CARBON PRICING: PERSPECTIVES FOR THE EU EMISSIONS TRADING SCHEME BY 2030

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Outline – Towards the recalibration of the EU ETS

1. EU 2030 climate and energy targets and EU ETS as the central instrument of its climate policy
2. The EU ETS surplus and the role played by its interactions with complementary energy and climate policies
3. The Market Stability Reserve to ensure adequate scarcity
4. Dealing with carbon leakages issues in the EU ETS
The 2030 energy and climate targets:

- A EU binding target of 40% GHG reduction compared to 1990
- A binding EU target of 27% of RES in final energy consumption
- An indicative EU target at least 27% improvement in energy efficiency

This GHG target is in line with the objective of 80 – 95% reduction by 2050.

The ETS cap will decrease by 2.2% from 2020 onwards to reach a EU ETS target of -43% by 2030 compared to 2005.
The EU ETS remains the central instrument to achieve 2030 GHG target

- As a technology neutral and economy wide instrument, the EU ETS is a key enabling instrument:
- Complementary measures remain necessary to drive low carbon investments

Carbon pricing also raises revenues that can be channeled:
- To fund complementary policies alongside carbon price
- To compensate declining sectors in order to smooth the transition
1. European targets and carbon pricing as a central instrument

2. The growing surplus and the role played by interactions between the EU ETS and complementary policies

3. The Market Stability Reserve to ensure adequate scarcity

4. Dealing with carbon leakages issues in the EU ETS
The EU ETS 2020 emissions reduction target has been overachieved since 2014

- From 2005 to 2014, EU ETS CO2 emissions decrease in all EU Member States: - 24% in 2014/2005

- From 2005 to 2014, CO2 emissions decrease in all EU ETS sectors: - 18% in the power sector 2005/2013 and more in cement, ceramics, iron steel sectors

- The EU ETS 2020 emissions target of – 21% in 2020 compared to 2005 was already reached in 2014.

Source: I4CE - Institute for Climate Economics, based on EUTL 2015

EU ETS emissions decreased from 2 375 MtCO2 to 1813 Mt between 2005-14 compared to the EU ETS cap of 1 816 MtCO2 in 2020.
Complementary climate policies have played a major role in EU ETS abatements.

Between 2005-11, the CO2 price contributed to 1-100 MtCO2 of EU domestic reductions and more than 1,100 MtCO2 outside the EU ETS scope through CDM and JI projects.
Without a credible long-term climate target, the growing surplus undermines the EU ETS functioning.

- A large surplus has been building on in the EU ETS without any perspective to decrease before 2030 - amounting to 2.1 billion in 2014, and is expected to reach 2.6 billion in 2020.

There are no perspectives for a balanced EU ETS and an efficient carbon price by 2030.
Over achievement of the 2020 RES target: 120 MtCO2 in 2020

Unanticipated shocks/events: the economic downturn = 1 900 Mt CO2 in 2020

Complementary policies not embedded in the EU ETS: EE directive with 500 MtCO2 + Kyoto offsets with 1.5 MtCO2

The growing surplus drivers by 2020: interactions with complementary policies and unanticipated shocks.

50% of the surplus avoided with an ex-ante assessment.

50% of the surplus came from uncertainty difficult to anticipate.

Complementary policies need to be taken into account in the cap setting. Mechanisms are needed to adjust the supply accordingly.

2.6 billion of EUA surplus in 2020.
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Introducing adjustment in the EU ETS supply is necessary to support its ambition

- Introducing adjustment in the EU ETS supply: the choice to implement “a robot” to absorb the surplus with the Market Stability Reserve from 2018.
- MSR = a dynamic adjustment based on a quantity corridor for the volume of allowances in circulation in the EU ETS

FIGURE 5: THE MSR FUNCTIONING BASED ON THE EU COMMISSION’s PROPOSAL

Source: Troignon et al. 2014.
Will this MSR be efficient to recalibrate the EU ETS by 2030?

- **Restoring the short term scarcity**
  - With MSR, the surplus = 500 million in 2030
  - Without MSR, the surplus = more than 3 billion

- **Improving the EU ETS resilience to external shocks**
  - Simulation of overachieving RES policies (55% in 2030 in power sector) and a strong downturn in 2025 similar to 2008
  - With MSR, surplus = 1,300 MtCO2 in 2030, against 4 GtCO2e without MSR

Source: I4CE - Institute for climate Economics (2015) based on European Commission, EUTL
This MSR is a welcome step but risks of instability could emerge

- **Risk of high volatility** if thresholds are not implemented in adequation with hedging needs

- **The MSR treats surplus in the same way whatever its sources:**
  - “Bad surplus” from complementary policies not embedded in the cap and from exogeneous shocks (offsets, downturn, overachievement)
  - But what does surplus stemming from early abatement and technology improvement be withdrawn?

- **Need of a proper governance to recalibrate the parameters in a timely manner**
  - Some human judgment is necessary to judge if the surplus is harmful to the cost effectiveness of the EU ETS, to adjust to hedging needs
Outline

1. European targets and carbon pricing as a central instrument
2. Complementary mechanisms and the scope of interactions
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4. Dealing with carbon leakages issues in the EU ETS
Free allocation as the way to prevent carbon leakages in the EU ETS

- EU committed to compensate « undue carbon costs » through free allocation for industry after 2020 as long as no comparable efforts are undertaken.
- Free allocation has been capped to 40% of the total EU ETS cap to ensure industrial sectors participate to the effort.

How to share the shrinking pie?

Declining free allocation budget from 0.8 to 0.5 GtCO2e from 2013 to 2030.

Declining cap.
Paving the way for the decarbonisation of industry sectors

How to protect exposed sectors and maintain abatement incentives in the context of a shrinking free allocation budget?

- **Targeting free allocation**
  - Tiered allocation ensures predictable and credible protection for most exposed sectors

- **Providing flexibility in the supply of free allocation**
  - To give a clear incentive to reduce emissions per unit of production, rather than decreasing production
  - To avoid windfall profits undermining credibility of the pricing scheme

- **Complementary mechanisms to promote innovation and to steer the demand for low carbon materials**
A necessary recalibration of the EU ETS for a cost-effective decarbonisation by 2030 with an enhanced governance

- A long term climate target is welcomed to support a cost-effective decarbonisation with low-carbon investments with a robust carbon price

- Stability and adjustment mechanism in Europe: the MSR is welcomed but guaranteeing its effectiveness call for a governing framework before 2030.

- To reinforce the credibility of the EU ETS, moving forward to an explicit role of complementary policies. Their interactions should be carefully assessed

- Industry decarbonisation: targeted and flexible free allocation

Calibrating the EU ETS in a sustainable way requires an enhanced governance (– with a committee of experts !) to provide an ex-ante assessment of complementary policies, to guarantee the MSR effectiveness, to monitor reductions drivers and to formulate of recommendations for the EU ETS design
Thank you for your attention!

Contact: benoît.leguet@i4ce.org

Download our report
Exploring the EU ETS beyond 2020
http://www.i4ce.org/download/copec-report/
Thank for you attention!

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