



Promoting 'Green' and 'Social' Values with China

Assessing EU trade-related cooperation
on sustainable development

Weinian Hu and Jacques Pelkmans

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Preface

The present eBook is a product of the RESPECT project [www.respect.eui.eu]. The authors are indebted to many colleagues from universities in Europe, China and the US, for insightful discussion and valuable suggestions. In particular, we wish to thank Bernard Hoekman for encouragement, suggestions and his insistence to bring out this eBook.

The theme and its in-depth treatment is neither a run-of-the-mill analysis of EU Trade Policy, nor of EU-China cooperative relations. Trade policy specialists do not deal with bilateral cooperation, with some occasional sectoral exceptions. The debates in the EU circuits are almost entirely focussed on trade negotiations and mutually agreed 'hard' obligations. We show that there is more and that, in the case of EU-China, it matters for sustainable development whilst supporting an important plank of EU trade policy.

Weinian Hu & Jacques Pelkmans

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1. PROMOTING 'GREEN' AND 'SOCIAL' VALUES WITH CHINA

The EU has long been concerned about sustainable development in China. This pre-occupation refers to two NTPOs (non-trade policy objectives, often denoted as 'values'): the *'green' pillar* consisting of environmental policies and those pursuing the mitigation of climate change, and the *'social' pillar* of internationally recognised labour standards in eight ILO core Conventions and the accomplishment and sound implementation of adequate social protection for its citizens, in particular workers. Our research in the RESPECT project¹ has focused on how EU-China cooperation with respect to these NTPOs has been built up over a period of some 25 years, and how effective it has turned out to be, *without having a bilateral FTA* – hence, no 'sustainable development chapter' in place. Nor does or did China benefit from GSP+ and hence – when benefitting from GSP+ – should have ratified 27 international Conventions on human rights, sustainable development and governance, and cooperated in the prescribed compliance regime.

The EU and China have cooperated with respect to sustainable development on a *voluntary* basis. The book attempts to systematically set out and explain the great activism in bilateral cooperation in a range of policy domains and specialisations. This range has widened considerably over time. The numerous bilateral activities and commitments are, more often than not, underpinned by mul-

¹ See <http://respect.eui.eu>

tilateral commitments, whether Agreements, Treaties, Conventions or global diplomatic Declarations.

1.1 Our research: coverage, research questions and overall inference

Our work covers a long time span, some 25 years since the mid-1990s. Initially, the cooperation (and trade policy where relevant) with China was mainly development-oriented, but this began to change once the EU and China concluded the Strategic and Comprehensive Partnership in 2003. Ever since, China and the EU usually worked via Dialogues, at ministerial level as well as with annual Summits, in which joint programming was announced. They spawned several series of projects (some, very large), applied programmes, working groups, exchanges, conferences and action plans with significant – often joint - funding for a period of two decades, and in energy even longer. This long-run working relationship avoided a legalistic approach with enforceable standards and/or targets set in FTAs or otherwise. Nevertheless, the EU and China have worked fairly consistently on sustained progress in both pillars, and frequently in operational, technical and practical terms rather than mere declaratory statements. However, this does not mean that the two partners did not enter commitments. Thus, in the green pillar both partners adhered, with ratification, to no less than 12 MEAs and related Protocols and Amendments. This is far more than the specific MEAs referred to in EU FTAs, even though China and the EU have never concluded a FTA together. In the social pillar the situation is more complicated and also less satisfactory. The leading multilateral set of commitments are ILO Conventions, and in particular the eight core Conventions. But China has not ratified four of these eight. Moreover, there are no international legal commitments for social protection, except for some aspects (in other ILO conventions), although this field has been effectively broadened via more encompassing ILO Declarations, for example (to which some FTAs refer).

There is another critical difference between the green and the social pillar: whereas private and/or public activities relevant for the green pillar often generate major negative cross-border or global externalities (mostly, via global warming but selectively also with air and water pollution; and positively with forestation if large enough), this is basically not the case for the social pillar, unless one is willing to argue that poverty risks and neglect of OSH (occupational safety & health) distort the level-playing field in trade and investment by avoiding significant labour costs when exporting. However, if one would support the level-playing field argument, this may also apply to the green pillar when observing a strong avoidance of the cost of 'clean' production. The level-playing field argument – insofar as sustainable development is concerned – has not played a significant role in EU-China trade relations when it would have been best applicable, that is, when China was still a relatively poor developing country. However, China is now an upper middle-income country and the argument is much less plausible insofar as sustainable development is concerned², because – as we show – today's China has significantly increased (costly) social protection and invested in stricter green laws as well as their (more) credible enforcement.

We understand 'coherence' of external policies with respect to sustainable development as the coherence of EU trade and investment policies vis-à-vis China³ with the pursuit, if possible jointly with China, of sustainable development in China. It is possible, especially recently – but only in the green pillar – that the EU can actually improve or be stimulated *by China* in the area of green technologies such as renewables, e-vehicles and some of its components. For most aspects, however, 'coherence' should be read as the pursuit of EU values – such as sustainable development – via EU trade and investment policies *and* the accompanying EU-China cooperation. In the case of EU-China, the combination of EU trade

2 There is a series of reasons outside the realm of sustainable development, where the level playing field does play a role, best summed up as systemic distortions in China. See European Commission (2017), Pelkmans (2018) and BusinessEurope (2020), among others.

3 Such coherence is required under Art. 21, TFEU (Lisbon treaty).

policy and very elaborate and active cooperation is truly unique. The present eBook attempts to demonstrate this uniqueness and to provide ample evidence to that effect. This uniqueness is reflected in the sheer quantity of EU-China Dialogues (some 68!, with 50 or so on economic and trade-related issues, including sustainable development) but also in the consistency and continuity over time since the Strategic and Comprehensive Partnership began. Many of these Dialogues or activities create bilateral working relationships and this is often – although not always, for example when issues are sensitive - generating a degree of trust and recognition. In turn, this can often lead to better and more tangible results. And such results may inspire further cooperation.

The typical EU cooperative approach to sustainable development in external policies has never been practiced with other trading partners anywhere near to the same extent as with China. More activities and greater efforts do not necessarily produce better results, of course. In Hu & Pelkmans (2020) we show that, selectively, the great efforts of pursuing a multiple set of goals via many EU-China Dialogues have paid off. Our detailed research on the EU cooperative approach in promoting sustainable development with and mainly in China has culminated in two lengthy papers focusing respectively on the green pillar (Pelkmans, 2021) and the social pillar (Hu & Pelkmans, 2021). Chapter 4 below constitutes an integrated presentation of both papers, with selected updating. In some respects these papers have a common foundation. To wit, in order to establish more accurately what exactly the EU preferences in values under the heading of ‘sustainable development’ are, we rely on chapter 16 of the Economic Partnership Agreement (EPA) with Japan, an ambitious recent FTA – and itemise both for ‘green’ and for ‘social’ what provisions can be found. This high standard of sustainable development is used for inspecting EU-China cooperation in this area, conscious of the fact that the EU and China do not have an FTA together and that China is not yet, although close to, a developed country.

The research has been conducted on the basis of three research questions for each one of the two pillars. In the *green pillar*, we query whether and to what extent respectively the *indicators* in and subsequently the *policies* of China reveal a process of convergence with the EU. This is followed by a third research question, also central to the RESPECT project more generally, whether EU trade policy and cooperation vis a vis China with respect to sustainable development systematically pursued the 'green' NTPOs since the late 1990s and whether this pursuit has been effective in supporting a process of convergence.

In the *social pillar*, we query first whether China has addressed, when transforming to a market economy, the respect for international labour standards and began building up a system of social protection based on individual entitlements (which never existed before in China). The second research question is whether one can observe a process of convergence in policies, laws and entitlements with respect to labour standards and social protection between China and the EU over the period 2000 – 2020. Subsequently, we answer the third question, whether EU trade policy and cooperation on sustainable development vis-à-vis China has systematically pursued the NPTOs of labour standards and social protection since around 2000 and whether this pursuit has been effective in supporting a process of convergence. This type of work inevitably requires painstaking and detailed analysis which cannot be summarized in a few lines. Nevertheless, the overall inference is clear and possibly surprising as a policy message: the EU-China cooperative approach has been quite successful, with of course some hiccups and limitations. Put differently, this bilateral *cooperative approach* on sustainable development is not necessarily inferior to a set of bilateral *legal commitments* in an FTA, possibly at times or in some respects even more effective than the FTA-based approach. This would matter in every bilateral relation but surely is remarkable in case of a very big trading partner like China, not regarded by many as cherishing similar values as the EU.

1.2 EU-China sustainable development cooperation: methods and intensity

Three connected building blocks lay at the basis of two-plus decades of quite successful cooperation in sustainable development and in some other policy domains. First, the Strategic and Comprehensive Partnership [SCP] between China and the EU concluded in 2003 - a deepening of the Comprehensive Partnership of 1998 - is and has remained critical. The initial expectations of this SCP were high as expressed in a series of speeches by PM Wen Jiabao in 2004 in Europe.⁴ Although a degree of realism crept in in later years and frictions occasionally developed, the SCP is still regarded as a kind of 'special' relationship by both the EU and China. The Partnership is usually invoked to justify or strengthen cooperative activities or to provide a well-accepted diplomatic basis for proposals for or extensions of ongoing work.

Second, the Partnership was so highly valued that it was crowned by annual EU-China Summits starting in 1998. The summits were quickly considered as the zenith of a huge pyramid of High-Level Dialogues, in turn overlooking or guiding a broad range of more technical committees at higher or lower levels, with sub-groups and ad-hoc sub-committees conducting the fine details of measures or proposals. In chapter 2 this 'architecture' of the EU-China Dialogues is explained in some detail. In that chapter, the huge cluster of EU-China activities by Chinese and EU officials is portrayed by a rich flowchart, which should help to realise the scale and diversity of the Dialogue architecture in recent years. The profound investment by the two partners in joint but nonetheless informal institutions, based on commitment without treaties, has certainly paid off, even when occasional frictions 'at the top' led to a cancellation of an annual Summit.

Third, Dialogues were systematically promoted and employed for a very large number of permanent policy domains, but also for new or ad-hoc policy issues. In other words, the pyramid of Dia-

4 See Jiabao (2004)

logues overarched by the regular Summit expanded continuously and remained open for new initiatives for two decades. Dialogues can mean different things. They can refer merely to bilateral meetings of the relevant officials, sometimes with business or scholars. On the EU side, EU officials were routine participants but their colleagues from EU Member States also joined dependent on the issues (e.g. in the 'social' pillar, more often as social competences are predominantly national). Frequently, Dialogues generate other initiatives such as smaller, big or even vast projects over a few or many years, and (often) with joint funding, i.e. common ownership. The cooperation can extend to Chinese ministries – in some cases, projects are conducted inside the ministries. A range of other options can be used, from regular conferences to targeted technical assistance to research on the ground to experimental measures testing out EU-inspired measures. Our work on EU-China Dialogues starts with its EU-China 'architecture'. In Pelkmans & Hu (2020a ; 2020b) an attempt is made to verify whether EU-China Trade-related Dialogues can advance bilateral trade relations, and the conclusion is that – within clear limits – they can and have done so. Moreover, in the cooperation both in the 'green' and in the 'social' pillar we have studied a range of projects, action plans and other initiatives called for or supported by Dialogues.

These methods and their sheer intensity and diversity, as well as the political weight of the Summit have altogether generated an amazing dynamic which has also yielded results in terms of steady progress in sustainable development. Without entering into the details of this cooperation here, results can be found in both pillars but it is probably fair to conclude that the harvest in and the 'productivity' of the 'green' pillar has been greater than those in the 'social' pillar. The reader is offered a rich menu of facts and explanations so that (s)he can judge for him/herself.

1.3 What prospects for EU-China cooperation in sustainable development?

We end with a brief reflection on the *prospects* of EU-China ‘green’ and ‘social’ cooperation. In particular, we query whether the past pattern of EU-China cooperation is still a good guide to anticipate and comprehend the near future.

EU-China cooperation in sustainable development, both ‘green’ and ‘social’, has assumed a very wide scope and grown in intensity for 2 decades or more. It was solely based on functional considerations for both partners, underpinned by a Comprehensive and Strategic Partnership. The EU and China were ‘equal’ partners with a joint organisation and common funding. On the whole, this cooperation has been useful, often targeted to specific agreed objectives and leading to or supporting concrete progress in a broad range of policies in China and/or jointly multilaterally.

However, the China of 2004 (just after having concluded the Strategic and Comprehensive Partnership with the EU) has transformed into a much more assertive partner in the early 2020s and would seem more inclined to signal power-political approaches. China’s refusal to respect human rights in Tibet and Xinjiang, its squeezing of democracy in Hong Kong and its rejection of criticism besides considering it as a strictly domestic matter where interference is not accepted, renders it more difficult for the EU to retain functional cooperation under the Strategic Partnership, as before.

After two decades or more of intense cooperation, the question arises whether China and the EU can be expected to continue with ‘more of the same’. We suspect that this is doubtful. There are good reasons not to expect a simple extrapolation of the steady and largely successful functional cooperation in these two ‘values’.

In a U-turn in 2021 led by the European Parliament, the ratification of the draft Comprehensive Agreement on Investment (CAI) was suspended for reasons of alleged human rights violation

in Xinjiang, which has disrupted the relatively undisturbed climate of cooperation. This U-turn is a break with the past. What had long remained disconnected (EU trade policy and foreign policy advocating 'values') has now been re-coupled. In the process also cooperation in sustainable development is likely to suffer a setback.

Therefore, one might expect 'some of the same' but probably not 'more of the same'. Nonetheless, on both sides there is a clear willingness to retain as much as possible the functional approach. And one ought to realise that bilateral activities 'under the radar' can more easily continue even in a frostier climate. Both in 'green' and 'social' cooperation, many bilateral activities are ongoing. The suggestion that the frictions, referred to above, have killed all bilateral cooperation would be entirely false and without any basis. But there is no denying that such frictions risk to hurt the trust, the informal machinery as well as the predictability stimulating new initiatives.

Apart from lowering expectations to 'some of the same', there are a number of lingering queries which do matter for this brief assessment. The most important one is about the following: so far, in the 'green' and 'social' cooperation between China and the EU, the link with EU trade policy was loose. Much of the cooperation was a 'stand-alone exercise', barely or not affected by ongoing negotiations about 'trade irritants' or other aspects of market access or trade defence issues. The link was more seen as indirect and long-run. As noted, that began to change since around 2015/6 when newly set-up cooperation was tasked to help resolve trade policy questions (from fisheries to the newly initiated High Level Environmental and Climate Dialogue). This trend is likely to continue. Of course the nature of such sustainable development cooperation is more an extension of trade policy and touches upon vested interests. It will be much harder to be successful.

There are also some other queries the answers to which need to be considered. We specify four important ones. First, how to address in earnest China's fossil addiction, which is much bigger than coal (which is already so disproportional), f.i. large oil and gas

imports? Second, can China and the EU cooperate to bend [dirty] 'rare earth' mining and processing into a much more clean & green direction? Third, how could China and the EU (possibly with others) cooperate in order to ensure in the longer run that China's massive imports from parts of Africa and from Brazil [turning rain forest into soybean fields for export to China] become far more supportive of 'green' objectives. Fourth, quite apart from trade defence issues of products from heavy industries exported by China to the EU and other countries, there is an issue for bilateral or plurilateral cooperation in that China exports what the EU (and some others) have chosen no longer to produce or much less. Arguing that China's overall industrial performance is more polluting – though correct – might be seen as partly due to policy choices made by the EU (and Japan, etc.). All these queries are intimately connected to carbon footprints and the considerations behind the CBAM (even when not actually introduced). China rejecting a CBAM-type measure does not solve these underlying problems. Much of embedded carbon is directly a function of trade, not just bilaterally but also with third countries. If the CBAM would not be feasible, trade-related cooperation in these areas between China and the EU may well be appropriate to address these aspects in earnest. But it seems unlikely that such vital cooperation will again remain 'under the radar'. On the contrary, it will be difficult and move slowly.

2. THE EU-CHINA DIALOGUE STRUCTURE

The EU and China maintain their bilateral relationship through an architecture of dialogues which have been evolving, especially after the EU-China Trade and Co-operation Agreement was concluded in 1985. The relationship between the EU and China was upgraded to become a “comprehensive and strategic partnership” in 2003. Such an at first very generally formulated ‘partnership’ is substantiated by more than 65 dialogues which steer the partnership in political, economic and sectoral, and people-to-people relations. This survey will depict this partnership, by discussing the depth and breadth of the bilateral dialogue architecture with a focus on its premise, structure, functions and a range of case studies to illustrate or illuminate how it works. The many deliverables that have been generated by the various dialogues, over the past two decades, will be highlighted throughout the survey.⁵ How EU’s trade and non-trade policy objectives are promoted vis-à-vis China is described, too.

The EU possesses formidable rule-making power in external trade, which is premised on its vast single market. Thanks to that, the EU has acquired much ‘soft power’ in non-trade issues, in enforcing standards for labour rights, consumer and human rights protection, and sustainable development on its trade partners

5 This survey is undertaken within the framework of the EC-funded H2020 project: Re-alising Europe’s soft power in external cooperation and trade (RESPECT), which analyses how to best forge coherence between EU’s trade and non-trade policies in order to improve the effectiveness of EU external policies, with an emphasis on trade policy.

within the framework of applicable international commitments. These non-trade policy objectives, coined as EU's values, are incorporated in the EU's comprehensive trade agreements, such as free trade areas, as trade-related sustainable development provisions, in the light of the obligations of Article 21 of the Lisbon Treaty since December 2009. The provision obliges the EU to be guided by its principles, such as democracy, the rule of law, human rights, when developing relations and build partnership with third countries, etc. And it is reinforced as a component of EU's external trade policy, thanks to the strategy Trade for All⁶, published in 2015. In other words, the EU's trade partners should agree with the EU, and deliver their shared values when conducting deep and comprehensive trade relations, thereby the EU's value-based trade strategy will materialise. In reality, trade agreements have since become a conduit to export EU's trade and non-trade policies and standards from the single market to third countries. Reflecting on the EU-China trade agreements concluded so far, the EU's non-trade policy objectives are not included in the Agreement on Cooperation on, and Protection of, Geographical Indications, but they are in the provisional agreement (January 2021) of the Comprehensive Agreement on Investment (CAI), including China's commitments on labour and environment protection. One explanation for that is that the CAI is a comprehensive agreement, while the former not.

This survey starts with a reminder of the legal premise upon which the bilateral EU-China dialogue architecture has been built. While describing the structure of the dialogue, the historic evolution of each pillar will be highlighted, too. After that, the functions of the dialogues will be illustrated, with case studies. Before concluding, a handful of bilateral dialogues conducted between the US and China will be featured in order to compare them with the EU-China dialogues for effectiveness.

6 Available at: [Trade for All - Towards a more responsible trade and investment policy \(europa.eu\)](https://trade-for-all.europa.eu).

2.1 The structure of the EU-China dialogue architecture

The comprehensive strategic partnership is described in detail by the Elements for A New EU Strategy on China, adopted by the European Commission and the European External Action Service (EEAS) in 2016, and is in line with the Juncker Commission's political guidelines, the Commission's "Trade for All" strategy (2015) and the Resolution on EU-China Relations adopted by the European Parliament in December 2015.⁷ This partnership is rolled out by a bilateral dialogue architecture under the three pillars of political cooperation, economic and sectoral dialogues and people-to-people exchange. As will be illustrated below, evolving with times and circumstances, the objectives of these dialogues remain relevant for the current bilateral relations.⁸

Initially, the bilateral dialogues were set up based on the necessities, following China's 'opening up' some 30-40 years ago. This was especially the case with regard to some of the economic and sectoral dialogues, such as the Dialogue on Technology Cooperation. After that, because of China's WTO membership bid, more dialogues were established under this pillar in order to assist China in transforming its economic development model from centrally-planned to market-oriented. The themes of the dialogues established then therefore reflect China's reform directions in preparation of its WTO accession, as well as the 'by-products' of it, and [Industrial products & WTO / TBT Consultation is one of them](#). Many dialogues on non-trade issues were established, too, such as employment protection and environment protection, which was to help China develop a wholly new societal welfare structure after the country dismantled the old one installed intricately around state-owned enterprises (SOEs) and attached to localities. The

7 Available at: [Texts adopted - EU-China Relations - Wednesday, 16 December 2015 \(europa.eu\)](#).

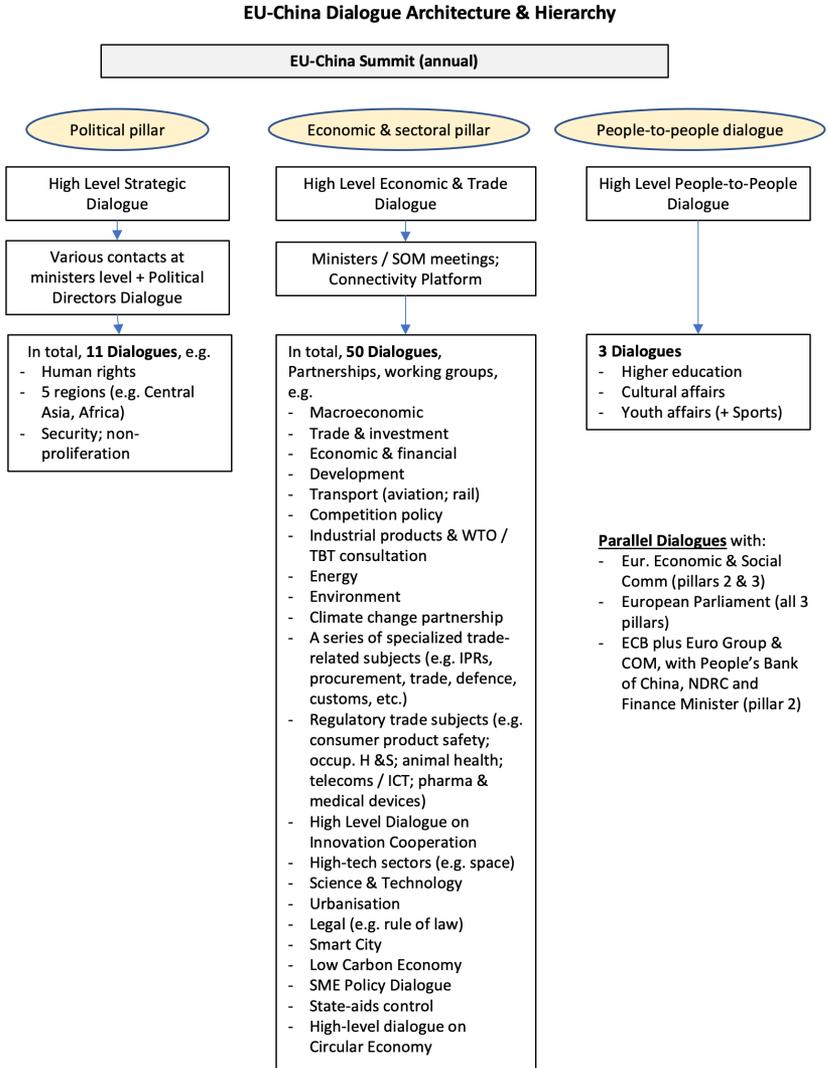
8 According to the EEAS, the EU-China Dialogue Architecture is the only published source summarising the bilateral dialogues presently available. Dated November 2015, it is still valid today although a number of new dialogues have been added since 2015, such as the legal dialogue inaugurated in 2016, the state aid control dialogue 2017, and the circular economy dialogue 2018.

old social welfare system was dismantled when China started to reform its SOEs through closing-down, or merger and acquisition. The EU extended generous assistance of capacity-building to help China establish fund-based new social security system.

A few trade and non-trade dialogues were first inaugurated as bilateral cooperation projects following the conclusion of the EU-China Trade and Co-operation Agreement in 1985. [The Industrial products & WTO / TBT Consultation](#) was an example of such cooperation project. The annual [Joint Trade Committee](#) was set up around the same time in the mid-1980s at ministerial level to take stock of policy developments in bilateral trade and investment, to review trade irritants arising between the two sides, and to help removing market access barriers in the relevant sectors. The annual Committee meeting also provides China and the EU with the opportunities to exchange views on important multilateral and plurilateral trade initiatives and on-going trade negotiations.

Over the years, as the bilateral relationship has deepened economically and politically, the scope for cooperation between the EU and China has become much broader, so has the number of dialogues taking shape under the pillars of political, economic and sectoral and people-to-people dialogues. The formalities of the dialogues became more diverse, too, including summit, ministerial, working group meetings, experts' seminars, and projects designated to implement policy objectives for concrete deliverables.

Figure 1: EU-China Dialogue Architecture



Pillar I – Political dialogue

The mechanism of bilateral political contact was inaugurated in 1994, and upgraded to summit level in 1998. Gradually, because of necessity and demands, dialogues on specific subject matters were arranged and the pillar of political dialogue has grown. For example, the [EU-China Cyber Task force](#) was set up in 2013 amidst the EU's increasing concerns over China's rampant cyber espionage and when both sides saw the needs for exchanging views on research, business and global standardisation in relation to the rapid 5G development. Also, following the Lisbon Treaty, the EU created the European External Action Service (EEAS) to undertake the Union's Common Foreign and Security Policy led by a High Representative, in 2010 the [High-Level Dialogue on Strategic and Foreign Policy](#) was established between the High Representative of the Union and the Chinese counterpart of the Foreign Minister. This dialogue takes place usually just ahead of the annual summit, in the form of exchanging views and both sides will summarise the major progress the partnership has achieved through the dialogue architecture. The purpose of this exercise is to set the scene for the summit and to substantiate the summit joint statement, to inject political impetus to the partnership, including mapping major cooperation programmes for the next year.

An example is the Strategic Dialogue that took place on 9 June 2020. The EU and China reviewed progress of the bilateral relationship made in the past year, including the progress made in the negotiations of Agenda 2025 and the need to move forward the remaining areas. Concrete disagreements between the two sides were also tabled and discussed.⁹ The high-level dialogue was concluded by both sides' expressing shared determination to push for the conclusion of a Comprehensive Agreement on Investment, the materialisation of China's commitments pledged in 2019, including eliminating market access barriers, improving the level

9 For details, see [EU-China Strategic Dialogue: Remarks by High Representative/Vice-President Josep Borrell at the press conference - European External Action Service \(europa.eu\)](#).

playing field and reciprocity.¹⁰ In terms of international affairs, both sides reaffirmed their commitment to cooperate on a number of areas, such as climate change, non-proliferation, including to fully implement the JCPOA (Joint Comprehensive Plan of Action – the Iran nuclear deal), inter-Korean relations and support to reconciliation, as well as dialogue between DPRK and the USA, and bilateral cooperation in Afghanistan, Middle East incl. Syria and Africa.

It is well-known that China attaches greater importance to the “One China” Policy in international affairs, including in its relations towards the EU, as China reiterates this principle in nearly every bilateral political document. This stance in effect records one motivation upon which the entire EU-China relationship was established. After China regained its permanent seat at the Security Council at the United Nations in 1971, the European Economic Community, as the EU was known at that time, recognised the People’s Republic of China as the only legitimate government of China, paving the way for the establishment of the bilateral diplomatic relations in 1975.

The subject themes covered under the Pillar of Political Dialogue range from regional affairs, international affairs, security and defence, cyber security as well as human rights. The breadth of the bilateral political dialogues illustrates the many areas that both sides’ share their common interests and recognise the mutual benefits they could garner via cooperation. Their shared positions are sometimes elevated to global level,¹¹ yielding joint leadership on several specific global issues, including implementing the nuclear agreement with Iran and denuclearisation in the Korean Peninsula.

Nonetheless, the political dialogue embodies a mixed picture of cooperation and challenges interwoven in the bilateral EU-China relationship overall. The institutionalised dialogue mechanism

10 See Grieger (2021)

11 Note that already in the draft European Security Strategy Paper in 2003, China has been recognised as one of the key partners for the EU’s strategic security relationship.

helps to sustain bilateral communication which is vital, especially in times of frictions. As to the policies for which each side upholds its own distinctive perspectives, the EU and China conduct their affairs in a manner of ‘agree to disagree’, therefore their policy divergence has been containable. This is evident, for example, as far as African development is concerned, as the EU prides itself on fostering good governance and sustainable development, while China practises the “five principles”, including “non-interference”.¹² Similarly, the EU and China acknowledge their conceptual differences in human rights protection, which are political rights to the EU and economic rights to China; nonetheless, the [Human Rights Dialogue](#) continues over the last decades with a “constructive, frank, forward-looking” approach.

The geographical regions covered by the political dialogue pillar includes, practically, the whole globe. Additionally, there are dialogues on security and defence, covering the subjects of cyber security, and non-proliferation & disarmament. Some political dialogues concern very specific subjects, such as Human Rights Dialogue, and the EU Special Representative & Special Envoy Meetings. Besides, there is the mechanism for regular contact between the EU High Representative/Vice President and China’s foreign affairs minister as well as the minister of defence.

Pillar II – Economic & Sectoral Dialogue

The number of economic & sectoral dialogues conducted between the EU and China has reached around 55 to date. The subjects covered are all-encompassing, ranging from trade to non-trade issues, as diverse as [research and innovation](#), [water management](#), [public procurement regulation](#) and animal health. Most dialogues combine policy dialogue meetings, expert seminars and implementation projects so that shared policy objectives can be pursued. Given the unusual number of economic and sectoral dialogues, the depth and the breadth of the EU-China economic coopera-

12 See the Joint Declaration of the EU-China Summit, Helsinki, 2006.

tion was probably foreseen because of China's huge market size, its complex WTO accession process, as well as trade opportunities and the frictions entailed.

History

From the outset, initiating a pillar of economic dialogues reflected EU's aim of market access, through China's integration in the world trade order. By applying the same market-driven trade rules, the EU envisaged that market openness would prevail and barriers would be lifted. Supporting China's WTO membership bid was a strategic approach engaged by the EU to achieve this objective.¹³ Along the process, the fundamental WTO market principles, from national treatment, intellectual property rights (IPR) protection, to good governance models, such as transparency and independent judicial review, were expected to be enacted in China. Dialogues, mainly for capacity-building in the beginning, were thus considered one after another as a means to achieve this purpose. Many ad hoc cooperation programmes were later developed into mechanism in order to assist China to further implement outstanding WTO commitments,¹⁴ while serving as cooperation platform for seeking trade opportunities and addressing irritants. Examples in this regard include market access for industrial and agricultural goods, services, market economy status, maritime transport, air transport, nuclear trade and safety, customs, science and technology and liberalisation of China's financial sector. Around the same time, as mentioned before, a few dialogues focusing on non-trade objectives, such as those on environment and on regional policy, were initiated. To this end, the EU's objective was to promote a sustainable development concept, new to China at the time,

13 See European Commission (1998)

14 For example, as seen in the Communication: Building a Comprehensive Partnership with China [footnote 10], the Commission identified as early as 1998 that without securing China's membership of the WTO GPA as part of the country's WTO accession package would reduce the overall value of the country's market access package. The Commission's both objectives failed to materialise. The Dialogue of Public Procurement was established in 2007, a year before China submitted its initial offer to negotiate its GPA accession.

while helping China integrate environmental protection measures into its overall development strategy, and to foster transfer of know-how and technology in the energy sector in China. As to social cohesion, the EU assisted China to explore different policy options, drawn from the EU's experiences and expertise so that China would be able to mitigate the social impact as a result of the overwhelming SOEs restructuring exercise, including the dismantling of the old SOE-based social welfare system. At the time, as a consequence of the restructuring, a massive number of Chinese SOEs workers were laid off, and left with no or insufficient social protection since the new social security system was yet to be built up (Box 1).

Box 1: Employment & Social Policies Dialogue

The [Employment & Social Policies Dialogue](#) was established in 2005 between the Chinese Ministry of Human Resources and Social Security, the Chinese Academy of Social Sciences and the DG Employment, Social Affairs and Inclusion of the European Commission.

The policy areas covered by the Dialogue range from employment, social security, demographic ageing to social dialogue and labour relations. The Dialogue was inaugurated in the wake of China's SOEs re-structuring exercise, which was conducted in order to subject them to market principles operating as a business entity, instead of as a government outlet. In the process, millions of workers were laid off, but the majority of them were then left without sufficient social security protection as the new system was not in complete operation, after the old one, attached to the SOE life-tenured employment, was demolished. As a result, overnight many laid-off SOE employees experienced a roller-coaster change from free to fee-paying medical coverage, and lost the community that they relied on from cradle to grave. Those who fell ill were compelled to pay medical bills from their one-off unemployment compensation, often already meagre especially in view of bleak re-employment prospects.

The EU member states' models and experiences were offered as a reference, when China was building a new social security system, along with new employment relations based on labour contracts.

From the outset, after the EEC took over from the member states the competence for all trade relations with state-trading countries, the trade relationship that the EEC and China embarked on was designed to be open and broad as illustrated by the 1985 Trade and Economic Cooperation Agreement. This relationship was intended to not exclude any subjects of economic cooperation as long as it fell within the Community's competence (Article 10). Back then, sectors for cooperation were industry, mining, agriculture, science and technology, energy, business management and biotechnology, etc. As to the forms of bilateral cooperation, they included exchange of economic information, people-to-people contacts between businessmen and trade officials, seminars, technical assistance programmes and trade/investment promotion.¹⁵ As mentioned before, the Joint Committee was also established then as a platform for trade and business exchange activities conducted at expert level and for supervising the overall bilateral cooperation.

More bilateral cooperation programmes were launched in the run up to China's WTO accession, and gradually they developed to become dialogues for long-term cooperation around the time when the EU-China annual summit mechanism was inaugurated in 1998.

15 After the Community took over from the member states the trade responsibility for all trade relations with state-trading countries in 1974, the EEC-China Trade and Economic Cooperation Agreement was subsequently concluded in 1978. It was a non-preferential agreement with equal benefits and obligations for both parties, and provided them the possibility to accord each other most-favoured-nation treatment and to develop mutual trade. A component of economic cooperation was added to the 1978 Cooperation Agreement and therefore a new trade agreement was signed in 1985 when both sides felt the need to strengthen and broaden their cooperation. The 1985 Agreement was therefore an open agreement encompassing many subjects for trade and called for different and flexible forms of cooperation activities as we see today from the dialogues. See Press Release Joint Committee EEC/China, MEMO-86-26, found in Snyder, ed. (2009)

Since then, as the EU-China trade volumes were rising continuously and because China had become a leading economy presenting many more business opportunities, the scope of bilateral trade dialogues expanded further to what it is today. Another motivation for such expansion was that bilateral trade relations had grown beyond goods and services, and moved also into investment and other regulatory areas as well as competition policy, therefore the dialogue themes have become ever more diverse compared to two decades ago.

Structure

The annual [High-level Economic & Trade Dialogue](#) (HLETD) is the chapeau of the Second Pillar of the EU-China Dialogue Architecture. Every year, the HLETD takes stock of the deliverables achieved by all the economic and sectoral dialogues ahead of a Summit. When the HLETD was inaugurated in 2007 at the vice-president level, the aim was also to address the outstanding market opening pledges of its WTO Accession Agreement yet to be materialised by China. In practical terms, the HLETD has the mandate to identify ways to reduce bilateral trade imbalances and to increase trade in a balanced way.

The agenda of the HLETD varies little from year to year. It covers issues related to the multilateral global trading system, strategic bilateral trade and trade-related areas, investment, innovation, effective market access, IPR protection and high technology, environment protection and energy. For example, the agenda of the 8th HLETD (July 2020) focused on the joint response to Covid-19 and global economic governance issues, bilateral trade and investment concerns, and cooperation in the area of financial services and taxation. Both sides exchanged views on the CAI negotiations, and agreed to work towards the continued relevance of the WTO. Also, referring to the 2019 EU-China Summit Joint Statement, the EU urged China to engage in future negotiations on industrial subsidies. The EU called upon China as well to start exploratory

talks for an agreement with the EU covering administrative cooperation to fight VAT fraud.

Overall, the economic and sectoral dialogues are conducted under two groups which are trade and non-trade issues. Additionally, the [Connectivity Platform](#) was established in 2015 with a singular focus on China's Belt and Road Initiative (BRI), which was launched a year earlier. In relation to the BRI projects implemented in the EU single market, the Connectivity Platform aims to promote transparency and a level playing field based on the EU market rules and international norms with respect to public procurement, competition, environmental protection and technical standards, etc. The Platform in the meantime identifies synergies between China's infrastructure blueprint and the Juncker Investment Plan, as well as funding sources in transport and in other kinds of infrastructure. In this regard, in 2017 the European Investment Fund (EIF) and China's Silk Road Fund (SRF) signed a Memorandum of Understanding with the aim of jointly investing in private equity and venture capital funds that would, in turn, invest in SMEs located primarily in the EU. The total amount of the investment fund is expected to reach €500 million, of which the EIF and the SRF would each invest €250 million. The joint fund was a joint deliverable following China's pledge announced at the HLETD 2015 to contribute to the Investment Plan for Europe, the so-called "Juncker Plan", and to enhance cooperation with the EU on investment issues generally.¹⁶

In respect of the relationship between trade and non-trade related dialogues, it is generally assumed that the dialogues on non-trade issues would ultimately contribute to achieve EU's trade objectives. This assumption has been made more apparent by the EU's 2015 trade strategy Trade for All, when the EU pledged to reinforce value-based objectives as a component of its trade policy, and to use trade agreements and trade preference programmes as levers to promote among its trading partners around the world

¹⁶ See the Press Release published after the EU-China Summit took place in Brussels in 2017.

values like sustainable development, human rights, environmental protection, in accordance with Article 21(2)(a) of the Lisbon Treaty. In practice, provisions concerning environment protection, human rights protection and core labour standards must be an integral part of a free trade agreement with third countries; while the EU aims to ensure that the applicable international standards are implemented as a condition for concluding a free trade agreement.

Trade issues

In the course of its WTO accession negotiations, China was obliged to redraft almost all its trade policies and legislation so that its economic model would be compatible with the market-driven WTO disciplines. The extent of this exercise may be gauged by the variety of bilateral sectoral dialogues established in the 1990s encompassing all the WTO trade areas, not only on goods and services but also on regulatory issues, such as agriculture, trade defence instruments, food safety and sanitary/phytosanitary, and industrial products & TBT, and IPR.

Once bilateral trade volumes soared and trade relations deepened, the original scope of economic dialogues was extended to other sectoral areas, such as competition policy, peaceful use of nuclear energy, aviation regulations. For example, since international cooperation is essential in fighting against the formation of international cartels and China can play a significant role because the country has become a must-visited jurisdiction in recent decades when examining cases of global merger and acquisition, the Competition Policy Dialogue was established. For China, it wanted to harmonise its vast domestic markets among the different levels of administration, and the EU wished to align China's competition policy with the EU's model. The bilateral [R&D cooperation in peaceful use of nuclear energy](#) brings about the EU's interests, too, as the research programme enabled researchers from both sides' mutual access to research facilities. Hence, EU nuclear researchers

could access China's state-of-the-art nuclear facilities as in Europe many are either closing down or phasing out.

Non-trade issues

The difference in EU-China dialogues on non-trade issues between the past and the present is found in the purpose of conducting such dialogues. In the past, the purpose was to share with China the EU's expertise and experience, as a means for capacity-building, including reflecting on the "European model" of regional integration and good governance under the rule of law.¹⁷ However, nowadays the purpose of conducting dialogues on non-trade issues seems to be raising China's ambition of sustainable development to match EU's level of standards in order to prevent China from enjoying (low) price advantages against EU goods, often due to compromised environmental and labour protection standards. In this sense, achieving a level-playing field is equally an assurance to tell EU citizens that Chinese goods and services are procured from workers employed under safe and fair conditions.

There is a presumption that, since China pursues economic development "at all costs" and at the expense of the 'values' that the EU champions, conducting dialogues with China on non-trade issues might only yield limited progress. Nonetheless, one reason that EU-China cooperation on non-trade issues could continue for nearly two decades is exactly because the Chinese government has become ardent in promoting environment and labour protection, in order to nurture a 'harmonious' society for stability, quality of life, job satisfaction, good governance, and a 'beautiful China' as President Xi Jinping vowed to build at the Conference of the Parties to the Convention on Biological Diversity (COP15) in October 2021, etc. This motivation may explain why the Chinese government has been engaging in discussions with the EU on non-trade issues, until China committed to implement its pledges on environment and labour protection as incorporated in the CAI provi-

17 See European Commission (2003)

sional agreement.¹⁸ Similarly, in September 2020, President Xi reiterated that China would aim to hit peak emissions before 2030 and for carbon neutrality by 2060. This is seen as a significant pledge China has undertaken to fight against climate change.¹⁹

Other bilateral dialogues on non-trade issues include dialogues on regional policy, and [occupational safety & health](#). The latter focuses on improving working conditions, reducing work-related accidents and illness, contributing to decent work for all while adhering to agreed international standards.

The EU's commitment in the overall bilateral economic dialogues was considerable, also in financial terms. In 2000, the amount that the EU allocated for conducting bilateral EU-China cooperation projects already totalled around €60 million per year. Many business opportunities have emerged from such dialogues, too, and contributed to economic growth and job creations in the EU, which is an objective that the economic and sectoral dialogues are envisaged to achieve. On top of that, along the process, since China indeed has adopted a few of EU's policies and regulatory models, such as the Emission Trading System (ETS), the EU's normative power on trade is being reinforced on the world's stage.

The number of bilateral economic dialogues is expected to grow further, including through 'organic growth' and for tackling trade irritants. For the former, the Dialogues on Sustainable Urbanisation Partnership (Box 2) is a case in point.

18 For detailed analysis on China's commitments, see Hu (2021-b)

19 Doubts nonetheless remain as to how China might manage this coal transition, also given the need to fuel a post-covid economic recovery which demands energy. As a result, it is perhaps of no surprise that the 14th Five-Year Plan did not announce any measures for coal consumption cap, unlike the previous Five-Year Plan. For example, as part of its 13th Five-Year Plan, China sought to cap coal consumption at the national level at 4.1 billion tonnes by 2020, or to less than 58 per cent of total energy consumption. It is also reported that after lifting a previous construction ban on new coal plants in 2018, China has rolled back policies restricting new coal plant permitting in each of the last three years. By mid-2020 China had permitted more new coal plant capacity than in 2018 and 2019 combined. This is going against the global shift away from coal: <https://climateactiontracker.org/countries/china/>. See also ch. 3.

Box 2: Sustainable urbanisation partnership

[The Dialogue on Sustainable Urbanisation Partnership](#) was launched between China's NDRC (National Development and Reform Commission) and the EC DG Energy, in 2012.

The motivation for launching the Dialogue was for the EU to help China optimise the layout and new formation of urbanisation. Due to the quick speed and large scale of urbanisation that has taken place in China, exceeding 50% of level of urbanisation in recent years, the Dialogue is expected to assist China in attaining sustainable development goals in expanded cities while at the same time, for example, promoting rural-to-urban migration. This objective of the Dialogue is crafted on the premise that the EU and its member states have rich experience in urbanisation, for which their know-how would be invaluable to Chinese policy-makers, either to accelerate an optimal urbanisation process, or to offer possible policy alternatives via concrete consultation.

At the same time, European and Chinese cities nowadays may well face similar challenges for urbanisation in terms of, for example, energy efficiency, energy and natural resource conservation and reduction of greenhouse gas emissions. These common challenges call for common solutions, too. Within this context, specific projects, such as on promoting energy efficiency buildings, research on energy technologies and finding ways to integrate renewable energy into urban areas, were undertaken in order to tackle these challenges.

Some programmes launched under the Urbanisation Dialogue were conducted in conjunction with other related dialogue programmes, such as the Mayors' Forum, and the EC-Link project. The latter was set up in order to help China make its cities more energy and resource efficient, to launch the EU-China Emissions Trading Scheme, and the Satellite Cities and Metropolitan Governance Project. This approach is designed to tap into each programme's strengths for a holistic approach to improve China's overall urbanisation experience.

Another important component of urbanisation cooperation is twinning where twinning partnerships are forged between cities in EU member states and China in order to work together on specific areas of urbanisation concerning, for example, energy (e.g. low-carbon), investment and trade, exploration and innovation. Forums, study trips, training activities, etc. are organised among policy makers and stakeholders, such as businesses, for generating understanding of urbanisation on the ground.

Pillar III – People-to-People Dialogue

Most dialogues conducted under the pillar of People-to-People Exchange were first launched as cooperation projects, for mainly two purposes. First, at civil society level, it was for the EU to assist China in the country's overall social reform to promote the rule of law, strengthen the civil society, modernise the overall legal and administrative framework of the country by showcasing the EU model. Second, it was to raise the profile of the EU for greater visibility and to exert its soft power in China.

The [High-Level People-to-People Dialogue](#) was inaugurated in 2012 after having grouped together all those bilateral dialogues initially conducted at civil society level, such as higher education, vocational training, culture, sports, gender equality and multilingualism. Some of the dialogues under this pillar of dialogues were established one or two decades earlier, including cooperation on higher education which has been flourishing since. For example, following the successful conclusion of the [EU-China Legal and Judicial Cooperation Programme \(2000-2005\)](#), the [China-EU School of Law at the China University of Political Science and Law](#) was established by EU-China joint funding. Regarded as a symbol of China's commitment to cooperating with the EU on legal affairs, the mission of the Law School is to improve the mutual understanding towards each other's legal systems, and to educate a great number of legal professionals who should acquaint themselves

with the knowledge of both jurisdictions, with practical legal skills. Within this context, the cohorts of Chinese law students have subsequently been brought a better understanding of, and a greater affinity with, EU laws, policies and legal practices for the Chinese judiciary and government institutions. As to the cooperation programme on business education, the China-Europe International Business School,²⁰ which was co-funded by the EU and China in 1994 in Shanghai, has swiftly gained a global reputation with rising student numbers, with campuses now established in Beijing, Shenzhen, Accra in Ghana, and Zurich in Switzerland.

Moreover, in 2005 the EU opened the “China window” of the Erasmus Mundus programme to Chinese students and scholars. Subsequently, China emulated the same model whereby since 2007, 100 scholarships are offered every year to EU students²¹ in a bid to provide EU students more educational opportunities in China.

2.2 Other EU institutions’ and Member States’ dialogues with China

The interlocutors of all the above-mentioned dialogues are usually the EEAS and the various Directorate-General (DG)s of the European Commission from the EU side, and their Chinese counterparts from the ministries and agencies of the State Council. Think tanks and industry associations may be lead interlocutors of the bilateral dialogues, too. The Chinese Academy of Social Sciences, a network organisation but also a think tank, is the lead interlocutor of the Employment & Social Policies Dialogue, together with the Chinese Ministry of Human Resources and Social Security. Relevant industry associations sometimes are dialogue partners as well. For example, the shipping industries from both the EU member states and China are institutionalised interlocutors of the

20 More information on CEIBS, see [The Best Business School in China | China Europe International Business School \(ceibs.edu\)](https://www.ceibs.edu).

21 For more information on [the Study in China programme](https://china-mission.be), see [Study in China \(china-mission.be\)](https://china-mission.be).

[Dialogue on Maritime Transport Agreement Implementation](#), and the Chinese Ministry of Transport and EC DG Move are the interlocutors at policy level.

Other EU institutions conduct bilateral dialogues with their respective Chinese counterparts as well. Every year, the European Economic and Social Committee co-organises a [Roundtable](#) with its Chinese counterpart, the China Economic and Social Committee, in order to exchange views on usually controversial topics of concern to both sides. Equally, in order to deepen mutual understanding, the [Delegation for Relations with China at the European Parliament](#) organises annual dialogues with the Chinese National People's Congress on different subjects that are covered by the EU-China Dialogue Architecture. Moreover, the Euro Troika (Eurogroup Chair, ECB, and Commissioner for Economic & Monetary Affairs) conducts an [Economic and Financial Affairs Dialogue](#) on financial markets with China's Ministry of Finance, National Development and Reform Committee (NDRC) and People's Bank of China.

EU member states conduct many dialogues and cooperation projects with China. For example, in the past the UK and Germany conducted their respective judicial dialogue with China's Ministry of Justice to train Chinese judges, to broaden their exposure to other jurisdictions, including the handling of legal cases. There are also many joint Master of Law curriculum programmes launched between law schools in EU member states and China. As a result, these days more and more Chinese lawyers and government officials are familiar with EU laws, the civil law legal system and international law. Such cooperation in legal training has been long-standing. In fact, as early as 1983 China and Germany already concluded an inter-governmental agreement on the Project of Promotion of the Patent System of the People's Republic of China, thanks to which many Chinese patent examiners were trained in Germany and a patent documentation database was installed so that patent applications could be examined in China. The whole process of judicial exchange, whether at the EU or member states

level, is particularly important to help instil the quality of transparency, fairness and impartiality when adjudicating in the Chinese judicial system and public administration. Notably, establishing an impartial judiciary is equally a commitment that China pledged at its WTO accession.

Education is a popular, often long-standing, cooperation area between the EU member states and China. For example, on 13 April 1995, China's Sichuan Province and the Brussels-Capital Region signed the Brussels-Sichuan Agreement of Cooperation, covering the cooperation areas of vocational training, student and cultural exchange programmes.

2.3 Functions

In the beginning, the EU-China bilateral cooperation programmes were usually of a capacity-building nature. They later evolved to become platforms for undertaking other functions, such as policy coordination, and forging more business opportunities. As a by-product of the dialogues, the EU seeks regulatory convergence where possible so that its rule-making capacity may be enhanced on the world stage. On the other hand, China has gained much know-how from the EU's experiences in many regulatory areas. The whole process has facilitated China's quicker integration into the WTO trading system bringing about a more market-driven economic development model. In the meantime, the funding pattern of the dialogues has transformed from a donor-recipient relationship between the EU and China to a co-funding pattern as far as cooperation projects are concerned.

In the past the EU and China assumed a mentor-student relationship between them, too, but these days it is more of a partnership as reflected by some dialogue agendas, such as the agendas of the Human Rights Dialogue (Box 3) taken place in recent years.

Box 3: Human Rights Dialogue

Initially, the Human Rights Dialogue was engaged as an instrument for the EU to promote its values of human rights protection in China; while China's human rights record (or rather violations) was scrutinised by the EU on a yearly basis during such meetings. At recent meetings, the agendas are re-orientated towards a "two-way" dialogue for deepening not only mutual understanding of the differences in each other's society and political systems, but also for highlighting specific issues in the debate with each other.

To date, though China's record on human rights is still regarded as poor by quite a few,²² over the decades China has been improving human rights protection gradually and installed a number of fundamental legal instruments in order to better safeguard citizen's human rights, including legal aid.²³

In parallel, the EU and its member states in recent years face persisting social challenges, such as irregular migration. This has granted China the opportunity to identify EU's weaknesses in human rights protection, and raise them to the EU in the Human Rights Dialogue meetings. As a result, the Human Rights Dialogue in recent years has replaced its China-focused agenda-setting by a two-way approach, because human rights protection challenges raised in China and in the EU are both discussed at the meetings. Though the EU has maintained the possibilities of listing some alleged individual human rights violations (e.g. death penalty, minority's rights) on the agenda, China equally uses the Dialogue to bring to the EU's attention on alleged human rights violations in the EU, such as migrants' rights.

For example, during the EU-China Human Rights Dialogue in 2018, issues concerning business and human rights, disability rights and the status quo of women's rights were topics identified for China to make improvement. At the same meeting, the migration issues and protection of fundamental rights, and in particular protection of the rights of migrants and asylum seekers were raised by China to the EU.

22 See Lederer (2020)

23 See Kuhn (2020)

Tackling the practical challenges in bilateral trade

A large number of dialogues under the Pillar of Economic and Sectoral Dialogue were established for tackling practical challenges, such as the [Dialogue on Consumer Products](#) for consumer goods safety. The RAPEX-China online system, launched by the Dialogue, serves for regular and rapid data transmission, where information on Chinese consumer (non-food) products identified as 'serious risk goods' and consequently banned or withdrawn from the EU markets is transmitted to Chinese authorities. Since 2008, the same dialogue instrument became a component of the EU-US-China trilateral cooperation on consumer product safety issues for coordinated response.

Sustaining a partnership, especially in time of frictions

Since the bilateral dialogues are not ad hoc but institutionalised, meaning that the EU and China are bound by the respective dialogue trajectories at political and/or working levels, with some of them also including contractual obligations for project deliverables, both sides are condemned to stay connected to carry on their work to make progress, however large their differences may be and whatever frictions may exist. In this respect, the [High-level Economic and Trade Dialogue \(HLETD\)](#) is a case in point (Box 4). Because of the ever-growing trade imbalances, and particularly for the lack of a level playing field and of reciprocity, in 2008 HLETD was established hoping to redress these issues, and to identify practical ways to improve bilateral trade. In principle, HLETD had the aim to implement the outstanding commitments about what China pledged to reform with regard to substantial market access for goods and services, based on the Joint Statement issued at the first EU-China Summit, in London, 1998.

Box 4: High-level Economic and Trade Dialogue (HLETD)

The annual agenda-setting of the HLETD corresponded with the trade frictions experiencing between the EU and China in recent years concerning disciplines, such as state aid, especially industrial subsidies.

For example, under the theme of “harnessing globalisation”, the agenda of the 7th HLETD in 2018 covered the subjects of WTO reform, including a new working group in order to tackle key reform areas, for example on industrial subsidies. During the meeting, the EU also urged China to submit an ambitious and comprehensive offer for its WTO Government Procurement Agreement accession as the previous offers were not accepted by GPA partners. On trade and investment issues, both sides exchanged views on obstacles to market access. The issues related to digital economy, cooperation on climate change, environment protection and the Connectivity Platform were also discussed. Other agenda items included China’s steel and aluminium overcapacity and the high technology sectors covered by the Made in China 2025 Strategy, market access barriers to EU beef and poultry exports, the circular economy, the ETS, the Oceans’ Partnership (e.g. fisheries), and the market access barriers following China’s cybersecurity regulations, etc.

Trade frictions aside, in the meantime HLETD pushes to advance bilateral economic and trade relations. The bilateral WTO Working Group tackles WTO reforms in relation to the Appellate Body and other disciplines, such as industrial subsidies and transparency. For the former, after the Appellate Body ceased to function in December 2019, the EU, China and 17 other WTO members in March 2020 established a contingency multi-party interim appeal arbitration arrangement, as a separate appeal system to settle trade disputes.

For the latter, however, little progress seems to have been made, except that the [Dialogue on State Aid](#) was established. It serves as a mechanism for the EU and China to conduct consultation, cooperation, and for transparency and legal certainty purposes, in the field of state aid control and Fair Competition Review. According to its [MOU](#), this new dialogue aims to enhance practical cooperation on transparency of China's state aid control regime and establishing a Fair Competition Review System in China, so as to foster fair competition in the market, the so-called a level-playing field, for businesses of all countries.

Aligning objectives where possible, elevate bilateral cooperation at global level

When the EU and China are able to forge shared positions on a given subject, their cooperation would be facilitated at global level. This is often the case with regard to their cooperation on foreign policy and security issues. For example, as acknowledged by Federica Mogherini, the former High Representative of the EU for Foreign Affairs and Security Policy, at her meeting with China's Premier Li Keqiang on 24 October 2019, EU-China cooperation was a major factor in first securing the Iran nuclear agreement and later in ensuring its full and effective implementation.

Enhancing the EU's rule-making power in trade²⁴

With the sheer size of its single market, counting 450 million consumers and 22.5 million small and medium-sized enterprises (SMEs), the EU boasts a normative power in global trade. When China embarked on market-opening in order to qualify for its WTO membership, abundant opportunities were presented to the EU to shape China's various trade policies and to align them with the EU's, where possible. The success of the whole undertaking would yield enhanced rule-making power for the EU at global level. In reverse, EU's trade policy approaches and experiences (including market integration) could serve as examples for China to reflect upon and learn from. Indeed, many economic and sectoral dialogues, for example the [Competition Policy Dialogue](#) (Box 5) and the [IPR Dialogue](#), have served both sides.

24 Seeking possibilities for greater influence and for enhanced market access ultimately is a strategy engaged by global market powers, the EU is not the only one. Recall, on 15 November 1999, Ambassador Barshefsky, then USTR, at the Press Conference on the U.S.-China Agreement said that on the question of financial securities, the Treasury Department in particular would have a forum in which to consult with China on the development of its securities market, which was underdeveloped. The Ambassador further said that while China typically turned to Hong Kong regulators for advice, the Treasury Department "...was very anxious to be able to participate in this kind of formulation of regulations and the development of capital markets generally in China, including with respect to market access in future..." Note that the Agreement, which paved the way for the U.S. support to China's WTO membership bid, established a capital markets dialogue to cover the totality of banking issues as well as securities and regulatory issues.

Box 5: Competition Policy Dialogue

Competition policy is a crucial and complex issue for China both internally, in relation to its domestic markets among different administrative levels, and externally for international mergers and acquisitions reviews.

Domestically, as a by-product of China's judicial devolution, China's internal markets at different administrative levels were often subject to diverse regulations. Therefore, when transitioning from a central-planned to a market-oriented economy, to achieve China's 'internal markets' integration the regulatory barriers erected between central and local, and among provincial and municipality, governments had to be removed, minimised or harmonised. Only after such integration, the (internal) market would be ready for fair competition on an equal footing. Besides, as a legacy of a central-planned economy, SOEs were bestowed with many privileges in terms of favourable policies and convenient access to public funds. In this context, achieving fair competition means eliminating SOEs' privilege and subjecting them to the same market rules as applicable to all enterprises regardless of their ownership, whether SOEs, private, or foreign-invested. Only then, a level-playing field for competition would materialise.

Internationally, with its quick rise to become a huge market for foreign investments, China is increasingly a "must visit" jurisdiction for global mergers. But at the same time its Anti-Monopoly Law (AML), since in 2008, appears relatively young in comparison with other competition jurisdictions in the world, such as the EU's, and requires improvements in implementation, in particular.

The EU and China in 2004 agreed to set up a permanent consultation mechanism on competition policy. At the time, China's competition regime, including AML 2008, administrative regulations and implementing rules, already started to follow the "European model" as China's AML equally regulates against anti-competitive agreements, abuse of dominant position and concentration, echoing Articles 101 and 102 of the Treaty on the Functioning of the EU and the EC Merger Regulation. Depending on the investigated markets, since an international transaction outside China could be subject to AML's scrutiny, coordinating with Chinese authorities on competition policy has become essential in order for both the EU and China to fight against international cartels.

Three different kinds of activities are introduced to complement the EU-China Dialogue on Competition Policy, in order to harness uniform implementation and coherent and predictable enforcement. The three kinds of activities are, a "Competition Week" to enhance public awareness about competition policy, a "Competition Summer School" to conduct an intensive week-long study programme to train Chinese officials, a "Visitors' Programme" which is a field trip to visit different competition authorities in the EU. At policy level, during the annual meeting of the Dialogue, officials from both sides will exchange views on good practices and discuss all areas of competition law, including state aid control.²⁵

Established in 2004, the bilateral cooperation in civil aviation has yielded the same result for the EU in extending its single market principles to China. China has one of the fastest growing aviation sectors in the world; it is expected to be the largest growing

²⁵ With the dialogue as a platform, the EU shares with China its experience in enforcing state aid control. It can also be used to learn more about the implementation of the Fair Competition Review in China, which is designated to prevent public policies from distorting and restricting competition while maintaining fair market competition and promoting a unified market. The dialogue is seen as the Commission's broad strategy to address the distortion that national subsidies policies engender on the promotion of a global level playing field where companies can compete on the merits. The dialogue is supported by cooperation with working groups at technical level. The dialogue takes place at least once a year, alternating between Brussels and Beijing.

domestic aviation market for the next 20 years, too. With a steadily increasing number of customers in the country, new airlines and low-cost subsidiaries of existing full services carriers will enter the market, many opportunities are therefore presented for the European aviation industry in China. This includes not only EU-manufactured aircraft and components, but also more flight frequencies between Europe and China.

The EU's aviation industry supports 5.1 million jobs and generates 2.4% of its GDP. Aviation is also one of the main drivers for R&D, and for creating employment in Europe. Exports account for roughly 60% of its revenue. Aviation trade between the EU and China has already generated more than EUR 10 billion. The EU-China Aviation Relations Dialogue aims to strengthen the economic partnership between the EU and China in the civil aviation domain in relation to industry, technology and safety.

From the perspective of EU's rule-making power, replacing the traditional flight route set-up based on nationality restrictions, the single market principle of destination has eventually been recognised by the Chinese aviation authority in the Horizontal Agreement signed in May 2019. This recognition extends the EU's internal aviation market to a third country.

As to safety, the objective of 'mutual acceptance' has been achieved as a result of the bilateral aviation dialogue. By signing the Bilateral Aviation Safety Agreement (BASA), the EU and China have established the mechanism of reciprocal acceptance of 1) certificates (airworthiness, environmental testing) and 2) findings of compliance issues by respective competent authorities. Such findings include design and production, maintenance, personnel licensing and training, operation of aircraft, air traffic services and management, etc. As to the 'mutual acceptance' arrangement, it will apply to a range of products, such as civil aircraft, aircraft engines, propellers, sub-assemblies, appliances, and parts. In practical terms, it means automatic acceptance without any technical investigation or validation exercise, so that a certificate issued by the certifying authority is recognised by the validating authority

as equivalent to its own certificate issued in accordance with its legislation and procedures.

The Aviation Dialogue is conducted through 1) exchange of information between regulatory authorities; 2) specific technological cooperation activities, including training, and secondment of short-term experts, in order to implement policy objectives. Aviation cooperation was emphasised by the EU as “a matter of priority” in bilateral relations with China since 2004, for three reasons. Firstly, China’s ever-growing civil aviation market, as mentioned above, promises substantial commercial opportunities, as mentioned above. Secondly, for the EU’s principle of destination to be recognised by China, so that all EU airlines will be able to fly to China from any EU member states with a bilateral air services agreement with China if unused traffic rights are available. Without the agreement, only airlines owned and controlled by a given member state of its nationals could fly between that member state and China. Thirdly, on ‘mutual acceptance’, the EU perhaps did not want to lag behind the US since the U.S. and China signed the Agreement for Promotion of Aviation Safety in 2005 covering, among others, mutual acceptance of technical standards, including (a) airworthiness approvals and environmental testing and approval of civil aeronautical products, and (b) qualification evaluations of flight simulators.

BASA also aims to facilitate mutual acceptance of the approvals and monitoring of maintenance facilities and alteration or modification facilities, crew members, aviation training establishments, and flight operations. Indeed, BASA brings the EU on an equal footing with the US, among others, with respect to aircraft and related products trade. In the meantime, BASA removes the unnecessary duplication of evaluation and certification activities for aeronautical products by the civil aviation authorities and therefore reduce costs for the aviation sector. BASA also promotes cooperation between the EU and China towards a high level of civil aviation and environment compatibility. Both the Horizontal Agreement and the Bilateral Aviation Safety Agreement came into effect in September 2020.

Thanks to the bilateral dialogue mechanism, not only on trade issues, but also on certain non-trade issues, chiefly on environmental protection, the EU's rule-making capacity is seen to be working towards China, for which China has stepped up from "soft", e.g. exchanging views and sharing experiences, to "hard" commitments with legally-binding deliverables, as testified by the CAI. Based on the provisional text of the Agreement (January 2021), China has committed to implement the Paris Agreement on Climate Change and to ratify the two ILO core Conventions on Forced Labour. With these legally binding obligations on non-trade issues, China departs from its previous approach undertaken in a similar context which was only about "best efforts" referring to by the negotiations, and the eventual suspension, of the EU-China Partnership and Cooperation Agreement (PCA) between 2007 and 2011.

In 2007, the EU and China launched their PCA negotiations, with a scope encompassing political cooperation, e.g. democracy, human rights, governance, and trade and investment liberalisation, mainly in the form of trade and investment facilitation. China's aversion against "hard" commitments to political deliverables was quoted as one reason for suspending the negotiations although one half of the 22 chapters had been finalised or were close to finalisation.²⁶ However, at the end of 2020 China has changed its position against non-trade issues during trade negotiations and accepted hard commitments to implement the Paris Agreement on Climate Change and to ratify the ILO Conventions on Forced Labour which are both with legally-binding effects. More significantly, as far as the CAI is concerned, China has subjected its sovereign right of ratification to a consultation mechanism with the EU – as the ILO Constitution is clear that ratification is a sovereign matter that a member shall decide. This is a triumph for the EU over its rule-making power, as well as its value-based trade policy. No wonder China's hard commitments, grouped under the chapter of sustainable development of the CAI, were hailed as the "last piece that fell

26 For the motivation for launching the PCA negotiations and a brief explanation of the suspension of the negotiations, see Pelkmans, Hu, Francois et al. (2018), ch. 1

into place” before the CAI was provisionally concluded.²⁷

With regard to environmental protection, China’s commitments under the CAI are two-fold. Firstly, China has committed to implementing the UNFCCC (United Nations Framework Convention on Climate Change) and the Paris Agreement on Climate Change. This means to have CO₂ emissions peak before 2030 and achieve carbon neutrality before 2060. On December 12, 2020, President Xi Jinping announced some further commitments for 2030 at the Climate Ambition Summit: China will lower its CO₂ emissions per unit of gross domestic product (GDP) by over 65% from the 2005 level, increase the share of non-fossil fuels in primary energy consumption to around 25%, increase the forest stock volume by 6 billion m³ from the 2005 level, and bring its total installed capacity of wind and solar power to over 1.2 billion kW.²⁸ Secondly, China has committed to a five-year action plan, known as Nationally Determined Contributions (NDC) under the Paris Agreement, to implement the aforementioned goals. Working on a five-year cycle since November 2016 when the Paris Agreement came into force was a commitment pledged at the conclusion of the Paris Agreement.

As to the labour protection commitment under the CAI, although – as far as the provisions are concerned – ratifying the two ILO Conventions on Forced Labour (Nos 29 and 105) will be on China’s “own initiative” with “continued and sustained efforts”²⁹ which appear rather a “best endeavour” kind of soft commitment, but the pledge is nevertheless legally binding, as confirmed by the Panel Report on the EU-Korea labour dispute, where the Panel decided that the wording “... respect, promote and realize...”, used by Article 13.4.3 of the EU-Korea Free Trade Agreement (FTA), and also by Article 4 of Sub-section 3 of the EU-China CAI (Agree-

27 Available at tradetalkspodcast.com 148, the EU’s new trade policy, with Sabine Weyand of DG Trade.

28 China’s Achievements, New Goals and New Measures for Nationally Determined Contributions.

29 See Article 4 of Sub-section 3 on Investment and Labour of the EU-China Comprehensive Agreement on Investment (https://trade.ec.europa.eu/doclib/docs/2021/january/tradoc_159346.pdf).

ment text as of 22 January 2021), is legally binding.³⁰ Moreover, the provision that constitutes the “best endeavour”, where parties “will make continued and sustained efforts towards ratifying”, seen in the same Article in both trade agreements, is equally legally binding as established by the same Panel Report.³¹

Furthering the EU’s strategic interests

The bilateral dialogues provide the EU with a ready instrument to advance its strategic interests vis-à-vis China, which is a global player in many dialogue areas under the Dialogue Architecture.

The foreign policy dimension

The EU-China bilateral political dialogues consolidate many of their shared positions in foreign policy in the geographical areas concerned, from Asia, Africa, Latin America, Middle East to North Africa. For example, at the 7th EU-China Summit in 2004, the Joint Declaration on Non-proliferation and Arms Control was concluded while both sides recognised each other as major strategic partners on arm control. This enhanced cooperation has been conducive in order to advance the multilateral non-proliferation process. The position shared by the EU and China on the Joint Comprehensive Plan of Action (JCPOA) is another case in point, as mentioned above.

The economic and trade front

Many dialogues conducted under the Pillar of Economic and Sectoral provide the EU with opportunities to explore new terrains to advance its trade interests. For example, as one of the earliest

30 See Report of the Panel of Experts, Panel of Experts Proceeding Constituted under Article 13.15 of the EU-Korea Free Trade Agreement, 20 January 2021, pp 28-40.

31 See Report of the Panel of Experts, Panel of Experts Proceeding Constituted under Article 13.15 of the EU-Korea Free Trade Agreement, 20 January 2021, pp 70-7. For an analysis on the challenges that China faces in order to ratify the ILO Conventions on Forced Labour, see Hu (2021-b)

bilateral cooperation projects, the Energy Dialogue was first established in 1994 in the forms of annual working group meetings and the bi-annual Conference on EU-China Energy Co-operation.

When [the EU-China Energy Dialogue](#) was first inaugurated, the specific agenda included energy policy and development strategy, the evolution of energy markets, and security of supply and sustainable development. Over time, and because China has since become simultaneously the world's largest renewable energy producer as well as the largest producer of hydroelectricity, solar power and wind power, and yet the world's largest greenhouse gas emitter, bilateral energy cooperation has been elevated to a very strategic issue for both sides, especially concerning supply and innovation.

In September 2020, President Xi's pronouncement on "emission peak by 2030 and carbon neutrality by 2060" has injected new impetus to China's ambition of environmental protection. Nonetheless, achieving carbon neutrality suggests that China will become the world's biggest market for low-carbon technologies, and this potential has been indeed acknowledged for it presents concrete trade opportunities. After all, China has been the world's biggest investor in renewable energy since 2016.

However, aside from all the encouraging developments, one should not underestimate the considerable impediments of a coal transition towards clean energy that China must overcome before achieving its goals. It is noticed that, in the 14th Five-Year Plan delivered at the 'two sessions' (Beijing, 4-11 March 2021),³² Premier Li Keqiang refrained from setting a cap on carbon intensity for the next five years (2021-2025) and from introducing a ban on building new coal-fired plants, which would have been a major step for promoting carbon reduction. As the world's largest coal producer accounting for half of global production, China continues to depend heavily on coal domestically.

32 The 'two sessions' refer to the annual meeting of the Chinese People's Political Consultative Conference (CPPCC) and the National People's Congress (NPC). The meeting is a window on the central government's priorities and plans for the coming year (<https://www.scmp.com/news/china/politics/article/3123587/two-sessions-2021-five-things-you-need-know-about-chinas>).

Presently, fossil fuels – mostly coal – account for about 90% of China’s energy production and consumption. The government has been working to lower its reliance on coal, to cut down over-capacity, while expanding its renewable capacity and to gradually switch from coal to gas as well as to renewable energy sources.³³ To peak CO₂ emissions by 2030 is therefore to manage a coal transition.³⁴ Using the Covid-19 recovery package as a conduit, China announced that it would invest around CNY 17.5 trillion (€2.26 trillion) in ‘new infrastructure’ (e.g. 5G networks, charging stations for new energy vehicles). However, it is also reported that the country will likely ease the pressure³⁵ on coal mines’ closure to meet the rising demand of energy for economic recovery post-Covid.

Nuclear energy is another area where cooperation has generated tangible results, and benefits the EU since it could learn from China for its know-how. The [R & D in Peaceful Use of Nuclear Energy Steering Committee](#) (RD-PUNE) was established in 2008, after the agreement on R&D co-operation on the peaceful use of nuclear energy between the Euratom and the Government of China was signed at the EU-China Summit, in The Hague, in 2004. The Agreement launched research cooperation, including researchers’ access to nuclear energy research facilities on both sides. This provision is particular important to EU researchers as they can access China’s state-of-the-art nuclear facilities while those in Europe were closing down or being phased out.

The same spirit of cooperation on nuclear energy extends to international fora, too. For example on nuclear fusion, the EU could promote its strategic interest in “advancing fusion science and preparing the way for the fusion power plants of tomorrow”.³⁶ The EU

33 For example, China’s State Development and Investment Corporation pledged in 2019 to no longer invest in new thermal power plants, Bloomberg, (March 2019), China state funds join shift from coal power investments (www.bloomberg.com/news/articles/2019-03-20/top-china-fund-sdic-joins-global-shift-away-from-coal-investment).

34 See also Teng (2018)

35 Bloomberg, China Likely to Ease Coal Mine Closures to Meet Rising Needs, 15 June 2020.

36 Available at: <https://www.iter.org/proj/inafewlines>.

and China are both parties of the inter-governmental multilateral agreement on fission-related research, and partners of the ITER,³⁷ the world's largest nuclear fusion project in which 35 nations cooperate on fusion research and participate in the R&D activities on a Sodium Fast Reactor and Very-High Temperature Reactor, within the Generation IV international Forum. When the ITER negotiation reached a deadlock in 2004 among the six parties (China, Japan, Korea, the EU, Russia and the US) as to the location of the 10-billion-Euro science project, China (and Russia) supported the EU's choice of the South of France (as opposed to a location in Japan, supported by the US and Korea). At the time, China even indicated that if negotiations were to fail it would be ready to join the EU to go ahead with the latter's choice of location.³⁸ The ITER Agreement was officially signed in Paris in November 2006, while India also joined as a party. France was eventually chosen as the location of the project.

The people-to-people front

The various dialogues undertaken at the people-to-people front help to deepen trust and mutual understanding between the peoples in the EU and China. Cooperation in this regard include many areas, such as education, youth, gender equality, sports and multilingualism. The whole exercise is designed to enhance EU's visibility, and soft power.

Though the dialogue themes of people-to-people exchange may appear light-hearted, they are of much importance when promoting EU's interests towards China. This is testified by, for example, the 2016 Joint Communication on Elements for a New

37 In southern France, 35 nations, including China, collaborate to build the world's largest tokamak, a magnetic fusion device that has been designed to prove the feasibility of fusion as a large-scale and carbon-free source of energy based on the same principle that powers our Sun and stars. ITER will be the first fusion device to produce net energy, and to maintain fusion for long periods of time. ITER will also be the first fusion device to test the integrated technologies, materials, and physics regimes necessary for the commercial production of fusion-based electricity.

38 See the Joint Statement of the 7th EU-China Summit, The Hague, 8 December 2004, at para.19.

EU Strategy on China which identified the Erasmus+ programme as an instrument to strategically promote the EU's interests concerning China.

Indeed, higher education has become increasingly a focal point for EU-China cooperation. China has already been the top beneficiary of the EU-funded "Erasmus+" programme and, since 2015 more than 4,000 Chinese students and staff benefitted from the programme in which 70 Chinese universities participated. Moreover, in 2017 both parties further agreed to boost researchers' mobility through the EC-funded Marie Skłodowska-Curie Actions, which is a programme promoting interdisciplinary research and international collaborations, and supporting scientists across the globe. China has benefitted considerably from the various EU-funded academic exchange programmes whereby some of China's most brilliant minds of the future generation are also exposed to Europe's culture, values, science and technology, reflecting EU's soft power. Perhaps as an emulation of the EU's practice and the logic behind it, China launched an "EU-style" five-year Chinese Government Scholarship Program (EU Window) from 2007 onwards to provide 100 scholarships per year to young EU students to study in China. This programme continues to date.

2.4 Exploring new areas of mutual interests to achieve a win-win situation for both

The examples above, such as on competition policy, already highlight the fact that dialogues can facilitate to achieve a win-win situation for both the EU and China. As the biggest consumer market in the world, China presents many opportunities for EU businesses. This was indeed one reason that, since the very beginning, the scope of EU-China cooperation set no limits as witnessed by the 1985 bilateral Agreement on Trade and Economic Cooperation which also covers their cooperation in third countries. For this purpose, the number of dialogues between the EU and China has been ever growing to date, since new cooperation areas con-

tinue to emerge.³⁹ This phenomenon is applicable to dialogues on non-trade issues, too.

On the other hand, although the dialogues on non-trade issues, such as environment protection, have delivered many tangible results, these Dialogue results were only realised in relation to “non-complicated” subject matters without the need for structural change. If a structural change is required, China may still be persuaded to change its stances, but that would require a much longer time to materialise. In this regard, China’s stance on forced labour is a case in point, since legislative changes in prison law and criminal law will be involved, although China already abolished forced labour camps in 2013.⁴⁰ Dialogues of other non-trade issues include [Regional Policy](#) and occupational safety & health. The latter focuses on improving working conditions, reducing work-related accidents and illness, in order to contribute to the objective of decent work for all and adhere to the agreed ILO standards.

Some sectoral dialogues were established in order to identify synergies between the EU and China for mutual benefits. The Climate Change Partnership, the [Dialogue on Aviation Regulation](#) and the [High-Level Dialogue on Innovation](#) are three such examples. The EU-China Climate Change Partnership includes an action plan of cooperation on clean coal, energy efficiency, renewable energies. Working towards a more ambitious Paris Agreement within the remit of the UN Climate Convention is an objective of the Partnership, too. Under the High-Level Innovation Dialogue, both sides set up a co-funding mechanism 2018-2020 and the Flagship initiatives, such as food, agriculture, biotechnologies, environment protection, sustainable urbanisation, surface trans-

39 In this regard, EU’s financial commitment has been considerable. For example, in 2004 the Hague Summit endorsed four financing agreements for EUR 61 million for four new cooperation projects under the programme of supporting economic and social reform in China. The four projects were: the EU-China Information Society Project, the EU-China Managers Exchange and Training Programme, the EU-China Social Security Reform Project, and the Erasmus Mundus China Window project. The Information Society Project as well as the Social Security Reform project have both organically grown and established further concrete dialogues, while the Erasmus Mundus China Window project has become fully-fledged in recent years as mentioned above.

40 For details, see Hu (2021-b)

port, safer and greener aviation, are topics identified for cooperation under the framework of the EU-financed H2020 programme. The obverse also applies: the EU joins China's drive for innovation and taps into China's increasing innovation capacity for a win-win position for both sides. In recent years, China has been making inroads in innovation. In 2019, China's R&D expenditure reached 2.17 trillion CNY (0.27 trillion EUR), equivalent of 2.19% of GDP, after the US.⁴¹ It is the world's second-largest producer of high-quality academic research and, seven of the world's top 25 academic institutions, ranked by research output in the natural sciences, are found in China.

2.5 Environment Policy Dialogue

The EU and China started to collaborate on environment protection in 1999, when the [Environment Policy Dialogue](#) was inaugurated. The EU was committed to support China's wide-ranging social and economic reforms in the run up to the country's WTO accession. Other projects established in the same period included education and training, science and technology, energy, agriculture, civil aviation, telecommunications, legal co-operation and public administration training, and human rights.

In 2003, the Environment Policy Dialogue was upgraded to the ministerial level, with the overall objective of implementing the 2030 UN Agenda for Sustainable Development in China. Since then, the topics covered under the Dialogue have experienced organic growth. Because of the Chinese society's increased awareness of environment protection, the scope of bilateral dialogue has been extended to cover more cooperation areas over the years. And, when the importance of some policy areas, such as sustainable development, renewable energy, and water source management, grew in their own right, specific dialogues were launched accordingly. Additionally, after the government has adjusted its policy focus from "development at all costs" towards environment-oriented, practical cooperation projects started to take off,

41 Available at: UKRI China – UKRI.

too, in order to rollout environment protection policies, such as the ETS.

The topics of environment protection have since increased to include sustainable production and consumption, pollution control and management, natural resource management, river basin management, biodiversity conservation, international environment governance, emergency response to environmental accidents, chemicals management, and disposal and management of dangerous wastes, etc. Both the EU and China also pledged their support to promote clean technology transfer, and to encourage the adoption of stricter environmental standards in mutual investment.⁴² In 2012, the projects on water pollution reduction, waste policy and reduction of heavy metal pollution were launched. Later, since the subjects of water, food and nutrition security garnered substantive interest from both sides under the umbrella of environmental and agricultural cooperation, the [EU-China Water Platform](#) was established in order to tackle the issue of integrated water resources management in China.

More recently, green finance and circular economy were added to the agenda of bilateral cooperation on environment protection. On green finance, a shared objective is to harness private capital flows towards a more environmentally sustainable economy. As to circular economy cooperation, following the [MoU on Circular Economy Cooperation](#) signed in July 2018, both sides started to share with each other's best practices, to align key mechanisms, and to set up product standards and policies potentially, which may enable an effective circular economy, for example in the area of plastics.

Exchange of information concerning methodologies, policy tools, technology transfer and implementation as well as staff exchanges, etc. are the means engaged by the EU and China in order to roll out a comprehensive and dynamic environment protection partnership. At policy level, a significant output of the bilateral Environment Policy Dialogue is China's adoption of the

42 See EU-China Joint Summit Declaration, Beijing, 2007.

EU's ETS concept, extending the EU's rule-setting capacity and strengthening the EU's leadership role as a global champion of environment protection.

In February 2021, China officially launched its national EU-styled ETS with the initial focus on the power generation sector involving 2,225 companies. Over time, the system would be extended to cover other sectors of high pollution, such as cement, steel and aluminium. The relevant companies covered during the launch phase can enter the process of buying and selling permits to emit carbon dioxide or other greenhouse gases. If a company is able to curb its emissions significantly, it can sell surplus permits in the market, but if it fails to limit its emissions, it has to buy unused allowances from other companies.

Prior to adopting the ETS, China implemented seven ETS pilot projects in five cities and two provinces, of which specific cooperation projects were undertaken between 2014 and 2017 within the remit of the EU-China Energy Dialogue. With China's participation, the ETS is presently operating to cover an estimated 17-18% of global CO₂ emissions, compared to 9% before. As a result, the EU's method of reducing CO₂ emissions is being promoted to a global level, although China employs slightly different techniques. China has also replaced the EU as the world's largest environment credit trading market.

Once policy objectives on environmental protection are aligned after bilateral dialogues, the next step is to conduct concrete projects to deliver those objectives. One example of such project is the

China-EU Water Platform (CEWP) Dialogue,⁴³ a three-tiered dialogue founded in 2012. The CEWP was intended to implement 1) policy exchange activities, and 2) research and innovation activities such as the EU-funded Horizon 2020 project [PIANO](#) (Policies, Innovation And Network For Enhancing Opportunities for China-Europe Water Cooperation). According to its 2018-2019 work programme, the PIANO project covered four areas, which were river basin management and ecological security, rural water and food security, water and urbanisation, water and energy security, as well as the programme of a number of horizontal activities with an organisational dimension and three work packages (WP).

CEWP also helps to bridge business opportunities both in China and the EU. The Chinese market for water technologies was estimated at US\$100 bn (€91.4 bn) in 2016 (Global Water Intelligence 2017) which was among the largest in the world, and with an expected growth rate of 28% between 2016 and 2020 (Global Water Intelligence, 2017) thanks to both public and private investments of a substantial scale. However, due to a variety of reasons, including language barriers, establishing and expanding operation in the Chinese water tech market could be a very difficult undertaking for European businesses. Chinese companies face similar difficulties when they try to access the European water tech markets. Serving as a bridge, the CEWP organises business ‘match-making’ and provides key sources of information to promote business opportunities for companies from both the EU and China.⁴⁴

43 With the support of the EU Water Initiative (EUWI) and based on reciprocity and mutual benefit, the China-Europe Water Platform (CEWP) was established in 2012 to achieve the objectives of realising good governance in managing water resources, enhancing mutual understanding on approaches in integrated water resources policy development and implementation, promoting the exchange of innovative knowledge and technologies to meet common challenges, creating opportunities for private sector and research institutes on both sides to undertake business development and joint research programs of common interest. According to the Declaration signed at the CEWP high-level Conference in Finland in 2017, during the next two years the CEWP would focus on reaching the UN Sustainable Development Goals associated with water and on promoting a water-related circular economy. This initiative takes place via the even deeper ‘water partnership’ between the EU and China and by increased cooperation with other international players in the water sector, not only in Europe and China but also outside.

44 For details, see <https://www.cewp.eu/organization>.

Within this context, it must be highlighted that public investments in water technologies were launched following the Chinese government's regulatory initiatives which are accompanied with investment programmes.

On the other hand, under the Environment Policy Dialogue, the bilateral cooperation programmes on [Environment Governance](#) and [Environment Sustainability](#) were conducive to instil greater awareness of environment protection, both at government and grassroot levels. Raising awareness requires long-term commitment in general. Awareness on environmental protection in China was initially poor. Economic development was paramount "at all costs", including environmental costs. In recent years, though, improving environment, with specific targets such as carbon emission reduction levels,⁴⁵ has been an on-going policy priority for which the government also allocated much financial support for implementation. Accompanying this policy drive is the government's financial schemes to support China's green industry. Already in 2015, China became the world's biggest investor of renewable energy, spending a total of US\$103bn (€94.14bn), or 36% of the world total.⁴⁶ This overall commitment has generated significant opportunities for deepening EU-China cooperation on climate change for clean technology transfer, and policy coordination at global level, etc.

The above policy re-orientation would not have been possible

45 On September 22, 2020, President Xi Jinping declared, at the General Debate of the 75th Session of the United Nations General Assembly, that China would scale up its Nationally Determined Contributions (NDCs) by adopting more vigorous policies and measures, and aims to have CO₂ emissions peak before 2030 and achieve carbon neutrality before 2060. On December 12, 2020, President Xi Jinping announced some further commitments for 2030 at the Climate Ambition Summit: China will lower its CO₂ emissions per unit of gross domestic product (GDP) by over 65% from the 2005 level, increase the share of non-fossil fuels in primary energy consumption to around 25%, increase the forest stock volume by 6 billion m³ from the 2005 level, and bring its total installed capacity of wind and solar power to over 1.2 billion kW. See China's Achievements, New Goals and New Measures for Nationally Determined Contributions, available at: <https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/China%20First/China%E2%80%99s%20Achievements.%20New%20Goals%20and%20New%20Measures%20for%20Nationally%20Determined%20Contributions.pdf>.

46 See China cementing global dominance of global energy and technology, 6 January 2017, the Guardian. Available at: <https://www.theguardian.com/environment/2017/jan/06/china-cementing-global-dominance-of-renewable-energy-and-technology>

without enhanced awareness of environment protection. The EU and China launched the Environment Governance Programme (2010-2015) to enhance awareness at both governmental and grassroots levels. The programme aimed to strengthen environmental governance in China through enhanced administration, public access to information, public participation, access to justice and corporate responsibility in the environmental field. Under the Environment Governance Programme, 15 projects with four themes were rolled out in order to enhance environmental governance in China based on the premise of the Aarhus Convention.⁴⁷ The Convention has four themes encompassing public access to environment information; public participation in environment planning and decision-making; access to justice in environment matters and corporate environment responsibility. The whole programme was funded by the EU for €15 million, and implemented by China's Ministry of Commerce and the Ministry of Environment.

The same dynamic partnership is found in the [EU-China Partnership on Climate Change and BCM on Climate Change](#), which was forged in 2005 at the same time when the country had become the world's largest carbon emitter.⁴⁸ The Dialogue on Climate Change is a platform for bilateral cooperation within the multilateral context of the UN Framework Convention on Climate Change, where both parties coordinate their political positions related to the Paris Agreement. The policy areas covered by bilateral climate change cooperation include domestic emissions reduction, carbon markets, low carbon cities, carbon capture and storage, greenhouse gas emissions from aviation and maritime industries and hydrofluorocarbons.

47 The Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters was adopted on 25 June 1998 in the Danish city of Aarhus (Århus). It entered into force on 30 October 2001. The Aarhus Convention establishes a number of rights of the public (individuals and their associations) with regard to the environment. The Parties to the Convention are required to make the necessary provisions so that public authorities (at national, regional or local level) will contribute to these rights to become effective.

48 China became the world's biggest investor in renewables since 2012 when \$ 65 billion was invested.

Within the context, to bring dialogue to action, the Action Plan adopted in 2018 seeks to address the issues related to clean coal, energy efficiency, as well as renewable energies. Subsequently, and in view of China's ambition to establish a nationwide ETS,⁴⁹ specific projects were undertaken to support the design and implementation of greenhouse gas emissions trading in China. Additionally, there was the project on [China-EU Near Zero Emission Coal \(NZEC\)](#) for developing and demonstrating carbon dioxide capture and storage technology in China by 2020, a project which turned out to be too optimistic for many years.

2.6 A platform for capacity-building

Among the EU-China economic and sectoral dialogues, capacity-building was a major objective in the beginning in order to facilitate China's WTO accession process. Later, most of the dialogues were transformed into platforms to assist the country's further integration in the WTO trading system and to address trade irritants for example on fisheries. Since many of China's WTO accession commitments are WTO-plus in nature,⁵⁰ the technical challenges that China was facing against the economic transitions were high. EU's (and other countries') technical assistance programmes were conducive in order to help China comply with its WTO accession commitments. Thus, many working group and expert meetings, which are a component of many bilateral dialogues, were organised in order to transfer to China the EU's knowhow and to discuss practical issues encountered. Such dialogues, including the Dialogue on Consumer Products, Industrial Products & WTO/TBT Consultation, have facilitated China to implement WTO-compliant legislation and practices.

The functioning of the expert group meetings organised within the framework of the [Dialogue of IPR Protection](#) is an example. Over the years, the Dialogue on IPR Protection, established in 2004, has developed a comprehensive framework of dialogues at

49 For details, see EUCHINA-ETS (eu-chinaets.org).

50 See Hu W. (2019a).

policy, working group and expert levels. Besides conducting bilateral meetings for information-sharing on IPR legislation and practice, and policy coordination, the IPR Dialogue has the purpose to identify weaknesses in IP protection on both sides and present proposals for improvement.

To complement the bilateral IPR dialogue activities at policy level, the IP Working Group was established in 2005 and is an integral part of the IPR Dialogue. Taking place twice a year, the agendas of each Working Group meeting are drafted with consultations among stakeholders, including industries, academia and practitioners, in order to make sure that the discussions are ‘relevant’ to the IPR issues that the parties face in reality. The location of the Working Group meetings alternates between the EU and China.

At expert level, the overall activities, which cover all the technical issues in IP areas, such as copyright, trademark, patent, GI, are organised by the [IP Key Project](#) for already more than a decade. Participants of the activities, such as technical training, experts seminars and field trips, include policy makers, judiciary and academics from both the EU and China.

Note that, although in the beginning the IP Key Project was an EC-funded project, it is now co-funded by the Commission and the Chinese Ministry of Commerce. This change of the funding pattern may reflect the fact that on IPR protection China no longer requires aid for capacity-building, but has developed its ability to enact WTO-complied laws and policies. In this sense, the Dialogue may very well serve as a platform for consultation, too

Another example of using the bilateral dialogue mechanism as a platform for the EU to conduct capacity-building activities is the Dialogue on Public Procurement. It was launched to assist China to deliver its WTO accession commitment and to accede to the WTO plurilateral Government Procurement Agreement (GPA) “as soon as possible”. It was only in 2000 that China enacted its first public procurement laws in order to pave the way to launch its

WTO GPA negotiations and to accede to the Agreement “as soon as possible”, in accordance with its WTO accession pledge. Prior to that, public procurement activities were ‘centrally planned’ and had little relevance to trade but aimed merely at spending of public funds. Nonetheless, as public procurement has a ‘public’ dimension, the procurement activities were therefore linked closely to SOEs in the past and SOEs were usually favoured by procurement contracting authorities since they were all from the same “family”. For this reason, public procurement was regarded as distinct from other trade disciplines, such as IPR protection, and has proven to be a difficult issue to tackle. After all China has yet to enforce a properly functioning SOE’ market, instead of governmental or quasi-governmental functions.⁵¹ Fundamentally, public procurement was not a trade issue for China, but one of public finance whereby public funds would trigger the application of the public procurement rules.

In 2006, one year before China submitted its initial GPA accession offer to the WTO, the [Regulatory Dialogue on Public Procurement](#) was launched between China’s Ministry of Finance and DG Markt of the European Commission. The Dialogue has the mandate to serve as a forum for policy consultation and discussion in order to enhance the technical expertise and capability in the area of government procurement policy of China’s Ministry of Finance. The Dialogue is also expected to increase mutual understanding and awareness of current and forthcoming policy approaches, legislation and related issues, both in China and in the EU. To breakdown the mandate in details, the Dialogue should identify mutual interest that would enable China and the EU to share their experiences and to follow new developments in legislation, incl. enforcement of domestic government procurement rules, and in international fora such as the WTO GPA. To achieve these objectives, the Dialogue is undertaken by means of regulatory exchange and seminars. Over the years, a number of joint studies were conducted in order to explore ways for China to propose an ambitious offer for acceding to the GPA in an expeditious manner.

51 See Hu, W. (2019b).

Though China has yet to submit an ambitious offer for its GPA accession,⁵² in recent years the Chinese authorities implemented a series of measures to improve the system domestically. For example, an e-procurement method was adopted so that public procurement opportunities available at central and local governmental levels are published on a dedicated website for everybody to see.⁵³ After the quality of transparency has been ensured, public scrutiny has been introduced and the system is now subject to judiciary review. This progress is a great leap forward given the historical background of China's public procurement regime, where government expenditures were kept strictly within the governments, so were the procurement contracts, which were not public. Now that public procurement is subject to public scrutiny, the accountability of the governments is also enhanced.

With the publication of public procurement opportunities at different administrative levels being centralised, it breaks down secrecy surrounding the system and thereby helping to eliminate possible nepotism and corruption. Moreover, China implemented the public-private-partnership (PPP) model for efficiency when using public funds and in executing procurement contracts. This is a remarkable development, because the government relinquished some power, including monopoly. This is a 'revolutionary' process, and the EU has contributed much expertise and influenced the modernisation of China's public procurement regime through the dialogue platform.⁵⁴

Protecting EU GIs in the Chinese market under Europe's *sui generis* system is another example where the bilateral dialogue mechanism has served as a platform for capacity-building, so that China was able to conduct a series of legislative undertakings to eventually roll out the *sui generis* GI protection scheme. EU-China

52 China's latest offer, the 7th, submitted in October 2019, was still considered inadequate because in a number of critical areas (incl. thresholds, entity coverage and offsets) the professed openness was not commensurate with what GPA parties offered. See United States Trade Representative (2020), 2019 Report to Congress on China's WTO Compliance, United States Trade Representative, p.38.

53 See 中国政府采购网 (ccgp.gov.cn).

54 Pelkmans, Hu, Francois et al. (2018).

cooperation on GI is conducted under the Dialogue of IPR Protection.

China first provided protection to GI products by trademark law, based on the so-called ‘new world’ scheme, advocated by countries like the US, Australia and Canada. China enacted the Provisions on the Protection of Geographical Indication Products in 2005, as a result of Sino-French cooperation on GI dating back to 1994. Subsequently, thanks to the technical cooperation pursued by the EU for decades, after aligning its GI protection regime with the EU’s, a *sui generis* protection scheme was rolled out in China. The whole process took a long time which was nonetheless to be expected because, apart from enacting the above-mentioned Provision, the Chinese legislature drafted the implementing rules, introduced a new corresponding GI registration system equipped with examination procedures, amended the Trademark Law (in order to stipulate the co-existence relationship between a GI product and its prior trademark), launched a new GI symbol which superseded three previous symbols (representing three different GI protection regimes in China, trademark, *sui generis* and raw agricultural GI products).

Alongside legislation, technical assistance in implementation and sharing the best practice are indispensable since the *sui generis* GI protection scheme is a typical European concept about which the Chinese enforcement authorities initially had little idea about. Thus, the EU-China “10+10” joint pilot project was launched in 2012 in order for China to experiment with the procedure of EU GI registration, including examination, publication, opposition, and appeal. After that, the EU and China published the “100+100” GIs (100 GIs from each side) in June 2017 so that the registration procedure was launched.⁵⁵ The publication of the 200 GIs was a technical but imperative procedure because the 200 GIs must be examined for their respective registrability in the market concerned before they could be included in the bilateral GIs Agreement as annexes. The additional technical complications that come

55 For details of EU-China cooperation on GI protection, see Hu (2018)

along with the examination procedure are that “interested parties” are entitled to oppose a GI registration.⁵⁶

When implementing the EU-style GI protection regime in China, the EU-China IPR Dialogue has duly served as a platform for capacity-building and for the enforcement authorities to learn how to protect the GI/IP rights conferred. In this regard, capacity-building activities consisted of training, expert seminars, field visits and personal-exchange; and bilateral meetings at political level brought impetus to moving forward this process.

A platform for policy coordination, communication, exchange of information

Meetings conducted under especially the Pillar of Economic and Sectoral Dialogues often serve trade policy coordination both at bilateral and multilateral levels. This is illustrated by the HLETD agendas in recent years in relation to, for example, identifying an interim solution after the WTO Appellate Body ceased to function.

Additionally, policy coordination means sharing information on respective policy strategies and legislation changes on both sides for consultation. The Dialogues on IPR, State Aid, Competition Policy, etc. are all embedded with a purpose of policy coordination. Policy coordination, information-sharing, public consultation, etc. instil the quality of transparency in bilateral trade relations, which is equally a WTO commitment that China is obliged to implement. Therefore, at various dialogue meetings, public consultation takes place, too, and the EU can provide its input, or request for clarification, and the Chinese side can use the dialogue mechanism to better communicate to the EU motivations behind legislation, and *vice versa*.

56 See Article 1.16.1, US-China Economic and Trade Agreement,

2.7 US-China policy consultation (vis-à-vis the EU-China dialogue architecture)

Despite all the achievements, one may ask whether the recourses that the EU has devoted to its EU-China dialogue architecture are worthwhile. It is maybe interesting to look at how the US and China have conducted their policy dialogues, in order to appreciate the approaches that the EU has undertaken.

The US and China conduct bilateral dialogues, too, but only three of them, which include the U.S.-China Joint Commission on Commerce and Trade (JCCT),⁵⁷ the U.S.-China Strategic and Economic Dialogue (S&ED)⁵⁸ and the U.S.-China Comprehensive Economic Dialogue.⁵⁹ It is observed that two non-trade issues, i.e. climate change and social safety net, are incorporated into the mandate of the S&ED Dialogue, and the dialogues have led to tangible outcomes.

For example, on climate change, China and the US have committed to cooperate on a number of areas related to climate and

57 The Joint Commission on Commerce and Trade (JCCT) is an annual dialogue that addresses commercial and trade issues between the US and China. The dialogue is co-chaired on the US side by the US Secretary of Commerce and the US Trade Representative, and chaired on the Chinese side by the Vice Premier responsible for trade and investment policy. Given the scope of the commercial relationship, other agencies not under the direct jurisdiction of the chairs frequently participate, such as the US Department of Agriculture and the PRC Ministry of Industry and Information Technology: <https://2014-2017.commerce.gov/tags/us-china-joint-commission-commerce-and-trade-jcct.html>.

58 Since its establishment in 2009, meeting bi-annually, the U.S.-China Strategic and Economic Dialogue (S&ED) has served as a platform for the two sides to make progress on core issues in the economic relationship. Through the S&ED, the US has secured actions from China that level the playing field for U.S. workers and firms, deepen cooperation on global challenges such as a climate change, and promote critical market-oriented reforms in China.

59 The U.S.-China Comprehensive Economic Dialogue (CED) was established by President Trump and President Xi in April 2017 to enable the two countries to address and resolve the comprehensive set of economic issues in their relationship, representing the highest-level bilateral economic forum. The dialogue is co-chaired by U.S. Treasury Secretary Steven T. Mnuchin and U.S. Commerce Secretary Wilbur Ross and their Chinese counterpart Vice Premier Wang Yang, who serve as Special Representatives of the two presidents on the economic relationship: <https://www.treasury.gov/initiatives/Pages/china.aspx>.

energy, including to encourage the transition toward low-carbon technologies; the role of public finance in supporting low-carbon technologies, climate resilience, reducing greenhouse gas emissions internationally, and to rationalise and phase out inefficient fossil fuel subsidies by a certain date. This dialogues continued amidst the Sino-US trade war ignited in 2018, and the rising geopolitical tensions seen after the Biden Administration took office in 2021. On 17 April 2021, the US and China, the world's two biggest carbon polluters, released their joint statement for cooperation in multilateral processes in order to, among others, curb climate change (and enhancing domestic actions), and maximise international investment and finance to support the transition from carbon-intensive fossil fuel-based energy to green, low-carbon and renewable energy in developing countries. On other measures of strengthening the implementation of the Paris Agreement, both sides will continue their actions to decarbonise industry and power, including through circular economy, energy storage and grid reliability, low-carbon transportation, energy efficient buildings, etc., as they have committed before under the same framework of S&ED dialogue.

Equally, on social security, which is another non-trade issue discussed under the framework of the S&ED, in 2016 on the topic of “developing the social safety net to support household consumption”, China committed to better align the incentives at all levels of the government to support household consumption by improving local taxation so that local governments would have the access to revenues in order to support their growing social welfare spending responsibilities. Also, China committed to strengthen medical and pension benefits for all residents, build more sustainable social security funds, and lower insurance contribution rates.⁶⁰

Compared to the EU-China Dialogue Architecture, the smaller network of three US-China dialogues covers many trade and economic issues of bilateral interests. They aim at discussing issues in

60 See 2016 U.S.-China Strategic and Economic Dialogue U.S. Fact Sheet – Economic Track, Press Release, 06 July 2017, US Department of Treasury: <https://www.treasury.gov/press-center/press-releases/Pages/jl0485.aspx>.

a longer perspective – the strategic track (e.g. non-proliferation, energy, global institutions, Iran, Afghanistan), but also trying to identify (near immediate) concrete solutions – the economic track (including climate change and social security) – when addressing trade and the financial services irritants, etc. On the economic track, the bilateral dialogue meetings seem to prioritise results over process, by using a “reverse engineering” approach to effect policy change after intended results are agreed upon by both sides. This may seem an effective approach, but appears coercive, nonetheless. The consultations conducted between the US and China on GI protection is a case in point, with which results intended by the US were achieved at each meeting, reflecting a result-to-policy effectiveness (box 6).

Box 6: US-China cooperation on protection of geographical indications

Because the Chinese market offers huge potential for US and EU farm exports now and in future, and since US farm exports’ market access may be impeded by those EU GIs protected in China if a US farm good share a common name with an EU GI, the US has been very active in policy consultation with China as far as the latter’s GI legislation is concerned. Such US-China engagement is also established through the bilateral dialogue mechanism between the two countries.

Indeed, what both sides have concluded on GI protection at a few annual US-China JCCT meetings was implemented in China’s GI policy and strategy, and they are consequently incorporated in the EU-China GI Agreement. This outcome illustrates that bilateral policy consultation could be very effective for near-immediate rule changes.

In relation to the Chinese market, the US’ policy objective on GI protection seems two-fold. It is, firstly, to guarantee its farmers’ commercial interests in market access in China, and secondly, to be ‘EU-proof’ meaning that opportunities for US farmers’ agri-food exports should not be impeded if a good happens to share the common name with that of the EU GIs protected in China.

To achieve this objective, for example, in 2014 at the US-China JCCT meeting China agreed that:

- 1) a term, or its translation or transliteration, is not eligible for protection as a GI in its territory where the term is generic in its territory;
- 2) the relationship between trademarks and GIs is to be dealt with in accordance with relevant articles in the TRIPS Agreement and that legal means are available for interested third parties on the above grounds to object to and to cancel any registration or recognition granted to a GI;
- 3) where a component of a compound GI is generic in the Chinese territory, GI protection will not extend to that generic component.

Moreover, at the US-China JCCT meeting in 2015, China further reiterated that

the commitments agreed a year ago should apply to all GIs, including those protected under international agreements;

it would follow transparency for developing cancellation procedures for already-granted GIs.

It is observed that, subsequently, perhaps on China's insistence all the above outcomes on GI protection are incorporated in the EU-China GI Agreement concluded in November 2019. Later, the same positions are reiterated in the US-China Economic and Trade Agreement, signed in January 2020,⁶¹ in which a set of factors that China must give due consideration when determining if a term is generic is also included in the Agreement.⁶² The set of factors is nothing new; it has been agreed by China following a previous JCCT meeting.

61 For details of US' engagement with China on GI within the context of the JCCT, see USTR (2019), "2018 USTR Report to Congress on China's WTO Compliance, United States Trade Representative", February, p.137.

62 See Section F, US-China Economic and Trade Agreement.

2.8 Conclusion

The EU-China Dialogue Architecture materialise the bilateral comprehensive strategic partnership in a substantive manner. The altogether around 70 dialogues, under the pillars of political, economic and sectoral as well as people-to-people exchanges, serve many functions, from aligning policy objectives (often with specific projects for concrete deliverables), solving trade irritants between the two parties, exploring trade and investment opportunities, to advancing the EU's value-based trade strategy. On the latter, after conducting more than a decade of dialogues on subjects such as environmental protection, China has since changed its approach to non-trade policy objectives from mere "cooperation" to binding obligation, as seen from the provisional text of the CAI on sustainable development. This is a victory for the EU, as it confirms the EU's capacity to advance its value-based trade strategy, even towards China, a global trade power.

The purpose for the EU to conduct dialogues on non-trade issues is supposedly to transpose EU's values to China through trade activities. However, such dialogues were mostly launched in order to assist China to mitigate the societal impact in the run up to the country's WTO accession. But in recent years, they have been re-styled as a means to advance the EU's values, within the framework of international obligations, including the Paris Agreement on Climate Change, and the eight ILO core conventions. It is worth pointing out that those EU-values benefit the Chinese society, and are in sync with the Chinese government's goal of establishing "a harmonious society", or "a well-off society in an all-round way". These shared objectives form the foundation for bilateral dialogue and cooperation, and later leading towards China's binding commitments for implementation. Undeniably, as a result of long-term engagement, many trade policy objectives are achieved for both the EU and China, chiefly in relation to environmental protection, an area that the EU champions also in technology.

In parallel to the so-called non-trade policy objectives, the bilateral economic and sectoral dialogues help bring about trade objectives, jobs and economic growth, to the EU. Not only that, on a couple of trade disciplines, such as geographical indications, aviation service and the ETS, the EU is successful in persuading China to adopt the EU's distinctive policy models, amplifying the EU's rule-making power in trade.

It is true that not all the non-trade policy objectives can be realised, at least not in a foreseeable future, human rights protection is one area, eliminating forced labour is another. For the former, the dialogue remains a form of exchange of ideas. One may complain that it is "superficial", but transposing EU's concept of human rights protection, i.e. political rights, implies political regime change, so it is inadmissible for China. For the latter, though under the CAI China's commitment to ratify the ILO Conventions on Forced Labour is legally binding, the ratification is expected to take a very long time to materialise. In the first place the CAI must be signed and ratified between the EU and China and secondly, due to judicial changes that will be required such as to amend China's penal code.

The general purpose for conducting the dialogues under the Pillar of People-to-People Exchange is to enhance the EU's soft power, the effectiveness of this exercise would most likely remain subtle, but could be incremental in the long run among China's next generations. Nonetheless, already abundant commercial gains have emerged for the EU from the many people-to-people exchange activities, especially tourism and higher education.

Ultimately, the functions of the bilateral dialogues, such as tackling the challenges in bilateral trade relations, extending EU's rule-making power in trade and sustaining a comprehensive partnership, illustrate a multifaceted relationship between the EU and China in the same fashion as the EU articulated in its "A Strategic Outlook" in 2019. In order to advance its comprehensive strategic partnership, based on specific subjects, the EU should 1) deepen its engagement with China to promote common interests at global

level; and 2) seek more balanced and reciprocal conditions to governing the bilateral economic relationship.⁶³ In this regard, the Dialogue Architecture will continue to serve as a platform to engage both sides. As China has become more sophisticated in policy-making and skilful in implementation, the functions of exchange of views and consultation might well become more prominent overall.

63 The EU sees the need to “adapt to changing economic realities and strengthen its own domestic policies and industrial base”. See Joint Communication, “EU-China – A strategic outlook”, JOIN(2019) 5 final, Strasbourg, 12 March 2019, p. 1. The document “refines” the EU’s approach to China, as laid down in the 2016 EU Strategy on China, to be “more realistic, assertive and multi-faceted”. See the Foreign Affairs Conclusions of 18 March 2019. The EU Strategy on China was adopted by the Council on 18 July 2016, doc. 11252/16.

3. EU VALUES, INTERNATIONAL CONVENTIONS AND CHINA

The EU has long been concerned about sustainable development in China. This pre-occupation refers both to the 'green' pillar consisting of environmental policies and those pursuing the mitigation of climate change, and to the 'social' pillar of internationally recognised labour standards in ILO core Conventions and the accomplishment and sound implementation of adequate social protection for its citizens, in particular workers. The present chapter presents an extensive analysis of these major pillars of sustainable development in China. On that basis it attempts to answer two series of three research questions.

The research surveys a long time span, some 25 years since the mid-1990s. Initially, the cooperation (and trade policy where relevant) with China was mainly development-oriented for both pillars, but this began to change once the EU and China concluded the Strategic and Comprehensive Partnership in 2003. Ever since, China and the EU usually worked via Dialogues, at ministerial level as well as with annual Summits, in which joint programming was decided. They spawned several series of projects (some, very large), applied programmes, working groups, exchanges and action plans with significant funding for a period of nearly two decades, and in energy even longer. This long-run working relationship avoided a legalistic approach with enforceable standards and/or targets set in FTAs or otherwise. Nevertheless, the EU and China have worked fairly consistently on sustained progress in

both pillars, and frequently in operational, technical and practical terms rather than mere declaratory statements. However, this does not mean that the two partners did not enter commitments. Thus, in the green pillar both partners adhered, with ratification, to no less than 12 MEAs and related Protocols and Amendments. This is far more than the specific MEAs referred to in EU FTAs, even though China and the EU have never concluded a FTA together. In the social pillar the situation is more complicated and also less satisfactory. The leading multilateral set of commitments are ILO Conventions, and in particular the eight core Conventions. But China has not ratified four of these eight. Moreover, there are no international legal commitments for social protection, except for some aspects (some other ILO conventions), although this field has been effectively broadened via more encompassing ILO Declarations, for example (to which some FTAs refer).

There is another critical difference between the green and the social pillar: whereas the green pillar generates major negative cross-border or global externalities (mostly, via global warming but selectively also with air and water pollution; and positively with forestation if large enough), this is basically not the case for the social pillar, unless one is willing to argue that poverty risks and neglect of OSH distort the level-playing field in trade and investment by avoiding significant labour costs when exporting. However, if one would support the level-playing field argument, this may also apply to the green pillar if one observes a strong avoidance of the cost of 'clean' production. The level-playing field argument linked to the second pillar has not played a significant role in EU/China trade relations when it would have been best applicable, that is when China was still a relatively poor developing country. However, China is now an upper middle income country and the argument is much less plausible insofar as sustainable development is concerned.⁶⁴

64 The level-playing field debate with respect to China is of course much broader than sustainable development. It also relates to systemic aspects. See European Commission (2017), Pelkmans (2018) and BusinessEurope (2020).

We understand ‘coherence’ of external policies with respect to the subject of this eBook as the coherence of EU trade and investment policies vis a vis China with the pursuit, if possible jointly with China, of sustainable development in China. It is possible, especially recently – but only in the green pillar – that the EU can actually improve or be stimulated *by China* in the area of green technologies such as renewables, e-vehicles and some of its components. In actual practice, ‘coherence’ should be read as the pursuit of EU values – such as sustainable development – via EU trade and investment policies and the accompanying EU-China cooperation. In the case of EU/China, the combination of EU trade policy and very elaborate and active cooperation is truly unique. This uniqueness is reflected in the sheer quantity of EU/China Dialogues (some 68!, some 50 or so on economic and trade-related issues, including sustainable development) but also in the consistency and continuity over time since the Strategic and Comprehensive Partnership began. Many of these Dialogues or activities set up by them create bilateral working relationships and this is often – but not always, for example when issues are sensitive – generating a degree of trust and recognition. In turn, this can often lead to better and more tangible results. And such results may inspire further cooperation.

The typical EU cooperative approach to sustainable development in external policies has never been practiced with other trading partners to the same extent as with China. More activities and greater efforts do not necessarily produce better results, of course. In Hu & Pelkmans (2020) we show that, selectively, the great efforts of pursuing a multiple set of goals via many EU/China Dialogues have paid off. We shall now study in greater detail the EU cooperative approach in promoting sustainable development with and mainly in China. In doing this we rely predominantly on the two papers focussing on the green pillar (Pelkmans, 2021) and the social pillar (Hu & Pelkmans, 2021). In some respects these papers have a common foundation, to wit, in order to establish more accurately what exactly the EU preferences in values are, we rely on an ambitious FTA – the EPA with Japan, ch. 16 – and itemise

both for 'green' and for 'social' what provisions can be found. This high standard of sustainable development is used for inspecting EU/China cooperation in this area, conscious of the fact that the EU and China do not have a FTA together and that China is not yet, although close to, a developed country.

3.1 Identifying 'EU values' from EU FTAs and multilateral obligations

An operational way to identify with greater precision what EU values, here under the heading of 'sustainable development', really are, is to study an ambitious FTA, the EPA with Japan. In ch. 16 of EPA, not counting the article on consultation and enforcement, because the EU and China do not have a FTA where this would apply, there are 37 items for the green pillar, and 25 for the social pillar, 7 of which are identical between the two because they are not specific to 'green' or 'social'. Not only are the 'green' elements more numerous but quite a few are a derivative of or confirm multilateral commitments in MEAs already ratified by China and the EU or other treaties or conventions (e.g. on sustainable fisheries or timber trade). In Pelkmans (2021), a detailed exercise is undertaken to verify for all 37 elements identified for the green pillar whether China might accept the provision.⁶⁵ The conclusion is that the large majority of the 37 specifications could be signed by China without any problem. The draft CAI treaty signed in December 2020 goes less far in 'green' issues but it is, after all, an investment treaty. It is, however, the first time that China legally commits bilaterally on several green issues. The multilateral elements weigh heavily in all this.

The specific 'social' elements are only 16 and they are almost entirely dedicated to labour standards or rights, not to 'social protection', which is implicitly seen as a domestic issue. Labour rights in EPA are, not unlike the 'green' issues, closely attuned with multilateral obligations. Therefore, striving for adequate social protection

65 With substantiation with the help of citations from official Chinese declarations or EU/China documents.

is hardly or not to be found in FTAs although it is long and widely recognised that it matters for a decent living and for development. The EU cooperative approach, on the other hand, can take social protection fully into consideration and has actively promoted it in EU/China cooperation. Not only is there no counterpart in EU FTAs for social protection, the EU itself is also hampered by the division of social competences which have been mainly allocated to the EU Member States. Unlike in FTAs, a legalistic framework, in the cooperative approach selected EU Member States were most interested to work together with the European Commission and China on various programmes and action plans which would enable China to make social progress inspired by European experiences. In other words, FTAs can be a good and instructive guide to identify the details of what otherwise are very general formulations of (green) EU values but that is far less the case for the social pillar. Insofar as FTAs do give guidance on (social) values, the leading reference is the set of core ILO Conventions and precisely for the core Conventions China has been unwilling to engage in serious Dialogues or projects as no less than four of them have not been ratified by China.⁶⁶ Here the draft CAI treaty signed in December 2020 might signify a partial breakthrough, if indeed the Agreement will be ratified, because China has committed – perhaps in the longer run – to ratify two of the four core Conventions, namely those on forced labour.⁶⁷ Nonetheless, the kernel of the core Conventions is and remains the pair of conventions on the right of association and on collective bargaining, together the bedrock of the ILO. A (plausible) assumption is that the Chinese leadership and the CCP consider these two conventions as a potential threat to their regime. They fear a self-inflating mechanism of workers and perhaps others to opt for new unions or challenge the Party when wishing to neutralise alternative organised voices, once workers being truly free to choose. If true, there is no chance that these two conventions will be ratified.

66 As discussed subsequently, with one exception, occupational safety & health, where China and the EU have conducted a highly applied OSH programme in coalmining and chemicals.

67 In Hu & Pelkmans (2021) we show how penal law is involved and argue that a reform of penal law might be a slow process.

3.2 Social values: blending bilateral and multilateral commitments

It is not entirely clear what exactly is the ‘social pillar’ of sustainable development. A first definition of the social pillar consists of the combination of ‘social protection’ (as understood worldwide by leading international organisations) and ‘international labour standards’ (i.e. rights of workers, including the fundamental ones as recognized by the ILO in its core Conventions). This would seem to be the most obvious approach but it neither fully coincides with the range of themes and dialogues practiced between the EU and China nor with the ‘EU standard’ for chapters on sustainable development in EU FTAs.

Social protection can be defined by its overall aim and four components.⁶⁸ The *aim* of social protection is to ‘reach or maintain an adequate standard of living and good health throughout their lives’. Such social protection has four components: (1) basic income security for children (hence, access to nutrition, education, care and necessities); (2) basic income security for persons in active age (those unable to earn sufficient income, such as sickness, unemployment, maternity and disability); (3) basic income security for older persons; (4) essential health care (incl. maternity care) under conditions of availability, accessibility and quality.

Social protection has become a commonly accepted norm for almost all countries, even when poor countries might not or not yet be able to afford all of its respective components. It is also explicitly referred to in SGD 1 as a kind of groundwork for any serious socio-economic and human development. International economic organisations such as ADB, UN-ESCAP, the ILO and the World Bank all deal intensively with social protection in various ways. However, this was not yet the case – certainly not any-

68 Here we use the definition and explanation of UN-ESCAP (2018), the UN Economic Commission for Asia and the Pacific, in its booklet “Why we need social protection”. See www.unescap.org and go to ‘social development policy guides’. This publication leans heavily on ADB’s work (on its Social Protection Indicator) and the ILO for its regular World Social Protection Report.

where near the same extent – in the mid-1990s when China was first confronted with the issue.

The other component consists of international labour standards. There are many, as developed and agreed over time by the ILO. The accepted practice in trade-related sustainable development is to prioritize the eight so-called ‘fundamental (or core) ILO Conventions’.⁶⁹ This practice follows the 1998 ILO Declaration on Fundamental Principles and Rights at Work in which all eight are enumerated. ILO Conventions are based on tripartite agreement and it is obliged to submit them for ratification to the relevant authority in an ILO member country (usually a parliament). The score in ratification is very high: in January 2019 92% (1376 ratifications) had been achieved and another 121 were still required. They include the following:

1. Freedom of association and protection of the right to organise (1948; no. 87)
2. Right to organise and collective bargaining (1949, no. 98)
3. Forced Labour Convention (1930, no. 29; and its 2014 Protocol)
4. Abolition of Forced Labour Convention (1957; no. 105)
5. Minimum Age Convention (1973; no. 138)
6. Worst Forms of Child Labour Convention (1999; no. 182)
7. Equal Remuneration Convention (1951; no. 100)
8. Discrimination (Employment and Occupation) Convention (1958; no. 111)

In 2020 China had ratified 26 ILO Conventions⁷⁰ (out of 190) but of the eight Core ILO Conventions, only four: no. 5 (minimum age, C138), no. 6 (worst forms of child labour, C182), no. 7 (equal remuneration, C100), and no. 8 (discrimination, C111).

69 See <https://www.ilo.org/global/standards/introduction-to-international-labour-standards/conventions-and-recommendations/lang-en/index.htm>

70 However, five of these ratified Conventions are no longer in force

Moreover, the ILO Governing Body has designated another four Conventions as ‘governance’ instruments in its 2008 Declaration on Social Justice for a Fair Globalisation, for the purpose of a proper functioning of the international labour standards system. They include:

- i. Labour Inspection Convention (1947, no. 81)
- ii. Employment Policy Convention (1964; no. 122)
- iii. Labour inspection (Agriculture) Convention (1969; no. 129)
- iv. Tripartite Consultation (International Labour Standards Convention (1976; no. 144).

China has ratified two of these four: C122 on employment policy and C144 on tripartite consultation. However, it is not customary to include the latter four in trade-related bilateral obligations e.g. in FTAs or in unilateral GSP (or, for the EU, GSP+) conditions.

Altogether, the social pillar in trade-related sustainable development Dialogues or agreements (like FTAs) constitutes therefore quite a substantial set of values or value-related obligations and policies, including social security and assistance. China assumes an ambivalent position in the ILO. China is one of the founding members in 1919. It works with the ILO in various programmes or studies, including for example a special four-years programme on ‘Decent Work’ in 2016.⁷¹ At the same time, it has neither ratified the Conventions on the freedom of association and the right-to-organise nor the one on collective bargaining, the very bedrock of the ILO and its values. It is likely that China has not ratified these two most fundamental Conventions because China might consider them as an undermining or destabilising its political and social system of governance, based on an absolute reign of the Party (CCP) and its controlled single All-China Federation of Trade Unions [ACFTU] which retains a monopoly.

71 ILO (2016), China-Decent Work Country Programme 2016 – 2020, Beijing/Geneva.

Another way of identifying social values the EU prefers, is to extract them from EU FTAs, in their sustainable development chapters. A summary is provided in Box 7.

Box 7: Labour and social specifications in EU FTAs

We rely on the social specifications of the EU FTA with Japan (EPA) in its chapter 16, as it is an ambitious FTA, a high standard compared to most, if not all, other FTAs in the world.⁷² In the ‘context and objectives’, there are general commitments on sustainable development, without distinguishing ‘social’ and ‘green’. This refers to e.g. trade promoting sustainable development and to the idea that economic and social development and sustainable development are mutually reinforcing. Furthermore, there are references to seven multilateral agreements and declarations on sustainable development and labour. The right-to-regulate section is equally valid for both green and social. The provisions on international labour standards and conventions, to which the EPA refers, comprise e.g. ‘decent work’ as the ILO sees it, a reconfirmation of ILO obligations and commitments (esp. in the 1998 ILO Declaration on Principles), a firm and clear reference to ‘fundamental rights at work’ (including specifically references to core ILO Conventions on the freedom of association and of collective bargaining; on the elimination of forced labour; abolition of child labour; and discrimination in employment and occupations), a commitment to pursue ratification of ILO Conventions as well as effectively implement them, whilst not using labour standards for protectionist purposes.

72 Hu & Pelkmans (2021, Table 1, pp. 13-15) provide detailed specifications of the social elements of the FTA.

Other sections relate to engagement to promote corporate social responsibility, transparency provisions and the cooperation between the partners in an international or multilateral context, including the ILOs Decent Work agenda. China's main problem is found in the non-ratification of four core ILO Conventions. However, Vietnam – with a similar political orientation, structure (e.g. a monopoly of the Party) and ideology as China – has ratified a FTA with the EU which specifies the values in the ILO Conventions. Meanwhile, Vietnam has ratified 7 of the 8 Conventions (unlike China) – the one lacking is the freedom of association.”

Source: Hu and Pelkmans (2021).

The EU has quite a history of multilateral attempts to connect trade with what was once called ‘unfair labour conditions’ and labour standards. It was the leading initiator (with e.g. the US and Norway) to begin incorporating such values in the WTO during the WTO Ministerial in Singapore in 1996.⁷³ Although this attempt failed, it is likely that China must have noted the careful and diplomatic positioning of the EU on these points. Probably this was cautiously discussed in the first ASEM meetings of trade ministers just before and after 2000 (where China played a role, whilst preparing for WTO membership). A few years later EU-China cooperation on social policy issues began. Nevertheless, it did next to nothing to alter the fate of the ILO core labour standards in China. As noted, China has ratified only four of the eight core conventions and 3 of them by 1973 or earlier. In other words, there was no connection with reforms or opening up. The fourth core convention (on the worst forms of child labour, no. 182) was ratified in 1999 and one might speculate that it was a relatively easy ‘gesture’ in the run-up to WTO membership. In the two decades since that ratification, there were few, if any, signs that China would ratify more core conventions.

However, during the 1990s and later, China did begin to pursue domestic social policies systematically. The SOEs could no longer

⁷³ For detail, see Hu & Pelkmans (2021, Section 4).

do it for their staff and collectives – always with a minimalistic solidarity – were changing into modern farms. The Labour Law is the first major law on labour relations adopted by China in 1994. Previously labour matters had been addressed solely by regulations. Under the Labour Law, for example Article 3 guarantees equal right to employment and choice of occupation, protection of occupational safety and health, social insurance and welfare, etc. Article 5 instructs the State to “... take various measures to promote employment, ... lay down labour standards, regulate social incomes, perfect social insurance system, ... and gradually raise the living standard of labourers. Article 12 prohibits discrimination against “ethnic group, race, sex or religious belief”. Women’s equal rights compared to men in employment as well as employment rights of the disabled are guaranteed by Articles 13 and 14, respectively. Article 15 prohibits recruiting minors under the age of 16, unless with formal approval (for recruiting minors for arts, physical culture, e.g. circus artists) and in which case the right to compulsory education must be guaranteed.⁷⁴ In addition to the primary legislation against discrimination and child labour, China also issued a series of secondary legislation as legal interpretation to govern some specific circumstances.⁷⁵

In terms of freedom of association, though Article 7 of the Labour Law guarantees the right to participate in, and organise, “trade unions in accordance with the law”, all trade unions must be under the governance of the All-China Federation of Trade Unions. Clearly, this critical provision introduces a different understanding of “freedom of association” and “collective bargaining”. And one that very few countries in the world would agree with. But it does help to explain employment relations in China, for example in relation to voluntary joining of the trade union, settling labour-management disputes, good governance/management of enterprises

74 Available at: <https://www.ilo.org/dyn/natlex/docs/ELECTRONIC/37357/108026/>.

75 See Hu & Pelkmans (2021, section 5.2) for details.

and employment disputes (human resources).⁷⁶ In addition to a different understanding, there can be no doubt that the political system has also influenced China's perspectives for ratification. It has silently delayed, indefinitely, the ratification of the two conventions on freedom of association and on collective bargaining.”

3.3 Green values: blending bilateral and multilateral commitments

Using FTAs as reference is insightful but also has its limits. Nevertheless, the blending of bilateral and multilateral commitments is very powerful in an ambitious example like EPA. However, even without a FTA between the EU and China, it is crucial to notice that the multilateral track is very important for EU-China trade policy and cooperation, in particular for ‘green’ policy-making. Table 1 shows why.

⁷⁶ For the details of China's legislation to uphold the labour rights of “freedom of association” and “collective bargaining”, see https://www.ilo.org/dyn/natlex/natlex4.listResults?p_lang=en&p_country=CHN&p_count=1095&p_classification=02&p_classcount=55.

Table 1: Adhering to MEAs: convergence between the EU and China

Treaty	Full title(s)	China ratified	EU ratified	Notes
CITES	(Washington) Convention on international trade in endangered species of wild fauna and flora	yes	yes	China has no 'reservations', some EU MS do
London Convention on marine pollution	(London) Convention on the prevention of marine pollution by dumping wastes and other matter (linked to IMO) 1996 Amendment to the London Convention	Yes yes	Yes yes	
Vienna ozone Convention	Vienna Convention for the protection of the ozone layer	yes	yes	
Montreal Protocol	Montreal Protocol on substances that deplete the ozone layer (specifies the concrete regulations for many substances, under the Vienna Convention, see above) Revisions to the Protocol, including 2019 Kigali Amendment on removing hydrofluorocarbons by 2040	Yes Yes*	Yes Yes	Largescale <i>illegal</i> CFC-11 production detected in China in 2018 China: 85% reduction by 2045
Basel Convention	Basel Convention on the control of transboundary movements of hazardous wastes and their disposal BAN amendment (on a total ban of such shipments including old ships) (in force 2019)	Yes yes	Yes yes	

Ramsar Convention	Ramsar Convention on wetlands of international importance, esp. waterfowl habitat	yes	yes	
Biodiversity	Convention on Biological Diversity (CBD)** Cartagena Protocol on biosafety (2003) Nagoya Protocol (or ABS) on access to genetic resources and the fair and equitable sharing of benefits arising from their utilisation	Yes Yes yes	Yes Yes yes	
Nuclear safety	Vienna Convention on nuclear safety Joint Convention on the safety of spent fuel management and on the safety of radioactive waste management Convention on early notification of a nuclear accident Convention on assistance in the case of a nuclear accident or a radiological emergency	Yes Yes Yes yes	Yes yes yes yes	Ratified by Euratom (idem) (idem) (idem)
Combatting desertification	(Paris) UN Convention to combat desertification in those countries experiencing serious drought and/or desertification, particularly in Africa (UNCCD)	yes	yes	China & EU are parties and <i>partners</i> providing support

Climate change	UNFCCC, UN Framework Convention on climate change Kyoto Protocol, under the UNFCCC Paris Agreement under the UNFCCC (2015)	Yes Yes yes	Yes Yes yes	As a developing country in 1997, China had lighter and back-loaded and reduction obligations
Stockholm Convention	Stockholm Convention on POPs (persistent organic pollutants)	yes	yes	
Rotterdam Convention	Rotterdam Convention on the prior informed consent procedure for certain hazardous chemicals in international trade	yes	yes	

China has ratified the Kigali Amendment on 17 June 2021, see <https://ozone.unep.org/all-ratifications> accessed on 11 Jan. 2022, but only with the status of 'acceptance'. It has an ODS licensing system but not (yet) one for hydrofluorocarbons.

*** All UN members have ratified except the US (a signatory). However, the US has initiated large implementation programmes.*

Table 1 shows that no less than 12 MEAs, 11 amendments, 3 extra Protocols and 4 supplementary conventions/treaties have been ratified by China and the EU alike.⁷⁷ In addition, in fisheries there are two UN treaties (UNCLOS and UNFSA), regional arrangements in RFMOs and SFPAs which offer a great scope to improve disciplines in fishing. In timber trade, the EU has been very active under FLEGT and has convinced China – huge importer of tropical wood – to import from FLEGT VPA countries under strict regulations and certificates. China has itself become much stricter on illegal logging at home, with a full prohibition in China itself.

⁷⁷ The one not ratified by China is the UN Watercourses Convention (1997), essentially because China prefers to go for bilateral cooperation with its many neighbours, not always for the common benefit (e.g. the Mekong Delta).

Altogether, such a multitude of multilateral and regional commitments greatly helps bilateral cooperation, too, even when there is no FTA with a sustainable development chapter.

3.4 The green and social fall-out from the Chinese growth machine

Once China decided to gradually introduce a market economy in the late-1970s, its economic growth quickly became very high and sustained, indeed, averages of over 10% real were observed regularly. A critical qualification is that this was “growth at all costs”. The principal costs were found in the environment, CO₂ and other emissions, neglect of labour standards, lack of social protection and disregard of public health. Growth was long an obsession and there is still a “growth at all costs” mindset (OECD [2019] p. 71) today. China’s civil service system should share some of the blame, too, since the incentive for promotion within the public administration system is largely based on economic growth in the locality, therefore civil servants focus on short-term, quick and strong growth, including FDI. This section deals with China’s super-growth, accomplished over several decades, its ultimate success in lifting many hundreds of millions out of extreme poverty and its largely negative fall-out, both in ‘green’ terms and socially.

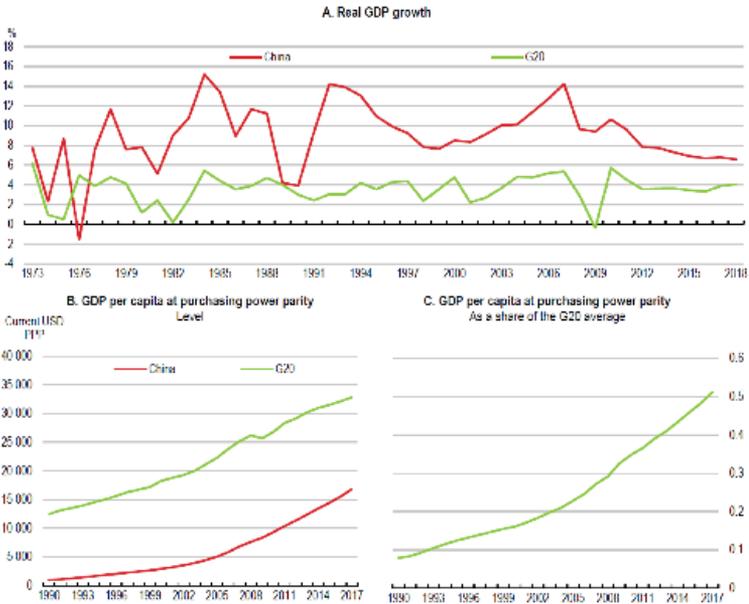
Amongst the numerous policy signals and incentives that e.g. provincial leaders and officials discern, apparently the most powerful success factor still remains high growth despite a wide range of other policy concerns. High economic growth is of cardinal importance both centrally and provincially and this is best observed when cyclical downturns or negative influences from the world economy hit China (ignoring COVID-19 for now). The typical response is to try to stimulate the economy, not so much to keep it from going into recession but merely preventing it from (perhaps only slightly) missing the high growth target by 1% or 2%.⁷⁸

Figure 2 provides the long-run Chinese economic growth

78 This statement is valid before the COVID-19 crisis hit.

rates with three distinct but related indicators over 4½ decades. Starting from the late 1970s, the path has been record-breaking. In the 1990s the average annual nominal economic growth has been around 10% and only after 2000 economic growth was beginning to level off structurally. Figure 2 depicts real growth which is nevertheless still high.

The Chinese growth machine was preceded by agricultural liberalisation in the late 1970s which demonstrated forcefully what incentivized farmers and agro-food entrepreneurs are capable of, with incredible progress in only a few years. In an impressive survey of 40 years of Chinese agricultural development Huang, Rozelle et al (2019) summarise the main findings in the analytical literature. Agricultural reforms were initiated with the introduction of the ‘household responsibility system’, dismantling the people’s communes and contracting out cultivated land to individual households in each village, at first usually for 15 years (later extended to 30 yrs). All studies show that in the initial period of liberalisation agricultural productivity increased very significantly, also helped by land transfers (hence, larger farm size), more and improved inputs, better equipment and public investment in rural infrastructure. After some years, this also caused the rural surplus of labour looking for employment outside the sector.

Figure 2: China's consistently high economic growth: 1973-2018

Source: OECD (2019)

Subsequently, the Chinese growth model was essentially based on huge investments in heavy industry (like steel, aluminium, cement) facilitated by extremely high savings rates due to the lack of a welfare state or of broad social protection during the 1980s and 1990s. Another growth driver consisted of strong export orientation of low-skilled-labour-intensive and low tech goods, based on cheap labour (with very low non-wage costs), scale and long working hours (only sometimes translating to overtime pay as extra income for workers). Especially initially, this export specialisation took place in numerous special economic zones (SEZ): between 1980 and 1992, no less than 444 SEZs were created, largely in coastal cities like Shenzhen, Zhuhai, Shantou and Xiamen,⁷⁹ followed by another 219 until 2016 all over the country.

79 See UNDP, CIDP & SIC (2020), National Human Development Report, special edition, p. 80 ; see www.hdr.undp.org/sites/default/files/nhdr_cn.pdf

3.5 Three transformations enabling high and sustained economic growth

High and sustained economic growth cannot possibly take place without profoundly altering the underlying economic structures and specialisations. The higher such sustained economic growth, the more dramatic the required or resulting underlying changes must be. We provide a short sketch of three ‘transformations’ enabling the Chinese variant of high and sustained growth. It should of course also be remembered that China was trying to catapult itself out of a command and planned economy with little initial freedom, whether economic or otherwise. We briefly discuss three transformations in the Chinese economy which have been crucial for facilitating, if not propelling, economic growth, namely, the emergence of Township & Village Enterprises (TVEs), the radical reforms of state-owned enterprises (SOEs) and the rapid rise of internal migration in China of rural (mostly low-skilled) workers out of agriculture into industry and simple services into regional centres in their counties or provinces or the fast-growing East in hitherto unusually large quantities.

The surprising and successful emergence of TVEs

TVEs emerged in the late 1970s from the modest rural industrialisation attempts by commune & brigade enterprises, which were renamed TVEs in 1984.⁸⁰ Since the hukou system prevented labour migration at the time, the successful liberalisation of agriculture threatened to release a huge outflow of labour from agriculture that could go nowhere. The only way out would be a massive rural industrialisation which would never be possible without different and more incentives-driven forms of enterprise. Initially, most TVEs were collectively owned by several families. They chose to focus on what was dubbed the “5 small industries”, namely small farm tools, small home appliances, small commodities, small hardware and small chemical fertilizers, all goods suffering from

80 This section draws on UNDP, CIDP & SIC (2020), pp. 110-119.

major shortages (given the overemphasis on heavy industries). The incipient market demand for these goods was enormous and little competition could be expected at first, also because private industry was still restricted. In addition, TVEs were established for coalmining activities and, at first in the coastal areas (because of long experience in the sector), in textiles and clothing. Initially, local governments were keen to support TVEs through financing, land use and employment; moreover, TVEs mainly worked with farmers, hence the land contract system was regarded as a safety net which led TVEs to save on social security.

By 1987 the output of TVEs surpassed China's agricultural output for the first time, an amazing milestone. In the late 1990s TVEs began to emphasize corporate ownership reform, some shares were even listed in the Shenzhen and Shanghai stock exchanges. Later still many TVEs became private enterprises so as to gain more flexibility. However, the days of easy markets with little competition and relatively low-cost entry were then over. Having low-skilled workers was no longer sufficient and, moreover, with hukou being relaxed (after, say, 2005 or so) and wages in the East much higher, labour costs rapidly increased. Nowadays, TVEs can hardly be recognized as a special category. In 2017 the TVEs altogether employed no less than 164 million people which is amazing knowing that TVEs did not yet exist before 1978 and the central government observed their rise passively.

TVEs are important if one wants to understand the social predicament of China at the time. They provided ample possibilities all over China to escape precarious employment (family labour ; self-employment) and acquire (more) decent jobs and higher wages. The success of TVEs, especially in the first two decades, greatly supported local infrastructure, development and governance, in the absence of national government support for the countryside. What often happens in developing countries, a hollowing out of the country side and a lack of perspective, has not or much less happened in China. At a later stage, it is primarily the workers from TVEs migrating to the East and forming the mainstay of urban industrialisation.

The radical reforms of SOEs

Other than agricultural collectives, the Chinese economy largely consisted of SOEs in the 1970s. SOEs could be small, medium-sized and large. The decision of opening up the Chinese economy implied at the same time a powerful reform imperative: hence the name of the first ten years, called “Reform and Opening up”. Thus, during the first 10 years or so of the ‘Reform and Opening Up’, the issues consisted of providing enterprise autonomy (and keeping part of the profit), implementing a contract responsibility system and separating government functions from management and ownership questions. In the still fairly closed and not yet so competitive Chinese market, these improvements led at first to growth of SOEs with SOE employees going up from 33 million in 1978 to 42 million in 1985, whilst yuan-based output tripled. This was almost certainly more a question of scale than efficiency. But it would be a short-lived revival given the more competitive environment with (i) the rapidly growing private sector - even though private companies could not enter, *de jure* or *de facto*, certain sectors – and (ii) the entry of foreign FDI in specifically assigned sectors located in export processing zones with high productivity, not to mention (iii) the TVEs. As a result the share of SOE-dominated industries fell dramatically to 30% in 1995. SOEs were increasingly regarded as (i) inefficient (too much labour and excessive investments), (ii) with low output given those resources, (iii) and having labour redundancies. When the first decade was over, China pondered about market-oriented reforms as Central Europe and even the Soviet Union were doing.

In the early 1990s, with the Chinese leadership having observed the experiments of ‘crashing out’ of command economies in Central and Eastern Europe – especially in the former Soviet Union and in e.g. Poland with its ‘big bang’ - China decided to go for controlled gradualism and supported social adjustment. Indeed, China observed the negative fall-out of radical if not reckless transformation in some European countries such as corruption, allowing new tycoons to arise swiftly, bank failures (e.g. in Russia in 1998)

and the great risk of social disruption due to job losses. However, supporting social adjustment amounted to a tall order as China did not have any social policy or social security system, other than the ‘iron rice bowl’ offered by SOEs and the egalitarian minimal security of collectives. But precisely the SOEs’ ‘iron rice bowl’ of permanent jobs and a host of free services to their workers like housing, education, health care and old-age pensions came under ever greater pressure with the increasing market-orientation of state-owned firms. It became one of the prominent reasons why SOEs could not become competitive, with market discipline and indeed competition on the rise. In the late 1980s and during the 1990s, not only the non-labour costs (covering those quasi-social services) per worker turned out to be critical for SOE competitiveness but the removal of overstaffing too. In fact, the so-called ‘hard budget constraint’ for SOEs arose when local, regional and federal government were less and less able or willing to cover losses suffered by numerous smaller SOEs, and frequently also larger ones. The conviction spread that especially many small SOEs were simply not viable.

Tackling both cost factors was most sensitive in a society where a separate state function (with tax-and worker contribution-based funding, answering social entitlements of workers) called ‘social protection’ did not exist. Moreover, adjustment of workers via job relocation between enterprises was initially unusual and far from easy. Some of this relocation was increasingly absorbed by the numerous new private enterprises, though often on terms far worse than in SOEs. Worse still, mobility of workers between regions or provinces, let alone from the West of China to the coastal provinces or the North-East, was severely inhibited by the restrictive hukou system. West-East mobility of workers was only feasible if one would accept non-contractual arrangements in private companies, low wages and extremely long hours, without much or any support from local authorities for the quasi-social services (as the non-eligibility for quasi-social services, at least education and housing, followed from not-having a local hukou). Altogether, “as the market economy deepened, balancing social equity and eco-

conomic efficiency has become a fundamental question in the reform of SOEs.⁸¹ With the SOEs relinquishing ‘their’ social policies, a brand-new system of social policies had to be built up.

In 1993 two breakthrough initiatives were announced, as an incipient policy response to the crisis of SOEs and the quest for social equity. First, SOE reform aimed at ‘sustainable development of SOEs’ (a soft term for ‘viability’), the continuous improvement of economic efficiency and rising employee incomes. To do so in ever more competitive and open markets, large SOEs had to be re-invigorated while relaxing control over [many] small ones. The Chinese government pushed for restructuring and debt/equity swaps for the large ones and mergers, contracting for – and sales of – smaller SOEs, with a harsh principle guiding the end result: survival of the fittest. It did not yield sufficient results by 1998 when the Asian financial crisis only made things worse. Excessive staff redundancies were still there, excess capacity in some sectors prevailed, and SOE managers seemed incapable of adapting to fiercer competition. SOEs suffered massive losses and non-performing loans with banks shot up to over 20%. Employees were also suffering slower wage growth – and medical care coverage evaporated. Another round of loss-covering subsidies seemed inevitable even though policymakers understood that such spending would be ineffective to help SOEs turn around. A further round of SOE reform was initiated for 3 years led by PM Zhu Rongji. Some reforms were only more of the same⁸² but this time there was more emphasis on technological transformation (supporting profitable firms), bankruptcy regulation and dismissal of staff. No less than 20 million workers were laid off in less than 3 years, several tens of thousands of small & medium sized SOEs restructured, thousands of such small SOEs bought out and hundreds ending up bankrupt.⁸³ This clean-up made a substantial improvement possible.

81 UNDP et al., 2020, p. 135

82 Again, more debt-equity swaps, this time with 4 newly founded (state-owned) asset management companies.

83 Where possible, workers had priority in receiving compensation paid from remaining assets, instead of creditors.

Second, in 1993 China's first social protection scheme was initiated in response to the dismissal of workers in SOEs. Laid-off workers (mainly if not only from SOEs, especially small ones) became an increasing problem and also caused a more general increase in urban poverty, ironically in an economy which was growing with record speed. The number of laid-off workers was already an unheard-of 3 million in 1993 and multiplied sixfold by 1998 to 18 million.⁸⁴ These were the days that the negotiations about China's WTO membership were at its height and the US, the EU and Japan wanted to be re-assured that China would genuinely become a market economy, with the role of SOEs being central to that issue. By 1999 the emerged Chinese 'social safety net' consisted of three initiatives to socially support SOE reforms: (a) unemployment insurance, (b) a living allowance for laid-off workers and (c) the 'dibao', later called the minimum labour allowance, the urban minimum living standard assistance paid to laid-off workers and other poor urban households. In the following few years, this set-up was improved by creating 're-employment centres' which combined the hand-outs to laid-off workers with an assurance that major social security benefits were not cut off, while providing training and helping to find new jobs. In fact, very much a form of 'active labour market policies' advocated nowadays everywhere.

China set out for yet another regulatory reform of SOEs (also under WTO pressure) and established, in 2003, the State-owned Assets Supervision and Administration Commission of the State Council, supervising 196 very big non-financial SOEs. Via mergers and restructuring, these have now reduced to 98 in December 2017.⁸⁵ And the number of small and medium-sized SOEs were slashed by hundreds of thousands but in 2014 there were still 18,800 SOEs in industry and 3,750 in construction. In banking and insurance there are few SOEs, but all have large market shares (dominance). To what extent these SOEs are efficient enough to survive on their own is difficult to answer in general but it is most unlikely that they would again become the cause of serious potential social anxiety.

84 Source : UNDP et al., 1999

85 See Pelkmans, Hu et al., 2018, chapter 14) for far more detail on SOEs in China.

Restrictive 'hukou' and intra-China migration of rural workers

Like many other developing countries, China suffered from a serious gap in the standard of living and in opportunities between the urban and rural population. By the mid-1980s, besides seeking non-agricultural jobs in the same county or province with TVEs (see above), a form of regional migration, both pull and push factors led to an ever-increasing flow of intra-China (mostly rural) migrants seeking employment in the East of China, with its urban areas, heavy industry and mining as well as some low-skilled-labour-intensive export sectors. The rural push factors consisted of the combination of scarce (e.g. job) opportunities for young peasants, very low income per capita (indeed, widespread and outright poverty) and labour surpluses on numerous farms as a result of rapid productivity growth in agriculture after its liberalisation. The pull factors included at first job opportunities with TVEs in counties nearby and (a little later) a great and ever-increasing demand for low-skilled or unskilled workers, also at quickly increasing wages in or near the big urban areas of East China. The numbers of rural migrants in China rose to staggering numbers, at its peak around 2005 as high as some 230-plus million, almost equal to the entire working population of the EU-27 at the time!⁸⁶ Roughly, this total is an addition of nearly 150 million so-called 'non-hukou migration' to big cities and another 80 million to nearby counties (where often obtaining a local 'hukou' was allowed, given the vicinity of the home); many of these 80 million worked in TVEs. The hukou system is an ancient form of registering individuals or households. Its factual implication is that certain entitlements are tied to the registered location of the person or household, thereby severely hindering migration in China and leading to sharper discrimination of rural citizens in urban areas (e.g. housing, schools

86 However, there are significant problems with the proper disentangling of statistical information on what non-Chinese observers would call "migrants". This cannot be treated here, for a careful analysis see Chan (2013). The most important reason for the confusion is that Chinese statistical reporting is made along the lines of various rather restrictive controls of intra-China mobilities, especially before the early 2000s. The data in the text are from Chan (2013).

for children).

China's initial employment and social security systems launched amidst SOE restructuring were based mainly on a resident's *hukou*, employer identities (e.g. SOE, foreign-invested-enterprise, collective, self-employed, etc.) and employment localities (e.g. urban, rural, township, etc.). As a result, when the rural-urban migration became so massive, migrant workers' social rights and welfare were not taken care of, simply because mobility was not captured by the system, and migrant workers lost their (rural) *hukou*, therefore their entitlement to social welfare. This failure became a huge challenge to the system. Migrant children in urban areas lost access to education. Migrant children's rural *hukou* registration did not entitle them to attend city schools. Because employers would frequently not pay for health insurance, despite obligations since the late 1990s, workers could be in for painful surprises in case of diseases (or felt forced to travel far away to home where they were entitled to care). Finally, access to decent and payable housing was also very poor.

The long-time acceptance of this discrimination and exploitation of many millions of low-skilled migrant workers can only be explained by their critical importance for the export-led growth model of China. Low-cost competitiveness had absolute priority, yet was impossible without the migrants. Better social protection for migrants only began to be introduced in the late 1990s, and began to have beneficial effects only a decade or so later.

3.6 The green costs of China's super growth

The environmental (non-climate) 'negatives' with a long-run impact on eco-systems and the economy are mainly seven: water pollution, man-made water shortages, urban air pollution, industrial toxic and hazardous waste, soil erosion, forest and grassland degradation, and habitat destruction and species loss. Although some of these are usually local, several of these costly 'negatives' meanwhile fall under MEAs and hence would potentially be sub-

ject to EU/China cooperation and/or discussion under EU trade policy. One might also wonder whether and to what extent bilateral or multilateral trade in goods might not have been distorted by a *radical neglect* of the costs to ecosystems or, indeed, by the *avoidance* of incurring mitigation or pre-emption costs by Chinese companies exporting goods. In short, competitiveness at the expense of workers, consumers, citizens and nature. This consideration is particularly pertinent given China's pretty extreme reliance on export-led growth for decades.

On the other hand, economic growth also facilitates the improvement of typical environmental indicators, at least potentially. If investment rates are as high as in China ever since the 1980s (far above those in OECD countries), such investments can be channelled towards cleaner production, may encourage greater material efficiency and energy efficiency as well as promote the conservation of scarce resources. High economic growth generates steadily higher incomes and public revenues which can more easily be used for stimulating new environment-friendly technology. Moreover, as in all parts of the world, affluence can be a great lubricator of adjustment and structural reform which can set in motion a process of greening the economy over time.

With respect to the climate impact of high and continuous economic growth, it is not much different. CO₂ emissions are a positive function of growth, but more forcefully so if fossil resources are prominent in energy generation and transport. It is a bit more complicated for other greenhouse gasses (GHGs) such as ozone and methane. It also depends what the fossil resources are which are used most. Here China is in a separate class: nowhere in the world is coal used more intensely for energy and heating than in China. The abundance of coal and its very low price has been critical for the decades that China was still a poor developing country, whether for energy generators, industry or households. For transport, oil is mostly imported, i.e. if and to the extent that cars and trucks become more fuel-efficient or indeed electric, the two birds of energy security and lower CO₂ emissions can be hit with a single

stone. But until the mid-1990s, China had relatively modest car and truck traffic, many city folk were still biking and long journeys were done by train. In other words, it was overwhelmingly coal which caused high CO₂ emissions and they were rapidly increasing as well, precisely as a result of very high economic growth. In fact, the non-climate environment issues and CO₂ are to some extent interdependent because the use of coal also generated very high emissions of particulates and of SO₂ (sulphur dioxide).

Acknowledging that there are two sides to the environmental and climate impact of high economic growth in China, it is still true that the negative effects prevailed in China for two reasons. One is that the rate of growth was so high for so long that – given the mindset of growth-at-all-costs – the very rapid increase of resource use in order to allow that growth easily dominated. The other reason is that China long pretended to go for new technology and (slow) substitution of highly inefficient outmoded capital goods and domestic heating products by modern equipment and methods, *without* opting for first-best solutions such as curtailing coal volumes, energy pricing, taxation of emissions and /or tough enforcement monitored seriously at the central level. New technology and market-driven substitution cannot generate enough reduction of e.g. emissions fast enough in the absence of proper energy pricing and/or taxation (incentivizing such processes) and in the presence of such high economic growth.

In the mid-1990s both policies and indicators of environment and climate in China were not yet so easy to ‘read’ and understand. For that reason, we rely on 2 authoritative reports by the World Bank, with co-authorship of Chinese specialists⁸⁷ and support from China’s main environmental agency at the time (NEPA). Below some core indicators on environment and on climate from China of the mid-1990s will be set out. Before doing so, it should be

87 On environment (non-climate), mainly air and water, see World Bank (1997), *Clear water, blue skies, China’s environment in the new century*, Washington DC, September, pp. 113 ; and on climate questions, see World Bank (1996), *China: issues and opinions in Greenhouse Gas Emissions Control* (ed. Johnson, Li, Liang & Taylor), WB Discussion Paper no. 330, June, pp. 66.

realized that China may have plenty of coal, but limited resources otherwise. A few indicators:

- a. China has some 18% of the world's population but barely 7% of arable land
- b. Agricultural land per capita is only 28% of the world's average
- c. Forests and wilderness (in 1995⁸⁸) per capita is only 15% of the world's average
- d. Water resources per capita are one-third of the world average
- e. In energy resources, it is a major net importer of oil and gas, including LNG (today)

With respect to air pollution, particulates⁸⁹ as well as sulphur (SO₂), NO_x, volatile organic compounds (VOCs) and carbon monoxide are the damaging emissions for humans. In China in the 1990s both industrial boilers (inefficient and with low smokestacks) and small household stoves were genuine culprits: industrial boilers consumed 33% of China's coal and emitted an even higher percentage of ground-level pollution in cities; households consumed only 15% of coal but contributed an amazing 30% to ground-level pollution. Between 1985 and 1995, particulate concentrations in cities had fallen significantly, but in large cities they were still 4 times the maximum WHO guideline, whereas in smaller cities they were some 3 times the guideline. It was therefore still very unhealthy. As to SO₂, the decline was small (in concentration), and in big cities the level remained still 2 ½ times the WHO guideline, again far from healthy. When citizens entered home, hence stepping out of the air pollution, they were often worse off because indoor air quality was (especially in winter⁹⁰) miserable.

88 The period matters because around that time China initiated a massive reforestation programme for many years.

89 Both fine (less than 10 microns) and ultrafine (less than 2.5 microns)

90 Due to combustion of raw coal and wood for cooking and heating. By 1995, Chinese citizens had more and more access to gas for the home and, if coal was still used, with cleaner coal and more efficient briquettes.

Altogether, citizens suffered disproportionately from respiratory diseases, the leading cause of death in rural areas and the third cause in cities. There was also a serious lead problem (esp. for children) resulting from industrial emissions and from leaded petrol because only one-half of petrol production was unleaded. Negative externalities across China and beyond – so no longer local only – were caused by long-range transport of sulphur, resulting in acid rain, damaging agriculture, ecosystems and materials.

Water pollution in China of 1995 was serious as well. Some 40% of monitored river sections flowing past cities did not meet minimum quality levels. Water shortages complicated matters further as upstream cities or others often stopped the water flow in order to stock water, thereby causing relatively greater pollution downstream. Municipal and industrial wastewater were at first hardly treated; since the early 1990s this was improving for industrial waste of regulated industries but not for municipal wastewater. In agriculture intensive use of nitrogen fertilizer and pesticides were a source of serious water pollution. Pesticides added to this, a problem for birds. Chemical oxygen demand [COD] pollution in water was often originating from larger livestock farms since meat production on farms increased enormously. About half of the monitored northern China river sections did not even meet the lowest standard for water, making the water even unsuitable for irrigation. Only 8% was grade 3, that is, the minimum standard for contact with humans!

Furthermore, there were other environmental issues such as environmental degradation in the forms of soil erosion, land degradation, deforestation and desertification, with one study⁹¹ estimating the costs at 5% of GDP. This compares to a cost of 8% of Chinese GDP in 1995 for air and water pollution discussed

91 Smil (1996) as quoted in the WB (1997) study, p. 23.

above.⁹² Hence, a staggering roughly 13% of GDP was at stake, and this does not include the costs of CO₂ emissions (which are summarized below). In a simulation up to 2020 under a ‘business-as-usual’ scenario, and taken into account the projected increase in income, the cost of 8% of GDP rises to a cost of 13% of GDP. The latter would consist of 600.000 premature deaths per year, 5.5 million cases of chronic bronchitis, more than 5 billion restricted activity days and 20 million cases of respiratory illness each year. Thus, even if human considerations would assume a lower priority, it would still be in the Chinese interest to address these huge social and health costs as a major burden on the economy.

When it comes to GHG emissions – primarily CO₂ – China in 1990 emitted about half of the US total and of the European total (equal at the time) but far less *per capita* than the US CO₂ emissions per capita (only some 12%! ⁹³). But between 1990 and 1995 CO₂ emissions in China went up up by nearly 300 mtC, some two- third, and reaching 800 mtC. And a baseline scenario for 2020 arrives at some 2200 mtC under plausible assumptions. If this simulation would be roughly correct, it meant in the late 1990s that, in order to keep the level of *global* CO₂ emissions constant at the 1990 level ⁹⁴, the rest of the world would have to *decrease their emissions by roughly one-third* merely to let the Chinese grow that much. This inference alone can be seen as a strong encouragement for the EU to engage with China in joint solutions, projects, Dialogues and what not, to help and nudge China into a radically different path.

The 2200 mtC simulation in 2020 is a derivative of an astounding increase in coal used, jumping from some 1.3 bn tons of raw coal in 1995 to no less than 3.1 bn tons of raw coal. This must imply, when considering policy in the late 1990s, an expectation of incredible surges of SO₂ emissions and of particulates by 2020, if no strategy

92 Given the still relatively low wages and costs of living in 1995 in China, the estimate of the statistical value of life is only \$ 60 000 (and, in the human capital approach, even a mere \$ 9000 for urban China). Nevertheless, the total costs are \$ 54 bn and \$ 20 bn (human capital approach). See World Bank, 1997, op. cit., p. 23. Similar damages would have costs in e.g. Europe amounting to a 20-fold to 25-fold of this amount in US \$.

93 Over 30% in the case of the EU (as the EU has much lower emission p.c.).

94 A standard measuring rod in the UNFCCC employed by all country signatories.

would be applied. However, the baseline scenario already includes market-induced improvements in energy efficiency over 25 years, *without* any new strategy, primarily due to changes in economic structure. These changes result from a lesser emphasis on heavy industry, more performant equipment when replacing capital goods, the rise of (much less polluting) services in overall GDP and improvement of heating & cooking inside households given higher incomes⁹⁵. These implied improvements ensure that, by 2020, not 10 000 mtce of coal but “only” 3300 mtce of energy use is the model outcome, most of which is coal. Interestingly, a daring simulation of 3 options for reducing GHG emissions by 2020 is presented: high energy efficiency (330 mtC less), alternative energy [i.e. low-carbon intensive fuels and renewables, with the warning that, with the state-of-the-art of 1995, these would be more costly than coal – note that coal at the time was not taxed directly or via emissions (up to 237 mtC less)] and afforestation (to be undertaken aggressively for a long period, with 221 mtC less). The upshot would be that GHG emissions would, over 25 years, only slightly less than double. However, all three options are demanding and invite international aid and open trade in environmental goods as much as possible, according to the World Bank team. Thus, there is a development motive for donors but just as much a direct (commercial and climate) interest for e.g. the EU to step in and find effective ways to support if not amplify the Chinese attempts to address these environmental and climate challenges.

Altogether, the baseline around 1995 for the environment and climate is highly problematic and – given the very high growth path China was determined to continue – worrying. In terms of EU / China cooperation, still in its infancy, the divergence between the two in indicators and strategic perspective could hardly be greater.

95 In the simulation, it means that input-output coefficients would alter over time leading to lower energy use

3.7 The social costs of China's super growth

The Chinese growth model was first of all based on huge investments in heavy industry (like steel, aluminium, cement) facilitated by extremely high savings rates due to the lack of a welfare state or of broad social protection during the 1980s and 1990s. Another growth driver consisted of strong export orientation of low-skilled-labour-intensive and low tech goods, based on cheap labour (with almost no non-wage costs), scale and long working hours (sometimes translating to overtime pay as extra income for workers). With rapid productivity growth in agriculture after the liberalisation in the late 1970s, rural areas became a source of cheap rural surplus labour. This surplus labour first flocked into TVEs (as noted, new type of small enterprise in rural areas, initially often commonly owned by former farmers or technicians) within their own counties or province. Typically, such low-skilled intra-China migrants of rural origin often had no or weak contracts and little (if any) social protection. With private enterprise given more freedom and foreign direct investment coming in later, numerous other rural workers found their way to hundreds of special economic zones, soon to be linked to international value-chains. All that counted initially in terms of labour and social protection were jobs, not the quality of work, nor worker rights (despite communism) except in the public sector (but less and less in SOEs).

It is often said that China disregarded environment and climate (it did indeed, as shown above) for several decades, but its incipient style of semi-state capitalism was also disregarding elementary aspects of labour rights and social protection, as well as their enforcement. With the opening up of rural agriculture and the relaxation of intra-China mobilities for workers and students, the view was that poverty could only be overcome by many millions of jobs and internal migration to areas where the jobs were found or created. The results were stunning: hundreds of millions of migrant workers moved around inside China, to townships and cities in their regions as well as to the fast-growing East of China. Despite

the enormous challenges, (registered) unemployment remained quite low and – by (say) 2015 - more than 800 million Chinese had been lifted out of extreme poverty. The growth model surely had its social costs, as will be discussed, but it must be acknowledged that China did achieve a key element of social progress when coming from a very minimal base – it was successful in creating numerous jobs for decades and hence a minimum of income. This elementary form of progress for so many people had been thought to be impossible in such a short while.

However, a second social threat was immanent. In the early 1980s some 80% of Chinese employment was generated by SOEs. Knowing that the former Chinese command and planning economy was based solely on 'state-run' enterprises and agricultural collectives (without a profit motive), the long march towards a market economy hinged primarily on deep and wide-ranging reform in three parallel ways: profound and sustained SOE reform, the emergence of successful TVEs (Township & Village Enterprises) and the rise of private business as from the early 1980s. Over several decades, gradually changing incentives, disciplines and legal rules for SOEs emerged side-by-side with newly emerging private enterprise, although initially underprivileged compared to SOEs. The rise of private firms smoothed the transition towards a market economy because at first the SOEs were not forced to adjust radically and – more often than not – losses that did show up were simply covered, whilst unemployment – a major fear of the leadership – remained low. The big surprise – also for the leadership⁹⁶ was the successful rise of TVEs, a new enterprise form that did not even exist before 1978. By 1997 TVEs provided 18% of all employment in China; in 1998 some 28% of China's GDP was generated by them and 35% of exports.⁹⁷

96 Deng Xiaoping said in 1987 "the most unexpected thing that came out of rural reform is the sudden rise of the TVEs... [...]... The central government should not be given the credit for it". Quoted from the 2020 China National HD Report, special edition, op.cit., p. 119.

97 UNDP/CIDP & SIC (2020), p. 118. Hu & Pelkmans (2021, Box 2) clarifies the role of TVEs in the 4 decades long Chinese reform process.

When loss-making was no longer automatically covered by subsidies or credit lines with state banks, beginning in the early 1990s, smaller SOEs massively went bankrupt or merged into larger firms whilst shedding surplus labour. This added up to many millions of workers. Moreover, all SOEs dislodged their non-economic functions such as education, social protection, social housing and health care. This double shock for tens of millions of workers in only a few years could not be compensated somehow by high economic growth, although this of course did help to generate additional demand for labour. When viewed in a longer time perspective, China has absorbed these problems quite quickly, though there cannot be any doubt that there must have been many temporary losers at the time.

4. EU/CHINA SUSTAINABLE DEVELOPMENT COOPERATION: TOWARDS CONVERGENCE?

With the status and some critical background of sustainability in China of the mid-1990s explained, we can now proceed with the precise research questions. We do this here because it is only in the mid-1990s or towards 2000 that the EU began to take an active interest in pursuing a sustainability agenda with China. And of course, it is indispensable to appreciate the starting point in China around that time, a kind of baseline.⁹⁸ We are interested in whether EU trade and external cooperation policies vis a vis China have been coherent and can be verified in terms of effectiveness. This can be made more operational as follows. We focus on the two pillars of sustainable development and ask whether China and the EU have become more convergent in policies and in terms of performance (for example, expressed in indicators). Subsequently, the query is whether the EU has actively and continuously pursued policies to stimulate such convergence between China and the EU.

For the ‘*green*’ pillar of sustainable development – environment and climate mitigation – we pose three research questions:

What is the process of convergence between the EU and China in the status of environment and climate factors, as captured by **relevant indicators** of sustainable development?

What is the process of convergence in environmental and cli-

98 Like is common practice in regulatory impact assessment.

mate-related **policies** between the EU and China over the period 1995 – 2020?

Did EU trade policy and cooperation vis a vis China with respect to sustainable development **systematically pursue** the NTPOs of environment and climate mitigation since the late 1990s and to what extenty has this pursuit been **effective** in supporting a process of convergence?

The proper delineation of sustainable development for the purpose of EU trade policy and cooperation is far from easy, however. For the green pillar the focus is on all the relevant specifications in the sustainable development chapters in recent EU FTAs, with EPA as the (ambitious) example. These chapters of FTAs express the ambitious EU preferences about values.

It should be realized that China was at first – in the relevant period – a developing country and even 25 years later, it is best characterized as an upper-middle-income economy. Can one expect convergence in sustainable development with such an economy late 2020? A priori one should not expect that or at least, if a process of convergence has been set into motion, it is unlikely to be completed and this must be taken into account. The convergence, as expressed in the answers to the first two research questions, is therefore to be regarded as a process. One should not expect this process to be completed late 2020, except perhaps selectively. Moreover, stylizing EU's ambitious trade-related sustainable development preferences from recent FTAs may be a sound idea in and by itself, but what about trade relations with the many WTO partners *not* having a FTA with the EU? And China falls into that category. Thus, there are two reasons to be cautious about the 'reading' of EU's trade-related sustainable development preferences from recent EU FTAs: China has no FTA with the EU in the first place,⁹⁹ and China is not yet a developed country (although it

99 China and the EU have built up several instances of fairly 'deep' cooperation in sustainable development, as will be shown. Invariably, what is included in the texts however, are phrases that such arrangements 'do not imply binding legal commitments' for the partners, a clear signal that partners carefully distinguish cooperation, even when 'deep', from FTA-like commitments.

is getting increasingly close) which might be expected to be able to 'afford' such ambitious preferences.

Full convergence in sustainable development between the EU and China therefore should not be expected so easily and, even if the process is developing, is unlikely to be completed at this stage. Stronger, by adopting the preferences as 'stylized' from the sustainable development chapter of the EPA between Japan and the EU, the ambition is tantamount to the highest one found in any FTA today. It does not stand to reason to expect China to fully pursue such ambitious aims in 2020. Using the sustainable development chapter of recent EU FTAs therefore has the function, and only this function, to sharply define or articulate EU's trade-related sustainable development preferences. Finally, much of the following rests on the initial presumption of the late 1990s that, in sustainable development, China is to converge to the EU's objectives. In 2020, however, or in the coming years, it is not excluded that the EU might wish to converge - in some aspects - to what China has meanwhile shown to be capable of (see e.g. Pelkmans, 2021, section 6.2.3 on components of e-vehicles and renewables).

For the 'social' pillar of sustainable development - respect for the ILO core Conventions and an adequate system of social protection - we have three equivalent research questions:

1. In transforming from a system of central planning without private ownership towards a market economy, has China addressed the respect for international labour standards and built up a system of social protection based on individual entitlements?
2. What is the process of convergence in policies, laws and entitlements with respect to labour 'standards' and social protection between China and the EU over the period 2000-2020?
3. Has EU trade policy vis a vis and cooperation with China on sustainable development systematically pursued the NPTOs of labour 'standards' and social protection since

2000 and has this pursuit been effective in supporting a process of convergence?

The research is equally EU trade policy relevant here, because sustainable development is recognized as a large part of the NTPOs dealt with in RESPECT, even when focusing “only” on its social pillar. Hu & Pelkmans (2021, Section 2) identify three distinct though partly overlapping approaches to the definition of the ‘social pillar’ of sustainable development are discussed. Although this discussion sheds some light on often ignored issues of demarcation in debates on sustainable development, we have opted for a pragmatic solution, that is, the social pillar is considered to consist of respect for the eight ILO core Conventions (as in EU FTAs) and an adequate system of social protection, as indicated by leading international economic organisations.¹⁰⁰

In what follows we first scrutinize the Chinese strategy or policy development in the green pillar in the 20 – 25 years, after have characterized the extent of convergence as captured by salient outcome or performance indicators and then attempt the same for labour standards and social protection. More detail and factual information on these two areas can be found in Pelkmans (2021, section 5) and Hu & Pelkmans (2021, sections 5, 7 and 8), respectively.

4.1 Measuring ‘green’ convergence

It is understandable, in the case of China, to start by verifying its Five Years Plans, the principal guides for policy aims and policy development. However, it turns out this verification is of limited use. Studying three consecutive Five Years Plans between 2000 and 2015 demonstrates that, in China, there was an emerging awareness – more with citizens than with the government – of

¹⁰⁰ In doing so, the question of ‘employment policies’ is ignored, even though China was keenly interested in employment policies in EU countries at the outset (for instance, in the first Dialogue in 2005). However, it should be realised that China’s model and plans placed the rapid increase of jobs as an effective form of fighting poverty on top of its priorities for decades.

the quickly deteriorating environment, but little to no determination to halt and reverse the process. For the many details we refer to Pelkmans (2021, section 5.1) but a few examples can illustrate some of the problems. In SO₂ emissions (from coal) the status in 2000 was 1995 x 10.000 tons and the 2005 target 1800. However, the realisation in 2005 was more than 20% higher than the starting point, in turn slightly reduced by 2010 and again a little by 2015. However, the realised level of SO₂ emissions by 2015 was *higher* than the realised level in 2000! The driver behind this failure is coal. Another example is COD where it proved difficult to reduce the enormous volumes and especially non-industrial waste (that is, agricultural and from cities). Also on air and water quality, the problems were alarming. For example, the share of monitored water flows near cities failing to meet even Grade V (the worst, not good for anything) was still 26% in 2005. In air quality, as recent as 2010 only 72% of cities were meeting Grade II of China's national standard, which is not a very ambitious one. Moreover, there were strong suspicions that data was very incomplete as a result of weak enforcement efforts. Much later when enforcement began to be taken serious, incredible underreporting was detected, for instance for illegal dumping of waste in rivers and lakes (in important areas some 20 x to up to 60 x what the known data was) and with respect to soil pollution.

Also in CO₂ emissions the level and trend were deeply worrying. CO₂ emissions were increasing very rapidly and seemed unstoppable. By the time China ratified the Kyoto Protocol (2002) CO₂ grew as fast or faster than the very high rate of economic growth, implying a doubling every seven years. In the Five Years Plans no attention was paid to CO₂, only to coal as being so central to Chinese growth. The Agency (later ministry) responsible of the environment lacked the competence to deal with CO₂, that was retained by the NDRC, a powerful ministry expected to ensure high growth. The only bright spot was (re)forestation at a steady rate in a programme that was foreseen to take some 40 years and would augment the share of forest land in all land from 15% to over 26% by 2035. This programme surely helped to absorb some

CO₂ emissions but its main motivation was found in anti-desertification, anti-flooding and anti-erosion in less populated parts of the country.

An analytical perspective

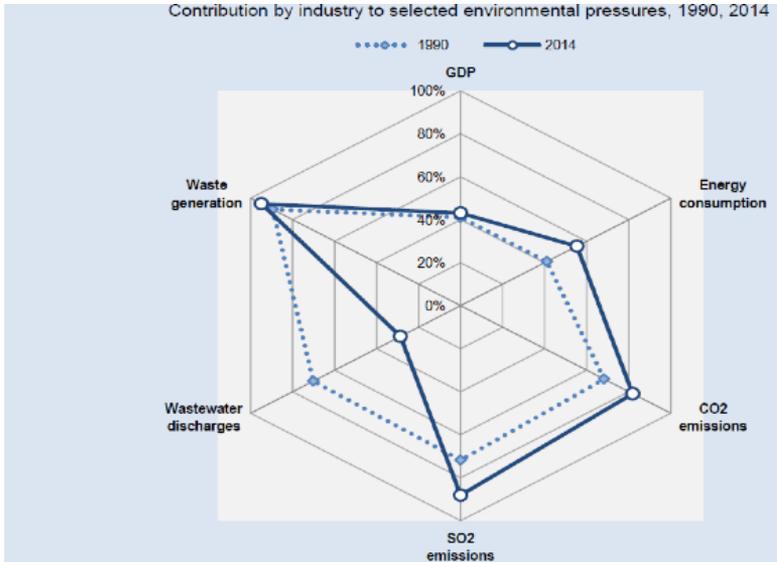
Since the Five Years Plans are presented in incomparable ways (for the indicators) and littered with intentions, they are ill-suited for analysis. In order to obtain an overall view over decades and a series of Five-Year Plans and to be better capable of coming to a succinct assessment, the following relies on a recent OECD study produced in cooperation with the DRC (Development Research Centre) of the State Council of China.¹⁰¹ It facilitates a further reliance on indicators and helps to assume an analytical perspective, unlike the Plans which tend to sum up numerous measures and policy suggestions for operational purposes.

In Figure 3 some telling long run environmental trends in China are depicted. The focus is on industry,¹⁰² long the main culprit of environmental damage by far. One finds that industry was (in 1990) overwhelmingly the principal generator of waste¹⁰³ and that is still the case in 2014. It has improved considerably in waste water discharges. With respect to SO₂ Figure 2 confirms that industrial SO₂ was stubbornly going up, with of course much larger volumes in 2014. The same goes for CO₂ emissions, the high share coming from industry still increased and the volumes grew multifold by 2014. Although energy efficiency in China strongly augmented over the 2½ decades, the share of industrial energy consumption nevertheless increased, mainly due to very high economic growth. The GDP spoke shows that all this happens with a constant share of industry in GDP (of some 40-plus%) between 1990 and 2014.

101 M. Linster & C. Yang (2018)

102 Defined as manufacturing, mining & quarrying and energy.

103 Even though agricultural waste was not included in the statistics, so the industrial shares are too high

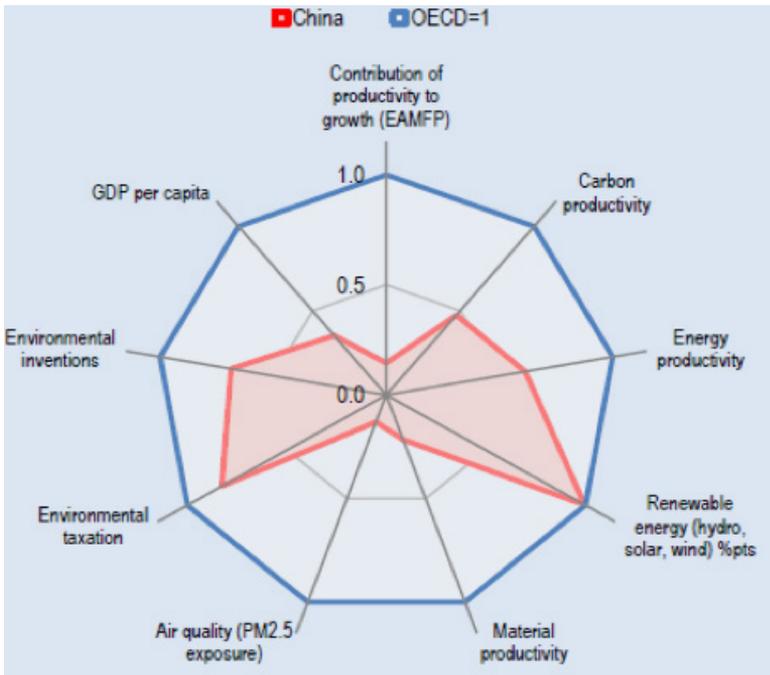
Figure 3: Environmental profile of Chinese industry

Source: Linster & Yang (2018, p. 13)

A complementary position about China in 2015 with 9 indicators of green growth is provided in Figure 4. Most striking are the productivity indicators. Whereas energy productivity is around 60% of the average OECD level, and carbon productivity at some 45%, material productivity is only some 23% and overall productivity about one fifth of the OECD level. The yardstick used here is multi-factor productivity adjusted for negative environmental impacts. A telling illustration is the generation of \$ 1000 of GDP: whereas China uses 180 ktoe of primary energy and 1930 kg of materials other than energy, the OECD on average uses only 110 ktoe of primary energy (some 60%) and only 420 kg of materials (just 23%); moreover, the OECD emits 260 kg of CO₂ from this energy use and China 540 kg, more than double. China is beginning to transform its growth model, which relied on heavy industry fueled by coal and consuming huge amounts of materials and resources, which some have characterized as ‘predatory exploitation’. It is not an exaggeration to conclude that this kind of

rapid growth ('at all costs') can only be sustained at the expense of environmental quality. Less noticed is the recent extreme reliance on *imports* of such resources: according to Linster & Yang, op. cit., China relied for more than half of its supplies of oil, gas, iron ore, copper, lead and zinc on imports in 2011 ; by 2014, China consumed nearly half the world's metals, an extreme dependence that may well backfire and cannot possibly be a long-term solution for a single country when other emerging economies want to develop.

Figure 4: China's green growth indicators relative to OECD in 2015



Source: Linster & Yang, 2018, p. 15.

Although energy productivity¹⁰⁴ has steadily improved, it is clearly below that of the BRIIS countries and even more below the OECD average. Thus, efficiency gains should be stepped up and coal must be capped and reduced urgently. The coal cap (though not by law) by 2020 foreseen in the 13th Plan is 4.1 bn tonnes which is unbelievably high (and even higher than the 3.1 bn tonnes obtained in the simulation done on the late 1990s). China has long committed to lower its carbon intensity (CO₂ emissions per unit of GDP, here 2005 level) by some 60-plus% (in 2030 and by 40% in 2020) but when GDP rises very fast this measure remains completely unrelated to the negative externalities inside and outside China! The 13th Plan incorporates the intention to begin a cap-and-trade system a la the EU's ETS but the introduction fell behind schedule and the scope is limited to the electricity sector. On the 1st of February 2021, the formal beginning of the Chinese ETS was announced but the factual operation only occurred in the late summer.

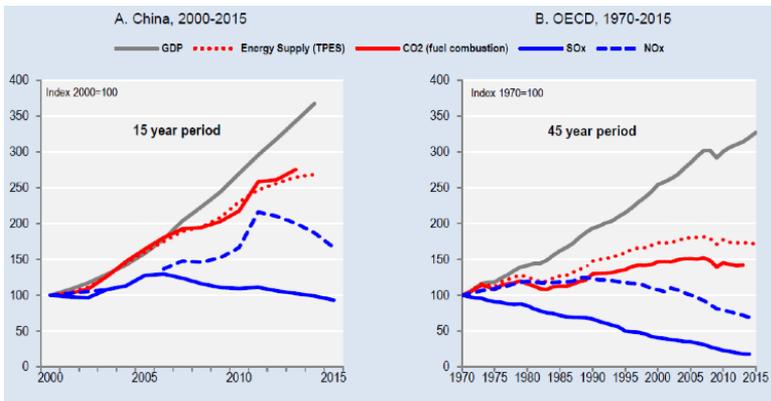
The inefficiency of materials consumption is extreme and, in turn, this has also led to very large waste flows, even though industrial waste reduction has become more successful recently. In any comparison between countries one must of course correct for the industrial structure of China, as compared to countries with a strong reliance on light industry and services, but the contrast is nevertheless stark. Thus, (non-energy) material productivity of China is comparable to Canada (a resource country, whereas China hardly is one) but only some 7% - 8% of that in the UK or Japan and some 15% or so of that in France or Korea!

SO₂ and CO₂ emissions increased in China both absolutely and relatively between 1990 and 2014 (Figure 5). Official NO_x data is only available as from 2006. The rise of CO₂ and SO₂ during the 1990s was steep, implying that the situation in 2000 was already problematic. Figure 5 (cf. left side) clarifies the enormous tasks China faces when combining future economic growth and decoupled trends of CO₂, NO_x and SO₂. The high SO₂ level of 2000

104 Defined as how much GDP is generated from one unit of energy.

was only returned to – after a surge – in 2012 and is since slowly declining, thereby beginning to reduce – after a lag – the acid rain problem as well as related problems of air quality. The trend of NO_x is sharply up and the 2015 level is still more than 60% higher than in 2000. The very rapid increase of CO₂ emissions hugs the steeply rising trendline for energy, which is predominantly coal. This trendline is below the GDP trend (so, energy growth and CO₂ emission growth are decoupled from GDP growth) but that is little consolation when CO₂ emissions, already from high initial levels, continue to increase so rapidly. We will come back to this subsequently.

Figure 5: China and the OECD: Environmental trends and economic growth



Source: Linster & Yang, *op. cit.*, p. 24.

Air quality is another major problem in China. Since 2013 (and even before) China attempts to impose air quality standards based on the high WHO indicators (much higher than EU standards).¹⁰⁵ The high WHO threshold for fine particulates (2.5 PM) is 35 $\mu\text{g}/\text{m}^3$, most OECD countries have much lower thresholds, hence, better air quality. In December 2016, however, the levels of

¹⁰⁵ For SO₂, NO₂, PM₁₀, PM_{2.5}, CO and O₃.

PM 2.5 concentration in 30 Chinese cities were a multiple of these thresholds, between almost four times the high WHO threshold to as much as eight times.¹⁰⁶ The health toll in terms of respiratory diseases must be quite high as various studies from the late 1990s show. It is useful to know that today's studies suggest a similar or worse adverse impact.¹⁰⁷

But there is good news too.¹⁰⁸ The OECD environmental policy stringency index – indicating strictness of environmental laws – for China has sharply moved upwards since about 2010 and begun to approach OECD levels. However, the index does not measure enforcement. Environmentally related tax revenues have gone up very steeply in 2007/8 and stayed roughly at that level for the following 8 years, close to the OECD revenues as a share of GDP. Both appear to be a genuine break with the past: tougher rules and pricing negative externalities had long been called for. Another item of good news is the rapid development of green technologies. Wind and solar industries are booming and are leading in the world. They already produced some 15% of Chinese energy in 2015.

More and more recent 'green' indicators for China

The numerous data about the last two decades shows – for the most part – a damaged environment and a serious neglect of climate policy in China. However, with Xi Jinping's 'ecological civilization' a new urgency is expressed. Also the Paris Agreement and the upcoming Biodiversity conference in Kunming strongly support such a new urgency. The following will therefore emphasize the most recent data and some background factors. However, since this material is data-intensive, only a summary can be presented here, and reference is made to Pelkmans (2021) for further detail.

¹⁰⁶ See Linster & Yang, *op. cit.*, p. 25, Figure 14.

¹⁰⁷ A prominent example is provided in a leading survey by Jin, Anderson & Zhang (2016, p. 2). A quote is telling: "The ambient air quality pollution in China has been estimated by the Global Burden of Disease to lead to 1.2 million premature deaths from one year's (2010) exposure in China, and in multiple studies to cause annual economic losses equivalent to between 1% and 7% of China's GDP".

¹⁰⁸ *Idem*, pp. 29-31.

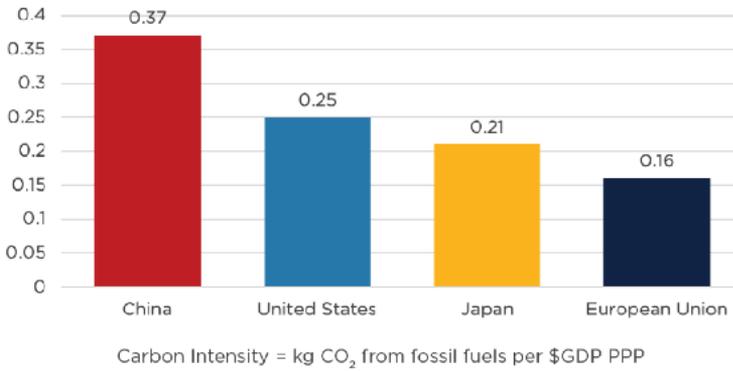
Climate-related indicators

There is lingering doubt about China's capacity or willingness of controlling coal and CO₂. The lingering doubt is underpinned by the newest three basic facts. First, China as the largest CO₂ emitter on the globe *added* 2.5% over 2018 to its CO₂ emission and again a small amount in 2019. The cuts realised by many countries – and certainly in the EU – are absent in China. Second, with coal being the central problem in Chinese climate policy [acknowledged by China itself], 2018 saw some 30 GW of new coal-fired power capacity *added*, another 30GW in 2019 and a planned 100GW under construction in 2020! Third, and often overlooked, Chinese (state-owned) banks continued to lead the world in financing new coal-fired plants all over the world (in part, under the Belt and Road umbrella). These three indicators undermine the credibility of China's climate mitigation commitments. What China does is to target a continuous reduction of coal as a share of primary energy: this works, as the 2016 share of 62% has fallen to 57.7% in 2019. But this lower share seems more the consequence of rapid growth in renewable energy than of a reduction of coal itself.

On the other hand, an opposite trend can also be observed serving the climate. First, China leads the world in renewable power deployment, and in 2018 added no less than 43% of the global new capacity. An increase of 36% is expected for 2019. Second, also in electric vehicles China leads the world: some 45% of all electric cars are found in China and no less than 99% of electric buses. Third, of the 9 nuclear power plants in the world which recently were for the first time connected to the grid, 7 were in China. Fourth, reforestation and forestation is actively pursued in China since the late 1990s, so much so that a considerably higher share of surface area is now covered by forests: from 16% of the country in 1999 to more than 22% in 2015. There are complaints about biodiversity in the newest forests but for the climate it is positive and it also works against floods (e.g. of rivers) and soil erosion as well as desertification. Thus, the first inference is that selective quotes on China can be misleading, either way.

By far the biggest problem for China and for the rest of the world, hence also the EU, is the combination of coal in China and its CO₂ emissions. The consequences have been very worrying indeed. China in 2018 emitted much more in global shares than either its population or its GDP shares: some 28% of global CO₂ emissions. This compares with a 10% share of the EU, 15% for the US and only 7% for India. Although China is catching up in its cumulative emissions 'stock' since 1750 (14% in 2019), the US (26%) and the EU (22%) have emitted much more over time. However, with the present speed and CO₂ volumes China will soon arrive at similar amounts, leaving less room for other emerging economies to grow with some CO₂. Per capita, in 2019 China emits only 6.9 ton, with the US 15.1 ton; still, China has long surpassed the EU here (4.5 ton).

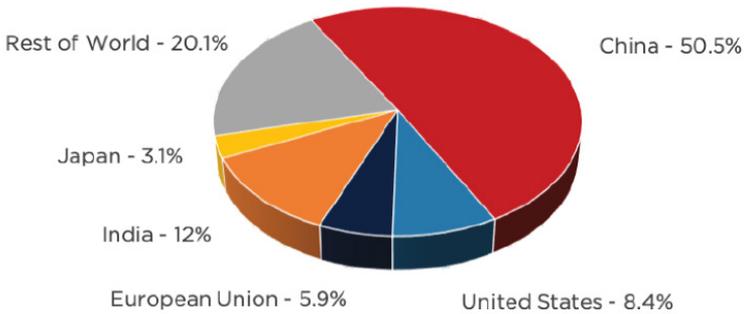
Coal has proven to be crucial for China's growth, so much so that its carbon intensity [CO₂ per unit of GDP] is by far the highest in the world: 0.37 (see Figure 6). For a long time, China has defended itself with the principle (in the UNFCCC treaty) of 'common but differentiated obligations', implying that developing countries – given their historically low cumulative emissions – cannot be strictly bound when trying to catch up in terms of development with OECD countries. Not only has China rapidly caught up with OECD countries, it also became aware of its own vulnerability for the effects of climate change and the impossibility of maintaining its strategy leaving other developing countries less room for CO₂ emissions in the near future.

Figure 6: Carbon intensity in the world: 2018

Source: Sandalow (2019)

With the Paris agreement, China has finally set a date for its CO₂ emission peak in 2030 - more than 3 decades after the EU - with several provinces adamant to peak even before. China presents an interesting argument for this timing: by 2030 China will have a p.c. income of roughly US\$ 25 000, whereas the US peak occurred when p.c. income was around US\$ 42k (in 2005) and the Japanese peak at US\$ 37k in 2007.¹⁰⁹ Behind the huge CO₂ emissions lies the Chinese coal issue. China's incredible and uninterrupted growth hinged - in part - on cheap and massive availability of coal. How unique this 'model' is can be seen in Figure 7.

¹⁰⁹ All incomes in PPP-2005 US dollars. Incidentally, there are still considerable uncertainties about CO₂ emission data from China, for a host of reasons (see Sandalow, 2019, for a summary on pp. 22-24).

Figure 7: World coal consumption 2018

Source: Sandalow (2019)

One can appreciate the early decades (say, up to the late 1990s) when the imperative of development was so pressing. But around the time of Chinese ratification of the Kyoto Protocol (in 2002), the awareness and strategic urgency of putting a limit on coal use seemed to be still absent. Indeed, between 2000 and 2013 Chinese use of coal tripled (!!) from an already high level. After 2013 there was an variable pattern of more modest growth. Even when 90% of the 100 largest coal-fired power plants are ‘ultra-supercritical’ (i.e. highly efficient), the sheer quantity is a primary issue, and so was the reticence about ‘pricing in’ the negative externalities. Today there are ambiguous signals from China, both about new capacity added and about deliberately scrapping new and planned capacity¹¹⁰. As noted, what is in the making is domestic carbon trading. For some 7 years China has been experimenting with its own ETS, helped by EU ETS experts. It is operational since the summer of 2021, after a formal start in February. In any event, carbon will be priced and this is badly needed. Coal is already taxed locally but how effective this is is unclear. For all the enormous efforts in renewable energy (including nuclear, ‘clean’ in CO₂ terms) China has under-

¹¹⁰ For details see Sandalow, *op. cit.*, pp. 62-65. In any event, as noted above, coal capacity has increased both in 2018 and 2019, and the same is likely for 2020.

taken, and the rapid increase in imported LNG, provincial officials still have incentives to approve new capacity (as growth matters most, and coal brings in tax revenue). At the same time, renewable energy grows rapidly (as Figure 8 in Pelkmans [2021] shows).

The 13th Plan aims at 15% non-fossil energy in primary energy consumption in 2020 and 20% in 2030. This is realistic, so it seems. At the same time, a series of other measures are taken about capacity, offshore wind, innovation, reducing curtailment¹¹¹ and scaling up distributed solar generation. The old and generous feed-in-tariff system is being dismantled and auctions take its place instead. Costs have fallen so much that electricity can soon be sold at prices equal to or lower than coal-based power, so grid parity can be pursued. This is especially the case for solar.

Air and water quality

In the EPI¹¹² of 2018 (where the overall ranking of China is 120 out of 180 countries) China occupies place no. 177 (of 180) for air pollution of SO₂ and NO_x, a record far below its standing in terms of development. Why China has considerable inhibitions in radically cutting such emissions which are strongly disliked by the people¹¹³ and lead to very large human health costs, is hard to discern. Is it because growth would be a little lower with less massive reliance on coal? Is it because China already imports so much energy and its import dependence would rise once more? Is it because of the lobbying power of the mining and electricity industry? It is only recently that president Xi has changed track and actively promotes 'ecological civilization' precisely because that is what people want. In terms of treaties and of the UN SDGs, the EU might perhaps raise these issues in bilateral exchange, but it is more than obvious that the overwhelming interest of the Chinese people themselves

111 Temporary interruption (hence, curtailment) of electricity flows from renewable sources, as the grids cannot handle them

112 The EPI [=Environment Protection Indicator] is co-produced by Yale's Environment Institute and the World Economic Forum. It is a composite indicator with 16 sub-indicators, beginning in 2006. The EU/EEA countries typically lead the ranking.

113 For polls, see Sandalow, 2019.

would be expected to be the guide for Chinese policy-makers and yet it was not really done seriously for a long time. A comparison of indicators for the mid-1990s and around 2015 points to 5 telling items:

- i. Air pollution contributes to 1.6 million premature deaths (so, particulates and other)
- ii. Some 500 million residents in Northern China lost more than 2.5 bn years of life expectancy due to air pollution from coal burning
- iii. Almost 100 bn people suffer from chronic obstructive pulmonary disease, with air pollution suspected to be the leading cause
- iv. Deaths from cardiovascular and pulmonary disease (in 272 cities) are closely related to very fine particulates (PM 2.5)
- v. PM 2.5 and ozone emissions (from 6 sectors) cause roughly 1.1 million premature deaths with a cost of some US\$ 38 bn per year.

The damage caused by widespread water pollution and the problematic quality of drinking water or even water for irrigation is great and widespread. In combination with the structural water shortage the country is suffering from, the challenges for a strategy of remediation of water in China are no less than daunting. A summary of the crucial shortcomings will be provided here but this is done in analytical and policy terms. However, such terms hardly convey an appropriate picture of the practical issues and fears of the citizens ¹¹⁴. Moreover, the water imbalance inside China

114 Confronted with numerous 'black and odorous' waters (in cities), greenish lakes and rivers due to eutrophication, some rural communities refusing to eat the agri-products they produce and sell due to the polluted irrigation water they use, numerous creeks and small rivers ending up in the big rivers in China (like the Yangtze River) which no longer carry water and the anxiety of citizens and workers along big rivers knowing of thousands of unreported sewage outlets spilling straight into the river or lakes. In some areas of China, chronic exposure to water pollution has led to the emergence of hundreds of 'cancer villages', where rates of tumours linked to water pollution far exceed the national average. Even in relatively well-off cities like Shanghai, many citizens filter or boil water because of lack of trust and anxiety about old and leaking water pipe networks.

is structural and profound, essentially caused by climatic differences of precipitation. But it worsens the problem considerably: Northern China covers 64% of the territory, 46% of the population and 60% of the cultivated areas, yet it has only 19% of the national water resources¹¹⁵. China has attempted to remedy this structural deficit by two huge South-North connections but the flows are so large that there are costly implications for the source areas and it is still not enough, let alone, if urbanisation continues unabated.

An authoritative and independent¹¹⁶ China Water Assessment by the ADB (2018) identifies seven principal water issues, some of which are interdependent:

- a. Water shortage, caused by natural insufficiencies but also low water use efficiency; this shortage is worst in the Hai river area, and in those of the Liao and Yellow rivers.
- b. Severe water pollution, caused by untreated pollutant discharge (often having exhausted the assimilative capacity of water bodies); eutrophication of some lakes and reservoirs has not reduced much and groundwater pollution is spreading.
- c. Aquatic ecosystem degradation, often in advanced stages, some perhaps beyond the option of restoration
- d. Weak water-related disaster mitigation capacity, overburdened by frequent floods and droughts (probably worsened by industrial and infrastructural activities)
- e. Low water-use efficiency ; efficiency is improving recently but much needs to be done about leakage rates of city water supply pipeline networks (as high as 15%), the (too) high water use per unit of industry value-added (as well as by citizens) and low farmland irrigation efficiency
- f. Insufficient water services, especially in the management of water supply and wastewater services; only 70% of surface

115 ADB (2018), p. xiii

116 But in cooperation with the Ministry of Water Resources

drinking water meet the national water quality standard; urban wastewater management is poor but rural wastewater collection and treatment is weaker still.

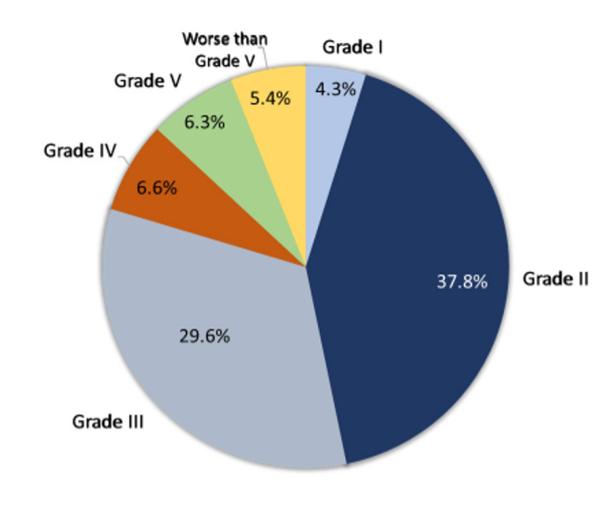
- g. Weak water governance, given ineffective water legislation for decades, poor enforcement, little coordination between jurisdictions, limited public involvement in water affairs and – a critical point, too often conveniently ignored – the absence or at best hesitant introduction of price signals or taxation. A lot of water is wasted for the latter reason alone, in a country that already has so little access to water.

Altogether, water pollution and overuse are a serious hindrance of development and, worse, a major health issue causing premature deaths of many and illnesses for others. Producing cheap at such health costs is also plainly distortive globally and the same goes when generating such environmental damage.

Thus, China has a very serious water problem for decades. This problem is in fact a combination of water scarcity (which is most severe in the North), serious water pollution of rivers, lakes and canals in urban areas, drinking water quality due (apart from pollution) to ageing underground pipe networks and huge questionmarks about groundwater and deep ground water sources. There were long considerable governance issues, too, in particular for interjurisdictional issues as well as enforcement capacity. The U-turn came in 2013 with the preparation of the 13th Five Year Plan, the ‘Water Ten Actions’ Plan of 2015 and the period of drafting the 2017 Water Pollution and Control Law. The ADB (2018) water assessment of China is closely associated with the new ‘water security’ strategy and it recommends five goals: accelerated ‘green economy’, modernizing water infrastructure, advanced water services, improved aquatic ecosystems protection and rehabilitation, and modernized water governance and management systems. This U-turn alone, if credibly implemented, would bring China much closer to strategic perspectives on water in the light of sustainable development held in the EU. There are six catego-

ries of surface water quality, the distribution of which is shown in Figure 8 for July 2019.¹¹⁷ The worst are grade V (not for human consumption, or swimming or even irrigation, perhaps for basic industrial cleaning) and ‘worse than grade V’ – useless for anything, together some 11.7% of surface water. Even the 16.6% of grade IV is restricted in use for health and safety. Drinking water is supplied from grade I and II water, some 42.1%.

Figure 8: Distribution in China of surface water by water quality, in July 2019



Source: Statista.

However, China did invest in reducing wastewater discharges ever since (say) 2000 (the 10th Plan), especially those from industry. Figure 3 above shows a significant cut in industrial wastewater discharges up to 2014. Given the initially weak official data, a detailed contribution by Ma, Zhao et al (2020) showing the improvement

¹¹⁷ See www.statista.com/statistics/1064877/china-share-of-surface-water-by-quality

of surface water quality between 2003 and 2017 ¹¹⁸ demonstrates the great strides China has made over one and a half decades. Therefore, the U-turn in water policy since 2013-15 appears more of a strong acceleration than a completely new strategy.

MEE reported both good results and stronger enforcement in January 2020 ¹¹⁹. Good quality surface water increased 3.9 percentage points compared to 2018 and severely polluted water is down by 3.3 percentage points. MEE announced that no less than 90% of bodies with black and odorous water will soon be curbed in targeted areas. Enforcement has become more credible: sewage outlets were detected and inspected with sonar, infrared, aerial surveys and on-site inspections. As a result, more than 60 000 sewage outlets were detected along the trunk and branches of the Yangtze river and the Taihu lake, some 30 times (!) those reported by local authorities. Another 19000 were found along the coast of the Bohai sea, some 25 times what was reported. It seems that enforcement is finally taken serious.

The World Bank (2018), whilst being complimentary about the U -turn as discussed and the massive investments undertaken, is nonetheless rather critical about water governance in China. A prominent governance and policy issue is that a lot of water is wasted. Chinese people and many of its firms do not seem to appreciate the value of water as long as the price is too low. Water pricing is still sensitive ¹²⁰ but critical for pre-empting the wasting of water. The MEE realizes this and even advocates - and experiments with - the trading of water rights. The World Bank notes that other upper-middle-income countries use far less water per unit of value-added. Also for irrigation such countries are far more effective with a unit of water for the land. Similarly the preservation of eco-systems has been dramatically disregarded. Thus, natural

118 The authors have used time-series of monthly mean concentrations of COD, NH+4-N and dissolved oxygen (DO) derived from site-level measurements across China as well as 10 major river basins. For other technical and statistical details, see Ma, Zhao et al, op. cit.

119 See <https://news.cgtn.com/news/2020-01-17/China-s-good-surface-water-quality-rose-in-2019-ecology-ministry>

120 Water was free of charge until around 1980.

ecological systems such as wetlands ¹²¹, coastlines, lakes and riverbanks keep decreasing in size for decades. More generally, land affected by soil and water erosion has reached some 31% of China's total land area. The governance of interjurisdictional water issues is far too weak and uncertain. Better integration across policy areas and between regions or basins is badly needed.

One potentially very costly and complex issue is deep groundwater pollution. So far, in China it is often attempted to drill for deep groundwater (typically down to 100 m) precisely so as to avoid surface or shallow groundwater. Even the MEE holds, so far, that deep groundwater is safe. However, in Curell (2017), some disturbing evidence shows otherwise. In scrutinizing 37 deep aquifers for the presence of nitrate ¹²², only one had nitrate below background levels and several had worryingly high levels of contaminant, besides indications about a range of other pollutants. The author fears that only a fraction of the 4 million wells drilled in Northern China in the 1960s and 1970s are registered. Many of them leak or allow 'bypass flows' from the surface to much deeper levels. The scale of this issue and the costs of remediation may well be comparable with that of soil pollution in countless sites i.e. massive and the liability question might be one way to reduce the problem.

Soil pollution in China and the new strategy

Soil pollution has long been the cinderella of Chinese environmental strategies. It is complex and technical to provide a truly satisfactory exposition. We merely provide the core provisions of the 2018 Law on Soil Pollution Prevention and some of its ramifications in Box 8.

121 The Ramsar Convention (Table 1, item 6) aims to protect wetlands and China has ratified it but it merely applies to 'wetlands of international importance'.

122 Nitrate is widely measured, easy to detect and highly water soluble.

Box 8: Chinese U-turn in soil pollution, prevention and control

Soil pollution, though less ‘visible’ or noticeable than air or water pollution, is very severe in China. In different degrees, no less than one fifth of farmland in China is polluted and for the country as a whole it is still some 16%. Laws supposed to prevent or reduce it were scattered and had little ‘teeth’. Enforcement was weak and unsystematic, and data was incomplete and of dubious quality. Moreover, potential exposure to soil pollution – often indirect via water or agri-food or delayed by decades – is highly uneven, differing between regions dependent on industrial or mining activities or the type of agriculture, as well as the local availability of water, in itself a major problem in China too. The 2018 law is a genuine U-turn but the costs and who will pay are daunting obstacles, even when enforcement were well-intended. The law went into force in 2019 and it is therefore too early to measure results. One immediate consequence is a massive survey of soil pollution in order to get better, more reliable data with a much more complete coverage of China. The plan is to obtain data from over half a million sites or areas. The main inorganic pollutants are eight heavy metals: cadmium, nickel, arsenic, copper, mercury, lead, chromium and zinc. Cadmium is the worst case with 7% of Chinese land polluted, nickel 4.8%, arsenic 2.7% and e.g., mercury 1.6%.

To understand the meaning of the new law (see Li, Liu, Lin, Liu & Xie, 2019), one should realize that it is based on the 2016 Action Plan (same title) which seeks to build a systematic soil pollution and control management system including this law, actions plans, regulations (with greater detail), risk control rules based on standards and technical guidelines. In addition, the law is to be understood in close relation with several other laws on agriculture, grassland and agricultural product quality. Targets are set for 2030: the safe utilization ratio of contaminated agricultural land and contaminated sites should exceed 95%.

This new and much more serious approach is of great importance for Chinese citizens (e.g., in case of building sites), workers in many cases, farmers and animals, but it has also great significance for the eventual 'safe' reputation of food both directly (e.g., rice, etc.) and via water pollution through leakages. The potential costs of this approach are staggering, one estimate being \$ 1.3 trillion merely for the period 2016 – 2020¹²³, which is some 10% of China's GDP! Insofar as the products produced are or were ending up in China's exports, either directly as final ones or serving as intermediate ones, with these colossal amounts of money one can pose the query, in earnest, whether such products have not been or are still not artificially cheap, distorting international trade for decades. Whilst the health and consumer protection as well as occupational safety of the Chinese people are of course the prime rationale for the clean-up, it is at the same time a powerful argument bilaterally and multilaterally for close cooperation with China to foster convergence on the approaches to fighting soil pollution.

Where is China today with air quality?

China's record for air pollution – with considerable negative health effects for the population – has long been extremely problematic. China simply did not make policy choices protecting its people and the environment. In 2013, in the run-up to drafting the new Air Pollution Law, a 'war on air pollution' was announced, leading the 13th Environmental Five Year Plan (2016-2020) to be more ambitious for air pollution. Although the overall focus was on 6 pollutants, the two prime cases are SO₂ and PM 2.5 (very fine particulates).

Myllyvirta (2020) has published the newest data for 2015 – 2019 for the 6 pollutants, based on a very close tracking.¹²⁴ Based on national averages, the results are shown in Table 2. During the

123 See <https://www.iisd.org/library/financing-models-soil-remediation-china> (2018)

124 The independent CREA (Centre for Research on Energy and Clean Air) in Finland uses data collected on an hourly basis by Chinese agencies and published on government websites. Lauri Myllyvirta leads this CREA work.

four years of data available, the results are broadly spoken good to very good indeed. The perhaps most inimical pollutant PM2.5 has fallen by 28% on average and SO2 even with no less than 56%. Also PM10 and CO have gone down by 27%. With NO2 the fall is a mere 9%, so it is still considerably above the level in 2000. And ozone has increased with 11%, which will have to be addressed.

Table 2: Recent air pollution trends in China: 2015 – 2019
(% change)

PM2.5	PM10	NO2	SO2	CO	Ozone (O3)
-28%	-27%	-9%	-56%	-27%	+11%
0% (winter 19)	-3% (winter 19)	0% (winter 19)	-12% (winter 19)	-6% (winter 19)	n.a. (winter 19)

Note: unit of measurement 'mu'g/m3 ; national averages; 'winter' refers to October thru December 2019 and the% represent the percentage change comparing these with October- December 2018.

There are two serious caveats with this positive picture. Both caveats have to do with *how* China has tackled this 'war on air pollution'. First, there is evidence of shifting 'pollution havens' inside China. Studying the air pollution at provincial level, it is apparent that there are considerable differences in performance between provinces, often coupled with increases in e.g. provincial steel and coal output in the same period¹²⁵ or indeed a shift from winter with less output to summers with higher output.¹²⁶ In big regions like greater Shanghai and greater Beijing, coal for heating has been aggressively replaced by natural gas and electricity, and this has led to real cuts in pollutants. However, the rest of China witnessed increasing output of e.g. pig iron and cement but above all non-ferrous metals. Second, China has strongly relied on an 'end-of-pipe' approach and this quickly runs into limits if meanwhile

¹²⁵ The so-called 'coal bases' are targeted to have coal industry expansion !

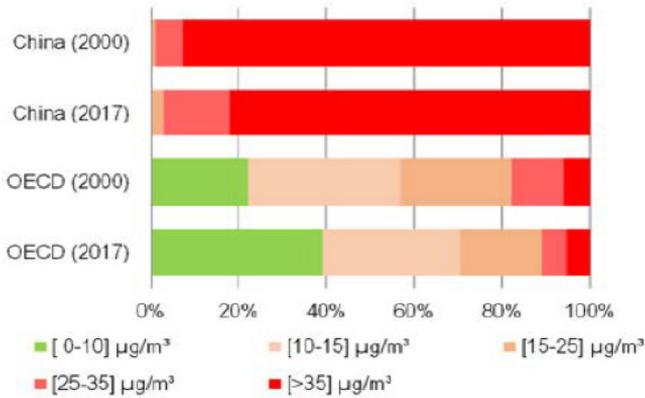
¹²⁶ Winters show worse performance due to heating, often still on a coal basis. For data, see Myllyvirta, op. cit.

coal remains as important or even augments. It has been done with denitrification and desulpherization filters or equipment. This works for SO₂ and PM_{2.5}, but is much less effective for NO₂ and ozone. Moreover, when filters are employed, they have a level-reduction effect once but if coal growth is not controlled or priced/taxed, sooner or later pollution levels will go up again. Rather than capping coal output, China seeks to apply technology as a solution but this runs into considerable limits. It should also be noted that ozone is dangerous for the lungs (but in different ways that is also true for PM_{2.5} and NO₂) and is a result of industrial, transport and power plant emissions¹²⁷, but hard to filter out.

Finally, to put the recent pollution levels in China into perspective, Figure 9 compares PM_{2.5} levels of 2017 in China with those in the OECD, and shows the progress since 2000. Despite the clear improvement in China, the difference is still enormous. In the EU a level of up to 10 'mu'g/m³ is seen as acceptable given WHO guidelines. Even with the progress reported including 2019, much of China still lives with very-fine-particulates pollution of more than four times the high WHO guidelines. The Chinese standard of 35 'mu'g/m³ often used in official publications is far above what the WHO recommends and can therefore only serve as an interim mile stone.

127 Ground-level ozone pollution is created when NO_x and VOCs react in the presence of sunlight.

Figure 9: PM2.5 levels in China and the OECD, comparing 2000 and 2017



Note: Source OECD (2019, p. 73)

Answering the first research question of the green pillar

The first research question is whether and to what extent *indicators* reveal that China and the EU converge in terms of environment and climate mitigation. The relevant period is from 1995 to 2020. The answer to this double query has to start with the initial deterioration in China of practically all indicators of environment and climate. The sharp contrast with the EU in the first decade or 15 years of this period, or for e.g. GHGs even longer, amounts to a clear divergence, not convergence. At least for some years and in the climate realm for most of the period, indicators were worsening despite (1) EU/China cooperation, projects, programmes, transfer of technology (e.g. CDM under Kyoto) and Dialogues, and (2) increasingly firm Chinese policy intentions and strategies. One explanation is paramount: exceptional economic growth ‘at all costs’, driven by the desire to move the country towards developed economy status and the determination to lift hundreds of millions out of extreme poverty first. Indeed, there was no such thing as ‘linear convergence’ in indicators, not at all. The pattern seemed more like a U-curve. Initially divergent trends changed over time

in a complicated fashion, dependent on the type of environmental issue. In other words, China began to converge only after first letting both environment and climate issues go out of hand.

This deterioration or slippage differed between aspects and between the two main classes of policy: climate and environment. The by far worst performance was linked to the use of coal. The coal addiction seems to have been a conscious choice, presumably also influenced by industrial pressures as well as regional lobbying. The enormous negative externalities this caused over time, especially for human public health, not to speak of the broader costs to society, were first ignored and later treated with little more than lipservice. When interventionist policy became unavoidable, the options favoured were in the technological domain: end-of-pipe techniques such as filters for denitrification and desulpharization, and the aggressive development of renewables in electricity generation. What was carefully avoided for a long time was both the use of price instruments for coal (say, taxation or an ETS China style) and the quantitative restriction of coal output. As noticed, the end-of-pipe techniques (first avoided because of the costs) have been successful recently, as far as they reach. They will not do for deep further cuts of SO₂ and NO_x emissions. Moreover, the taboo on taxation and on the rise of coal prices has finally been removed. Forms of pricing of negative externalities and cuts of coal output are bound to be the only truly effective routes to live up to the Paris Agreement commitments in the longer run. Nevertheless, in climate policies, indicators for CO₂ and some other GHGs (e.g. ozone) begin to show declining growth but still growth despite the already extremely high level. The peak in CO₂ has not been reached yet. China's insistence that carbon intensity is falling rapidly should be acknowledged but is little consolation when CO₂ emissions – already the largest in the world – are still increasing. Air pollution is close to the worst in the world and only improved since 2013 – 2015. Water standards slowly begin to improve as well, be it still too selectively. Water pollution has been ignored or belittled for a very long time, although investments in infrastructure and new legislation and better enforcement helped

somewhat. Waste is now being addressed more effectively, after serious investments in treatment.

On the other hand, China is very active in sustained reforestation, with strong results, and in the swift expansion in renewables, meanwhile generating some 15 % of electricity in 2020. In electric vehicles and lithium batteries it has become a world leader. Expansion in nuclear energy also helps to support climate policies.

Therefore, on the basis of the indicators dealt with so far it is premature to conclude that research question 1 can be answered in the confirmative that is, *indicators* showing convincingly a trend towards convergence between the EU and China. One can observe that China has stopped initially divergent trends and *bent them into a converging direction* but a firm conclusion would need still more recent data and clear targets for 2025 or 2030 that are actually met. The most recent indicators should also be read in conjunction with the transformation of China's strategies and policies, which is what the second research question is about.

4.2 The social dimension of China's transformation to a market economy

In the social pillar the first research question is whether China has, when transforming the economy from a centrally planned one without private ownership to a market economy, addressed the respect for international labour standards and social protection based on individual entitlements?

There is a sharp contrast between the two aspects of the question. With respect to core ILO Conventions, China did not take any initiative to sign and ratify four of the eight Conventions, neither during the crucial 1990s nor later. It never ratified the two conventions forming the bedrock of labour union activities all over the world and of course of the ILO, namely on the freedom of association (C87) and on collective bargaining (C98), nor those on forced labour and its abolition (C29 and C 105). Until the publication of the draft CAI treaty (see further) late December 2020,

there had been no clear sign that China was considering to ratify the two conventions on forced labour. This does not mean that China did not act in these domains at home but rather that its laws were enacted without any interest in being in line with such authoritative ILO conventions. We first elaborate China's position in its domestic laws with respect to the freedom of association and collective bargaining, then address social protection, and end with a discussion of the severe social drawbacks of 'growth at all costs'.

Freedom of association and collective bargaining in China

Freedom of Association and Protection of the Right to Organise Convention (no.87) (hereunder 'freedom of association') and Right to Organise and Collective Bargaining Convention (no.98) (hereunder 'collective bargaining') are two of eight fundamental conventions that the ILO has urged its members to ratify 'at the earliest possible stage.'¹²⁸

'Freedom of association' refers to the right that workers and employers should enjoy to form and join organisations of their own choosing. This right is based on the premise that ensuring workers and employers to have a voice and are represented is essential for the labour markets but also of overall governance structures in a country, since non-state actors' participation in economic and social policy is seen as being at the heart of democracy and the rule of law.

'Collective bargaining' is regarded as a key means through which employers and their organisations and trade unions can establish fair wages and working conditions. Such working conditions include working time, training, occupational health and safety and equal opportunities between women and men. Ensuring the right for 'collective bargaining' is equally a means which provides the basis for sound labour relations, since it may address the rights and responsibilities of the parties, thus ensuring harmo-

128 International Labour Organization (2019), *Guidance on Ratification*, p.3.

nious and productive labour relations in workplaces.¹²⁹

China is one of the few ILO members not having ratified the two fundamental conventions. In this regard, the unique domestic situations in each country determine whether a government would support a ratification, although ILO members are expected to not only to support the labour rights advocated by the ILO, but also ascertaining those rights in national legislation.¹³⁰ For example, the United States guarantee all the ILO labour rights in its national legislation, but the Congress does not want to be evaluated by an international organisation – the ILO – on certain domestic labour issues. The United States so far has only ratified two ILO core conventions on Abolition of Forced Labour and Worst Form of Child Labour.

New Zealand ratified so far six ILO core conventions. The country has not ratified the Convention on Freedom of Association and Collective Bargaining, nor the Convention on Minimum Age, although the rights *per se* are protected by New Zealand's domestic labour legislation. The government has chosen not to ratify the conventions and the opposition is from the business, due to a domestic traditional perception. On the former, the issue is the scope of lawful strike action. The New Zealand's Employment Relations Act only guarantees the right to strike on the grounds of collective bargaining, health and safety. On the latter, Business New Zealand, the largest business advocacy body in the country, argues that there is a *de facto* minimum age for full-time employment; incorporating it formally in legislation would contrast with the traditional belief that the employment of younger persons benefit young people by teaching them valuable work skills and ensure that children are looked after in at least some of their out of school hours through gainful employment. Therefore, ratifying the Con-

129 For detailed explanations of the two fundamental rights, see [Freedom of Association and Collective Bargaining \(Decent work for sustainable development \(DW4SD\) Resource Platform\) \(ilo.org\)](#).

130 For example, New Zealand, Singapore and the United States have not ratified the Freedom of Association and Protection of the Right to Organise Convention. The United States have not ratified the Right to Organise and Collective Bargaining Convention.

vention would appear to ‘achieve little, but New Zealand would open up to a pointless challenge’.¹³¹

Some might argue that – although not ratified – those rights under the two ILO fundamental conventions are guaranteed by the various labour laws in China. In this context, stemming from the dual-identity of the All-China Federation of Trade Unions (ACFTU), China’s only trade union organisation, a major contention is who the ACFTU actually represents, workers or the government and the Party? Or, is the ACFTU a non-state actor? If the ACFTU represents the workers, then the participation of non-state actors, i.e. workers, in economic and social policy is enforced – in both freedom of association and collective bargaining. After that, since the Chinese government has unequivocally declared that it has no intention to go for a ratification¹³², the question would become a *de facto*, rather than a *de jure*, enforcement, similar to the case in New Zealand. In this regard, China has stated that all the relevant rights concerning freedom of association and collective bargaining are protected, *de facto*, by the Constitution (Article 35) and the various labour laws, for example the Labour Law, the Labour Contract Law, and the Law on Mediation and Arbitration of Labour Disputes. Another point is whether representation is an authentic act? It would be but only if workers are effectively free to state and act likewise, that certain groups of workers can start their own union, or at least can freely express that they do not want this union. In addition, (a la Hirschmann), when first being a member in the ACFTU, there ought to be “exit or voice”, they ought to be / feel completely free to raise their voice [opposition; disagreement] and equally to commence their own union, or challenge the leadership of the ACFTU. In other words, representation is far more than just a formal act! However, if the ACFTU represents the government, it means workers’ interests are not at all represented by workers. Then, it won’t be possible to conclude that workers’ rights

131 For details, see https://www.ilo.org/declaration/follow-up/annualreview/archiveof-baselinesbycountry/WCMS_DECL_CL_NZL/lang-en/index.htm.

132 See https://www.ilo.org/wcmsp5/groups/public/---ed_norm/---normes/documents/genericdocument/wcms_752614.pdf.

within the meaning of the two fundamental conventions are fully guaranteed, in joining organisations of ‘their own choosing’ and in negotiating wages and working conditions.

The All-China Federation of Trade Unions (ACFTU), China’s only trade union, is simultaneously tasked to represent the interests of workers¹³³ and of government and the Communist Party. For example, based on its Constitution, ‘loyalty to the Party’ and ‘service to the workers’ are juxtaposed as the ACFTU’s mission.¹³⁴ In any case, it is not clear how elections are organised so that a worker would be qualified to be an ACFTU member to represent workers’ interests and to fight for their rights. Becoming an ACFTU member when one is young looks more like a career choice; if one is older, then, that would likely be a ‘reward’. The sense of election, meaning competing among a few candidates, in order to hold a union post, does not exist.¹³⁵ But, by definition, a trade union is an organisation of workers, not of a political party, even though a party may pride itself of protecting workers’ rights and improving their working conditions. In a similar vein, the ACFTU has been expected to be active in the advocacy and representation of the employees’ interests, and, in the meantime, to be more responsive to the needs of society for social stability¹³⁶ amidst China’s rapid economic development. These two interests are not the same, hence could collide sometimes. Moreover, according to the ACFTU’s “five faceted and unified” model of rights protection, adopted in 2007, it ranks the leadership of the party as the most important, while participation by the workers comes at the very bottom of the list.¹³⁷ Indeed, there is a legitimate question as to who and what the

133 In accordance with Article 2 of China’s Trade Union Law, the All-China Federation of Trade Unions and all the trade union organizations under it represent the interests [As above, you cannot “declare” this by law; is a choice of the workers] of the workers and staff members and safeguard their legitimate rights and interests. For details, see http://english.court.gov.cn/2016-04/14/content_24528284.htm.

134 See the Preamble of the Constitution of the ACFTU, available at: <http://acftu.workercn.cn/27/201810/28/181028081156082.shtml>.

135 See also Wang (2008)

136 Brown (2006)

137 Bai (2008)

ACFTU serves?

The upshot is that the dual identity of the ACFTU, and its mandate requiring it to defend (possibly) conflicting interests simultaneously, casts serious doubt on how effectively Chinese workers' rights of freedom of association and collective bargaining are protected.

Freedom of association

Workers' right of 'freedom of association' is guaranteed by China's Trade Union Law, which states that 25 or more employees must be allowed to form an 'Enterprise Trade Union'; if the number of employees falls short of the required 25, they have the option of forming a 'basic-level' trade union committee.¹³⁸ However, as the ACFTU is the only trade union organisation in China, the workers' right of joining 'organisations of their own choosing' has lost its meaning as there is nothing to choose.

Moreover, as underlying the right for 'freedom of association' is the notion of non-state actor's participation in economic and social policy, a recurring question is whether the ACFTU is a non-state actor? According to its Constitution, as a general principle, the ACFTU cannot be said to be a non-state actor representing workers, since it is '*under the leadership of the Communist Party of China*'.¹³⁹ This being the case, ACFTU's roles in, for example negotiation and mediation in collective bargaining and labour disputes based on the Labour Law and the Trade Union Law,¹⁴⁰ cannot be said to result from being a non-state actor.¹⁴¹ As a result, workers' right for 'freedom of association' cannot be exercised in its true sense.

138 Articles 3, 10, Trade Union Law of China.

139 Available at: <https://www.cecc.gov/resources/legal-provisions/constitution-of-the-all-china-federation-of-trade-unions-amended>.

140 In relation to collective bargaining negotiations, the representatives of the workers shall be designated by the labour union of the entity, and the chief representative in this respect shall be the chairman of the labour union (Article 20 of the Provisions on Collective Contract, 2004). Consequently, the trade union is a party to mediation and settlement of disputes (Article 50 of the Provisions on Collective Contract (2004). [year??]

141 For example, see Bai (2008) and <https://democracyweb.org/freedom-of-association-china>.

Collective bargaining

The right for collective bargaining has two aspects, one is fair wages and another is better working conditions. These two rights are comprehensively covered by the Labour Law (1994)¹⁴² and the implementation of them is laid down in the Labour contract Law (2007).

For example, Chapter V of the Labour Law guarantees fair wages, 'equal pay for equal work', guaranteed minimum wages, holiday pay, etc. Working hours, rest and vacation rights are covered under Chapter IV, including a 300 percent of normal wages for over-time pay if work is undertaken on statutory holidays. Occupational safety and health is "guaranteed" by Chapter VI.

Moreover, the Provisions on Collective Contract (2004) supplements the Labour Law (Article 1 of the Provision), specifies the term 'collective contract'¹⁴³ and stipulates the content that each item, such as labour remuneration, staff reduction rest and vacation, labour safety and health, settlement of disputes, should cover (Article 3 of the Provisions).¹⁴⁴ The Provisions also provide how negotiation of collective contracts may be conducted and by whom (Chapter III of the Provisions), how a collective contract may be examined (Chapter VI of the Provisions), etc. Therefore, on the face of the labour legislation, workers' right to collective bargaining seems to have been guaranteed – without questioning the true character of the ACFTU which represents workers at these negotiations. But as mentioned before, since the ACFTU has its dual identity in different ways, it won't be possible to ascertain that workers' interests are effectively represented, and rights for collective bargaining are protected.

142 For a translation of the Labour Law, see <https://www.cecc.gov/resources/legal-provisions/labor-law-of-the-peoples-republic-of-china>.

143 By virtue of Article 3 of the Provisions on Collective Contract, collective contract "refers to the written agreement concluded between an employing entity and its workers on items such as labor remuneration, working hours, rest and vacations, labor safety and health, professional training and insurance and welfare through collective negotiation according to laws, regulations and rules".

144 For a translation of the Provisions on Collective Contract, see <http://www.asianlii.org/cn/legis/cen/laws/pocc373/>.

As to enforcement, though there was resistance,¹⁴⁵ coming from keen competition on FDI extra- and intra-China even among counties, initially attributed to the resulting ‘higher’ labour costs, those rights promised by the Labour Law have been enforced after the Labour Contract Law came into force in China in 2008.

Since then, analysis has shown that the Labour Contract Law increased contract coverage of migrant and other low wage workers and raised the proportion of workers with legally mandated social insurances. Therefore, overall the Labour Contract Law helped improve the position of workers in China¹⁴⁶ in terms of wages and working conditions. But, the meaning of ‘bargaining’ between workers and employers for workers’ to claim more and better rights and pursuing workers’ interests is missing – due to the simple fact that it is the ACFTU that represents workers at such negotiations and labour disputes settlement. In reality, there is no record to show that the ACFTU has defended workers’ interest in collective bargaining, against the management. The opposite is the case in fact, as the Ole Wolff case has illustrated.¹⁴⁷ And the internal ACFTU processes about labour demands in negotiations are rarely public, indeed, are in fact controlled by the Party and the state. In this regard, as illustrated before, due to the dual identity of the ACFTU, it is not possible to conclude that workers’ right of ‘collective bargaining’ is protected in China.

145 Exacerbated by local government’s economic goals, including to maintain the ‘advantage’ of low labour cost against other FDI destinations, labour law implementation was said to be ‘historically weak.’ And many workers, especially migrant workers, were ill-treated often without a labour contract, and with deprived working conditions, such as brutally long working hours, involuntary confinement. See Tang K. (2008), “The Evolution of Labor Contract Law and Comments on Two Papers”, China Centre Net; and Chan A. (2001), “China’s workers under assault: the exploitation of labour in a globalizing economy”, Sharper. In the first place, labour rights can only be guaranteed when an employment relationship is established by a labour contract. However, before the Labour Contract Law came into force in China in 2008, it was estimated that around only 20 percent of private companies sign contracts with their employees. See Tang (2008)

146 Freeman & Li (2013)

147 It was reported in the Ole Wolff case of collective bargaining, the ACFTU defended the company by claiming that the company had begun to comply with the labour law even though it was still acting in violation of the law. For details, see Wang (2008). There are also numerous reports shedding light on how the ACFTU behaves – or, is frequently invisible – inside factories. See the China Labour Bulletin at <https://clb.org.hk>

Social protection

However, the intentions and to some extent the realisation of social protection were approached in a different manner as from the early 1990s. After a decade during which economic growth in agriculture, SOEs and the newborn TVEs seemed to move in parallel without large shocks, and early FDI was flowing in, the 1990s were going to be radically different. SOEs had to adjust drastically, in numbers, in market shares, in modernisation and more and more often also in quality. The smaller ones were going bankrupt with the thousands and the bigger ones sometimes too, but frequently merged out of necessity. Hard budget constraints were exercised, a new phenomenon. The 'social protection' practiced by SOEs in education, social services, health and housing had to be dismantled in order for such companies to survive in a harsher market climate. Efficiency considerations began to prevail for workers and managers alike. Altogether, this radical transformation made it ever more inescapable that a system of 'social protection' separate from SOEs but equally separate from foreign companies, TVEs or farm collectives should be built up. Social protection began to be regarded as a critical duty of society as a whole. It would require a system with legal entitlements for individual workers or indeed citizens, with a number of critical forms of insurance against social risks. This awareness began to be manifest with a new type of labour laws but quickly extended to cover some of the entitlements of social protection, that is what in the EU are called 'welfare states.' However, in those days China was still a relatively poor developing country, albeit one with extremely high growth.

As noted previously, social protection can be defined by its overall aim and four components. The *aim* of social protection is to 'reach or maintain an adequate standard of living and good health throughout their lives.' Such social protection has four components:

- a. basic income security for children (hence, access to nutrition, education, care and necessities);
- b. basic income security for persons in active age (those unable to earn sufficient income, such as sickness, unemployment, maternity and disability);
- c. basic income security for older persons;
- d. essential health care (incl. maternity care) under conditions of availability, accessibility and quality.

Social protection has become a commonly accepted norm for almost all countries, even when poor countries might not or not yet be able to afford all of its respective components. However, this was not yet the case – certainly not anywhere near the same extent – in the early and mid-1990s when China was first confronted with the issue (Box 9). The overall aim can be better understood once one begins to appreciate the beneficial effects social protection has for overcoming very basic constraints in development and for security of people. It is seen as part of ‘social and economic human rights’, critical in reducing and preventing poverty (certainly of great importance for China at the time), vital for ‘human development’, good against social exclusion and for good health of the labour force and as a stimulus for long-run economic growth.

Box 9: Human Development in China in the early 1990s

The social predicament of people depends to a large extent on indicators now caught by the UNDP Human Development Index.¹⁴⁸ The Human Development Index is a result of three component indicators: on health, education and income. The idea behind the index is to assess the development of a country *not by GDP alone*. The three indicators express (a) standard of living, (b) a long and healthy life, and (c) being knowledgeable as an expression of human capital. The HDI is a limited tool (as there is much more to development of a country) but has nonetheless been very successful as a way of approaching development in a richer fashion than just money income per capita on average. Since 2010 ‘poverty’ is no longer defined by the UNDP only as an income measure; for this purpose the MPI, the ‘multidimensional poverty index’ with ten indicators instead of three has been developed and measured.¹⁴⁹

In the early 1990s¹⁵⁰ China’s HDI was behind the world’s average; amongst the 5 BRICs China was the second lowest. Its health component was relatively strong and education relatively weak. Only in its income per capita component China started as the lowest (1990) but surpassed India with a near-doubling. Nevertheless, the world average per capita income was still very far above China’s level: nearly four times as high (US\$ 9160 in 2011 PPS).

SDG no. 1.3 expects all countries to implement nationally appropriate Social Protection systems and measures for all, including social protection floors, to end poverty by 2030. The basic principle should be: universal coverage. Social Protection has the potential to reduce insecurity for workers and helps to formalize employment contracts. This is not a small issue in Asia-Pacific: some 60%

148 For all detail and many references, see www.hdr.undp.org/en/content/human-development-index-hdi

149 See UNDP & Oxford PHI (2020), Charting pathways out of multidimensional poverty

150 In Hu & Pelkmans (2021, section 3.3) China’s HDI between 1990 and 1995 is explained with four graphs and five tables, also in comparison with other BRICs.

(!) of the labour force is an informal worker with a very weak or no legal status, when it matters. Workers in the informal economy have no or insufficient access to any form of Social Protection. This means that (social) laws yield nothing even close to universality, except purely by name: many, if not most, workers simply have no status under such laws. One can enumerate a number of beneficial effects of Social Protection but these are either public (e.g. multiplier effects) or for the relevant workers at stake. For many *other* workers in the informal labour market, social protection is – more often than not – a dream. EU countries are a stranger to this massive ‘informalisation’ of the economy given universal coverage and functioning welfare states.

A lack of Social Protection is a contributing factor to growing inequality in and between countries. It is also likely to augment the inequality of opportunity. Both can harm economic growth in the long run, but short-run profit seeking, let alone ‘greed’, is unresponsive to such concerns. Inequalities often tend to become inter-generational (and hence, turn into traps). Inequality may actually be economic, social and related to environment (e.g. air, water and soil). This is one reason for the links between the two pillars of sustainable development.

The World Bank emphasizes more the human capital aspect and cost-effectiveness. Social protection systems “are transformative as they not only help the poor and most vulnerable mitigate economic and fiscal shocks, but also help ensure equality of opportunity by giving them a chance to climb out of poverty, and become productive members of society.”¹⁵¹ Safety nets are often regarded as a means of harnessing human capital. The World Bank supports universal access to social protection. Universal social protection coverage includes: providing social insurance through cash transfers to those who need them, especially children ; benefits and support for people of working age in case of maternity, disability, work injury or for those without jobs ; and pension coverage for

151 See <https://www.worldbank.org/en/topic/socialprotection/overview> accessed on 12 April 2020

the elderly. Assistance is provided through social insurance, tax-funded social benefits, social assistance services, public works programs [an interesting addition] and other schemes guaranteeing basic income security.

Social drawbacks of 'growth at all costs'

During the 1990s, China's growth at all costs occurred in defiance of sustainable development, both for the environmental and climate pillar (cf. Pelkmans, 2021) and the social pillar. The following will mainly focus on severe socio-economic discrimination of rural versus urban workers and their families. In addition, there was a general disinterest in 'decent' work and a massive neglect by companies of honouring their obligations – modest as they were – to their workers, for the sake of competitiveness and enriching owners and managers. It is good to realise that the government and the Party began to consider explicit elements of a welfare state and enacted some of them in the second half of the 1990s but at first such initiatives did little to reduce this open defiance.

Rural versus urban hukou and other forms of discrimination

For a long time, the hukou status determined one's working and earning options in life. We refer to Hu & Pelkmans (2021, Box 1) for a more detailed exposition. The predicament of rural people was to work in or connected to farming, fishing and forestry. All this changed, beginning in the late 1970s when agricultural liberalisation turned out to be extremely successful, rapidly augmenting productivity and prompting a surplus of labour looking for other employment. To a surprising extent this alternative employment was offered by TVEs which tended to be in the same county or province so that the hukou issue did not normally arise. For a decade or so, most surplus labour in rural areas was absorbed by TVEs and to a lesser extent by foreign investors, building labour-intensive product assembly and processing plants in special economic zones (all over the country). By the early 1990s, TVEs employed more

than 100 million people, an incredible performance knowing that 15 years before there simply were no TVEs at all.

But the demand for labour in mining, construction and other private industry remained very strong and agriculture became less and less capable to 'bind' much labour as traditionally had been the case, given that machinery, better seeds, fertilizers, modern irrigation and other yield-raising inputs as well as better infrastructure pushed up productivity, hence causing a secular reduction of the agricultural labour force. A steady flow of (domestic) migrants to the East became the 'new normal' during the latter part of the 1980s and especially the 1990s. As will be highlighted below, soon the numbers of migrants turned out to be staggering. In the 1990s, international organisations dubbed it the largest domestic migration wave ever, easily involving 200-plus-million workers (including the short-distance migration to TVEs). Labour intensive industries such as toys, consumer electronics, clothing & textiles, but also construction (a huge sector helped by rapid development of China), coal mines and other mining and, increasingly, heavy industry like steel, aluminium, ceramics and shipbuilding became dependent on migrants. And the migrants on them.

And by 2010 or 2015, one can portray this transformation as the 'lifting out of poverty' of hundreds of millions of Chinese compared to an only recent past. Reduction of poverty was the leading aim of Chinese development strategy, above anything else. The mobility and successful finding of jobs by so many millions of migrants in a relatively short period of time was regarded as an enormous success of 'the' Chinese model. No doubt it is. Had they been retained in their regions, many would have remained jobless, extremely poor and without perspective, also for their children. These consequences would have been bad enough on their own, yet one can hardly imagine the socio-political repercussions after a while. However, whilst recognizing the success of lifting hundreds of millions out of extreme poverty that China accomplished via growth and internal migration, it would be a mistake to conclude that relative poverty has largely been overcome. In 2020, hundreds of millions Chinese still live on very low incomes indeed.

In the 1990s, the nature and scale of socio-economic discrimination of migrants, solidly based on the hukou status and invisibly strengthened by a deeply felt form of conscious ‘social distancing’ by urban citizens everywhere, resulted in a kind of ‘caste system’ with some features of apartheid as well. For migrants leaving their family behind it meant that the kids rarely saw their father or parents (and growing up with the elderly). For families joining the migrant(s), it meant that kids would run into systematic discrimination in education and most good schools would be closed for them. Anyway, migrants’ wages were low, far lower than most urban workers’ wages, and schools were out-of-reach for that reason alone. Medical treatment was supposed to be undergone back home - easily some 1000 – 2500 km away – where clinics were ill-equipped and lacked quality doctors. As noted before, the majority of migrants did not enjoy written contractual arrangements, had to make extremely long hours every week – often with 6 days a week - and had initially no form of insurance whatsoever. The housing facilities (if one can call them like that) were usually far outside towns and – more often than not – in dilapidated buildings or in overcrowded dormitories of the employer.

Once China began to build, step by step, elements of a welfare state, these sharp distinctions between urbans and rurals were initially cemented in the new systems. To be sure, there were also considerable differences amongst the urbans, especially between state civil servants, the military and teachers, on the one hand, and other urbans on the other. But such differences were far smaller than the cleavage between the migrants and all others.

Other costs of supergrowth for unskilled (migrant) workers

The growth and cost-competitiveness mindset of Chinese managers and industrial owners during the 1990s (and even later) was uncompromising. They did everything to squeeze out maximum efforts by the workers, whilst investing little in the work environment, including safety on the work floor, and attempting to get away with not honouring social obligations by trick work or out-

right deceit. Since the ACFTU showed next to no concern about these bad practices¹⁵² and – at first – labour inspections were almost non-existent, whilst wildcat strikes were risky (or would lead to dismissals), the emerging set of social laws were weakly enforced. Suffering from all this were unskilled workers but the overwhelming majority of them would be migrants either from the rural parts of the same province or non-urban-hukou migrants from far-away provinces. This episode would foreshadow the enormous struggle in China between growth and cost-competitiveness, on the one hand, and improving on the near-absence of enforcement and ‘decent work’. Although there are numerous informal accounts of such practices, analytical studies are next to non-existent as reporting and the publishing of damaging data were strictly forbidden. At a later stage (from 2005 or so), the China Labour Bulletin (CBL) began to report from a relatively safe Hong-Kong base, but the Chinese government remains extremely sensitive to such reporting.¹⁵³

Not honouring social obligations to workers could consist of non-payments of social and pension contributions to funds (once they came into being) and this would typically be discovered only when migrants would wish to transfer the entitlements or receive cash, or when a company went broke (due to misfortune or a fake bankruptcy followed by relocation elsewhere). Frequently, overtime would not be paid in full or be falsely documented. More generally, the majority of migrants had no formal contract even when new laws to this effects had been introduced.

Occupational safety and health (OSH) in the workplace was given very little attention, everywhere but not even in very risky workplaces where it was essential – in construction and mines, be it coalmines or mines for other resources. The result was a huge and largely avoidable total of casualties, accidents and occupa-

152 In Table 8 in Hu & Pelkmans (2021) it will be observed that the ACFTU only began to officially be protective of migrants in 2003!

153 In 2010, a bilateral meeting between the EU and China derailed when the invited CBL director gave a statement on problematic social factory practices in China, and the Chinese Delegation walked out in protest.

tional diseases. Initially, little more than a very minimal compensation was paid to the family and no disability insurance for victims existed. Occupational risk was regarded as 'normal' and sometimes even old Chinese traditions holding that prosperity of the community would go above the fate of the individual would be invoked. The struggle to improve OSH in China was difficult and the EU rushed to support China by EU programmes and a High Level China/EU OSH Dialogue. We return to this subsequently.

China's emerging social protection in the mid-1990s

In the early 1990s, the social consequences of the reforms and structural transformation of China's economy began to dawn on policy-makers. Its labour market was not accustomed to large (be it perhaps temporary) surplus labour shed by SOEs and due to the modernisation of agriculture whilst the overall Chinese economy – including the labour market - was rife with restrictions and internal barriers, the greatest one of which was the hukou system. Another severe restriction consisted in the one-child policy¹⁵⁴ which undermined the tradition that parents could rely on the extended family to look after them when growing old. The new TVEs had meanwhile absorbed 'agricultural' citizens as industrial and service workers in ever greater quantities in rural areas. Moreover, foreign enterprises, notably in special economic zones, exercised some additional demand for (mostly low-skilled) labour. However, despite all this and despite the very high economic growth which also stimulated the demand for labour, SOEs generated surplus labour becoming unemployed in masses, a daunting spectre for society and the Chinese leadership. Turning SOEs into market-oriented companies caused a dramatic loss in implicit social protection whilst the modernisation and liberali-

154 The one-child policy did not apply to all of China, however. In some 35% of the country (mainly urban areas) the policy was strictly enforced, in some areas a second child was possible (after paying a fee) if the first one was a girl, and in remote areas no restrictions applied at all. The impact of the policy was magnified in the 1990s by the very low fertility rate during and after the famine caused by the Cultural revolution, which temporarily led to an extremely tiny number of babies in a few consecutive years, hence fewer children who could support parents in the 1990s.

sation of agriculture meant a rupture in the ages-old social protection by the (extended) family, as jobless youngsters felt a need to move and seek industrial employment. Indeed, a much more market-oriented economy was in need of a logical complement: a system of social protection, partly on the basis of contributions by enterprises and workers, working like an insurance, partly based on the state's budget as an idiosyncratic expression of solidarity.

But this admission came only slowly. Growth had absolute priority: the fight against poverty would be won via high secular economic growth. In 1993, the Party proclaimed: efficiency first, equity later. But with many millions of workers unemployed and more labour shedding taking place year after year,¹⁵⁵ whilst new private companies and even (especially smaller) SOEs did not give many workers formal labour contracts – with all the insecurity implied – it became undeniable that poverty was on the increase, even when other parts of Chinese society were doing better all the time. The social insecurity grew so much that a MLA (Minimum Living Allowance) was gradually introduced by big cities and provinces, based on a calculated minimum cost of living, or rather subsistence. Once the State Council formally allowed such programmes to be nation-wide, urban MLA membership grew from 0.5 mn persons in 1999 to no less than 21 mn in 2002. However, neither actual benefits (some 10% of local per capita income) nor the coverage of the MLA were impressive. Rural MLA variants attracted 3.2 mn rural residents by 2000.¹⁵⁶ Especially the latter formed a break with a deeply rooted past, as rural villages were long held to be responsible for the so-called 'five guarantees' for the very poor, meant to consist of orphans, disabled and e.g. childless elderly: food, shelter, health care, clothing and burial expenses.

155 It is very difficult to arrive at a robust estimate of the total labour shedded by SOEs in the 1990s. The measurement in terms of flows is surely impressive (some 40 mn to 50 mn redundancies probably) but a stock measure of the resulting unemployment is fraught with problems. As noted above, demand for labour was also sharply up year after year (by foreign companies, TVEs and quickly growing private firms) and the net result in terms of unemployment is far lower but exact figures are hard to come by. The unemployment figures published at the time by China are not following international conventions.

156 All data in OECD (2010, pp. 135/6).

The rise of poverty, be it in a segmented way, also increased inter-regional inequality.

The early phase in Chinese social protection

In the mid- and late 1990s, the authorities finally reacted with the enactment of several laws as the beginning of what is nowadays regarded as social protection. In 1992 the Trade Union law was adopted but this merely confirmed the monopoly and control of the All-China Federation of Trade Unions. The same year a Women Rights Law was enacted,¹⁵⁷ a most welcome minimum protection against exploitation of the often weak position of women vis a vis managers. In 1993, minimum wages were introduced on a week of 44 hours. About the initial enforcement little seems to be known but, given the weak enforcement of many laws related to enterprises, one cannot be optimistic. Moreover, with huge new annual inflows of migrants, the Lewis effect¹⁵⁸ was felt in that the rate of increase of the minimum wage was far lower than one would expect given the rapid rise of prosperity. Thus, in the period between 1995 and 2006 the rate of increase of average wages in 253 prefectural cities was higher than 10% annually, whereas the minimum wage rose only with 6.5% annually, causing the share of minimum wage in the average wage to fall from 44% to only 27%.

In 1994 the wide-ranging Labour Law was adopted (in force Jan. 1995) which imposed labour contracts for all full-time workers. A host of entitlements for workers were mandatory, either by law or explicitly to be incorporated in such contracts: minimum wage (usually the local one), a maximum of 44 hrs a week (with much higher wages for overtime and e.g. 300% for work on a free day), specified days without a duty to work (e.g. the Spring Festival around Chinese New Year, etc.), special protection for women against certain heavy work and during pregnancy (following the

157 Amended in 2005.

158 China in the 1990s seemed to be a model version of Arthur Lewis' (1954) theory, holding essentially that wages could not increase when there was an infinitely elastic supply of labour at all times.

1992 law, as noted above), prohibition of violence by employers, prohibition of wage arrears (already then a widespread problem), a general entitlement of 'social insurance and welfare treatment' (art. 3), duty for the employer to ensure work safety and sanitation, a general entitlement of vocational training, a prohibition of child labour (below 16 years), timely warning of workers and consultation in case of a threat of severe cutting of the labour force or bankruptcy and the right to conclude collective contracts. The government (art. 70) is under the duty to set up a social insurance system and funds for compensation when workers 'become old, suffer diseases or work-related injuries, lose their jobs and give birth'.

Therefore, on the face of it, the Labour Law laid down many entitlements which fit a modern welfare state, with numerous responsibilities for the employer and a few complementary ones for the state. However, as so often in China, there are two realities, certainly in the 1990s if not later too: besides the reality of the Labour Law, there was the reality of a lack of enforcement and the frequent attempts by employers to try to get away with a business model applied to their workers which remained outright exploitative, knowing that enforcement was soft or simply absent. The many millions of migrants from rural areas (and without a local urban hukou) usually accepted either temporary work (for which a contract with all the specifications mentioned above was legally not required) or accepted an oral engagement from managers. In either case, these workers did have to work the full week and – more often than not – many hours of overtime. Many migrants returned home around the Spring Festival and would not necessarily return to the same factory – so, in fact they preferred immediate short-run cash payments instead of the very slow build-up of social security entitlements over a long period which – in the short run – would lower their cash income. Indeed, their *de facto* wages were often so low that many felt it was not worthwhile to engage in such long-run savings. Most migrants also transferred money home and this was a significant driver of wishing to dispose of money immediately. Some migrants were simply not aware and

mimicked others, some tried social security but found out how long it took before they could 'draw' from it, other realized quickly that the transfers of their entitlements were cumbersome given the complexities of the emerging social system in China and the bias against migrants (e.g. the entitlements of urban workers were much higher in value than for migrants, as the system was based on local living standards back home, and also incorporated plain discrimination of rural workers). It could also have to do with the bias in the coverage of medical expenses – a subject on its own – where the insured payments for medical care were far too low and treatment had to be paid upfront (despite the law specifying that medical insurance ought to pay first and subsequently ask for reimbursement of some part of it), strengthening incentives to go for immediate cash without dedicated savings.

Obviously, for companies the costs of having workers without contracts or only oral ones were far lower. It also meant that workers often were at the mercy of managers who insisted on impossible targets or on overtime far beyond the limits in the Labour Law. In some sectors, the situation was worse still, in particular in mining and construction, both big sectors. On top of all the objectionable practices of (say) textiles and clothing, toys, shoes, other consumer goods, consumer electronics, etc., both mines and construction sites were notoriously dangerous, with little or no investment in safe working conditions and personal protection equipment. This is not to say that there were no safety laws - even though they were vague at first and could be much improved – but rather that there was little or no enforcement, until accidents happened (and even then, only major ones would be followed by a clampdown, small ones would escape with a little corruption or a symbolic warning). Local officials were known to shield local enterprises (by looking the other way), thereby facilitating growth targets of the region and boosting employment. In the 1990s, the sheer scale of mining accidents had grown so much (6000 - 10000 dead per year was not unusual) that a special Agency for safety in mines was established in 1999. One amongst several quick activities of enforcement consisted in a campaign to close thousands of illegally opened small

mines with extremely risky working conditions. In construction it was both the speed of working (e.g. in high-rises) and the costs of solid protection structures (such as high scaffolds) and equipment which stood in the way of safety. In the 1990s, China considered itself still as a developing country where daily risk taking was part of citizen and work life.

The Labour Law had disadvantages, other than a lack of enforcement. It is an example par excellence of a Chinese law which becomes significant and effective only once detailed implementation laws (often called 'regulations') are adopted in its wake. The law formulates a range of laudable entitlements but is not operational in many respects. For a sensible assessment, one needs to consider a series of more specialized or implementation laws being enacted later or indeed much later. It is indispensable as well to understand the funding of various insurances, pensions and subsidized government funds like the Housing Providence Fund. In addition, one ought to appreciate the role and working of the All-China Federation of Trade Unions which functions rather differently from a labour union in most countries of the world. Instead of a pre-occupation at all times with the pursuit of the interests of the workers in companies, and representing them with an explicit or implicit mandate to speak out clearly and act on their behalf, the ACFTU does not really function as the voice of workers.

Although the staff of the All-China Federation of Trade Unions is much bigger, relatively, than that of unions in (say) OECD countries, with no less than one million staff members, there is often very little or no union activity in factories or for workers until there are elections or a labour or safety conflict arises. Typically, in such cases, the Union will try to mediate between angry workers and management so as restore peace and tranquillity on the work floor, for the sake of smooth production, instead of backing reasonable demands of badly treated workers. However, the All-China Union has a monopoly and is very closely associated with the Chinese Communist Party, indeed so much so that the links with the Party preoccupy staff members more than the classical union work. It

is also known as a bureaucratic institution. The upshot is that this Union does little or nothing actively to ensure enforcement of contracts of workers, let alone that workers get a contract in the first place, or that aberrations in the day-to-day treatment of workers are effectively addressed. Worse, many elections of worker representatives in companies are co-arranged between management (!) and the All-China Union, without giving any voice to the workers in the first place. The right to strike was removed from the constitution in 1982, a remarkable move for a Party that came to power via strikes and revolt. It is often noted, however, that strikes are not forbidden. In fact, there are numerous small wild-cat strikes but (in the 1990s) they are hardly ever published. In recent years, with mobile phones and social media, it is more difficult for the government to pre-empt publication.

The Hong-Kong based CLB¹⁵⁹ has developed a strike map in an attempt – an admittedly incomplete attempt – to get a rough proxy of labour disputes, their origin and location. Because workers do not have an effective ‘voice’ in companies and enforcement does not protect them, wild-cat strikes are the only option, even when such disruptions can be risky given the authoritarian regime. Neither for the thousands of (usually small) strikes nor for the major strikes or worker protests, has there ever been one recorded which was organised by the All-China Federation of Trade Unions! From numerous reports and even court cases it is known that there are more than enough good social and other sound reasons for that mighty Union to make itself felt and heard. For workers to start a new trade union of their own is forbidden, it has to be organized under the All-China Federation.

159 China Labour Bulletin, see <https://clb.org.hk>. For the strike map, see <http://maps.clb.org.hk/strikes/en>. Unfortunately, the data underlying the map is recent and does not go back to the 1990s. In China itself it is considered a crime publishing such data.

Answering the first research question of the social pillar

The first research question is whether, in transforming the economy during the 1990s and later to a market economy, China has addressed the respect for international labour standards and built up a system of social protection based on individual entitlements? With respect to the ILO core conventions, the answer is simple: China has not ratified four of the eight core conventions and only very recently showed some interest in two of these four, namely on forced labour (with prudent commitments in the draft CAI Agreement). In the other two it has not shown any interest (as far as the authors know). The most one can say is that, on 'collective bargaining', it has arranged some domestic regulations facilitating this at the company level but always under control of the ACFTU.

With respect to social protection, China *has* attempted to build up a system of social protection during the 1990s and later. It depends where one marks the cut-off point but during the 1990s, this build-up was at first fragmented and hesitant. This is very understandable because China had to undergo a most radical transformation and also had no experience with separate legal and state-funds-supported social protection, based on individual entitlements, even less its administration. What essentially happened in the 1990s is that several social laws emerged, partly on the rights and entitlements of individual workers or categories of workers (e.g. women), partly on a more generic basis, the most important of which was the 1994 Labour Law. The latter comprised a series of general commitments of social protection, besides labour rights, and obligations of companies. Unfortunately, this law and some other ones had more the character of promises and a sense of perspective, but not yet the detail and operability of implementation regulations. At the same time, given the sad experiences of workers shed by SOEs, but without much social protection at the time, the pressing needs of many jobless workers – often from far-away rural areas – had to be addressed urgently. Hence, the *dibao* (in Shanghai) was invented as a MLA (subsistence allowance)

and a Housing Providence Fund, a Unified Basic Pension insurance system for enterprise workers, basic medical insurance and unemployment insurance were all swiftly introduced before 2000 to cope with the situation.

In other words, China has improved the predicament of workers (and indeed all citizens) in China, not merely via high economic growth but also by means of a broad system of social protection, with universal coverage where appropriate. We survey at some length the painful social side of ‘growth at all costs’, mostly at the peril of low or unskilled migrants workers from poor provinces. The SOE reforms in the 1990s were harsh, with dramatic labour shedding and little or no social security at first, and some stop-gap measures later. China in the 1990s was still a developing country and hence it cannot be surprising that the human development indices were also still rather weak, although rising fairly rapidly (though better for per capita incomes and health than for education).

4.3 Research question 2: EU/China policy convergence as of 2020

The present section will attempt to answer the second research question on convergence of green *policies*, or at least policy preferences in terms of similar aims, and their implementation by 2020. We start with a focus on greenhouse gases and ‘Paris’ commitments’ as well as on emerging ‘responsible business’ in China. We complement this with a different verification using the sustainable development chapter of EPA as a way to compare China’s and the EU (feasible) green commitments. There is much technical detail required for such an analysis. In order to cope with this, we refer briefly to EU/China cooperation on timber and trade and on sustainable (and illegal) fishing, based on Hu and Pelkmans (2021). Box 11 discusses the green pillar of the sustainable development chapter of the draft CAI treaty, the first time China has actually agreed to binding green obligations in a bilateral agreement. Furthermore, China has made great strides in greening, that is, in

e-mobility with cars, buses and scooters, in renewables and with forestation.

Together these two approaches provide the basis for an assessment where and to what extent China has converged with the EU in the environment and climate components of sustainable development as far as trade and investment is concerned.

China's environmental and climate strategy today

Having digested extensive fact-finding on the (often) very problematic indicators for water, air and soil pollution in various forms, a brief remark on institutions is appropriate. In the 25 years studied, China began with a weak Agency, changing to a stronger Agency, next to a ministry which did not have the power to address climate mitigation, and since 2018 finally a fully-fledged environmental ministry. In 2018, climate and other environmental issues and strategies have been brought under a single ministry MEE: the ministry of ecology and environment. From a functional point of view, this makes sense. Coordination between these two branches of environmental policies is of obvious importance: several pollutants are strongly linked with coal, hence accompany CO₂ emissions. There is also the argument that the mighty coal sector might be less able to block hard decisions in a ministry that does not deal with industries as such. Nevertheless, there is a fear that the new ministry will not be able to wield the power that the NDRC had when it dealt with CO₂ (although one can have doubts whether this was to the benefit of the environment).

Another aspect that would seem to be pretty certain to come up is stricter enforcement of targets and of amended environmental laws. It has already been noted that the OECD Environmental Stringency Index moved up sharply after 2010 and approached OECD levels. But this index is not about enforcement. And enforcement has been a major weakness in China's environmental and climate policies. Laws often do not work well. If it is not about corruption, the literature is unanimous about other principal reasons. In a

country widely seen as autocratic and with top-down government style (especially via the Party), the surprising reasons are sporadic enforcement, low penalties and weak monitoring. Indeed, if local officials have no explicit incentives, little happens. This fact-of-policy-life in China has deep roots. In Pelkmans (2021) a special Box 3 is inserted to ask attention for this problem. Chinese governance is 'departmental-regional' fragmented and their leaders respond to explicit incentives for policy priorities on which they have to deliver. Green policies rarely rank high. Environmental bureau's are underfunded. Laws (especially before 2015) tended to suffer from four deficiencies: low legislative qualities, too many principles, the substance is too basic and the laws are inherently difficult to enforce. Environmental rights used not to be defined. Monitoring is often weak. And many such laws are not really 'risk-based' but control oriented.

The idea that local or all officials respond to the strong wish of citizens to radically do something about air pollution long seemed alien to China. No wonder this is ill-understood in EU countries. Only in 2013 the Chinese government began to significantly toughen policy. The 'Ten Tasks' are often not that much different from intentions in Plans but this time the urgency, enforcement and monitoring are more serious, with hard targets and 'bans' in some instances. Criminal (environmental) cases have been recorded far more than before. For 2020 a 15% cut in SO₂ and NO_x is mandatory (and Table 2 suggests that was easily met for SO₂, but not fully – in 2019 - for NO₂). The dual benefits with climate measures of course help a lot. However, the State Council went much too far, when announcing¹⁶⁰ 'remarkably improved air quality and much greater sense of happiness for the people..'

Only a few years later, there are many recent examples of conspicuous enforcement set by the government agencies, exemplified strikingly by the placing of thousands of cameras in agricultural areas in order to discipline farmers and detect illegal disposals. Since a few years the Chinese government has also become intol-

160 In the Three Years Action Plan for Blue Sky Defense, June 2018.

erant of 'dirty' electricity and 'dirty' steel, as inefficient coal-fired power plants and furnaces have been dismantled. Moreover, the tolerance of the Chinese people for extremely bad and damaging air and water quality has reduced as well. There are numerous reports of protests in local or provincial communities, even in Wuhan just before the corona crisis broke out. Nowadays the central government appears to be more dedicated to pursue 'a beautiful China' as a reflection of Xi's 'ecological civilization'. Three wide-ranging, tougher and much more risk-based environmental laws manifest a radical change in addressing the worst pollution in China. First, the Air Pollution Prevention and Control Law of 2015, followed in 2017 by the Water Pollution Prevention and Control Law. Second, in August 2018 the Soil Pollution Prevention and Control Law was enacted, a potentially extremely costly but inevitable undertaking. All three laws are an improvement over past practices, in particular because the 'polluter pays' principle is followed, more careful surveys are compulsory, and strict environmental liability is incorporated.

Greenhouse gases: China's early implementation steps of Paris

With respect to climate change mitigation, it is useful to first take note of the policy intentions linked to the Paris Agreement, China's Nationally Determined Contribution (NDC):

- a. To peak its CO₂ emission by 2030 or earlier
- b. To reduce the carbon intensity of GDP by 60% - 65% below 2005 levels in 2030
- c. Increase the share of non-fossil fuel to 20% by 2030 (and 15% by 2020)
- d. Increase its forest stock by 4.5 bn m³ in 2030 compared to 2005

Together these four intentions are not consistent with global warming below 2 degrees C, let alone 1.5 degrees.¹⁶¹ China has finally put a relative cap on coal consumption (58% share in 2020 energy consumption), yet lifted a ban on new coal-fired power plants in 2018, leading to a non-trivial increase in CO₂ in both 2018 and 2019. All targets of the NDC will almost certainly be attained. The peak in CO₂ will be reached by several provinces claiming to attain their subtarget in a few years after 2020. However, as shown above, some provinces are 'coal bases', and have also begun to compensate the strict policies in Beijing and Shanghai by higher coal and steel output (e.g. Mongolia, Liaoning and Shanxi). So it is simply too early to tell. The fact that coal has been allowed to expand capacity 3 years in a row (even though the 3rd year was a COVID-19 year) is worsening the problem and casts doubt on promises of a pre-2030 peak. Moreover, beyond the peak, how fast will the CO₂ emissions decrease? In Pelkmans (2021, section 6.2.3), early 'green pointers' from the 14th Plan are discussed, showing that internal struggles (led by coal provinces) cause the leadership to be half-hearted.

The carbon intensity reduction is largely structurally determined, via embodied technical progress and replacement of outmoded equipment and factories but equally by a rapid rise of non-fossil energy production (which is firmly projected), the third target. China may well have another problem, namely, the other [non-CO₂] GHGs such as methane, N₂O and hydrofluorocarbons. Climate Tracker expects that by 2030 non-CO₂ emissions will make up nearly 25% of China's GHGs (in CO₂ equivalent). This issue is also linked with the Kigali Amendment of the ozone protocols (such as Montreal).¹⁶² The question is therefore what and how much China will do how fast in order to reign in such GHGs. Now that China has used end-of-pipe technologies to reduce emissions such as SO₂ and NO_x, the only effective remedy for further

161 Similarly, the EU's NDC is also insufficient. Whereas Carbon Tracker assesses China's NDC as 'highly insufficient', the EU is seen as 'insufficient'.

162 See Table 1. Note that the Kigali amendment on HFCs has very long adaptation times (for China up to 2045).

caps is to tackle the coal production and use. What is different, however, is the pricing of coal. In February 2021 China's ETS was formally initiated. It will take a few years before it is expected to be truly effective, as explained in Box 10, given teething problems and the fear for data falsification. Once these problems have been ironed out, all depends on how stringent and how swift the constraints on companies emissions will be tightened.

Box 10: China's ETS, an early assessment

On 1st February 2021 China officially initiated its national ETS for the electricity sector, some 2200 power plants. The basic idea is the same as in the EU: with allowances for CO₂ a company (now, only power plants; later, possibly other sectors as in the EU) the price for carbon should incentivise participants to become less pollutant via efficiency, new ('greener') technology, restructuring of production or substitution. This can only work when carbon prices become high enough reaching perhaps € 20 or even € 30 or € 40 and that, in turn, necessitates a certain scarcity of allowances, and this scarcity ought to increase over time. Once carbon prices are high, it is also possible that certain types of production – having no adequate alternative technology – must be terminated. In China the very large majority of power plants run on coal, and, of most fuels, coal is relatively pollutant. Once the China ETS works, coal will become expensive, eventually be phased out and alternative fuels or renewable energy must be used.

The good thing about introducing a China ETS is that the taboo on pricing coal out of the market is gone. Nevertheless, at this very early stage the ETS will not do much to curb coal presence and coal power in China. As in the EU in the early years of the ETS and, again, right after the financial crisis, there are strong indications that the quantity of allowances is too large, hence the carbon price will be much too low, and not exercise any pressure or incentivise 'green' investment or a fuel switch.

Authorities in China have confirmed that the switch from city-based to a national system will inevitably have teething problems and they need time to iron them out. One deeply rooted practice in China (by regional officials) is underreporting on a massive scale if acting otherwise might hurt economic growth. During the pilots, second or third stage verifiers were appointed so as to be capable of detecting such underreporting. Moreover, a failure to report has a penalty of only 30.000 yuan, some €3500, which for power plants is peanuts.

Moreover, the technique of the ETS differs from that in the EU. In the EU a limit (cap) is set on the volume of carbon emissions and that limit can be adjusted downwards over time. Instead, in China the constraint consists of a 'carbon intensity limit' for every unit of electricity a power plant generates [carbon intensity is defined as how much CO₂ is generated per unit of GDP]. If a power plant remains below that constraint, the allowances in surplus can be sold on the carbon market. As Figure 4 shows, China still had a very problematic 'carbon intensity' compared to the US and Japan in 2018, let alone to the EU. With a benchmark of 0.877tCO₂/MWh, it appears that all power plants of 300MW and larger can easily comply and will see no need to buy new allowances. There are 3 possible escapes. One is a 5% offset if firms fund projects in renewable energy or forestry. Another is a 'load factor correction' in case power plants run at half of their capacity or less, allowing a softer benchmark. Running at low capacity is not so unusual in China, in some cases due to renewable energy coming to the network, although one wonders how the costs are covered. A third escape is a cap of 20% on how much companies can pay (in terms of extra allowances) for over-emitting. On the other hand, in a country without carbon taxes, uneven climate regulations and regional disparities there is a huge need to get used to this system and its pervasiveness. Experts expect the China ETS to begin to work more effectively in another 3 – 5 years.

On forestation, we have already noted that China has successfully increased the area covered with forests to more than 22% of its land. This has a double motive: against desertification (the large Gobi desert tended to augment) and supporting the mitigation of climate change. The target of reforestation in 2020 in China is 23.04% of the land, and 26% by 2035. The target to be made in 2030 will therefore not be a problem, not least because stopping the Gobi desert from incrementing (and with it the occasional sand storms) is a powerful motive and widely supported. The scale of this 40-years reforestation project is truly amazing. There is criticism such as the monoculture generated and the relatively low absorption capacity of CO₂ of these new forests.

Can 'responsible business' in China contribute?

There are many indications in China that it is not just 'the state' long having taken a weak stance on sustainable development whilst paying lipservice since the late 1990s, but equally that Chinese business (including SOEs) exploited the lack of credibility of enforcement in order to avoid the costs of following the rules and intent of environmental laws. This is less true for foreign-owned companies in China used to stricter regimes at home. With the old SOEs in a non-competitive environment having died out, profit-maximization and/or shareholder value seemed to be the only guidance of business leaders. The idea of 'responsible business' or a voluntary take-up of 'corporate social responsibility' (CSR) was long alien to China.

This is not the place to write the (short) history of CSR in China but the numerous small spontaneous protests from workers or the regional population after accidents revealing a severe disregard of the rules or in anticipation of major infrastructural projects imposed on the locals (e.g. the extreme example of the Three Gorges dam is just one amongst many) without any voice for the locals naturally drew the attention of green NGOs. With criticism getting more widespread, president Hu Jintao and the government

launched the ‘scientific development concept’ in 2003 (a better term is ‘societal development’ or indeed sustainable development).¹⁶³ The promotion of voluntary CSR followed soon and laws were enacted with guidance as well. None of this was bottom-up and business showed no real commitment. It is held that this changed somewhat after the earthquakes in Sichuan in 2008 when business in China rushed in to help with equipment or money. However, in her work on China’s extractive industries (mining, fisheries and forestry) – easily amongst the worst offenders in terms of environment – Tan-Mullins (2014) finds a lacklustre performance at best, and possibly much less in their FDI or sourcing abroad in e.g. Africa. For one, raising the issues of ‘transparency’ and ‘accountability’ is highly sensitive as questions of corruption and bribery are purposefully neglected. This is despite the large majority of extractive firms in e.g. mining being SOEs. Best practice global standards such as the EITI¹⁶⁴ are not adopted in China, probably for this reason.¹⁶⁵

More generally, empirical work on CSR in China is still in its infancy. One inference is clear: it is not widespread in business and SOEs are overrepresented. The latter might be attributed to the tighter government hand in the governance of SOEs.¹⁶⁶ Oliver Rui of the China Europe International Business School has composed a CSR index for Chinese listed companies.¹⁶⁷ Of the 3052 A-share companies listed in 2017 in Shenzhen and Shanghai, only one quarter disclosed CSR reports but many were not detailed

163 It is defined as people-oriented, comprehensive, coordinated and sustainable development which aims to protect the environmental and livelihood security of China’s citizenry.

164 The Extractive Industries Transparency Initiative, see www.eiti.org

165 Although Tan-Mullins also warns that some adaptation of global standards to China might be wise as otherwise such standards risk to be discredited as the outcome of Western hegemony in the CSR debate.

166 The board of every SOE has a mandatory seat for a representative of the CCP.

167 See <https://www.ceibs.edu/new-papers-columns/growing-csr-china-first-corporate-social-responsibility-index-chinese-listed> March 2018

and lacked data.¹⁶⁸ Therefore, now the CSR Index only comprises the performance of the top-50. Since 2009 there is an international conference on CSR reporting in China and the Golden Bee report¹⁶⁹ has a detailed analysis of the status after 10 annual conferences. Data confirms more or less the picture from professor Rui: nowadays there are some 2000 CSR reports a year and 399 are rated 'good'.¹⁷⁰ Firms listed on the HK stock exchange (with stricter requirements) score some 25% better than those listed in Shanghai or Shenzhen. So far, CSR is voluntary but in 2021 the regime will become stricter which should be helpful: ESG level disclosure will become mandatory for some 3000 firms listed (and a few bond issuers).

Empirical work by Li, Khalili & Cheng (2019) is helpful for acquiring an idea whether CSR can contribute to improve environmental performance of business. Much of CSR reporting in China is about business projects resulting in environmental and/or social improvements. Of 31 100 projects by these companies, some 23 500 focus on environmental responsibility (esp. air, water, energy, and solid or hazardous waste); the upward trend of the number of projects over the ten years is rather sharp. This would seem to suggest that Chinese business begins to assume environmental responsibility itself, even though in some areas these projects are a consequence of new laws or enforcement. A small group of companies, though mostly large ones, may well become a handmaiden of China's sustainable development. Another interesting empirical finding is that a company will gain a higher revenue when it engages in CSR with many projects which should facilitate the further acceptance of a serious CSR approach amongst Chinese companies. That in turn can contribute to the achievement of

168 The author notes that many firms do not go beyond donations to charity, or attempts to conserve nature; international CSR standards also prescribe disclosure of company operation and management, product quality and innovation, responsibility to employees and diversity in staff. The basic idea is that seven stakeholders are well informed: customers, employees, environment, communities, shareholders, suppliers and government.

169 See www.csr2.mofcom.gov.cn/article/ckts/sr/201712/20171202687223.shtml 18 Dec. 2018

170 Following the HongKong ESG Guide (ESG= Environmental, Social and Governance)

sustainable development in a natural way driven by local initiative and respectable business practices.

An EU FTA sustainable development 'standard' for EU/China trade policy

The sustainable development chapter of recent EU FTAs can be regarded as an inventory of trade-related sustainable development specifications for environment and climate. It represents EU preferences with respect to NTPOs (in environment and climate policies) in bilateral trade and investment relations. The FTA with Japan is amongst the most ambitious 'deep' FTAs concluded by the EU and indeed in the world. One might call it the "EU trade-related sustainable development standard in environment and climate". This subsection uses this inventory or "EU standard" for a proxy assessment of the trade-related NTPOs in environment and climate on which the EU and China would seem to agree. The inventory is much more about aims, strategic perspectives, policy intentions and commitments and not, or at best very selectively, about indicators. Nevertheless, it is a measurable and verifiable method to understand whether and to what extent *policy* convergence in (trade-related) environment and climate between China and the EU can be observed.

The EU and China do not have a FTA and are also not negotiating one. Table 3 summarizes the green pillar of the sustainable development chapter in the EPA between the EU and Japan, except the consultation and dispute settlement part (as there is no FTA between China and the EU). The 4th column proxies our assessment on whether an EU/China FTA could well include these objectives or activities too. References or quotations from Chinese leaders or institutions underpinning or exemplifying confirmations in the fourth column of Table 3 are collected in Annex II of Pelkmans (2021).

Table 3: China's convergence with the EU "standard" on sustainable development¹⁷¹

no	subject	Items of substance (short)	Reflected in EU/China cooperation
1	Context & objectives	<ul style="list-style-type: none"> • Trade contributing to sustainable development • Considering specific MEAs, etc. • Economic/social development and environmental protection 	<ul style="list-style-type: none"> • yes, reference in Annex II • yes, see the survey in Table 1 • yes, reference in Annex II
2	Right to regulate	<ul style="list-style-type: none"> • Right to regulate • International standards • Strive to ensure high levels of environmental protection • 3 non-regression clauses; non-discrimination; non-arbitrariness 	<ul style="list-style-type: none"> • implied by regular caveats • frequently, yes, • very similar, see Annex II • unclear; but intensive cooperation suggests: yes
3	On MEAs	<ul style="list-style-type: none"> • Effectively implement MEAs • Trade & environment, mutually supportive • Trade-related environmental matters, exchange views/info • Re-affirm UNFCCC + Paris • Cooperate so that trade is positive for transition to low-GHG emissions 	<ul style="list-style-type: none"> • Yes, MEAs often re-affirmed; EU and China are convergent in terms of (12) MEAs, see Table 1 • yes, see Annex II • For decades, has been done and intensified between EU and China • Strongly and repeatedly • yes, see Annex II

171 On environment and climate policies only.

4	Trade and investment favouring sustainable development	<ul style="list-style-type: none"> • Facilitate/promote trade & investment in environmental goods & services • Idem, in goods and services suitable to combat climate change • Promote trade under labelling schemes and private initiatives 	<ul style="list-style-type: none"> • EGA was a plurilateral attempt, with the EU and China, now stuck • EGA attempt can be widened to include this • partial confirmation, see Annex II
5	Biological diversity	<ul style="list-style-type: none"> • Re-affirm CBD and CITES • Including labelling schemes and combatting illegal trade • Details on implementation • Consult on e.g. wildlife, ecosystems, etc. 	<ul style="list-style-type: none"> • not literally but clearly implied, see Annex II • via multilateral routes • idem
6	Sustainable forestry	<ul style="list-style-type: none"> • Trade and investment serving sustainable forestry • And timber trade/timber products • Contribute to combat illegal logging 	<ul style="list-style-type: none"> • all 3 items follow directly from the 2009 China-EU BCM (Bilateral Coordination Mechanism) on Forest Law and Governance and its active follow-up
7	Sustainable fishing	<ul style="list-style-type: none"> • Trade & investment serving sustainable fishing/ aquaculture • Comply with UN & FAO conventions and implement port measures • Encourage sustainable fisheries in RFMOs (and credible controls) • Combat IUU 	<ul style="list-style-type: none"> • China has gradually shifted closer to EU positions, both multilaterally (UN and FAO) and bilaterally • in 2018 all aspects (also IUU) included in the Blue Partnership for the Oceans (with China)

8	Scientific information	<ul style="list-style-type: none"> Parties take account of scientific information + precautionary principle 	<ul style="list-style-type: none"> no general issue, so far, but 'open science' agreed for Oceans precautionary principle or approach im- or explicit in MEAs
9	Transparency and evaluation	<ul style="list-style-type: none"> Pursuit of sustainable development in transparent way Sustainability impact assessment 	<ul style="list-style-type: none"> transparency can sit uneasily with China's way of governing, although improving China has environmental impact assessments but often local. Rigour & independence of authors unknown
10	Cooperate on sustainable development	<ul style="list-style-type: none"> Cooperation over a wide spectrum of sustainable development issues 	<ul style="list-style-type: none"> Yes, the EU/China Dialogues and other bilateral programmes, projects and partnerships testify about sustainable development cooperation since (say) 2003

The context and objectives (item 1) taken from the FTA with Japan would seem to present no problem for China as the first and third sub-items are clearly implied in declarations or summaries of meetings or press releases. On the MEAs, as is shown in detail in Table 1, China and the EU are convergent for no less than 12 MEAs as well as Protocols or later Annexes .

The right-to-regulate (item 2) is an obvious entitlement for any State. The commitment to apply international standards or agreements is typically followed by China case by case, but after decades of international as well as bilateral cooperation China is firmly woven into webs of international agreements and standards. Striving to ensure high levels of environmental protection is not so easy to assess. In recent speeches of the Chinese leadership, powerful language is employed suggesting full support of high levels of protection. But that is probably best interpreted as aims for the longer run, except for e.g. renewables, electric vehicles and bat-

teries. Thus 'striving' is indeed the appropriate wording. The three non-regression clauses have the purpose of not undermining the high levels of protection. They consist of: (a) 'not encourage trade or investment by relaxing or lowering the level of protection' in environmental and climate laws ; (b) 'not waive or otherwise derogate from those laws and regulations'; (c) not 'fail to effectively enforce'. It is here where a (deep) FTA might well be different than more transactional cooperation because China might not wish to be so constrained in addressing the domestic consequences of sustainable development policies (even when it might agree with the idea). However, in the draft CAI non-regression clauses have been included. Furthermore, the ban on arbitrary or unjustifiable discrimination or disguised restriction might be difficult for China to formally commit to, again even when it might agree with the idea itself.

If there is one very broad and important area of environmental and climate policy where the EU and China agree fully, it is the commitments to MEAs and their later amendments or extensions (item 3). In fact, a large part of environmental/climate aspects of sustainable development is covered by MEAs and it would be a major mistake to focus on such EU/China cooperation as a predominantly bilateral question. It is more the other way around: much of EU/China bilateral cooperation and wider trade policy with respect to environment and climate is about bilateral accentuation, re-affirmation and practical implementation of the MEAs as well as the working-together in the multilateral environment to accomplish common objectives or targets¹⁷². There is no doubt that the two partners support all 4 sub-items in item 3 explicitly or implicitly.

Partners in deep FTAs typically consider such FTAs as yet another force to stimulate trade and investment favouring sustainable development (item 4). However, moving from principled

¹⁷² There is only one exception to China's willingness to join MEAs: the UN Watercourses Convention (on transboundary water cooperation). Here China assumes a bilateral approach. In the EU this is little known because the EU has no common boundary with China. See Pelkmans (2021, section 6.2.3).

agreement of 2 countries to the pluri-lateral (for example, the EGA) or multilateral negotiation environment is not a small step. Thus, on the 3 sub-items of this domain there is unlikely to be discord between the EU and China at the general level but these aims are not nearly concrete and practical enough for an EGA¹⁷³ to be accomplished.

China and the EU agree on the main initiatives of biological diversity as well as on the MEAs like CBD and CITES (item 5). Indeed, China is the host of the biodiversity COP conference in Kunming in the autumn of 2021. But China is also a source of demand for dubious or forbidden products, usually based on fake medical or physical convictions. Combatting illegal trade thus implies tough customs and knowledge of informal trade networks. Analogous to fair trade and some other cases, an effective implementation of CITES, for instance, requires investments in and cooperation on wildlife in some countries and in the knowledge and conservation of eco-systems. Both CBD and CITES are demanding in implementation which leaves considerable scope to disagree on implementation whilst agreeing on the objectives.

Sustainable forestry

Sustainable forestry (item 6) has long been a subject of deep cooperation (e.g. Indonesia as a frontrunner with the EU) before the subject began to enter FTA texts. China firmly agrees with the three sub-items. The topic is important for reasons of trade and complex to organize domestically in participating countries and internationally. In 2009 China and the EU established a BCM (Bilateral Coordination Mechanism) on FLEG which stands for Forest Law Enforcement and Governance¹⁷⁴. The EU participates with the European Commission and interested Member States. The overall objective is to contribute to the reduction of illegal log-

173 The exact list of environmental goods or goods relevant for facilitating the mitigation of climate change [see de Melo and Solleder, 2019] is critical for the practical meaning of this type of commitment. This is complex.

174 See www.euflegt.efi.int/documents/10180/23033/2009+EU+China+BCM+Agreement

ging and associated trade globally in order to promote sustainable development – environmentally, socially and economically (Art. 2.1). FLEG is inspired by the FLEGT initiative of the EU that has been concluded with several ASEAN countries and some African ones as well. The BCM focuses precisely on China's relations with and imports from such countries, besides China's exports to 'regulated' countries. It is well-known that local efforts to organize sustainable forestry (e.g. in East Malaysia and Indonesia, etc.) remain ineffective if the demand side (often China) is not addressed firmly as well.

The origin of China's interest is found in the 1998 and later restrictions for its own forests with respect to harvesting. In turn this has triggered a gradual but steady rise in imported forest products. China is a huge importer of timber and related products (pulp & paper, plywood) with US\$ 51 bn in 2017 and it used to be a formidable exporter as well but has now lost almost one third of its 2007 foreign sales.¹⁷⁵ Although there is worldwide concern about illegal logging and a quest for better governance of trade and certification, the EU FLEGT initiative has been a leading example in this respect. In 2019 there were 15 FLEGT VPA (Voluntary Partnership Agreement) countries which have minimum regulation and certification requirements as a condition for exporting to the EU. This has acted as a standard for quite a few countries and stimulated China to act in a similar fashion. However, the legal and administrative detail and verification are demanding before fully-fledged and reliable licences can become compulsory. Between 2007 and 2017 Chinese timber imports from FLEGT VPA countries increased by 136% in US dollar terms and is thereby the second biggest importer from VPA countries behind the US, but far ahead of the EU, the import share of which halved in a decade to 16% in 2017. On the export side, some 52% of Chinese exports of timber products were bound for regulated markets i.e. only demonstrably legal timber is allowed to come in. Exports to the

175 This is usually attributed to increasing demand from a rising Chinese middle class. China's exports in 2007 were equal to its imports. Source : Briefing, Analysis of China's trade with the EU and VPA countries 2007 – 2017, see EU FLEGT Facility (2019b)

EU increased by more than 50% in value but remain stagnant by volume, a sign that consumers have shifted to higher priced goods such as furniture.

A stubborn problem remains that, in the complex flows from countries that export to China first, and subsequently for the processing inside China, before exporting to third countries, guaranteed tracking is extremely difficult. There is no mandated robust chain of custody systems and there are no Chinese import regulations (yet) ensuring that all imports are verified as legal. Clearly, this is partly what the annual BCM meetings with China are about. During the 9th meeting in March 2018 a Work Plan was adopted with a host of options to address this issue, e.g. import management measures, the development of the CTLVS (Chinese Timber Legality Verification System), a new monitoring system with guidelines and more incentives for the private sector to adopt responsible purchasing of forestry products. The original BCM agreement also mentions (Art. 3.2) codes of conduct for European or Chinese businesses. Meanwhile, in 2020 China has amended its forest law prohibiting the purchase, transport and processing of illegal wood.

China, the EU and Indonesia (a big exporter to China) have developed a triologue with respect to FLEGT and the VPAs.¹⁷⁶ This is important as Indonesia is still the only ASEAN country with a fully developed licensing system (since 2016 - EU legal timber imports of €2 bn in 2018) and since China is by far its biggest client. In the meantime, ASEAN ministers have endorsed an ASEAN Code of Conduct on timber imports in 2019. There are also initiatives on Vietnam – China and China -Myanmar trade in timber, all stimulated by the FLEGT approach. Since a number of the VPA countries is in Africa, and China is once again a major client, a China-Africa-EU triologue is being set up to help these countries and to level the playing field in the interest of the environment.

176 See for this and other initiatives, EU FLEGT Facility, Annual Report 2018, see www.euflegt.efi.int. In 2020 the Chinese Academy of Forestry recommended the Chinese recognition of Indonesian V-Legal documents, the study underlying this recommendation was co-funded by EU FLEGT.

Sustainable fisheries

Sustainable fisheries (item 7) is perhaps even more demanding than forestry. In fisheries there is a complex web of regional and international organisations as well as private certifiers. In 2020 China agrees with most if not all of the four subitems as formulated. But in the past its record in IUU has been problematic, if not worse, and its reputation for the arrangements for fishing in African waters is subject to much improvement.

For 2015 the FAO (2018b) estimates China's world share of production being as high as 37.7% (79.3 mn ton). This is much higher than China's share in the world population or world GDP. There is little doubt that 'growth at all costs' was practiced for several decades, just like in industry, pushed by unemployment in coastal communities, and stimulated by subsidies. The next three economies on the FAO list (Indonesia, India and the EU, together in population nearly double that of China) only generate 18.4% of world fisheries output, half of that of China.¹⁷⁷ It is therefore of the greatest importance that the EU and China assume leadership in order to make world fisheries sustainable and – in the process – level the playing field.

However, fisheries is a very complex policy area, not only because of the sovereign waters issue (EEZs, exclusive economic zones) but also because Asian and European fishing boats have become more dependent on Distant-Water-Fleets (DWF), which in turn often require subsidies in order to be profitably operated. There are complications flowing from modern fishing technology (e.g. bottom trawlers destroying bio-diversity), lack of transparency of bilateral agreements (especially when these are coupled with loans and grants as China routinely does, and, in so doing, creating dependency) to allow DWFs in one's EEZs, depletion of stocks in certain areas, and unreliable data. Although reporting to

¹⁷⁷ If one focuses only on catches (not aquaculture), the joint share of the three followers is just over 90% of the Chinese catches. It is aquaculture which creates the biggest gap.

the FAO is compulsory, a 2012 report for the EP¹⁷⁸ calculated that between 2000 and 2011 inclusive, China had massively underreported its DWF catches: rather than the reported annual average of 368K tonnes, the better estimate turned out to be around 4600K tonnes, some 12 times this reported volume. Over 60% of this huge amount is caught in African waters, often under murky or confidential contracts with loans attached. Inspections there are weak or simply absent. When in Europe, with strict rules, certification and quotas commonly enforced as well as the arrangements under the EU common fisheries policy and RFMOs, the governance of sustainable fisheries can already be controversial, it is not hard to appreciate that this sustainability is much more difficult to achieve in other parts of the world, including China.

EU-China cooperation in fisheries dates back to 2010 when the partners signed a MoU for a High-Level Dialogue on an integrated approach to Ocean Affairs, and to the High Level Dialogue on Fisheries. The timing seems not to be a coincidence. The EU enacted a tough Control Regulation 1224/2009 with a system of green, yellow and red cards. China exports a lot of fish to the EU and had every interest to obtain and maintain a green card. A red card would imply penalties or even an import ban. Besides, there is a High-Level Dialogue on Law of the Sea and Polar Affairs and, since 2016, an EU-China WG on IUU. In the EU/China Summit (July 2018), cooperation was reinforced through the ‘Blue Partnership for the Oceans’¹⁷⁹ which includes sustainable fisheries. The objectives of this Partnership include ‘to ensure effective governance for the conservation and sustainable use of the oceans’, ‘... strengthening...ocean governance mechanisms and structures, including in ... fisheries’ that ‘keep oceans clean, healthy, pro-

178 See www.europarl.europa.eu/meetdoes/2009-2014/documents/pech/dv/chi/china.pdf. The role of China in world fisheries. Note that China Tuna Industry Group revealed formally (in a IPO !) in September 2014 that China had been taking advantage of lax enforcement to exceed catch quotas for bigeye and yellowfin tuna in the Pacific. Interesting enough, this was seen by competitors in China as an incentive to go for private certification with respect to sustainability with e.g. Friends-of-the-Sea and Marine Stewardship Council regarded as credible all over the world.

179 See https://ec.europa.eu/fisheries/eu-and-china-sign-landmark-partnership-oceans_en of 16 July 2018. The Declaration on the Blue Partnership (with details) is attached.

ductive and safe', and, finally, enhancing technical cooperation in many ways and forms. The 'effective ...fighting [of] IUU fishing activities' e.g., by tracking suspected vessels and strengthen effective systems of control, inspection and enforcement is surely the right way to proceed. The Declaration on the Partnership also promotes 'open science and open data'.

Although there are serious sustainability problems in fisheries worldwide, there is also a lot of activity on formal and informal commitments between neighbouring countries, in regions, in catchment areas and multilaterally, and both public and private. EU-China fisheries cooperation must be understood against several UN-inspired treaties like UNCLOS and UNFSA,¹⁸⁰ EU participation in 6 'tuna RFMOs' (Regional Fisheries Management Organisations) and 11 non-tuna RFMOs, giving the EU a unique position to lead on world governance in fisheries. RFMOs can set catch limits, impose technical measures and control obligations. For the EU's own fleet, the EU has concluded 18 SFPAs (Sustainable Fisheries Partnership Agreements) for fishing in EEZs of partner countries, but with a regulated and guaranteed environment that does not differ in governance between countries as it is derived from strict EU laws applicable in the EU itself. The EU would ideally want China to conclude such SFPAs based on high [read: EU] standards which do not depend on negotiation strength, agreements which are public and not linked to loans or aid as such. The relevant EU regulation is Reg. 2017/2403 of 12 Dec 2017 on the sustainable management of external fishing fleets.

The problem of fisheries subsidies is very weakly tackled within the context of 'precise reporting' (against IUU fishing) under Article 25.3 in the WTO Agreement on Subsidies and Countervailing Measures and what are the prohibited subsidies (and subsequently what should be the exceptions) contributing to IUU fishing, fishing or fishing-related activities regarding overfished stock, and overcapacity and overfishing (e.g., subsidies for building

180 UNCLOS is UN Convention on the law of the seas, and UNFSA is the UN Fish Stocks Agreement.

or upgrading vessels, fuel subsidies, price support for fish caught). The subject has been under negotiation since 2001. Clearly, the EU and China can be useful here, not least because China and the EU are the world's biggest fishery subsidizers (the 3rd largest is the United States),¹⁸¹ but China does not have a strict state aids tradition as the EU has had for decades. Moreover, the Chinese fleet is so 'oversized' (i.e., kept large, without cutting in earnest) that subsidy disciplines can only mean considerable cuts in vessels and production (especially DWFs) for years. This is bound to be resisted and alternative employment might have to be sought.

The subsidy question is complex because not all fisheries subsidies are automatically distortive, nor do they always keep the fleet size. The issue of 'special and differential treatment' that WTO developing members may be entitled to adds more complications to the negotiations, and China speaks for itself and for other WTO developing members,¹⁸² for example, concerning their 'right for development'.¹⁸³ For example, China itself has let it be known that its capacity constraints as a developing country and the absence thus far of a comprehensive statistical system make it difficult to notify relevant measures and implement disciplines of overcapacity, overfishing or overfished stocks, since basic supporting data is missing.¹⁸⁴ This issue may be tackled by the country itself and within the framework of the bilateral cooperation on sustainable fisheries, since data transparency is covered by the scope. As Bayramoglu, Copeland, Fugazza & Jacques (2019) argue, and as the EU has practiced for a while, it is the combination of subsidy controls and various quota that is optimal for conservation and consistent with incentives for negotiation. In any event, following the mandate of the Buenos Aires 11th WTO ministerial in January

181 See World Trade Organization Fisheries Subsidies Negotiations, Congressional Research Service, September 16, 2021.

182 See China's proposal on WTO reform published in May 2019. Among others, it pleads for safeguarding the development interests of developing members, particularly in the areas of agriculture, trade remedy rules, fisheries subsidies, e-commerce and new issues, such as investment facilitation.

183 For detailed discussions, see Hu (2019a).

184 See Zhang X., Xu Q. & Wang J (2019).

2017, the chair of the fisheries subsidies negotiations submitted in November 2021 a draft agreement of consolidated text, with the different positions held by members starting from the scope of the agreement, and the definitions, like ‘fishing related activities’. But ‘nothing is agreed until everything is agreed’.¹⁸⁵ So the negotiations will continue. Presently, the disagreement among the members focuses on the special and differential treatment (e.g., the grace period for implementation) and exceptions for certain subsidies, for example, whether fuel subsidies should be included in the agreement. Some developing country members argue that the sustainability conditionality, which is a focus of the agreement, would disproportionately benefit developed economies who are already large subsidizers, such as the EU and the United States.¹⁸⁶

The EU and China have a great opportunity to assume genuine leadership. Although its ambition may be limited due to its insistence on being a WTO developing member on fisheries subsidies negotiations, China has every incentive given its enormous economic, social and environmental stake and the EU pretends already for years to be in the lead when it comes to global fisheries governance. The EU has indeed a unique position not only as a frontrunner in responsible fisheries rules coupled to controls and given its membership of partnership and RFMOs all over the world, but above all because its leverage is powerful, being the biggest fish importer in the world – it is credible when setting standards. Therefore, the EU-China fisheries cooperation can be decisive bilaterally but also globally.

185 See Agreement on Fisheries Subsidies, Draft Text, 24 November 2021, WT/MIN(21)/W/5/Add.1, available at: <https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/WT/MIN21/W5A1.pdf&Open=True>.

186 See Article 1.5, Agreement on Fisheries Subsidies, Draft Text, 24 November 2021, WT/MIN(21)/W/5/Add.1, also World Trade Organization Fisheries Subsidies Negotiations, Congressional Research Service, September 16, 2021.

Science- and evidence-based approaches to sustainable development

Item 8 is about objective, science-based and evidence-based approaches of sustainable development. Also international standards should guide national policies. And the precautionary approach may be justified if scientific knowledge is insufficient in the presence of very serious, possibly irreversible damage. Over time China has clearly moved into this direction for environment and climate issues. Science plays a great role in China's domestic debates as well. However, whether China would be ready to subscribe in general to this set of principles is not certain – as before, it might wish to do so in specific agreements and MEAs. In any event, some MEAs incorporate the precautionary 'approach' and this is fully accepted by China.

The notion of transparency (item 9) has become an elementary component of EU FTAs¹⁸⁷ after the 2006 Global Europe strategy began. Compared to several decades ago, China has become much more transparent, with far greater openness about laws and decrees relevant for trade and investment and much more consultation about draft laws and e.g. technical standards. The lingering problem is that this openness does not apply universally for China's actions. These exceptions create suspicion and/or are associated with laws or practices that tend to undermine the reputation of China in the international community. Examples include standard setting in the case of cybersecurity, the late and much too vague reporting on subsidies in the WTO and the dramatic underreporting of DWF fish catches to the FAO a decade ago. Item 9 incorporates the use of sustainability impact assessment, a practice that – if proper evidence-based assessment and functional logic is employed – can be very helpful as an input in domestic decision-making on sustainable development issues. It also helps outsiders to be better informed – it is possible that outsiders, including foreign partners, may help constructively, some-

187 It is also prominent in US FTAs.

thing that China has long promoted¹⁸⁸ and practiced. However, it is not so clear what the current status is of (as China calls them) environmental impact assessments. A functional (i.e. non-political or non-ideological) impact assessment is surely in the enlightened Chinese interest as well.

Item 10 is about bilateral cooperation in many aspects of sustainable development, as far as climate and other environmental issues are concerned. This is where China and the EU, ‘working together’, have been very active and both bilaterally between the two but just as often or even more frequently, together in the context of MEAs and other multilateral activities. The present contribution testifies to this.¹⁸⁹

Overall, the foregoing demonstrates that China *broadly approximates* this “EU standard for trade-related sustainable development in environment and trade”. There are definitely some weak points and one or two sub-items where it is difficult to come to a firm conclusion. Nevertheless, of the 30 sub-items, China is convergent in the large majority of instances, and possibly convergent on some additional ones but this would have to be tested. Lest it be forgotten, Table 3 is based on roughly the highest sustainable development standard in FTAs in the world. It underpins the convergence hypothesis mentioned in the very beginning of this study. This convergence is not complete – the crucial point is that it has already gone *far, without* having a FTA.

However, in the last days of December 2020, China and the EU agreed on a draft investment treaty of a wider scope, called the CAI: Comprehensive Treaty on Investment.¹⁹⁰ The CAI is not a FTA but overlaps to some degree because it includes market access provisions and a section on sustainable development. This is the first time that China commits itself to legal provisions on sustainable

188 Recall for instance the longstanding participation of EU experts in the CCICED advising on the preparation of the next Five Year Environmental Plan.

189 See more generally on EU/China trade-related Dialogues, Hu & Pelkmans (2020).

190 The provisional text was published late January 2021: see www.trade.ec.europa.eu/doclib/2021/january/tradoc_159343.pdf.

development in a bilateral. Box 11 elaborates. The thrust of the CAI's provisions on sustainable development more or less confirms what has been distilled from Table 3.

But it also demonstrates rather painfully that, whilst in diplomatic parlance and legal language about aims and principles the two parties nowadays agree to a large extent, most actual indicators about the environment and GHGs in China reflect serious divergences, with trends towards convergence being slow and uneven. In 2020 this is the “*great green paradox*” in environmental relations between China and the EU. This paradox can sow confusion. A steady pursuit of an ambitious green agenda between the two partners should ensure that this ‘great green paradox’ will soon melt away.

Box 11: Sustainable development and ‘green’ commitments in the draft CAI

The sustainable development section in the draft CAI has four sub-sections. The first sub-section re-affirms commitments in many international documents (from the 1992 Rio conference to the 2019 ILO Declaration on the future of work), promotes CSR and responsible business conduct and encourages responsible business practices under a range of compacts including the OECD Guidelines for multinationals. It also encourages involvement of non-state stakeholders in public discussions with the Parties and recognises the relevance of sustainability impact assessments. The second sub-section is central for verifying policy convergence. Following the right-to-regulate, each Party shall ‘strive to ensure that its laws and policies provide for and encourage high levels of environmental protection’ which confirms the high standards of the CAI but sows uncertainty with “striving to ensure”.

Art. 2 incorporates the three routine non-regression clauses, probably for China explicit for the first time. Art. 3 confirms that multilateral dialogues (e.g. UNEP) should enhance the mutual supportiveness between investment and environmental policies “in a manner complementary to [the Parties’] efforts” in bilateral and multilateral settings (which can mean very little or a lot).

Art. 4 is about MEAs which – between China and the EU – is hardly the problem; because of their size, the two Parties could indeed be truly ‘complementary’ to exchanges under MEAs.

Art. 5 on green growth is rather light: ‘facilitate and encourage investment in environmental goods and services’ and exchange good practices about environmental impact assessments. Art. 6 (about climate change) links up with the Paris Agreement and each Party “shall implement... its commitments with regard to its NDCs”. And a range of (green) investment types should be promoted, besides cooperation ‘on investment-related aspects of climate change’ in various fora. Sub-section 4 on a mechanism to “address differences” includes a Panel of Experts (in case consultations do not work) in Art. 3, which is more or less identical to that in the Korea/EU FTA (with the finding on the ‘right of association’ in January 2021).

It thus seems that China is on par with Korea in allowing a finding from an Expert Panel on such an agreement. However, when reading carefully all the substance above in this Box, at least on ‘green issues’ there seems to be precious little on which one can imagine a serious legal issue of ‘breaching’ Section IV of the CAI. What worked in the Korea labour case, where a clear commitment was at stake, is most unlikely to work with China, unless there would be retrogression with tangible proof. In other words, China believes in cooperation, preferably truly joint action and funding, and very much less in legal approaches.

Bright spots in China's green strategy

It is particularly here that one should pay attention – indeed, much more attention – to China's own home-grown initiatives of going green. The focus on all traditional indicators is well justified but one might miss out on multiple and daring industrial and technological developments that China itself has gradually engineered and vigorously promoted. Altogether, these initiatives begin to look like a genuine overall 'green' strategy that is geared to future industries, clean energy, new forms of transport and innovative technologies, possibly resulting in a broad support of 'going green' and a zero-carbon economy by 2050. Some basic facts have been mentioned before, especially the strength of the renewables sector in China, but without entering into the broader perspective of China's long-run strategies and their possible outcome. It is this subject where the EU can and should learn from China, best in cooperative efforts. In a way this is already happening as EU industry is selectively involved in new energy vehicles, battery storage technologies, wind turbines and solar panels (both with technology originating from Europe). In all these sectors, China has quickly mastered and developed the technologies involved and exploited scale in the huge Chinese market, resulting in drastic cost cuts. The strategy is reminiscent of the opening up of the Chinese economy after 1978: rather than pushing too much on the correction, transformation or removal of the 'old' [at the time, the SOEs; here the 'old' is everything coal-based], one can cherish and promote the 'new' over a longer period of time [at the time, the 'new' were private firms; here, the 'new' consists of all the green technologies and sectors] until they arrive at a critical scale and can contribute in earnest to greening the economy, whilst also enjoying a strong business model.

Ever since 2015 one reads occasionally about a supposed Chinese leadership in 'greening' the world. This would of course be very good news, above all for Chinese citizens, workers and nature but also for regional and global motives. This stream of publi-

cations is not necessarily fake news or ‘framing’, but it is usually focussed merely on ‘clean energy’ (especially renewables) and its rapidly increasing application, in China, to the electricity sector, energy storage and bus-fast-rail-car transport. It matters therefore for the environment (e.g. air quality – thereby bound to generate wide support amongst the citizens - and other co-benefits) but particularly for climate mitigation policies. However, many worrying aspects of the state of the environment in China are not or at best marginally affected by these green industrial policies.

Nevertheless, it is easy to understand the rationales behind this overall strategy. China considers energy security as a top priority and these strategies are an effective (though probably insufficient) response to the huge and seemingly ever increasing import dependency created by China’s erstwhile industrial and [‘old’] energy policies and other unsatiable resource-intensive business models. This point incorporates the second rationale: China’s new economic strategy is to move up the value-added ladder in global value chains, if only to ensure higher productivity as a basis for higher incomes, and to create strong (dominant ?) corporate players on the world market in a range of newer high-value-added industries. Even if China would wish to continue the old mass production and export-reliant economic model, the annual *decrease* in available intra-Chinese migrant workers (of some 3 million a year) would make this impossible today. The determination of a radical turn-around was emboldened over time when it turned out that China could swiftly learn from companies and hi-tech from developed countries. All means were solicited, with huge subsidies and state-banks guarantees, purchases of hi-tech in the market,¹⁹¹ joint ventures with foreign hi-tech companies under Chinese control, a switch to a chain of new applied research institutes and SOEs going abroad and conducting targeted take-overs at above-market prices. The Manufacturing China 2025 programme targets 10 sectors including the sectors mentioned above.

191 In addition, there is quite some literature on illegal copying or stealing of technology from companies

In clean energy the results have been amazing and now reach critical mass for making an impact on climate policies and to a modest extent environmental policies. According to UNEP in Frankfurt ¹⁹² a mind-boggling US\$758 billion has been invested by China in renewables capacity (without hydro) between 2010 and spring 2019, followed by the US with 'only' US\$ 356 bn. Some US\$ 60 bn in national and provincial subsidies was spent on new energy vehicles between 2009 and 2016.¹⁹³ No wonder China has now the largest wind and solar capacity in the world (210 GW wind and 200 GW solar).¹⁹⁴

Finamore (2020, p. 7) adds that China is also the largest producer and deployer of high-speed rail, subways, lithium batteries and electric vehicles. Costs and prices have come down dramatically. In solar equipment the cost reductions have been so large that the biggest anti-dumping case the EU ever ruled (on solar panels from China, with € 22 bn bilateral trade) was terminated halfway through the customary 5 years, because the duties were considered as hindering the green transition. Of course, soft budget constraints eventually harden even in China. In 2019 subsidies to new energy vehicles were curtailed and terminated for some renewables.

While the EU's focus on fostering 'green cooperation' with China has been longstanding, the EU has recently become much more interested in China's *new* industrial strategy, with considerable attention and powerful efforts suggested by Manufacturing China 2025 in ten sectors, including environmentally relevant and climate-friendly sectors. Examples mentioned above are telling enough. However, the EU interest has shifted towards a far more critical perspective of this Chinese interventionism, to some extent as part of an overall re-appraisal of China's interventionism. The core of the EU (and other countries') criticism of China's industrial

192 See www.unenvironment.org/resources/report/global-trends-renewable-energy-investment-2019 in September 2019 (Global trends report)

193 Kennedy & Qiu (2018)

194 REN21 (2019), Renewables 2019 Global Status report, Paris, www.Ren21.net/reports/global-status-report

and other interventionist policies is that the magnified distortions inside China and their impact outside undermine China's market economy features and violate ever more its 'competitive neutrality'. Another way of putting this is that China seems uninterested in a level-playing-field over a wide range of economic activities, with damaging effects for competition inside China (e.g. for competitors from the EU, say, in 'green' industrial sectors) as well as damaging effects outside China in third markets, including the EU single market. In an unusually large, well-informed and detailed report from BusinessEurope (2020) these distortions "unleveling" the playing field are systematically addressed and numerous EU policy actions are suggested, besides repeated calls upon China to return to a level-playing-field based approach. In a cooperative EU-China 'green' perspective, it would be narrow-minded, if not worse, to focus solely on successful cooperation as agreed between the two partners, and neglecting to try to incorporate a truly cooperative approach with respect to China's 'new' industrial – here, 'green' – policies. So far China has ignored such calls. A clear illustration of how complex and damaging the profound Chinese interventionism is is found in a recent example of combined anti-dumping and anti-subsidy duties on EU imports of optical fibre from China.¹⁹⁵ Optical fibres fall under Manufacturing China 2025. The anti-dumping duties range from 19.7% to 44%; in addition, the countervailing duties (after adjustment) amount to 5.1% to 10.3%. Chinese producers of optical fibres benefitted from not one but "a number of government subsidies, including funds aimed at supporting R&D and innovation". In addition they benefitted from preferential tax rates (for hi-tech industry) and enjoyed access to attractive loans from the China Development Bank Fund.

All this can be interpreted as an encouragement to reform and drastically widen the cooperative approach between the EU and China in 'green' technology in order to overcome and/or pre-empt distortive green industrial policies in China.

195 See Commission Implementing Regulation EU 2021/2011 of 17 Nov. 2021 imposing definitive anti-dumping duties on imports of optical fibre cables originating in the People's Republic of China, OJ EU L 410/51 of 18 Nov. 2021. And Commission Implementing Regulation (EU 2022/72 of 18 Jan. 2022 imposing definitive countervailing duties on imports of optical fibres [etc/], OJ EU L 12/34 of 19 Jan. 2022.

Green pointers from the 14th Five Years Plan

The Outline of China's 14th Five Years Plan has become available only in March 2021.¹⁹⁶ The full details in specific sectoral Plans and regional ones are expected much later. There are strong indications that the outcome in the Plan – especially with respect to climate issues – has been the result of fierce internal debates which have tied the hands of the central government to some extent.¹⁹⁷ When it comes to climate-related issues, the debate turns around the two targets in the Plan: a CO₂ intensity target of – 18% by end-2025 and an energy intensity target of – 13.5%. And about what is *not* in there: neither a cap on CO₂ emissions nor a cap on coal output. China's updated version of its NDC under the Paris commitments was only submitted on 28th October 2021, just before the Glasgow COP-26 began.¹⁹⁸ It would seem that the two targets in the Plan do not stop coal from increasing its output nor CO₂ emissions from growing. Of course the latter is still consistent with the first NDC from China, namely that the country would peak CO₂ emission by 2030. Unsurprising, neither the coal and the coal-related industries nor a lot of provinces keen to push economic growth with the help of coal are enthusiastic about throttling CO₂ emissions and/or coal and have raised alarm about the consequences of such reforms. But this is not new – apparently Paris has not yet been taken seriously by some and this is exactly the fear of many observers outside China. It is said that the State Council has

196 The text of 52 pp. can be retrieved from https://www.fujian.gov.cn/english/news/202108/t20210809_5665713.htm

197 With respect to climate, in particular coal, the following is based on a very detailed account (including interviews with leading Chinese experts and top officials) of the key elements of the Plan and the background discussions as well as explanations. See CarbonBrief (2021), What does China's 14th 'five year plan' mean for climate change? <https://www.carbonbrief.org/qa-what-does-chinas-14th-five-year-plan-mean-for-climate-change-of-12-March-2021>. However, climate and environment have been combined in the Outline (in chapters 37 – 39 but the Outline alone provides very little detail on climate issues (items IV. and V. in ch. 38). The source with detailed reporting and targets for 2025 and 2030 is the updated NDC (see following note).

198 See www4.unfccc.int/sites/ndcstaging/PublishedDocuments/China%20First/China's%20Achievements,%20New%20Goals%20and%20New%20Measures%20for%20Nationally%20Determined%20Contributions.pdf.

learned its lessons from too much top-down governance, leading at times to extreme and severe measures (like engineered black-outs) in order to make the target, and is now favouring bottom-up approaches. However, provinces and their leaders would have to be assessed on the primacy of 'green' targets *above* growth targets for this to work, otherwise loopholes and inconsistencies are bound to arise everywhere.

The 14th Plan did not include a Five Year economic growth target for the first time ever. It is also emphasized that this Plan is about making living more agreeable in China and that relies on other determinants such as a 'beautiful China' that ought to be achieved by 2035. The share of coal in primary energy by end-2025 is expected to be around 50% (down from 57% in 2020), yet even this share would imply an extra coal output of some 100-200 GW. And it might eventually imply a 'high-carbon-lock-in' for decades to come, an automatic resistance against or at least a huge cost factor for going 'more green.' But there are defenders, too. Prof. Ji Zou is quoted about a study¹⁹⁹ showing that a 18% - 20% reduction of CO₂ intensity by late 2025 puts China on a trajectory that is consistent with (only) a 1.5°C rise globally, assuming that China fulfils the promise by President Xi that China would be carbon-neutral by 2060. Finally, many Chinese observers hold that China has been overachieving frequently when firm targets are set – targets in the Chinese tradition have to be 'safe' for the responsible leaders – and China will do this again. Most observers also expect a coal emission target to be announced later when this is tactically possible.

What China submitted to COP-26, in its 'updated NDC', in terms of self-imposed targets is somewhat more ambitious than in 2015:

- a. CO₂ emissions peak before 2030 (not new)
- b. Achieve carbon neutrality before 2060 (new, compared to the NDC of 2015, but announced by Xi Jinping before)

199 See <https://www.efchina.org/Reports-zh/report-lceg-20201210-zh>

- c. Lower CO₂ emissions per unit of GDP by over 65% from the 2005 level (in its first NDC, it was 60% - 65%)
- d. To increase the share of non-fossil fuels in primary energy consumption to 25% (was 20%)
- e. To increase the forest stock volume by 6 bn cubic meters from the 2005 level (is up)
- f. Bring total installed wind & solar capacity to over 1.2 bn KW by 2030 (no NDC target before).

However, as shown in CarbonBrief (2021), the three simulation studies of the NDCs submitted to the Glasgow COP-26, including UNEP, all lead to a global warming of 2.3 – 2.4°C, and this assumes perfect implementation which is rarely the case. Also China is not ambitious enough.

On environmental (non-climate) the 14th Plan Outline provides some detail. In a pre-announcement from the State Council,²⁰⁰ it is emphasized that circular development is top priority as well as ‘an overall green transformation of the economy and society’. By 2035 the ‘ecological environment’ will be fundamentally improved and the ‘goal to build a beautiful China will be basically achieved.’ Some hard targets are specified but mostly the language reads like a long list of political promises, a typical style of Chinese Five Years Plans.

Summarizing, the ‘eco-security system’ will be improved, touching many of the – often severe - problems mentioned above. Promises are made about red lines for ecological protection, restorations of eco-systems (e.g the Qinghai-Tibet plateau, the north-east forest belts, the sand control belts), improving the governance of the Yangtze river, the Yellow river and other rivers, whilst protecting ecological corridors.²⁰¹ Various forms of transfers and payments are foreseen. On pollution, several hard targets are included:

200 See english.www.gov.cn/policies/latestreleases/202102/22/content_WS6033af-98c6d0719374af946b.html

201 Interestingly, ‘weather modification initiatives based on science’ are announced as well.

- i. Reduction of PM2.5 (particulate matter) by 10% at prefectural level
- ii. 'effectively curb' the increase in O3 [so, no reduction]
- iii. A series of loose promises (e.g. improve air quality in Beijing-Tianjin-Hebei region)
- iv. Reduction of NOx and VOC by more than 10%
- v. Reducing COD and ammonia nitrogen emissions by 8%
- vi. Eliminate substandard Grade V [useless water], including urban 'black and odorous waters' which would be major progress for citizens
- vii. Relocate and transform heavily polluting enterprises in key river areas
- viii. Promote the control and restoration of contaminated land for farming and construction
- ix. Attack plastic pollution
- x. Undertake initiatives on sewage systems ['complete coverage']
- xi. Separate different forms of waste and foster centralised treatment facilities, also for medical waste
- xii. Water policy will be more stringent so as to reduce water consumption per unit of GDP; pricing mechanisms for e.g. water and sewage treatment are foreseen
- xiii. Add a range of other initiatives such as energy efficiency of data centers, 'green mining' and going, in earnest, for a 'circular economy', including a re-manufacturing industry,
- xiv. Finally, not unlike the EU's general idea (though turning out to be very hard in actual practice), a shift in long-distance freight transportation 'from highways to railways and waterways'.

Whilst it is not always easy to analyse the Plans in the past, as shown in Pelkmans (2021, section 5.1), the nature of this approach as well as some of the targets make for a very different Chinese environmental regime than one, let alone, two decades ago. Almost all the themes brought up in the Outline have been discussed in our assessment before,²⁰² and indeed criticised. Given this contrast, the Outline might be regarded as a U-turn given the nature of the approach as well as many of its details. At the same time, the hard pollution targets are not ambitious, although in the right direction. It is likely that more ambitious targets here would be seen as too costly for industry.

Answering the second research question in the green pillar

The second research question is whether there is a process of convergence in environmental and climate-related *policies* between the EU and China over the 25 years since 1995. The policy interest in China in moving away from the erstwhile damaging or very damaging policies or the negligence practiced by the central and provincial governments was there, much before any indicators could signal that. The various Plans from 2000 onwards initially show superficial interest in water and air pollution (next to none in soil) but targets were overshot (that is, missed) in some problematic cases and the rate of improvement of other ones (coming from bad scores) was slow at best. There was too little investment in solid data gathering and enforcement was weak or worse. In areas such as soil pollution and waste management matters initially were literally close to disastrous. The predominance of economic growth was engrained in the system of governance. At times some such bad practices occurred in the EU, too, but the major difference is the voice of the people and the press. That voice sooner or later stems the otherwise perhaps unstoppable continuation of deleterious practices (as some benefit from the avoidance of paying for negative externalities). Although it is known that small scale protests erupted regularly in China, they were too often smothered

202 See Pelkmans (2021) for greater detail.

and hardly ever reached the national press or TV, except when major accidents happened. In other words, a powerful signalling function was lacking.

One consequence was that many SMEs, farmers or individuals also started to (mis)behave, whether with many thousands of illegal sewerage outlets to the Yangtze river or Bohai lake, millions of illegal drillings for water, or illegal dumping of waste by farmers anywhere, knowing to be undetected. For the population, the upshot was the appearance of black-and-odorous waters, air pollution that was unbearable and extremely unhealthy and a more general ambiance of a lack of trust in the government about its messages about soil, air and water pollution. In these days, climate change seemed to be a subject for specialists and - in any event - the blame should be on those having caused CO₂ pollution since more than 2 centuries ago, not China. But in the area of policy there was at first little interest because the people did not notice CO₂ pollution themselves (in contrast to soot, very fine particulates and some other gases). Of course with such a miserable starting point, there was bound to be a longing on the part of China to improve but the implicit condition was that it should not be costly and could never undermine the determined very high growth path.

Chinese policy-makers have clearly enjoyed the cooperation with the EU, for decades, without at first feeling much pressure to act swiftly and show results. Nevertheless, both for domestic reasons (and with very high growth, the problems were quickly mounting) and due to the insistent nudging by the EU, gradually a slow process of convergence in many policies for environment and climate was set into motion. These convergent policy moves were initially quicker and closely linked to various EU activities in environment, than in climate questions. As far as the latter was concerned, Beijing long stuck to its position (under Kyoto) that the old industrial countries had done most of the (CO₂) polluting, cumulatively, and China and other developing countries' development could not be constrained by emission reduction programmes. In

this respect the EU and China found a common interest, nonetheless, in the CDM (see Box 12) where the two dominated the world market on the

Box 12: China and the EU: joint dominance of worldwide CDM

The Clean Development Mechanism (CDM) is one of the two 'flexibilities' of the Kyoto Protocol – the other is Joint Implementation. CDM is a market mechanism helping developing countries, including China at the time, to finance climate mitigation measures in companies, based on explicit and carefully organized requests from developed (i.e. Annex 1) countries which have a problem honouring their CO₂ mitigation commitments. This would kill two birds: developing countries reduce CO₂ and obtain technologies to do so, which they would otherwise have great difficulty accomplishing without harming economic growth, whilst developed countries can honour their climate commitments, though not entirely at home (but still equally useful to fight climate change as this is a global problem). The EU/China Partnership on Climate Change aimed to encourage EU and Chinese companies to engage in CDM project cooperation.

Once in 2005 China took off with CDM, it soon became a great success, at least in numbers of projects and credits ensured. Even more so bilaterally between the EU and China. By April 2012 China had approved 3935 projects. In all the years since 2007 to 2012 China ensured roughly 50% of the world CDM market in terms of projects, whilst the EU (due to the ETS and its carbon market) exercised roughly half of the world demand for CERs and the EU-China commercial interaction was intense. In China the bulk of CDM projects were executed by SOEs (state-owned enterprises), especially those of larger size. On the demand side, multinational companies were critical but, since China did not allow full ownership of companies in the relevant sectors, the companies heavily emphasized exports of equipment to China rather than the genuine transfer of the technology.

The CO₂ reduction has clearly been non-trivial and a host of other benefits²⁰³ have been identified such as innovative technologies and financial transfers to developing countries, finding untapped mitigation opportunities, selective contributions to technology transfer and the creation of knowledge, institutions and infrastructure that can facilitate further action on climate change. In addition, some projects provided significant co-benefits as e.g. identified by Rive and Aunan (2010) for SO₂, PM 2.5 and NO_x (one-third of the monetized CO₂ benefits). However, the drawbacks became ever more apparent, especially the elusiveness of additionality. The sheer scale can be appreciated by the CO₂ equivalent of all CDM projects in the world in 2010: all projects other than industrial gases²⁰⁴ reduced some 1.2 million ton. However, the ever-increasing claims from the producers of industrial gases (technically honoured by the CDM system) undermined the credibility of CDM. As a result, the EU terminated CDM for such projects in April 2013.

Note: a more detailed explanation can be found in Pelkmans (2021, pp. 77 – 79).

demand and supply side for some 8 years. After 2012 China began to make the U-turn, hesitantly, to negotiate CO₂ reduction commitments at the world level: the 2015 Paris Agreement. Even after Paris its NDC promises merely to improve ratios and – so far – avoids a true coal cap and / or a CO₂ emission cap. In the 14th Plan the two caps are once again avoided although there are other forms of tightening. In environment China seems finally to become much more brave in air and water pollution. The Plan of an attack on soil pollution following from the 2018 law is similar in spirit but its costs are staggering and thus it remains to be seen. At long last, under the banner of a “beautiful China”, to be accomplished by 2035, there is clearly more drive behind these various fights against pollution.

203 Quoted from a study commissioned by DG Clima of the European Commission on ‘additionality’ by Cames et al (2016), p. 17

204 Biomass, geothermal, hydro, solar, tidal, wind, cement, and transport.

What is in a separate category is the green quasi-industrial strategy that China has set in shortly after 2005. It consists of e-mobility with e-cars, e-buses and e-scooters, the enormous and rapid boost of renewables and the aggressive and very long term forestation strategy.

4.4 China's Social Protection in 2020

In the two and a half decades since China initiated the wholesale reform of social protection, the social predicament of Chinese citizens – be they workers, pregnant workers, farmers, pensioners or unemployed – has considerably improved. In the following the overall situation will be briefly sketched and several deeper problems will be set out. Nevertheless, we shall avoid to provide a treatise on social protection in China because the pursuit of the social pillar of sustainable development with EU trading partners is not and cannot be on detail. Of course, these ought to be nationally decided. The core issue we are interested in in this section is whether China has been willing and capable to build up a fully-fledged system of social protection in which important social risks of citizens are covered via insurance mechanisms, the national and regional budgets and pooled saving schemes (with or without subsidies). And under universal coverage. Unlike China in the late 1990s, the broad answer for China in 2020 is affirmative. After first setting out the basis of the 2020 system by simply summing up what are the social obligations when a firm attracts a new worker, we shall discuss two major drawbacks (on inequality and income distribution, and one on migrant workers) and briefly touch upon the fight against poverty. We shall not discuss ageing. Ageing in China started from a low level but now accelerates because of the (meanwhile abolished) one-child policy and many millions of couples being reticent to have more children. However, at the moment the pressure on dependency rates is still bearable and lower than in many OECD countries.

Consider a company that hires a new worker. What are the social payments to be made by the employer and what by the

employee? This gives us a simple but quite satisfactory answer to the query what social protection exists in 2020 in China. The basic facts are presented in Table 4.

Table 4: Contributions from the private sector to social protection in China

	SHANGHAI	
Social insurance/protection	employer	employee
Pension insurance	20 %	8%
Medical insurance	9.5%	2%
Unemployment insurance	0.5%	0.5%
Maternity insurance	1%	- - -
Industrial injury insurance	0.16%	- - -
Housing Providence Fund	7 %	7 %
	GUANGZHOU	
Pension insurance	14 %	8 %
Medical insurance	7 %	2 %
Unemployment insurance	0.6 %	0.2 %
Maternity insurance	0.9 %	- - -
Industrial injury insurance	0.2 %	- - -
Housing Providence Fund	5 - 12%	5 - 12%

Source: Antoine Boquen, March 2021, www.nhglobalpartners.com/china-social-security-system-explained

As Table 4 shows, there are 5 types of social insurance and one other element of social protection: compulsory housing savings (with the help of the employer). This certainly covers a large part of the landscape of social protection and is a radical improvement over the mid-1990s. The Table gives the examples of two large cities, because large cities or regions may set different rates of contribution. Thus, in Shanghai the employer pays an addition²⁰⁵ over the gross wage of the employee of in total 38.2%, with the worker 17.5%. In Guangzhou the employer pays 27.7% and the worker 15.2%, both a little lower. Altogether these contributions are con-

205 Assuming for Guangzhou the 5% housing contribution.

siderable, taking into account how young social protection is in China and that China is not yet at the average income levels of OECD countries though close to the lowest. Altogether these contributions are considerable, taking into account how young social protection is in China and that China is not yet at the average income levels of OECD countries though close to the lowest.

It is perhaps more insightful to give an example in renminbi for a typical worker in Shanghai. The gross salary costs for the employer are RMB 16,099. The employer has to contribute RMB 840 to the Housing Fund (for this worker) as well as RMB 3,250 for the 5 social insurances specified in Table 4. This leaves as a gross salary for the typical worker RMB 12,000. Before the worker receives the monthly pay-slip, there will be three deductions, as contributions to social insurance plus a tax: RMB 840 for the housing fund, RMB 1,260 for the 5 social insurances and RMB 147 for the individual income tax, leaving a net salary of RMB 9,573 that will be pocketed by the worker.

Social protection is not solely paid for by the private sector, also by the public sector in often complicated ways. There are contributions by the state and/or lower-level governments for the so-called 'basic pension' (not in Table 4) and for certain types of shortages of medical funds. In addition, there is what in China is called 'social assistance' (welfare), including the 'dibao' (subsistence minimum). Complexity further increases because some entitlements are different for different people. First, Table 4 shows that contributions can differ between regions, so can social allowances. The sharpest and indeed most stubborn disparity is between urban and rural workers or persons more generally. This has deep roots in history because farming communities were long expected to practice solidarity. With the great mobility and modernisation in today's China, this disparity appears without foundation and – together with the 'hukou', nowadays equally impractical and unfair – causes several irrational and painful disparities. Second, domestic migrants are severely disadvantaged compared to other urban workers, let alone the traditionally privileged civil servants

and the army personnel. However, as so often in China, there seem to be two realities because the formal laws and arrangements for social protection have been significantly improved and begin to approach universal coverage as well. The migrants problem for social protection is briefly set out in Box 13.

Box 13: Problems of social protection for (outbound) rural migrant workers

Beginning in the late 1980s/early 1990s ‘outbound migrants’ – those migrating from their township, county or province to other (usually Eastern) provinces and hence liable to be unable (esp. when moving between provinces) to rely on their (rural) hukou – came in masses to the industrial and service centres of the country. A total of some 150 million ‘outbound’ migrants in 2005 has been mentioned before. By the end of 2017 this had swollen to 172 million, of which 77 millions interprovincial. Since most Chinese provinces are big, even a part of intra-provincial migrants lived and worked at a considerable distance from their rural origin. After a period of hesitation and very limited but targeted social protection after the 1990s, eventually a degree of harmonisation of social protection between urban and rural (but working in urban areas) was implemented around 2013/4. The central government insisted that social cohesion and inclusion is a key value of socialism with Chinese characteristics and hence created urban/rural instruments to make this happen.

Unfortunately, for the most part this is a paper reality. Without additional or more radical measures, it might turn into a factual reality only after many years if not a generation. There are several reasons for this initial failure. First, many rural workers are so-called informal workers and do not sign labour contracts with their employers. In 2016 this was no less than 65%! This has several reasons, including low education and the sense of freedom to switch employers after the annual Spring Festival (around Chinese New Year) which indeed happens in large volumes. This switching also means that, in fact, many migrants only work 10 months a year.

Of course, such job hopping only makes sense when jobs are unskilled, that is, when there is no human-capital loss for the worker when switching. As the education level in rural areas leaves a lot to be desired and this may well have a hysteresis effect – like a longer-run education handicap – in the county of origin but also for outbound migrants. Given that in and around big cities, the better schools are usually not open for children of migrants, there is a risk that this handicap becomes an intergenerational trap.

Second, many migrants tend not to be well-informed and – as low-income earners, and who might also send remittances back home – have a strong preference for secure short-term income instead of shaving off a significant share for social protection (see Table 4) for a later purpose. Third, transferring social benefits when an outbound migrant, and when switching jobs frequently, is a great problem in China. Such social benefits are on ‘individual accounts’ but – unlike what one might expect – these accounts are not nationwide. This is caused by the fact that social protection administration and the funds are under national laws but locally managed. Most of the systems were not yet online in 2018 or – if they were – hopelessly incompatible. With over 30 000 townships and thousands of counties, and limited administrative capacities, the practical drawbacks of this fragmentation are immense. It is time-consuming and most irritating to transfer entitlements successfully, leading many migrants to just give up and prefer take-home pay. More often than not, when migrants are switching employer, and no arrangements have been made, they may find that their entitlements (e.g. for pensions which require a minimum build-up of 15 years; for unemployment it is 5 years for full benefit) are simply zero-ed! In 2017 a significant improvement was introduced for payments related to maternity leave and medical care, that is, a direct settlement for medical expenses incurred outside the pooling region which enables a migrant to obtain an instant refund.

In addition to all this, the technical and financial capabilities of the local administrations also present a serious problem for e.g. pension funds. Scholars have found that invested capital available may be as much as 30% lower than expected due to mistaken investments, quite apart from cases of embezzlement facilitated by lax supervision.

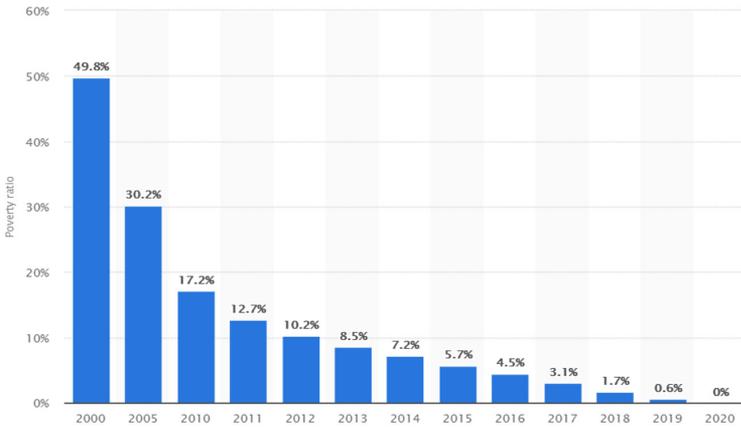
Therefore, the gradual improvements in social protection for the outbound migrants enacted nationally are based on the philosophy of contracted labour (which is typically happening for higher skills workers but much less for migrants) and the existing fragmented systems of local administration and related rigidities. So, once again, there are two realities in China. The implication is that many migrants – the older ones now returning home for their old age (60 years for men, 50 for women) – cannot enjoy their full pension income (which is low anyway) or receive no pension income at all. And may well suffer from other practical shortcomings of this system. The principal incentive why migrants moved in large numbers is and has always been the steady strong *rise* in real wages for decades, far above what they could earn locally, not or hardly because of the security of social protection.

Source: Zhang Yinghua (2019)

Third, although there is better social protection than before, in several respects it is of minor significance for the social predicament of less privileged, mainly the rural citizens. In other words, in term of the (re)distribution of income the system is weak, even in Chinese eyes (let alone, in European eyes). China used to have wide-spread poverty and a major income gap. In the ‘war on poverty’ the central government promised to eradicate poverty by 2020. And they did, as Figure 10 clearly shows. However, there are serious problems with this official claim because China is an upper-middle-income country for which the poverty line, according to the World Bank, should be much higher: instead of US\$ 2.25 a day (which is roughly the 2300 yuan, corrected for

increased purchasing power between 2011 and 2020) but more like US\$ 5.50 a day. But with US\$ 5.50 a day, the 2018 poverty rate in China was not 1.7% (Figure 10) but 17%,²⁰⁶ an enormous difference.

Figure 10: Poverty eradication in China (%), based on Yuan 2300 p.y. (2010 pr.)



Source: Statista (2021) see <https://www.statista.com/statistics/1086836/china-poverty-ratio/>

Most of this rather extreme poverty is found in rural areas.²⁰⁷ Moreover, the methods of arriving at eradication typically were in campaign-style. More than 100.000 poor villages were targeted and visited for assessment, quick build-ups or easy infrastructural deficiencies were constructed and millions of households had to sign forms testifying that all in the household had received the money. Here some ‘adulteration’ took place because frequently 4 or 5 members had to share the money, thereby again falling below the poverty line. Martin Raiser (World Bank) is quoted saying that, for all the praise about successful eradication, “we are less sure it

²⁰⁶ China Power Team (2020),

²⁰⁷ There is data on rural poverty (at \$ 1.90 at 2010 prices, and adjusted) but data on urban poverty is not published.

is sustainable or cost effective.”²⁰⁸ For the Party leadership, what matters is presumably the socio-political stability in the country, in the run-up to the 100th birthday celebration of the CCP in the summer of 2021. And a victory over poverty is likely to help. The lingering doubts over lingering poverty are also fueled by a speech of PM Li Keqiang in May 2020 holding that there “are over 600 million people whose monthly income is barely 1000 yuan (some US\$ 140), not enough to rent a room in Chinese cities.”²⁰⁹ Since that amount is less than US\$ 5 a day, and it does not even enable renting a room, let alone to eat and ‘live’, how can poverty have been eradicated? And 600 million people amounts to some 42% of the population!

But there is also a painful income disparity between rich and poor. Although the attack on poverty is helpful to some extent, the ‘attack on inequality’ has never been launched despite China’s history as an egalitarian country in the second half of the 20th century. Once the market oriented reforms were in full swing (say, as off the late 1980s), inequality in China began to sharply increase. A striking illustration of inequality as affected by social security has been given by Li Shi (2016) on the basis of the Gini-coefficient of inequality and the corrections of the coefficient due to social security measures. In 2015 the Gini coefficient was 0.47 (which indicates fairly sharp inequality), a little down from its peak in 2008. First, there is the decline from Gini based on market incomes only (0.52) to Gini of disposable incomes (0.44). This decline is hardly due to taxation (hence, incomparable with the EU ; taxation in China occurs mainly via indirect taxes) but to public transfers and private transfers (see also Table 4). When comparing urban and rural China (2013), Shi (op. cit.) finds that public transfers reduce the Gini by 21% in urban areas whereas this effect is only 6% in rural areas; in contrast, private transfers (in practice, remittances

208 Gao Feng, China claims it has eliminated poverty, but is it true?, VOA News on China, 3 March 2021, <https://www.voanews.com/east-asia-pacific/voa-news-china>. Note that nominal income in rural areas is often profoundly affected by diseases (with incomplete coverage) and natural disasters, harder to fight than in cities.

209 Idem, Gao Feng, Recall the World Bank recently estimated that some 373 million live below \$ 5.50 a day in China.

mostly) in rural areas reduce the Gini by no less than 12% in sharp contrast with urban areas (only 2%). A second marked difference is that in rural areas the retired pension barely reduces the Gini, but in urban areas the reduction is 19%. Here one observes a clear proof of the low take-up of pension arrangements by migrant workers, as discussed above. In other words, social security has now reached rural China but it does very little to mitigate income disparities with urban citizens. Shi (op. cit.) also presents a comparison of Gini of 22 European countries with China and the impact of social security. The average decline of Gini is around 30% in Europe compared to a decline of 8% in China. The difference is telling. Moreover, what is not included is taxation of income, barely an issue in China (see Table 4). In Europe, income tax is a major equalizer as well. In other words, when including the impact of income taxation on the Gini, it would undoubtedly be significantly lower in Europe and not in China.

Human Development – China's social predicament

In Box 9 we provided a snapshot of China's HDI status and developments in the early 1990s. In those days China still was a relatively poor though rapidly growing developing country. In the present chapter the idea is to present the HDI of the latest year (2018) and the trends between 1995 and 2018. For both, trends in the three components of the HDI (per capita income, a public health indicator, and an education indicator) will be analysed too. The three components of the HDI are not independent: other things equal and over a longer period, both health and education are critical determinants of per capita incomes and their trend growth. Altogether, this generates a richer and more valuable picture of the social predicament of Chinese citizens and/or workers. Ideally, this predicament would consist of enjoying (i) core labour rights, (ii) appropriate social protection, (iii) typical OECD-levels HDI and trends. Although public health and education are arche-typical domestic policies, hardly ever the subject of (bilateral) treaty commitments linked to trade and investment, for the social pre-

dicament of citizens and workers the two factors are indispensable, and not just social protection and enjoying labour rights..

How China has improved on Human Development: 1995 – 2018

China has greatly improved on human development in these 23 years. Not only did it move up steadily from 0.617 in 1995 to 0.731 in 2018, it also surpassed the world HDI in 2008 or 2009, see Figure 11. China moved up in the HDI ranking worldwide but not spectacularly because other developing countries also markedly improved their HDI. This is especially the case for the 5 BRICS: India and Russia and to a lesser extent Brazil (and South Africa only modestly) have improved their HDI considerably, as shown in Table 5. It is remarkable that, whereas most OECD countries are in the very top and fairly stable, the United States, which was 2nd in 1990, had fallen to 15th place in 2019.

Figure 11: Trend of Human Development Indices in China: 1995-2018



Table 5: HDI trends of the BRICS compared: 1995 - 2018

	Brazil	Russia	India	China	South Africa
1995	0.651	0.701	0.463	0.548	0.652
2000	0.684	0.721	0.497	0.593	0.629
2010	0.726	0.780	0.581	0.701	0.662
2018	0.761	0.824	0.647	0.758	0.705

Figure 12 depicts the HDI trend since 1995 for China, with its three components. Life expectancy has always dominated, and still did in 2018 (Figure 13), although the distance with education and income has shrunk appreciably. One can again compare this with other countries, of course, but it is more sensible to realise that the social predicament of Chinese citizens has improved a great deal, which is what matters first of all. Figure 12 shows that the health index has consistently remained firmly above the world levels, even though both increased steadily since 1995. At the same time, despite China's strong health trend performance, it nevertheless takes no higher place than 59th. However, in health it is the best of the BRICS in 1995 and still in 2018 (narrowly above Brazil).

Unsurprisingly, the fastest rise is in per capita incomes given China's growth machine: from a p.c. income of roughly one quarter of the world level in 1995, it rose to 8 times as much, ending slightly above the 2018 world level. Amongst the BRICS only Russia has a (much) higher p.c. income, but that is partly the result of Russia's massive natural resources. In education two sub-indicators are used: the actual number of schooling years (of cohorts now having left school) and the expected years of schooling (of newly arriving pupils). In the actual number of years of schooling, China climbed from a poor 5.7 years in 1995 to 7.9 years in 2018, whereas the expected years of schooling shot up from 9.1 years in 1995 to no less than 13.9 years in 2018. China's actual years of schooling stayed below the world average, in 1995 and still in 2018. This can be considered a weakness. On the other hand, although the expected years of schooling in 1995 were behind the world (by half a year), in 2018 China was ahead of the world by 1.2 years, a firm catch-up.

Figure 12: Trend in HDI components in China: health, education and income 1995-2018

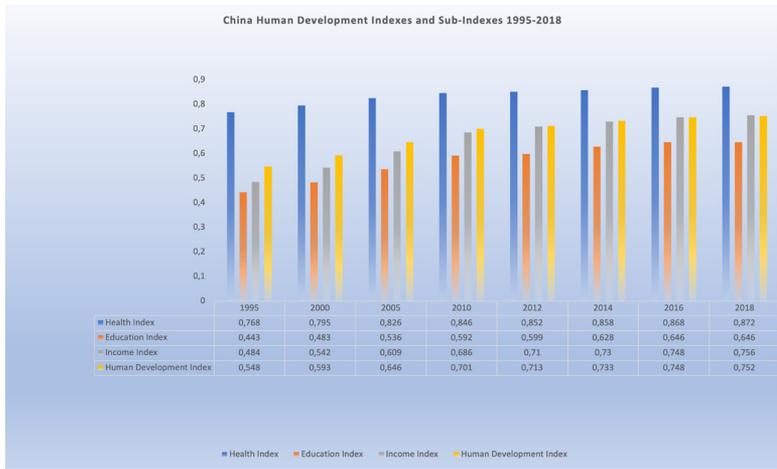
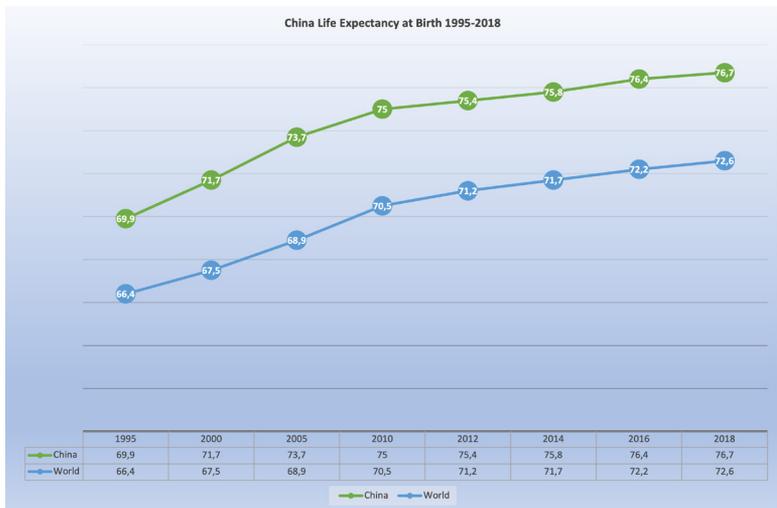


Figure 13: China's health (life expectancy at birth) index: 1995-2018



It is striking from the surveyed trends how long it takes, even when underlying economic growth is so powerful as it was in China, before one begins to approach HDI levels of OECD or EU countries. It would go too far to discuss this in detail for 27 coun-

tries plus China and for the HDI and its components. In 1995 China's HDI (0.548) was significantly below the lowest four (future) EU countries, i.e. those below 0.700: Bulgaria, Croatia, Latvia and Romania. By 2018 when China had climbed to 0.758, the gap with the lowest four (between 0.816 and 0.845) had narrowed appreciably. It is thus conceivable that China might catch up in Human Development with the lowest performing EU countries in 6 – 8 years from today (if trends remain unchanged). It should nevertheless be pointed out that China is still far from the top four EU performers in HDI which all score above 0.930. Zooming in on the components, China has already surpassed (narrowly) the 4 lowest performers in the EU on health,²¹⁰ but did not come even close to the lowest performer in the EU on years of schooling (7.9 years for China, against 9.2 for Portugal, with other EU much higher), getting close to the lowest three in the EU for expected years of schooling (13.9 for China as against 14.2 – 14.5²¹¹) and beginning to near the lowest three performers in terms of p.c. income.²¹²

These trends are illustrative for a China which is no longer merely 'growing at all costs'. China cherishes a far richer development concept and this is not to be described as mere propaganda or paper work. The 18th Party Congress in 2012 called for the 'construction of a harmonious society', with an emphasis on education whilst improving people's health. The ambition further increased in 2015 with the vision of 'innovative, coordinated, green, open and shared' development, a vision that centers the concept of human development.²¹³ In 2016 the 'Healthy China 2030 Plan' was launched. The HDI shows unmistakably that the social predicament of Chinese citizens has enormously improved since 1995 and this trend continues in a climate of lower (though still impressive) economic growth rates. These trends should help to solidify a foundation for secular EU /China cooperation in social aspects of sustainable development.

210 Bulgaria, Latvia, Lithuania and Romania.

211 For Luxembourg, Slovakia and Romania.

212 For China in 2018 in 2011 US \$ (PPP) 16127 ; for Bulgaria, Croatia and Romania between 19646 – 23906.

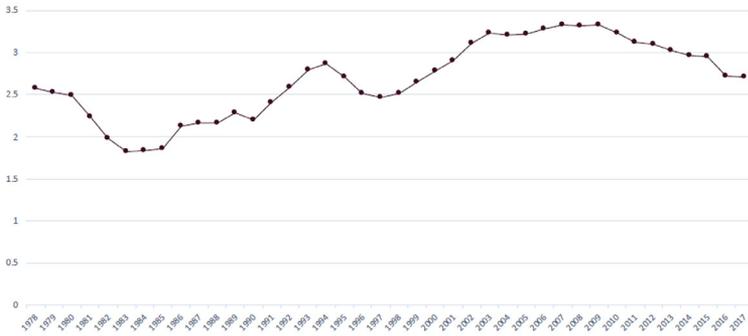
213 See China's HD report 2020, p. 37 for both citations.

The urban/rural divide in China's Human Development

It has long been held that the income gap between rural and urban citizens in China was so large that one could speak of a deep divide. Whilst the North-East, East and South East of the country were growing fast, becoming even affluent, this would not or much less be the case for rural areas. But also rural health and educational opportunities were widely regarded as inferior to those of urban citizens.

With new systematic and long-term data available, this issue can now be discussed with better factual evidence.²¹⁴ At a very aggregate level Figure 14 shows 40 years of the ratio of p.c. incomes of urban and rural resident. It shows considerable fluctuations but the 2017 ratio is almost identical to the 1978 ratio, that is, urban p.c. income is some 2.6 times the rural p.c. income, on aggregate. It is not the purpose of this paper to assess this measurement of the divide. The ratio does not seem to be extreme compared to other countries but it is certainly possible to find quite a few countries where the ratio is smaller, partly by policy design. However, it depends how rural and urban are delineated, whether it is pre- or post-tax, and whether ex-post compensatory measures for rural reduce the differences. It might also be the case – indeed, it is likely – that the effective purchasing power of (say) 100 yuan differs between rural and urban. In any event, since the rather high overall inequality in 2007-2009, the Chinese government has made significant efforts to address the divide in a number of ways. This seems to have helped.

214 All of the following (unless indicated) is from China's HD report 2020

Figure 14: China's ratio of urban over rural p.c. incomes: 1978 - 2017

Source: *China Human Development Report 2020*, p. 37

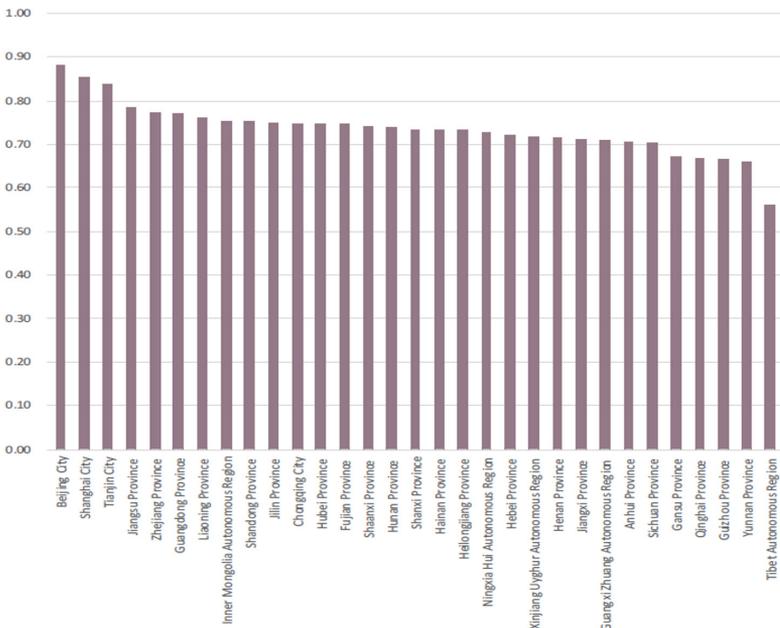
One reason is that the fight against poverty in China – important for decades – has become quite successful precisely in the country-side. “From 2013 to 2017, China’s rural poor population decreased by 13 million a year.” (op. cit., p. 38) and the poverty incidence fell from 10.2% in 2012 to 3.1% at the end of 2017. Average incomes have increased spectacularly: the p.c. income index of the HDI for the four super-regions grew between 1982 and 2017 with 127% (Eastern), 171% (Central, from a very low level), 181% (Western, idem) and 97% (North-East, with a lot of old heavy industry). In terms of 2011 US \$ (PPP), in absolute terms, the gap in 2017 between the coastal / Eastern region (\$ 21,221) and the other three (\$ 11,424 – \$ 12,772) remains considerable, however.

In the following, the discussion will be conducted with HDI data only. The HDI for the four super-regions were at first characterized by a major gap between the North-East region and the Eastern region, on the one hand, and the Western and Central regions, on the other hand. But in 2017 these contrasts had all but disappeared, put differently, the coefficient of variation²¹⁵ fell from 10.6% in 1982 to only 3.5% in 2017. Another clear indication that there is no major urban/rural divide in HDI terms anymore is given in Figure 15 which depicts the HDI of most Chinese provinces in 2017.

215 A dispersion measure, defined as the ratio of the standard deviation to the mean.

Apart from Tibet as an outlier, provincial HDIs are between 0.67 and 0.88, but without the three leading cities, the HDIs are really rather close. It follows that inter-provincial HDI disparities are moderate for the most part. Nevertheless, there is some concern that – even when HDI levels are satisfactory for China or for a province – inequalities are disturbing. Inequalities occur only in some provinces and not necessarily the traditionally ‘poor’ provinces. HDI are now known even at the level of prefecture-level cities (i.e. within provinces) and yields some unexpected results. Provinces like Shanxi, Fujian, Jiangxi and Shaanxi demonstrate a high level of HDI with small internal disparities whereas Xinjiang, Hunan, Hubei and Guangdong show great disparities, unexpectedly. Indeed, the most developed province in China – Guangdong – has very high disparities at cities’ level. Finally, HDI levels for women are more than 90% of the HDI for men, so gender disparities are generally small.

Figure 15: Level of provincial HDIs in China: 2017, 31 provinces



China's rural human capital gap and long-term economic growth

Unfortunately, there may well be a 'human capital gap' between the rural and urban areas in China. Its magnitude cannot be properly read from official HDI statistics. As shown in Figure 12, the education element of the HDI is the weakest of the three. It is split into two sub-components: the actual and the expected number of years of schooling. As shown, the actual number of schooling was still very poor in 1995 (less than 6 years) but it rose to 7.9 years in 2018, lower than the world average. The expected number of school years was 9.1 in 1995 and rose to 13.9 yrs in 2018, passing the world average in the meantime. These HDIs are weaker than the components for health and per capita income in China, but they are also conveying a false picture, as revealed by painstaking empirical work by a group of (mainly Chinese) scholars led by Scott Rozelle.²¹⁶ The misleading picture is the result of two aspects.

First, and long known informally, a China-wide HDI for education is almost useless unless further broken down into rural and urban HDIs. There is a 'human capital gap' between the rural areas and the urban ones. For a meaningful approach, one needs to understand this 'gap' and how it is gradually closing over time. For 2015 and for the age bracket of 25 yrs – 64 yrs, the gap is enormous: only 11.3% of workers from rural areas had attained at least high school education, in contrast with no less than 44% of urban individuals. Providing an order-of- magnitude of how many people are affected by this gap, the following data is telling: in 2014 871 mn Chinese had a rural hukou, of which 659 mn are of working age. Of these some 31% have migrated to cities to work, some 227 mn. Problems of obtaining good schooling (high schools) are considerable in rural areas but probably even bigger in urban ones due to outright discrimination of rural-hukou children, forcing them either to be 'left behind' at home with grandparents (in ages 0-17 yrs, some 60 mn) or following education on low-rated private

216 See Li, Loyalka, Rozelle & Wu (2017) and Khor, Pang, Liu, Chang, Mo & Rozelle (2016). More recent statistical confirmation and some policy recommendations are in Yu, Zhang, Wang, Dang, Abbey & Rozelle (2019).

migrants schools. There is a host of reasons why kids from rural areas do not take up high school or drop out in large numbers (explained in Li et al., 2017, pp. 6-8).

The second reason is that the official statistics – almost certainly also underlying the official HDI indices – on educational accomplishments are grossly inflated (since around 2003). In Khor et al (2016), this discovery is explained by the mismatch of the 2010 census data (direct measurement, highly reliable) and the data from the Ministry of education, largely based on data supplied by local and provincial officials, in turn influenced by artificial incentives and subsidies to present ‘better’ figures. For high school attendance, the exaggeration is some 50+% for 2010, which profoundly influences HDI data for education. Thus, HDI statistics on education as presented in this chapter cannot be relied upon as being as high as presented – sadly, China performs worse than official data tells us. However, the much more important inference is that this lower performance in Chinese human capital, at least in the country-side, has a major impact on the long-run economic growth of China for the (say) next two decades.

Instead of attaining secular economic growth of some 5% - 7%, as suggested in long-run forecasts, the corrected data for high school education (esp. in rural areas) as an important component of human capital strongly suggest a secular economic growth of some 3% annually (Li et al., 2017) for the period 2015 – 2035. In addition, it throws a more sombre light on the perspectives of rural youngsters, but this with a proviso. Indeed, one of the factors discouraging going to or staying in high school is the increasing scarcity of low skilled workers, inducing swiftly rising real wages for them. Going to school therefore presents them with an opportunity cost that – together with other factors (like high tuition for rural high schools ; lower quality schools, making it difficult to pass the country-wide college entry examination) – might be assessed as too high for many. With a secular growth rate of some 3%, there is a risk that China’s fear of getting stuck in the middle income trap may still be hard to escape from.

4.5 25 years of EU/China cooperation in the green pillar of sustainable development

The last 25 years of EU/China relations have witnessed great activism in cooperation and other initiatives in environmental and climate issues. The short survey is focused on the multilateral and bilateral approaches. The multilateral approach is about China's and the EU's energetic participation in UN-related and other multilateral organisations or initiatives. Even when the EU and China were not deliberately working together directly in these fora, there is presumably a common orientation, but more often than not also similar concrete obligations and detailed specifications of commitments. The bilateral approach began some 25 years ago in the first-ever Commission policy paper on EU/China relations.²¹⁷ A huge tail of subsequent policy papers, strategy documents, declarations and reports followed ever since, quite apart from a long list of projects. The short survey will stick to the essentials.

Multilateral policy convergence between the EU and China

China and the EU are both signatories of a range of important Multilateral Environmental Agreements (MEAs). Indeed, much of bilateral commitments on environment and climate in sustainable development chapters of EU FTAs, in fact hinges critically on multilateral treaties and active cooperation. Even when China and the EU have no FTA, there is a lot of overlap in codified preferences of the two partners in the multilateral arena. Table 1 provides an overview of no less than 12 MEAs at stake in order to compare the multilateral environmental 'acquis', as it were, between China and the EU in 2020. In fact, there is much more: in addition to the 12 MEAs, there are in total 11 'amendments' (some of which of great importance), 3 extra Protocols and 4 supplementary conventions or treaties, all signed and mostly ratified by China. For all the MEAs in Table 1 there is full formal convergence between

217 A long term policy for China Europe relations, COM (1995) 279. There is no web link of this paper. However, it can be found in a reference volume edited by Francis Snyder (ed., 2009, pp. 340 - 369).

the EU and China, in other words, in terms of strategic aims and the ensuing implementation and enforcement (where relevant) of these treaties, China and the EU are in full agreement. The detailed obligations might differ sometimes – as a function of the level of development and other factors – but the strategic convergence over a broad spectrum of environmental policy areas is very clear.

One can argue that the formal convergence of a broad spectrum of treaties and their respective amendments is not so special as the majority of these agreements is ratified by an overwhelming majority of UN countries. What China does in this respect is apparently driven largely, if not entirely, by the importance of the substance of these agreements and by multilateral processes which can only be influenced to a limited degree by EU strategies, and even less by sustainable development aspects of EU trade policy (which is relatively recent). EU's activism in a number of treaty discussions, both during negotiations and after ratification, will also focus on ensuring China's commitments where possible, but a detailed study of how diplomacy fared in each and every case is far beyond the scope of the present contribution.

Curiously, it is exceedingly rare to find a specification about MEAs as rich as Table 1.²¹⁸ The Table is helpful when assessing the multilateral environmental preferences of China and the EU. If and insofar as any future FTA with China would seek to specify references to MEAs as one element of a sustainable development chapter, Table 1 makes immediately clear that such an overall framework for a common multilateral basis is readily available. Without a FTA, as nowadays, it is nevertheless comforting that China's and EU's positions and international commitments overlap so much that the term 'convergence' seems fully justified. However, some of these treaties have pathways of several decades and stretch over numerous items (or 'substances' or other elements) that some actual differences may remain relevant, at least for a while.

When looking at the same MEAs for the EU and China, it is easy to forget that China still enjoyed developing country status

²¹⁸ The exception is probably the 27 Conventions underlying GSP+ (on 'green' and 'labour' and 'governance').

in the 1990s and the early 2000s. Thus, although both the EU and China may have ratified the same treaty, the factual obligations at a certain moment in time might differ significantly. One example is offered by the Kyoto Protocol. China became a leading user of the CDM, the Clean Development Mechanism of the Kyoto Protocol,²¹⁹ resulting in efficient technology being installed in China paid by EU companies or EU countries stuck with a too high emission level at a certain point in time (see the detailed Box 5 in Pelkmans, 2021 for an elaborate analysis of the joint dominance of China and the EU in CDM). Recently, the EU and China have worked closely together in the run-up of the Paris Agreement on climate, which is significant and relevant for decades ahead. Testing how ‘deep’ these Paris commitments really are was attempted in the COPs of Katowice and in Madrid. The provisional conclusion is that – when it comes to details of implementation and speed of adjustment – China is more prudent or possibly less credible than the EU, for now. Yet there are still many years to go. But also the EU faces very major challenges in climate strategy and the new Green Deal shows how ambitious it is to be consistent with the full implications of a net-zero-carbon European economy and society (by 2050).

Table 6 aims to complement this evidence on ‘policy convergence’ by comparing China’s engagement with multilateral trade-and-investment relevant commitments with what beneficiary countries of the EU GSP+ are obliged to adhere to. Today’s EU GSP+ requires ratification of 27 Conventions in four areas: environmental/climate protection, good governance, human rights and labour rights. After 2023 the revised GSP+ requirements imply that another 4 Conventions, one Protocol and an Agreement will be added, whereas one Protocol is dropped (because it will be replaced). Hence, the total list of commitments will amount to 32. Table 6 verifies for all these 32 items what China has ratified and also compares these with what Table 1 comprises (MEAs only) and what EPA, ch. 16 either specifies or implies via less specific but

219 One of the ‘flexibilities’ of the Protocol.

nonetheless relevant pledges. The obvious reason behind this comparison is that China is far more successful and developed than typical GSP+ countries, and is, moreover, the EU's biggest or second-biggest trading partner. It would be very difficult indeed for the EU to explain and justify why China – after 25 years of intense bilateral cooperation in sustainable development – would turn out not to be as ambitious as the nine GSP+ countries and not show at least a similar degree of 'convergence' in ratifying these multilateral commitments.

Table 6: China's multilateral convergence: Ratification of GSP+ & Other Conventions

	Required GSP+ Conventions	Ratification by China	In Table 1 (MEAs only)	EPA, ch. 16 ; reference or implied
1. EC	Convention on international trade in endangered species of wild fauna and flora [CITES, 1973]	Yes,	Yes	Yes, Art. 16.6
2. EC	Montreal Protocol on substances that deplete the ozone layer [1987]	Yes	Yes	No ; also the (relevant) term 'public health' is absent in Ch. 16
3. EC	Basel Convention on the control of transboundary movements of hazardous wastes and their disposal [1989]	Yes	Yes	No ; idem, on 'public health'
4. EC	Convention on Biological Diversity [1992]	Yes	Yes	Yes, Art. 16.6
5. EC	UN Framework Convention on Climate Change [1992]	Yes	Yes	Yes, Art. 16.4

6. EC	Cartagena Protocol on Biosafety [2000]	Yes	Yes	Yes, implied in Art. 16.6 sub 1 by “and its protocols”
7. EC	Stockholm Convention on persistent organic pollutants [2001]	Yes	Yes	No, possibly implied by phrases in Art.16.5
8. EC	Kyoto Protocol to the UN Framework Convention on Climate Change, today <i>superseded by the Paris [Climate] Agreement</i>	Yes	Yes	Yes, implied in Art. 16.4 sub 4 where the <i>Paris Agreement</i> is specified
9. GG	UN Single Convention on narcotic drugs, as amended in 1975	Yes, 1985 *	n.a.	n.a.
10. GG	UN Convention on psychotropic Substances [1971]	Yes, 1985 *	n.a.	n.a.
11. GG	UN Convention against illicit traffic in narcotic drugs and psychotropic substances [1988]	Yes, 1988 *	n.a.	n.a.
12. GG	UN Convention against corruption [2003]	Yes, 2006	n.a.	n.a.
13. HR	Convention on the prevention and punishment of the crime of genocide [1951]	Yes but no ratification; binding on all UN countries	n.a.	n.a.
14. HR	International Convention on the elimination of all forms of racial discrimination [1969]	Yes, 1981	n.a.	n.a.
15. HR	International Covenant on Civil and Political Rights [1976]	Signature only, 1998	n.a.	n.a.

16. HR	International Covenant on Economic, Social and Cultural Rights [1976]	Yes, signed 1997; 2001 ratified	n.a.	n.a.
17. HR	Convention on the elimination of all forms of discrimination against women [1979]	Yes, 1980	n.a.	n.a.
18. HR	Convention against torture and other cruel, inhuman or degrading treatment or punishment [1987]	Yes, 1988	n.a.	n.a.
19. HR	Convention on the rights of the child [1990]	Yes, 1992	n.a.	n.a.
20. LR	Freedom of association and protection of the right to organise [1948 ; ILO nr. 87; ILO 'core']	No	n.a.	Implied in Art. 16.1 sub 1 and specific in Art. 16.3 sub 2
21. LR	Right to organise and collective bargaining Convention [1949; ILO nr. 98 ; ILO 'core']	No	n.a.	idem
22. LR	Forced Labour Convention [1930 ; ILO nr. 29 ; ILO 'core' and its 2014 Protocol]	No	n.a.	idem
23. LR	Abolition of Forced Labour Convention [1957; ILO nr. 105; ILO 'core']	No	n.a.	idem
24. LR	Minimum Age Convention [1973; ILO nr. 138 ; ILO 'core']	Yes, 1999	n.a.	Implied in Art. 16.3, sub 2 and 3
25. LR	Worst Forms of Child Labour Convention [1999; ILO nr. 182; ILO 'core']	Yes, 2002	n.a.	Specified in Art. 16.3 sub 2
26. LR	Equal Remuneration Convention [1951; ILO nr. 100 ; ILO 'core']	Yes, 1990	n.a.	Implied in Art. 16.2
27. HR	Discrimination (Employment and Occupation) Convention [1958; ILO nr. 111; ILO 'core']	Yes, 2006	n.a.	Implied in Art. 16.2 sub 2

28. HR	Optional Protocol to the Convention on the rights of the child on the involvement of children in armed conflict [2000]	Yes, 2008	n.a.	n.a.
29. HR	Convention on the rights of persons with disabilities [2007]	Yes, 2008	n.a.	n.a.
30. LR	Convention on Labour Inspection [1947; ILO nr. 81]	No	n.a.	n.a.
31. LR	Convention on Tripartite Consultations [1976; ILO nr. 144]	Yes, 1990	n.a.	Implied by Art. 16.3
32. GG	UN Convention against Transnational Organised Crime [2000]	Yes, 2003	n.a.	n.a.

*Notes: EC = environmental /climate ; GG = good governance; HR = human rights ; LR = labour rights ; n.a. = not applicable ; * means: with some substantive reservations.*

China has ratified 26 of the 32 Conventions and Protocols required for GSP+. In addition, in one case [item 15] it has only signed, not ratified. In five cases it has simply neither ratified nor signed at all. This is a fairly high score but not good enough. It means that the 9 GSP+ countries²²⁰ do better and none of these countries comes near to the GDP per capita of China. Indeed, the problem is *not* the level of development. It is a direct consequence of the extreme controls the Chinese government and the monopolist Party (CCP) wish to maintain and hence a measure of authoritarian governance. This is immediately clear once one considers the nature of the 5 Conventions not signed or ratified. The items 20 and 21 constitute the most fundamental Conventions for workers to ensure that they can organise themselves the way they deem fit, with all non-violent methods available, in order to pro-

²²⁰ Armenia, Bolivia, Cape Verde, Kyrgyzstan, Mongolia, Pakistan, the Philippines, Sri Lanka and Uzbekistan. Four countries are regarded as 'prospective GSP+ countries' : Bangla Desh, Lao PDR, Nepal and Tajikistan.

mote their cause, protect their rights and improve their standard of living. The items 22 and 23 (both on forced labour) reflect harsh forms of punishment. Penal law in China would have to be transformed before one can expect their ratification. In the longer run, stimulated by the CAI negotiations, this transformation might be possible and a more dignified system might be installed. And item 30, on labour inspections represents yet another system of control, and therefore an instrument of those in power rather than a judicial and administrative tool to protect workers and verify independently how they are treated.

Finally, item 15 is a human rights Covenant. Whereas China has much improved in economic rights, and partially in social rights, the EU-China Dialogues on Human Rights show that civil and political rights leave much to be desired. The CCP as well as the government prefer to retain enough discretion and freedom to contain the spreading of defiant ideas and to intervene in ways (and often without transparency) that shield their power and preempt protest, let alone uprising. Ratifying the Civil and Political Rights Covenant would therefore be impossible, or amount to a non-violent revolution.

With respect to MEAs, the overlap with Table 1 is complete. Indeed, several items in Table 1 are not even included in Table 6 (e.g. London Convention on marine pollution ; the Ramsar Convention on (international) wetlands ; Vienna Convention on nuclear safety ; UN Convention on combatting desertification, where China is also a 'partner' as is the EU; the Rotterdam Convention on prior consent of shipping hazardous waste).

The conclusion is that China has realised a far-reaching degree of policy convergence when it comes to multilateral commitments. However, although performing well in environment and better and better in climate issues, the country would not stand the test of GSP+ , a test that 13 other countries – all less developed – would pass or have already passed.

Bilateral dialogues and cooperation on sustainable development, the early days

Already in 1994, when a general EU/China perspective had yet to be formulated, the EU and China began an energy Dialogue. Also before the 1995 Commission paper (see footnote 217) Member States had already begun funding projects inspired by sustainable development in China, usually from a development perspective. There seems to be little systematic knowledge about this episode. The 1995 COM paper mentions the emergence of a working group (what later would become a policy Dialogue) in the following quote: “The environmental challenge faced by a rapidly developing China has been recognized by the Chinese government in its ‘Agenda21’ follow-up programme of the [1992] Rio summit , with its accompanying list of specific projects leading to sustainable development. The problems faced by China in the environmental field are partly systemic – a low awareness of the long-term consequences of inaction , partly technological, and partly because China does not believe that it can afford the costs of high environmental standards. Of critical importance is the need to integrate environmental considerations into other areas of policy, such as economic planning. A new working group has been set up to discuss how the EU can best help Chinese efforts. We need to identify a coherent European contribution in a field where there is multiplicity of signals from the Chinese side.” (op. cit., pp. 352/3) The quote shows clearly that the EU intention is borne from development considerations, with China as a recipient. There is no suggestion yet of a genuine common interest or an EU-specific interest.

It would still be another 2 years before the European Commission would publish an ASEM-related paper on environment,²²¹ laying the basis for a proposal to enhance the working group between the EU and China to a Dialogue on ‘environment and sustainable development’ in the newly framed EU/China partner-

221 COM(1997)490 of 13 October 1997, Europe Asia cooperation in the field of environment

ship of 1998.²²² For China the Commission proposes to help China to “integrate environmental priorities – such as the prevention of industrial pollution and greenhouse gas emissions, and the conservation of biological diversity – further into national economic policy processes and into development schemes at regional and local levels. Where desirable, and in line with the Chinese objective of reducing poverty alleviation, projects should be integrated together.” A similar Commission line is followed for energy, helped by the existing energy dialogue. The Commission had also produced a Communication on a Europe-Asia cooperation strategy for energy (again, an ASEM type paper). It says that the EU should help China to develop efficient and clean industries and also establish a presence in its potentially lucrative market for green technology. Top priorities include energy efficiency, developing clean coal technologies, alternative energy sources, notably natural gas. The EU should seek to develop synergies with international financing institutions. The Commission advocates that the EIB (especially for energy) comes in to strengthen funding and expertise. The first conference on EU/China Energy cooperation was held in 1997 and a second one was to follow in 1998.

The 2000 Commission implementation report²²³ of the new EU/China Partnership is interesting on all the latest of the nearing WTO membership of China, but disappointing about environmental issues. There is talk about a 2 yrs programme (of SEPA?) since 1998 called Programme on Economic Planning and Environmental Protection, supported by the EU in a number of concrete ways, but little detail. The Commission paper explicitly refers to the 10th Five Year Plan of China (2001–2005), with a novel policy of sustainable development, in which a great emphasis seems to have been laid on the development of an environmental industry sector, where the EU sees opportunities.

222 In COM(1998)181 of 25 March 1998, Building a comprehensive partnership with China, in : Snyder (2009) op. cit., pp. 370-388.

223 See COM (2000)552 of 8 September 2000, in Snyder, op. cit., pp. 388-403.

The next implementation report [COM (2001) 265 of 15 May 2001]²²⁴ reflects deepening and widening of cooperation in environment. The bilateral environmental WG is reviewed and an advocacy is made for a 'substantial and separate policy dialogue on environmental issues of mutual interest' with SEPA. Also to promote common interests in the framework of MEAs. Assist China in a range of areas: sustainable forest management, sustainable land-use, land planning and management, water resource management, sustainable energy production & marketing, air pollution and measures to combat climate change. Moreover, to develop cooperation projects on a range of aspects: 7 in total, very broad altogether. Specifically on energy, apart from the 4th EU/China Energy cooperation conference, a new policy dialogue is proposed and a project on how to assist (knowledge transfer to) China in reducing the environmental impact of its energy production and consumption.

Two years later the Commission²²⁵ publishes 'A maturing partnership – shared interests and challenges in EU/China relations' in which a 'strategic partnership' was proposed. This proposal was made in the knowledge that China was to publish its own EU strategy paper in October. The EU strategy paper calls for 'strengthening existing policy dialogues on environment and energy, and complement them by implementing planned cooperation projects on environmental capacity-building and sustainable development. Through the Commission's participation in the China Council for International Cooperation on Environment and Development [CCICED], [it can] help identify priorities for future cooperation in this area.' A telling quote for the purpose of the present eBook, a little further, reads that 'with the current shift ... away from traditional development projects towards *sectoral interventions which are increasingly aligned with EU policies*, a greater degree of involvement of line ministries is required' [*emphasis added*]. During the early days of bilateral cooperation on sustainable development, this is a rare admission that the bilat-

224 See in Snyder, op. cit., pp. 403-420.

225 See COM (2003) 533 of 10 September 2003, in Snyder, op. cit., pp. 459-489.

eral approach of the EU is shifting from a development perspective towards greater policy or strategic alignment.

In the Chinese 2003 EU strategy paper²²⁶ there is a strong section on environment, quoted here in full: “China-EU communication and cooperation in environmental protection should be stimulated and a mechanism of dialogue between the Chinese and EU environmental ministers launched. Framework documents on environmental cooperation should be formulated and discussions held on the establishment of information network on environmental cooperation. Bilateral cooperation should be strengthened on such issues as environmental legislation and management, climate change, bio-diversity protection, bio-safety management, and trade and environment.” The shorter section on energy cooperation is linked and reads as follows: “China-EU cooperation will be expanded in such fields as energy structure, clean energy, renewable energy, and energy efficiency and saving. Exchanges on energy development policies will be promoted. Efforts will be made to ensure a successful, EU-China energy conference. The energy WG mechanism will be strengthened. Training on energy technology and cooperation in demonstration projects will be boosted to promote application and transfer of technology”. Shortly after these two strategy papers from both sides, the EU/China summit of 2003 relabeled the strategic partnership into a ‘*strategic and comprehensive partnership*’. PM Wen Jiabao confirmed these heydays in the relationship when calling, in a series of speeches in 2004, for ‘vigorously developing’ this EU /China comprehensive strategic partnership.²²⁷

In short, the EU and China were clearly and actively engaged in bilateral efforts of an often practical nature to create or bolster capacity in energy and environment, besides almost permanent diplomatic efforts of the two partners to approximate their positions on a range of sustainable development related issues. The

226 China's EU policy paper, October 2003, in Snyder, 2009, op. cit., pp. 490 – 498.

227 See Snyder, 2009, op. cit. for his speeches in Brussels, Helsinki, Hanoi and The Hague, starting from p. 499.

approach also changed from an ad-hoc or patchwork one into a more solid and long-run bilateral relationship – the strategic and comprehensive partnership – which is considered as essential by both, even when in some episodes political irritations arose or the summit would be cancelled. In such troubled episodes, the practical cooperation on sustainable development remained untouched or even intensified.

Bilateral cooperation on sustainable development: 2003 – 2019

Although drawing a line between the ‘early days’ and EU-China SD-related cooperation after mid-2003 is always somewhat arbitrary, the solemn agreement on the political binding of a “strategic and comprehensive partnership” between China and the EU is a sound reason to do so. This partnership has withstood tensions of ‘high politics’ and embarrassment during the economic and financial crisis of 2009/10. It also has proven to be serious in terms of permanent activity, debates, cooperation and technical programmes. Of course, the present paper cannot and should not go into the numerous details of this relationship, but an attempt will be made to help the reader in appreciating the nature, diversity and intensity of the sustainable development elements of the partnership. The critical question remains whether an active and lively partnership does indeed bring about or at least stimulates greater convergence in sustainable development between China and the EU. Conveying what the EU/China partnership in sustainable-development-related ²²⁸ policies has generated, will be done with the help of Table 7 and Table 8. Table 7 simply lists the activities and other highlights in the green pillar over the last 17 years or so, without ensuring that it is exhaustive.²²⁹ Table 8 provides some details of one – indeed major – activity: the 2016-2020 EU-China

228 For present purposes, only the environment & climate aspects, not the social elements.

229 The Table lists 7 energy, 9 environment/climate, and 2 sectoral initiatives. It is not – and cannot be – exhaustive because some initiatives led to bilateral projects which in turn developed sub-projects via delegated management (with several dozens of activities).

Roadmap on energy cooperation which overlaps partly with environment and climate.

Table 7: EU-China cooperation on energy/environment/climate: 2003 – 2019

(1st) year	Official title	Recent activity	Annotations
Energy			
1994	EU-China Energy Dialogue	2017	Now part of summit
2005	MoU EU-China Dialogue on energy and transport strategies		(probably split later)
2012	EU-China Joint Statement for enhanced Cooperation on electricity markets		(later submerged in 2016 Roadmap)
2013	EU-China Joint declaration on Energy Security		
2013	EU-China 2020 Strategic Agenda for Cooperation	For 6 years	Very wide spectrum of activities, incl. energy, environment & climate
2016	EU-China Roadmap on energy cooperation	2019	A wide and ambitious agenda on energy supply, energy demand and cross-cutting (see Table 4)
2019	Joint Statement on the implementation of the EU-China cooperation on Energy	9 April	Plus annex, interim report
Environment & climate			
2003	EU-China ministerial Dialogue on environmental policy	6th Dialogue, in 2016	

2005	EU-China Joint Statement on climate change (including climate partnership) Established a. China-EU Action Plan on Clean Coal b. China-EU Action Plan on industrial cooperation on energy efficiency and renewable energy	Permanent see below	
2006	EU-China CDM Facilitation project		Under the EU/China climate partnership
2010	Joint Statement on Dialogue and cooperation on climate change;		Under the EU/China climate partnership of 2005 (and even established a Climate Change hotline)
2011	EU-China Environmental Governance programme 2011-2015		
2012	EU-China Environmental Sustainability Programme		Supports the attainment of targets in the China 12th five -year Development Plan 2010-2015
2015	EU-China Joint Statement on climate change		Preparing the COP of Paris (Dec 2015)
2018	Joint leaders Statement on climate change and clean energy		
2018	MoU to enhance cooperation on emissions trading	July	Detailed technical support in testing phase of Chinese ETS

Forestry & water			
2009	BCM (Bilateral Cooperation mechanism) on Forests and against illegal logging	BCM Workplan in 2018 (8th)	
2010	China-EU water Platform (high level Dialogue)	Nov. 2019, 7th	

Table 7 shows clearly that the EU and China have been active and recently even very active on sustainable development issues and technical cooperation over more than one and a half decades.²³⁰ This was found at all levels from the EU-China summit to technical WGs and direct cooperation in China with officials and business where desirable (e.g. for CDM and later for emission trading). The cooperation has been linked to the five year plans of China²³¹ and to cooperation under international treaties. One can therefore maintain that the partners have undertaken, and on a permanent basis, an intense mode of cooperation with a view to pursue convergence in sustainable development related strategies, as much as possible. By way of illustration, Box 14 elaborates on the 2005 Climate Partnership which began quite ambitiously and has retained its activity level ever since.

230 It should be realized that it is not exhaustive. One major example is the EU-China Trade Project II from 2010 to 2016 which aimed to support the Chinese government trade reform and sustainable development agenda. Focussing mainly on customs and regulatory issues (including technical standards as well as SPS), it also dealt with sustainable development under 'cross-cutting issues'. One amongst several of the 400 activities in this massive project is the EU China Low Carbon Economy platform ; also Green Smart Cities was dealt with. See www.euctp.org/index.php/en/project-background.html and its newsletters.

231 As noted, for the 12th plan explicitly. EU experts are also members of the CCICED, an advisory body appointed by the Chinese government. A recent report (2019) by the CCICED specifies the recommendations for the 14th Plan (2020-2025) : www.iisd.org/sites/default/files/publications/cciced/agm/cciced-progress-report-2019-en.pdf

Box 14: The EU/China Partnership on Climate Change, 2005

The 2005 EU/China Partnership on Climate Change is a short but rich document, with a number of off-springs which highlight its scope and ambition. As noted previously, it was preceded by various joint activities on climate and environment in the period 1998-2003 (about which little has been published) emerging from the general 'strategic partnership' started in 1998. In 2003 the ministerial Dialogue on environmental policy was initiated and prepared the ground for this pathbreaking Climate Partnership. Textually, it consists of two documents. The Joint Declaration on Climate Change (of 2 September 2005) is annexed to a background Memo²³² explaining the partnership and background. It confirms two China-EU Actions Plans, one on Clean Coal and one on Energy Efficiency and Renewables Energies which had already been agreed in March 2005. More specifically, one concrete cooperation goal is to develop and demonstrate, in China and the EU, advanced 'zero-emissions' coal technology on the basis of carbon capture and storage by 2020 (technical project that proved more difficult than expected).

Other examples of specific technical cooperation concern about methane recovery, hydrogen and power transmission. The Partnership also reinforces EU-China cooperation on the Clean Development Mechanism (CDM), one of the 'flexibilities' of the Kyoto Protocol. It foresees a Dialogue on the further development of CDM post-2012 (the third stage of the ETS).

232 MEMO/05/209 of 2 Sept 2005, www.ec.europa.eu/clima/sites/files/international/cooperation/clima/docs/joint_declaration_ch_eu_en.pdf

Finally, five research streams were set up e.g. on vulnerabilities to climate change, on economic impacts of climate change in China, on awareness and on adaptation. Subsequently, the Climate Partnership was intensified with a range of new activities. It was reconfirmed with a Joint Statement on Dialogue and Cooperation on Climate Change in April 2010 and yet another Joint Declaration on Climate Change in June 2015 ‘... building on a decade of successful cooperation’ helping to prepare the ground for the Paris Agreement and agreeing on a host of ongoing and new activities.

As noted, a very concrete and market-based off-spring of the Climate Partnership is the promotion and facilitation of business projects in China under CDM. Whereas the rules and registration for CDM projects had been set up by the UNFCCC after Kyoto, China and EU investors have quickly dominated this form of making ‘green’ finance available.

How frantic EU/China cooperation in environment really was seems (too) little known and is apparently misjudged based on very partial information²³³. Therefore, it is interesting to ‘zoom in’ on yet another major example of recent EU-China (energy) cooperation, so as to appreciate the intensity of such cooperation. Table 8 summarizes the EU/China Roadmap on energy cooperation of 2016²³⁴, for this purpose. By means of this Roadmap “China and the EU have a mutual interest and role to promote low-carbon development, protect the environment, address climate change and encourage energy development”. The Roadmap distinguishes energy supply, energy demand and cross-cutting issues. Our summary has simplified the Roadmap somewhat.

233 For a sceptical view, see Farnell & Crookes (2016) but their environmental cases are only few and merely in a relatively short period and based on opinions of Commission officials, without specifics. Since reporting is weak and uneven, it is hard to assess.

234 https://ec.europa.eu/energy/sites/ener/files/documents/FINAL_EU_CHINA_ENERGY_ROADMAP_EN.pdf

Table 8: Summary of EU/China Roadmap on energy cooperation 2016-2020

Energy supply	Energy demand	Cross-cutting
renewables	Management methods to keep the energy system in balance	Energy regulation and pricing, build a cooperation platform on energy regulation
Trade & investment, reducing costs	Calculation methods for the appropriate energy mix	Coordination in regulatory policies, both by harmonising regulatory grid policies and transparent regulation of oil and gas pipeline infrastructure
Develop distributed generation and CHP (combined heat & power)	Electrical energy demand side management policies ; grid structure design ; cross-border & regional power transmission grid systems and (more) renewable energy	Share experiences on the reform of energy pricing and support policies; for e.g. renewable energy and natural gas markets
Expand the bio-gas sector	Energy efficiency in 3 applications: appliances, work towards harmonisation of energy labels of appliances/buildings, energy conservation standards for consumer goods, incl. mutual recognition of schemes	Energy and the environment (more) market mechanisms for environmental protection (market for green goods, and inciting cleaner production) Include energy efficiency in environmental guidelines Improve trade & investment conditions in energy
Power grids distributed networks and smart grids	Other cooperation on energy efficiency: increase business cooperation in eco-design and circular economy; market-oriented energy performance system	Engage in international energy institutions: support China's involvement; cooperate in the framework of the Energy Charter Treaty
Fossil fuels, joint platform for supply disruption	Not applicable	Not applicable
Efficient electricity generation from clean coal and gas	Not applicable	Not applicable
Nuclear safety	Not applicable	Not applicable

The Roadmap is quite broad and – in some areas - goes far e.g. ‘harmonising grid policies’ and cooperation in the framework of ‘the Energy Charter Treaty’, besides ambitious intentions in energy efficiency with respect to appliances and mutual recognition. Also the improvement of trade and investment conditions in energy might be seen as a move in the right direction.

Two decades of EU/China cooperation in the social pillar of sustainable development

The two principal EU/China Dialogues (one, started in 2005, on Employment and Social Policies, and the other initiated in 2009 on OSH) were accompanied by the three successive big projects (the one on Social Security [2006-2011] about which little seems published; the one on OSH in High Risk Sectors [2014-2019]; and the one on Social Protection Reform [2014 – 2019], which has been succeeded by a triangular collaboration between the EU, ILO and China.²³⁵ The striking omission is work or cooperation *on international labour standards* with China, although OSH constitutes a borderline case in this respect.

The EU/China Dialogue on Employment and Social Policies

After some preliminary discussions between the EU and China ever since 1995, an ‘employment-oriented’ MoU was signed on 5 September 2005 in Beijing. It established a High Level Dialogue on employment, social security and pension schemes, as it was specified at the time. Commissioner Spidla immediately broadened it on the spot calling it ‘... the first step to an exchange of experience regarding labour issues, corporate social responsibility and social dialogue’. The Dialogue and the projects in its wake clearly aim for mutual learning and capacity building. Spidla added that he looked

235 EU & ILO, 2019 – 2022, Improving China’s institutional capacity towards universal social protection, see https://www.ilo.org/beijing/what-we-do/projects/WCMS_713539/lang--en/index.htm

forward to explain the European social security system, presumably in the knowledge that the preparation of the first major EU/China project on social security (beginning in 2006) was completed. The explicit link with sustainable development followed in the EU-China summit of November 2007, noting that ‘our cooperation on employment and social affairs is an important element of the dialogue on sustainable development and decent work’. In turn, this led to a strengthening of the 2005 Dialogue in a new MoU in January 2008, stating that the work would also be more ‘prospective’, i.e. on long-run challenges and, on the Chinese side, would be supported by the Chinese Academy of Social Sciences.²³⁶

The set-up has been flexible and wide-ranging from the beginning. The declared link with sustainable development is more intentional than analytical because social protection has not initially been regarded as part of the sustainable development concept in FTAs that the EU concludes. It was mainly about international labour standards. However, with the ever greater emphasis on ‘decent work’ (cf. the EU-China summit of November 2007), a potentially large overlap with social protection has been introduced. Indeed, the term ‘decent work’ has crept into the text of more recent FTAs, which would seem to widen the social pillar of sustainable development enormously.

The documentation in the public domain about the Dialogue is very limited (and old links no longer work). But a recent meeting under the Dialogue demonstrated the wide and flexible set-up once again. The success of the Dialogue is hard to measure but it did generate a number of other more specific common activities, such as a targeted High Level Dialogue on OSH, and three large projects directly with the Chinese government (see below). Also the recent and current triangular work between the EU, the ILO and China originates from the Dialogue.

236 https://ec.europa.eu/commission/presscorner/detail/en/IP_08_30

EU-China social security reform project 2006-2010

The jointly funded²³⁷ social security project aimed to support the transition to a sustainable social security system in China which 'guarantees accessible, adequate and affordable social security benefits to all citizens.'²³⁸ One component was about supporting policy development, capacity building, exchange best practices and build up a Dialogue on social security between China and the EU. The second component is essentially about implementation via pilots in six provinces (Beijing, Gansu, Hunan, Jilin, Sichuan and Shan-dong), as a stepping stone for a national roll-out.

In order to clarify the applied nature of this project, some details are provided here. The second component is about activities in five specific areas: medical insurance, business processes in social security administration, activities in old-age insurance, advances in questions of work injury and social care for the elderly. In medical insurance technical assistance focused on development of diagnosis related groups, systems and coverage for outpatient care and e.g. an operational manual was developed in Gansu. In business processes, some 26 of 39 business processes in social security have been introduced and selected IT assessments have been carried out in 4 provinces. With respect to the activities on old-age, work focussed on the implementation of the planned rural pension and on the needs surveys to this effect. In work injury, the introduction of standards and guidelines for work injury rehabilitation has been stimulated as well as the establishment of rehabilitation institutes. With respect to social care for the elderly, training for social care managers (in Hunan) was provided, with follow-ups in other provinces ; in Sichuan a unified basic package for the elderly was defined, the costs estimated and tested in 2 cities in the province. Where training was provided, a typical comment was that (lower) managers were never given any training, implying that instructions were just supposed to be top-down.

237 Each partner for € 20 million.

238 The quote is from an updated fiche of 'eucss' about the project originating from the overall EuropeAid website (on 5 March 2010). [When accessing <http://www.eucss.org.cn> one enters a bookselling site!]

The project took place entirely in China and was managed from China, mostly by Chinese contractors. No matter how useful the project – which was clearly pragmatic and hands-on for those working with social security – has been, there is no publicly available report or any useful interim report or other publication. Indeed, in papers produced for the Social Protection Reform project (2014–2019), there is strong disapproval and disappointment about this lack of transparency.

Occupational Safety & Health: The Dialogue and the project for High-Risk sectors

The Occupational Safety & Health Dialogue started in 2009. Its purpose is to help improve working conditions, reduce work-related accidents and illness and thereby adhere to international standards contributing to decent work for all. It has continued until 2020. Apart from some conferences, little has been brought to the public domain. But that is not the case for a far more hands-on and fairly large project on OSH in high-risk sectors, in particular chemistry and coalmines. In the following the high-risk sectors project will be presented and discussed in detail, so as to demonstrate the utility of this EU /China endeavour.

Whilst two ‘social’ Dialogues are being held annually – the Employment and Social Policies Dialogue, starting 2005, and the Occupational Health & Safety Dialogue, as off 2009 – the second one generated a direct off-spring, called the EU-China Project on Occupational Safety and Health in High-Risk Sectors (2012–2016). Before going into the specific Project, it is useful to understand the general background of OSH²³⁹ in China. Although sporadic and ad-hoc interventions by the government already did occur during the pre-reform days in the 1960s–1980s²⁴⁰, the first law (on safety of mining) was enacted in 1992 (with further provisions on coal

239 In China there is a convention of splitting up OSH into OH [= occupational health] and OD [= occupational diseases]. When reading the literature, these 2 terms may be encountered frequently. The ILO and the WHO employ OSH as indeed most of the world does. The US and the EU call their relevant Agencies OSHA.

240 In particular, on the medical side via a health inspection system, also checking on industrial hygiene

mines safety inspection in 2000), followed by a fire prevention law in 1998. So, one may conclude that OSH became more prominent with increasing prosperity but at the same time with the much greater importance of private business in China (i.e. without the overall social protection, long guaranteed by SOEs). However, OSH strategy was addressed in earnest only from 2000 onwards. In 2001 the SAWS [State Administration of Work Safety] was established and soon elevated to ministerial level. In 2002 two more relevant laws followed.²⁴¹ But it would remain an uphill struggle for a long time, although China was wise enough to initiate a much closer cooperation with the ILO ever since 2002. China had already ratified 12 relevant ILO Conventions²⁴² and requested technical support for a range of sectors.²⁴³ Also a bi-annual China/ILO Forum on Work safety was set up in an attempt to stimulate better implementation of OSH measures. That China was getting much more serious in OSH legislation and implementation was also demonstrated by frantic legislative activity in Beijing. In seven years time, another eight regulatory initiatives were undertaken.²⁴⁴ The 11th Five years plan (2006-2010) gave OSH significant attention for the first time, with a number of initiatives and programmes. It was

241 First, the Law on Occupational Diseases Prevention and Control was enacted. Second, the Law on Work Safety was promulgated as well. These two laws, together with the new SAWS, dramatically improved the legal and operational basis for improving OSH in China

242 These are : the 1981 OSH Convention [155], the 1988 one on safety and health in construction [167], the 1990 one on chemicals, the 1921 weekly rest (for industry) one [14], the 1951 one on equal remuneration [100], the 1958 one on Discrimination in employment and occupation [111], the 1964 Employment Convention [122], the 1973 one on minimum age [138], the 1976 Convention on Tri-partite Consultation [144], the 1978 one on Labour Administration [150], the Vocational rehabilitation and employment (for disabled persons) [159] and the 1999 Convention on Worst Forms of Child Labour [182].

243 See for more detail, ILO (2010), Review of work safety and health inspection system in the PRC, August, see www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---lab_admin/documents/publication/wcms_240207.pdf

244 Such as Regulations on the safety administration of dangerous chemicals (2002), regulation on work-related injury insurances (2004), regulations on reporting, investigation and handling of work accidents (2007). In addition, the 2004 law on administrative supervision, administrative regulations on work safety of construction projects (2004), administrative punishment measures for violation of work safety (2007), regulations of duties of internal bodies and staff in SAWS (2008) and interim' rules on administration of occupational health in workplaces (2009).

during the 11th plan period that China and the EU decided to set up a regular OSH Dialogue, with the first meeting in 2009. It was quickly concluded that by far the worst problem of OSH in China was found in coal mining and, to some extent, in other high risk sectors. From this inference, the special EU-China Project on Occupational Health and Safety in High Risk sectors emerged.

Purpose, structure and results of the Project

The overall objective of the EUCOSH project²⁴⁵ is to help China “achieve effective standards of work safety and health in high-risk sectors comparable to those in the EU, including a zero-fatality rate.” Thus, the ambition was to aim high. The more specific purpose was “to develop China’s capacity at all appropriate levels to design and enforce an effective OSH strategy based on the principles of prevention and the direct involvement of workers in risk management”. The project was funded and implemented together with the ministry (SAWS) throughout. Also the immediate follow-up is a direct extension of the project.

The starting points of the project included:

- i. OSH laws and regulations are reasonably well developed (around 2010) in China but they are overly prescriptive and complex
- ii. There is a lack of capacity to enforce regulations
- iii. Legal responsibilities for OSH are imperfectly assigned, resulting in misaligned incentives
- iv. The notion of a ‘safety culture’ in enterprises is absent, with SAWS relying solely on legal mechanisms to enforce norms

The idea was to work directly and in detail with enterprises; six enterprises were selected: 2 coal mines, 2 non-coal mines, and

²⁴⁵ The used abbreviation of the High Risk Sectors project. We quote from the official summary dated April 2016 when the project was terminated. See The EU’s support to work safety in China, a brief summary of the EUCOSH project 2012-2016, www.sascharusch.de/resources/EUCOSH-Project-Summary-Report_small.pdf

2 chemical enterprises. For the many specific details we refer to Hu & Pelkmans (2021, section 9.3.1). That the interest from China was lively is also indicated by an EU-funded UK project on safety of coal mines in China undertaken just before EUCOSH.²⁴⁶ However, the overwhelming reason for sustained interest in best-practices on mining safety is the appalling record of China in (especially) coal mine safety which SAWS had been desperately trying to improve.

Chinese OSH in coal mines: improvements after decades of serious neglect

There are three social sustainability issues in coalmining in China. Each one of them is very problematic and the three together show a very painful degree of failure. Two of these are plain OSH issues and the third one is a pure but severe social (or inequality) question. There are reasons to believe that the situation has improved since the EUCOSH project was designed in 2011-2012, although not as much as would have been desirable. What is documented below refers to the situation around 2005 – 2010, that is, the basis for initiating the project.

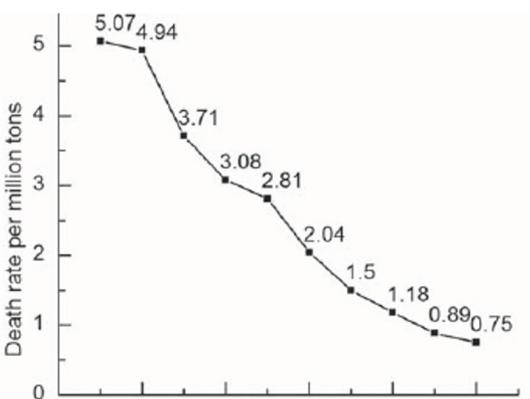
The three major issues²⁴⁷ are: (i) the extremely high fatality rate in Chinese coalmines, no matter what criteria are chosen to measure this ; (ii) the extremely high number of coalminers contracting pneumoconiosis (or ‘black lungs’ disease); and (iii) when not counting the (low risk) non-mining administrative staff and management, almost all miners are migrants from poor areas. Because their wages are much lower than average industrial wages, and their workweeks very long, the migrant workers are not only de facto discriminated, but simply bad off on several counts such as being subjected to high and multiple risks, whilst receiving low hourly wages, with no labour union to stand up for them.

246 See Wu, Feickert & Li (2009).

247 It should not be forgotten that coal is also a leading cause of serious pollution in China. See Pelkmans (2020).

The fatality risks in China's coalmines have come down considerably, but from incredibly high levels. Based on the China Coal Industry Yearbook (various years), a crude estimate is that the total number of deaths between 1949 and 2005 is more than 250.000! Since there are known instances of suppressing the facts about large incidents in the past and since reporting (both by local officials and by mine management) is incomplete, the fatality rate has been higher than official figures in the past. The life of a mine-worker seemed next to irrelevant (up to the year 2000 or so). Official fatality statistics provide the number of deaths per 1 million ton of coal produced. In 1949 this rate was 22.5. In Figure 16 it can be observed that this had come down to 5.07 in 2000 and declined further to 0.75, a significant further fall. This rate – achieved after decades of attempts to accomplish low-risk coalmining – is however still a large multiple of e.g. the US²⁴⁸ rate in the same period, namely hovering between 0.02 and 0.05 – in other words, the (official) Chinese rate is some 15 – 25 times the US rate.²⁴⁹

Figure 16: Fatality rate of China's coal mines: deaths per million tons (2000-2010)



Source: *Chu et al., 2016*

248 A large coal producer, unlike the EU (of today)

249 See the extensive surveys by Tu Jianjun (2007) and by Chu, Jain, Muradian & Zhang (2016). It should be noted that China has far more deep coalmines than the US and that risks may also increase because many Chinese mines are in areas with high gas and high groundwater pressure.

A comparison with India shows that China is uniquely weak in coal mine safety: already in 2000 the Indian fatality rate was 0.43 and this fell to 0.114 in 2010, about one-sixth of China (Chu et al., 2016). Some 80% of all fatalities in coal mining worldwide takes place in China, grossly disproportionate given China's share in global GDP, indeed even given China's share of world coal output (which grew to some 50% in 2018). It should also not be forgotten that Chinese coal production has increased – in the same period – at a rate of some 10% a year, so the absolute number of deaths tends to decrease at a slower rate than the fatality rate. In the period 2001 – 2012 (cf. Chu et al., op. cit) there were 30 848 accidents reported with a total of 51 232 fatalities. In other words, coal mining has remained a very risky activity, be it only less so than before. That said, there is no denying that the number of (officially reported) casualties has fallen quite a lot: from 6995 in 2002 to 1384 in 2012. A large share of this reduction has been accomplished by closing thousands of illegal (small) mines which often had safety levels far below Chinese standards and without almost any OSH policy and rules.

More difficult has been the effective lowering of OSH risks in the numerous TVE mines. The Township and Village Enterprises were discussed previously as early specialists in textiles & clothing, consumer electronics and handtools. In fact, TVEs in mining were the very first enterprises allowed when the 1978 reforms were initiated (and in small numbers even before that date because they could easily attract peasants). Although at first not truly private companies - their origins were the village communities – by the early 1990s they were turning into profit-seeking enterprises, and later became private corporations. It turned out that they assumed extreme measures to maintain high profitability, including exposing their miners to high risks (so, avoiding costly OSH measures and equipment), forcing miners to make long working weeks (routinely more or much more than 50 hours underground) at relatively low wages, avoiding injury or death liability or any other insurance (and paying very low compensation to families in case of casualties) whilst exercising repressive action in the mines in

case of protests or wild-cat strikes. Only in most of the SOE mines was the OSH situation better, or rather less bad. The situation in China's mines has long been miserable and this is not explained by China's (then still) developing status.

Why Chinese OSH efforts in coalmining only slowly gain effectiveness

There are nine reasons why OSH in China's coal mines is so difficult to accomplish effectively.²⁵⁰ Together, these reasons clarify that a sound and ambitious EU project EUCOSH and High Level Dialogues on OSH can contribute but are nevertheless bound to remain relatively ineffective without solving deep-rooted fault-lines in China itself. We specify four of them here:

1. China has a relatively high share of underground coalmining, with (far) lower productivity than surface mining and higher risks
2. As noted, China has many coal mines in areas with high gas pressures and high groundwater pressures. These are more likely to cause gas explosions, flooding and roof collapse.
3. Because of the very low productivity, no less than 5 million workers are needed to meet the (around 2005) growing demand for coal. This leads to overcrowded mines, hence high fatality rates when accidents happen.
4. The entry of TVEs has given a tremendous boost to coal output but amounted to a disaster for safety. By 1995 TVEs had a coal output share in China of 46%, after which a gradual decline set in – in 1991 there were no less than 100.000 (often small) TVE mines. TVEs were notorious for their unwillingness to invest in OSH. Their strong preference was to operate far above capacity which implies operating beyond safety thresholds. Workers suffered from chronic fatigues, safety rules were systematically violated and vital mining equipment often failed. As a result, around 2005 one-third of coal output is still produced by TVEs

250 The following draws heavily on the survey by Tu Jianjun (2007).

but some 70% of fatalities originate from TVEs as well.²⁵¹

All in all, technical assistance by or via the EU in OSH would seem to have been pragmatic and competent. The cooperation with SWAS and other officials has been close and results have been fed into Five Years Plans. These are certainly commendable achievements. But, especially (but not only) on OSH, such projects and the absorbed learning in China can only be truly effective if there are no or only minor obstacles or structures in the way of getting improved social outcomes. In OSH in coalmining, for example, this has proven to be quite difficult, even though risks have been falling fairly strongly over recent decades.

On the EU/China Social Protection Reform Project 2014 – 2019

The project²⁵² is based on 7 identified “Main Problems & Needs”, summarized in Annex 1 of the Aide-Memoire of March 2018. These 7 areas cover almost anything that is relevant for discussing China’s social protection issues. What is striking is the frankness of the explanation of the problems. No vague or propagandistic language at all. In just a single page, with tiny font, a clear overview is provided of the ‘challenges’ in China’s Social Protection in or just before 2014. And the Aide-Memoires claim that they have worked effectively on all areas, and with a lot of openness.

The seven areas are:

1. Major disparities between rural and urban areas (between and within regions); it is mainly about how to ensure that the ‘rural-to-urban migration on a massive scale’ and existing

251 The other 5 reasons are explained in some detail in Hu & Pelkmans (2021, section 9.3.2). They refer to the migrants being unskilled, paid a very low wage and not given adequate PPEs; corruption in the mine sector (officials possessing shares of mines they had to inspect); a shortage of inspectors; the illegal opening of mines; and an estimated underinvestment in OSH in coal mines in 2006 of no less than \$ 8.8 bn! It should also be noted that the EU approach emphasizes that coalminers themselves should have a permanent say in safety levels and technical implementation, a most radical feature for managers accustomed to top-down instructions only.

252 See the link for the project <https://www.euchinasprp.eu/en>; there is a risk that the link no longer works

practices (and rules) does not perpetuate the 'segmented urban population' which has meanwhile emerged, and rural migrants obtain equivalent social security

2. Steady growth of an ageing society; 'will significantly raise the needs for elderly support and social care, and challenge the sustainability of pension fund and public finance'
3. Separate social insurance schemes, applied to different social groups; those for workers in public institutions (then, 8 mn civil servants + 30 mn other like teachers and the army) - they are separated from general contribution schemes and rely on state finance. Not only are urban and rural residents distinguished but also the self-employed and 'irregular' workers; the text plainly says how it is: for the latter two participation is voluntary 'and expensive' - even where participation is mandatory, 'there is widespread non-compliance'. Also, 'social insurance should be portable in order to retain workers when they change jobs or place.'
4. Inappropriate supervision and management of social security funds; there are 5 funds (pension, health, unemployment, working injury and maternity) - by the end of 2011 the rapid increase led to a total of Yuan 2.7 trillion. But... an estimated 33% (!!) of those funds have been lost in the decade up to 2011. Reasons include inflation and 'unduly restrained investment options', as well as extreme fragmentation of fund management over more than 2000 decentralised units (too small for 'sustainability'), plus the lack of appropriate centralised supervision leading to misuse or embezzlement.
5. Weak and partial legal framework in social assistance systems; such weaknesses undermine the effective functioning of 'welfare' spending. There are no unified standards for benefit calculations, and 'central government intentions may be mismanaged or locally ignored'. Subsequently, a range of powers of local authorities to include or exclude is specified - showing that the modes of decentralisation are fraught with difficulties, prompting mistakes or far worse - local governments 'hold

power over social insurance capital and have the power to divert these funds to uses of their own' (!); 'the outcome is a system with limited and unequal implementation and vast and complex inequalities of provision across localities'.

6. Unbalanced, multi-layer social protection system; private-public partnerships and the role of NGOs are minimal; the 'administration of the social protection system is inadequate and needs to be unified'. 'Social assistance has low efficiency' and 'welfare services are minimal'. Rural migrants are often excluded. State-related employees 'are a privileged group'.
7. Difficulty and complexity to the services delivery; local government agencies and social workers often suffer from (too) low capacity. The local social insurance bureau's are inefficient. Mis-targeting and misallocation occurs frequently. Health care services operate on a fee-for-service basis. ... 'This complexity, along with that of government levels, contributes to the pattern of vastly differentiated provisions across the country'.

In addition there are four cross-cutting aspects of social protection as well. These span: gender equality issues; issues related to disability (a forgotten domain in social protection in China);²⁵³ good governance ; human rights issues. It was decided that disability [not a risk identified today under social insurance in China] would deserve a 'Note on Disability Insurance' which was published. Apart from the Note on Disability Insurance, much insight can be had from the two Aid-Memoires, one of March 2018 [with the far more factual Task Force report of May 2018] and one of 2019 (no precise date, probably June). They are rich and full of soft and hard data. No less than 24 Technical Notes have been produced on many topics derived from the 7 main problems, in Component 1 and another 7 Notes under component 3, and the

253 It should be noted that the ILO and China have jointly worked on no less than 5 projects on disability issues in China (from rights and opportunities, all the way to employability) between 2008 and 2017 inclusive. The ILO notes that China counts some 85 million disabled people. Over 60 laws and regulations exist but apparently they lack implementation mechanisms, and not fully addressing the needs of disabled communities.

cross-cutting areas.²⁵⁴

The 2019 Aid Memoire comprises a most relevant (what is called) 'logical framework'. It comprises an overall objective ['furthering social equity and inclusiveness of economic development throughout Chinese society'] and 3 'specific objectives': (a) greater effectiveness of China's social security system... thru strengthening institutional capacity; (b) core implementation issues, such as 'appropriate legal and regulatory frameworks, and, enhanced and sustainable financial management of the social security system'; (c) idem, including enforcement of 'social assistance'. For this eBook the many technicalities would go much too far (see Table 9 in Hu & Pelkmans, 2021), but a summary of the more important ones can be provided here.

First, specialised partnerships with NDRC on social protection reforms were developed. This will enter the 13th Plan (2016 – 2020) and would be proposed for the 14 th Plan (2021 – 2025). One of the proposals concern national policy evaluation techniques, in MoUs with EU partners. Second, the EU will help with a comprehensive model for a multi-tier design of the pension system. Harmonisation and integration of the various basic social protection systems will be addressed, and with it portability, a serious issue in China. Third, the sustainability of a Long Term Care Insurance scheme will be analysed in detail. Fourth, a multi-pillar pension system (e.g. with actuarial model analysis) will be developed. Fifth, management of social insurance funds and investment techniques will be targeted. Sixth, the enforcement of the Social Assistance Law will be addressed, including the unification of benefits standards in social assistance. Finally, improved care for poor rural people and disabled people will be pursued. All this goes to demonstrate the high aims and practicalities of this prominent project.

²⁵⁴ See fn. 6 of the Task Force report 2018 for the 24+ 7 Technical Notes as well as footnotes 3 and 4 with links to other publications. The problem is that there is no longer public access to the Aide-Memoires, or indeed anything from the website. The 2019 Aide-Memoire frequently refers to the website: <https://www.euchinasprp.eu/en/horizontal-en/project-memorabilia-en>.

Answering the second research question in the social pillar

The second research question is about the process of convergence in policies, laws and entitlements with respect to labour standards and social protection between China and the EU over the period 2000 – 2020.

China steadily built on the social protection system and, as of 2014, accomplished a ‘national’ system by finally combining some forms of social security for both rural and urban citizens. Nonetheless, as so often in China, there remain two realities. By sticking to the hukou registration, even if with greater flexibilities, and by maintaining a highly fragmented administration at local or regional level, often with limited capabilities, undeveloped or incompatible IT systems and insufficient pooling, the practical problems of transferring entitlements between provinces are huge. As a result, the system malfunctions in many ways. In addition, numerous outbound migrants have remained informal workers (some 65%!), although the system of social protection is built strictly on contracted workers. The upshot is that precisely those workers mostly in need of social protection obtain the least.

That further reforms are badly needed follows from an assessment of the main tenets of social protection in China today. The picture has once again two sides. It is undeniable that China has done much to improve social protection, both by stricter and more ambitious laws for companies (and workers where relevant) financing five forms of social security as well as contributing to the Housing Fund, and by spending more from the general budget. At the same time, zooming in on details as well as on what the effective results for rural people or migrants from rural areas but working in urban areas are, we show that there are still considerable discrepancies between the overall intentions and the basic social facts on the ground. In terms of redistribution affected by social security – a desirable policy given rather sharp inequality in China – it is striking that these effects are small or very small except for pensions in urban areas. In rural areas, the redistributive effects

of social protection are minimal, even though there they might be more desirable. China's 'war on poverty' was formally ended by the leadership in 2020, yet there are serious concerns about lingering poverty, both in terms of disposable incomes being very low and the size of the groups suffering. Again, two realities. The analysis is complemented by a review of Human Development in 2018, because poverty traps comprise more than mere disposable income. China has greatly improved the HDI but the education pillar remains relatively weak. Recent academic work has shown that large parts of rural areas suffer from an educational gap with urban areas, such that simulations show that over 2 decades the secular economic growth rate of China risks to fall to around 3% (due to low human capital in rural areas).

4.6 Answering the third research question for the green and social pillars

The RESPECT project attempts to answer the question whether EU trade policy in the wider sense can influence and be effective in promoting NTPOs with trading partners. The present report focuses on '*sustainable development*', an important NTPO, as defined by the European Commission: the fight against climate change and the protection of the environment, on the one hand, and the respect for ILO core labour Conventions and adequate social protection on the other hand. The trade relationship studied is that between China and the EU. We shall now attempt to answer the third research question both for the green and for the social pillar.

The third research question for the green pillar

The basic idea of the research is that one can observe a decades-long, complicated if not tortuous process of convergence between the EU and China in sustainable development (in climate and environment), guided and supported by intense and multi-variate bilateral exchanges, Dialogues, consultation, practical projects, stimula-

tion of green investments in China (via CDM), programmes and direct local collaboration in the implementation of policy inside China. However, this progress in the convergence process is highly uneven over (say) the last 25 years, studied in this work, both in different time periods as well as between different issues of sustainable development, and hence hard to appreciate fully. This chapter tries to render this process intelligible. The text shows clearly that the EU has been active, if not very active, ever since the first Commission paper on EU/China relations in 1995, in assisting the development of China, when still a developing country, and in promoting in many ways the direction and intensity of sustainable development policy making directly or indirectly relevant to trade and investment. The process of convergence has been influenced by the EU, no doubt, but there have been many other actors as well as international agencies that have been helpful in this respect. It is therefore impossible to verify the degree of effectiveness of the EU promotion of sustainable development in EU/China trade policy in the wider sense with any rigour. Nevertheless, the report points to an abundance of EU-China activities, Dialogues, programmes, funding (by the EU and later, jointly), projects, common declarations/statements and regular support from the EU-China Summit level over two decades. These common activities have widened considerably in scope and have deepened as well in a number of instances. In several specific policy or expertise issues, the EU has actually supported China directly be it via local collaboration (e.g. emission trading) or China has adopted EU regulatory requirements (e.g. car emission requirements).

In the above, we have zoomed in on 25 years of ever closer EU/China cooperation – both bilaterally and in multilateral settings – on sustainable development. Provided is a summary of the early period between 1994/5 and 2003 when China and the EU concluded the Strategic and Comprehensive Partnership and, subsequently, a concise survey of bilateral sustainable development cooperation with a total of 19 Dialogues, multi-year programmes (including several projects with hard targets and very many activities), joint statements and common agenda's or roadmaps. Little

discussed in the public debate is the near-complete convergence between China and the EU in terms of MEAs: a survey of no less than 12 MEAs (and amendments, annexes, etc) demonstrates this near-congruence. With respect to emission trading, the EU and China concluded a MoU in 2018 to enable personal and technical support inside China, following the EU's experience with the ETS. A separate detailed table is dedicated to the ambitious EU/China Roadmap on energy cooperation 2016-2020, even including selected forms of harmonisation. As an illustration of the importance of market-driven incentives in the cooperation, Pelkmans (2021, Box 10) describes how the CDM of the Kyoto Protocol has worked between the EU and China, with both having assumed roughly 50% of the global CDM market respectively on the demand and supply side, a great but relatively short-lived success. And there would seem to be little doubt that the EU and China will continue to cooperate closely in the green pillar,²⁵⁵ if only because of the 'great green paradox' in this policy domain in China: convincing improvements in China's green indicators only follow with very considerable lags the U-turns in a sustainable direction in policies and strategies. Nudging China to keep on going 'green' steadily will still be important for the EU for this reason alone. Box 15 shows in yet another fashion how complex it is to fully appreciate China's predicament on environment and climate. Given the considerable improvements in 'greening' China, the 'great green paradox' still plays a far too important role.

255 One prominent example is the newly established High Level Environment and Climate Dialogue between China and the EU, initiated in September 2020, with a rich follow-up meeting in September 2021. A new green cooperation agenda was agreed with no less than 12 cooperation areas.

Box 15: Where China stands in environment and climate, the EPI rankings 2020

The EPI (Environmental Performance Index) generated by Yale's Environment Institute and the WEF is an authoritative guide on overall and some specific record(s) of 180 countries. It has its own peculiarities and choices – inevitably – but its coverage of a number of areas which matter is unparalleled. It should be helpful as yet another measure to appreciate where China stands in 2020 terms of environment and climate. Besides, the question might be answered whether the tightening of laws and enforcement in the last decade in China can be traced in EPI indicators. However, for 'climate' there is a drawback because e.g. China's great efforts to stimulate renewables does not appear in the climate indicator as only problematic gases are included. China's EPI ranking in 2019 was no. 120 (of 180 countries) and this ranking has not changed in 2020. Since this ranking is poor, without any doubt, it is good to understand why that is so. Of ten rankings of important 'green' aspects, leading to this overall ranking, three dominate as the EPI gives them a greater weight of in total 59% of EPI: biodiversity & habitat (ranking only 172, much too bad for the chair of the Kunming UN conference in 2021), air quality (ranking 137) and climate change (103).

Many other sub-indicators in the EPI show much better results for China although only one is in the top-50 (fisheries with a ranking of 31) and another 3 are close (sanitation & drinking water, with ranking 54, heavy metals with ranking 54 and agriculture with ranking 55). Other rankings hang in the middle: waste management with 66, water resources with 67 and pollution emissions with 91. Overall, therefore, it is not possible with such rankings to speak of a 'beautiful China' as president Xi has done. It will undoubtedly take much more sustained efforts. However, over a longer period China did improve the EPI rankings. Over a ten-years period, China improved its score (on which rankings are based) with 8.4 points to 37.3.

The *third research question* in the green pillar is whether EU trade policy and cooperation vis a vis China with respect to sustainable development systematically pursued the NTPOs of environment and climate mitigation since the late 1990s and whether this pursuit has been effective in supporting a process of convergence?

The initial status of China's environment in the late 1990s and the emerging realisation of the major problem of global warming mitigation via CO₂ reduction and controlling other GHGs served as wake-up calls for the EU. The strategic partnership with China (1998) and the strategic and comprehensive partnership (since 2003) created a form of trust and stability, thereby forming the foundation for a steady increase in both the scope and the intensity of environmental and climate mitigation cooperation. With China becoming an upper middle income economy, this cooperation became both more urgent and more feasible. Thus, initially EU policy and EU/China cooperation in environment and climate was directed at stimulating and improving China's policies in this respect, whilst the facts (indicators) on the ground were still pointing to a rapidly deteriorating status. In other words, a gradual and at first slow emergence of more sound environmental and climate policy in China coincided with worsening practices in the economy, generating pretty extreme negative externalities for citizens and workers, and similarly for nature in many forms. A manifestation of the '*great green paradox*'. Only when the persistent and wide-ranging EU/China cooperation matured over several channels and topics, and the indicators had become intolerable, policies and enforcement were significantly tightened. This is of course not only and possibly not even primarily due to EU/China sustainable development cooperation but the present report shows in abundant detail that there cannot be any doubt that the EU has been unfailingly pro-active in sustainable development with China for two decades and has been most responsive to any request or policy interest from China in these fields, whether for support or knowledge transfer or for pursuing common activities or a common pursuit in multilateral settings (a key activity given the many MEAs the two partners share).

The third research question for the social pillar

We have attempted to address the social pillar of sustainable development in the EU /China trade and investment relations. This seemingly simple statement is actually confusing because it is not entirely clear what this social pillar actually comprises. One concept combines internationally recognised labour standards and a system of social protection. Another – especially in the context of nearly two decades of EU /China of cooperation and joint programmes – could be the collection of EU/China joint activities in this area. And a third view may consist of the social clauses in recent EU FTAs in the sustainable development chapter, as an expression of EU values, even if China and the EU never have concluded a FTA so far. If one takes the EPA with Japan as an ambitious example, it has 25 clauses on the social pillar of the sustainable development chapter. Most are on or closely related to core ILO Conventions on labour rights, with the rights of association and collective bargaining as the bedrock - the two foundations for workers to organise themselves effectively. Some clauses are directly or indirectly referring to (aspects of) social protection, e.g. with references to ‘decent work’. Social protection is therefore either an implicit issue – one on which a lot of EU/China cooperation has actually taken place and still occupies the two partners – or partners consider that these two areas (labour standards and social protection) are naturally closely connected. This can also be concluded if one reads the UN SDG no. 1.3. In the actual practice of EU / China cooperation on the social pillar, most projects and programmes have been on aspects of social protection. China has apparently not been prepared or interested in joint work on labour standards, with one exception: occupational safety & health of workers, where a targeted project on OSH in coalmining and chemicals has successfully been implemented. More far-fetched but not implausible is the possibility that the EU – initially or until recently – perceived risks of a non-level playing field in labour relations and the perhaps artificially low total labour costs per unit of Chinese exports. In that case, jointly addressing the social dimension of the bilateral trade and investment relations would

both serve the upholding of EU values and help to pre-empt distorted bilateral economic relations.

We have discussed the undisputable value part: international labour standards. Although four core ILO conventions are not ratified by China, China has meanwhile developed some legislation in various ways in order to address some of the fundamentals and at the same time gradually developed, with some painful imperfections, a system of social protection. Nevertheless, the refusal by China to move on the right of association and of collective bargaining, both closely connected with the monopoly of the ACFTU and indeed the political monopoly of the CCP, and the great hesitation about the two conventions on forced labour (e.g. in camps for 're-education'), remains a sore point for all workers and the ILO but surely also for EU/China cooperation. China may be seen as having made a prudent move on the two conventions on forced labour in the draft CAI treaty between the partners on investment. One should expect that quite some time will lapse before these two conventions might be ratified and implemented by adjusting penal laws.

In social protection, China has improved the predicament of workers (and indeed all citizens) in China, not merely via high economic growth but also by means of a broad system of social protection, with universal coverage where appropriate. China steadily built on the social protection system and, as of 2014, accomplished a 'national' system by finally combining some forms of social security for both rural and urban citizens. Nonetheless, as so often in China, there remain two realities. By sticking to the hukou registration, even if with greater flexibilities, and by maintaining a highly fragmented administration at local or regional level, often with limited capabilities, undeveloped or incompatible IT systems and insufficient pooling, the practical problems of transferring entitlements between provinces are huge. As a result, the system malfunctions in many ways. In addition, numerous outbound migrants have remained informal workers (some 65%!), although the system of social protection is built strictly on con-

tracted workers. The upshot is that precisely those workers mostly in need of social protection obtain the least.

We survey EU/China cooperation on labour standards and social protection, effectively begun in 2005. A series of major projects and programmes have been undertaken jointly: on social security (partly inside Chinese ministries), on safety and health in high risk sectors (esp. mining and chemicals), on social protection reforms, besides high level Dialogues for 15 years. The EU has also strongly encouraged China to work still more with the ILO which eventually China has done directly bilaterally (for example a four year programme on Decent Work), and also trilaterally (EU/ILO/China), for example on Improving China's institutional capacity towards universal social protection (2019-2022). Included are two detailed analyses of projects. One is on occupational safety & health in coalmining and chemicals. It is shown what the EU project's value-added has been (with technical standards but also including an insistence on worker participation bottom-up when improving OSH in mines and chemical plants and storage). In the meantime China has enormously reduced the fatalities in coalmining, although it firmly remains above e.g. levels of fatalities in India. The other is the project on reforms of social protection where a detailed ex-post evaluation is provided in order to illustrate actual and potential value-added.

That further reforms are badly needed follows from an assessment of the main tenets of social protection in China today. The picture has once again two sides. It is undeniable that China has done much to improve social protection, both by stricter and more ambitious laws for companies (and workers where relevant) and by spending more from the general budget. At the same time, zooming in on details as well as on what the effective results for rural people or migrants from rural areas but working in urban areas are, we show that there are still considerable discrepancies between the overall intentions and the basic social facts on the ground. In terms of redistribution affected by social security – a desirable policy given rather sharp inequality in China – it is

striking that these effects are small or very small except for pensions in urban areas. In rural areas, the redistributive effects of social protection are minimal, even though there they would seem to be more desirable. China's 'war on poverty' was formally ended by the leadership in 2020, yet there are serious concerns about lingering poverty, both in terms of disposable incomes being very low and the size of the groups suffering. Again, two realities. The analysis is complemented by a review of Human Development in 2018, because poverty traps comprise more than mere disposable income. China has greatly improved the HDI but the education pillar remains relatively weak. Recent academic work has shown that large parts of rural areas suffer from an educational gap with urban areas, such that simulations show that over 2 decades the secular economic growth rate of China risks to fall to around 3% (due to low human capital).

Finally, we explore briefly whether a level-playing field between the EU and China matters as far as social protection and labour standards are concerned. This is based on a more extensive analysis in Hu & Pelkmans (2021, section 12). We conclude that the EU has in fact pursued a combination of promoting actively sustainable development in China in both pillars, *with* an emerging level-playing-field approach. This approach has, so far, been capable of constraining EU forces insisting either on protectionist responses or (interventionist) domestic counter measures or both, whilst keeping up its values approach.

After having answered the first two research questions for the social pillar, we turn to the third research question: *Has EU trade policy vis a vis and cooperation with China on sustainable development systematically pursued the NPTOs of labour 'standards' and social protection since around 2000 and has this pursuit been effective in supporting a process of convergence?*

There is no doubt that the EU has been ready to cooperate with China ever since China and the EU concluded the Strategic and Comprehensive Partnership in 2003. And right from the start of the first major project (following early meetings of the Social and

Employment Dialogue with China), these were joint projects with a strong degree of 'ownership' on both sides. However, apart from the interesting and seemingly effective OSH project for the high-risk coal mining and chemicals sectors, which is essentially about labour standards, the projects mostly covered technical, administrative, financial/actuarial and conceptual questions of social protection. There is very little published evidence of any project activities directly related to internationally recognised labour standards, in particular about non-ratified core ILO Conventions. In this sense there is an obvious discrepancy between the need, as perceived by the EU, to prepare for ratification and full domestic implementation of these four Conventions, and almost certainly some other ones (as China has also not ratified a series of other ILO Conventions that would appear to be desirable), and the manifest – though 'silent' – positioning of China not to do so. There is an opening, however: the recent CAI draft treaty comprises a cautious quasi-commitment by China to strive towards ratification of the two Conventions on forced labour. It should be noticed that, on OSH for workers, the coal mining and chemicals project appeared to have been hands-on and useful, in particular for the miners themselves.

In contrast, China and the EU have been active in cooperation on social protection and continue to attempt searches for further improvement. A profound impediment is the domestic multi-layered structure of China's governments, their coordination (or the lack of it) and the limited capabilities at local levels. There is also a high degree of path dependence, with lingering inefficiencies proving hard to iron out. Moreover, there are deep-rooted inequalities between rural and urban, partly resulting from traditions and old barriers to intra-China mobilities. Finally, there are major educational inequalities between rural and urban which are deep-seated and may have caused hysteresis for another generation. Given all the inhibitions, the joint determination of the EU and China to address social protection and help improve it in many ways, already for more than 15 years, cannot be expected to be successful so easily. This determination has recently led to a tripar-

tite set-up together with the ILO (until at least 2022).

The short answer to the third research question is therefore that the EU has pursued, in earnest, durable EU/China cooperation with respect to social protection, but that this turned out not to be acceptable to China as far as non-ratified ILO core Conventions are concerned but acceptable – indeed, welcome – for social protection. In terms of effectiveness, given the inevitable limits of bilateral cooperation, the social protection cooperation has been effective and practical – not least because activities, projects and programmes were truly ‘joint’ – and still continue, whereas, with respect to labour standards, the only breakthrough is the recent CAI draft treaty with its prudent quasi-commitment with respect to two Conventions on forced labour.

5. PROSPECTS FOR EU-CHINA COOPERATION ON SUSTAINABLE DEVELOPMENT

Writing in early 2022, it is worthwhile to briefly reflect on the *prospects* of EU-China ‘green’ and ‘social’ cooperation. While not strictly based on systematic empirical research, one cannot escape pertinent questions about more strictly linking EU trade and investment policy and sustainable development. It may well be that the past of EU-China cooperation in sustainable development we studied is not a good guide to anticipate and comprehend the near future.

5.1 EU-China sustainable development cooperation – a little recognised success story

The foregoing discussion makes clear that EU-China cooperation in sustainable development, both ‘green’ and ‘social’, has assumed a very wide scope and grown in intensity for two decades or more. This cooperation has been voluntary and not based on agreed mutual obligations (e.g. a sustainable development chapter in an FTA). Indeed, it was solely based on functional considerations for both partners, underpinned by a Comprehensive and Strategic Partnership, and usually as ‘equal’ partners with a joint organisation and shared funding. On the whole, this cooperation has been useful, often targeted to specific agreed objectives and leading to or supporting concrete progress in a broad range of policies in

China and/or jointly multilaterally. There seems to be no other bilateral relationship generating such an intense, durable and wide-ranging cooperation in sustainable development. Moreover, this steady cooperation has undoubtedly supported the EU-China relationship for the two partners, other things equal. We conclude this eBook with an assessment of the prospects for extending this broadly successful cooperation.

Perhaps a warning is in place before discussing the prospect of this cooperation. “Successful cooperation” – here in sustainable development – does not necessarily mean full convergence and bilateral agreement on almost everything. It does imply a sustained willingness to work, together, on aspects of policies and institutions relevant for sustainable development and of sufficient importance for the participating countries to achieve well-defined goals. At all levels, preferably simultaneously. However, striving after congruence is neither realistic nor necessary. Where disagreements remain, respectful consultations matter and a good understanding supports the trust in the relationship despite occasional differences. It is and will always remain a matter of judgment whether and when discrepancies and differences start affecting the partnership negatively.

Nonetheless, this long-standing functional cooperation in sustainable development between the EU and China has not received the attention and appreciation it deserves. Policy debates in the three principal EU bodies, the Council, the Parliament and the Commission, in Brussels are rarely discussing this cooperation, let alone embracing a long-run view about it in the EU-China context. This is a curious inconsistency and a shortcoming on the part of the EU in the overall perspective on EU-China relations. It is inconsistent because there is a lively EU debate, both political and legal, on the importance and specificity of sustainable development

chapters in FTAs,²⁵⁶ whilst largely ignoring the undeserved silence about the rich “cooperative” alternative without mutual legal obligations. And this is even more curious because it is China, often regarded rather critically, which is at stake here. Precisely with China an EU-FTA would not be easy to accomplish and obtaining a high standard sustainable development chapter in such an FTA might well add to this difficulty. In Pelkmans, Hu, Francois et al. (2018) an extensive almost-chapter-by-chapter verification of a possible FTA with China is conducted in great detail. The conclusion is that an FTA would imply a lopsided agenda with by far most of the work to be done by China. In this light the success of the bilateral cooperative [‘alternative’] route in sustainable development is interesting and its effectiveness in the case of China surprising. It deserves some acclaim.

The absence of public appreciation is hard to explain but we shall offer two possible explanations. One reason for this lack of recognition may well be that the Commission (here, including the EEAS) does not organise the overall reporting of all the Dialogues and the related projects, programmes, and many other activities. Individual Dialogues and activities are irregularly reported and – more often than not – in superficial ways, for example, by summarising their progress in a couple of words in the summit joint statements. It is therefore largely ‘under the radar’, even though it is not secretive. Annual or bi-annual reporting on the functional cooperation in the bilateral Partnership – with hard facts and results – would significantly contribute to a better recognition. Whilst there is a lot of *criticism* of the EU-China relationship – some of it justified – there is little basis to be found or published in common sources about the *accomplishments* in sustainable development. That is unbalanced and regrettable.

256 A recent milestone in this permanent debate is the study commissioned (by the European Commission) from a team brought together by LSE, published on 10 February 2022. It analyses seven EU FTAs. See the press release at <https://trade.ec.europa.eu/doclib/press/index.cfm?id=2360> with a link to the study. In the Press release Trade Commissioner Dombrovskis notes “that positive engagement can be most effective in bringing about positive and sustainable change”. This touches exactly the point we make in our work (on EU-China). The cooperative alternative can also generate such change, even with China. That seems little known.

Another reason probably is found in the sharpening of tone in EU-China relations, from both sides. This is often connected with the increasing blurring of (EU) foreign policy and EU trade policy, and the a priori requirement based on the Lisbon Treaty and recent EU trade policy strategy papers that EU trade policy (broadly conceived) and 'EU values' (incorporating sustainable development) be closely connected, if not coupled. Even though the present eBook cannot deal with the EU foreign policy vis-à-vis China – in fashionable jargon called 'geo-political' and/or 'geo-economic' or indeed 'strategic autonomy' – it is not a secret that China became much more assertive in the early 2020s, seemingly more inclined to signal power political approaches. China's human rights violation in Tibet and Xinjiang, its squeezing of democracy in Hong Kong and its rejection of even the mildest criticism besides considering it as a strictly domestic matter where interference is not accepted, renders it more difficult for the EU to retain functional cooperation under the Strategic Partnership, as before.

5.2 Bilateral 'green' and 'social' cooperation: more of the same?

After two decades or more of intense cooperation, the question arises whether China and the EU can be expected to continue with 'more of the same'. We suspect that this is doubtful. There are good reasons not to expect a simple extrapolation of the steady and largely successful functional cooperation in these two 'values'.

First, in both 'green' and 'social' cooperation during this episode, China could learn – at first - much from the EU and occasionally adopted its practices, technical or other standards or ideas. Joint projects, with Chinese 'ownership' as well, were often helpful for ministries, specific sectors or policy-makers. They also taught EU policymakers and officials as well as numerous experts much about China in many different policy domains and the thinking or attitudes behind them. From both sides there was – more often than not – an eagerness, going further than a mere willingness, to work together and frequently even a degree of excitement to help

China develop with much greater respect for these two values in sustainable development. Today it would seem that this episode is largely over. The functional drives behind such an extensive and intensive bilateral cooperation programme have become much more selective. On its own account China has become far more active in 'green' policymaking. President's Xi's repeated promise to create a 'beautiful China' is more than just a slogan, even when the date of 'delivery' is only in 2035. Much more credible laws in air, soil and water have been adopted and are meanwhile enforced in more meaningful ways. In climate China has ratified the Paris Agreement, with its five-year reporting in Nationally Determined Contributions (NDCs). The country now has its own China style ETS that is operational nation-wide. In social questions, social protection has been built up. Its two weaknesses – discussed in detail previously – will have to be addressed if the system is to support, in earnest, all workers: on the one hand, its very foundation based on formal labour contracts is not helping the many tens of millions of intra-China migrant workers who avoid (or do not get offered) contracts, and, on the other hand, the redistributive effects of the protection is rather weak, and almost negligible for rural workers. On core labour standards, the draft agreement of the Comprehensive Agreement on Investment (CAI) has shown that China might be willing to ratify the Conventions on Forced Labour. However, the two quintessential ILO Conventions [on free association and collective bargaining] remain a taboo for China, despite its claim that it is a socialist – indeed, a “People’s” – republic. It would appear most unlikely that EU-China cooperation might attempt to work on this archetypical property of the PRC.

Second, the two-plus decades covered by our RESPECT research were characterized by a common – be it not always explicit – preference that China should catch up. China's growth model at the time left no doubt that very high economic growth was overriding anything. We have dubbed this “growth at all costs”. However, the desired catching up applied in particular to the negative fall-out of this reckless growth path. The 'green' and 'social' values in sustainable development were long ignored and several 'green' indicators

grew far worse before slowly turning into the right direction. The early EU policy notion that China needed development aid was gradually phased out – certainly after China’s entry into the WTO in 2001 and the subsequent upgrading of the EU-China 1998 Comprehensive Partnership into the 2003 Strategic and Comprehensive Partnership [SCP]. Basically, the SCP aimed at creating equality and common ownership, with lasting consequences for the nature, set-up and emphases of bilateral cooperation programmes. The decision to establish a regular EU-China Summit since 1998 and the 2013 EU-China Strategic Agenda for Cooperation (until 2020) further cemented the conviction of being equal partners. For most of this period, and dependent on the policy domain, China was nevertheless eager to catch up in e.g. the quality of social protection, occupational safety & health, the abatement of CO₂ and other GHG emissions (including the long avoided pricing instruments in the overall toolbox) and a host of deep-seated non-climate environmental problems such as pollution of water, soil and air (and related waste treatment). The one area where China chose to develop its own path early on is renewables and related technology such as solar panels and wind turbines as well as modernised nuclear energy. And successfully so. For all these reasons the post-2020 period is therefore not going to be “more of the same”. In that sense, the scope and intensity of EU-China cooperation as surveyed in previous chapters is bound to become less abundant and more targeted. The uniqueness of EU-China trade and cooperation is likely to become less conspicuous. Some of the huge EU-China programmes – some with up to 400 projects and many follow-ups – will not be repeated anymore. The mutual interest in ‘green’ and ‘social’ cooperation is likely to stay, the eagerness will be far more selective.

Third, the overall governance and political stimulus of EU-China cooperation, possibly also in sustainable development, has been tarnished in recent years. And this is bound to engender consequences. Although interruptions happened before, the EU-China Summit is now handicapped in giving leadership to cooperation by recurrent doubts about its being held at all

and by the narrowing of its agenda due to tensions about human rights inside China (Tibet, Ughurs, Hong Kong's changes). These frictions have been exacerbated by sanctions slapped on China and some of its leading officials involved in the Uighurs drama of secretive camps with an unusually large number of locals for an unusually long (often undetermined) time and suffering from lamentable practices, followed by Chinese counter sanctions to EU MEPs and think-tanks. The EU (both Commission and EP) has put the CAI on hold, despite its innovative character and the inclusion (novel for China) of sustainable development. These non-trivial frictions came on top of EU irritations about China's conduct and selective actions during the first year of COVID-19. Other irritants for the EU are perhaps less prominent but surely do not help. They include the Belt and Road Initiative in nearly 70 countries (based on a lack of impartial governance, dominance of non-transparent Chinese procurement practices and de-facto imposition of Chinese technical standards) and China's 17+1 process with 12 EU countries and 5 non-EU countries on the eastern flank of the Union. In both cases some patched-up accommodation between the EU and China has taken place but both initiatives remain less well-regarded in Brussels for several reasons. China's recent treatment of Lithuania has also generated bad blood in several capitals in the EU. So far China has not lent support to the Russian occupation of Crimea – such support would be inconsistent with China's strict territorial integrity and sovereignty philosophy – but its 'neutrality' about Russia's recent maneuvering e.g. about Ukraine for geo-political reasons has not been well received by the EU. Altogether, unlike previous EU-China frictions in the past (e.g. the post 1989 weapon embargo), there are more of them today and they occur with higher frequency.

Fourth, and fundamental, although the pursuit of sustainable development (here, 'green' and 'social') is a long-standing policy preference of the EU, the great advantage of bilateral cooperation rather than legal obligations in an FTA is that (EU) trade and investment policy and the EU pursuit of 'values' remain distinct and disconnected. In other words, the pursuit of these values is

active and clear but it is not coupled to EU trade policy. However, since the Lisbon re-write of the EU treaty, Art. 21 speaks about a duty to maintain ‘consistency’ between EU trade policy and such values, here ‘green’ and ‘social’. The question is whether this coupling is actually a good idea (Pelkmans, 2022). But in the case of EU-China there is no FTA, no proposed FTA and GSP+ does not apply to China. Therefore, the legal instruments for the coupling of EU trade policy and ‘green’ and ‘social’ values do not apply to EU-China bilateral relations. Put differently, whether values are violated or ignored does not burden EU-China trade policy (whether in WTO or directly bilaterally) or indeed bilateral investment treaties like the CAI. They are on separate tracks. This does not mean the EU abdicates from pursuing these values. But the EU’s disagreement with policies of partners undermining or violating such values can be expressed via foreign policy. However, also here there is genuine doubt whether these tracks remain separated in future.

For sustainable development, instead, bilateral cooperation is the preferred option, based on mutual agreement and ‘ownership’. This has worked very well with China for two decades. This relative stability and predictability in sustainable development cooperation has undoubtedly encouraged a wider scope of and greater intensity in bilateral cooperation. In a U-turn in 2021 led by the European Parliament, the ratification of the draft CAI treaty was suspended for reasons of human rights (Ughurs), which has disrupted the relatively undisturbed climate of cooperation. This U-turn is a break with the past. What had long remained disconnected (EU trade policy and foreign policy advocating ‘values’) has now been re-coupled. The risk is that neither the CAI will be ratified for long, nor that China will amend or overhaul its harsh regime for many Ughurs. In the process also cooperation in sustainable development is likely to suffer a serious setback.

5.3 Conflicting signals about EU-China sustainable development cooperation in future

These four reasons together do not justify too much optimism for EU-China ‘green’ and ‘social’ cooperation. From this perspective one might expect ‘some of the same’ but probably not ‘more of the same’. Nonetheless, on both sides there is a clear willingness to retain as much as possible the functional approach. Chinese ministers have publicly indicated that they do want the CAI and underlined that the CAI is clearly in the EU interest. In the EU there are rumors (e.g. France and Germany) that a bilateral version of the CAI could be a temporary substitute. And one ought to realise that bilateral activities ‘under the radar’ can more easily continue even in a frostier climate. Both in ‘green’ and ‘social’ cooperation, bilateral activities *are* ongoing: in ‘social’ there is a three-years project with the ILO and China until late 2022 (called “Improving China’s institutional capacity towards universal social protection”) and in ‘green’ the EU-China Environmental Dialogue (since 2003) had a meeting in April 2021 preparing the Kunming Biodiversity CoP 15, the BCM (on forestry and FLEG) implements the 2019 work plan including a country-specific handbook, the China-Europe Water Platform continues and the EU-China environmental project (initiated in 2018) is developing better environmental governance and the integration of environment into other Chinese policy domains. In September 2020 the High Level Environmental and Climate Dialogue between China and the EU was established, with a rich follow-up meeting in September 2021. Apart from a lengthy list of ‘soft’ commitments, “both participants agreed to continue and expand the cooperation” in no less than 12 issue areas in environment and climate.²⁵⁷ It is also too often neglected how much EU-China cooperation actually takes place in a multilateral environment. Much of the bilateral obligations in

257 Biodiversity conservation, chemicals management, climate legislation, energy conservation and energy efficiency improvement, circular economy, renewable energy, green transportation, green buildings CCUS and hydrogen energy. Joint Press Communiqué, 10 Oct 2021, <https://ec.europa.eu/clima/news-your-voice/news/joint-press-communique-following-second-eu-china-high-level-environment-and-climate-dialogue>

FTAs' chapters on sustainable development are based on multilateral processes and outcomes. The intense negotiation work in the WTO on fisheries continues unabated. Altogether, the suggestion that the frictions, described above, have killed all bilateral cooperation would be entirely false and without any basis. But there is no denying that the same frictions risk to hurt the trust, the informal machinery as well as the predictability stimulating new initiatives.

There are already some signs on the wall. The 2020 Strategic Agenda for Cooperation, which expired by late 2020, has not been renewed as yet. A true EU-China Summit, also spending some time on issues and the blessing of cooperation in addition to several ministerial and secondary meetings, has not been held after mid-2020. Some truncated summitry took place (sometimes between a few PMs and president Xi rather than the Commission and Council presidents) but mainly with a view to pre-empt further frictions, not to initiate leadership about new bilateral cooperation programmes. There is regret on both sides but 'high politics' seems to be in the way.

If this frosty period continues, there is likely to be less and less intense EU-China cooperation in sustainable development. This might be regrettable for social values but it has to be recognised that the China – as it is ruled today – cannot be expected to embrace the two core ILO Conventions. Not only are these Conventions not negotiable for China, strong EU insistence on their adoption might well be considered as subversive given the extreme – indeed even increasing – forms of control the government and Party maintain formally and informally. However, for social protection, cooperation may well be continued. For 'green' cooperation the matter is very different. No profound differences of view between the EU and China prevail and no threat to the Party seems immanent. Moreover, China is essential for global (hence also EU's) climate strategy. For non-climate environmental policies problems are less acute in a transborder sense. Nevertheless, China's modes of production and consumption are still adverse to a good shepherdship of the earth, with its longstanding dispropor-

tional imports (and inefficient use) of raw materials and minerals, including a strong reliance on oil and gas. Its bilateral frictions over cross-border rivers, its remaining generation of acid rain affecting neighbouring countries, its fisheries policies are all key examples where cooperation and an agenda for improvement could make a difference. The shining counterexample is China's forestation strategy already making considerable progress for some 4 decades and still to continue until 2035. Also the EU can benefit from some of the advances in clean energy (e.g. modern ultra-safe nuclear) and renewables.

Apart from lowering expectations to 'some of the same', there are a number of lingering queries which do matter for this brief assessment. The most important one is about the following: so far, in the 'green' and 'social' cooperation between China and the EU, the link with EU trade policy was loose. Much of the cooperation was a 'stand-alone exercise', barely or not affected by ongoing negotiations about 'trade irritants' or other aspects of market access or trade defence issues. The link was more seen as indirect and long-run. As noted, that began to change since around 2015/6 when newly set-up cooperation was tasked to help resolve trade policy questions (from fisheries to the newly initiated High Level Environmental and Climate Dialogue). This trend is likely to continue. Of course, the nature of such sustainable development cooperation is more an extension of trade policy and touches upon vested interests. It will be much harder to be successful. At the same time, the agenda of the newly established High Level Environmental and Climate Dialogue, agreed just before the Glasgow COP-26 meeting in November 2021 when the CAI frictions were already in place for months, looks impressive and seems similarly broad as in the recent past. Would an attitude of 'we agree to disagree' still permit to continue with extensive 'green' cooperation?

There are also some other queries the answers to which need to be considered. They are directly or indirectly related to a possibly very difficult 'greening-of-trade' issue: embedded carbon. Just for reflection, consider the following four important ones. First,

how to address in earnest China's fossil addiction, which is much bigger than coal alone (which is already so disproportional), for instance its large oil and gas imports? Second, can China and the EU cooperate to bend [dirty] 'rare earth' mining and processing into a much cleaner & green direction? Third, how could China and the EU (possibly with others) cooperate in order to ensure in the longer run that China's massive imports from parts of Africa and from Brazil [turning rain forest into soybean fields for export to China] become far more supportive of 'green' objectives. Fourth, quite apart from trade defence issues of products from heavy industries exported by China to the EU and other countries, there is an issue for bilateral or plurilateral cooperation in that China exports what the EU (and some others like Japan) have chosen no longer to produce or much less. Arguing that China's overall industrial performance is more polluting – though correct – might be seen as partly due to policy choices made by the EU and other advanced countries. All these queries are intimately connected to carbon footprints and the considerations behind the CBAM (even when not actually introduced). China rejecting a CBAM-type measure does not solve these underlying problems. Much of embedded carbon is directly a function of trade, not just bilaterally but also with third countries. If the CBAM would not be feasible, trade-related cooperation in these areas between China and the EU may well be appropriate to address these aspects in earnest. Or some combination of the two. But it seems unlikely that such vital cooperation will again remain 'under the radar'. On the contrary, it will be difficult and move slowly.

REFERENCES

- Asian Development Bank (2018), Managing water resources for sustainable socioeconomic development, a country water assessment for the P.R. of China, December, see www.adb.org/sites/default/files/institutional-document/473576/country-water-assessment-prc.pdf
- ABD (2019), The Social Protection indicator for Asia, Manila, www.adb.org
- Bai R.(2008), “The role of the All-China Federation of Trade Unions: implications for Chinese workers today”, *The Journal of Labour and Society*.
- Bayramoglu,B, B. Copeland, M.Fugazza & J-F. Jacques (2019), Trade and negotiations on fisheries subsidies, *VOX CEPR Policy portal*, 21 October, see <https://voxeu.org/article/trade-and-negotiations-fisheries-subsidies>
- Blockmans, S. & W. Hu (2019), Systemic rivalry and balancing interests: Chinese investment meets EU law on the Belt and Road, *CEPS Policy Insight*, no. 2019-04, March, www.ceps.eu
- Boquen, A. (2021), China’s social security system explained, www.nhglobalpartners.com/china-social-security
- Brown R.(2006), China’s Collective Contract Provisions: Can Collective Negotiations Embody Collective Bargaining?, University of Hawai’i at Mānoa.
- BusinessEurope(2020), The EU and China, addressing the systemic challenge, January, [www.businesseurope.eu/sites/buseur/files/media/reports_and_studies/2020-01-16_the_eu_and_china - addressing the systemic challenge - full paper.pdf](http://www.businesseurope.eu/sites/buseur/files/media/reports_and_studies/2020-01-16_the_eu_and_china_-_addressing_the_systemic_challenge_-_full_paper.pdf)
- Cames, M. et al. (2016), How additional is the Clean Development Mechanism?, Berlin, study for DG Clima, see www.ec.europa.eu/clima/sites/clima/files/ets/docs/clean_dev_mechanism_en.pdf

- CarbonBrief (2021), What does China's 14th five-year plan mean for climate change ? , <https://www.carbonbrief.org/qa-what-does-chinas-14th-five-year-plan-mean-for-climate-change-12-March-2021>
- Casale, G. & C. Zhu (2013), Labour administration reforms in China, Geneva, ILO, www.ilo.org
- CCICED (2019), Progress on environment and development policies in China and impact of CCICED's policy recommendations (2018-2019), see www.iisd.org/sites/default/files/publications/cciced/agm/cciced-progress-report-2019-en.pdf
- Chan, K. (2013), China: internal migration, in: *The Encyclopedia of Global Human Migration*, ed. by Immanuel Ness, Blackwell Publishing
- Chen, H., A. Rieu-Clarke & P. Wouters (2013), Exploring China's transboundary water treaty practice through the prism of the UN Watercourses Convention, *Water International*, Vol. 38, 2, April, pp. 217 – 230
- Chinapower Team (2020), Is China succeeding at eradicating poverty?, Washington DC, <https://chinapower.csis.org/poverty/>
- China Public Procurement website (no year), see [中国政府采购网 \(ccgp.gov.cn\)](http://www.ccgp.gov.cn)
- China State Council (2000), The 10th Five Years Plan for Environmental Protection
- China State Council (2003), China-EU policy paper, included in Snyder, ed., pp. 490-498
- China State Council (2005), The 11th Five Years Plan for Environmental Protection
- China State Council (2006), The 11th Five Years Plan for National Economic and Social Development, see http://www.gov.cn/english/special/115y_index.htm
- China State Council (2011), 12th Five Years Plan for Environmental Protection, Guofa 2011, 42

- China State Council (2018), Three Years Action Plan for Blue Sky Defense, June, see www.gov.cn/policies/latest_releases/2018/07/03/content_281476207708632.htm hu
- Climate Tracker (2019), China's pledges and targets, see www.climate tracker.org/countries/china/pledges-and-targets/
- Chu, C., R. Jain, N. Muradian & G. Zhang (2016), Statistical analysis of coalmining safety in China with reference to the impact of technology, *Journal of the Southern African Institute of Mining and metallurgy*, Vol. 116, 1, January
- Curell, M. (2017), China's war on water pollution must tackle causes of deep groundwater pollution, <https://globalwaterforum.org/2017/04/03/chinas-war-on-water-pollution-must-tackle-causes-of-deep-groundwater-pollution/>
- EP(2012), The role of China in world fisheries, see www.europarl.europa.eu/meetdoes/2009-2014/documents/pech/dv/chi/china.pdf
- EPI(2019), Environmental Performance Indicator 2019, New Haven and Geneva, see www.epi.envirocenter.yale.edu
- EU FLEGT Facility (2019a), Annual report, highlights and insights from 2018, see www.euflegt.efi.int
- EU FLEGT Facility (2019b), Briefing: analysis of China's trade with the EU and VPS countries 2007 – 2017, see www.euflegt.efi.int/publications/analysis-of-china-s-trade-with-the-eu-and-vps-countries-2007-2017
- EU & China (2009), Bilateral Cooperation Mechanism on FLEG, see www.euflegt.efi.int/documents/10180/23033/2009+EU+China+BCM+Agreement
- EU & China (2014), EU-China Social Protection Reform Project, see <https://www.euchinasprp.eu/en/>
- EU & China (2016), EU/China Roadmap on energy cooperation, see https://ec.europa.eu/energy/sites/ener/files/documents/FINAL_EU_CHINA_ENERGY_ROADMAP_EN.pdf

- EU & China (2018), Blue Partnership for the Oceans, see https://ec.europa.eu/fisheries/eu-and-china-sign-landmark-partnership-oceans_en_of_16_July_2018
- EU & China (2021), Comprehensive Agreement on Investment, provisional text, www.trade.ec.europa.eu/doclib/2021/january/tradoc_159343.pdf
- EU & ILO (2019), Improving China's institutional capacity towards Universal Social Protection, project between the EU, China and the ILO 2019-2022, see https://ilo.org/beijing/what-we-do/projects/WCMS_713539/lang--en/index.htm
- EU & Japan (2018), Agreement between the EU and Japan for an Economic Partnership, August, see www.trade.ec.europa.eu/doclib/2018/august/tradoc_157228.pdf
- EU & Mexico (2018), FTA Agreement in principle, April, see www.trade.ec.europa.eu/doclib/2018/april/tradoc_156528.PDF
- EUCOSH (2016), The EU's support to work safety in China, summary of the EUCOSH project, April, see www.sascharusch.de/resources/EUCOSH-Project-Summary-Report_small.pdf
- European Commission, COM (1995)279, A long term policy for China-EU relations, included in Snyder, ed., pp. 340-369
- European Commission (1996), The trading system and internationally recognised labour standards, 19 July 1996
- European Commission, COM (1997)490 of 13 Oct 1997, Europe-Asia cooperation in the field of environment
- European Commission, COM (1998)181 of 25 March 1998, Building a comprehensive partnership with China
- European Commission, COM (2000)552 of 8 September 2000, Implementation Report (of the partnership)
- European Commission COM (2001) 265 of 15 May 2001, Second Implementation Report (of the partnership)
- European Commission, COM (2003)533 of 10 September 2003, A

maturing partnership – shared interests and challenges in EU/China relations

European Commission, COM (2009), Position paper on the Trade Sustainability Impact Assessment of the Negotiations of a Partnership and Cooperation Agreement between the EU and China, February [on the Trade SIA on a PCA between the EU and China, August 2008, see <http://www.euchina-sia.com/>]

European Commission, COM (2015) , Trade for all, towards a more responsible trade and investment policy, see www.trade.ec.europa.eu/doclib/2015/october/tradoc_153846.pdf

European Commission (2017), EU negotiation proposal of the Sustainable Development chapter of the draft FTA with Mexico, April, see www.trade.ec.europa.eu/doclib/2017/may/trade_tradoc_155528.pdf

European Commission (2020), Sustainable development, website information, <https://ec.europa.eu/trade/policy-making/sustainable-development/>

FAO (2018a), Soil pollution, a hidden reality, Rome, see www.fao.org/3/i9183en/i9183en.pdf

FAO (2018b), The state of world fisheries and aquaculture 2018, www.fao.org/3/i9540en/i9540en.pdf

Farnell, J. & I. Crookes (2016), *The politics of EU-China Economic Relations*, Palgrave-Macmillan

Feng, G. (2021), China claims it has eliminated poverty but is that true?, VOA News, see www.voanews.com/east-asia-pacific/vo-news-china/china-claims-it-has-eliminated-poverty-true March 3, 2021

Finamor, B. (2020), China's quest for Global Clean Energy Leadership, Rome, *IAI Papers* 20/05, January, see www.iai.it/sites/default/files/iaip2005.pdf

Freeman, R & X. Li (2013), „Has China's new labour contract law worked?“, VOX.EU.

- Golden Bee (2017), Research on CSR reporting in China 2017, see www.csr2.mofcom.gov.cn/article/ckts/sr/201712/20171202687223.shtml
- Grieger, G (2021), EU-China Comprehensive Agreement on Investment: leveling the playing field with China, 17 Febr. 2021, see <https://epthinktank.eu/2020/09/14/eu-china-comprehensive-agreement-on-investment-leveling-the-playing-field-international-agreement-in-progress-with-china>
- Hu, W. (2018), Reciprocity and mutual benefits: EU-China a cooperation on and protection of Geographical Indications, *CEPS Research Report* no. 2019/04, www.ceps.eu
- Hu, W. (2019-a), China as a WTO developing member, is it a problem ?, *CEPS Policy Insight* PI2019/16, www.ceps.eu
- Hu, W. (2019-b), Industrial subsidies, State-owned Enterprises and market distortions, problems, proposals and a path forward, Univ. of Adelaide, Institute of International Trade
- Hu, W. (2021-a), A survey of the EU-China dialogue architecture: premise, structure, functions and case-studies, paper for RESPECT, April, see www.respect.eui.eu
- Hu, W. (2021-b), The EU-China Comprehensive Agreement on Investment – an in-depth reading, *CEPS Policy Insights* PI2021-07, www.ceps.eu
- Hu, W. & J. Pelkmans (2020), EU-China Trade-related Dialogues, a first assessment, paper for RESPECT, *EUI Working Paper RSCAS* 2020/46, August, see <https://cadmus.eui.eu>
- Hu, W, & J. Pelkmans (2021), Encouraging social progress in China, EU/China cooperation for the social pillar of sustainable development, paper for RESPECT, see www.respect.eui.eu
- Huang, J., Rozelle, S. et al (2019), Agricultural and rural development in China during the past four decades, *Australian agricultural and resource economics*, Vol. 64, pp. 1-13
- ILO (2010), Review of work safety and health inspection system

- in the PRC, August, see www.ilo.org/wcmsp5/groups/public/-/-ed_dialogue/-/-lab_admin/documents/publication/wcms+240207.pdf
- ILO (2016), China, Decent work country programme 2016-2020, www.ilo.org
- ILO (2020), Social protection for workers in the informal economy, FAQ, www.ilo.org/wcmsp5/groups/public/-/-asia/-/-bangkok/ilo-beijing/documents/publication/wcms_761053.pdf
- Jin, Y., H. Anderson & S. Zhang (2016), Air pollution control policies in China: a retrospect and prospects, *International Journal of Environmental Research and Public Health*, Vol. 13, 12, December,
- Kaneti, M. (2020), China's climate diplomacy 2.0, *The Diplomat*, see <https://thediplomat.com/2020/01/chinas-climate-diplomacy-2-0/>, 2 January
- Kennedy, S. & M. Qiu (2018), China's expensive gamble on New-Energy-Vehicles, November, Washington DC, CSIS, www.csis.org/programs/chinese-business-and-economics/scott-kennedys-publications
- Khor, N., L. Pang, C. Liu, F. Chang, D. Mo, P. Loyalka & S. Rozelle (2016), China's looming human capital crisis: upper secondary educational attainment rates and the middle-income trap, *The China Quarterly*, December, pp. 905-926
- Kuhn, R (2020), Does China care about human rights ? 24 October, CGTN
- Lederer, E. (2020), Nearly 40 nations criticise China's human rights policies, 7 Oct. , see www.apnews.com
- Lee C.H. (2009), Industrial relations and collective bargaining in China, ILO, www.ilo.org
- Lewis, A. (1954), Economic growth with unlimited supply of labour, *Manchester School*, Vol. 22, pp. 139-191

- Li, S. (2016), Redistributive effects of social security system in China, paper for the EU/China Social Protection Reform project, see www.inps.it/nuovoportaleinps/default.aspx?itemdir=53689#
- Li, H., P. Loyalka, S. Rozelle & B. Wu (2017), Human capital and China's future growth, *Journal of Economic Perspectives*, Vol. 31,1, pp. 1-26.
- Li, T., Y. Liu, S. Lin, Y. Liu & Y. Xie (2019), Soil pollution management in China: a brief introduction, *Sustainability*, Vol. 11, 3, January
- Li, K., N. Khalili & W. Cheng (2019), Corporate Social Responsibility practices in China: trends, context and impact on company performance, *Sustainability*, vol. 11, 354
- Li, L., S. Wolters & F. Yang (2017), China and its climate leadership in a changing world – from passive follower to constructive shaper of the global order, *Discussion Paper*, July, see www.climate-diplomacy.org and www.adelphi.de
- Liang, Z. (1999), Foreign investment, economic growth, and temporary migration: the case of Shenzhen Special Economic Zone, *China, Development and Society*, Volume 28 Number 1, June 1999, pp.115-37.
- Linster, M & C. Young (2018), *China's progress towards Green Growth: an international perspective*, Paris, OECD Green Growth Papers no. 2018/05, see www.oecd.org/env/country-reviews/PR-China-Green-Grwoth-Progress-Report-2018.pdf
- Lui, O. (2018), Growing CSR in China: first CSR index for Chinese listed companies, www.ceibs.edu/new-papers-columns/growing-csr-china-first-corporate-social-responsibility-index-chinese-listed March
- Ma, T., S. Sun, G. Fu, J. Hall, Y. Ni, L. He, J. Yi, N. Zhao, Y. Du, T. Pei, W. Cheng, C. Song, C. Fang & C. Zhou (2019), Pollution exacerbates China's water scarcity and its regional equality, *Nature Communications*, Vol. 11, see <https://www.nature.com/>

- [articles/s41467-020-14532-5](#)
- Ma, T., N. Zhao, Y. Ni, J. Yi, J. Wilson, L. He, Y. Du et al. (2020), China's improving inland surface water quality since 2003, *ScienceAdvances*, Vol. 6, 1, see <https://advances.sciencemag.org/content/6/1/eaau3798>
- Malcolmson, S. (2020), How China became the world's leader in green energy, *Foreign Affairs*, see <https://www.foreignaffairs.com/articles/china/2020-02-28/how-china-became-worlds-leader> February
- Melo, J. de & J.M. Solleder (2019), The role of an Environmental Goods Agreement in the quest to improve the regime complex for Climate Change, Florence, EUI, *RSCAS Working Paper* 2019/55, see www.eui.eu/RSCAS/Publications/
- Myllyvirla, L. (2020), Air pollution in China 2019, CREA, Helsinki, paper 01/2020, see www.energyandcleanair.org
- OECD (2005), OECD Economic Surveys, China, September, Paris www.homepage.ntu.edu.tw/nlbh/ref/OECD?42.pdf
- OECD (2008), The impact of foreign direct investments on wages and working conditions, background report for the ILO-OECD conference on Corporate Social Responsibility
- OECD (2010), OECD Economic Surveys, China, Paris [DOI 10.1787/eco_surveys-chn-2010-en]
- OECD (2019), *OECD Economic Surveys China*, Paris
- Pan, X-C (2018), Research on Xi Jinping's thought of ecological civilization and environment Sustainable Development, 2nd International workshop on renewable energy and development, doi: 10.1088/1755-1315/153/6/062067
- Pelkmans, J. (2018), China's socialist market economy as a systemic trade issue, *Intereconomics*, Vol. 53, 5, September/October
- Pelkmans, J., W. Hu, J. Francois et al., (2018), *Tomorrow's Silk Road- assessing an EU-China Free Trade agreement*, London/ Washington DC, Rowman & Littlefield International

- Pelkmans, J. (2021), Nudging China to go green: how EU trade and cooperation stimulated China, paper under RESPECT, see www.respect.eui.eu
- Pelkmans, J. (2022), Linking “values” to EU trade policy – a good idea?, *European Law Journal*, no. 1
- REN21 (2019) Renewables 2019, Global Status report, Paris, www.ren21.net/reports/global-status-report
- Rive, N. & K. Aunan (2010), Quantifying the air quality co-benefits of the CDM in China, *Environmental Science and Technology*, 44 (11), pp. 4368 – 4375
- Sandalow, D. (2019), Guide to Chinese Climate Policy 2019, New York, Columbia University, see www.energypolicy.columbia.edu/sites/default/files/file-uploads/Guide%20to%20Chinese%20Climate%20Policy_2010.pdf
- Snyder, F. ed. (2009), *The European Union and China, 1949-2008*, basic documents and commentary, Oxford, Hart Publishing
- Tan-Mullins, M. (2014), Successes and failures of CSR mechanisms in Chinese extractive industries, *Journal of Current Chinese Affairs*, December, <https://journals.sagepub.com/doi/full/10.1177/186810261404300402>
- Tang, K. (2008), “The Evolution of Labor Contract Law and Comments on Two Papers”, China Centre Net
- Tu, Jianjun (2007), Coal mining safety: China’s achilles heel, *China Security*, Vol. 3,2 pp. 36 –53
- UN Watercourses Convention (1997), Convention on the Law of the Non-Navigational Uses of International Watercourses, GA-Res. 51/229(21 May 1997), available at http://www.un.org/ga/search/view_doc.asp?symbol=A/res/51/229
- UNDP (2020), Human Development Index, see www.hdr.undp.org/en/content/human-development-index-hdi
- UNDP, CIDP & SIC (2020), China National Human Development

- Report special edition, February, www.hdr.undp.org/sites/default/files/nhdr_cn.pdf
- UNDP & Oxford PHI (2020), Charting pathways out of multidimensional poverty, OU Press
- UN-ESCAP (2018), Why we need social protection, Bangkok, www.un-escap.org
- Wang J. (2008), “The Struggle of a Self-Organized Workplace Union in China”, Global Monitor.
- Wang, Lijun (2010), The changes of China’s environmental policies in the latest 30 years, *Procedia Environmental Sciences*, Vol. 2, pp. 1206-1212
- Wang, H. (2020), China must drive cooperation on climate change in the new decennium, Beijing, CCG (Center for China and Globalisation), February 1, see www.en.ccg.org.cn
- Wang, X., R. Luo, L. Zhang & S. Rozelle (2017), The education gap of China’s migrant children and rural counterparts, *Journal of Development Studies*, Vol. 53, no. 11, pp. 1865-1881
- Wen, Jiabao (2004), speeches in Brussels, Helsinki, Hanoi and The Hague, included in Snyder, ed., pp. 499 – 512.
- World Bank (1996), China: Issues and opinions in Greenhouse Gas Emissions Control, *WB Discussion Paper no. 330*, edited by Johnson, Li, Liang & Taylor, June, Washington DC
- World Bank (1997), *Clear water, blue skies, China’s environment in the new century*, Washington DC
- World bank (2018), Watershed, a new era of water governance in China, *Policy Brief*, Washington DC, November, see www.documents.worldbank.org/curated/en/999601541495579766/Policy-Brief.pdf
- World bank (2020), Social Protection, see <https://www.worldbank.org/en/topic/socialprotection/overview>
- WTO (2018), *Trade Policy Review China 2018*, Geneva, WTO

WT/TPR/S/375 of 6 June

- WTO (2019), Interim report on fisheries subsidies negotiations, ambassador S. Wills, December, see www.wto.org/english/tra-top_e/rulesneg_e/fish_e.htm
- Wu, R., D. Feickert & W. Li (2009), Impact study on the EU/China coal mine safety training programme in the UK in 2008, see www.miningquiz.com/pdf/China_Mine_Safety/PDSF_IMPACT_STUDY%20Final.pdf
- Yu, B., S. Zhang, L. Wang, R. Dang, C. Abbey & S. Rozelle (2019), Past successes and future challenges in rural China's human capital, *Journal of Contemporary China*, Vol. 28, issue 120
- Zhang, Y. (2019), Improving social protection for internal migrant workers in China, ILO/IOM & EU, Beijing, ILO Office for China, www.ilo.org/wcmsp5/groups/public/-/asia/-/ro-bangkok/-/ilo-beijing/documents/publication/wcms_732202.pdf
- Zhang, X., Q. Xu & J. Wang (2019), Capacity constraint: a fundamental perspective for the development issue at WTO, *Journal of World Trade*, no. 1, Vol. 53



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