Seminar: EU ETS outlook to Phase 4

#### **EU ETS IN THE NEXT DECADE**

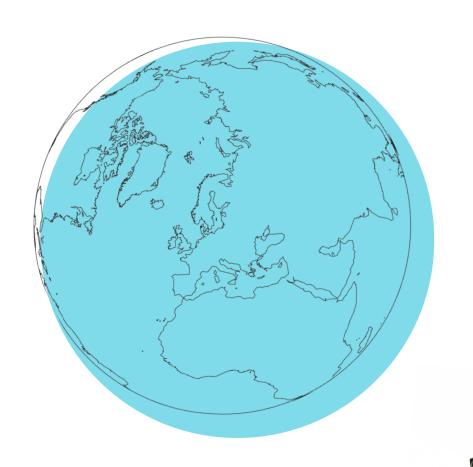
Dr Outi Haanperä, Sitra and Verena Graichen, the Öko Institut, 18th of November 2019



### How to align the EU ETS with the Paris Agreement?

The role of the EU ETS in increasing EU climate ambition: Assessment of policy options. **Verena Graichen**, **Jakob Graichen**, **Sean Healy** (Öko-Institut e.V.), Sitra Studies 161, 2019.





## Global emissions need to be **HALVED** by 2030

...if we want to limit warming below 1.5 degrees.



#### What was studied?

- What would an appropriate emission reduction target for the ETS be if the EU-wide target for 2030 was increased from 40% to either 55 or 60%?
- What are the policy measures to deliver the new target?
- **3** How the measures differ in abatement potential and political feasibility?
- Conclusions and recommendations going forward



An updated EU-wide 55-60% emissions reduction target would require **reducing emissions by 61-65%** from the 2005 level under the ETS sector.

The following measures were studied to achieve this target:

- **1.** Strengthening the cap
- **2.** Enhancing the system's resilience towards short term variations
- **3.** Applying a carbon price floor
- **4.** Extending the scope of the ETS
- **5.** Applying a tiered approach to free allocation of allowances



# 1 Strengthening the cap

#### **Background**

If we want to reduce emissions in the ETS sector faster, we must reduce the amount of emission allowances put into circulation. This would strengthen the emission cap.

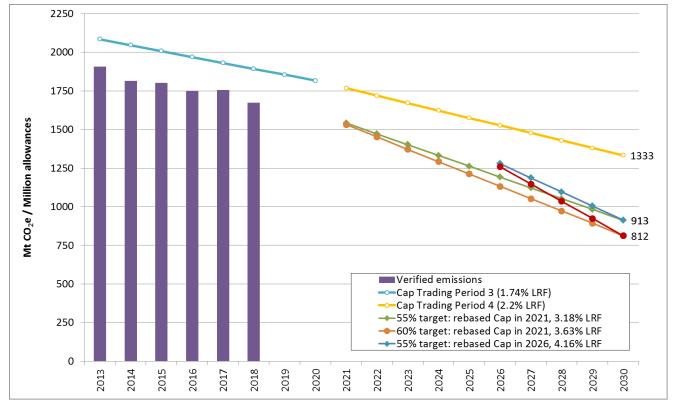
#### How?

- **Rebasing the cap**The amount of allowances released annually would be adjusted downwards significantly in one year after which the annual reduction rate would continue as before.
- Applying a higher linear reduction factor (LRF)
   Linear reduction factor defines the amount the cap declines annually.
- **A combination** of these

**Abatement potential:** high



Strengthening the cap to reach the new 2030 target





#### Rebasing the cap enables a lower LRF

			Does it reach the enhanced target?
Cap Trading Period 4,	15 504	0	No.
no rebasing, 2.2 % LRF	0.		NT
Rebased cap in 2026, LRF 2.2 %	14 480	1 023	No.
Rebased cap in 2021, LRF 2.2 %	13 457	2 047	No.
Rebased cap in 2026, LRF 4.16 %	13 835		Yes, 55%, if surplus is eliminated.
Rebased cap in 2026, LRF 5.07 %	13 533	2.	Yes, 60%, if surplus is eliminated.
Rebased cap in 2021, LRF 3.18 %	12 273		Yes, 55%, if surplus is eliminated.
Rebased cap in 2021, LRF 3.63 %	11 721		Yes, 60%, if surplus is eliminated.



## **Enhancing the resilience: MSR**

#### **Background**

Market Stability Reserve (MSR) is the key measure to enhance the resilience of the system to external shocks, such as economic recessions, by tackling the surplus of allowances. Evidence suggests, that the surplus of emission allowances will start to build up again during the 4th trading period.

#### How?

- Altering the rules so that the MSR is also able to address the expected future surplus.
  - Maintain the intake rate at at least 24% from 2024 onwards (according to the current rules the intake rate decreases to 12% in 2024)
  - Applying the linear reduction factor (LRF) to the MSR thresholds (inflow and outflow). This ensures, that the MSR is able to address the surplus with a declining cap and emissions.

**Emissions reduction potential:** medium-high

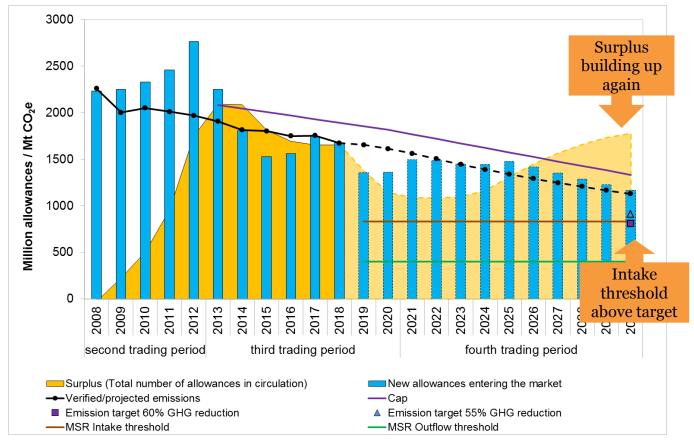


#### **Enhancing the MSR parameters**

	<b>Current rules</b>	Enhanced MSR (24% intake rate)	Enhanced MSR (36% intake rate)
Intake rate as % of allowances in circulation	12% starting 2024 (24% until 2023)	24%	36% starting 2024 (24% until 2023)
Upper threshold defining whether there is inflow to the MSR	833 M EUAs constantly	Declining threshold to 656 million EUA in 2030 by applying the LRF of 2.2% starting in 2021	
Lower threshold defining whether there is outflow of the MSR	400 M EUAs constantly	Declining threshol EUA in 2030 by a of 2.2% start	applying the LRF
Amount of allowances released from the MSR in case of outflow	100 M EUAs constantly	Declining amount EUA in 2030 by a of 2.2% start	applying the LRF

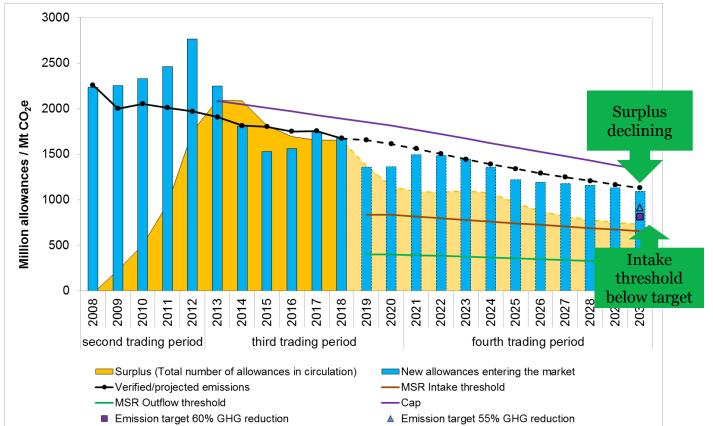


#### **Current MSR: surplus building up again**





#### Reformed MSR: surplus absorbed





# Enhancing the resilience: unilateral cancellation

#### **Background**

After a reform to the ETS directive, the member states have the right to unilaterally cancel allowances. For example, if a member state decides to phase out coal power plants, the demand for EUAs decreases. The MS has then the option to cancel the redundant allowances to avoid increasing surplus in the market.

#### How?

- The member states have the right to withhold from auctioning allowances due to national abatement measures in the electricity sector (e.g. coal phase-out)
- Does not require EU-wide regulation—can be implemented nationally

Emissions reduction potential: high



## Carbon price floor

#### **Background**

The ETS can be enhanced both by reducing the amount of allowances in circulation and by increasing their price. A price floor for carbon improves the competitiveness of clean technology and lowers the risk in clean investments.

#### How?

- A carbon price floor can be established nationally—no EU-wide regulation needed.
- An EU-wide minimum price for carbon (EU-wide regulation needed) can be implemented either through a surrender charge (i.e. price floor) or through an auction reserve price. If an auction reserve price is in place, EUAs at an auction are only sold if a certain price level is reached.

**Emissions reduction potential:** medium-high



## Extension to the scope of the ETS

#### **Background**

There is an ongoing discussion about whether additional sectors should be included in the ETS, e.g. building-specific heating and cooling, land transport and maritime transport. It is essential to evaluate which factors are key to deliver abament in these sectors and what the emission reduction potential would be under the ETS.

#### How?

- An obligation to surrender EUAs could be attributed upstream to the transport or heating fuel providers (or downstream to consumers) to cover the emissions
- The end consumer would carry the costs

Emissions reduction potential: low



## Altering the rules for free allocation

#### **Background**

Approximately 43% of the allowances are allocated for free. Installation deemed at risk of so called carbon leakage receive a higher share. Carbon leakage means, that environment and climate regulation and the associated costs could incentivise businesses to transfer production to countries with laxer regulation.

#### How?

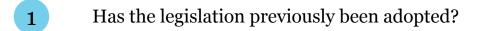
 The rules could be altered in such a way that installations exposed to great carbon leakage risk could receive larger share of the free allocation and installations with smaller risk would receive fewer allowances for free.

**Emissions reduction potential:** Low



## Political feasibility captures the relative "ease" of the associated legislative process

The political feasibility was assessed through the following questions:



- 2 Are there plans currently in place to amend the existing legislation?
- What is the decision procedure for amending the legislation?
- Is the policy option targeted at certain sectors (auction vs free allocation)?

In addition, all reforms need *political will* to be implemented.



## Measures differ in their abatement potential and political feasibility

Note: numbers are presented in the report page 53

		potential	feasibility	the impact
Strengthening the cap	Higher LRF	High	Medium	Medium- and long-term
ngther the cap	Rebasing	High	Medium	Medium-term
Stre	Rebasing and higher LRF	High	Medium	Medium- and long-term
. e &	Enhanced MSR (24% intake rate)	Medium	High	Short-term
Enhancing resilience	Enhanced MSR (36% intake rate)	High	High	Short-term
	Unilateral cancellation	High	High	Short- and medium-term
Carbon price floor	Surrender charge on electricity by group of countries/Nordic surrender charge on all ETS sectors	Medium	High	Medium-term
	Surrender charge on electricity EU-wide	Medium	Medium	Long-term
	Auction reserve price	High	Low	Long-term
Other	Extension of the scope to cover maritime transport	Low	Medium	Long-term
	Extension of the scope to cover road transport/decentralised heating	Low	Low	Long-term
	Tiered approach to free allocation	Low	Low	Long-term

foodibility.



None of the measures alone is able to deliver the change required.

We need a comprehensive policy package.

Strenghening the cap aligned with the enchanced targets.
This is done by rebasing the cap and increasing the LRF.

Enhancing the resilience through the MSR.

A group of countries taking the lead by implemeting a carbon floor price and cancelling the maximum amount of allowances under the unilateral cancellation.



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#### **Reflection and Panel Discussion**

- Reaction from the European Commission: **Joao Serrano**
- Moderator for the panel discussion: **Outi Haanperä**, Sitra

#### Panelists:

- Ville Niinistö, Member of the European Parliament
- Rønnaug Sægrov Mysterud, Vice President, Head of EU Affairs, Norsk Hydro
- Anne Malorie Géron, Vice President EU Affairs, Fortum
- Sam Van den plas, Policy Director, Carbon Market Watch

