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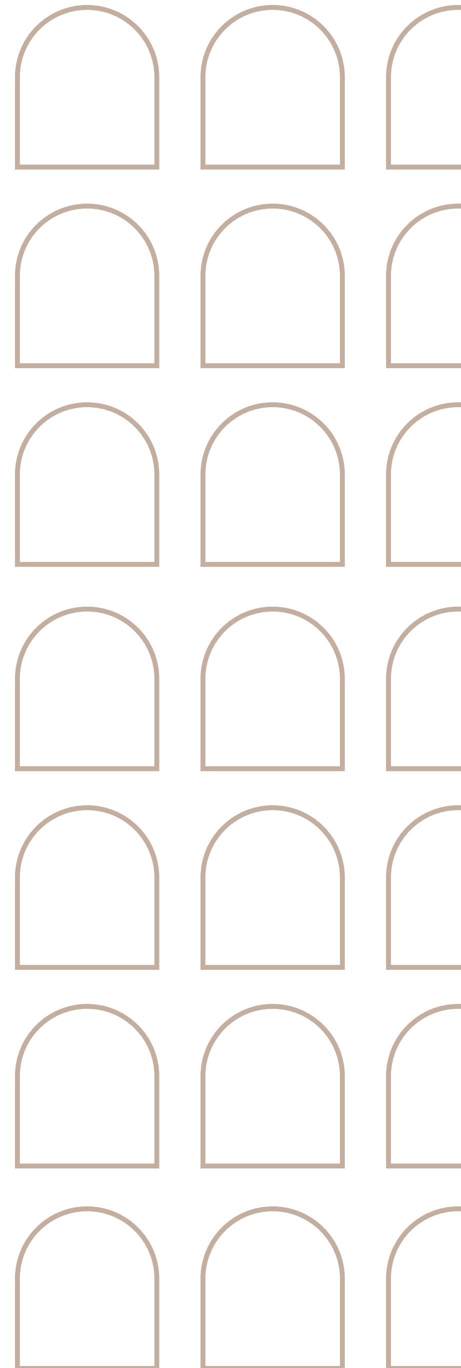

STG Policy Papers

POLICY BRIEF

TOWARDS AN EU POLICY AGENDA FOR VOLUNTARY CARBON MARKETS

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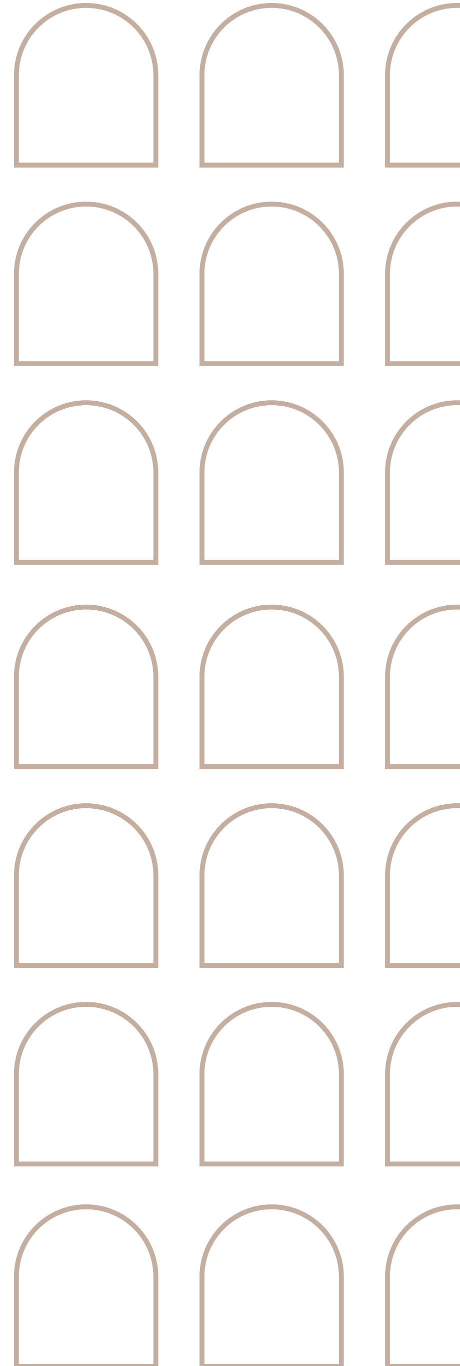
EXECUTIVE SUMMARY

The future of Voluntary Carbon Markets (VCM) remains uncertain as environmental quality concerns, trust issues and market fragmentation prevents the emergence of a sizeable and liquid market. VCM growth will depend largely on better market organisation and oversight, and on strengthening environmental integrity. This policy brief diagnoses problems and outlines the EU's actions that could contribute constructively to the further development of VCM and attainment of the goals of the Paris Agreement.



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1. INTRODUCTION

Uncertainty and scepticism continue to cast a shadow over Voluntary Carbon Markets (VCM). As identified in a previous policy brief, their structural integrity rests on addressing several credibility challenges. So far VCM have neither gained critical mass nor sufficient trust in terms of environmental quality. For there to be a vibrant, large-scale VCM, there needs to be certainty that what is being paid for is really being delivered, as well as balance between supply and demand. This policy brief highlights what the European Union (EU) is and should be doing to improve trust and foster integrity in VCM, and through that, scale a uniformed market, accelerate climate finance, and meaningfully contribute to the goals of the Paris Agreement.

2. THE STATE OF CURRENT VCM

The Kyoto Protocol's Clean Development Mechanism (CDM) was *de facto* the first full scale baseline-and-credit mechanism generating credits that could be traded and used for offsetting. The logic underpinning project-based instruments was that while companies could theoretically reduce emissions themselves, they could meet commitments at a lesser cost if they bought credits from emissions reduction, avoidance, or removal projects from elsewhere in the world, where it was cheaper to develop projects. The CDM's gradual demise had its roots in the questionable environmental integrity of some projects, combined with the over-supply of credits in relation to demand. The questionable quality of CDM credits led the EU's Emission Trading Scheme (EU ETS) to close the door to these credits, causing a decrease in demand.

In the VCM private entities shape a self-regulated, interactive, and complex governance system. Not only do VCM differ from compliance markets in terms of architecture and scope, but volumes and prices are widely divergent too. In 2022, the average price of a tonne of carbon dioxide equivalent (CO2eq) emissions reduction on the VCM amounted to around $8, with so-called "nature-based" solutions generally selling at a price premium[1]. During the same year, the primary market accounted for approximately approximately $1.3 billion with a lingering oversupply[2].

By comparison, the compliance emissions trading markets mobilised €865 billion in 2022, the bulk of which came from the EU ETS[3]. The EU ETS is based on a declining absolute cap with currently no use of international credits. Recently, EU allowances exceeded a price of €100 per tonne of CO2eq. which demonstrates that there is confidence in the market, which is strengthened by market oversight and disclosure.

Growth projections for the VCM, ranging between a more modest 5- to 10-fold increase[4] and an ambitious 15-fold increase by 2030[5], and are based on many assumptions but the most fundamental of these – the robustness of carbon accounting – is not yet assured. If VCM are to learn lessons from the CD, quality and quantity should proceed in tandem: reputable supply drives strong demand and vice versa. Below, market frictions across the VCM value chain are analysed first, then a possible future role for the EU is mapped out to help overcome these deficiencies.

3. SUPPLY: HIGH FRAGMENTATION, LOW LIQUIDITY

There are persistent questions on what credits envisaged for voluntary use stand for. Do credits bought and aimed for voluntary use by private companies represent additional reductions, avoidances, or removals to those that would have happened anyway? Are these credits of comparable measurement quality and permanence to the emissions they are meant to compensate? Is the counterfactual scenario (baseline) influencing the number of credits generated accurately estimated? Are credits retired irrevocably cancelled after being used to offset emissions

1 Turner, G. *et al.*, 2023.
2 *Ibid.*
3 Vitelli, A. and Gualandi, R., 2023
4 Turner, G. *et al.*, 2021.
5 Adams, T., et al., 2021.

so that they cannot, in any circumstances, be used again or double-counted? These are some of the concerns targeting the quality of VCM credits[6].

As an intangible commodity, the value of carbon credits hinges on the accuracy and perceived legitimacy of what is offered and how it is calculated. Trust in the appropriateness of institutional arrangements is central to a well-functioning market[7]. In a decentralised trading environment, however, there are multiple actors each championing how things should best be done. Highly fragmented sets of carbon standards, each with their own methodologies and terms of compliance, are confusing[8]. Inconsistencies in monitoring, reporting and verification (MRV) approaches across standards make comparability across credits difficult.

Furthermore, liquidity is impaired by the preponderance of over the counter (OTC) trades, and diversity between registries gives rise to inconsistencies in the tracking of credits and their eventual retirement. This hampers the scaling of VCM.

Attempts to reinvigorate trust are flourishing. The Integrity Council of the Voluntary Carbon Market is currently attempting to finalise quality threshold criteria, the so-called Core Carbon Principles, to enhance the standardisation of high-quality credits. Similarly, rating agencies are increasingly gaining prominence in screening standards and projects to identify the best environmental quality credits. However, the lack of harmonisation among and within these service providers may also accentuate existing confusion.

4. DEMAND: HIGH RISKS, FEW CERTAINTIES

As net-zero commitments proliferate, the business sector turns to the VCM to retire credits to back up "carbon neutrality" claims. However, these claims vary in meaning and scope across actors and jurisdictions. For example, when a claim is made by a company to be 'climate neutral', does the company ensure that it includes all its activities everywhere in the world, including partially owned facilities, and not just those in certain jurisdictions? Are all greenhouse gases covered? Do emissions reported include the indirect emissions associated with energy purchased, such as emissions caused by electricity generation? Does the commitment include the carbon embedded in the products the company produces that will one day be released into the atmosphere? There is a notable lack of uniformity.

Some of the buyers of VCM credits are fearful of reputational damage if what they acquired to fulfil their commitments turns out to be a misrepresentation, or worse, a falsification of mitigation. Buyers want to be confident in the robustness of MRV methodologies applied to the projects[9]. Moreover, the multiplication of methodological approaches to estimating mitigation is aggravated by poor data availability, often limited to high-level metrics[10].

At the national level, the regulation of claims is uncoordinated, and companies face a multitude of different governance approaches[11]. To counteract this trend, the Voluntary Carbon Markets Integrity Initiative is working on the standardisation of claims according to the use made of credits.

Action in that regard has also been taken by the United Nations Secretary-General, who established a High-Level Expert Group on the Net-Zero Emissions Commitments of Non-State Entities to try to set clearer standards for net-zero emissions pledges. The report underscored that only high integrity carbon credits in voluntary markets should be used by companies to compensate for emissions that could not be mitigated in their value chain.

6 Miltenberger, O., Jospe, C. and Pittman, J., 2021.
7 Blum, M., 2020.
8 IIF, ISDA, 2023.
9 BCG, Shell, 2022.
10 Blaufelder, C. *et al.*, 2021.
11 Kreibich, N., Brandemann, V., Jüde, F., 2022.

Moreover, there are potential interrelations with the international framework currently being developed regarding Article 6 of the Paris Agreement. Questions remain on whether double claiming should be avoided based on (corresponding) adjustments to countries' emission balances when companies use carbon credits, particularly those transferred internationally. While currently many independent standards provide limited or even no guidance on claims related to the use of their carbon credits, one possible solution stakeholders in the VCM are likely to zoom in on would be to differentiate claims made when voluntarily using carbon credits. Contribution claims might, for example, explicitly foresee that no corresponding adjustments would be applied, which means the purchaser only finances reduction efforts in the host country of the project. In any event, as a minimum, proper transparency is key to knowing how credits used in VCM relate to the accounting framework being devised under the United Nations.

5. EU CONTRIBUTIONS TO ENHANCING VCM INTEGRITY

The EU has been largely absent from the VCM debate so far, focusing rather on its compliance carbon pricing instrument, the EU ETS. Nonetheless, recent EU policy initiatives – some still in the making, others already finalised – are poised to affect the VCM. In these ways, the EU has the potential to help improve VCM by building on insights gained from experience of the EU ETS. In this regard, the following areas of action are worth considering.

i. Disclosure and reporting rules

The European Sustainable Finance Disclosure Regulation (SFDR)[12] and the Corporate Sustainability Reporting Directive (CSDR)[13] are instruments to enforce transparency and the quality of user-friendly climate-related data. The SFDR obliges financial market participants to disclose information on material risks a company's activities may pose to the environment and people as well as material risks that environmental factors, including regulatory constraints for environmental and social protection purposes, may have on the company's financial health and prospects – the so-called "double-materiality" concept. The CSDR sets stringent sustainability reporting requirements for corporates, including the obligation to provide clarity on the use and quality of carbon credits utilised. The first set of European Sustainability Reporting Standards (ESRS)[14], lays down technical criteria for mandatory reporting activities, including for VCM credits. The ESRS draft on Climate Change[15] explicitly sets a disclosure requirement (E1-13) on "the extent and quality of carbon credits" purchased from VCM. Despite some limitations of these two synergetic measures[16], the EU is set to play a pioneering role in enforcing legally binding reporting standards for the use of VCM credits. Robust disclosure and reporting rules should trigger a virtuous "race to the top" towards high-quality carbon credits. By pushing for greater alignment and consistency across reporting, an attempt is being made to build investor confidence.

ii. Carbon Dioxide Removals Certification Framework

In 2022, the European Commission proposed a Regulation targeting high quality Carbon Dioxide Removals (CDR) taking place in the EU[17]. This initiative covers both technologically led (e.g., DACS and BECCS) and nature-based types of carbon removals (linked to land-management and agricultural practices, and often referred to as "carbon farming"). If the EU 2050 climate neutrality target is to be met, scaling carbon removals should be a priority, as recent analysis sug-

12 Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability-related disclosures in the financial services sector.
13 Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC, and Directive 2013/34/EU, as regards corporate sustainability reporting.
14 The European Commission is set to adopt the standards as delegated acts in June 2023.
15 EFRAG, 2022.
16 Cornillie, J., 2022.
17 Proposal for a regulation of the European Parliament and of the Council establishing a Union certification framework for carbon removals. COM/2022/672 final.

gests that carbon removals will be needed to a greater extent than is often recognised[18], and these take time.

To address fragmentation and integrity concerns on carbon dioxide removal standards, the voluntary certification framework proposes minimum quality criteria to be enforced across different activity types. VCM certification bodies will need to comply with these unified criteria and be recognised by the EU framework. This harmonisation effort is accompanied by a requirement to report CDR-related information on certificates that will be traceable in interoperable public registries. By determining a common denominator in terms of quality requirements, the framework opens prospects for the fungibility of certificates across different financial end-uses. Certification will be a badge of quality in its own right but importantly, through the trust it creates, will also facilitate access to finance. VCM, along with other sources of finance, could benefit from this enhanced transparency of carbon removals.

In a virtuous two-way process, the EU certification could not only influence the strengthening of existing VCM methodologies and processes, but also use best practices from established programmes through mutual learning and cross-jurisdictional pollination. Recognising existing practices and amending their flaws allows "the baby not to be thrown out with the bathwater", as happened in another context[19]. The EU proposal, to be complemented by more technical secondary legislation, has the potential to become a leading standard-setter for the certification of carbon removals, paving the way towards greater policy convergence.

iii. Claims regulation

As part of the EU's new Circular Economy Action Plan[20], two legislative initiatives are underway to regulate climate-related claims and to strengthen consumer protection. The European Commission's proposal for a Green Claims Directive[21] covers the substantiation and the communication of voluntary environmental claims. Only those claims meeting minimum requirements according to ex-ante verification are allowed to be used. The role of offsets in making climate-related claims comes under scrutiny. Companies are required to provide additional information on offsets used for emission reduction claims, to specify the type of offsets used (reductions or removals), to ensure their high integrity and that they are accounted for correctly. By providing provable and trustworthy information on companies' and products' environmental performance, the initiative seeks to ensure greater transparency and consistency that will enable greener decisions and combat misleading information.

The European Commission's proposal made in 2022 for "strengthening the role of consumers in the green transitions"[22] provides purchasers with the necessary data to carry out informed decisions and be protected from unfair and misleading commercial practices. Restriction on the use of generic claims – like "carbon neutral" – is conditional on the fulfilment of specific requirements, first and foremost the demonstration of excellent environmental performance. Moreover, claims that cannot substantiate "clear, objective and verifiable" commitments or targets, or those not subject to independent monitoring, should be prohibited.

While both legislative initiatives still must be enacted, they indicate the EU's ambition to provide greater harmonisation in making claims across Member States. Appropriate

18 Smith, S., et al., 2023.

19 In early 2009, the UK, motivated by the willingness to ensure rigour of carbon credits audit and verification procedures, intervened in the voluntary carbon market in the form of a "Quality Assurance Scheme" targeting the supply side. The scheme, whose application was voluntary for credits providers, accredited only compliance credits (from CDM, EU ETS). The decision to rule out the leading voluntary carbon standards on the basis of their dubious integrity drove most voluntary organisations not to adhere to the government-led initiative. The UK attempt to regulate the market was consequently limited in its achievement. (Lovell, H.C., 2010).

20 Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - A new Circular Economy Action Plan For a cleaner and more competitive Europe. COM/2020/98 final.

21 Proposal for a Directive of the European Parliament and of the Council on substantiation and communication of explicit environmental claims (Green Claims Directive). COM/2023/166 final of 22/03/2023.

22 Proposal for a Directive of the European Parliament and of the Council amending Directives 2005/29/EC and 2011/83/EU as regards empowering consumers for the green transition through better protection against unfair practices and better information. COM/2022/143 final of 30/03/2022.

sanctions will inevitably be needed. The EU's internal regulation to ensure the integrity of claims has the potential to contribute towards a greater alignment of substantiating claims at the global level.

At the level of the UN, the aspect of the application of the Paris Agreement's Article 6 'corresponding adjustments' to VCM offsetting claims may still be refined. In the meantime, some interesting initiatives such as the Nordic Dialogue on Voluntary Compensation have been launched to present best practice guidance on the voluntary use of carbon credits and claims related to that use. Similar activities are being developed by individual Member States. A coordinated approach at EU level would be beneficial.

iv. Implementing legislation related to the Carbon Border Adjustment Mechanism (CBAM)

The CBAM legislation foresees a reduced liability for importers of goods into the EU to the extent that a carbon price has already been paid in the country of origin. The EU will have to develop secondary legislation to specify the criteria according to which carbon pricing systems will be eligible, and on what basis. This provides an opportunity for the EU to incentivise the use of carbon pricing in third countries, and the EU will also be seeking to ensure that carbon pricing systems in other jurisdictions are meaningful from an environmental perspective. MRV requirements for embedded carbon will have to be elaborated, and documentary proof provided that a carbon price has been effectively paid. Depending on how this is done, it would potentially create opportunities for the scaling up of the high-quality segment of VCM.

6. IMPROVING OVERSIGHT THROUGH THE FINANCIAL MARKET

Financial regulatory bodies could mitigate VCM weaknesses and correct imperfections in several ways. The EU ETS falls under the EU's financial regulations, such as the Markets in Financial Instruments Directive (MiFID) and the Market Abuse Regulation (MAR), and offers a valuable lesson. While some may find this a burdensome requirement, it has enhanced trust in the EU's carbon market. The EU could consider bringing some of VCM's activities under its financial regulations, but currently this is not being considered. Alternatively, key players in financial markets may help create a more reassuring regulatory context. Five elements are worth mentioning:

i. Market operators could facilitate the creation of centralised trading infrastructure, counteracting the customary practice of piecemeal OTC transactions[23]. Centralisation would boost liquidity, price transparency, and knowledge-sharing. Nurturing a well-functioning secondary market could allow market participants to manage and hedge risks implied in investing in carbon projects, thus attracting more investors and reaching a broader audience.

ii. Standardised definitions, transactions, and contracts could facilitate the growth of primary and secondary markets. To harmonise the currently fragmented landscape of standards and certification bodies, a common reference framework is needed. As an example, the International Swaps and Derivatives Association (ISDA) recently published its 2022 Verified Carbon Credit Transactions Definitions[24] to support the trading of carbon credits. Standardisation efforts are not limited to terminology alignment but can encompass contract and price benchmarking[25]. Standardised contractual arrangements promote more limpid price discovery as they transparently communicate their prices in secondary markets. Contracts can take the form of sales and derivatives[26] to be traded on exchanges which, in turn, facilitate and optimise informed and competitive trading where publicly available data is offered[27]. Room for flexible pricing would still be

23 Tjon Akon, M., 2023.
24 ISDA, 2022.
25 An example of such action is GER - Net Zero Markets
26 ISDA, 2021.
27 Spilker, G., and Nugent, N., 2022.

available for those features peculiar to each carbon credit, such as other co-benefits.

iii. Establishing independent market oversight that promotes fairness and confidence in the market. It would be necessary to lay down manipulation, abuse, and anti-fraud rules, and also envisage sanctions in the case of infringement of these rules. Efficiency and legitimacy pass through ensuring rule abidance and penalties for improper practice.

iv. A centralised registry gathering standardised data – akin to the open-source data model of the Climate Action Data Trust – could enable coherent tracking of issuance, transfers, and retirements of credits (and their subsequent cancellation). Consistency across data monitoring and reporting and access to information on international transactions are indispensable[28]. Under the EU ETS the central management of the registry has proven to be essential to deliver the outstanding compliance record of the system.

v. At the project level, insurance mechanisms would further develop if clarity and certainty is provided as to what happens in the case of reversals of carbon dioxide removals – whether intentional (e.g., ploughing) or unintentional (e.g., forest fires). More insurance products could also serve to mitigate risks for many market actors, but insurance companies will only offer products if they are themselves able to predict risks and potential liabilities.

7. CONCLUSION

Useful and important steps are being taken to increase trust in, and decrease risks of, VCM. These steps will create conditions for a better functioning of VCM in the future. While private-led initiatives are attempting to reform from within, new EU regulations will support these actions to ensure greater transparency, effectiveness, and accountability. New regulations on disclosure and reporting are already being implemented by the EU, while more is to come on the certification of removals, claims and in implementing the EU's CBAM. The EU can and should exert constructive leverage over the growth of VCM and thereby boost their contribution to ambitious climate action.

28 IOSCO, 2022.

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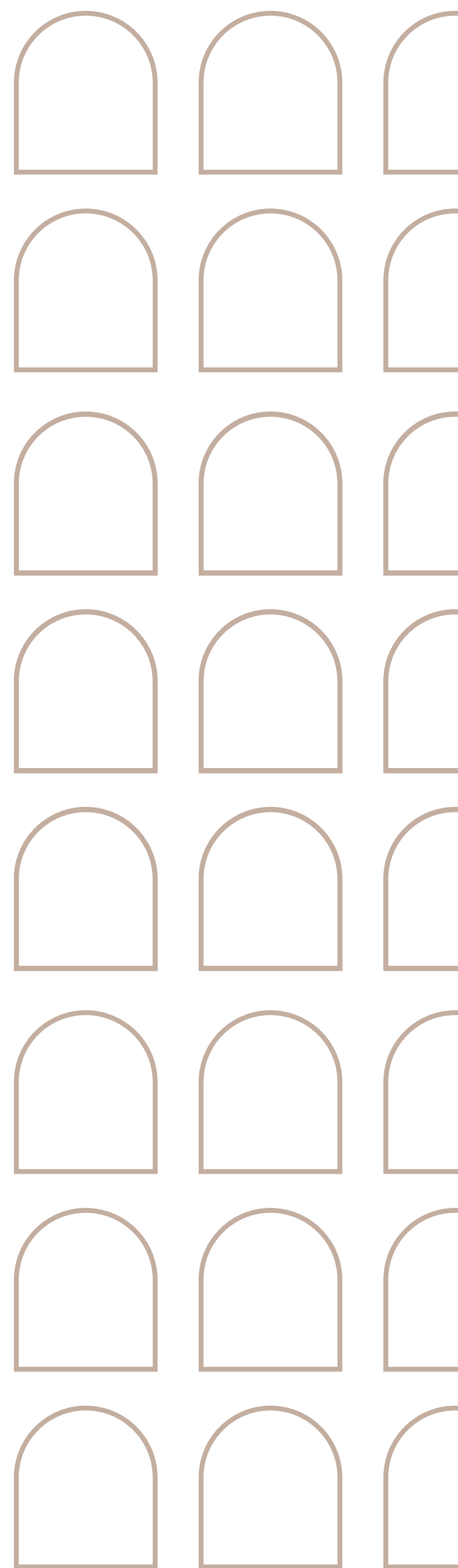

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