



**Organisation of
Eastern Caribbean States**



One Community · Growing Together

REGIONAL WORKSHOP ON CARBON MARKETS AND RELATED MECHANISMS

Workshop Report



THE WORLD BANK



Regional Collaboration Centre – St. George's
Promoting Climate Action in the Caribbean



giz Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH

On behalf of:



Federal Ministry for the
Environment, Nature Conservation
and Nuclear Safety

of the Federal Republic of Germany

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1. Introduction

In 2015, the international community agreed to combat climate change by limiting the global temperature rise to below 1.5 degrees Celsius, as defined in the 2015 Paris Agreement (PA).

The Agreement requires all Parties to set climate change targets known as "Nationally Determined Contributions (NDCs)." In addition to that, Article 6 of PA includes provisions on voluntary cooperation in implementing their NDCs to allow for higher ambition in mitigation and adaptation actions and promote sustainable development and environmental integrity, thus paving the way for the international use of carbon markets. It is widely recognized that these market-based mechanisms can be cost-effective in achieving emission reduction targets.

In this context, the [OECS](#) Commission, in coordination with the World Bank Transformative Carbon Asset Facility ([TCAF](#)), the *Deutsche Gesellschaft für Internationale Zusammenarbeit* (GIZ) Global Carbon Market Project ([GCM](#)), and United Nations Framework Convention on Climate Change (UNFCCC) Regional Collaboration Centre ([RCC](#)) St. George's, organized the Regional Carbon Markets and related mechanisms. The goal was to explore the strategic development of market mechanisms and carbon pricing instruments for NDC implementation.

The OECS Commission hosted this virtual workshop to engage the region in discussing carbon pricing and exploring the strategic development of market mechanisms for NDC implementation, featuring speakers and presenters: Shanna Emmanuel and Crispin d'Auvergne, from the OECS Commission; Perumal Arumugam, Nicolas Muller, and Vintura Silva from UNFCCC; Stephan Hoch and Sandra Greiner from Climate Finance Innovators; Klaus Oppermann from the World Bank; Lydia Ondraczek and Patrick Munyaneza from GIZ.

Strong participation at the workshop included more than 40 participants representing the OECS and the CARICOM Member States.

2. Structure of the Workshop

The three-hour workshop comprised of two main sections. A content-related section, with a general conceptualization on carbon pricing mechanism and recent discussion on Paris Agreement Article 6. The second section, more interactive and focused on uncovering carbon pricing instruments opportunities for the Caribbean region from TCAF and GCM projects.

The workshop's objective was to explore the strategic development of market mechanisms and carbon pricing instruments for NDC implementation.

3. Opening remarks. By OECS Commission

Mr Crispin d'Auvergne, on behalf of the OECS Commission, welcomed the participants to the **Regional Workshop on the Carbon Markets and Related Mechanisms** and praised the initiative, pointing out the relevance and the well-timed discussions. Carbon markets will be an essential topic in the upcoming COP 26 in Glasgow. Mr d'Auvergne expressed gratitude to all agencies involved in the organization of the event. He wished for an informative workshop, valuable future work, and that opportunities can raise from the workshop regarding implementing carbon pricing solutions in the region.

Mr d'Auvergne concluded by highlighting the [Eastern Caribbean Solar Challenge](#), a program launched in May 2021 to accelerate renewable energy in the region and that [The Factor Initiative](#) is interested in purchasing potential emission reductions certificates/carbon credits from this programme.

4. Session I – Carbon Pricing

4.1 An introduction to Carbon Pricing. By [MéxiCO2](#)

The presentation provided basic concepts of carbon pricing mechanisms. The speaker started by addressing the importance of carbon pricing policy and the urged Caribbean countries to implement it.

As of June 2021, [64 countries around the world](#) are implementing carbon pricing. Many more countries are currently discussing the introduction of this mechanism. The rationale of putting a price on carbon goes beyond the urgent need to curb global greenhouse gas emissions, and it includes the need to mitigate climate change **transitional risk** (see Box 1). Mitigating this type of risk can prevent countries from lagging in transitioning from a carbon-intensive economy to a green economy. Carbon pricing can help Caribbean countries to navigate through this transition.

Box 1 – Transitional Risk

The Bank of England defines **transitional risk** as the financial risks which could result from the process of adjustment towards a lower-carbon economy. Changes in policy, technology and physical risks could prompt a reassessment of the value of a large range of assets as costs and opportunities become apparent.

Source: [Bank of England, Breaking the Tragedy of the Horizon – climate change and financial stability. 2015.](#)

Carbon pricing is [an economic instrument](#) that captures the external costs of GHG emissions and ties them to their sources through a price, usually based on the carbon dioxide (CO₂) emitted, shifting the burden for the damage from GHG emissions back to those who are responsible. There are two options for carbon pricing: **Carbon Tax** and **Emissions Trading System** (Or Cap-and-Trade System). Although, some [countries adopt a combination of these instruments](#).

A **Carbon Tax** directly sets a **price** on carbon by defining an explicit tax rate on GHG emissions or – more commonly – on the carbon content of fossil fuels, i.e., a price per tCO₂e. Although it is straightforward to be developed, it does not provide the environmental certainty to decrease GHG emissions.

Box 2. Carbon Pricing Worldwide

64 carbon pricing initiatives under implementation.

45 billion USD raised by governments in 2019

11.65 GtCO₂e (21.5% of global GHG emissions) covered by these initiatives.

Source: [The world bank](#)

On the other hand, under an **Emission Trading System** – ETS – a government establishes an **absolute limit on emission** (a cap) to specific sectors. It provides the emitters with a certain quantity of allowances within a defined timeframe. The emitter can trade emission units to meet their targets. To comply with emission targets at the lowest cost regulated entities can either

implement internal abatement measures or acquire emission units in the carbon market. An ETS is the most effective and flexible method to achieve a specific target to lower emissions.

For further reading:

- The [Stern Review](#) by Sir Nicholas Stern.

4.2 Carbon Pricing in the region and the CiACA initiative. By UNFCCC

The speaker started by highlighting that the absence of a price on carbon converts our atmosphere into a free dumping ground of carbon resulting from our economic activity. That is why we need to incorporate the cost of pollution in our economic activity, and this is the basic philosophy of carbon pricing mechanisms.

There are several reasons to adopt a carbon pricing policy. First and foremost, to cut GHG emissions and tackle climate change. Associated benefits relate to environmental and health from lesser pollution. Carbon pricing also has economic benefits, as it can raise more revenues, attract new investment and job creation, allow economic diversification, and avoid stranded assets. The speaker highlighted that once a carbon pricing mechanism is in place, the investment pattern tends to shift, enabling the countries to remain competitive in a global economy headed towards a low GHG pathway.

The [CiACA](#) objective is to assist parties in developing carbon pricing approaches for implementing their NDC under the Paris Agreement and fostering collaboration. Before implementing a Carbon Pricing option, countries need to go through a comprehensive process. The speaker emphasized

the importance of national and regional consultations on which carbon pricing option to be adopted. [For more information about CiACA](#)

i) Example of Carbon Pricing fit for SIDS:

Mauritius, a small island state that relies on imported petroleum products for power generation, introduced a fossil fuel taxation system to recycle revenues to finance environmental action and renewable energy projects: the Mauritius Sustainable Island Levy. The levy is based on each liter of petroleum products (0.01US\$/L). Also, the country has aligned the taxation vehicle imports with CO₂ emissions. The Mauritius approach is close to an explicit carbon tax, and the UNEP recently recommend the introduction of a carbon tax expressed in US\$ per ton of CO₂, as opposed to existing taxes and levies.

ii) CiACA support in the Caribbean region:

Jamaica

- Analyse use of international Carbon Markets for meeting Jamaica's long term sustainable development goals

Dominican Republic

- Capacity building on carbon pricing and consultations
Study on opportunities and options for introducing carbon pricing with detailed technical recommendations for 2 instruments that was narrowed down through initial assessments

Trinidad and Tobago

- Start of support/stocktaking of relevant national circumstances
- Next step: assessment of most appropriate options

Panama

- Support to establish a lively carbon market for stakeholders to reduce and offsets their emissions - for achieving climate neutrality
- Next steps to bring more participants in the scheme (more private sector entities, municipalities)

5. Session II – The Future of International Carbon Markets

This session provided an overarching picture of the current discussion on Paris Agreement Article 6 negotiations.

5.1 Paris Agreement Article 6 Negotiations. By UNFCCC

The purpose of this presentation was to provide some reflections on current discussions on Paris Agreement Article 6.

In 2015, the international community agreed to fight climate change by limiting the global temperature rise to below 1.5 degrees Celsius, as defined in the 2015 [Paris Agreement](#). The PA recognizes that international carbon markets can help countries raise their mitigation ambition through voluntary cooperation, as market mechanisms can lower the cost and increase the flexibility of achieving mitigation outcomes within the countries' NDCs. Article 6 of the [Paris Agreement](#) establishes a general framework for three mechanisms to facilitate Parties NDCs implementation. 1) **Cooperative approaches in Article 6.2**, which includes bilateral and multilateral international systems for carbon credits trading; 2) A **multilaterally governed crediting mechanisms** in Article 6.4, a post-Kyoto protocol mechanism; and 3) **The non-market approach** in Article 6.8 opens space for other non-market-based initiatives to raise mitigation and adaptation ambitions. One key feature of Article 6.8 does not involve the trading of carbon credits.

Box 3 – What is Article 6?

Article 6 [two-page] is a key part of the Paris Agreement. It allows Parties to voluntarily cooperate to meet their Nationally Determined Contributions, providing for international transfers of mitigation outcomes, a new mechanism for mitigation and sustainable development, and non-market approaches.

Source: [Decoding Article 6 of the Paris Agreement \(adb.org\)](#)

The rules and guidance for operationalizing Article 6 - *the so-called Article 6 Rulebook* - are yet to be agreed upon.

What issues are contentious in PA Article 6?

- Avoiding double-counting of units from Article 6.4 mechanism, e.g., how to avoid double claiming of emissions reductions generated of the scope of host Party NDCs
- Transition Carbon Credits from Clean Development Mechanism to 6.4 mechanisms, e.g. how can credits generated under CDM be used under Article 6 new architecture
- Baselines and additionality (as part of the design of the 6.4 mechanisms)
- Share of proceeds (SOP) for cooperative approaches under Art.6.2. additional to the levy lifted from 6.4 mechanisms to provide predictable finance to support adaptation action
- Overall mitigation in global emissions (OMGE)

Further reading:

- [Co-chairs Summary Article 6.pdf \(unfccc.int\)](#)
- [Cooperative action under Article 6 - Carbon Mechanisms \(carbon-mechanisms.de\)](#)

5.2 Study presentation – Article 6 Piloting. By Climate Finance Innovators

The speaker highlighted the key results of the study [Article 6 Piloting: State of Play and stakeholder experiences](#). The study focuses on the implementation of Article 6 at a piloting level. In the absence of an Article 6 rulebook, the authors define article pilots as initiatives aligned with Articles 6.2, 6.4, and 6.8 mechanisms. The study reveals a significantly increasing number of pilots, particularly under the 6.2 mechanisms, with US1.4 billion of funding already committed to Article 6 pilots.

Examples of pilots:

- Adaptation Benefits Mechanism – is a results-based non-market mechanism (Article 6.8) for financing adaptation; the African Development Bank pilots it
- The German Federal Ministry of the Environment, Nature Conservation, and Nuclear Safety (BMU), with an initiative focused on southern Africa
- World Banks – TCAF

Although the Caribbean region has not yet an Article 6 piloting initiative, the speaker reminded the audience that it is not too late to engage in Article 6 piloting.

With regards to the level of development, the pilots are currently in different stages of implementation. The Japanese Joint Crediting Mechanism (JCM) being the only one in total development.

Question: What is the situation in the Caribbean under the Clean Development Mechanism?

Answers: Some Caribbean states have significant solar and wind energy projects, which could be under the scope of Article 6. Yet, there is a tendency to look critically at these projects under Article 6 because many countries have already included them in their NDC goals.

- The main difference between Article 6 of the Paris Agreement and the Kyoto Mechanisms is that the former includes domestic targets encapsulated in the Parties' NDCs. And the projects must take into account the NDC goals. Projects need to be evaluated against the NDCs.
- Focus on regional approaches with a programmatic approach — time and transaction cost saving.
- No registered CDM activities of OECS Member States

Question: How do we achieve environmental integrity in different ways, and how can we communicate this to all AOSIS members?

Answers:

- Setting a good and ambitious baseline is essential.
- The entire project must cover environmental integrity, governance, and planning to implement rules in estimating eligible emission reductions and transparent reporting and review.
- Find balance governance within Article 6.2 (a decentralized mechanism) and Article 6.4 (a centrally governed and operated mechanism). 6.2 request larger transparent review by governments.

Question: How relevant is South-South exchange for the success of carbon markets/carbon pricing instruments?

Answers:

- There are several experiences from initiatives from around the world. There are a lot of similarities between rural electrification in Africa which and small islands. There are also programmatic and policy approaches that could serve as inspiration for the Caribbean (multi-country approach).
- Look at South-South exchange with regards to Article 6 readiness: the example of alliances in Africa.
- The importance of regional alliances enables countries to work together and put the countries in a better position in the negotiation.

6 Session III – Project Presentation – Opportunities for the Caribbean

6.1 Transformative Carbon Asset Facility - TCAF. By World Bank

In 2017 the World Bank established the [Transformative Carbon Asset Facility](#), a US\$ 220 million carbon fund set to purchase emission reductions achieved by mitigation activities. It was developed as a hybrid fund, meaning it combines both climate financing and carbon markets funding. Regarding the scope, TCAF does not fund individual activity but rather structural transformative initiatives such as a reform of an entire sector towards a green economy.

TCAF crediting approaches:

The sectoral crediting, in which the fund will look to the highest emitting sector in the economy and the volume of emission reduction target. Then, TCAF will purchase the emission reductions beyond that pre-established target. Example: sectoral renewable energy program.

Box 5 TCAF Transaction Structure

Payments:

- Per ton of verified emission reduction.
- 5-7 years crediting period within one NDC cycle.
- Minimum of 5 mt VERs over crediting period.
- Mitigation activities can have started earlier than crediting period.

Accounting:

- About 50% of VERs stay in host country, accounted against host country NDC: climate finance transaction.
- Other 50% of VERs are transferred to TCAF as ITMOs, and so cannot be used for host country NDC compliance: carbon market transaction.

The jurisdictional crediting approach the same logic as the sectoral approach, but it considers the emission reductions of an entire city, a small state, or a small country. TCAF will make payments per unit of emission reductions beyond the pre-defined target. Example: city-level program.

Finally, the policy-based crediting, TCAF, will look at specific mitigation policies such as carbon tax or removal of fossil fuel subsidies and apply modelling to determine the number of emission reductions resulting from that policy. Then, TCAF will pay for those emission reductions.

For further reading:

[TCAF Core parameters public version FINAL 09072018 UPDATE November2020.pdf \(tcafwb.org\)](https://tcafwb.org/TCAF_Core_parameters_public_version_FINAL_09072018_UPDATE_November2020.pdf)

Question: How can TCAF contribute to ambition raising in implementing carbon pricing?

Answers:

- Ambitions raising is done by setting the baseline to bellow the Business as Usual scenario, ideally at the levels of NDC targets. Then you must go beyond NDC targets to get TCAF payments. And this can be used strategically to prepare the successive NDC.
- Differently from investment project that has upfront costs, the policy venue has recurrent costs. Usually, these are hidden costs. And TCAD is designed to pay for these hidden costs.

Question: Given the low potential of emissions reductions of individual countries, is there a possibility for the countries to apply for TCAF jointly, e.g. under the OECS framework?

Answers:

- TCAF has three elements: i) operational element, which is paying for emission reductions; ii) knowledge sharing; and iii) capacity building. The latter two seem more relevant for the Caribbean region simply because of TCAF the emission reductions requirements.
- It is a possibility in the jurisdictional crediting approach to creating a program for a group of countries.

6.2 The Global Carbon Market (GCM) Project. By GIZ

Box 6 GCM Pillars

Developing and advancing market-based climate policy instruments in close collaboration with partners.

Supporting and building capacities amongst stakeholders from public and private sector through workshops, trainings, and high-level meetings.

Increasing the participation and visibility of partner country representatives in international conferences and negotiations.

The [Global Carbon Market Project \(GCM\)](#) is funded by the German Federal Ministry of the Environment, Nature Conservation and Nuclear Safety (BMU) and implemented by GIZ since 2010. It is continuously adapted to the evolution of carbon markets. GCM started focusing on Kyoto protocol aspects and, more recently, has transitioned to Paris Agreement and Article 6 related mechanisms. The GCM

works with partners in Tunisia, India, Chile, Uganda, and Eastern Africa. This year the project started collaborating with St. Lucia and Grenada.

Selected project activities with the potential of transferability were presented. For instance, in [Uganda](#), the project supported the setting up of the [Eastern African Alliance on Carbon Markets and Climate Finance](#). Just recently, the Alliance published the Article 6 Negotiations Handbook. In [Chile](#), GCM provided a technical recommendation on the country's carbon tax. In [Tunisia](#) and [India](#), the project supports the private sector to engage in carbon markets.

Question: What are the plans for St. Lucia and Grenada?

Answers:

- Cooperation just started; stakeholder consultations ongoing.
- Too early to give more concrete answers.
- In the following months, an action plan will be developed.

7. Next Steps, wrap-up and closing remarks

Possible next steps

- Article 6, Carbon Pricing Instruments and Voluntary Markets Regional Capacity Building
- Raising awareness among stakeholders
- Exchange with other alliances and countries of the region or globally that have already had experiences
- Building up a relationship with other regions for knowledge sharing

RCC wrap up

- The last time the Caribbean region observed discussions on carbon markets/pricing was in 2017. The need to move the topic forward was highlighted. Since 2017, there was an

understanding of how the region could benefit from carbon markets. However, the region did not participate in the CDM mainly because of the small scale of emissions vis-à-vis transaction cost. There are initiatives in the region, for instance, in Trinidad and Tobago or possibly in Guyana in the future.

- There is an open invitation for the Caribbean to join the Pacific Alliance. It is an opportunity for the Caribbean countries/region to follow the development of carbon markets and standard Measurement Reporting and Verification systems.
- In the region, several initiatives such as GCM have regional components. They could be significant in developing an understanding of the Paris Agreement Article 6 and its developments and how the countries could benefit from the future carbon markets.
- Countries should take proactive measures to engage in Article 6 negotiations.

OECS Commission final remarks

- The OECS commission addressed a word of appreciation to the workshop organizers and all participants.
- This workshop is timely, as the region looks to pursue Article 6 and other carbon market initiatives.
- OECS is developing the Carbon Market Strategy for the region.
- OECS is looking forward to having a more focused discussion with [Daimler DA](#). The company is interested in purchasing carbon credits generated in the region.