

# Deepening International Cooperation on Emissions Trading



5<sup>th</sup> Technical workshop | 22 October 2021

## Alignment: possible reforms for integration

Stefano F. Verde, Florence School of Regulation - Climate



LIFE DICET is co-financed by the EU LIFE Programme of the European Commission

# The LIFE DICET project (1)

<https://lifedicetproject.eu.eu/>

- ❑ Goal: Support EU and MS policy makers in deepening international cooperation for the development and possible integration of carbon markets.
- ❑ Duration: September 2019 - ~~December 2021~~ August 2022.
- ❑ Emissions Trading Systems (ETSs): EU, China, New Zealand, California, Quebec and Switzerland.
- ❑ Objectives:
  - Facilitate enhanced international carbon market cooperation between the European Commission and the regulators of other major ETSs.
  - Provide information and capacity building on the regulation of carbon markets and the implications for their possible integration.
  - Create an international network of experts on carbon markets.
  - Increase political support for international carbon markets through dissemination.



# The LIFE DICET project (2)

<https://lifedictproject.eu.eu/>

□ At the heart of the project is the Carbon Market Policy Dialogue (CMPD). The CMPD culminates in three meetings which address five topics of ETS integration:

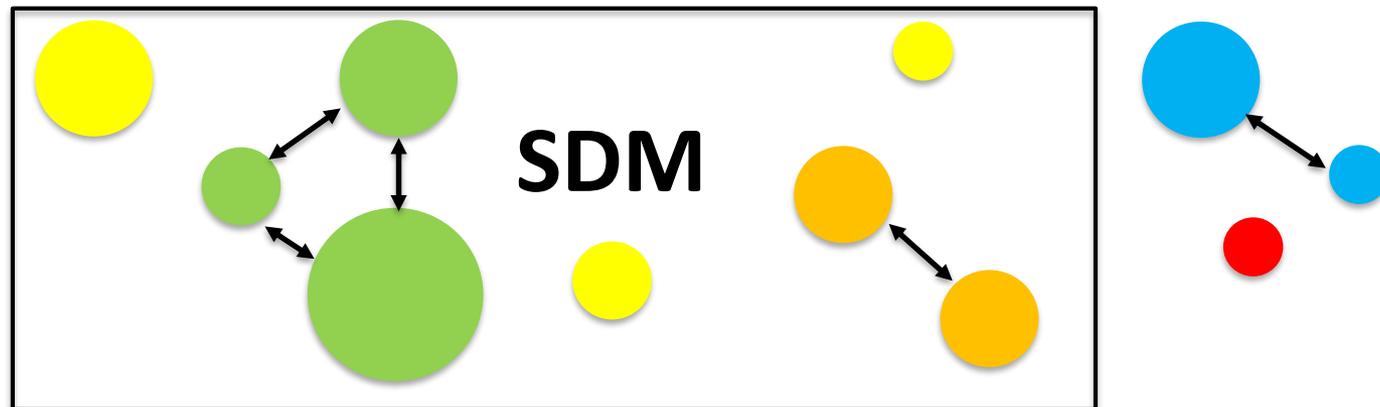
1. Environmental ambition: scope, stringency, and policy mix
2. Price containment: volume- and price-based mechanisms
3. Carbon leakage prevention: free allocation and other measures
4. Environmental integrity: use of offsets

5. Alignment: possible reforms for integration



# ETSs in the global carbon market

- The rules of Article 6 of the Paris Agreement are not yet defined. But, we can imagine how the future global carbon market will look like. We can envision:
- A growing number of ETSs that are indirectly linked to each other through the Sustainable Development Mechanism (SDM) (Art 6.4), with quant./qual./price limits (restricted linking).



- A number of ETSs that are also directly linked to other ETSs (Art. 6.2), with or without quant./qual./price limits.
- Fewer ETSs independent of the SDM that operate in isolation or are directly linked to other ETSs, with or without quant./qual./price limits.



# Relevance of linking

- ❑ The original idea of linking is economic at heart (reducing costs): through trade of emission allowances and full or partial equalization of marginal compliance costs, linked ETSs can deliver on their mitigation targets at a lower cost.
- ❑ Linking entails monetary and abatement transfers across jurisdictions which need to be tolerated. But tolerance is not granted: local co-benefits of emissions abatement are valuable and international transfers may not be welcome. Also, domestic distributional effects and general equilibrium effects matter.
- ❑ From a global perspective, ETS linkages are of interest for an environmental reason: lower costs can enable higher ambition. In the Paris world, this is key given the gap between the NDCs and the Agreement's goal.
- ❑ The question of trading mitigation outcomes for increasing ambition is central in the SDM (Art. 6.4: "deliver an overall mitigation in global emissions"). For ETS linking (Art. 6.2), the governments involved will decide. In some cases, linking will be used as a lever for ambition; in others, as a lever for cost savings.



# Conditions for linking

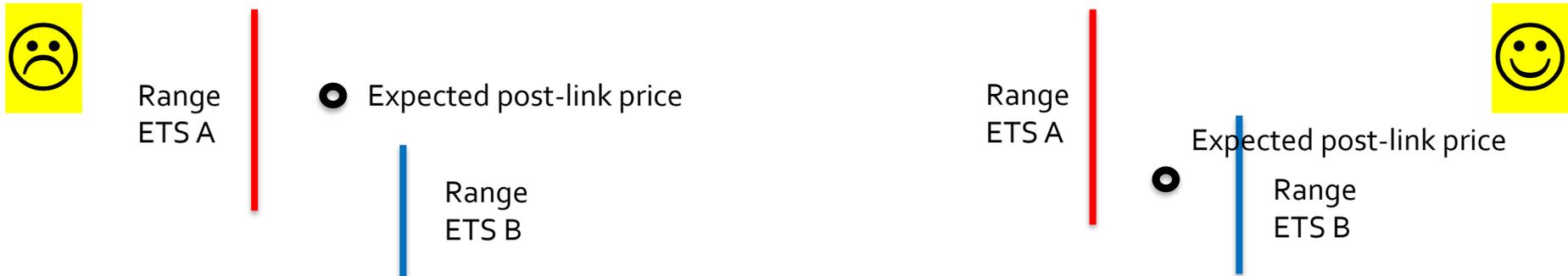
- Based on the project contents so far, we can identify a few necessary conditions for a linkage to take place:
  - General trust. A linkage will not take place if a jurisdiction does not trust the other(s) sufficiently.
  - Some overlap of acceptable carbon prices (ambition match). A linkage will not take place if a jurisdiction expects post-link carbon prices to lie outside its acceptable range.
  - Expected economic benefit at a macro-economic level. A linkage will not take place if a jurisdiction does not expect a net benefit. This benefit refers to the whole economy, not only to the ETS sector.
  - Confidence on environmental integrity. A linkage will not take place if a jurisdiction fears that the linkage will come at the expense of environmental integrity.
  - Price control. A linkage will not take place if a jurisdiction fears to lose control on the level of carbon prices, meaning prices falling outside its acceptable range.

# Ways to facilitate linking

- The conditions for linking (previous slide) point to different actions or approaches that can be pursued to facilitate the establishment of linkages:
  - General trust → If trust is not there, it would need to be built gradually through cooperation.
  - Some overlap of acceptable carbon prices → The introduction of a (WTO-compatible) border carbon adjustment could lead to some overlap.
  - Expected economic benefit at a macro-economic level → First, do modeling exercises – there seems to be a shortage of simulation studies. Second, consider issue linkage as a way to increase expected benefits. Notably, consider preferential trade agreements.
  - Confidence on environmental integrity → Linking agreements should include provisions for the environmental integrity of the linked ETSs: notably, require agreement on the regulation of offsets and on changes in allowance supply.
  - Price control → Linking agreements should include provisions for maximum and minimum price bounds (price collar).

# The acceptable price range

- While an ETS is a quantity-based instrument, there is always a range of carbon prices – explicit or de facto – that the policy-maker considers acceptable given her own objectives and constraints.
- When it comes to linking, the expected post-link price needs to fall in the acceptable range of all jurisdictions for the linkage to potentially take place.



- Hepburn and Fankhauser (2010): “Linking regional markets requires a certain level of coordination and the alignment of policy objectives between the systems. Perhaps the most important objective upon which agreement is required is the range of acceptable carbon prices, as prices in linked systems will invariably converge through arbitrage. That is, there has to be an equivalence of ambition between systems.”



# Linking with a price collar

- ❑ Consider a situation where the expected post-link carbon price does fall in the acceptable range for all potential linking partners. Still, a jurisdiction may be concerned that future events in- or behaviour by the linked jurisdiction(s) could drive carbon prices off its acceptable range. This could happen due to:
  - Economic or technological shocks
  - Changes in the policy mix affecting regulated emissions (moral hazard)
- ❑ A linking agreement that provides for a price collar removes the risk of losing control on carbon prices. As such, it could be an effective approach for facilitating the establishment of new linkages.
- ❑ Compared to linking with quotas on allowance transfers, linking with a price collar allows for full trade gains (within the agreed collar).
- ❑ Price collars may be a key for effective coordination of linked ETSs: clubs of linked ETSs differentiated by price (ambition) level.
- ❑ Linking with a price collar requires that all jurisdictions are happy to have a collar. As the EU ETS so far shows, it is not granted that they all can or want to.



# Conclusions

- ❑ Governments decide on the purpose of a linkage. In some cases a linkage will be used as a lever for ambition, in others as a lever for cost savings.
- ❑ Ways to facilitate new linkages:
  - Build trust through cooperation;
  - Use WTO-compatible border carbon adjustments (to help align acceptable carbon prices);
  - Use preferential trade agreements (to strengthen club benefits);
  - Negotiate linking agreements including provisions on the regulation of offsets and changes in allowance supply;
  - Negotiate linking agreements including provisions on maximum and minimum price bounds.
- ❑ Price collars may be a key for effective coordination of linked ETSs: clubs of linked ETSs differentiated by price (ambition) level.
- ❑ In such a system, if an ETS linked to one or more other ETSs in a higher price band, the linkage would clearly serve as a lever for increased ambition.





[LifeDicetProject.EUI.eu](http://LifeDicetProject.EUI.eu)

European University Institute  
Via Giovanni Boccaccio 121 50133 Florence (Italy)  
LifeDicet@EUI.eu  
Twitter: #LifeDicet @FSR\_Energy