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CARBON &
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LAW
REVIEW

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Reparations For Climate Harm and The Role of The Loss and Damage Mechanism: Lessons from Other Areas of Law

Oscar Davison

Regulatory Approaches to Carbon Dioxide Usage and Storage in the European Union

Tatu Hocksell

Bringing the Ocean into National Systemic Climate Litigation – Is Due Diligence a Bridge?

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European Climate Policy: One Step Forward, Two Steps Back

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The Voluntary Carbon Market and Indonesian Publicly Listed Companies

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Editorial

In a year marked by record breaking global temperatures and ever more devastating natural disasters, the world's governments prepare to meet in December for the first ever global stock-take under the Paris Agreement. It marks the first time that governments will come together to determine how far we have collectively come – and how far we have to go – to meet the goals of the international climate change regime and avoid catastrophic climate change. Initial reports indicate that we have quite a distance to cover.

The global stock-take, however, is not the only thing on the agenda, as important conversations about the complexities of climate change mitigation, adaptation and the necessary financial support thereof, continue to sharpen their focus and become more contentious leading up to this year's climate negotiations.

In this issue of the Carbon & Climate Law Review, contributors explore some of the most pressing issues in this debate. In his thoughtful exploration of finance mechanisms to combat climate loss and damage, Oscar Davison examines the potential for a reparations-based approach loss and damage mechanism. On the basis of two examples of existing (non-climate related) reparation schemes, he outlines his finding that there is much to learn from other areas of law and outlines the possibility for climate reparations-related mechanism that is informed by Indigenous cultural practices and healing processes, centres the voices of climate victims and climate-vulnerable populations, and allows Global North States to participate and provide reparations without necessarily accepting legal liability.

In another important consideration, Tatu Hocksell examines the European Union's regulatory approaches to carbon capture and storage, which is heavily relied on in the International Energy Agency's emission reduction scenarios. Focusing on point source carbon capture technologies, Hocksell outlines the role of this technology in EU climate policy, including reporting mechanisms, regulatory and policy objectives and approaches, and the interplay between EU-Member States and the promotion and use biofuels, synthetic fuel production and storage. Clarity on when and how new regulation on carbon capture utilisation and storage solutions can be relied on, as well as which incentives are practical and available will go a long way towards bringing this important topic closer to effectiveness.

One lever that has begun to show some success in pressuring governments toward more ambitious climate action has been the proliferation of climate-related litigation in national court systems. This month marked the first of several climate-related legal proceedings at the international level as well. Hearings began at the International Tribunal for the Law of the Sea (ITLOS) regarding the request for an Advisory Opinion which was submitted to the Tribunal by a group of small island states in order to clarify state due diligence obligations under the law of the sea convention as they pertain to climate change.

In my exploration of national climate litigation, I outline the important interplay between international law and national climate litigation and argues that inclusion of the law of the

sea convention's due diligence obligations within systemic climate litigation could result in higher climate mitigation ambition being ordered by national courts in the short-term. The Advisory Opinion from the ITLOS will go a long way to clarifying the due diligence obligations at issue.

As climate-related legal questions, mechanisms, approaches and challenges continue to evolve and develop, the turbulent and changing climate are matched only by the innovative, thoughtful, complex and transformational approaches taken by those scholars and practitioners actively engaged in the topic. Let us all hope that we find workable and equitable solutions quickly.

Kate McKenzie
Managing Editor

Indonesia

The Voluntary Carbon Market and Indonesian Publicly Listed Companies

*Handa S Abidin and Soraya D Kartikasari**

In general, publicly listed companies in Indonesia have not yet optimised the potential of the voluntary carbon market (VCM) as part of their climate action. This situation has been exacerbated by recent regulations on carbon trading in Indonesia that have not fully supported the VCM. Indonesia needs regulations that support the potential of the VCM, not regulations that hinder it. Moreover, it is important for the VCM in Indonesia to support the Paris Agreement in order to link Indonesian climate activities with the global climate efforts of the UNFCCC regime through the VCM. This article also examines the role that the VCM should have in connection with the Paris Agreement, especially related to Indonesia's NDC target for 2030.

I. Introduction

One of the approaches that can be applied to meet the climate goals of a company or entity is purchas-

ing voluntary carbon credits^{1,2}. The concept of using carbon credits as an offset instrument is not new, having been around for more than three decades.³ Carbon offsetting is seen as a 'transitional strategy' and a 'supplementary measure'.⁴ It is not a substitute for the agenda to cut emissions globally.⁵ However, carbon credits could serve more purposes than only acting as a tool for companies to engage in carbon offsetting.⁶ A company could also buy carbon credits and retire them without using them as offsets, resulting in a more meaningful effect to decrease emissions.⁷ The selection of high-quality carbon credits can also provide support for other aspects such as the Sustainable Development Goals (SDGs).⁸

The term 'voluntary carbon market' (VCM) is self-explanatory. The word 'voluntary' indicates that neither buyers nor suppliers/sellers are obliged to purchase or supply/sell carbon credits.⁹ To put this another way, the establishment of the market for carbon arises as a result of voluntary participation on

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1 For a definition and explanation of carbon credits, see: Climate Focus (Authors: C Streck, M Dyck, and D Trouwloon), 'The Voluntary Carbon Market Explained' --lt--https://vcmprimer.org/> (2021) ch 5, 1-2.

2 For recent discussions related to the climate action commitments of companies, see eg: (1) *ibid*, Climate Focus, ch 9, 2; (2) Taskforce on Scaling Voluntary Carbon Markets, 'Final Report' (2021) 52; (3) AC Lin, 'Making Net Zero Matter' (2022) 79 Wash & Lee L Rev 679, 681-684 and 698-708; (4) C Streck, 'How Voluntary Carbon Markets Can Drive Climate Ambition' (2021) J Energy & Nat Resources L 1, 1-3; (5) C Streck, 'Strengthening the Paris Agreement by Holding Non-State Actors Accountable: Establishing Normative Links between Transnational Partnerships and Treaty Implementation' (2021) 10:3 TEL 493, 495 and 499-500; (6) C Streck, 'Filling in for Governments? The Role of the Private Actors in the International Climate Regime' (2020) 17 J Eur Env'tl & Planning L 5, 5-7, 9-10, and 17; and (7) GE Marchant, Z Cooper, and PJ VI Gough-Stone, 'Bringing Technological Transparency to Tenebrous Markets: The Case for Using Blockchain to Validate Carbon Credit Trading Markets' (2022) 62 Nat Resources J 159, 164. For a discussion of why companies buy carbon cred-

its, see: *ibid*, ch 9. See also, eg: (1) Apple, 'Environmental Progress Report' (Apple Inc. 2022) 30 and 84; (2) Google, 'Building a Carbon-free Future for All.' <https://sustainability.google/commitments/carbon/#leading-at-google> accessed 7 September 2022; and (3) T McDonnell (Quartz), 'A Cryptoplatform is The World's Largest Buyer of Carbon Offsets', <https://qz.com/a-crypto-platform-is-the-world-s-largest-buyer-of-carbo-1849358688> published 2 August 2022.

3 (1) *ibid*, Climate Focus, ch 1, 2; (2) D Brand and M Meizlish 'An Investor's Perspective on the Voluntary Carbon Markets: From Marginal to Mainstream' in R Bayon, A Hawn, and K Hamilton, *Voluntary Carbon Markets* (eds) (Earthscan 2009) 90; and (3) *ibid*, Taskforce on Scaling Voluntary Carbon Markets, 38-40.

4 (1) Streck, 'How Voluntary Carbon Markets Can Drive Climate Ambition' (n 2) 2 and 8; and (2) *ibid*, Climate Focus, ch Introduction, 1 and ch 1, 5.

5 *ibid*.

6 *ibid*, Climate Focus, ch 9, 1-3 and ch 2, 1, see also ch 1, 1.

7 *ibid*.

8 *ibid*, ch 6, 4, ch 7, 3-4, and ch 12, 3.

9 See also: *ibid*, ch 1, 1, ch 5, 1-3, and ch 9, 2. For the cycle of a VCM project and carbon credits, see: (1) *ibid*, Ch 8, 3-4 and Ch 5, 2; and (2) Taskforce on Scaling Voluntary Carbon Markets (n 2) 29-31.

the part of sellers and buyers who engage in the activities of selling and purchasing carbon credits.¹⁰ In general, the purchase of carbon credits may be conducted either directly from carbon developers or through intermediaries.¹¹

The rules for issuing carbon credits are determined by 'private carbon standards' which are dominated mainly by the Verified Carbon Standard (VCS) (Verra) and the Gold Standard (GS).¹² Since 2010 the VCS has consistently outpaced the GS, the Climate Action Reserve (CAR), and the American Carbon Registry (ACR) in terms of the percentage of total carbon credits.¹³ Nonetheless, this does not mean that a VCM activity cannot be connected to a regulated arrangement such a carbon tax (for instance, in Colombia and South Africa) or a compliance carbon market (for instance, in California).¹⁴ Other countries in different regions, like Germany and the United Kingdom in Europe, Mexico in Latin America, and China, Malaysia, and Thailand in Asia, also utilise the VCM to support other forms of carbon pricing.¹⁵ Governments can also play the role of a regulator in supporting VCM activities, implementing VCM projects, and/or facilitating the implementation of VCM activities.¹⁶ Governments can also regulate how the VCM position is linked to Article 6 of the Paris Agreement¹⁷ and their country's Nationally Determined Contributions (NDCs)¹⁸.

As a G20 country¹⁹, Indonesia has a developing stock market worth 637 billion USD by market capitalisation.²⁰ The market capitalisation of the stock market is expected to increase as the Indonesian economy grows.²¹ This research assesses how familiar publicly listed companies are with carbon credits, and whether they have ever purchased carbon credits. In order to achieve this, the authors examine the annual and financial reports (2019-2021) of publicly listed companies available on the website of the Indonesian Stock Exchange,²² as well as the sustainability reports (2017-2021) of publicly listed companies obtained mostly from the companies' own websites and the Financial Services Authority's official website.²³ Not all the reports of the publicly listed companies are available on the Indonesian Stock Exchange and Financial Services Authority's official websites. Thus, in addition, the authors sent questionnaires to hundreds of other publicly listed companies where some of which participated in the research.

Previous research has examined the role of the capital market in facilitating carbon disclosure, but not within the context of Indonesia.²⁴ In the context of the United States, the Securities and Exchange Commission put forward a proposal for registrants to make a 'disclosure' on their carbon offsets.²⁵ More-

10 See also: *ibid.*

11 (1) *ibid.*, Climate Focus, ch 5, 1-3; and (2) Forest Trends' Ecosystem Marketplace, 'The Art of Integrity: State of Voluntary Carbon Markets' Q3 Insights Briefing (Forest Trends Association 2022) 10-11.

12 (1) *ibid.*, Climate Focus, ch Introduction, 1, ch 1, 1, ch 2, 1, ch 5, 3, and ch 7; (2) C Streck and MV Unger, 'Creating, Regulating and Allocating Rights to Offset and Pollute: Carbon Rights in Practice' (2016) 2016 CCLR 178, 180 and 183; and (3) Streck, 'How Voluntary Carbon Markets Can Drive Climate Ambition' (n 2) 4. See also: Streck, 'Filling in for Governments? The Role of the Private Actors in the International Climate Regime' (n 2) 26.

13 *ibid.*, Climate Focus, ch 1, 3.

14 *ibid.*, ch 7, 4, ch 9, 1, and ch 2, 1.

15 *ibid.*, ch 2, 1; (2) World Bank, *State and Trends of Carbon Pricing 2022* (World Bank 2022) 60; and (3) M Santoso, V Lath, and V Agarwal, 'How Voluntary Carbon Markets Can Help Indonesia Meet its Climate Goals' (30 May 2022) <<https://www.thejakartapost.com/opinion/2022/05/29/how-voluntary-carbon-markets-can-help-indonesia-meet-its-climate-goals--.html>>.

16 *ibid.*, Climate Focus, ch 2, 1-3. See also for the context of REDD-Plus: ch 13, 1-2 and ch 14, 1-3.

17 (1) *ibid.*, ch 2, 3, ch 3, 1-5, ch 13, 1-2, and ch 14, 3; and (2) World Bank (n 15) 48-50.

18 (1) *ibid.*, Climate Focus, ch 9, 2, and ch 8, 1 and 3; and (2) *ibid.*, World Bank, 48-49.

19 G20, 'About the G20' <<https://g20.org/about-the-g20/#about>> accessed 23 September 2022.

20 Bursa Efek Indonesia, 'Statistik' <<https://www.idx.co.id/data-pasar/laporan-statistik/statistik/>> published 9 September 2022.

21 R Agarwal, A Santoso, KT Tan, and P Wibowo, 'Ten Ideas to Unlock Indonesia's Growth After COVID-19' (McKinsey & Company 2021) 2.

22 The cut-off date for annual reports was 18 June 2022, and for the financial reports it was 7 August 2022. For annual reports, see: Bursa Efek Indonesia, 'Laporan Tahunan' <<https://www.idx.co.id/perusahaan-tercatat/laporan-keuangan-dan-tahunan/>> accessed 18 June 2022. For financial reports, see: Bursa Efek Indonesia, 'Laporan Keuangan' <<https://www.idx.co.id/perusahaan-tercatat/laporan-keuangan-dan-tahunan/>> accessed 7 August 2022.

23 The cut-off date for sustainability reports was 1 July 2022. For sustainability reports, see eg: Otoritas Jasa Keuangan, 'Laporan Keberlanjutan' <<https://www.ojk.go.id/keuanganberkelanjutan/id/publication/publicationsustainabilityreport>> accessed 7 August 2022.

24 See in general: G Erion, 'The Stock Market to the Rescue Carbon Disclosure and the Future of Securities-related Climate Change Litigation' (2009) 18 Rev Eur Comp & Int'l Envtl L 164.

25 Securities and Exchange Commission, 'The Enhancement and Standardization of Climate-Related Disclosures for Investors' (Proposed Rule) (21 March 2022) eg: 77-79, 89, 269-271, 273-274, 341-342, 366, 457, 465, and 480-481.

over, many companies are obliged to report Environmental, Social, and Governance actions in other capital markets,²⁶ including in Indonesia²⁷.

Furthermore, this research also looks at how Indonesian law, in particular the President Regulation Number 98 Year 2021 concerning the Implementation of Carbon Economic Value (*'Nilai Ekonomi Karbon'*) to Achieve the Target of the Nationally Determined Contribution and the Control of Green House Gas Emissions in National Development (President Regulation 98/2021)²⁸ and the Minister of Environment and Forestry Regulation Number 21 Year 2022 concerning the Procedures of Implementation of Carbon Economic Value (MEFR 21/2022)²⁹, regulates the VCM when it comes to publicly listed companies and how we should connect the VCM with the Indonesia's NDC.

II. Indonesian Publicly Listed Companies and Voluntary Carbon Credits

The prospect for Indonesia to generate carbon credits and receive income from them is considerable.³⁰ There are several ongoing carbon credit projects in Indonesia.³¹ Nonetheless, it is difficult to locate publicly listed companies in Indonesia that have explicitly stated that they have purchased voluntary carbon

credits from a third party based on their official reports (annual, financial, and sustainability reports). A publicly listed company that has done so is, for instance PT Gunung Raja Paksi Tbk.³² It should be noted that there are publicly listed companies that engage in carbon offsetting within their groups using carbon credits that they have generated.³³ In addition, there is a publicly listed companies that has pledged to engage in carbon offsetting.³⁴

Only 18 of the 789 publicly listed companies that we contacted responded to our survey questions. Of these 18 publicly listed companies, no one claimed to have purchased carbon credits. However, five of them acknowledged that they are familiar with carbon credits. Furthermore, five claimed to have calculated the carbon produced by their companies. Moreover, there is also one company which reported that it owns a company selling carbon credits and never bought carbon credits.

There are no Indonesian publicly listed companies on the UNFCCC regime's Race to Zero initiative.³⁵ Nonetheless, it should be noted that, as of 1 October 2022, there are 19 Indonesian companies on the Race to Zero list.³⁶ Although there is no Indonesian publicly listed company on the Race to Zero initiative, there are Indonesian publicly listed companies that have openly declared their intention to achieve the net zero³⁷ objective with a specific year

26 Erion (n 24) 165.

27 Peraturan Otoritas Jasa Keuangan Nomor 51/POJK.03/2017 tentang Penerapan Keuangan Berkelanjutan Bagi Lembaga Jasa Keuangan, Emiten, dan Perusahaan Publik (stipulated: 18 July 2017, promulgated: 27 July 2017) art 10 paras (1), (3), (4), and (6)-(7); art 12 paras (1) and (3), and art 13.

28 See: Peraturan Presiden Republik Indonesia Nomor 98 Tahun 2021 tentang Penyelenggaraan Nilai Ekonomi Karbon untuk Pencapaian Target Kontribusi yang Ditetapkan Secara Nasional dan Pengendalian Emisi Gas Rumah Kaca dalam Pembangunan Nasional (stipulated: 29 October 2021, promulgated: 29 October 2021) (President Regulation 98/2021).

29 See: Peraturan Menteri Lingkungan Hidup dan Kehutanan Republik Indonesia Nomor 21 Tahun 2022 tentang Tata Laksana Penerapan Nilai Ekonomi Karbon (stipulated: 21 September 2022, promulgated: 20 October 2022) (MEFR 21/2022).

30 (1) Katadata Insight Center, 'Indonesia Carbon Trading Handbook' (2022) v, 43-44, and 53; and (2) Otoritas Jasa Keuangan, 'International Seminar on Carbon Trade 2022', Mahendra Siregar (minutes: 34:37-35:36) <https://www.youtube.com/watch?v=rh5FeAH_lml> published 27 September 2022.

31 *ibid*, Katadata Insight Center, 44-47.

32 PT Gunung Raja Paksi Tbk has purchased voluntary carbon credits from Climate Impact X, see: PT Gunung Raja Paksi Tbk, 'Laporan Berkelanjutan 2021: Penyelarasan Perjalanan: Masa Depan yang Lebih Cerah dengan Baja yang Berkelanjutan /

Sustainability Report 2021: Aligning the Journey: Better Future with Sustainable Steel', 10.

33 Eg: (1) PT Barito Pacific Tbk, 'Sustainability Report 2020: Benefit for All Through Environmental, Social, and Governance (ESG) Integration / Laporan Berkelanjutan 2020: Integrasi Aspek Lingkungan, Sosial dan Tata Kelola (LST) untuk Manfaat Bersama', 9; (2) PT Barito Pacific Tbk, 'PT Barito Pacific Tbk dan Entitas Anak, Laporan Keuangan Konsolidasian untuk Tahun-Tahun yang Berakhir 31 Desember 2020, 2019 dan 2018 dan Laporan Auditor Independen / PT Barito Pacific Tbk and Its Subsidiaries, Consolidated Financial Statements for the Years Ended December 31, 2020, 2019 and 2018 and Independent Auditor's Report', 76, 183 (on Verified Carbon Unit / VCU), and 184; and (3) PT Indika Energy Tbk, 'Sustainability Report 2021: Progressing Towards Sustainability', 56 (the issuer of carbon credits has not been mentioned).

34 Eg: PT Merdeka Copper Gold Tbk, 'Laporan Berkelanjutan 2021: Tumbuh di Tengah Tantangan / Sustainability Report 2021: Growth in the Face of Adversity', 125.

35 UNFCCC, 'Who's In?' <<https://racetozero.unfccc.int/join-the-race/whos-in/>> accessed 25 September 2022. For other relevant initiatives, see eg: World Bank (n 15) 51.

36 *ibid*, UNFCCC, 'Who's In?'.

37 For the definition of net zero and differences with Science-Based Targets, carbon neutral, carbon negative, and carbon free, see: Taskforce on Scaling Voluntary Carbon Markets (n 2) 97.

target.³⁸ Non-state actors have various strategic positions on the climate agenda and some of these can also be applicable to a corporate context, including in Indonesia.³⁹ The difficulty of achieving this pledge to net zero lies in its execution.⁴⁰ There are approaches in the United States that could be adapted to the setting of Indonesian law in order to encourage the fulfilment of net-zero commitments by companies.⁴¹

III. The Paris Agreement, Indonesian Law, and the VCM

The Paris Agreement—through Law Number 16 Year 2016 concerning the Authorisation of the Paris Agreement to the United Nations Framework Convention on Climate Change—is the legal basis of the President Regulation 98/2021 (along with the Law Number 6 Year 1994 concerning the Authorisation of the United Nations Framework Convention on Climate Change).⁴² In other words, the text of the President Regulation 98/2021 must not be in contradiction with the Paris Agreement and the earlier treaty, the 1992 UNFCCC.

The potential for carbon trading in Indonesia is enormous, with the Chair of the Indonesian Financial Services Authority (Otoritas Jasa Keuangan) estimating a potential of \$565 billion USD only from most parts of the forestry sector.⁴³ The promulgation

of the President Regulation 98/2021 should be seen as an indication of the commitment of Indonesia to climate action.⁴⁴ However, substantial revisions still need to be made to enhance the quality of the President Regulation 98/2021 and its implementation.⁴⁵ The President Regulation 98/2021 is problematic because it is ambitious but difficult to execute, too wide⁴⁶, vague⁴⁷, and unfriendly to the VCM⁴⁸ as will be elaborated in more detail below. This chapter focuses on analysing the VCM from the standpoint of the purchaser, particularly in relation to the President Regulation 98/2021 and its implementing regulation, the MEFR 21/2022.

A high-ranking official from one of Indonesia's ministries has expressed the difficulty of understanding the President Regulation 98/2021.⁴⁹ Another a high-ranking official from the Ministry of Environment and Forestry responded by emphasising the need to understand the reasons behind the regulation's creation.⁵⁰ However, the issue with this argument is that the minutes of the discussions related to the establishment of the President Regulation 98/2021 are not publicly available.

The President Regulation 98/2021 came into effect in late October 2021.⁵¹ Almost a year later, the MEFR 21/2022 was promulgated.⁵² In general, there are many aspects in the President Regulation 98/2021 that need to be regulated more specifically in the form of a minister regulation.⁵³ The President Regulation 98/2021 regulates the making of imple-

38 See eg: (1) PT Austindo Nusantara Jaya Tbk, 'Laporan Berkelanjutan 2021: Mengatasi Perubahan Iklim Melalui Pengembangan yang Bertanggung Jawab', 1; (2) PT Indika Energy Tbk (n 33) 4, 11, 24, 27, 39, 53, 55-58, and 97; (3) PT Medco Energi Internasional Tbk, 'Laporan Berkelanjutan 2021: Membangun Masa Depan Melalui Energi dan Sumber Daya Berkelanjutan', 9, 17-18, 22, 68, 73-74; (4) PT Merdeka Copper Gold Tbk (n 34) viii, 40, 125, 132, and 165; and (5) PT Unilever Indonesia Tbk, 'Sustainability Report 2021: Purpose Led, Future Fit; Stronger Together towards Recovery', 20 and 91-92.

39 See: Streck, 'Filling in for Governments? The Role of the Private Actors in the International Climate Regime' (n 2) 11-15, 20-24, and 27-28. See also: Streck, 'Strengthening the Paris Agreement by Holding Non-State Actors Accountable: Establishing Normative Links between Transnational Partnerships and Treaty Implementation' (n 2) 499-500.

40 (1) Lin (n 2) 719; and (2) GE Marchant, Z Cooper, and PJ VI Gough-Stone (n 2) 167. For a list of climate change voluntary commitment and its examples, see: EB Weiss, 'Voluntary Commitments as Emerging Instruments in International Environmental Law' (2014) 44 *Envtl Pol'y & L*, 88-94.

41 See: (1) *ibid*, Lin, 719-730 and 766-767; and (2) Erion (n 24) 170-171.

42 President Regulation 98/2021 (n 28) Remembrance, numbers 2 and 7.

43 Otoritas Jasa Keuangan, 'International Seminar on Carbon Trade 2022' (n 30) Mahendra Siregar (minutes: 34:37-35:36). For another estimation, see: *Katadata Insight Center* (n 30) v, 43-44 and 53.

44 *ibid*, *Katadata Insight Center*, v, 50 (Dharsono Hartono), and 52.

45 See eg: Baker & McKenzie, 'Indonesia: New Carbon Emission Regulations - Green Shoots?' (Client Alert, 2022) 4.

46 See eg: *ibid*.

47 See eg: *ibid*.

48 See: n 61-62.

49 Ditjen Pengelolaan Ruang Laut, 'Sosialisasi Perpres No 98 Tahun 2021: Penyelenggaraan Nilai Ekonomi Karbon & Pengendalian Emisi GRK', M Yusuf (minutes: 14:50-15:50) <<https://www.youtube.com/watch?v=jIAcU8rivsc>> published 25 August 2022.

50 *ibid*, Joko Prihatno (minutes: 22:05-22:40).

51 President Regulation 98/2021 (n 28) art 90 and the promulgation page.

52 MEFR 21/2022 (n 29) art 85 and the promulgation page.

53 See also, eg: Baker & McKenzie (n 45) 4.

menting regulations for its execution.⁵⁴ There are at least 19 topics under the President Regulation 98/2021 that needed to be regulated in more detail by minister regulations.⁵⁵ These implementing regulations did not include other legal or policy products that are not explicitly mentioned in the President Regulation 98/2021, whether they needed to be regulated in a minister regulation or not.⁵⁶ The MEFR 21/2022 heavily reduces the amount of implementing regulations that must be created.⁵⁷ The MEFR 21/2022 is an implementing regulation for 12 articles under the President Regulation 98/2021.⁵⁸ Of these 12 articles, 11 articles are explicitly requested by the President Regulation 98/2021 to have implementing regulations in the form of minister regulations.⁵⁹ One article is not directly stated in the President Regulation 98/2021 as requiring further regulation with a minister regulation, but it is included as a topic that is specially regulated under the MEFR 21/2022.⁶⁰

The President Regulation 98/2021 does not explicitly regulate the voluntary carbon market. There is no explicit insertion of the word '*sukarela*' (voluntary) in the President Regulation 98/2021, which raises the question of the precise position of VCM and its carbon credits under the President Regulation 98/2021. According to Wahyu Marjaka—a high-ranking official from the Ministry of Environment and Forestry—the VCM will be phased out once the transition to a regulated and mandated market is complete, in accordance with the President Regulation

98/2021.⁶¹ Another senior official from the similar ministry, Joko Prihatno, cautioned against using the term VCM since the President Regulation 98/2021 does not lead to a VCM but rather to a mandatory market.⁶² However, using examples from other countries, a VCM and a regulated market can coexist and support each other.⁶³

Similar to the President Regulation 98/2021, the MEFR 21/2022 also fails to explicitly regulate the VCM. It also lacks the word '*sukarela*' (voluntary), but it does include provisions for additional Carbon Economic Value mechanisms that may be proposed by the Minister of Environment and Forestry or other relevant ministers by fulfilling a number of requirements.⁶⁴ The problem is that the requirements for recording and reporting on these other mechanisms do not fully support the concept and implementation of the VCM.⁶⁵

The definition of '*pelaku usaha*' (business participants) in the President Regulation 98/2021 and the MEFR 21/2022 is very wide.⁶⁶ On the other hand, however, the President Regulation 98/2021 and the MEFR 21/2022 both fail to involve other parties, inter alia foundations, indigenous peoples, and individuals who are not business participants, as active participants in carbon trading activities.⁶⁷ These individuals are also able to make substantial contributions to climate change mitigation.⁶⁸ It is also necessary to accommodate individuals who want to offset their emissions voluntarily, for example by buying carbon credits via direct trading or through a carbon ex-

54 See: President Regulation 98/2021 (n 28) art 5 para (5), art 30, art 44, art 49 para (4), art 53 para (3), art 54 para (8), art 55 para 6, art 56 para 2, art 57 para 5, art 61 para (3), art 67 para (4), art 68 para (6), art 69 para (5), art 70 para (4), art 71 para (6), art 75 para (4), art 77 para (4), art 82 para (6), art 84 para (6), for the deadline to stipulate the implementing regulations, see: art 89.

55 *ibid.*

56 See: *ibid.*, art 7 para (4), art 11 para (4), art 31 para (3), art 48 para (4), art 50 para (2), and art 75 para (1).

57 MEFR 21/2022 (n 29) Consideration.

58 *ibid.*

59 They are: art 49 para (4), art 53 para (3), art 54 para (8), art 56 para (2), art 57 para (5), art 61 para (3), art 68 para (6), art 69 para (5), art 71 para (6), art 77 para (4), and art 82 para (6) of the President Regulation 98/2021, see: *ibid.*, Consideration.

60 The article is: art 48 para (4) of the President Regulation 98/2021, see: *ibid.*, Consideration.

61 Otoritas Jasa Keuangan, 'International Seminar on Carbon Trade 2022' (n 30) Wahyu Marjaka (minutes: 2:05:33-2:07:59) and (2:13:54-2:15:38).

62 Ditjen Pengelolaan Ruang Laut (n 49) Joko Prihatno (minutes: 1:45:33-1:46:00).

63 See: n 14-15

64 MEFR 21/2022 (n 29) arts 36-37.

65 *ibid.*, art 51. See: n 9-10.

66 (1) President Regulation 98/2021 (n 28) art 1 number 35; and (2) *ibid.*, MEFR 21/2022, art 1 number 40.

67 (1) *ibid.*, President Regulation 98/2021, art 1 numbers 35 and 17-19, art 51 para (2), and art 53 para (2); and (2) *ibid.*, MEFR 21/2022, art 1 numbers 14, 19, 21-23, and 40, art 10 paras (2)-(3) and (5)-(6), art 12 paras (1)-(2), and (4), art 13, art 14 paras (4)-(5), art 15 paras (1) and (3)-(4), and art 16 paras (1) and (3)-(4). See also: (1) Ditjen Pengelolaan Ruang Laut (n 49) Joko Prihatno (minutes: 1:07:15-1:08:08) and (Prihatno mentions that, in the future, NGOs could be considered as an active participant in carbon trading in an implementing regulation of the relevant minister regulation, see: minutes: 1:38:33-1:42:17).

68 See in general: (1) MP Vandenbergh and AC Steinemann, 'The Carbon-Neutral Individual' (2007) 82 NYU L Rev 1673; and (2) MP Vandenbergh, J Barkenbus, and J Gilligan, 'Individual Carbon Emissions: The Low-Hanging Fruit' (2008) 55 UCLA L Rev 1701.

change that will be established in the future.⁶⁹ In the President Regulation 98/2021 and the MEFR 21/2022, business participants can include anyone from individuals—although these must be individuals who do business—to business entities.⁷⁰ A publicly listed company can be included in the category of business participants based on the President Regulation 98/2021 and the MEFR 21/2022.⁷¹

The general definition of a business participant based on the President Regulation 98/2021 and the MEFR 21/2022 does not explain the specific business sector of a business participant, which further widens the definition of a business participant under these regulations.⁷² The issue with this wide definition is that all parties classified as business participants are bound to implement the President Regulation 98/2021 if they are required by the regulation to do so. For instance, business participants that do not comply with the need to document and report their implementation of climate change mitigation and Carbon Economic Value activities may be subject to sanctions.⁷³ The President Regulation 98/2021 does not promote the ‘voluntary’ spirit of the VCM if purchasing carbon credits is categorised as a climate change mitigation activity that must be reported and a business participant will be sanctioned if it fails to do so.⁷⁴

Commentators advocate for the existence of the VCM in Indonesia, in addition to the emission trading system.⁷⁵ In terms of demand, the World Bank

classifies the VCM as one of the ‘four broad segments’ of carbon credit, along with the international compliance market, domestic compliance, and result-based finance.⁷⁶ It is expected that adjustments of provisions will be made to the President Regulation 98/2021 and the MEFR 21/2022 to enable the application of a VCM that supports carbon trading, namely emissions trading and emission offsets.⁷⁷ It is true that many aspects of the VCM need to be addressed, ranging from supply to demand.⁷⁸ Improving the quality of the VCM should therefore be a priority, and activities that are undertaken on a voluntary basis should not be punished. The purchase of voluntary carbon credits should not be burdensome; rather, it should be facilitated and recognised. From the standpoint of the suppliers of carbon credits, international carbon standards can still operate and be recognised in Indonesia if a number of requirements are met.⁷⁹ Although this uncomfortable situation has been considered a burden.⁸⁰

Climate Focus states that ‘a defining feature of the VCM is that it is not regulated by governments’ and that the VCM is ‘outside of regulated or mandatory carbon pricing instruments’, however, they also say the VCM needs to respect existing laws and policies, *inter alia*: the rights of indigenous peoples and local communities.⁸¹ Moreover, it is important to make sure that the VCM in Indonesia is in accordance with the Paris Agreement in order to participate in the bigger climate action agenda of the UNFCCC regime,

69 (1) President Regulation 98/2021 (n 28) art 1 number 23 and art 54; and (2) MEFR 21/2022 (n 29) art 1 number 21, art 5, art 27, art 46 para (2), art 52 para (3), and art 77 para (1). See also: Ditjen Pengelolaan Ruang Laut (n 49) Joko Prihatno (minutes: 2:13:59-2:15:41).

70 (1) *ibid*, President Regulation 98/2021, art 1 number 35; and (2) MEFR 21/2022 (n 29) art 1 number 40.

71 See: *ibid*.

72 *ibid*.

73 *ibid*, art 70 paras (1)-(3).

74 See also: n 9-10.

75 M Santoso, V Lath, and V Agarwal (n 15).

76 World Bank (n 15) 35-36.

77 See: (1) President Regulation 98/2021 (n 28) art 49 para (2); and (2) MEFR 21/2022 (n 29) art 5 para 1.

78 Taskforce on Scaling Voluntary Carbon Markets (n 2) 45-46, 48, and in general: 1-111. See also: Climate Focus (n 2) ch 1, 5.

79 See: (1) President Regulation 98/2021 (n 28) art 73 paras (7)-(8) and art 77; (2) MEFR 21/2022 (n 29) art 68; (3) Ditjen Pengelolaan Ruang Laut (n 49) Joko Prihatno (minutes: 1:35:15-1:36:15

and 2:12:29-2:13:50); and (4) Tim Publikasi Hukumonline, ‘Perkembangan Carbon Market di Indonesia Pasca COP26 dan Peraturan Presiden No. 98 Tahun 2021’ <<https://www.hukumonline.com/berita/a/perkembangan-carbon-market-di-indonesia-pasca-cop26-dan-peraturan-presiden-no-98-tahun-2021-lt6260d0121b77b?page=all>> published 21 April 2022.

80 (1) V Sebastian (S&P Global Commodity Insights), ‘Carbon Credit Issuances from Indonesia on hold, Developers Await Clarity’ <<https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/energy-transition/040722-carbon-credit-issuances-from-indonesia-on-hold-developers-await-clarity>> published 7 April 2022; and (2) B Mulder (S&P Global Commodity Insights), ‘Indonesia Halts Carbon Project Verification Process Over Legal Concerns’ <<https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/energy-transition/041422-indonesia-halts-carbon-project-verification-process-over-legal-concerns>> published 14 April 2022. For an example of a Verra project that has included the President Regulation 98/2021 as a basis for carrying out its activities, see: PUR ProjeK, ‘Agroforestry and Reforestation for Carbon Sequestration in Indonesia’ (Version 1.0, Draft PDD for listing, 2022) ch 1.14.

81 Climate Focus (n 2) ch Introduction, 1, ch 1, 1, ch 2, 1-2, ch 5, 3, and chs 10-11 and 14. For the context of Kenya, see in general: K Sena, ‘Carbon Credit Schemes and Indigenous Peoples in Kenya: A Commentary’ (2015) 32 *Ariz J Int'l & Comp L* 257.

particularly concerning the use of NDCs towards the accomplishment of the objectives of the Paris Agreement.⁸²

Thus, it is essential to establish the position of the VCM in supporting the Paris Agreement, including the Indonesian NDC, although '[t]he Paris Agreement with its governing bodies has no jurisdiction over the VCM'⁸³. The President Regulation 98/2021 regulates that Carbon Economic Value activities will not reduce the Indonesian target to the NDC.⁸⁴ This will be the proper approach to minimise certain concerns related to the disadvantageous impacts of the VCM if it is included as an action to accomplish the NDC target.⁸⁵ For instance, there is a concern that a country could become overly dependent on VCM participants in order to reduce emissions, which might lead to the government's implementation of less ambitious measures.⁸⁶ However, the MEFR 21/2022 contradicts the President Regulation 98/2021 when it regulates that Carbon Economic Value can contribute to meeting the NDC target.⁸⁷ The VCM will become part of Carbon Economic Value if it is recognised as part of carbon trading.⁸⁸ Based on the President Regulation 98/2021 and the MEFR 21/2022, Carbon Economic Value is part of Indonesian climate change mitigation actions.⁸⁹ Therefore, Carbon Economic Value can be included in the Indonesian NDC roadmap.⁹⁰

Indonesia has recently increased its NDC target for reducing greenhouse gas emissions from 31.89% (0.91 GtCO₂-eq) up to 43.20% (1.23 GtCO₂-eq) based on its greenhouse gas emissions baseline of 2.869 Gt-

CO₂-eq by 2030.⁹¹ However, this target has not yet been updated in the President Regulation 98/2021 and the MEFR 21/2022 which still use the previous reduction target of 29% (0.83 GtCO₂-eq) up to 41% by 2030 (1.18 GtCO₂-eq).⁹² The President Regulation 98/2021 and the MEFR 21/2022 need to be revised in order to have the same target as the Indonesian Enhanced NDC of 2022.⁹³ If the VCM is recognised as a Carbon Economic Value following the approach of the President Regulation 98/2021, the VCM can be categorised as an additional contribution beyond the NDC target. However, if the VCM follows the approach provided in the MEFR 21/2022, it might be construed as part of the country's efforts to achieve the NDC target. As previously stated, an option that does not put the VCM as part of achieving the NDC target is a safer option in order to push more progressive climate actions by Indonesia.⁹⁴

Indonesian government has declared 2025 as the year of the 'full implementation of carbon pricing in Indonesia'.⁹⁵ Beyond the President Regulation 98/2021, the spirit of support for the VCM needs to be regulated by implementing regulations such as the MEFR 21/2022 and also higher regulations than the President Regulation 98/2021, such as the future omnibus law regarding financial services⁹⁶.

IV. Conclusion

The VCM is expanding significantly on a global scale.⁹⁷ A VCM is not the final solution to carbon off-

82 See: Paris Agreement (adopted 12 December 2015, entered into force 4 November 2016) art 2 (a) and arts 3-6. See also: Indonesia, 'Enhanced Nationally Determined Contribution Republic of Indonesia' (2022) 15-16.

83 Climate Focus (n 2) ch 3, 1 and 3.

84 President Regulation 98/2021 (n 28) Consideration Letter d, art 2 paras 2-3, and art 3 paras (1)-(3). See also: Otoritas Jasa Keuangan, 'International Seminar on Carbon Trade 2022' (n 30) Wahyu Marjaka (minutes: 55:13-55:40).

85 Climate Focus (n 2) ch 3, 4-5, ch 8, 3, and ch 9, 2-3.

86 *ibid.*

87 MEFR 21/2022 (n 29) art 1 number 13 and art 84.

88 See: (1) President Regulation 98/2021 (n 28) art 47 para (1) and art 49 para (2); and (2) *ibid.*, MEFR 21/2022, art 3 para (2) and art 5 para (1).

89 (1) *ibid.*, President Regulation 98/2021, art 45; and (2) *ibid.*, MEFR 21/2022, art 2 para (1).

90 *ibid.*, President Regulation 98/2021, art 25 para (4).

91 (1) Indonesia (n 82) Summary, 1, 6, 12, and 14; (2) *ibid.*, President Regulation 98/2021, arts 2-3; and (3) MEFR 21/2022 (n 29) Consideration.

92 (1) *ibid.*, President Regulation 98/2021; and (2) *ibid.*, MEFR 21/2022.

93 See: n 91.

94 See: n 85-86.

95 Undang-Undang Republik Indonesia Nomor 7 Tahun 2021 tentang Harmonisasi Peraturan Perpajakan (authorised: 29 October 2021, promulgated: 29 October 2021) Chapter VI on Carbon Tax, Explanation of art 13 para (3). See also: Otoritas Jasa Keuangan, 'International Seminar on Carbon Trade 2022' (n 30) Wahyu Marjaka (minutes: 1:04:58-1:06:44).

96 For the Indonesian government's statement regarding the omnibus law and the carbon market, see: Otoritas Jasa Keuangan, 'International Seminar on Carbon Trade 2022' (n 30) Mahendra Siregar (minutes: 35:38-35:56).

97 (1) World Bank (n 15) 10, 12, 33, 38, and 40-41; and (2) Forest Trends' Ecosystem Marketplace (n 11) cover page and 2-4.

setting, but as a temporary solution it is still necessary.⁹⁸ In Indonesia, parties that act as suppliers of carbon credits are currently significantly more developed than parties that act as buyers.⁹⁹ The issue is that not all parties in Indonesia have the ability to become carbon credit suppliers. Purchasers, including publicly listed companies, have a role in the VCM in particular by actively participating in the transition stage. Indonesia needs regulations that will enable the VCM to collaborate with other forms of carbon trading. The Indonesian VCM's contribution to the Paris Agreement depends on the legal track chosen by Indonesia itself. In order to reduce the debate

or controversy regarding the quality of the activities aimed at achieving Indonesia's NDC targets by 2030, it will be preferable for Indonesia to focus on strengthening what has already been regulated in the President Regulation 98/2021 and viewing the VCM as a supplementary effort that falls outside Indonesia's NDC target for 2030 but within the framework of the Indonesian NDC.¹⁰⁰

98 See: n 4.

99 See: n 30-34.

100 See: n 85-86.



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