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Management and Law

# SNIS Project: Designing Effective Regulation for Carbon Markets at the International, National, and Subnational Level



**Building Competence. Crossing Borders.**

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# Overview

- Project Members
- 2 year project: Start 2019 ends 2020
- Funder is Swiss Network for International Studies (SNIS)
- Aim and Motivation
- Overview Research Questions
- Project structure
- Future steps



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## Interdisciplinary

h e g

Haute école de gestion  
Genève



### *Our NGO Partners:*



### *Our International Organisation:*



# Aim and Motivation

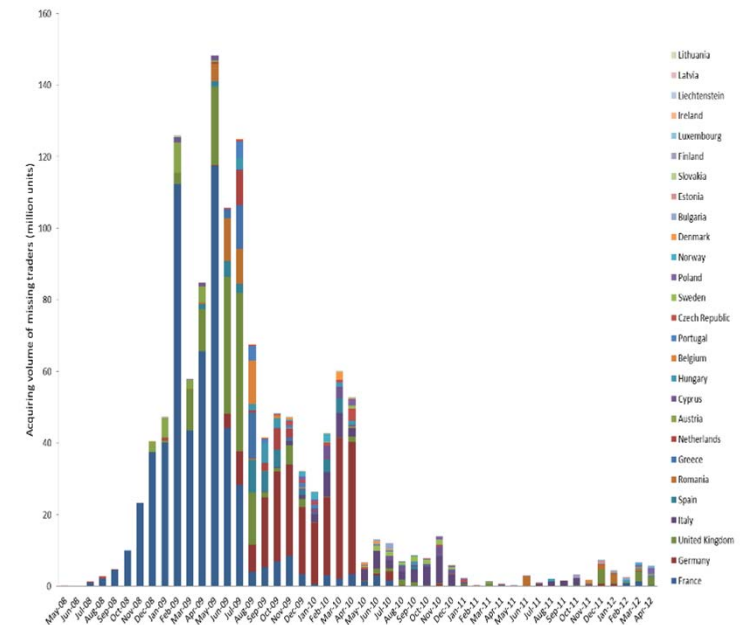
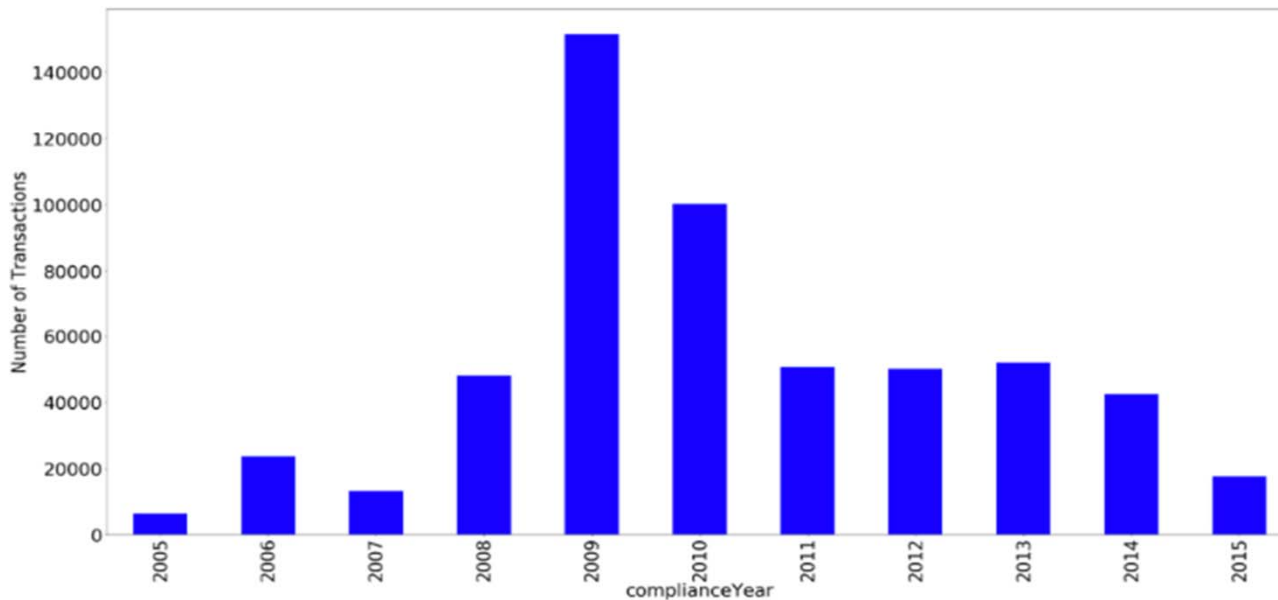
Aim: To provide an integrated, multi-disciplinary theoretical and practical approach to multi-level carbon market regulation based on empirical findings.

Motivation:

- **High costs for tax payers** and society if carbon markets are not effectively regulated (e.g. VAT fraud more than 5 billion Euro) and **damage to reputation** of economic instrument use
- **New carbon markets** are implemented in developed and developing countries
- Markets are developed by other multilateral institution such as the Carbon Offsetting and Reduction Scheme for International Aviation (CORSA) by International Civil Aviation Organization (ICAO). Links between those markets are planned but often poorly governed, therefore **gaps between levels and systems**.
- Carbon Markets are **important for Switzerland** with regard to the own target but also given the linking and role in international markets

# European taxpayers lose €5bn in carbon trading fraud

- Europol says EU's Emission Trading System in peril
- Fraudsters could target gas and electricity markets next



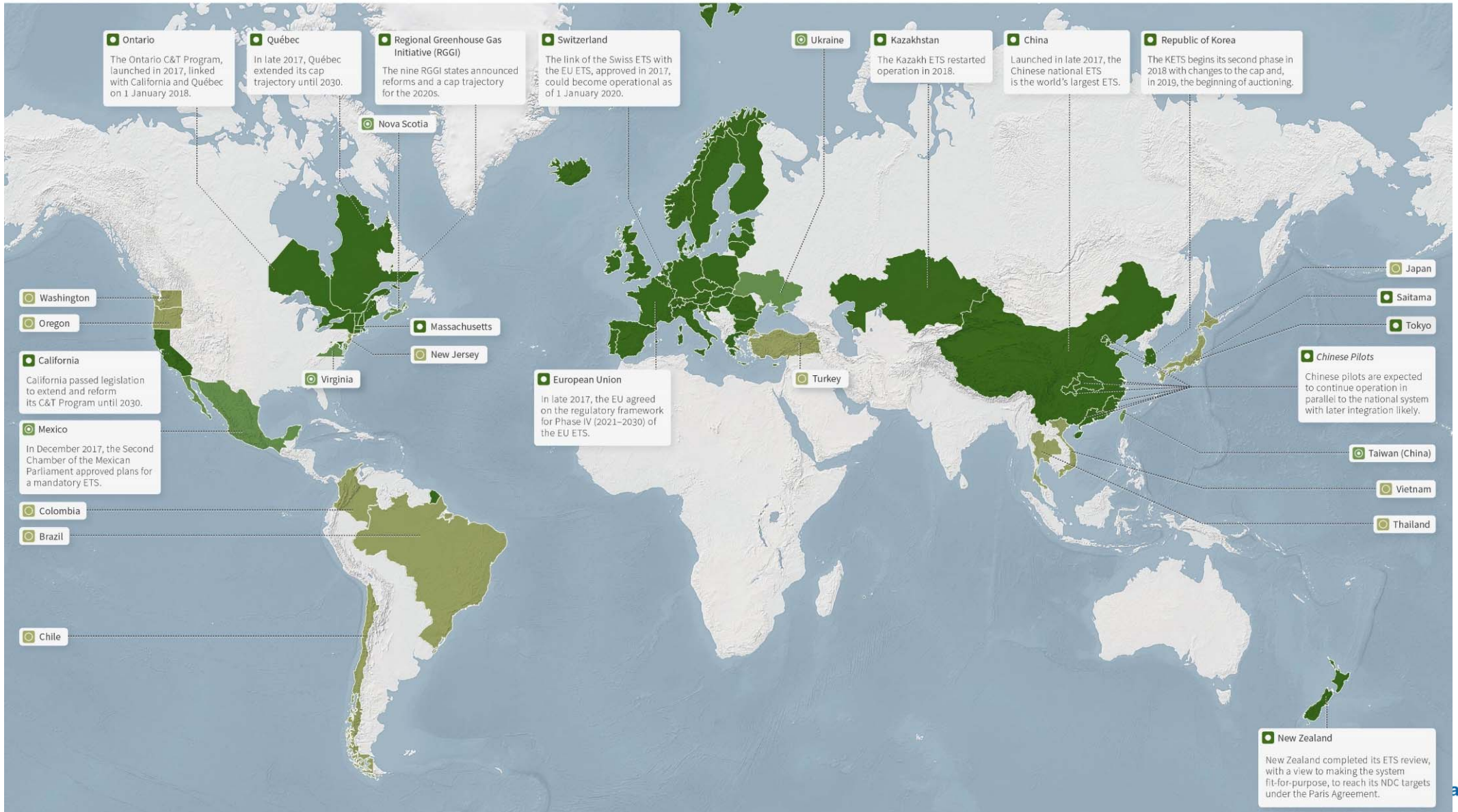
VAT Fraud Starts in France, followed by UK and Germany



# Emissions Trading Worldwide

The state of play of cap-and-trade in 2018

- ETS in force
- ETS scheduled
- ETS considered



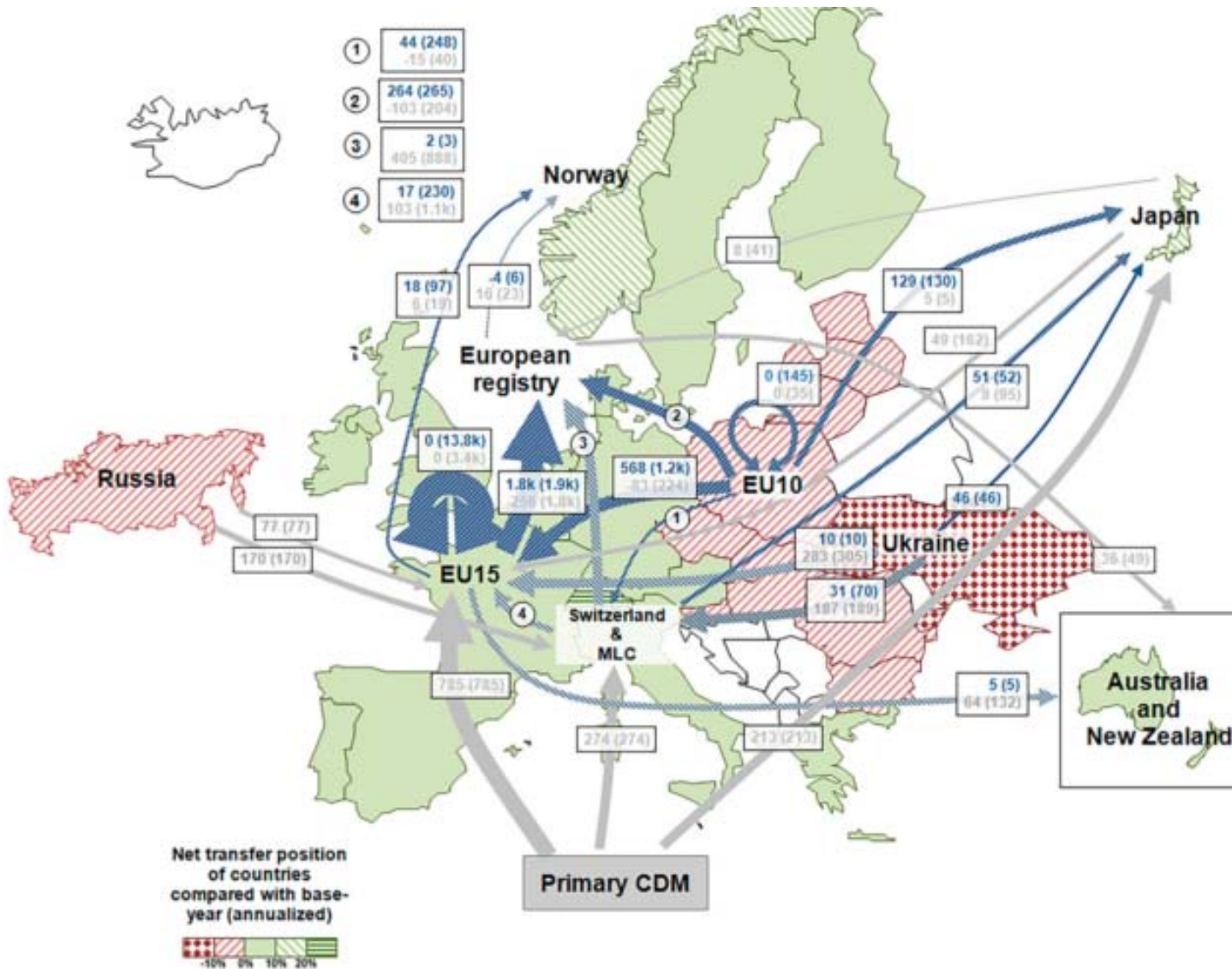
# No oversight for CORSIA is foreseen....



## How does an operator meet its offsetting requirements under CORSIA?

- 1** An operator is made aware of the quantity of emissions it is required to offset ( $n$  tonnes of CO<sub>2</sub>)
- 2** The operator purchases a number of emissions units equivalent to this offsetting requirement; each emissions unit is equivalent to one tonne of CO<sub>2</sub> that was mitigated and verified by an eligible programme
- 3** The operator provides evidence to the State of the surrendered emissions units
- 4** The State validates and records that the operator surrendered emissions units, and reports this information to ICAO

# Switzerland as trading hub for international units

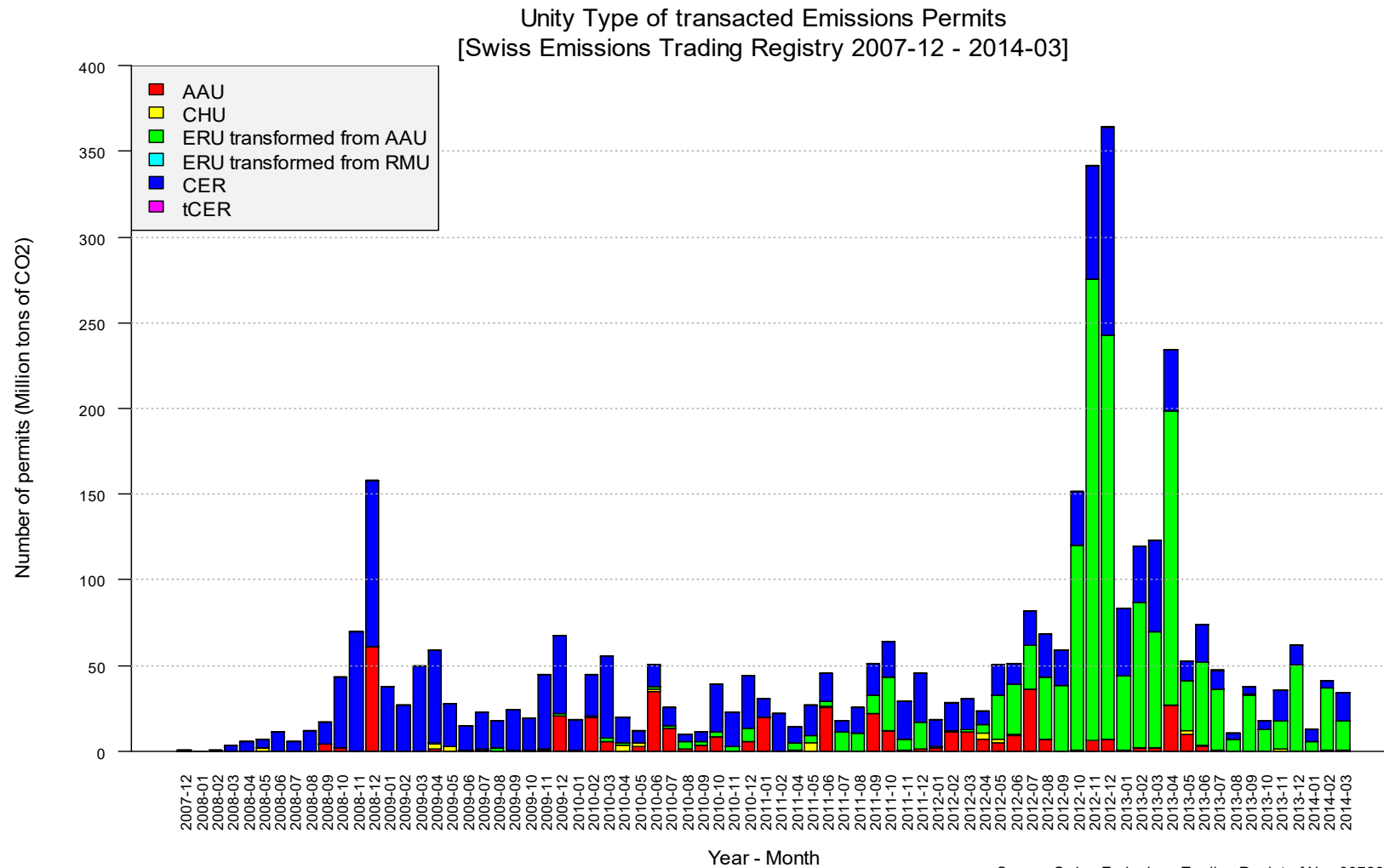


Flows of AAUs are in dark blue

Flows of CERs/ERUs are in grey



# Swiss Registry: major volumes of international units



Source: Swiss Emissions Trading Registry [N = 39726]

# Two different type of carbon markets... different problems

<b>Baseline and credit</b>	<b>Cap and trade</b>
Only emissions reduction compared to <b>baseline</b> or target are tradable	Allocated allowances are tradable
<b>Ex-post</b> Credits are generated after verification, monitoring (and certification)	<b>Ex-ante</b> Allowances are allocated for free or auctioned to covered entities
Wide participation in credit generation and trading	Tradable surplus of allowances can only be created by covered entities
	Non regulated entities can participate in trading
Examples: Clean Development Mechanism, voluntary markets, CORSIA	Examples: US Acid Rain Program, Swiss and EU Emissions trading, Article 17 of Kyoto Protocol

# Overview Workpackages (2 year project)

Axel Michaelowa/  
Andrea Baranzini

Principles of regulatory oversight

- Baseline and Credit: CDM/JI/CORSIA and Article 6.4
- Cap and Trade: EU ETS, California, China pilots and Article 6.2, Financial and Electricity Markets
- Paper 1: "Principles and rules for a multi-level carbon market regulatory oversight"

Regina Betz/  
Peter Schwendner

Risk of market abuse

- Definition of Market abuse risk (illegal/ not in line with guidance)
- Detection options for market abuse
- Paper 2: "Past and future risks in carbon markets: How to detect abuse in carbon markets?"

Rainer Baisch/  
Michael Mehling

Gaps in existing market regulation

- Gaps between international, national and regional levels
- Risk by involving private sector, allowing international transactions
- Paper 3: "Existing market regulations and enforcement practices in carbon markets"

Paula Castro/  
Katja Michaelowa

International co-operation

- Which Countries support strong language on market oversight?
- How can bottom-up mechanisms of policy diffusion (e.g. capacity building initiatives, linking of schemes) may help in spreading strong rules on market oversight?
- Paper 4: "International cooperation for effective carbon market regulation: How does support for sound regulation diffuse?"

# WP1: Research Questions, Methods, Outputs, Conferences

Q1. What principles and rules should guide an effective and feasible multi-level carbon market regulatory oversight?

- What are the advantages and disadvantages of principles or rule-based regulatory approaches?
- Which other principles or rules should be usefully added from related financial and energy markets?
- What principles and rules do we need at a national and subnational level?
- What institutional settings are effective in prevention, detection, and enforcement?
- To what extent can the principles be applied in the context of the new bottom-up approach of the Paris Agreement?
- How can we operationalize cost-effectiveness and emission mitigation effectiveness

**Methods:** Literature review, establishment of theoretical framework for whole project

**Output:** Paper Principles and rules for a multi-level carbon market regulatory oversight

**Conference Presentation:** Global Climate Policy Conference



# Theoretical Framework

- Level of Regulation: international, national, or subnational
- Overall principles: A tonne is a tonne, Polluter Pays principle...
- Principles for Offsets/Baseline and Credit (proposal):
  - environmental integrity,
  - additionality,
  - contribution to sustainable development,
  - transparency,
  - absence of double counting
- Principles for Emissions Trading:
  - Efficiency, Effectiveness,.....
  - Link between design and principles e.g. environmental integrity: MRV standards, Sanctions, Ambition and incentives for mitigation

# ICAO decisions so far...

- Programmes that generate offset credits, for purchase by aircraft operators, should meet a range of elements covering the need for:
  - (i) Clear Methodologies and Protocols, and their Development Process
  - (ii) Scope Considerations
  - (iii) Offset Credit Issuance and Retirement Procedures
  - (iv) Identification and Tracking
  - (v) Legal Nature and Transfer of Units
  - (vi) Validation and Verification Procedures
  - (vii) Program Governance
  - (viii) Transparency and Public Participation Provisions
  - (ix) Safeguarding Systems to address environmental and social risks
  - (x) Sustainable Development Criteria
  - (xi) Avoidance of Double Counting, Issuance and Claiming
- Offsetting programmes should deliver such credits that:
  - (i) Are Additional
  - (ii) Are based on a Realistic and Credible Baseline
  - (iii) Are Quantified, Monitored, Reported, and Verified
  - (iv) Have a Clear and Transparent Chain of Custody
  - (v) Represent Permanent Emissions Reductions
  - (vi) Assess and Mitigate Against Potential Increase in Emissions Elsewhere
  - (vii) Are only Counted Once towards a Mitigation Obligation
  - (viii) Do No Net Harm

# Research Questions WP2

**Q2.** What were the **risks** of market abuse in the **past**, how can they be detected, and what are the potential **future** risks?

- Baseline and Credit: What approach might best reduce the risk of biased additionality determination?
- How can registry and price data be analyzed to detect general and specific market abuses?
- What new risks/benefits will ledger technologies bring to carbon markets?

**Methods:** Econometrics, Machine Learning

**Output:** Paper on “Past and future risks in carbon markets: How to detect abuse in carbon markets?”

**Conference Presentation:** IAEE, COST, Swiss Society for Financial Market Research

# Risks to carbon markets

## General market risks:

- price manipulation,
- money laundering,
- collusion,
- cyber-attacks,
- other predatory behavior
- VAT fraud
- cyber-attacks

## Carbon-market-specific abuses:

- gaming of additionality tests or baselines by providing false information in project documentation to achieve registration of non-additional projects
- misreporting of performance data to increase the number of credits issue
- laundering of units



# Research Question WP3

Q3. To what extent are existing market regulations and enforcement practices addressing the risks identified in Q2?

- Which market abuses are covered by which legislation and jurisprudence in each ETS? MiFID II, MiFIR, European Market Infrastructure Regulation (EMIR), and MAD
- What are the options for legally defining the traded unit (e.g., as a commodity or a financial product) and what are the consequences?
- What experiences have been reported concerning the application of the law regarding market abuses in the different ETSs?
- What differences can be derived for prevention, detection, and enforcement practices?
- Where are the regulatory gaps and how can they be addressed?
- Would a more ETS- specific regulatory approach based on registry data reduce the risk of market abuse?

**Methods:** Literature review and legal comparison, interviews

**Output:** Paper on “Existing market regulations and enforcement practices in carbon markets”

**Conference Presentation:** SEERIL

# Research Question WP4

Q4. How can cooperation be achieved for effective carbon market regulation and oversight at an international level?

- Do countries involved in capacity building initiatives or ETS linking proposals increasingly support effective regulation in international negotiations?
- As a consequence, can capacity building and bilateral ETS linking be channeled to achieve better cooperation multilaterally or do they at least help in improving regulation at a domestic level?
- Can existing national level institutions such as Designated National Authorities for the CDM take over specific regulatory functions (and their related institutions) for the mechanisms covered by the Paris Agreement?
- What are the legal and political limitations to cross-border cooperation with regard to market oversight?

**Methods:** Content analysis, interviews

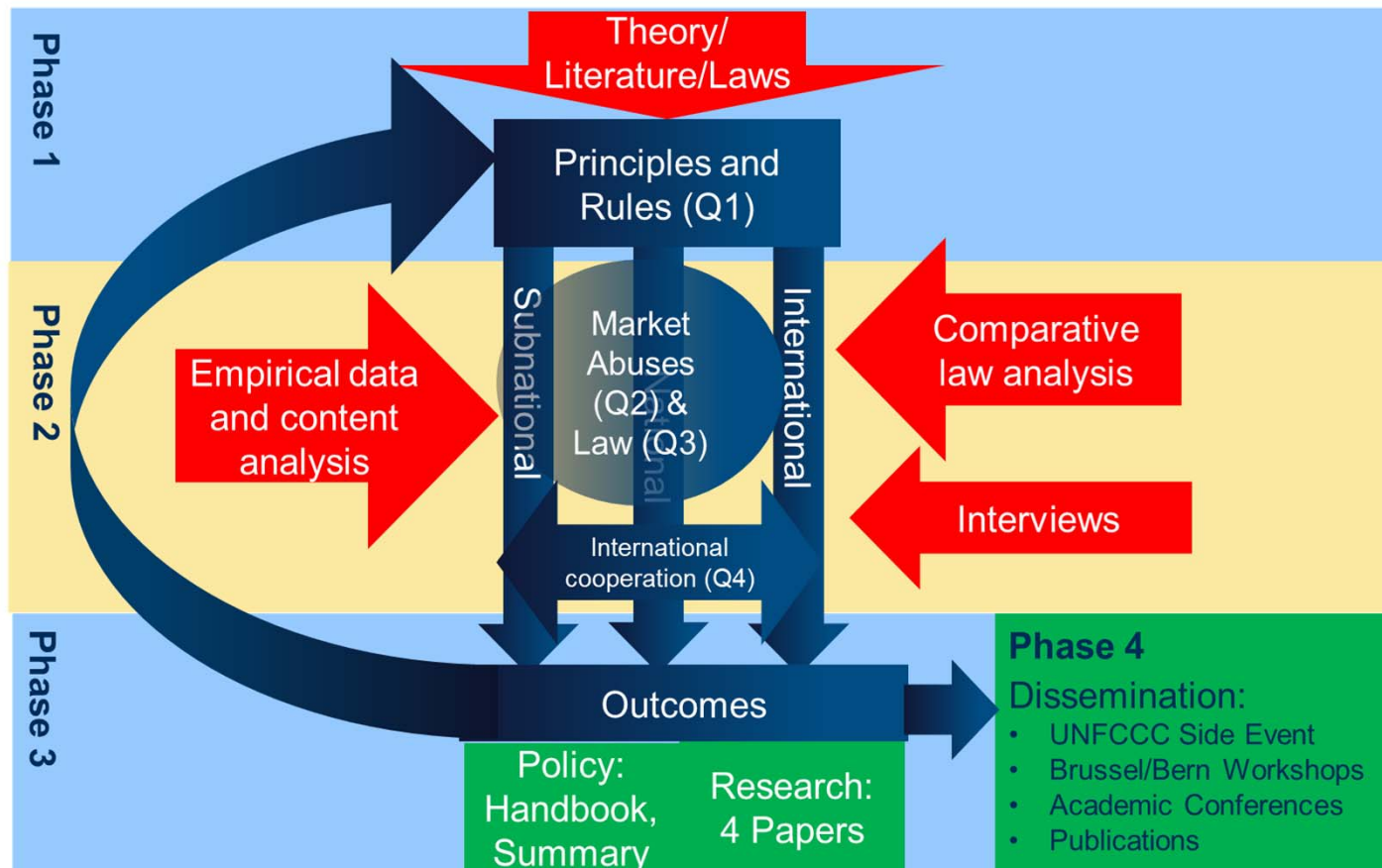
**Output:** Paper on "International cooperation for effective carbon market regulation: How does support for sound regulation diffuse?"

**Conference Presentation:** International Studies Association, Environmental Politics and Governance

# Project structure and overall outcomes and dissemination

**Q5.** What are the **requirements** for a feasible and effective regulation for carbon markets at an international, national, and subnational level?

**Output: Handbook**



# Further steps and meetings

- **Kick-off workshop in Switzerland: 21st of January at Zurich**
  - Discuss principles, select laws and markets to be assessed, share literature and data, discuss labor and project coordination
- **Interim Workshop at UNFCCC meeting in Bonn: June 2019**
  - Discuss draft theoretical framework and outcomes of Q1-Q3; agree on structure of papers and handbook; coordinate remaining work on Q2, Q3, Q4, Q5
- **Meeting of partners at UNFCCC meeting in Bonn: June 2020**
  - Discuss draft papers and handbook; coordinate remaining work
- **Final Side Event at UNFCCC COP: November/December 2020**
  - Present the results, disseminate the handbook





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Thank you for your attention.  
Questions?

