



Going beyond the 40% target

Impact on the EU Emission Trading System

ERCST – Beyond the EU NDC & Impact on the EU ETS
MTES, Paris – January 27, 2020

Raphael Trotignon (CEC) and Simon Queminn (LSE)

raphael.trotignon@chaireeconomieduclimat.org – s.quemin@lse.ac.uk

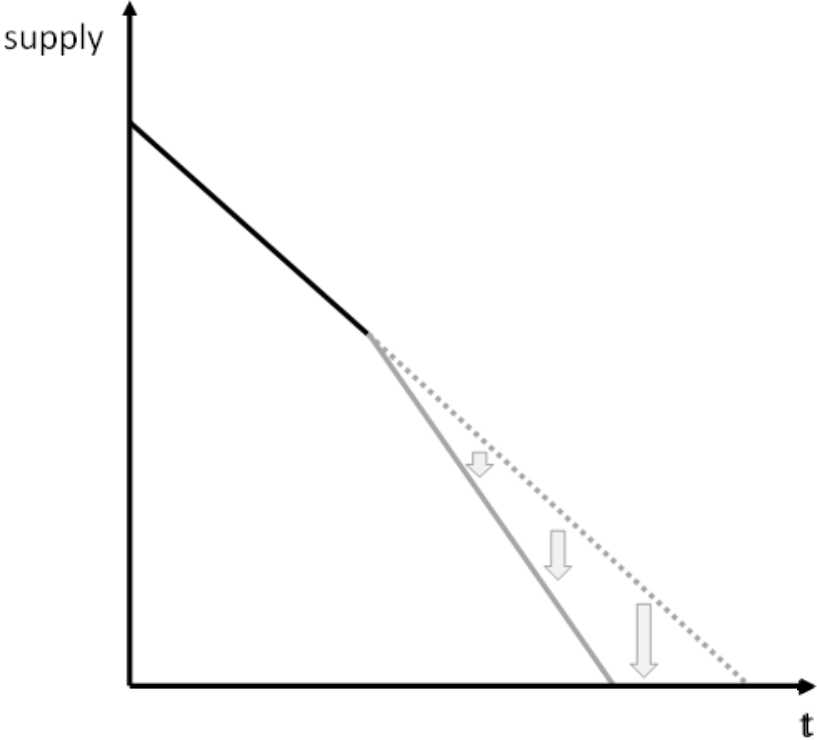
Evaluating the interaction between MSR and LRF

- Raising ambition within the EU ETS revolve around a more stringent cap trajectory (LRF increase) and a revision of the MSR and its parameters.
- These elements are not independent, and their interaction need be considered.
- With our simulation model we evaluate and quantify various options in revising the MSR parameters and the cap trajectory.
- We highlight our key results in a [Policy Brief](#) available on the CEC website

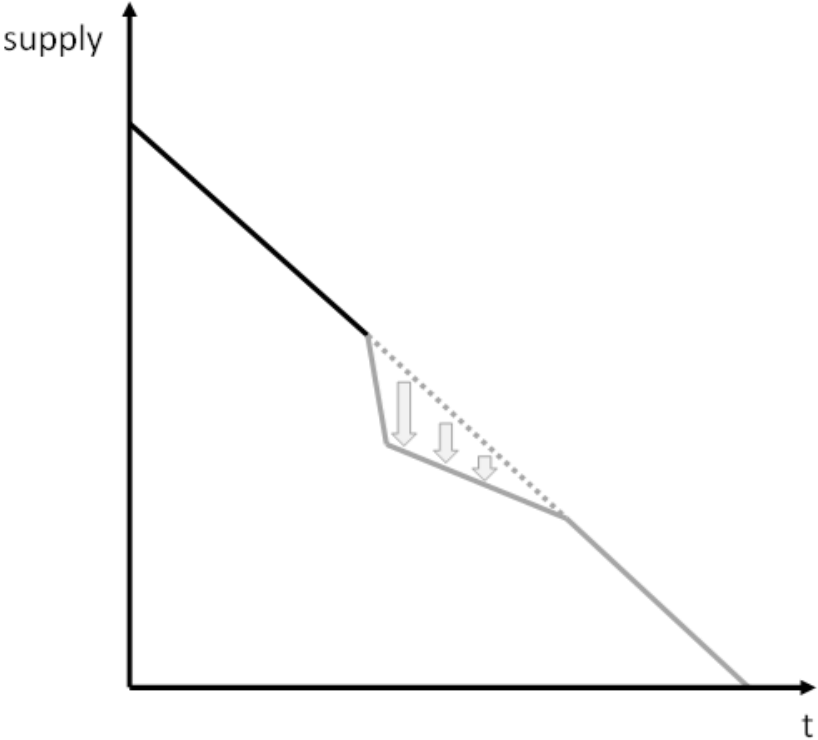


Evaluating the interaction between MSR and LRF

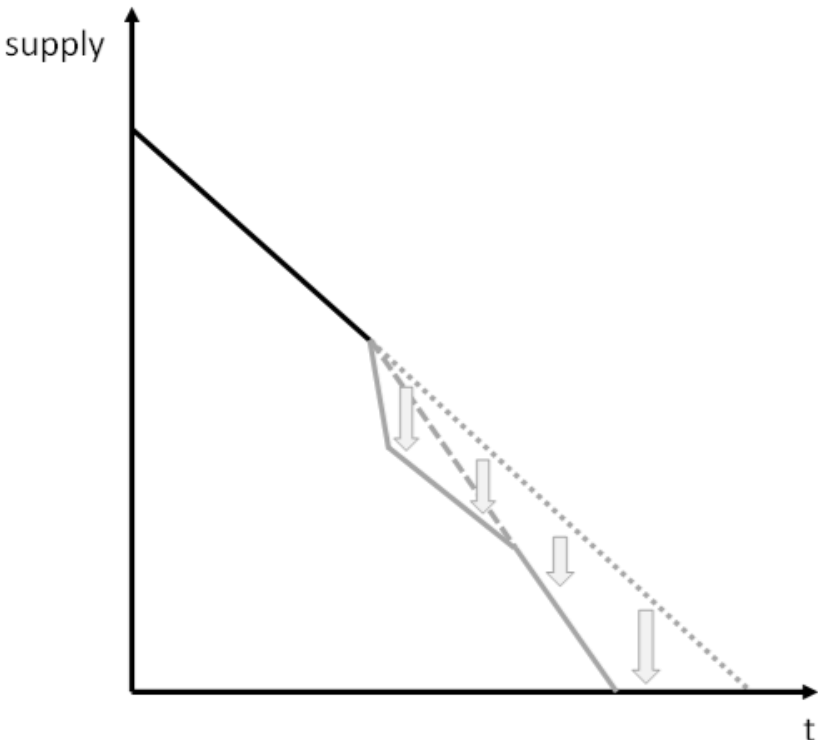
LRF increase



MSR with CM



LRF increase + MSR with CM



Transitional stringency matters

- Past market developments suggest that **market actors tend to focus on the short to mid term** and do not fully account for the scheme's long-term ambition target
- Only the **3-12 years ahead with greater visibility and political credibility** matter the most for their decisions.
- In this context, the MSR has potential to make the longterm ambition embedded in the cap trajectory more tangible in the short to mid term by **frontloading abatement efforts**
- It seems that **MSR review is as important if not more than increasing the LRF** ; changing both can be tricky

Informing the MSR review

- With the current thresholds (400–833 MtCO₂) constant over time, a **higher intake rate generates higher volatility** due to more pronounced oscillatory behavior around the thresholds, but without leading to higher ambition
- The **position of the intake threshold matters relatively more than that of the release threshold** in terms of market outcomes: a lower intake threshold sustains higher price and ambition levels
- Combining **declining thresholds** (e.g. based on the LRF) with a higher intake rate is conducive to higher prices and ambition without destabilizing the market
- Despite this, **even after changes in its parameters**, the ability of the MSR to improve market **resilience to future shocks remains limited by design.**

Combining MSR review and LRF increase

- Since the MSR + CM has potential to permanently curb supply, it could be utilized hand in hand with an LRF increase to raise ambition.
- With the current LRF (2.2%) and MSR parameters, our simulations indicate that **the current 2030 target will be overachieved (-48% w.r.t. -43% relative to 2005)**
- If we consider that the ambition target is ramped up to -62%, the **required LRF lies between 2.6 and 3.0% depending on the MSR parameters** - but it is not sufficient for delivering carbon neutrality by 2050
- Our analysis further explores the complex interaction between the chosen LRF and the MSR parameters which need be carefully assessed as part of the 2021 review process

Combining MSR review and LRF increase

- MSR review and LRF increase, both effective in 2024 ; aiming at -62% in 2030/2005

Table 1 – LRF-MSR interaction with constant thresholds (400-833 MtCO₂)

Intake rate	LRF	Emissions (Mt)			EUA price in 2030 (€/tCO ₂)
		2030	2040	2050	
No MSR	2.20	1,281	848	419	19,2
	4.15	882*	405	148	52,1
12%	2.20	1,109	674	285	33,5
	2.96	882*	401	145	52,2
24%	2.20	1,106	666	279	33,7
	2.89	882*	390	120	52,3
36%	2.20	1,098	676	280	34,4
	2.83	882*	419	129	51,9

+56%



Thank you for your attention

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