



THE POSITION OF THE POLISH CONFEDERATION LEWIATAN  
ON THE EUROPEAN UNION'S 2030 ENERGY AND CLIMATE POLICY

PROPOSALS FOR EFFICIENT SUPPORT FOR  
LOW-EMISSION MODERNISATION  
OF ENERGY SECTOR AND INDUSTRY

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# SUPPORT FOR LOW-EMISSION MODERNISATION OF ENERGY SECTOR

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# LOW-EMISSION TRANSITION CHALLENGES

Large scale of required adjustments  
(low-emission transformation of coal monoculture)

Obsolete infrastructure, low-emission options are capital-intensive  
(required significant investment effort)

Income gap relative to EU average remains significant

- Lower capability of Polish economy to cover the costs of low-emission modernisation **will not disappear** in the near future.
- **Similar problems in other New Member States**

# TWO OPTIONS

Use of ETS revenue to support  
energy investments in NMS

Modified derogation mechanism

# TWO OPTIONS

Use of ETS revenue to support energy investments in NMS

## Modified derogation mechanism

Possible compromise?



- full control over mechanism implementation at domestic level
- only investments consistent with long-term emission reduction target will be supported
- smart design needed in order to ensure **elastic** mechanism, which mitigates the risk of wasted support if market conditions change

# TWO OPTIONS

## Use of ETS revenue to support energy investments in NMS

- creating domestic low-emission investment (modernisation) funds in the NMS
- Investment fund effectively **reduces energy price component which covers CAPEX** → price shock is smaller
- does not differ significantly from currently used solutions
- flexible mechanism –possibility to reallocate funds between sectors and project types

## Modified derogation mechanism

### First-best solution

**IF**

clear rules are set ex ante,  
including interaction with  
state aid rules  
and  
scale is adequate



# FOCUS ON MODERNISATION FUND

## Challenges for energy sector intervention

- How to integrate the fund into already complex market w/o unnecessary distortions?
- What about the state aid rules?

## Possible solution:

The fund covers part of other policy instruments' costs  
(which are normally included in the energy bill)

- Examples: costs of RES auctions, capacity mechanisms, CHP support schemes
- Funds allocated by the Member States according to their preferences and changing domestic circumstances
- Avoiding conflicts EC-MS: the list of allowed types of supported instruments needs to be **agreed ex ante**

# FOCUS ON MODERNISATION FUND

The fund as a **promising option for negotiations**:

- ✓ Key mechanism not dependent on the results of discussion on the future of energy market.
  - Whatever the rules and allowed instruments will be, CAPEX support via co-financing of other policy instruments decreases energy prices and enables modernisation.
- ✓ Additionality of CAPEX support allows the NMS to make their own bet on preferred energy mix while ensuring that the fund will finance only energy options which lower emissions.
  - For example, the fund might co-finance RES auctions and support for nuclear investments, while costs of the capacity market for fossil-based generators could be covered only by domestic consumers.



# FOCUS ON MODERNISATION FUND

## Example: what does 86-10-4 mean for Poland?

For 10 years

	EUAs for auctions by source	Central ETS revenue scenario, bn EUR
Historic emissions 86%	65%	17,2
<i>Solidarity 10%</i>	25%	6,7
<i>Modernisation 4%</i>	10%	<b>2,7</b>

Our estimates:  
**1,5 bn PER YEAR**  
additional investment  
needed in low-emission scenario

### Assumptions:

EC climate goal proposal (40% reduction)

Solidarity mechanism - continued

Modernisation fund - split among NMS proportionally to solidarity mechanism

EUA price rising from 10 EUR in 2021 to 50 EUR in 2030

1,5 bn EUA removed from market 2021-2030

# FOCUS ON MODERNISATION FUND

## Alternative – greater focus on the investment:

For 10 years

	EUAs for auctions by source	Central ETS revenue scenario, bn EUR
Historic emissions 86%	65%	17,2
<i>Solidarity 6%</i>	15%	4
<i>Modernisation 8%</i>	20%	<b>5,4</b>

1/3 of the additional  
investment

## Another perspective – total investment burden:

3-4 bn EUR per year

- total excessive investment burden for NMS (above EU average)  
= 14-17% of all auctioned EUAs = 7-9% of all EUAs

→ *Even higher EUA price? Extended ETS?*

# SMART INDUSTRY PROTECTION FOR EFFECTIVE LOW-EMISSION TRANSITION

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# CARBON LEAKAGE RISK IN EMISSION-INTENSIVE INDUSTRIES

## Problems:

- Risk of carbon leakage increases over time
- Ambitious benchmarks are **automatically** decreased over time and through cross-sectoral correction factor
- Breakthrough technologies are the **long-term** answer
- What about short- and mid-term perspectives for industry?

## Solution:

- Make benchmarks realistic and resign from correction factor, especially in case of **process emissions**

# CARBON LEAKAGE RISK IN EMISSION-INTENSIVE INDUSTRIES

## Problem:

### Ex ante allocation:

- does not take into account production variability accurately
- distorts the incentives for plant operators
- creates opportunity for windfall profits from pass-through
- amplifies the benchmarking problem (**sharp increase of marginal costs**)

## Solution:

- Move from ex ante allocation of free allowances to production-based **ex post allocation**

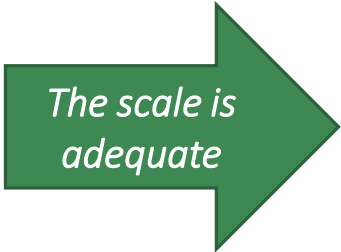
# CARBON LEAKAGE RISK IN EMISSION-INTENSIVE INDUSTRIES

## Problem:

- How to ensure that **overall emission cap is not exceeded** if we introduce realistic benchmark and ex post allocation?

## Solution:

- Use part of the allowances surplus to create a reserve that would enable to fix the carbon leakage protection without violating the total cap (→ less allowances moved to MSR)



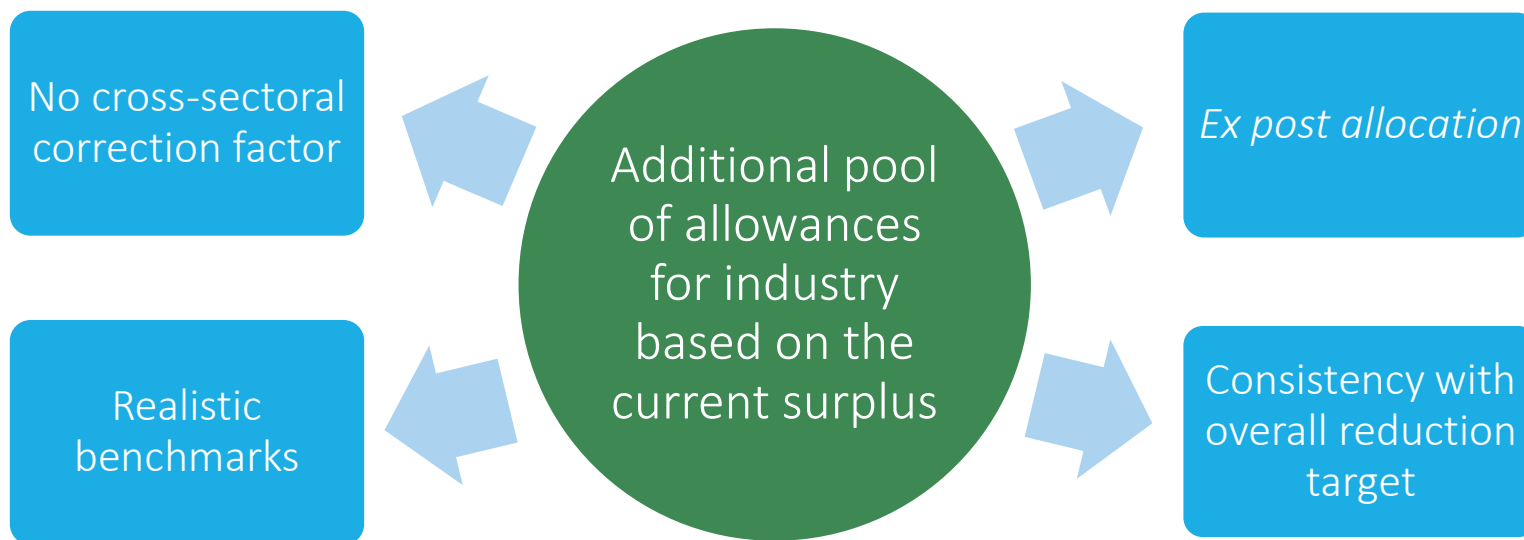
*The scale is  
adequate*

*Allowances surplus > 2 bn EUA*

*Industry estimate for shortage of allowances 2013-30 = 1 bn EUA*

*(Eurofer)*

# CARBON LEAKAGE RISK IN EMISSION-INTENSIVE INDUSTRIES



Holistic approach to the carbon leakage protection reform is crucial

# CARBON LEAKAGE RISK IN ENERGY-INTENSIVE INDUSTRIES



WISE



LEWIATAN

## Problem:

- Differentiated **willingness** and **capacity** of the MS to compensate for indirect costs of ETS to energy-intensive industries

## Solution:

- Create the ETS-based **centralised mechanism** for protection of energy-intensive industries in the EU

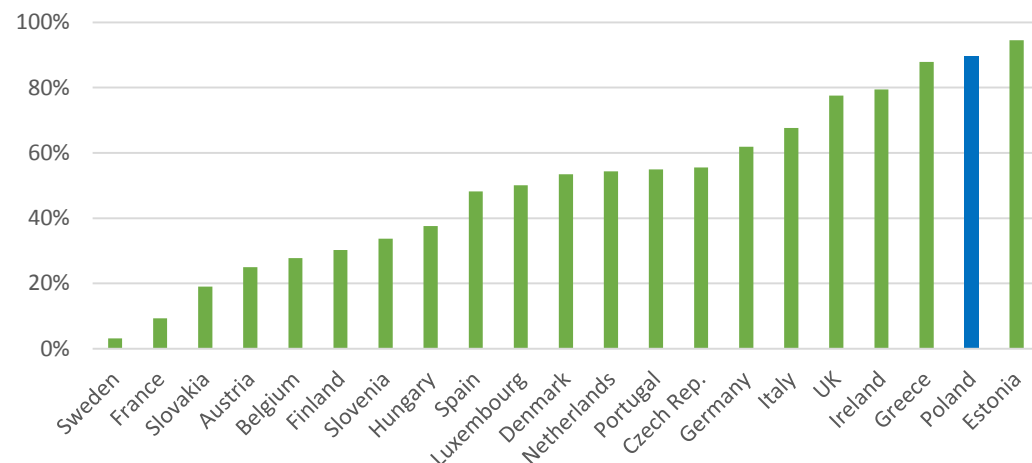


# CARBON LEAKAGE RISK IN ENERGY-INTENSIVE INDUSTRIES

## Problem:

- Different energy mixes → different average/marginal electricity emission intensity ratios in energy sectors across the EU → different contribution of the MS to the centralised mechanism

## Average/marginal electricity emission intensity ratios across the EU



## Solution:

*Source: own elaboration based on EC and IEA data*

- **Compensate the excessive burden** on countries with relatively high average/marginal electricity emission intensity ratios during the allocation of the EAU for auctioning between the MS

THANK YOU FOR YOUR ATTENTION



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