



# Evolution of the global carbon market

**Implications of different market based approaches for an integrated carbon market in the future**

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*Andrei Marcu*  
*Head of CEPS Carbon Market Forum*

## Moving beyond Kyoto

- KP is Cartesian, logic and orderly, a giant cap-and-trade system
  - Units with clear compliance value
  - Tracking through ITL
  - No double counting possible
  - Transfers for UNFCCC compliance
  - What did the KP do ?
    - Articles 3.10-3.10 - accounting
    - Articles 6, 12, 17 - created UNFCCC tradable commodities
    - Created the regulatory framework for a carbon market for UNFCCC compliance
    - Created scarcity/compliance obligations before the CMP

## Lessons from KP

- UNFCCC run market infrastructure was major benefit
- Clarity of compliance value and market value. Principle of ‘regulator decides’: the regulator decides what the environmental value of a unit is and how it provides recognition
- Difference between production and use: “offset” vs “baseline & credit”
- Unclear objectives & politicization
- Carbon leakage: asymmetric CC-provisions lead to competitiveness pressures from asymmetrical climate change policies
- Regulatory and political stability for credibility and long-term price signal

## Lessons from KP

- Markets were driven by UNFCCC compliance
- Little markets in pure AAU transactions & voluntary
- Focus on EU and Japan – this were demand came from
- Most trading related to domestic compliance
- No talk of linking Japan/EU – linking provided by CERs/ERUs
- Two type of linking discussions
  - Inside KP: EU – Australia
  - Outside KP: California – Quebec
- Markets tended to centralize and focus domestically in time

## Moving beyond Kyoto

- World has changed
  - Different economic order
  - Different emissions pattern
  - Different appetite for global governance
  - Many domestic market-based approaches to CC mitigation have developed

## Moving beyond Kyoto

- Copenhagen tried to duplicate a KP and failed
- Hence, demand for an agreement capable of facilitating a heterogeneous, less-centralised landscape, with ‘various approaches’
- Paris agreement unclear but assumptions on the agreement and the world to 2020 and beyond must be made
- All discussions depend on assumptions and scenarios

## Assumptions

- New international climate change agreement in Paris
- All Parties will have INDCs
  - Economy-wide with absolute caps (not dissimilar to KP commitments, but without AAU budget)
  - Sub-national level with absolute caps (e.g. sectors of the economy, sub-national regions)
  - Without absolute caps

# Assumptions

- There will be a desire to transfer mitigation outcomes/ units -- “good for compliance” with their INDCs.
- Different types of mitigation instruments/approaches/ market mechanisms
  - Developed, created and operated by the COP (e.g. CDM, JI). New ones may emerge in this category (NMM?)
  - Created and operated Domestically by Parties.



# Markets and 2015 Agreement

## Option 1 - Use any units

I. Broadly decentralised climate change regime, each **country is able to use any international units** it chooses for compliance, without any global standards.

- Recognise the right to use international units
- Define market mechanisms that are created through the UNFCCC
- Recognise that each Party sets standards for environmental integrity of the units it uses for global compliance.
- Standardise the way each jurisdiction describes the characteristics of the international units it uses for compliance according to the environmental standards.

## Markets and 2015 Agreement

### Use and units

- Standardise the way each jurisdiction describes the characteristics of the international units
- Ensure that there is no double counting for issuance and usage for compliance
- Ensure that information for accounting purposes is made available.
- Recognise the need for national registries

## Markets in the 2105 Agreement

### Option 2 - Standards as guidance

II. Decentralised climate change regime with some minimum environmental standards provided **as guidance only**.

- Define environmental standards that all units need to meet. The COP would define these standards at the global level.
- Standardise the way each jurisdiction describes the characteristics of the international units it uses for compliance vs. the global environmental standards.

## Markets in the 2015 Agreement

### Option 3 - Standards, no approval

**III. Environmental standards must be observed, but no approval required for the units used for compliance.** This would represent only a very small incremental step when compared to the approach in (II) above, and has been called a “transparency approach”. Define environmental standards that need to be observed.

- Standardise the way each jurisdiction describes the characteristics of the international units it uses for compliance according to the environmental standards.

## Markets in the 2015 Agreement

- Describe units characteristics used in each jurisdiction, and how they meet the standards set by the COP.
- Create a global body that would review units used for compliance by each jurisdiction (peer review) against the COP standards, but without power to approve or reject units, or systems that produce units.

# Markets in the 2015 agreement

## Option 4 - Approved Systems

**IV.** Global environmental standards are **defined by the COP, and must be observed**. The units, or systems that produce units used for UNFCCC compliance, must be approved by the COP. In this case, in addition to what is in (I), the agreement should include provisions to:

- Define environmental standards at the global level (by the COP).
- Define the process for approving the accession of units (or systems that create international units) to be used for compliance with UNFCCC commitments.
- Against environmental standards set by the COP.

# Markets in the 2015 agreement

## Approved Systems

- Create an international regulator that would check units, or systems that create units used internationally, against environmental standards set by the COP.

## Market development scenarios

- Markets will be influenced by the international regulatory compliance framework
- Markets will be created for
  - International compliance
  - Domestic compliance



# Market development scenarios

- **Scenario 0:** market remain domestic in nature
- **Scenario 1:** Cartesian scenario: linked carbon markets: carbon market evolves as a set of subnational /national/regional market approaches, linked through the backbone of an international “framework
- **Scenario 2:** Globally Networked Carbon Markets: created through different domestic units (similar to currencies), which would have a rating for use for global and domestic compliance

# Market development scenarios

## “Centralized” international regulatory framework

- Cartesian model
- Most trading is done for domestic compliance that need international compliance recognition

An “FVA”- type mechanism will be needed which will provide and ensure

- Determine WHAT and How much domestic units transferred internationally get counted through **Conformity Checks** – when is the conformity check done: at issuance, at sale, at transfer, at use for compliance?
- Avoid double counting
- Provide accounting information

## Market development scenarios

- Less “centralized” regulatory system
  - Cartesian model
  - Networked carbon market model
  
- How can international markets evolve
  - Snowball model
  - Cluster model

# Market development scenarios

- What is likely to drive enlargement from domestic to global:
  - Regulatory developments (e.g. Australia/EU)
  - Where is the demand (EU, Japan acted as clusters in KP)
  - Market functioning (i.e. is there a need)
  - Marginal abatement costs (how high)
  - Economic ties & trade flows (East Asia)
  - Political signals (Quebec/California)
  - Now always according to a grand plan



Thank you for your attention

Andrei Marcu

[andrei.marcu@ceps.eu](mailto:andrei.marcu@ceps.eu)

+32 47 966 80 61