Ensuring environmental integrity in emissions trading – Estonia’s experience

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Basis for emissions trading
Estonia hosted 12 private sector JI projects that generated 1.8 mil tCO2e ERUs for Finland, Austria and NEFCO.

Ensuring environmental integrity (additionality, avoidance of double counting) was a precondition to trade, validated by UNFCCC accredited independent auditors.

Wind power, boiler-house fuel-switch, biogas, hydro power – high cost-effectiveness due to high carbon intensive baseline.

Only verified pre-2012 ERUs Kyoto Protocol compliant.

Short crediting period and high transaction costs only supported large projects.

Important role of early governmental carbon credit procurement programmes.
Green Investment Scheme 2010-13

• Estonia signed 22 agreements for sale of unused governmental emission rights (AAUs) with 3 EU governments (Austria, Spain, Luxembourg) and 4 Japanese corporations

• Proceeds of 392,6 mil EUR for 75,5 mil AAUs

• Tailor-made greening programmes targeting renewable energy, energy efficiency and sustainable transportation

• Ensuring environmental integrity incl. short/long-term greening, additionality, avoidance of double-counting

• Ensuring other benefits incl. cost-effectiveness, socio-economic impact, timely implementation, enhancing trade, FDI and R&D

• Untapping the potential of innovative green technologies
Green Investment Scheme programmes in Estonia

AUSTRIA:
- 63 district heating projects incl. CHP plants, boiler-house fuel-switch and pipeline renovation
- LED street lighting in 7 cities (11,741 lighting points)

SPAIN:
- 20 energy-efficient trams for capital Tallinn
- 3 wind farms
- 120 economic buses for county lines

LUXEMBOURG:
- Energy efficiency of 576 apartment buildings and 292 private houses
- 95 micro-renewable energy devices (solar PV, solar heat, small wind)

JAPANESE CORPORATIONS (Mitsubishi, Sumitomo, Marubeni, SMBC):
- Energy efficiency of 540 public buildings
- Country-wide electro-mobility incl. 167 quick chargers, 507 electric cars for public servants, 657 grants for purchase of EVs, electric car sharing in 2 cities
Example 1: Electro-mobility programme

• Partner Mitsubishi Corporation, implementation 2011-17
• Country-wide quick-charging infrastructure:
  - 167 quick chargers, 380,000+ charging sessions, 1600+ clients, 3,400+ MWh green electricity consumed
• 507 electric cars distributed to municipal social workers
• Grant support for electric car purchase (657 grants)
• Awareness raising incl.
  - electric car sharing in 2 cities (6,900+ clients, 31,000+ rentals)
  - electric car demo center
• http://elmo.ee/en/
Example 2: LED street lighting in 7 cities

• Partner country Austria
• Switch to LED street lighting and modern dynamic control in 7 medium-sized cities (11,741 lighting points)
• Implementation during 2012-15
• Central design and public procurements
• Achieved 76% energy savings! (5504 MWh/year, 6,000 tCO2e/year)
• Encouraged to launch a new 43 mil EUR EU-financed programme targeting switch to LED at 22,000 lighting points
Conclusions

• Benefits of emissions trading:
  - cost-effective CO2 emission reductions
  - other environmental and socio-economic benefits
  - enhancement of trade and FDI
  - supporting green technology innovation

• No more low-cost opportunities:
  - as such already exploited (JI, GIS, EU grants, EU ETS auction revenue, private financing)
  - due to ever greener baselines
  - no more ‘hot air’ in the system

• Preconditions for emissions trading:
  - ambitious targets creates demand and motivation
  - early action secures cost-effectiveness
  - programmatic approach offers scale and cost-efficiency
  - project-based approach offers private sector engagement
  - ensuring of environmental integrity
Thank you!

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