Environmental Economics
No.10

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The EU Emissions Trading System (EU ETS)

Background

The Kyoto Protocol

Agreed upon in 1997

The first commitment period (2008–2012).

- ✓ Extends the 1992 **UN Framework Convention for Climate Change** (UNFCCC),
- ✓ Set legally-binding GHG reduction targets, or caps, for 37 industrialized countries

This led to the need for **policy instruments** by EU to meet the Kyoto commitments.

The first step was in 2000

Background

In **2000** a green paper with some first ideas on the designs of the **EU ETS** was presented.

By the European Commission

It served as:

a basis for numerous **stakeholder discussions** that helped shaped the EU ETS in the first phases.

This led to the adoption of the EU ETS Directive in 2003 and the introduction of the EU ETS in **2005**.

The EU Emissions Trading System (EU ETS)

■ What is the EU ETS?

- ✓ The system was first introduced in 2005.
- ✓ The EU ETS is **a major tool** of the European Union in its efforts to meet **emissions reductions targets**.
- ✓ The EU ETS is **a 'cap** and **trade'** system.

- ✓ It caps the total volume of GHG emissions from installations and aircraft operators

→ responsible for around **50%** of EU GHG emissions.

- ✓ The system allows trading of **emission allowances**

→ so that the total emissions **stays within the cap** and **the least-cost measures** can be taken up to reduce emissions.

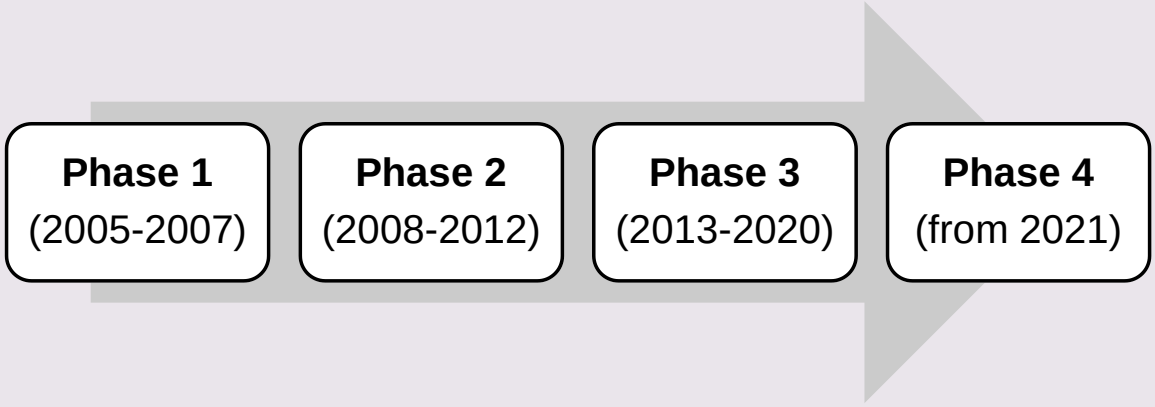
- ✓ The trading approach helps to combat climate change in a cost-effective and economically efficient manner.

AS, the EU ETS covers more than **11,000 power stations** and **industrial plants** in **31 countries**, and flights between airports of participating countries.

- ✓ The implementation of the system has been divided up into distinct trading periods over time, known as phases.

2013-2020 (The current phase of the EU ETS)

EU ETS-Phases



The EU chose a "cap-and-trade" structure

Why?

- A traditional c**ommand-and-control** approach may mandate a **standard limit** per installation,

  but provides **little flexibility** to companies
  (as to where or how emissions reductions take place)

- **A tax** does not guarantee that the GHG emissions reduction **target** will be achieved.

  and in a multi-national system, **agreement** would be required **across all countries** on the **right price** for carbon.

  Difficult to determine the "right price" to obtain **the cut in emissions** required without under- or overcharging companies.

- cap-and-trade allows a set **environmental outcome** to be achieved at lowest costs.

- Trading allows companies to determine

  what **the least-cost option** is for them to meet a fixed cap

- The carbon price is then set by the market through trading

In addition, cap-and-trade provide:

- **Certainty about quantity**
- **Cost-effectiveness**
- **Revenue**
- **Minimising risk to Member State budgets**

Certainty about quantity

- Emission Trading directly limits **GHG emissions**

by setting **a system cap** that is **designed** to ensure **compliance** with the relevant **commitment.**

There will be certainty about **the maximum quantity of GHG emissions** for the period of time over which system caps are set.

- This is relevant for supporting the EU's international objectives and obligations and achieving environmental goals.

Cost-effectiveness

Trading reveals the carbon price to meet the desired target.

The flexibility that trading brings means that all firms face the same carbon price

and ensures that emissions are cut where it costs least to do so.

Revenue

If GHG emissions allowances are auctioned

this creates **a source of revenue** for governments

at least 50% of which should be used to fund measures to tackle climate change in the EU or other Member States.

Minimizing risk to Member State Budgets

The EU ETS provides **certainty** to **emissions reduction** from installations responsible for around **50%** of EU emissions.

This reduces **the risk** that Member States will need to

purchase **additional international units** **(**to meet their international commitments under the Kyoto Protocol).

How does the EU ETS contribute to meeting the EU's climate policy goals?

- The international community has agreed that global warming should be kept below **a 2ºC increase**, as compared to the temperature in **pre-industrial times.**
- In 2008, the EU set a series of climate and energy targets to be met by 2020 in its pathway towards **a low-carbon competitive economy**, known as the "20-20-20" targets. These are:
  - A reduction in **EU greenhouse gas emissions** of at least 20% below 1990 levels.
  - 20% of **EU energy consumption** to come from renewable resources
  - A 20% reduction in **primary energy use** compared with projected levels, to be achieved by **improving energy efficiency**.

How does the EU ETS contribute to a competitive economy?

- EU leaders envisage that the European economy can cut most of its GHG emissions by 2050 through smart, sustainable and inclusive growth.
- The Commission's roadmap for moving to a low-carbon economy by 2050 includes a key role for the EU ETS in promoting decarbonization (reducing its carbon intensity) throughout the European economy.

How does the EU ETS contribute to a competitive economy?

- The EU ETS contributes to the creation of jobs, generation of green growth and strengthening long-term competitiveness of the European economy by putting a price on carbon. Specifically:
  - It stimulates investments in energy efficiency measures, reducing energy costs and financial risks associated with increasing energy prices
  - It offers an incentive to invest in renewable energy technology, reducing the energy dependency on fossil fuel imports and enhancing energy security
  - It strengthens the EU ambition to decarbonize the European economy, providing a long-term stable policy environment for low carbon investments and clean *technology.*

Thank you