



Assessment of Article 6 market mechanisms of the Paris Agreement and options for Turkey:

Report on Turkey's Current situation

ERCST

European Roundtable on
Climate Change and
Sustainable Transition

Glossary of acronyms and terms¹

Annex I Parties. The industrialized countries listed in Annex I to the Convention, which committed to returning their greenhouse-gas emissions to 1990 levels by the year 2000 as per Article 4.2 (a) and (b). They have also accepted emissions targets for the period 2008-12 as per Article 3 and Annex B of the Kyoto Protocol. They include the 24 original OECD members, the European Union, and 14 countries with economies in transition. (Croatia, Liechtenstein, Monaco, and Slovenia joined Annex 1 at COP-3, and the Czech Republic and Slovakia replaced Czechoslovakia.) List of Parties to the Convention can be found here.

Annex II Parties. The countries listed in Annex II to the Convention which have a special obligation to provide financial resources and facilitate technology transfer to developing countries. Annex II Parties include the 24 original OECD members plus the European Union. List of Parties to the Convention can be found here.

Article 6 of the Paris Agreement recognizes that some Parties choose to pursue voluntary cooperation in the implementation of their NDCs to allow for higher ambition in their mitigation and adaptation actions and to promote sustainable development and environmental integrity.

A6.4M – Article 6.4 Mechanism. The mechanism established under Article 6.4 of the Paris Agreement creating a centralized window for Parties to deliver mitigation outcomes that can be used toward their nationally determined contribution (NDC) or transferred to another Party. The mechanism is to be “supervised by a body designated by the Conference of the Parties”.

A6.4U - Article 6.4 Units. Units issued under the A6.4M.

Bracketing using typographical symbols of square brackets [--] placed around text under negotiation to indicate that the language enclosed is being discussed but has not yet been agreed upon.

Capacity building. In the context of climate change, the process of developing the technical skills and institutional capability in developing countries and economies in transition to enable them to address effectively the causes and results of climate change.

Carbon market. A popular (but misleading) term for a trading system through which countries may buy or sell units of greenhouse-gas emissions in an effort to meet their national limits on emissions, either under the Kyoto Protocol or under other agreements, such as that among member states of the European Union. The term comes from the fact that carbon dioxide is the predominant greenhouse gas, and other gases are measured in units called "carbon-dioxide equivalents."

CERs – Certified Emission Reductions are Kyoto Protocol units equal to 1 metric tonne of CO2 equivalent. CERs are issued for emission reductions from CDM project activities.

¹ This glossary of terms is, whenever possible, based on the glossary of climate change acronyms and terms of the UNFCCC: <https://unfccc.int/process-and-meetings/the-convention/glossary-of-climate-change-acronyms-and-terms>

CDM – the Clean Development Mechanism is a mechanism under the Kyoto Protocol through which developed countries may finance greenhouse-gas emission reduction or removal projects in developing countries, and receive credits for doing so which they may apply towards meeting mandatory limits on their own emissions.

CMA - Conference of the Parties serving as the meeting of the Parties to the Paris Agreement. All States that are Parties to the Paris Agreement are represented at the CMA, while States that are not Parties participate as observers. The CMA oversees the implementation of the Paris Agreement and takes decisions to promote its effective implementation.

CMP - Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol. The Convention's supreme body is the COP, which serves as the meeting of the Parties to the Kyoto Protocol. The sessions of the COP and the CMP are held during the same period to reduce costs and improve coordination between the Convention and the Protocol.

COP - Conference of the Parties. The supreme body of the Convention. It currently meets once a year to review the Convention's progress. The word "conference" is not used here in the sense of "meeting" but rather of "association". The "Conference" meets in sessional periods, for example, the "fourth session of the Conference of the Parties."

CORSIA – the Carbon Offsetting and Reduction Scheme for International Aviation is a global market-based mechanism aimed at offsetting any increase in total CO₂ emissions above 2020 levels from international civil aviation.

Decision 1/CP.21 mandated SBSTA to operationalize the provisions of Article 6 of the Paris Agreement through recommending a set of decisions to the COP.

Designated National Authority (DNA) – An office, ministry, or other official entity appointed by a Party to the Kyoto Protocol to review and give national approval to projects proposed under the Clean Development Mechanism.

Designated Operational Entity (DOE) – A DOE is an independent auditor accredited by the CDM Executive Board (CDM EB) to validate project proposals or verify whether implemented projects have achieved planned greenhouse gas emission reductions

EETS – Energy Efficiency Trading Systems.

Global warming potential (GWP). An index representing the combined effect of the differing times greenhouse gases remain in the atmosphere and their relative effectiveness in absorbing outgoing infrared radiation.

Greenhouse gases (GHGs). The atmospheric gases responsible for causing global warming and climate change. The major GHGs are carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O). Less prevalent --but very powerful -- greenhouse gases are hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF₆).

HFC. Hydrofluorocarbons.

ICAO. International Civil Aviation Organization.

INDC. Intended Nationally Determined Contributions.

ITMOs – Internationally Transferred Mitigation Outcomes.

Joint implementation (JI). A mechanism under the Kyoto Protocol through which a developed country can receive "emissions reduction units" when it helps to finance projects that reduce net greenhouse-gas emissions in another developed country (in practice, the recipient state is likely to be a country with an "economy in transition"). An Annex I Party must meet specific eligibility requirements to participate in joint implementation.

Kyoto mechanisms. Three procedures established under the Kyoto Protocol to increase the flexibility and reduce the costs of making greenhouse-gas emissions cuts. They are the Clean Development Mechanism, Emissions Trading and Joint Implementation.

The Kyoto Protocol is an international agreement standing on its own, and requiring separate ratification by governments, but linked to the UNFCCC. The Kyoto Protocol, among other things, sets binding targets for the reduction of greenhouse-gas emissions by industrialized countries.

MBIs – Market Based Instruments. Policy instruments that use markets, price and other economic variables to provide incentives for greenhouse gas emitters to reduce their emissions or achieve carbon neutrality by addressing negative externalities.

Mitigation. In the context of climate change, a human intervention to reduce the sources or enhance the sinks of greenhouse gases. Examples include using fossil fuels more efficiently for industrial processes or electricity generation, switching to solar energy or wind power, improving the insulation of buildings, and expanding forests and other "sinks" to remove greater amounts of carbon dioxide from the atmosphere.

NDC - Nationally Determined Contribution. According to Article 4 paragraph 2 of the Paris Agreement, each Party shall prepare, communicate and maintain successive nationally determined contributions (NDCs) that it intends to achieve. Parties shall pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions.

Paris Agreement rulebook / Katowice Climate Package / COP24 decisions. Set of implementing decisions of the 2015 Paris Agreement concluded during COP24 in Katowice, Poland taking place 2-14 December 2018. The implementation guidelines covered informing NDCs, communication on adaptation, rules of functioning of the Transparency Framework, facilitation and compliance, global stocktake, technology transfer and financial support.

RBF – Results-Based Finance

RE – Renewable energy.

REC – Renewable energy certificate.

Registries, registry systems. Electronic databases that tracks and records all transactions under the Kyoto Protocol's greenhouse-gas emissions trading system (the "carbon market") and under mechanisms such as the Clean Development Mechanism. "Registry" may also refer to current discussions on a system for inscribing nationally appropriate mitigation actions.

SB - Subsidiary Body. A committee that assists the Conference of the Parties. Two permanent subsidiary bodies are created by the Convention: the Subsidiary Body for Implementation (SBI) and the Subsidiary Body for Scientific and Technological Advice (SBSTA). Two major temporary bodies that exist currently are the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol (AWG-KP), established at COP 11 in Montreal, and the Ad Hoc Working Group on Long-term Cooperative Action under the Convention (AWG-LCA), established at COP 13 in Bali. Additional subsidiary bodies may be established as needed.

SBI - Subsidiary Body for Implementation. The SBI makes recommendations on policy and implementation issues to the COP and, if requested, to other bodies.

SBSTA - Subsidiary Body for Scientific and Technological Advice. The SBSTA serves as a link between information and assessments provided by expert sources (such as the IPCC) and the COP, which focuses on setting policy.

SOP – Share of Proceeds are generated from project activities under the CDM (as a percentage of the CERs issued) used to cover administrative expenses and to assist developing country Parties that are particularly vulnerable to the adverse impacts of climate change to meet the costs of adaptation.

VCU – Verified Carbon Unit: Under the VCS Program, projects are issued unique carbon credits known as Verified Carbon Units or VCUs. Each VCU represents a reduction or removal of one tonne of carbon dioxide equivalent (CO₂e) achieved by a project.

VER– Verified Emission Reductions. Under the Gold Standard Program, VERs are issued for voluntary climate action. Each VER represents one tonne of CO₂.

1. Executive summary

There are numerous issues that will need to be considered when choosing and designing market-based instruments (MBI), if there is an interest in using and maximizing the use of Article 6 of the Paris Agreement.

While Turkey is an important economy with significant room to grow, it may not be a liquid enough market for certain types of MBI, such as an ETS which requires a significant number of market participants and a significant quantity of the underlying tradeable commodity. Participating in international markets, including linking with other-like MBIs may turn out to be a necessity, and not a luxury. ITMOs will be an important component to help drive to a lower cost of compliance with an NDC for Turkey, as well as a potential source of revenues for projects in Turkey, and to permit it to speed up the decarbonization process.

However, using international cooperation through international market approaches will require that there is coordination and negotiations with other countries with whom Turkey decides to do business.

In connecting two markets, the partner country would want to make sure that any mitigation outcome it takes in comes from a country that is also a Party to the Paris Agreement, and that any transfers are done according to the rules of the Agreement, i.e. Article 6.

Therefore, when designing an MBI Turkey should be mindful of who its potential partners may be, and what it needs to put in place not only to comply with, but also to take maximum advantage of trading opportunities.

Another element that Turkey needs to take into account is whether it wants to use Art 6.2 or 6.4 of the Paris Agreement, or both of them.

Turkey will want to define how it sees itself: mainly as an exporter or an importer of mitigation outcomes. This will probably also color its decision to use Art 6.2 or Art 6.4. As an importer of ITMOs for use towards its NDC, it is possible that Art 6.2 may provide a more flexible solution. As an exporter, it may want to have the option of using both provisions, as it may give it a broader access to the marketplace.

As an exporter, baseline and credit mechanisms will allow it to provide ITMOs or A6.4U for export, in a manner similar to the CDM, which is a simpler but more limited international interaction. Its impact on the efficiency of domestic decarbonization will also be limited.

A cap-and-trade system will have more impact on the domestic decarbonization, and will allow, if so desired, for a more dynamic interaction as an exporter and trader of mitigation outcomes under Art 6.

There is no doubt that if Turkey wants to be part of the emerging Paris Agreement carbon market and also influence its shape in the UNFCCC negotiations, it will need to be a Party to the Paris Agreement. Not being Party will not only not allow it to use international carbon markets, but it will also hamper any efforts to shape the negotiations for the Article 6 rulebook.

The way its NDC will be presented will also be an important element to take into account. Its scope and metrics may have a strong interaction with the way the MBIs would interact with Art 6.

The choice of the characteristics of ITMOs that Turkey wants to use or export (including originating from the A6.4M) will also be a consideration in designing domestic MBIs. This will have to be a specification in what is good for compliance in an MBI. In addition, Turkey will need to specify what Turkey will allow for export – it may want to allow exports from targeted sectors, by using cost abatement floors, technology conditions, etc. In addition to qualitative filters, it may want to consider quantitative filters. All these need to be built into the choice and design of MBIs as well.

Metrics of MBIs will play an important role in their design. Turkey's MBI may include ETS, renewable certificates and energy efficiency certificates trading. This will have to impact Turkey's stance of what type of ITMOs it allows in any or all the above mentioned MBI.

Building-in the Art 6 provisions instead of retrofitting should be an important consideration for Turkey in designing its MBIs.

Overview of the report

This report aims at providing a comprehensive overview of Turkey's current situation, summarising the research work conducted throughout the PMR Turkey project and highlighting where the implications of these studies interact with the Article 6 framework. Importantly, it details what considerations Turkey will have to make when choosing an MBI that best suits its domestic needs in the context of Article 6.

The report is structured as follows: chapter two begins by introducing Turkey's situation in the Kyoto Protocol period. It then goes into details on the output of some studies produced by PMR Turkey and presents which elements of each MBI will interact with the Article 6 framework. It also presents some key figures on the domestic voluntary carbon market and concludes by outlining the eligibility of domestic emissions reductions for CORSIA.

Chapter three begins by outlining Turkey's situation in relation to the Paris Agreement. It then presents the main elements of Article 6 and delves into detail on how each element will interact with the different MBIs Turkey is considering.

The final section concludes by summarizing the recommendations made throughout the report.