ClimaEast

Support to Climate Change Mitigation and Adaptation in Russia and ENP East countries

MRV in the EU Emissions Trading Scheme

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DAI
Proudly Incorporating HTSPE

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Cap and trade system

- A system in which annual emissions are capped (and traded)
- Allowances/quotas are:
  - tradeable
  - transferable freely/with constraints
  - bankable/not bankable
  - 1 allowance equals one tonne of CO2
- The system has identified participants:
  - registered (eg. through permits)
  - obliged to comply with rules
- **The system has a functioning MRV**

Why cap and trade?

- Concept:
  - Government cannot know what the best emission limit for a single polluter is
  - Govt sets limit for all polluters jointly
  - Polluters decide who will be able to emit through trading with pollution permits
  - Each polluter can buy rights to emit (allowances) , invest in more efficient opeartions or reduce production, depending on what makes more business sense
  - This way, reducing emissions can become a godd business choice
- Initial allocation of emission rights can be free or in auction – it does not matter for ETS to work
- Key requirements:
  - Scarcity (less permits than demand)
  - Lot of diverse industries involved (lot of reduction opportunities)
  - Reliable MRV (a ton is a ton)
  - Regulatory certainty (lobbying should not be te key compliance strategy)
  - Trading infrastructure (registries and trading exchanges)

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EU ETS: key dates

- The EU ETS started in January 2005
- First EU ETS phase (trial) 2005 -2007
- Second EU ETS phase 2008-2012
- Third EU ETS phase 2013 – 2020
- Fourth EU ETS phase from 2021

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ETS design

- Simple “downstream” cap-and-trade system for major emitting industries
- Monitoring rules
- Independent verification
- Robust penalties to ensure compliance
- Electronic registry system to record holdings of allowances
- Market development driven by the private sector

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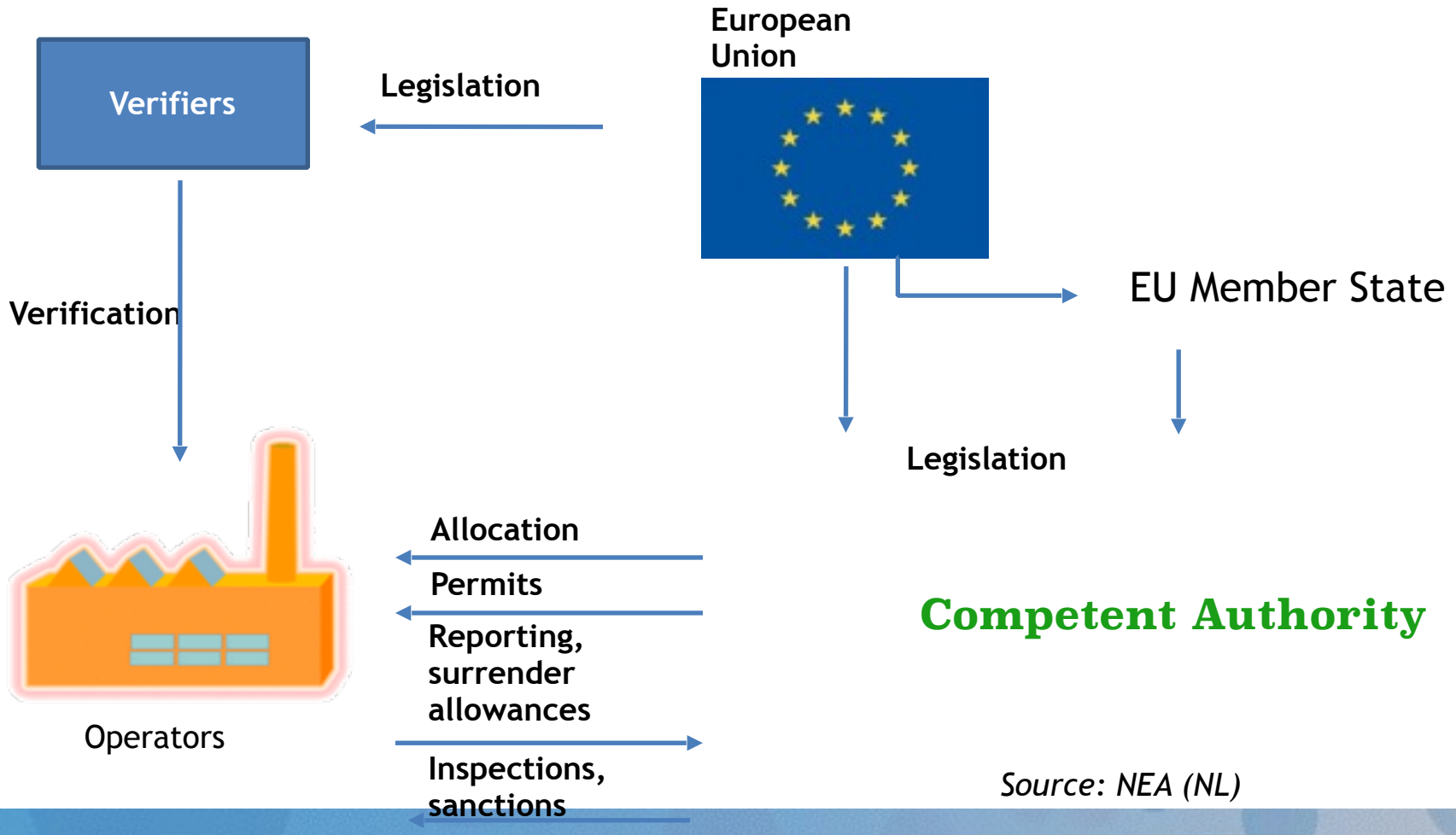
EU ETS Structure



Source: NEA (NL)

Scope of the ETS: activities

- Combustion installations above 20 MW
- Oil refineries
- Ferrous metals production above 2,5t/hr
- Cement production
- Glass production above 20 t/d
- Ceramics production above 75 t/day
- Pulp and paper production above 20 t/d
- PFCs from alluminium production and N2O emissions from chemical plants included from 2013
- Aircraft operators performing aviation activities in the EU and EFTA states

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EU ETS: coverage

- About 11 thousand installations
- Aviation in the EU and EFTA countries
- Nearly half of total EU GHG emissions
- 28 EU Member States and 3 EEA-EFTA states
- GHGs included:
  - Carbon dioxide
  - N2O
  - PFC

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EU ETS: legal framework

- Directive 2003/81/EC (adopting emissions trading)
- Directive 2004/101/EC (linking directive)
- Directive 2008/101/EC (including aviation activities in ETS)
- Directive 2009/29/EC (ETS review – part of the climate and energy package)
- key implementing provisions:
  - regulations on Union Registry
  - **Monitoring and Reporting Regulation (MRR)**
  - **Accreditation and Verification Regulation (AVR)**

ETS 2005-2012

- Member States initially responsible for cap setting and allocation through National Allocation Plans (NAPs)
- NAPs approved by the European Commission
- 25 (phase I) 27 (phase II) registries
- National authorities overseeing compliance
- allowances distributed mostly free of charge
- Dominant allocation methodology - grandfathering
- Just 5% of allowances auctioned on average

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ETS 2013-2020

- Directive 2009/29/EC amending Directive 2003/81/EC
- One single EU –wide cap (limit) set on the total GHG emitted by installations included in the EU ETS
  - EU ETS cap set at 2,084,301,856 allowances in 2013
  - Decreasing by 1.74% anually
  - Reduction continued beyond 2020
  - -21% reduction against 2005 levels
- Harmonised allocation - main allocation method: auctioning
  - The proportion increasing annually
- The remaining allowances allocated free of charge to industry threatened by carbon leakage, based on benchmarking
- Strengthened MRV
- Increased scope (new GHG, new activities)

ETS 2013-2020 – broader scope

- New gases:
  - PFCs from aluminium
  - nitrous oxide from certain chemicals
- Broad interpretation of “combustion”, Annex I listing only activities
- Combined effect: approx. 6 - 7% increase of scope
- New sectors
  - Aluminium
  - Basic chemical production
- aviation

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ETS 2013-2020 – allocation principles

- Harmonised allocation rules to ensure a level playing field across the EU:
  - No distortion of competition
  - Fully equal treatment within sectors across EU
- Auctioning as the general rule, with transitional free allocation up to 2020
- In terms of allocation rules, three categories of operators:
  - No free allocations (i.e. full auctioning)
  - Partial free allocation (no carbon leakage)
  - Up to 100% free allocation (carbon leakage – based on benchmarks)

Strengthened MRV

- Monitoring and Reporting Regulation
- Replaced earlier guidelines
- Verification and Accreditation Regulation
  - New EU-wide rules replacing regulation on MS level
- Harmonised €100 penalty for non-compliance
  - requirement to surrender allowances remains
- Single Union registry
  - MS responsible for operations on MS level

Compliance

- Member State competence, harmonized elements:
  - no permit, no operation
  - blocking transfers if no verified emission report by 31 March
  - €100 penalty and compensate shortfall for insufficient surrendering

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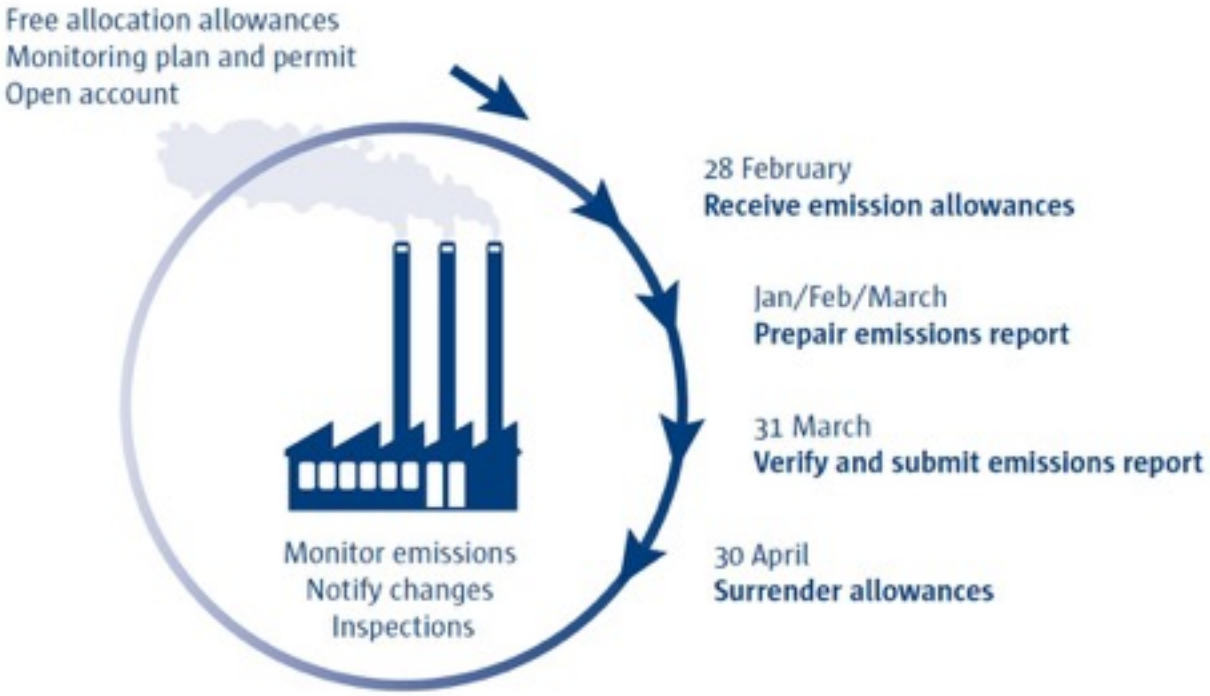
Compliance cycle emissions trading



ETS Permit

- Mandatory for operators covered by EU-ETS
- No information about actual emissions or allowances
- Most important element: **monitoring plan**

Monitoring plan

- Description of monitoring methodology
- Approval before GHG is emitted
- Installation specific application of monitoring requirements
- Operator responsible for content
- Basis for reporting, verification and inspection

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Monitoring Plan supporting documents

- Uncertainty assessment
- Risk assessment
- Sampling plan → formally approved

All must be checked before issuance of permit

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General monitoring principles

- All emissions within an installation included (except mobile sources and waste incineration)
- “A tonne must be a tonne”
- Completeness
- Consistency, comparability, transparency
- Accuracy
- Integrity of methodology
- Continuous improvement
- Cost-effectiveness

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Data management and control

Step 1
- Collection of primary input data
- Risk: measurement device out of order

Regular maintenance and control

Step 2
- Registration of primary input data
- Risk: data is not registered

Back up facilities, regular control

Step 3
- Registration of primary input data in emissions report
- Risk: data are incorrect

Control & corrective actions

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Verification

Verifier

- Legal entity/person accredited by a National Accred. Body
- Contracted by the operator

Role of verifier

- Check implementation of monitoring plan
- Check data in emissions report

Verification principles

Objective: ensure that data are monitored and reported according to the MRR (validated MP)

- Reliability: correct and free from material misstatements
- Independence: from operator and CA
- Professional scepticism
- Reasonable level of assurance
- Materiality
- Scope of verification

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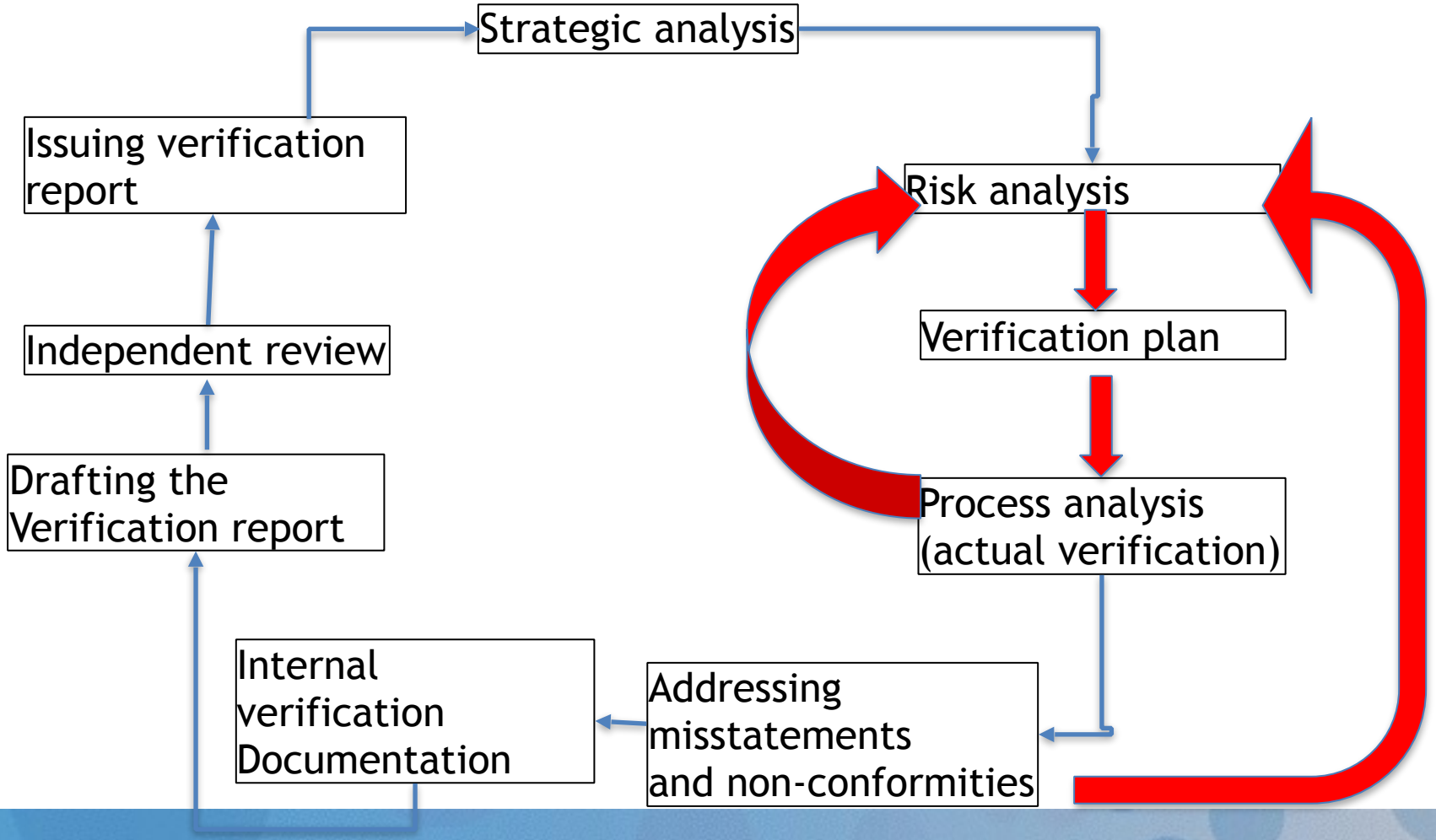
Verification process



Verifiers

Requirements

- Competence process
- Impartiality and independence
- Other issues

Accreditation

- Competences of verifiers
- Verifications performed in line with AVR

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MRV in emissions trading

- more information on

- http://ec.europa.eu/clima/policies/ets/monitoring/index_en.htm

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