Evaluation of the impact of the EU ETS auction revenues and derogation under Article 10c on investment and infrastructure in Poland

Ex-post analysis

Krzysztof Kobyłka, Marianna Sobkiewicz, Aleksandra Miłobędzka, WiseEuropa

The project brings together nine partners from seven EU countries. Its objective is to create an overarching governance framework for EU climate and energy policies based on a stock-take of existing policies and their performance.

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4i-TRACTION


#innovation
FOSTERING BREAKTHROUGH INNOVATION
TO TRANSFORM THE MATERIAL BASE OF OUR ECONOMY
AND ADD NEW VALUE CHAINS


#investment
SHIFTING INVESTMENT AND FINANCE
TO OVERCOME MARKET FAILURES AND MOBILISE
PRIVATE CAPITAL


#infrastructure
ROLLING OUT INFRASTRUCTURE
FOR A CLIMATE-NEUTRAL AND RESILIENT ECONOMY


#integration
STRENGTHENING INTEGRATION ACROSS SECTORAL
SYSTEMS TO ALIGN SECTORAL DEVELOPMENTS,
AVOID INCONSISTENCIES AND MAXIMISE SYNERGIES

About WiseEuropa

WiseEuropa is an independent think-tank based in Warsaw, undertaking research and contributing to the public debate on Polish and EU policy. We specialize in the following topics:

- **Energy & Climate**
- **Sustainable Finance**
- **Macroeconomic Policy**
- **Sustainable Transport**

Our mission is to improve the quality of national and European public policy and the economic environment by contributing evidence-based analyses of policy to the public discourse.

Study background

Aim of the study: to investigate the impact of two types of funds available under the EU ETS in the 2012-2020 period: derogation under Article 10c and auction revenues on two of the four „i's" we study in the 4i-TRACTION project:

- the level of investments,
- the development of infrastructure in Poland in the context of the energy transition and sustainable development objectives.

This study is part of a series of six national case studies conducted within the project's WP2: Ex-post assessment of EU climate policy.

Methodological approach

The case study was developed around two main research questions:

- How did Poland benefit from the derogation laid down in Article 10c of Directive 2003/87/WE?
- How were the revenues from the sold emission allowances invested in decarbonisation?

The study was conducted according to the following general framework:

1) Conceptual analysis, defining the goals and objectives of the measure in question.
2) Empirical analysis, examining actual outcomes and effects based on available data.
3) Evaluation, assessing the extent to which the measure achieved its intended goals.
4) Recommendations, providing recommendations on analysed policy measures.

Analysis was based on: a literature and media review, data analysis, and expert surveys.

EU ETS Polish revenues streams

Polish revenue streams (height adjusted for estimated revenue)

*including allowances from derogation 10c sold in 2021
**some values are estimated based on the annual average EUA price

Revenues from national auction pool

Regulatory framework for auction pool revenues

4i TRACTION

Requirements:

- According to Article 10, part of the allowances are distributed among Member States and shall be auctioned
- Objective: According to Article 10(3) of the EU ETS Directive, Member States are required to allocate **at least 50% of auctioning revenues (or the national equivalent in financial value) to a range of outlined measures**
- Governance: EU countries are obliged to report to the European Commission annually on the amounts and use of the revenues generated

Objectives accordingly with the Directive provisions:

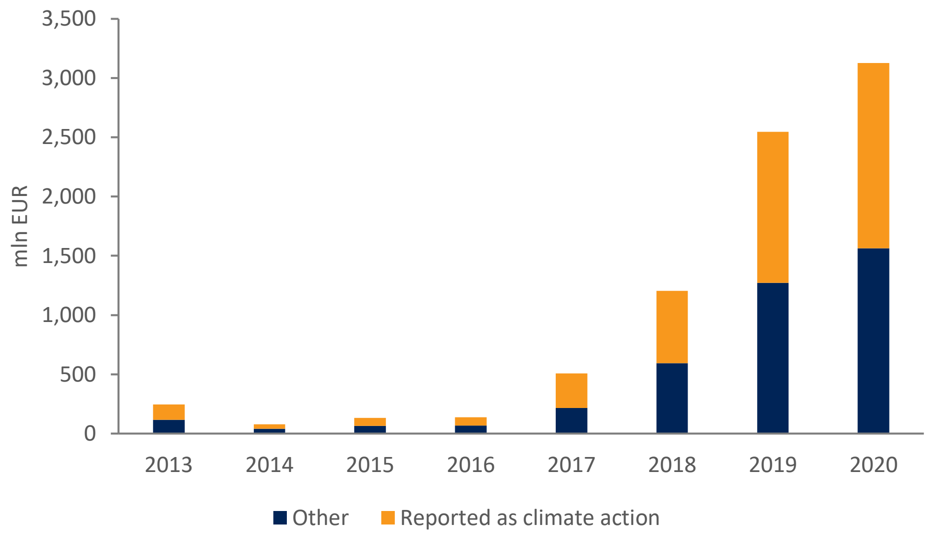
- reducing GHG emissions
- developing RES
- improving energy efficiency
- measures to avoid deforestation and increase afforestation
- forestry sequestration
- capture and geological storage of CO_2
- shifting to low-emission and public forms of transport
- financing of R&D in energy efficiency and clean technologies
- measures to increase energy efficiency and insulation or to provide financial support to address social aspects in lower- and middle-income households;

Poland’s auction pool

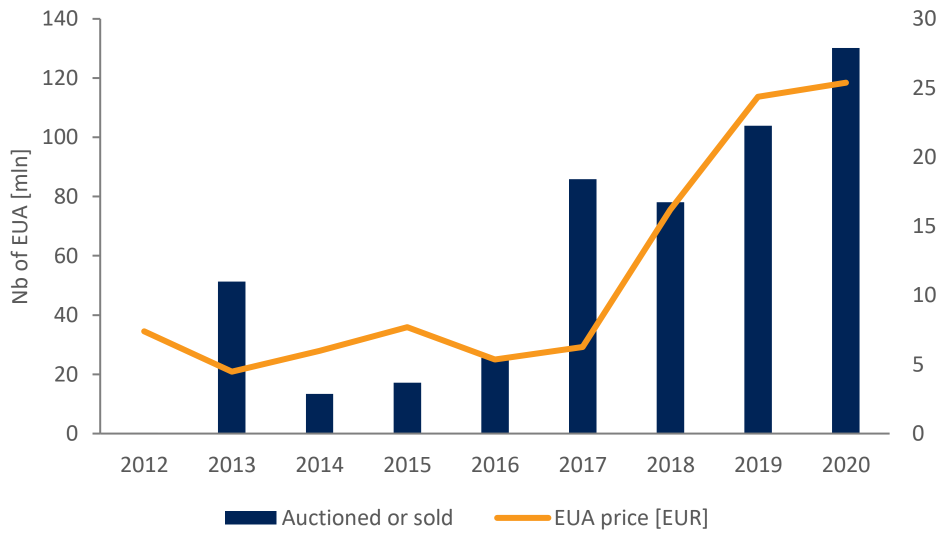
- Based on Poland’s reports, each year about 50% of revenues was reported as climate protection spending – which is the minimum required by the Directive and totals 4 billion EUR over 2012-2020

- Significant increases in the EUA price at the end of the third period contributed to an equivalent increase in revenues in recent years

Revenues from auctioned Polish allowances in 2013-2020
(Source: WiseEuropa based on Polish reports)



Number of auctioned allowances from Polish auction pool 2012-2020 (Source: EUTL, EEX)



Additionality and eligibility

Member States' ambition level: Despite the required minimum of 50%, some countries (e.g., Germany, France, Portugal, and Greece) allocated significantly more of their funds to the outlined objectives

Revenue equivalents vs additionality: According to the Directive, Member States can report the spending of a "revenue equivalent", which allows them to reverse the causal sequence - i.e., EU ETS funds do not have to cause additional activities and investments, but one can report on programs already implemented within the framework of state budgets

The substantial level of discretion in how funds are allocated that the regulation allows for leads to the following issues:

- The possibility of reporting "revenue equivalents" creates **uncertainty about the additionality effect** of reported activities
- The broadly defined catalogue of objectives allows for greater flexibility but also **reduces transparency**
- The above issues make it **more difficult to monitor and evaluate the effectiveness of reported activities**

Poland's (questionable) use of auction revenues

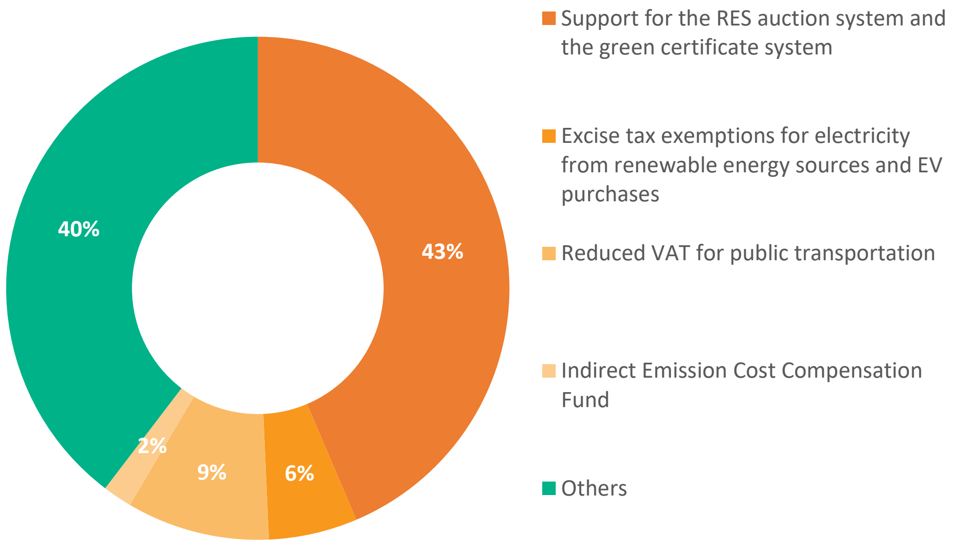
Poland has reported a total of almost 1,000 programs in its reports, but the majority of funds was disbursed in a handful of activities.

According to ClientEarth Poland, several of the activities reported in the years 2013-2020 raise doubts as to their compliance with the EU ETS Directive:

- **Support for the RES auction system and the green certificate system does not involve an additionality effect**, and based on provisions of the RES act, it should have been financed by the RES fee included in electricity bills
- **Reporting tax exemptions as climate protection spending is, for the government, a means of equalising the revenue it would have otherwise missed** and it is not possible to assess how those funds were spent
- The Indirect Emission Cost Compensation Fund does not fit any of the Directive's outlined objectives

Moreover, our analysis has shown few investments in infrastructure (e.g., in smart metering or heating networks).

Share of main controversial activities reported as climate action in 2013-2020
(Source: WiseEuropa based on ClientEarth)



Derogation under article 10c

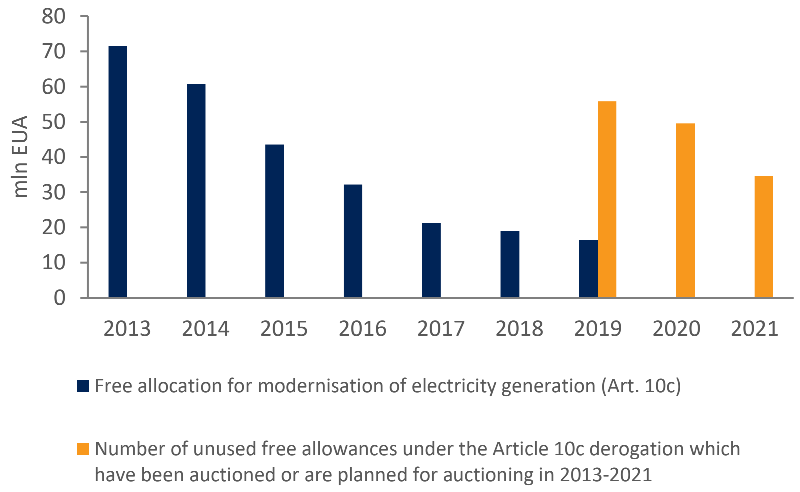
Regulatory framework for derogation 10c

- Under **Article 10c of EU ETS Directive**, by derogation some of the Member States (lower-income countries) could give free allocation for electricity producers under certain conditions
- Condition (objective): equivalent will be spent on **retrofitting and upgrading of the infrastructure and clean technologies**
- Governance: MS should do a **National Investment Plan** along with the application to be accepted by the EC. Also, the MS should submit to the Commission, every year, a report on investments
- The plan should provide **the diversification of the supply mix,** MS should also ensure the derogation **will not create undue distortion to competition**

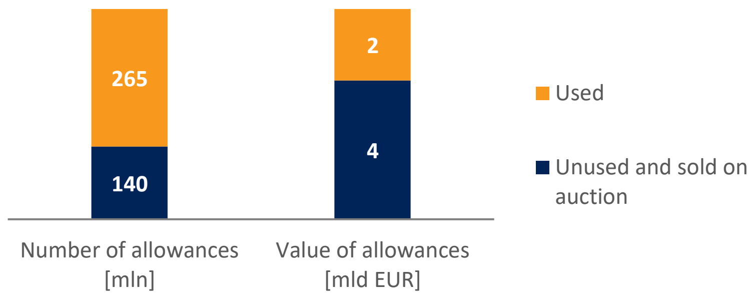
Derogation 10c in Poland

- Poland decided to use the derogation and developed an application approved by the Commission
- Polish electricity producers could receive **405 mln allowances**, but 140 mln were unused and later sold on auction
- Estimated value of given and sold allowances is **6 mld EUR**

Free allocation under Article 10c and unused allowances in Poland in 2013-2020 (Source: EC)



Nb of EUA and estimated value under Article 10c in Poland in 2013-2020 (Source: EC, EEX)



Why did Polish producers not receive 1/3 of their allowances?

Government / public administration position:

Companies would often give up the investments, because the unprofitability resulted from:

1) the possibility of clearing allowances only after the investment,
2) a lower than the projected price of EUAs at the beginning of Phase 3.

Poland's Supreme Audit Office position:

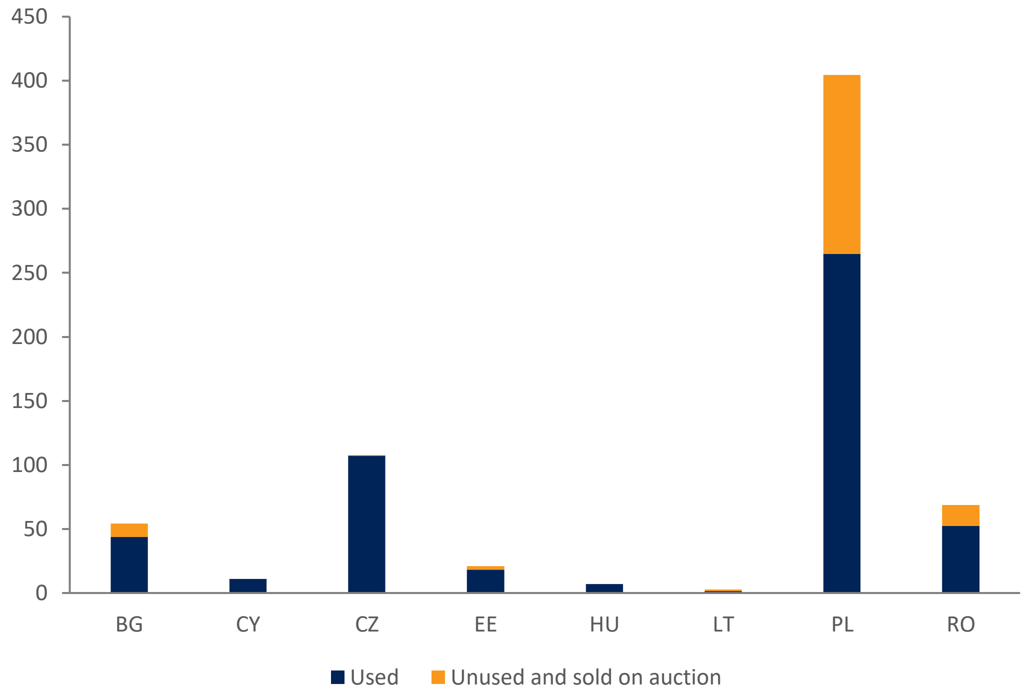
1) failure to provide transparent rules for the eligibility of investment activities report under the NIP
2) a lack of clearly defined objectives to be achieved by the NIP. Implementers failed to verify the feasibility of individual investment projects submitted

In addition, the draft NIP was also prepared by a private entity, without any agreement with the then-Minister of the Economy

Derogation 10c in other countries

- Poland was the biggest beneficiary of derogation 10c
- All countries have used all or a greater proportion of their allocated allowances than Poland
- However, a report by CAN Europe and WWF (2014) indicates similar issues with sustainability in Czechia and Romania: investments listed under the NIP mainly supported conventional power sources

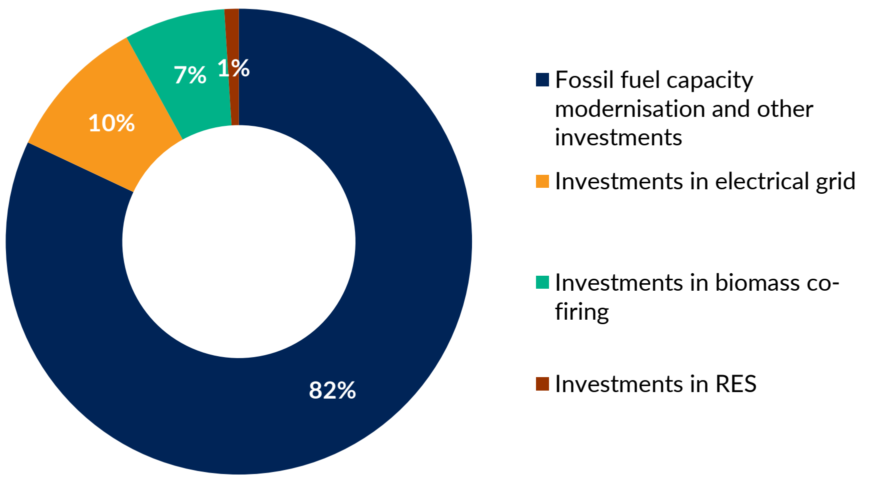
Number of allowances and estimated value under Article 10c and unused allowances in eligible countries in 2013-2020
Source: based on European Commission



National Investment Plan

- Poland reported **378 investments**
- **82% of them were focused on coal-fired power plants, while 7% concerned co-combustion of biomass**
- Only 12% referred directly to investments in energy infrastructure. Minor investments in network expansion or modernization of substations (the Polish Transmission System Operator) or gas infrastructure investments (GAZ-System)
- A mere 1% of investments reported under the NIP was devoted to RES

Share of different types of investments in the Polish NIP (Source: based on CAN Europe)



Diversification of supply mix

From Article 10c (1)

„The national plan shall also provide for the diversification of their energy mix and sources of supply for an amount equivalent, to the extent possible"

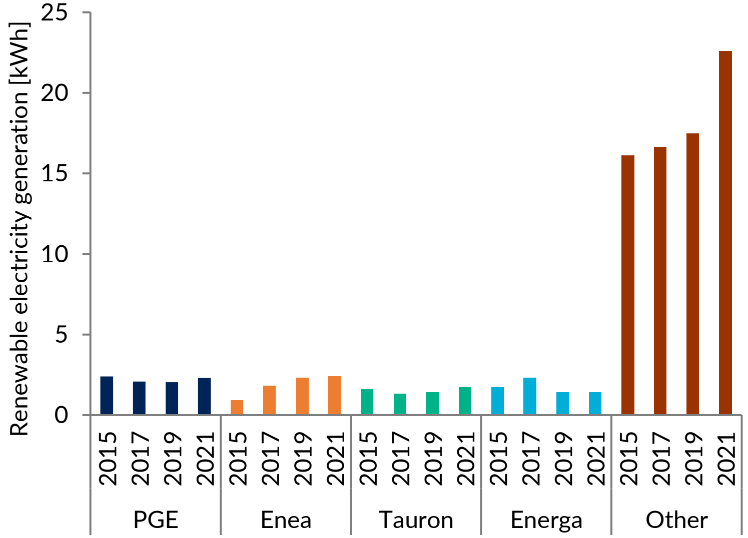
Analysis of NIP underlying objectives

- Poland's electricity generation became more diversified but mainly due to the increase in RES (mostly prosumer-driven) and gas capacities, and the increase in imports
- a strengthening of the role of conventional sources (carbon lock-in) was observed – the capacity in coal was higher than forcasted in the application.

Share of SOCs in the energy transition effort

- SOCs received most of the derogation allowances
- SOCs are responsible for 70% of overall generation, but only 27% of generation from RES
- They did not make substantial investments in renewables in the analysed period; most of the RES market was developed by prosumers and non-public companies

Electricity generation from RES by state-owned vs other companies in 2015-2021
(Source: based on company reports and PSE)



Market distortion

From Article 10c (3):

„An application shall contain: […] e) information showing that the allocations do not create undue distortions of competition"

Analysis of NIP underlying objectives

- In derogation application, Poland projected a reduction in the share of state-owned companies in the market,
- Consolidation in Poland's electricity generation market increased notably in the years 2011-2021
- Hence, the Polish government's rationale for not having undue market distortion was flawed

Market distortion

From Article 10c (3):

„An application shall contain: [...] e) information showing that the allocations do not create undue distortions of competition"

Analysis of NIP underlying objectives

Company	Share in 2011	Forecast from Poland for 2020	**Actual share in 2021**
PGE	37.7	33.4	40
Enea	7.7	8.3	15
Tauron	14.7	14.7	9
Energa	2.8	3	2
PKN Orlen	1.2	1.9	7
Total	**64.1**	**61.3**	**73**

Discussion and recommendations

Conclusions

- The EU ETS is a crucial element of EU climate policy and the volume of funds available to Member States from its revenues make it a potent tool for transformative change
- In 2012-2020 **Poland had a minimum of 11,2 billion EUR were eventually available** to support its energy transition efforts, but **mere 1-4 bln EUR contributed to it**
- Modest political support for emissions reduction during the analysed period and loose or broken mechanisms to steer investments towards sustainability resulted in **ineffective use of these financial streams**.

Conclusions

- **The broadly defined catalogue and non-earmarked revenues made it possible to report a wide range of activities that did not meet the additionality principle**. Some of the activities reported by Poland raise doubts as to their compliance with the Directive
- **The derogation 10c was not futureproof** and it failed to secure accomplishment of intended objectives. It seems that the issues could have been detected at the stage of approval
- **Changes after 2020: revision of related regulation gave substantial improvements** (such as changing 50% to 100%, Modernisation Fund etc.). However, some issues persist

Recommendations for Polish decisionmakers

- Changes after 2020: For the 4th phase Poland decided to drop derogation and hence is going to sell these allowances in the Polish auction pool
- Considering the fact that revenues from the derogation were not effectively spent, it was reasonable. However, **appropriate changes regarding the use of these funds should be ensured**
- Given this, the disbursement of auction revenues should be reformed to make it more efficient. To this end, **it is necessary to introduce the planned Energy Transformation Fund (or other governance mechanism)** financed entirely by auction revenues and would be devoted to investments and programs supporting the clean energy transition. Moreover, adequate emphasis should be given to mobilizing private investment supporting energy transition objectives

Thank you!

Krzysztof Kobyłka
WiseEuropa
krzysztof.kobylka@wise-europa.eu

Marianna Sobkiewicz
WiseEuropa
marianna.sobkiewicz@wise-europa.eu

4i-traction.eu