EU PAVILION SIDE EVENT

Risks in carbon markets: lessons-learned from the Flexibility Mechanisms under the Kyoto Protocol

COP25, Madrid
3 December 2019

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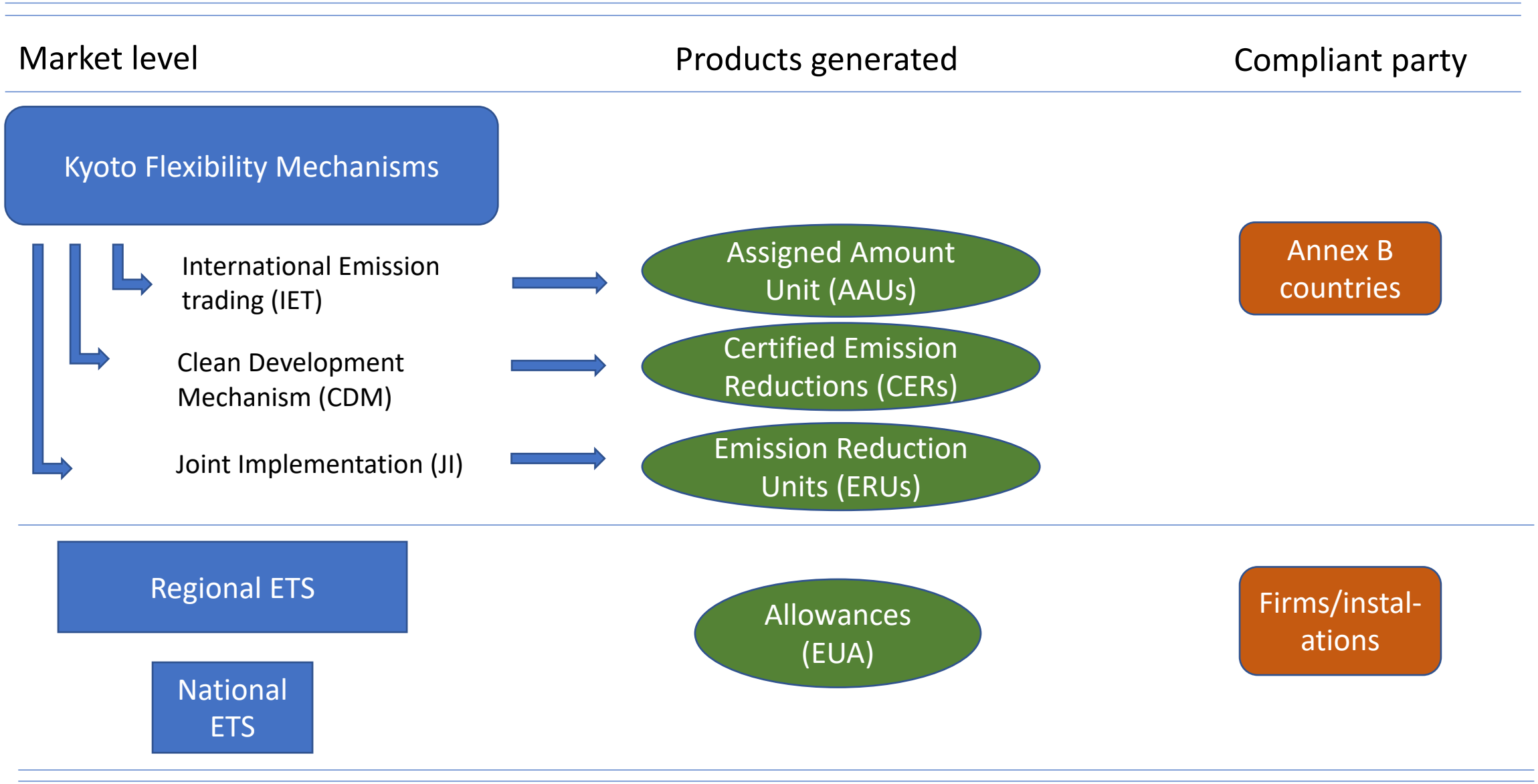
Market mechanisms were introduced in order to make reducing emissions more efficient / cost-effective. The hope was if the costs of complying with reduction commitments would shrink, countries would be willing to set more ambitious targets. Thus, the market was set up to facilitated compliance and the expectation was that they would be manly used for such.

We investigate trading behaviour during the Kyoto Protocol's first and second commitment period to analyse whether this was the case, looking at:

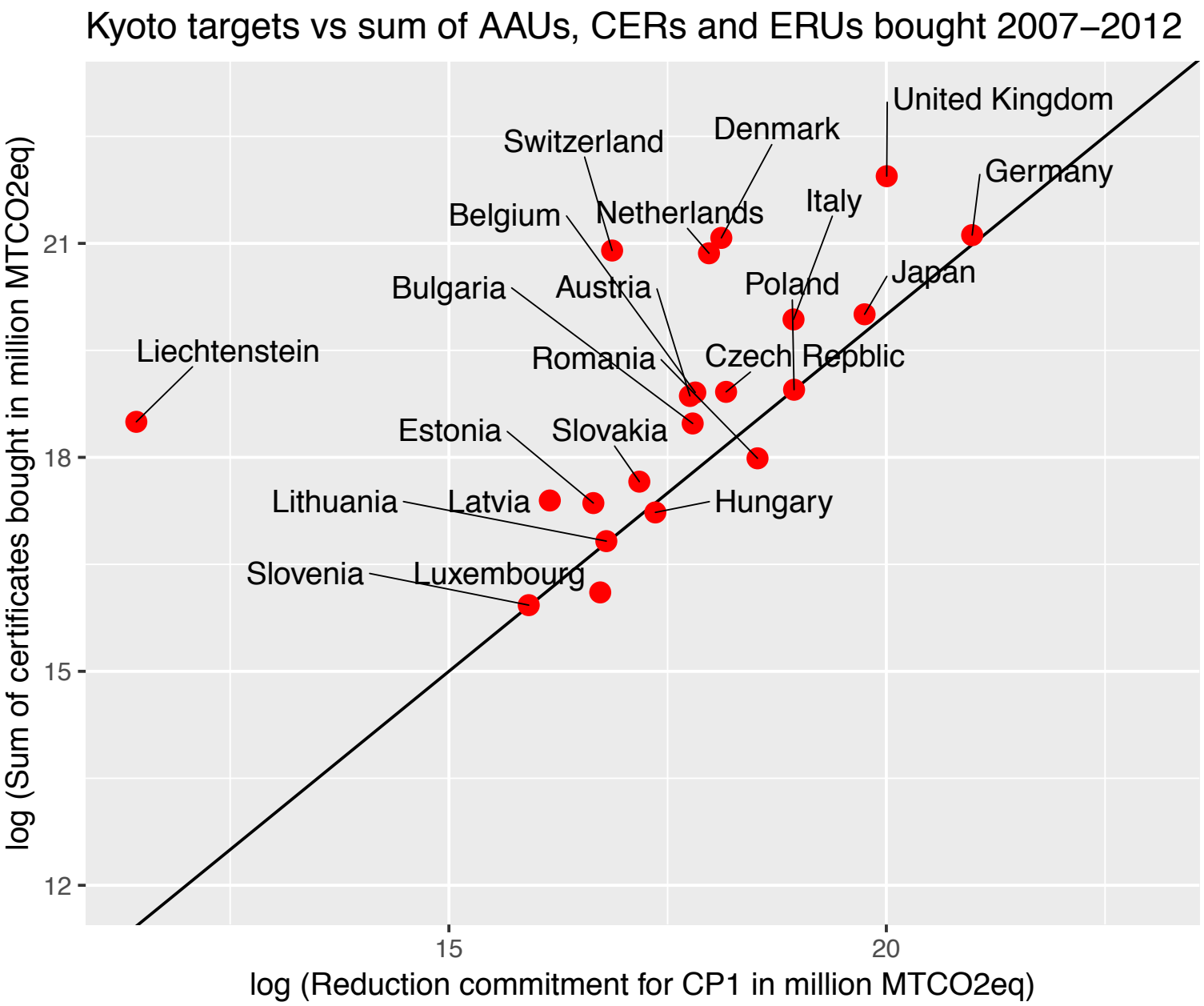
- Assigned Amount Units (AAUs) assigned to countries with emission reduction targets under the Kyoto Protocol,
- Certified Emission Reductions (CERs) obtained from CDM projects, and
- Emission Reduction Units (ERUs) obtained from JI projects.

Background


Market level
Products generated
Compliant party
Kyoto Flexibility Mechanisms
International Emission trading (IET)
Clean Development Mechanism (CDM)
Joint Implementation (JI)
Assigned Amount Unit (AAUs)
Certified Emission Reductions (CERs)
Emission Reduction Units (ERUs)
Annex B countries
Regional ETS
National ETS
Allowances (EUA)
Firms/instal-ations

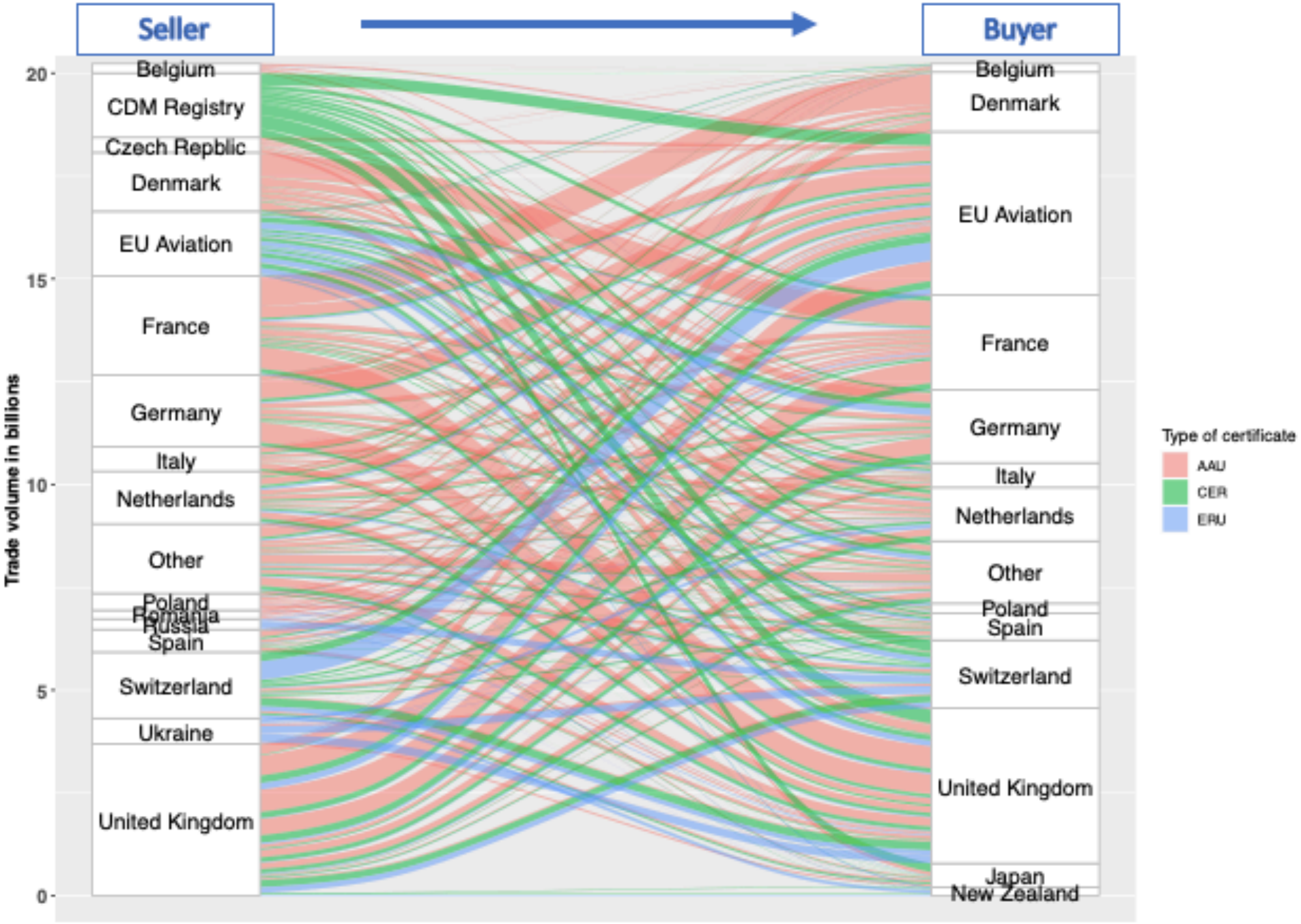
Trading behaviour during CP1 (2008-2012) – I

Firms, individuals and governments in the large majority of countries with emission reduction targets under the KP bought many more reduction certificates or allowances than they actually needed to meet their emission reduction commitment. This means that trading happened not only to meet compliance



Based on data from the Institute for Global Environmental Strategies (IGES)

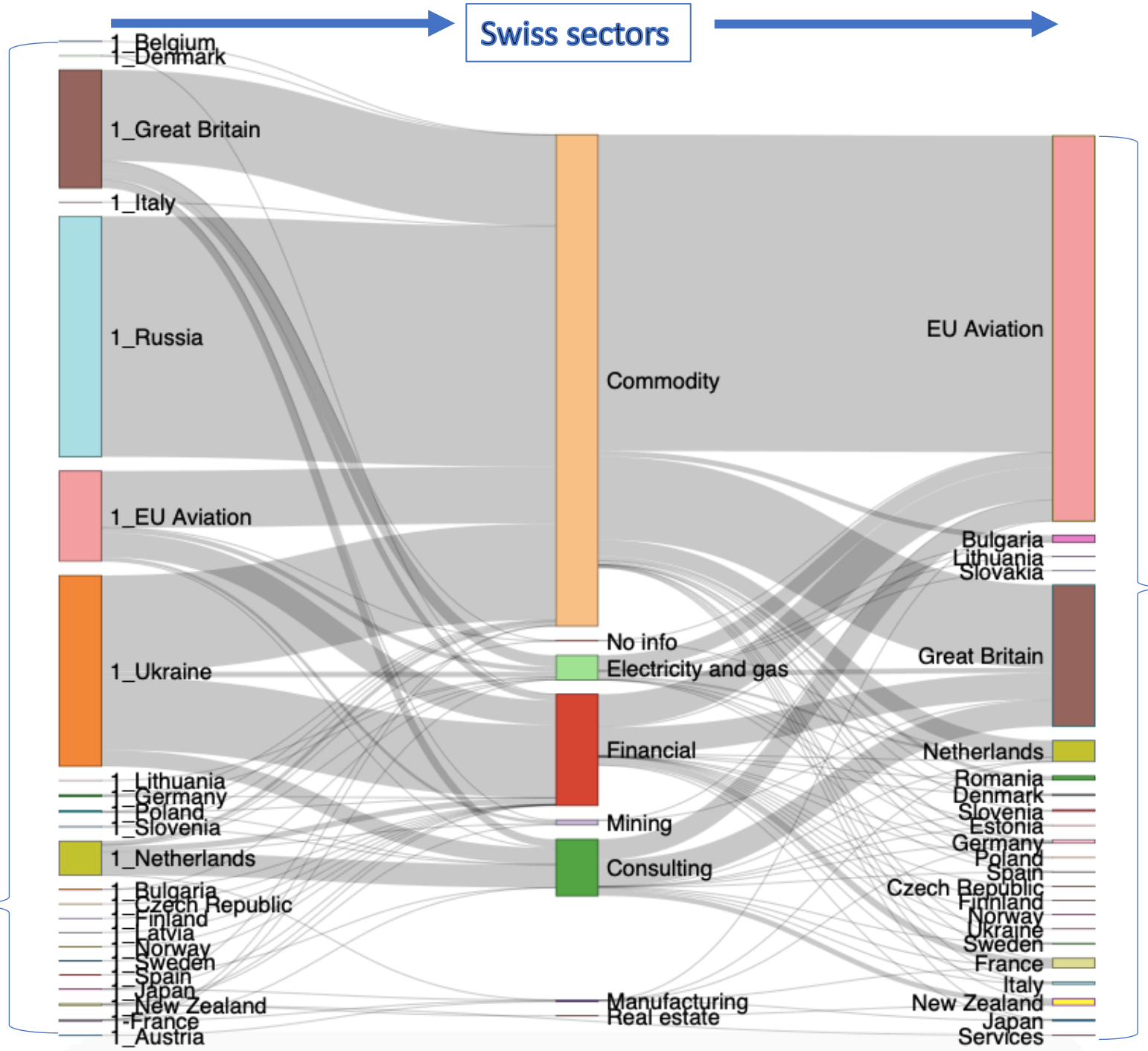
Trading behaviour during CP1 and CP2 (2008-2015)



Based on IGES Data

Flows of ERUs into Swiss registry during CP1 (2008-2012)

Switzerland has an ETS, however buyer firms are not covered by the ETS and these firms do not have emission reduction targets, such as those in the commodity and financial sectors were heavily involved in this trade, and were the main channels through which certificates from Ukraine and Russia - very likely generated from hot air - entered the European market.

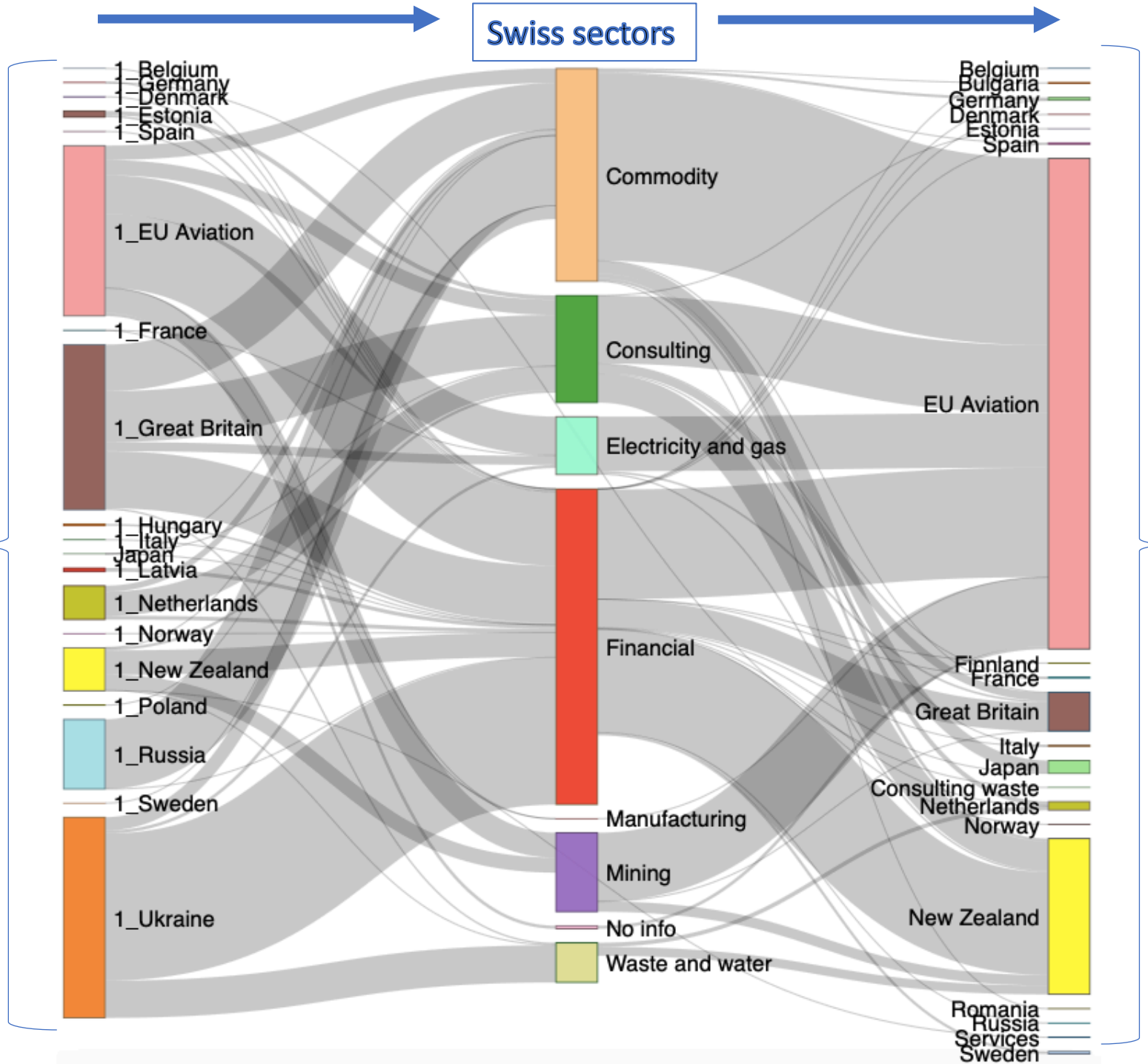


411 mil ERUs

354 mil ERUs

Based on BAFU data (2019)

Flows of ERUs into Swiss registry during CP2 (2013-2015)



255 mil ERUs

263 mil ERUs

Based on BAFU data (2019)

Risks in carbon markets and where they arise

	National & regional cap-and-trade (use of intern. certificates allowed)	Intern. cap-and-trade market (AAU market)	Baseline-and-credit market (JI & CDM)
Compliant parties	Private entities	Governments	
Allocation		Over-estimated BAU emissions (hot air)	
Accounting		Double counting	
Project level			Perverse incentives Non-additionality Over-estimated baseline
Trading level	Abuses of the market: VAT fraud, cyber crimes (e.g. phishing), money laundering		

Lessons learned: insights for future carbon markets

- International carbon market:
  - Provisions in Paris Agreement that rule out the creation of hot air and bad quality tradable emissions certificates
  - International oversight body which tracks and controls the flows and the surrender of certificates
  - Common rules for MRV and reporting of in-flows out out-flows
- EU ETS
  - Financial market oversight is necessary but might not be enough
  - Registry management and oversight: opening accounts, suspension of accounts, exclusion of persons with criminal records