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29%

Global greenhouse gases (GHG) that are covered by carbon prices

50%

of the additional GHG emissions can be removed through carbon trading by 2030

68

countries that have bilateral agreements for carbon trading



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Carbon Trading Needs a Good Rulebook: Three Risks for Sri Lanka to Reduce

Increased carbon trading can enhance the flow of climate finance and support mitigation, adaptation, and loss and damage activities. However, at present, the lack of an effective National Framework not only impedes this possibility but also risks uncalculated decision-making that can jeopardise the country's climate commitments and incur significant social and economic costs.

Basics of carbon markets and the run-up to the Paris Agreement

International carbon markets first came into play in 1997 under the Kyoto Protocol with carbon trading schemes such as 'International Emissions Trading' (IET), Clean Development Mechanism (CDM) and Joint Implementation (JI).¹

In simple terms, carbon markets are systems in which carbon credits are bought and sold. One tradable carbon credit is equivalent to 1 tonne of greenhouse gas emissions reduced or removed.²

Carbon markets are classified into two types – (1) compliance carbon markets (CCM) which are formed as a result of a regulatory requirement, and (2) voluntary

carbon markets (VCM), which involve the issuance, buying and selling of carbon credits on a voluntary basis by private entities. International carbon markets as a whole under Article 6 of the Paris Agreement have elements of both.

The Paris Agreement and international carbon markets

The Paris Agreement, which was adopted in 2015, has established a bottom-up approach to climate action, whereby all State Parties determine their own emission reduction targets under Nationally Determined Contributions (NDCs). Article 6 of the Paris Agreement outlines market and non-market mechanisms for 'voluntary international cooperation' to enhance ambition and support sustainable development in climate action.

After almost a decade of negotiations, at COP29 (the 29th Conference of the Parties to the United Nations Framework Convention on Climate Change, or UNFCCC) in Azerbaijan in November 2024, State Parties agreed to operationalise carbon markets under Article 6 of the Paris Agreement.³

There are two market pathways created under Article 6. First, Article 6.2 allows State Parties (countries party to the Paris Agreement) to trade Internationally Transferred Mitigation Outcomes, or ITMOs, through bilateral or multilateral cooperation. This is carbon trading that happens between State Parties with the authorisation of the hosting State Party. Being a host means that a country voluntarily cooperates to approve and facilitate emission reduction activities within its borders under Article 6 of the Paris Agreement, following the adopted rules and modalities.⁴ Article 6.2 also allows private actors to trade ITMOs to countries, but only with the authorisation of the relevant host country. The operationalisation at COP29 has provided clarity on how a host country authorises carbon credits as ITMOs, and on the operation of relevant registries for trading.⁵

Second, Article 6.4 creates a centralised global carbon market which is called the Paris Agreement Crediting Mechanism (PACM). The PACM is structured similarly to an independent VCM, setting out a governance structure, and requirements for developing carbon projects, including standards, approved methodologies, supervisory body and registry. The credits issued under PACM are called A6.4 Emission Reductions (A6.4ERs). They could become ITMOs, if they are authorised by the participating State Parties.

Why carbon markets matter to Sri Lanka

Sri Lanka's climate finance needs significantly exceed the resources currently available through the national budget. In 2025, the government allocated 45 billion LKR (approximately 149 million USD) for environmental protection, which includes activities such as waste management and coastal protection, and 21 billion LKR (approximately 70 million USD) for sustainable energy.⁶ In May 2025, at the launch of the Sustainable Finance Roadmap 2.0, the Central Bank Governor

stated that "the CBSL has estimated that the government requires 10.85 billion USD to implement the NDCs until 2030 and warned about the rising cost of inaction."⁷

This indicates that Sri Lanka clearly requires private and international climate financing tools and mechanisms to ensure that the country meets its international commitments and becomes more climate resilient. Effectively engaging in carbon markets will potentially unlock new avenues of climate finance for the country, enhancing Sri Lanka's capacity and resources for adaptation, mitigation and loss and damage.

Where Sri Lanka stands now

The Climate Finance Strategy of Sri Lanka 2025-2030 has recognised the government's efforts in developing a framework to trade carbon credits generated from emissions reductions and nature-based solutions (NbS), supporting projects such as renewable energy and afforestation, with integration into international markets.⁸

In this context, Sri Lanka has already taken three positive steps towards engaging in international carbon trading.

First, Sri Lanka has signed a Joint Crediting Mechanism (JCM) agreement with Japan and has entered into an MOU with Singapore which falls under Article 6.2 of the Paris Agreement and imposes a set of roles and responsibilities on the country.⁹

Second, Sri Lanka has published its 'positive list' of project areas to implement carbon trading projects under Article 6.¹⁰

Third, Sri Lanka has submitted its interest to UNFCCC to become a host for PACM under Article 6.4 of the Paris Agreement. In that regard, Sri Lanka has submitted five activities as of May 2025 for prior consideration under Article 6.4.¹¹

However, there is a fourth and critical step that Sri Lanka still needs to complete to unlock its ability to engage with carbon markets and successfully unlock related financing. That is an effectively formulated "National Carbon Market Framework". Sri Lanka has already commenced developing this framework.¹² The core purpose of this

framework is to govern and develop a strategic approach to Article 6 activities undertaken by the country. If it is to be formulated effectively, a National Carbon Market Framework will need to encompass multiple crucial components including carbon credit authorisation, pricing, registry, regulatory body, and non-authorised credits, each decided strategically by weighing costs, benefits and risks.¹³

This insight recognises the critical need to put in place an effective National Framework and unpacks three problems that need to be addressed in formulating an effective framework. These are the problems of overselling, uncoordinated selling, and human rights violations in the process of carbon market trading. Designing an effective and strategic framework that has mechanisms to address these problems is a key priority in the formulation of a National Carbon Market Framework.

The problem of overselling

Sri Lanka has set emissions reduction targets across six sectors under its updated NDC 3.0: energy, transport, industry, waste management, agriculture, and forestry. These targets represent the emissions reductions that Sri Lanka intends to achieve as part of its climate commitments under the Paris Agreement. When selling ITMOs, either under Article 6.2 cooperative mechanisms or 6.4 PACM, corresponding adjustments should be made to avoid double counting of emission reductions. This is mandated by the Paris Agreement for all ITMOs to avoid both host country and acquiring country double-counting the emission reduction towards their own NDCs, and thereby to avoid artificial inflation of emission reductions. This creates a risk of overselling for the host country.

Overselling in the context of Article 6 carbon trading is the transfer of mitigation outcomes internationally that would otherwise have been required to achieve the country's own NDCs.¹⁴ While accurate data is crucial to track the progress toward domestic and global emission targets, an inadequately regulated ITMO selling policy by the host country could lead to overselling, jeopardising its ability to meet its own NDC commitments, causing cascading economic costs. In the event of overselling, especially if such emission

reductions are sold at too low a price, Sri Lanka risks failing to meet its targets or being forced to achieve those targets through more difficult emission reduction actions or more expensive purchases of carbon credits in the global market.

It is true that commitments under the Paris Agreement are nationally determined and are voluntarily undertaken. However, an inability to adhere to those commitments would cause reputational damage, harm Sri Lanka's international standing and diplomatic relationships, and affect its access to climate finance.

A well-developed National Carbon Market Framework can reduce this risk by setting clear rules on what Sri Lanka can sell and what it must retain for domestic emission targets. This could include a 'negative list' of projects approved under Article 6 of the Paris Agreement, limits on project duration and number of credits transferred from such projects, and periodic reviews to assess their impacts on NDC targets. Sri Lanka can potentially exclude areas pledged for carbon neutrality or strategically identify certain sub-categories under the areas that would be reserved for the state to achieve its own NDCs.¹⁵ For example, within the energy sector, hydro and biomass energy could be reserved for Sri Lanka and wind and solar for ITMOs.

The problem of uncoordinated selling

Uncoordinated selling, where carbon credits are traded through different market systems without a common overseeing national system, can become a problem for Sri Lanka for a few reasons. The country has finite land, ecological resources, and mitigation opportunities. As an island state, there are limits to the number and scale of carbon market projects that can operate within the country. As a developing country, Sri Lanka also needs to preserve policy space for development that improves living conditions for its citizens. Carbon market activity must therefore be planned in a way that supports, rather than constrains, national development and climate priorities.

Voluntary carbon trading has existed in Sri Lanka for over a decade and continues to operate via various private

entities.¹⁶ As the Article 6 carbon market trades offset credits similar to the VCMs, if these different forms of carbon markets operate without coordination, this could pose a significant threat to achieving the country's net zero targets and other NDCs.

A National Carbon Market Framework therefore needs to take measures to coordinate the relationship between Article 6 markets and VCMs. One way to overcome this challenge is to encourage 'carbon insetting' in the private sector, where actors pursue reductions or removals of GHG emissions within their own value chains.¹⁷

Another more enforceable mechanism is to establish a compliance carbon market in the form of a carbon tax or a cap-and-trade system in a gradual reduction model such as the European Union Emissions Trading System (EU ETS) where companies in high-emitting sectors are given emission targets, and these targets are reduced annually or at a similar frequency.¹⁸ This could either be embedded in a National Framework or be enforced through a distinct piece of legislation.¹⁹ The framework can also be used to establish registry and verification systems to ensure the integrity of VCMs. Indonesia is an example of integrating VCMs into the National Framework.²⁰

Apart from coordinating the interplay of different carbon markets, the framework can also be used to coordinate credit selling prices. Various economic, political and regulatory factors affect the pricing and stability of the international carbon market. For example, the recent withdrawal of the USA from the Paris Agreement has taken out a significant potential buyer of ITMOs. When pricing ITMOs, host countries are advised to charge a fee/cess/levy/tax to finance the additional mitigation activities that they have to undertake, due to corresponding adjustments.²¹ This can lead to discrepancies in ITMO pricing between countries, making buyers hesitant to buy ITMOs at a higher price. Therefore, Sri Lanka has to carefully consider different levers and formulate its own ITMO pricing strategy in the National Framework.

The problem of undermining human rights

Unregulated and unsupervised carbon trading projects can harm

and undermine the rights of people and communities. There are several global examples of reforestation and conservation projects that have led to the forced relocation and displacement of communities and indigenous groups, threatening their livelihoods.²² In Cambodia, several Chong indigenous residents were forcibly evicted from their customary farmland and were harassed by rangers for collecting forest products at the Southern Cardamom REDD+ Project.²³ There have also been reported cases of persecution of environmental defenders for opposing harmful carbon market projects. Between 2010 and 2011, 23 Honduran farmers were reportedly killed in connection with a dispute involving the owners of UN-accredited Clean Development Mechanism palm oil plantations.²⁴

In response to such concerns, the UNFCCC introduced the Article 6.4 Sustainable Development Tool in October 2024. This tool includes mandatory environmental and human rights safeguards for activities under the Paris Agreement Crediting Mechanism, as well as an appeals and grievance mechanism.²⁵ The safeguards require the participants to identify, evaluate, avoid, minimise and mitigate potential risks associated with projects.

Sri Lankan authorities need to assess the potential risks to people and communities when developing or approving activities for Article 6 carbon markets, aligning with the Sustainable Development Tool and the country's domestic and international human rights obligations. The National Framework needs to be equipped with project development benchmarks, including environmental and social risk assessments, prior and meaningful consultation with affected communities, public disclosure of project information, benefit-sharing rules, and accessible grievance mechanisms. Where particular sectors, project types, or geographic areas are identified as high risk for rights violations, they can be excluded through the negative list of projects.

In the global context of a serious deficiency in financing for climate resilience efforts, carbon markets provide a practical pathway for Sri Lanka to meet its urgent climate finance needs. This insight shows how the Paris Agreement provides a mechanism to

help Sri Lanka engage in global carbon markets and highlights the immediate action the country should take to unlock that opportunity. However, as outlined

in this insight, engaging in international carbon trading inherently increases the government's responsibilities and also creates three foreseeable and imminent

risks. Therefore, the immediate policy priority is not simply to establish a National Carbon Market Framework, but to ensure it is well formulated to address these risks ♦

Recommended Citation

Wickramasinghe, S., (2026). Carbon Trading Needs a Good Rulebook: Three Risks for Sri Lanka to Reduce .Verité Research Insight, No. 01; Vol. 14

Endnotes

- 1 Axel Michaelowa, Igor Shishlov, and Dario Brescia Evolution of International Carbon Markets: Lessons for the Paris Agreement (2019) at https://perspectives.cc/wp-content/uploads/2023/10/Evolution_of_International_Carbon_Markets.pdf - IET determined maximum emission levels for 37 industrialised countries,' and allowed trading in between countries that emitted below the level and the ones that intended to emit beyond, CDM enabled industrialised countries to earn emission reduction credits by financing emission reduction or removal projects in developing countries, with the resulting credits counting towards their own emission reduction commitments. It allowed one industrialised country to earn emission reduction credits by investing in emission reduction or removal projects in another industrialised country, with the credits applied towards its own emission reduction target.
- 2 United Nations Development Programme What Are Carbon Markets and Why Are They Important? 18 May 2022 at <https://climatepromise.undp.org/news-and-stories/what-are-carbon-markets-and-why-are-they-important>
- 3 United Nations Framework Convention on Climate Change Key Outcomes from COP29: Article 6 of the Paris Agreement October 2025 at https://unfccc.int/sites/default/files/resource/Key-Outcomes-from-COP29_Article-6-of-the-Paris-Agreement.pdf
- 4 United Nations Framework Convention on Climate Change (UNFCCC) Article 6.2 Initial Report/Registry Minimum Viable Product (MVP) 2024 at https://unfccc.int/sites/default/files/resource/A6.2_Registry_%20MVP.pdf United Nations Framework Convention on Climate Change Article 6.4 Manual for Host Parties' Participation in the Paris Agreement Crediting Mechanism (PACM) Version 1.0, May 2025 https://unfccc.int/sites/default/files/resource/HPparticipation_manual.pdf - The activities under CDM should be transitioned to Art. 6.4. There are 25 projects in the CDM registry that are hosted in Sri Lanka and should undergo this transition. The country has nominated the Ministry of Environment as the Designated National Authority (DNA) for the PACM https://unfccc.int/sites/default/files/resource/HPparticipation_manual.pdf;
- 5 However, prior to the finalisation of the Article 6 rule book in 2024, there have been ITMO transfers between countries, for an instance when, Switzerland bought ITMOs from Thailand in 2022, to fulfil their NDCs; Gautam Jain and Shubham Deshmukh, How to Fully Operationalize Article 6 of the Paris Agreement, (2025), at <https://www.energypolicy.columbia.edu/publications/how-to-fully-operationalize-article-6-of-the-paris-agreement/>
- 6 Ministry of Finance, Sri Lanka Budget Estimates 2024 – Volume I at <https://www.treasury.gov.lk/api/file/g1bae993-5489-4dda-9c19-74d8f5dc4439>
- 7 Central Bank of Sri Lanka Speech at the Launch of the Sustainable Finance Roadmap 2.0 5 May 2025 at https://www.cbsl.gov.lk/sites/default/files/speech_20250505_launch_of_the_sustainable_finance_roadmap_2.0_e.pdf
- 8 Ministry of Finance, Planning and Economic Development (Sri Lanka), 'National Climate Finance Strategy of Sri Lanka 2025–2030: Financial Products to Address the Climate Challenges in the Country' (October 2025) at <https://www.treasury.gov.lk/api/file/ef2dff2b-8a19-4bc8-9936-10c3e17a9264>
- 9 Kumudini Vidyalkara, 'The Journey Towards the Implementation of Article 6 of the Paris Agreement in Sri Lanka' (2024) at https://unfccc.int/sites/default/files/resource/Sri-Lanka_The-journey-towards-the-implementation-of-article%206.pdf; UNFCCC Decision 3/CMA.3: Rules, Modalities and Procedures for the Mechanism Established by Article 6, Paragraph 4, of the Paris Agreement (CMA/2021/10/Add.1) p.18 at https://unfccc.int/sites/default/files/resource/cma2021_10_add1_adv.pdf#page=18 - As per the UNFCCC guidance adopted for Article 6 of the PA, For Art 6.2. cooperative bilateral/multilateral mechanisms, Sri Lanka should first publish its national strategy or the framework on carbon markets. The country has to submit an initial report, annual information and regular information along with biennial transparency reports (BTR) with arrangements in place to authorise ITMOs, track ITMOs, and the most recent national inventory report (GHG inventory). Further, the host country is required to establish institutional arrangements and processes to authorize mitigation outcomes

to be used as ITMOs and to track the transfer and use of ITMOs there has to be an electronic database of a registry systems by the host party. The framework is required to encompass these components and to guide the surrounding administrative processes. Thereafter the host party has to report on all information related to Article 6 engagement and NDC accounting (i.e., transfers, corresponding adjustments, comparing the country's GHG adjusted emissions to the NDC goals, etc.) and should communicate in the initial, annual regular and biennial reporting as required.

- 10 UNFCCC Host Party Participation Requirements for Article 6.4 Mechanism (Version 01.0) at https://unfccc.int/sites/default/files/resource/A6.4_Form_AC_001_Sri%20Lanka_HPPR.pdf
- 11 UNFCCC Prior Consideration Notifications (21 May 2025) at <https://unfccc.int/documents/645550>
- 12 Website of the Global Green Growth Institute (GGGI) 'GGGI and Sri Lanka's Ministry of Finance partner to strengthen carbon trading expertise' 16 February 2023 at <https://gggi.org/gggi-and-sri-lankas-ministry-of-finance-partner-to-strengthen-carbon-trading-expertise/>
- 13 World Bank; A6IP; GGGI; GIZ; ICVCM; UNDP; UNFCCC; VCM 'Country Guidance for Navigating Carbon Markets' 2025 at <https://openknowledge.worldbank.org/entities/publication/957aaef4-75c9-4554-95db-cb0a6ff678e9> ; Rwanda Environment Management Authority (REMA) 'Rwanda National Carbon Market Framework' 2023 at https://www.climatechange.gov.rw/fileadmin/user_upload/Climatechange/Rwanda_National_Carbon_Market_Framework_updated_1_.pdf
- 14 United Nations Framework Convention on Climate Change Modalities, Opportunities and Risks of Introducing Fees or Levies on Mitigation Outcome Units in Lao PDR (CiACA – Lao PDR) July 2023 at https://unfccc.int/sites/default/files/resource/CiACA_Lao_PDR_Modalities_Opportunities_and_Risks_of_Introducing_Fees_or_Levies_on_Mitigation_Outcome_Units_in_Lao_PDR.pdf
- 15 To avoid oversell, the Kyoto Protocol has a mechanism called 'the commitment period reserve' where each party is required to maintain a reserve of reduction units in its national registry. However, no such mechanism exists under the Paris agreement, and thereby it is imperative for the parties to develop their own domestic mechanisms to deflect overselling.
- 16 Ministry of Finance, Planning and Economic Development (Sri Lanka), 'National Climate Finance Strategy of Sri Lanka 2025–2030: Financial Products to Address the Climate Challenges in the Country' (October 2025) at <https://www.treasury.gov.lk/api/file/ef2dff2b-8a19-4bc8-9936-10c3e17a9264>
- 17 Website of the World Economic Forum 'Carbon insetting vs offsetting: what's the difference?' 24 March 2022 at <https://www.weforum.org/stories/2022/03/carbon-insetting-vs-offsetting-an-explainer/>
- 18 Website of the European Commission 'EU Emissions Trading System (EU ETS)' at https://climate.ec.europa.eu/eu-action/carbon-markets/eu-emissions-trading-system-eu-ets_e
- 19 United Nations Conference on Trade and Development (UNCTAD) The Role of Voluntary Carbon Markets in Global Climate Action December 2025 at <https://unctad.org/publication/role-voluntary-carbon-markets-global-climate-action>
- 20 Center on Global Energy Policy, Columbia University SIPA, Navigating Indonesia's Energy Transition 7 May 2024 at <https://www.energypolicy.columbia.edu/navigating-indonesias-energy-transition/>
- 21 World Bank Corresponding Adjustment and Pricing of Mitigation Outcomes 14 November 2023 at <https://ppp.worldbank.org/public-private-partnership/node/7127>
- 22 Nesrine Malik 'The voluntary carbon market has failed the human rights test' Al Jazeera 10 December 2024 at <https://www.aljazeera.com/opinions/2024/12/10/voluntary-carbon-market-has-failed-the-human-rights-test>
- 23 Human Rights Watch Carbon Offsetting's Casualties: Violations of Chong Indigenous Peoples' Rights 29 February 2024 at <https://www.hrw.org/report/2024/02/29/carbon-offsettings-casualties/violations-chong-indigenous-peoples-rights>
- 24 Human Rights Watch 'COP28: Carbon Market Rules Should Protect Rights' 7 March 2023 at <https://www.hrw.org/news/2023/03/07/cop28-carbon-market-rules-should-protect-rights>
- 25 United Nations Framework Convention on Climate Change Annex: Recommendations for activities involving removals under the Article 6.4 mechanism A6.4-SBM014-A04 26 October 2023 at <https://unfccc.int/sites/default/files/resource/A6.4-SBM014-A04.pdf>