European Roundtable on
Climate Change and
Sustainable Transition

Central Europe Energy Partners

Implementation of the funding mechanisms in the fourth phase of the EU ETS: state of play

Implementation of the funding mechanisms in the fourth phase of the EU ETS: state of play

Brussels, October 2019

Authors:

Andrei Marcu, Executive Director of ERCST

Maciej Jakubik, Executive Director of CEEP

Domien Vangenechten, Researcher at ERCST

Michał Długosz, Climate and Policy Analyst at CEEP

Contents

Introduction

The revision for the fourth phase of the EU Emission Trading System (ETS), covering the period 2021 - 2030, introduced a number of changes concerning the funding mechanisms for climate and transition purposes in the system.

Three of these funding mechanisms are aimed at helping lower-income Member States to finance their transition to a low-carbon economy. Firstly, the option for some Member States to give free allocation to their energy sector for modernisation and transition purposes ("Article 10c Derogation") was extended and updated. Secondly, a new fund, the Modernisation Fund, was introduced to support investments in lower-income Member States aimed at modernising their energy systems and improving energy efficiency. Thirdly, the Solidarity Provision, which redistributes a share of the total allowances available over phase 4 to lower-income Member States was continued and linked with the other two funding mechanisms.

Next to these mechanisms to support lower-income Member States, NER 300, a programme with the aim to finance carbon capture and storage (CCS) and renewable energy (RES) technologies was rebranded and transformed into the Innovation Fund, which has the broader goal to support innovation in low-carbon technologies and processes by financing projects in any EU Member State.

Last year, ERCST and CEEP produced a paper on these funding mechanisms, which discussed their respective functioning, eligibility, size, explained how they are related to each other, and highlighted a number of issues and questions that should be addressed during the implementation phase.

Since then, a number of new developments have taken place that are worth discussing. On the implementation side, most progress has been made for the Innovation Fund, for which the delegated regulation was adopted on February 26, 2019. The implementing act establishing the rules for the Modernisation Fund are only expected to be finalised in the first half of 2020.

While the implementation process is still ongoing, eligible Member States were already expected to make some key decisions regarding their use of the funds: by June 30, they were expected to inform the European Commission on whether or not they will make use of transitional free allocation during phase 4. Moreover, by September 30 they had to decide how to use the flexibility mechanism that was introduced to move allowances between the various funds[1].

Over the course of 2019, ERCST and CEEP have been analysing and discussing the impact of these funding mechanisms on the functioning of the EU ETS and on investments plans of Member States in Central and Eastern Europe (CEE). A stakeholder sentiment analysis, including through means of a survey, interviews and workshops organised in Romania, Bulgaria, Poland and the Czech Republic provided us with input on the various approaches and positions of Member States and stakeholders towards the use of these funds.

This paper will:

- provide an update on the state of play of the implementation process of the four funding mechanisms;
- highlight some of the main takeaways from the stakeholder sentiment analysis; and
- shed light on the decisions made by eligible Member States regarding the use of Article 10c Derogation and the flexibility mechanism.

[1] See Figure 1 for an overview of the flexibility mechanism.

1. Overview and state of play of the funding mechanisms

Solidarity provision

The solidarity provision increases the amount of allowances to be auctioned by the 16 Member States with the lowest GDP per capita levels[2], for "the purpose of solidarity, growth and interconnections within the Union", by redistributing a fixed share of the total quantity of allowances to be auctioned over phase 4 of the EU ETS among them.

In practice, the total quantity of allowances to be auctioned over phase 4 is split as follows:

1. 90% is distributed among Member States according to their share of verified emissions under the EU ETS (for the year 2005 or the average of years 2005-2007, whichever is highest).
2. The remaining 10% is distributed among eligible Member States, which increases their quantity of allowances to be auctioned by a certain percentage stipulated in Annex IIa of the Directive. In total, about **800 million allowances** are redistributed.

Table 1: Size and estimated value of the funding mechanisms

Funding Mechanism	Estimated amount of allowances (million)	Estimated value over phase 4 (in € million) - €25/EUA
Solidarity Provision	798	€ 19 950
Article 10c Derogation	648	€ 16 200
Modernisation Fund	310	€ 7 750
Innovation Fund	450	€ 11 250
TOTAL	**2 206**	**€ 55 150**

Source: Own calculations

The phase 4 review also introduced a flexibility mechanism, allowing eligible Member States to transfer their solidarity allowances to the Article 10c Derogation (up to 50%) and/or the Modernisation Fund (up to 100%). Member States were expected to decide how to make use of this flexibility and notify the European Commission by September 30. These decisions will be discussed in Chapter 3.

Article 10c Derogation

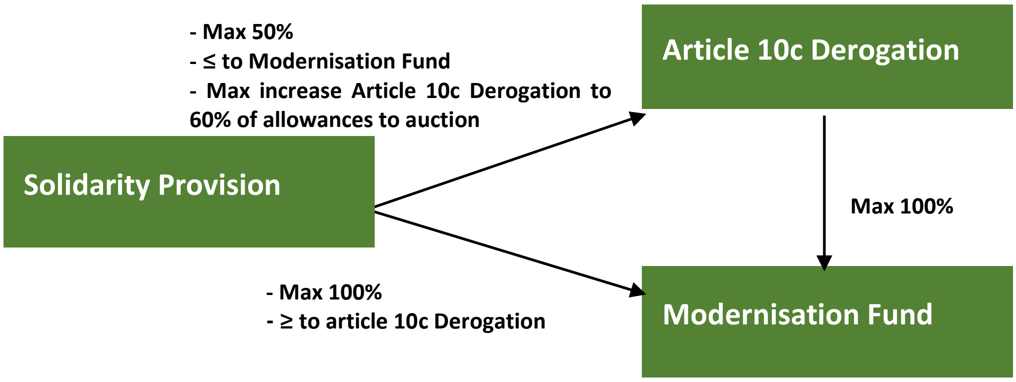
The Derogation from the rules of harmonised free allocation, by which ten lower-income Member States[3] are allowed to grant free allocation to electricity generating installations covered by the EU ETS, is continued in phase 4. With this Derogation, eligible member states can help finance

[2] Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Greece, Hungary, Latvia, Lithuania, Malta, Poland, Portugal, Romania, Slovakia, Slovenia and Spain.

[3] Member States with 2013 GDP per capita levels at market prices below 60% of the Union average are eligible: Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania and Slovakia.

their transition by providing free allocation to electricity producers as a way to finance projects aimed at the modernisation and decarbonisation of their energy mix.

Figure 1: Overview of the flexibility mechanism to move allowances



Source: Own presentation

The use of this Derogation is optional and, in the default case, up to 40% of the Member State's allowances to be auctioned can be used for this purpose. This share can be increased to maximum 60%, if the Member State decides to move some (up to half) of the Solidarity allowances to the Article 10c Derogation. Under the default case, if fully used, roughly **650 million allowances** would be allocated for free over the course of phase 4 under the Derogation. Figure 1 gives an overview of the amount of allowances available per Member State and per year.

Compared to phase 3, some notable changes were agreed upon:

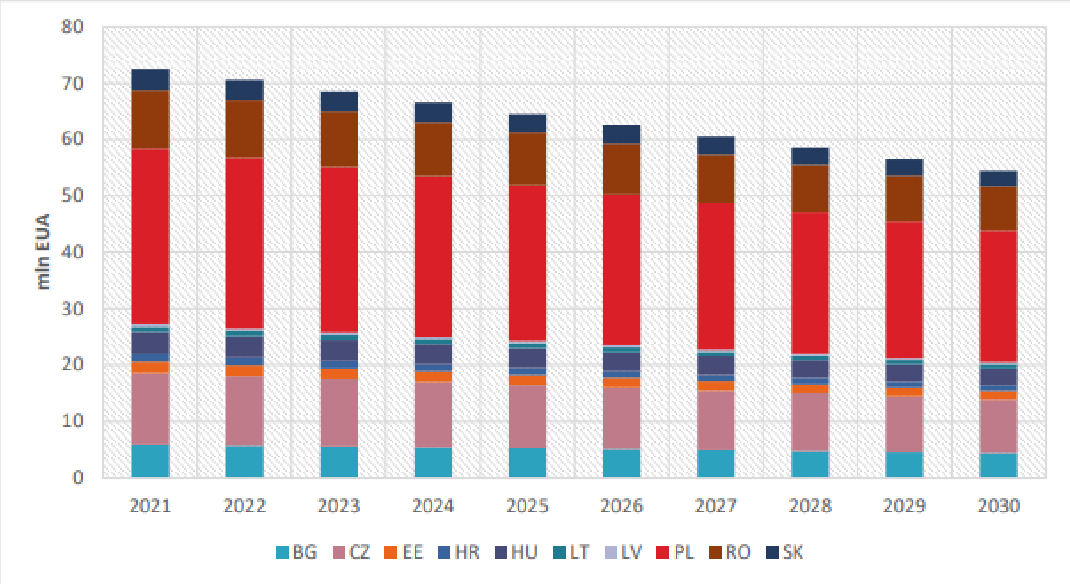
- Firstly, Croatia and Slovakia are now eligible to make use of Article 10c, while Cyprus and Malta are not anymore.
- Secondly, while over phase 3 Article 10c Derogation was often used for the modernisation of coal plants, this seems no longer possible in phase 4.
- Thirdly, in phase 4, only up to 70% of the investment costs may be supported, provided that the remainder is privately financed.
- Lastly, a 'phase-out obligation' has been introduced, meaning that when an investment leads to additional electricity generation capacity, a corresponding amount of capacity with a higher emission intensity has to be decommissioned.

Regarding the selection of projects, there are two possible procedures:

- Smaller projects (up to €12.5 million) can be selected by Member States based on 'objective and transparent criteria'.
- For larger projects, Member States are required to organise a competitive bidding process, which has to abide by a number of conditions set out in the Directive.

Member States that decided to make use of Article 10c Derogation were expected to publish both the list of smaller investments and the framework for the competitive bidding process by June 30, 2019. Finally, the flexibility mechanism also allows Member States to transfer Article 10c Derogation allowances to the Modernisation Fund. As mentioned earlier, Member States had to make and communicate their decision by September 30. Both of these decisions will be discussed in Chapter 3.

Figure 2: Amount allowances available per year and per Member State for Article 10c Derogation in Phase 4



Source: National Centre for Emissions Management (KOBIZE), Market Report number 85, April 2019

Modernisation Fund

The Modernisation Fund is a newly introduced fund with the aim to support investments to modernise energy systems and improve energy efficiency. The Member States eligible are the same as those eligible for Article 10c Derogation. The Fund will operate under the responsibility of the beneficiary Member State, which can use its share to finance individual investments, newly developed subsidy schemes or co-finance existing subsidy schemes.

Table 2: Amount of EUAs per Member State under the Modernisation Fund

Member State	Percentage of Modernisation Fund	Millions of EUAs
Bulgaria	5,84 %	18.10
Croatia	3,14 %	9.73
Czech Republic	15,59 %	49.33
Estonia	2,78 %	8.62
Hungary	7,12 %	22.07
Latvia	1,44 %	4.46
Lithuania	2,57 %	7.79
Poland	43,41 %	134.14
Romania	11,98 %	37.14
Slovakia	6,13 %	19.00
TOTAL	**100%**	**310**

Source: Annex IIb of Directive 2003/87/EC

Two percent of the total quantity of allowances available during phase 4, roughly **310 million allowances**, will be monetised in equal portions over phase 4 to finance the Modernisation Fund. Each of the eligible Member States has access to a fixed share, as shown in Table. Moreover, in case the free allocation buffer to avoid the application of the cross-sectoral correction factor (CSCF) is not used, another 77.5 million allowances could be added. Finally, using the flexibility mechanism, Member States have the possibility to move up to all their Solidarity and Article 10c allowances to the Fund, potentially increasing its size up to **1.7 billion allowances**. In Chapter 3, we will see that there is variability in how Member States decided to use this option.

The EU ETS Directive determines the general framework for the Modernisation Fund, distinguishing between two types of eligible projects: **priority**[4] and **non-priority projects**[5]. Priority projects can be financed up to 100 % of their relevant costs, without any requirements for private co-financing if costs are not fully covered. This implies a great flexibility for co-financing priority projects, as they are not excluded from receiving funding from other European and/or national funds. At least 70% of the fund is to be used for these priority projects. Non-priority investments can be co-financed to up to 70% of relevant costs, while the remaining cost are to be funded by private legal entities. There remains some ambiguity in the definition of a 'private legal entity', which should be clarified (e.g. the situation of a state-owned company).

While no investments can be made in energy generation facilities using solid fossil fuels[6], investments aimed at modernising heating systems (e.g. district heating pipelines) using heat generated by solid fossil fuels in other installations can be eligible, as long as they decrease emissions and/or improve efficiency. Moreover, any investments in power plants using gaseous fossil fuels will also likely be eligible for finance.

The Modernisation Fund has a wider scope than the Article 10c Derogation, both in terms of companies that can apply, as well as types of projects that may be eligible. Indeed, while for Article 10c Derogation only existing power installations registered in the EU ETS can apply, any company can apply for funding from the Modernisation Fund. Moreover, investments must not necessarily relate to installations for power installations: a wide variety of projects are eligible, including for example energy efficiency projects in industrial installations, or projects supporting 'Just Transition' in carbon-dependent regions.

While the Modernisation Fund operates under the responsibility of the eligible Member States, they are first required to send any proposal for funding to the European Investment Bank and the investment committee[7]. The EIB has an important role, as it is tasked with assessing whether a proposed project is a priority project or not.

For projects that the EIB deems to be non-priority, there are two possible outcomes. In case the EIB endorses a project proposal, the Investment Committee can decide by simple majority to recommend the financing of the project up to 70% of the relevant costs. In case the EIB does not endorse a project, the Investment Committee has to decide with a two thirds majority[8].

The implementing act establishing the remaining modalities of the Modernisation Fund has not been adopted yet. Discussions among Member States within the Climate Change Committee will be held before the end of 2019, and the act is expected to be adopted in the first half of 2020. The

[4] Priority projects include investments in: generation and use of electricity from renewable sources, the improvement of energy efficiency, except energy efficiency relating to energy generation using solid fossil fuels, energy storage and the modernisation of energy networks, including district heating pipelines, grids for electricity transmission and the increase of interconnections between Member States, as well as to support a just transition in carbon-dependent regions in the beneficiary Member States. Investments in energy efficiency in transport, buildings, agriculture, and waste.

[5] Non-priority projects can be any projects not mentioned in the priority areas, as long as they are 'consistent with the Union's 2030 climate and energy policy framework and the long-term objectives as expressed in the Paris Agreement. No investments can be made in energy generation facilities that use solid fossil fuels, with the exception of efficient and sustainable district heating in Member States with a GDP per capita at market prices below 30 % of the Union average in 2013 – Romania and Bulgaria.

[6] With some exceptions in Romania and Bulgaria – see footnote 6.

[7] The investment committee is composed of a representative from each beneficiary Member State, the Commission, the EIB, and three representatives elected by the other Member States for five years.

[8] For this particular case, the beneficiary member state and the EIB are not entitled to a vote.

Investment Committee is expected to be established by the second quarter of 2020, with the aim of having its first meeting in the third quarter of 2020.

While the exact content of the implementing act is currently unknown, it will likely include elements such as:

- what information Member States are required to submit to the Investment Committee and the EIB when proposing projects;
- provisions for the election of non-eligible Member State representatives to the Investment Committee;
- provisions outlining the decision-making procedures by the EIB and the Investment Committee for the assessment of investments;
- provisions on how and when allowances are to be monetised and distributed by the EIB;
- provisions to ensure transparency, including reporting requirements for the Member States, the EIB as well as the Investment Committee;
- provisions on how to ensure that the 70-30 proportion between priority and non-priority projects is respected; and
- provisions for recovery rules.

Innovation Fund

The Innovation Fund is the successor of NER 300 and is aimed at supporting innovation in low-carbon technologies and processes. The delegated regulation establishing the Innovation Fund was adopted on February 26, 2019, and outlined its governance, the projects' eligibility requirements, and the modalities for calls for proposals.

The size of the Innovation Fund will be at least **450 million allowances**, which will be further increased by any unspent funds from NER 300 as well as up to 50 million allowances in case the free allocation buffer is not fully used.

Contrary to the other funding mechanisms, projects in all Member States can receive funding. However, the exact scope of eligible projects remains unclear: the Directive only lists five *types* of projects[9] envisaged to be financed, while the delegated act only includes a table of 'illustrative examples of potential projects' in its explanatory memorandum.

Five criteria will be used to rank and select projects:

- Effectiveness in terms of GHG avoidance potential;
- Degree of innovation compared to state of the art;
- Project maturity (planning, business model, etc.);
- Technical and market potential for widespread application; and

[9] The types of projects are:

- Low carbon technologies and processes in sectors covered by the ETS;
- environmentally safe carbon capture and utilisation ('CCU') that contributes substantially to mitigating climate change;
- products substituting carbon intensive products of sectors covered by the ETS;
- environmentally safe capture and geological storage ('CCS') of CO_2;
- and innovative renewable energy and energy storage technologies.

- Efficiency: relevant costs over GHG avoided/energy produced/energy stored/CO2 stored in the first 10 years.

However, the delegated act does not mention any methodology for how to evaluate or rank the projects against these criteria.

Both the types of solicited projects or sectors and the detailed methodology for the selection procedure will be determined by each individual call for proposals. This means that the different calls for proposals might considerably differ from one another, and that project developers will likely not know in advance if and when they can apply for funding. However, the European Commission intends to have an 'open and broad' first call for projects of different scales and different sectors. Based on the experience of this first call, future calls might become more tailored. This first call will likely start in June 2020.

Successful project can receive funding for up to 60% of their relevant costs[10], which includes both capital and operation expenses. The financing process has been made more flexible compared to NER 300:

- Up to 40% of the support can be provided upfront at financial close;
- The remaining 60% is provided after financial close, partially before entry into operation and partly after, in annual instalments based on GHG avoidance reports;
- Additional support for project development can also be requested, and potentially be covered up to 100%.

The annual reports on the GHG avoidance achieved by the project will be compared with the amounts expected in the application. In case the realised amounts are lower than 75% of the planned amounts, the level of support will be adjusted proportionally.

Support from the Innovation Fund will be highly flexible and compatible with other types of support. Support may be given in a form other than grants, and can be combined with, for example, loans from the Invest EU Fund or other funding sources from the Member States.

With respect to the governance arrangements, the European Commission has the direct management over the Innovation Fund, as well as the auctioning of allowances and management of revenues. However, large parts of these tasks can be delegated to an implementing body (e.g. the EIB).

Contrary to the Modernisation Fund, the direct role of Member States is fairly restricted in the Innovation Fund.

[10] Relevant costs = additional costs resulting from the application of the innovative technology (CAPX + OPEX – benefits arising during 10 years after entry into operation compared to same formula for 'conventional production').

2. Reflections on stakeholder sentiment analysis

Over the course of 2019, ERCST and CEEP carried out an analysis of stakeholder sentiment. The input for this analysis includes the results of a survey[11], interviews with representatives of the eligible Member States and input received during workshops in Romania, Bulgaria, Poland and the Czech Republic.

A first overall impression is that the interest and expectations for the funding mechanisms are high, for Member States and stakeholders alike. The recent rise in prices of EUAs considerably raised costs for installations and increased the sense of urgency to transition towards a low-emission power generation capacity. Since the investment needed to achieve this in many Central and Eastern Member States are very high, the funding mechanisms are seen as a key tool to help finance the modernisation of their energy sector.

Overall, companies indicate that the funds are likely to play an important role in the coming decade, as 90% of respondents expect the funds to trigger or contribute to new low-carbon investments.

Table 2: Survey question: 'Which statement best describes the expected impact of the new funding instruments on the low-carbon investment decisions of your company?'

They will be a trigger for new investment decisions	They will have a supportive role in making investment decisions	They will only have a minor influence on investment decisions
35%	55%	10%

Source: Stakeholder survey carried out by ERCST and CEEP

Regarding the types of projects companies want to apply for funding for, there are similarities as well as differences between the various funds, as can be seen in Table 3. The survey indicates that despite the fact that NER 300 delivered no successful CCS project, the appetite for companies to invest in CC(U)S is still prevalent. However, while the NER 300 was explicitly focused on catalysing the demonstration of CCS and innovative RES technologies, the new Innovation Fund has a wider scope, which seems to be welcomed by companies given their high interest to use it to invest in low-carbon technologies and processes.

While the Modernisation Fund and the Article 10c Derogation have a similar objective, the survey highlights the wider scope and applicability of the Modernisation Fund. Although efficient co-generation and electricity grid projects can get funding under either of the funds, renewable energy projects are less interesting under Article 10c Derogation, given the decommissioning requirement when new electricity generating capacity gets added. Moreover, a large share of companies interested to invest in renewables such as solar PV and onshore wind are not eligible under Article 10c, as they have no power generating installations or are not covered by the EU ETS altogether.

The survey also made it clear that the Modernisation Fund was favoured over Article 10c by most stakeholders. Thanks to the wider scope and applicability of the Modernisation Fund, stakeholders

[11] The survey was sent to Member State representatives and representatives of 70 companies and associations. Respondents were asked questions about their priorities and their preferred design of the different Funding Mechanisms. The response rate was 60% and 56% respectively.

expect that a larger variety and number of projects will be able to compete for funding, likely leading to a larger emission reductions. Other arguments raised favouring the Modernisation Fund include the possibility for projects to be financed for up to 100% of their relevant costs; more predictable finance compared to free allowances, whose value can fluctuate; avoiding additional administrative costs from operating two parallel funds; and the lack of a phase-out obligation.

Table 3: Survey question: 'For which type of projects might your company apply for funding under the respective funds?'

Article 10c Derogation	Modernisation Fund	Innovation Fund
Efficient co-generation (47%) Carbon capture and storage/use (47%) Smart grids and electricity storage (33%)	PV (50%) Onshore wind (42%) Renovation of distribution grids (42%) Efficient co-generation (33%) Carbon capture and storage/use (33%)	Low-carbon technologies and processes (79%) Innovative renewable energy and energy storage (58%) Carbon capture and storage/use (48%)

Source: Stakeholder survey carried out by ERCST and CEEP

This preference is also shown by stakeholders' support to use the flexibility mechanism to pool allowances in the Modernisation Fund. Overall, 68% of our respondents were in favour of doing this. The survey carried out by the European Commission shows similar results, as in eight out of ten eligible Member States a majority of respondents are in favour of doing this[12].

Many stakeholders highlighted the need for flexible funding schedules, as ex-post funding alone is deemed insufficient for many types of projects. In that regard, many supported the changes made to the Innovation Fund compared to NER 300: taking into account both CAPEX and OPEX, allowing for upfront funding and the possibility to receive project development assistance were all perceived as welcome developments, which should also be considered when Member States decide on their use of the Modernisation Fund.

During the workshops, some stakeholders voiced their concern that the currently vague criteria for non-priority projects under the Modernisation Fund might allow for 'less green' investments to receive funding. While this vagueness will likely be addressed in the implementing act, most stakeholders actually expect the sheer number of priority projects to exhaust the national shares of Modernisation Fund. Moreover, they point to the fact that non-priority projects would have to undergo a lengthy procedure, including a technical and financial assessment by the Investment Committee, which could postpone their development. Therefore, we may expect most Member States to submit only tailored projects aimed at easily qualifying as a priority project, in order to avoid the administrative red tape.

In terms of process and timing of the implementation, a number of issues were raised during the discussions. While stakeholders welcomed the technical workshops organised by the European Commission, they deemed this process to be insufficient. Many stakeholders were left with unanswered questions, including whether or not certain type of projects would be eligible for funding.

---

[12] https://ec.europa.eu/clima/events/technical-workshops-eu-ets-funding-mechanisms-modernising-energy-sector-including_en.

In terms of timing, there was a general concern about the fact that important decisions were to be made by Member States, including whether or not to use Article 10c Derogation and how to utilise the flexibility mechanism, before the rules for the Modernisation Fund are operationalised. A similar problem exists with regard to the revision of the state aid guidelines, which is only foreseen to be completed by the second half of 2020. This creates uncertainty, as investments under either of the funds will have to be cleared under these guidelines by the European Commission, before they can be financed.

Moreover, the impact of the Market Stability Reserve on the funds remains uncertain. This is something that we already raised last year[13], and which has been further explored in other reports[14]. The general expectation is that allowances moved to the Modernisation Fund will effectively be shielded from the MSR functioning, contrary to auctioned allowances. This would create an incentive for Member States to use the flexibility mechanism to pool allowances in this Fund. However, this is yet to be clarified by the European Commission.

All these elements highlight that not all relevant information was at hand at the time Member States were to communicate their decisions, and this might have hindered the decision-making process.

3. Reflections on Member State decisions

As stipulated by the Directive, Member States were expected to inform the Commission by June 30 on whether or not they will make use of Article 10c Derogation during phase 4. By September 30, they had to decide how to use the flexibility to move allowances between the various funds. In this section, we will reflect on the decisions made by eligible Member States, as well as their reasoning behind these decisions, to the furthest extent possible.

It is worth noting that the information available differs considerably between Member State. In some Member States, the internal political decision-making process is still ongoing. In others, Member States representatives were more reluctant to explain the motivation behind a specific decision, indicating the political sensitivity of the topic.

As was mentioned before, the Modernisation Fund was favoured over Article 10c Derogation by a majority of stakeholders. Overall, this sentiment seems to be reflected in the decisions made by the beneficiary Member States.

Table 4 gives an overview of the decisions taken by Member States regarding their use of Article 10c Derogation and the flexibility mechanism. A more detailed description for each individual Member State can be found in Annex I.

As was mentioned before, the Modernisation Fund was favoured over Article 10c Derogation by a majority of stakeholders. Overall, this sentiment seems to be reflected in the decisions made by the beneficiary Member States.

[13] https://ercst.org/wp-content/uploads/2018/12/1cs6b4ta6_492279-4.pdf.

[14] See for example https://sandbag.org.uk/wp-content/uploads/2019/06/Optimising-EUETS-transition-funds.pdf.

Table 4: Overview of Member States' decisions regarding the use of Article 10c Derogation and the flexibility options

Member State	Use Article 10c during phase 4? *To what extent?*	Transfer solidarity allowances to Article 10c Derogation?	Transfer 10c allowances to the Modernisation Fund? *How many?*	Transfer solidarity allowances to the Modernisation Fund? *How many?*
Bulgaria	Yes *40% of allowances to be auctioned*	No	No[15]	No
Croatia	Yes *20% of allowances to be auctioned*	No	Yes *50% of 10c allowances*	No
Czech Republic	No	No	Yes *100% of 10c allowances*	Yes *50% of solidarity provision allowances*
Estonia	No	No	No	No
Hungary	Yes *40% of allowances to be auctioned*	No	No	No
Latvia	No	No	*To be decided*	*To be decided*
Lithuania	No	No	Yes *100% of Article 10c allowances*	No
Poland	No	No	No	No
Romania	Yes *Only small-scale projects for a total value of €104 million*	No	Yes *All but €114 million used for small-scale projects*	No
Slovakia	No	No	Yes *75% of Article 10c allowances*	No

Source: Information provided by Member State representatives

Article 10c Derogation will become a lot less sizeable than it has been in phase 3, as only four of the eligible Member States will make use of transitional free allocation in the coming decade. The total amount of transitional free allocation available over phase 4 will be about eight times lower than the default case, as can be seen in figure 3. In total, little more than 82 million allowances will be allocated for free to electricity generating installations to help finance decarbonisation and modernisation projects.

The reasons for not using Article 10c Derogation vary considerably between Member States. Latvia and Lithuania both already have a relatively low carbon-intensive power production system, and

[15] However, Bulgaria is exploring the possibility to transfer non-used Article 10c allowances to the Modernisation Fund.

deemed it unlikely that the use of the Derogation would lead to substantive emission reductions. The Czech Republic argued that it wanted to avoid lock-in effects as well as any unnecessary administrative costs by operating investment schemes with similar objectives. Poland, on the other hand, was of the opinion that the new rules for Article 10c make the Derogation 'not the most efficient tool for the continued transformation of its coal generation portfolio'. Slovakia, which was not eligible to make use of Article 10c Derogation during phase 3, decided not to start using Article 10c, but rather to focus resources in the Modernisation Fund. Finally, Estonia argued that it preferred having the maximum flexibility in deciding how to spend auctioning revenues during phase 4.

Some of the other Member States decided not to use Article 10c to its full extent: Croatia will only use up to half of the allowed amount of allowances, while Romania will only finance 14 small-scale projects through the derogation for a total of €114 million, meaning it will not establish a competitive bidding process.

The other three Member States that will use Article 10c Derogation will make use of a competitive bidding process. More information on the design of the bidding process in Bulgaria and Hungary can be found in Annex I[16].

Most Member States that will not (fully) use Article 10c Derogation decided to move allowances to the Modernisation Fund using the flexibility mechanism. Both the Czech Republic and Lithuania will move their full Article 10c amount to the Modernisation fund, Slovakia 75%, and Romania and Croatia will move any allowances which are not used for Article 10c purposes. Poland and Estonia are the only Member States that have opted to auction its Article 10c allowances, while Latvia has not yet made a decision at the time of writing.

The option to transfer allowances from the solidarity provision is less utilised: no Member State plans to increase the amount used for Article 10c, while only the Czech Republic will move 50% of its solidarity allowances to the Modernisation Fund.

When asked why the flexibility to move allowances from Article 10c is used, but from the solidarity provision not, several Member States highlighted that they are perceived as two different 'types' of allowances: allowances that *could* be used for Article 10c are perceived as already being destined for climate and energy purposes, while allowances from the solidarity provisions are seen as a part of the general auction revenues.

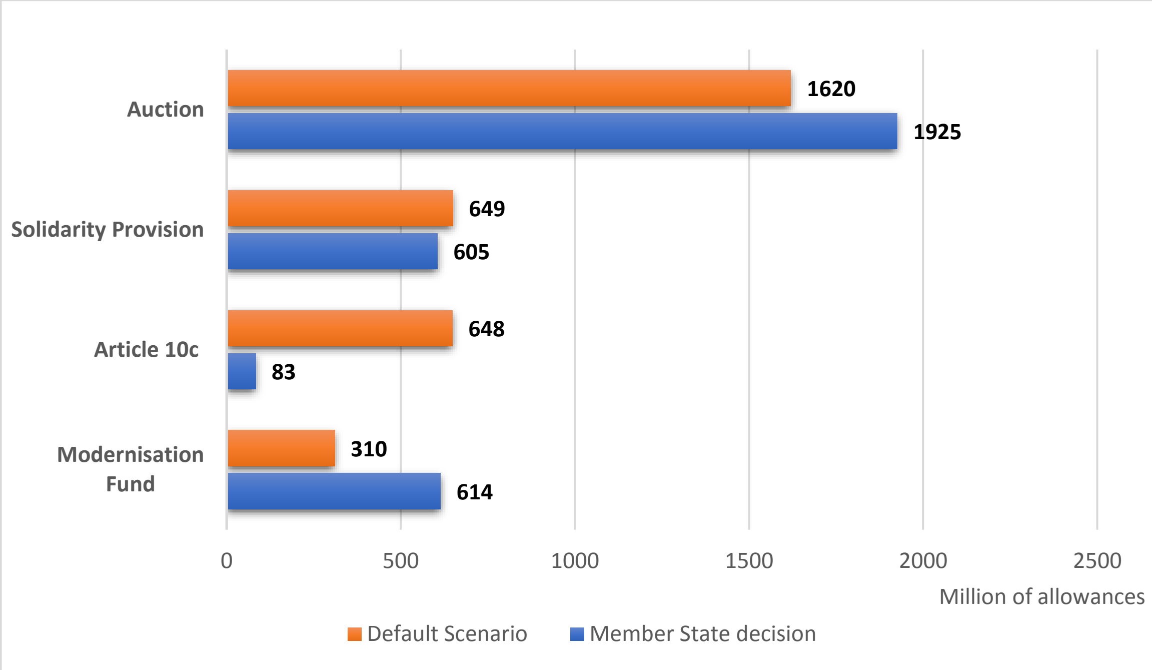
This difference in perspectives means that ministries of environment often had more freedom in deciding how to use the Article 10c allowances, and many of them opted to focus resources in the Modernisation Fund. On the contrary, auction revenues are often added to the general budget, which is managed by the respective ministries of finance and used for a variety of purposes. This entails that earmarking part of these revenues to the Modernisation Fund would have to be agreed upon by several ministries, which proved to be difficult.

Another reason is that in some Member States, auction revenues are already earmarked for climate and energy purposes. This means that moving allowances would not result in an increase in funding available for climate and energy purposes. As a case in point, in Croatia, all auction revenues are earmarked for the Environmental Protection and Energy Efficiency Fund. Moreover, Croatia also decided to use its share of the Modernisation Fund to co-finance this same fund. Hence, in practice, it makes no difference how they decide to use the flexibility mechanism.

[16] For Croatia, there was no information available at the time of writing.

Following Member States' decisions, the Modernisation Fund is expected to almost double in size to about 614 million allowances compared to the default case. While this increase is substantive, it is only one-third of its potential size if the flexibility mechanism would have been fully used.

Figure 3: Effects of Member States' decisions on their use of Article 10c Derogation and the flexibility mechanism



Source: Own calculations

It is important to note that following the Member State's decisions, the total amount of allowances available for Article 10c Derogation and the Modernisation Fund actually decreases by over 260 million allowances compared to the default scenario.

However, this does not necessarily mean that the overall investments for climate and energy projects will be lower. For example, the Polish government is actually planning to use the revenues of the 275 million 10c allowances to establish a new national fund for the modernisation of the energy sector, operating separately from the Modernisation Fund. Moreover, it was mentioned before that there are differences between Member States regarding how they use their auction revenues, and for many the auctioning revenues are already used or earmarked for climate and energy purposes[17].

[17] See for example http://www.maximiser.eu/ets-tool.

Conclusions

The funding mechanisms included in phase 4 of the EU ETS can be used to finance investments in projects that modernise and diversify the energy sector, improve energy efficiency or employ new low-carbon technologies and processes. If designed and implemented correctly, they will prove to be of fundamental importance to help speed up the transformation of the energy matrix in Central and Eastern Europe, and aid in their wider transition towards a competitive low-carbon economy.

While the implementation process is still ongoing, and unclarities remain, Member States were already expected to make important decisions on how they will use of these funding mechanisms in the next decade. In this paper, we have reflected on those choices made by Member States, which vary considerably, highlighting the different national circumstances and priorities.

Going forward, it is important to have an open and inclusive process, involving stakeholders at all levels of decision-making. Stakeholders should be able to provide input to the implementing act for the Modernisation Fund through a public consultation, and Member States would benefit from an inclusive national process in deciding how to use their share.

In the meantime, any ambiguity that remains, such as regarding the functioning of the MSR and revision of the state aid guidelines, should be clarified as soon as possible, ensuring that no issues stand in the way of effective decision-making.

Flexibility has proven to be an important element of the funding mechanisms. Firstly, the flexibility to move allowances between the various funding mechanisms has proven its purpose: by giving Member States the option, they were incentivised to reflect on their national priorities and circumstances, and use the flexibility accordingly.

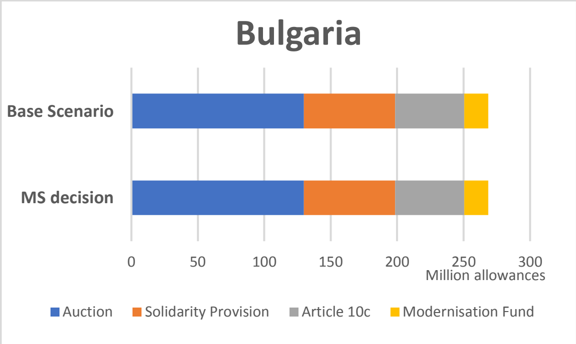
Secondly, the Modernisation Fund allows for flexibility in terms of eligible investments. This flexibility should be fully utilised by Member States, directing resources in accordance with their national circumstances and priorities. On the one hand, one could argue that the focus should lie on investments with the largest potential to reduce GHG emissions, regardless of the used technology, but avoiding lock-in effects. On the other hand, the social dimension of the transition should not be overlooked. Using the Modernisation Fund to finance a 'Just Transition' would help ensure public support for climate policies and lead to a sustainable transition in the long term.

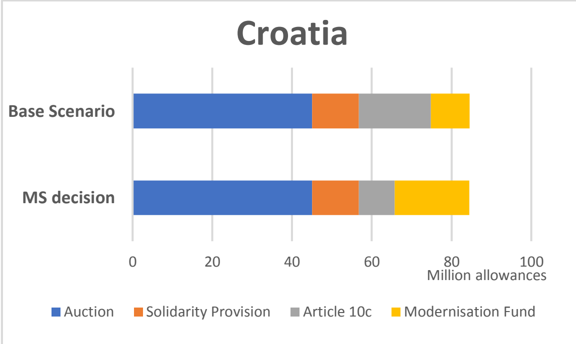
Thirdly, stakeholders have continuously highlighted the need for flexible investment schedules, as ex-post finance alone is often not sufficient. The Innovation Fund has evolved considerably in this regard, allowing for a combination of ex-ante, ex-post as well as project development finance. This level of flexibility should also be considered by Member States, when deciding their use of the Modernisation Fund. Moreover, synergies with other funding instruments and other types of support should be fully exploited, and definitely not restricted.

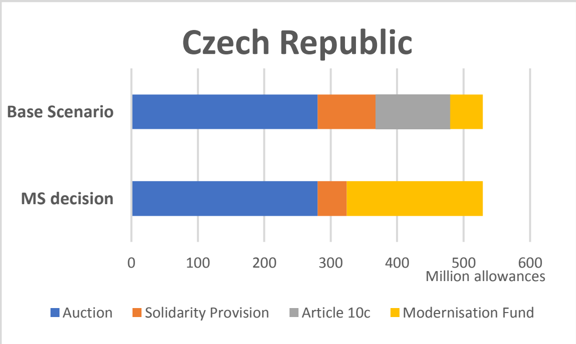
Transparency should be a key element in the design and use of all of the funding mechanisms. For the Modernisation Fund, the EIB and the Investment Committee there should be clear guidelines on how to assess projects. Moreover, proceedings for evaluating projects should be carried out in reasonable time-frames over all funding mechanisms, providing certainty for project developers and investors.

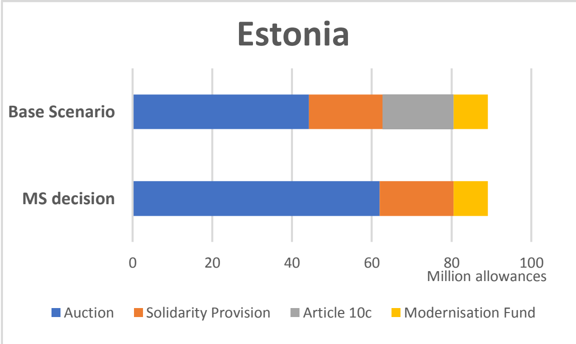
Lastly, given the objective of the new European Commission and many Member States to increase the 2030 climate targets, the EU ETS might be faced with another review in the near future. Since the size of the solidarity provision, the Modernisation Fund and Article 10c Derogation are all directly related to the overall cap of the EU ETS, tightening the cap would lead to fewer allowances available. Given the level of investments needed in the low-carbon transition, any downgrade of the funding mechanisms should be avoided. On the contrary, if the EU ETS directive would be reopened, the number of allowances available should actually be increased, especially for the Modernisation Fund.

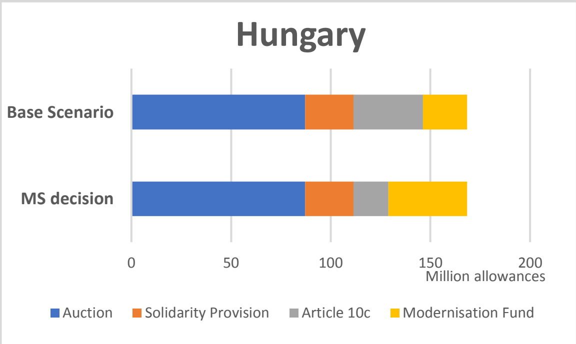
Annex I. Breakdown of Member State decisions

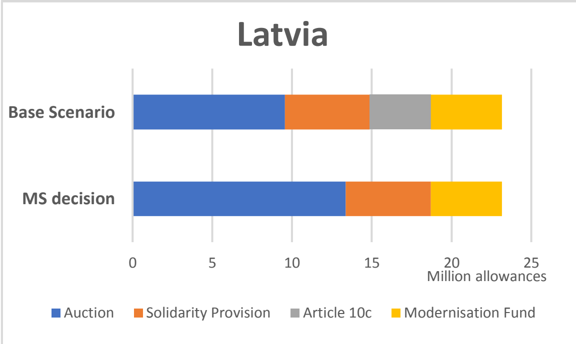


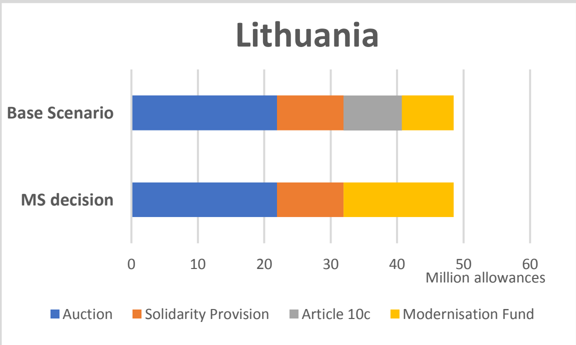


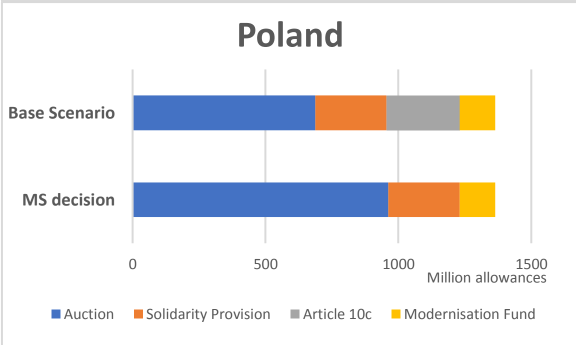


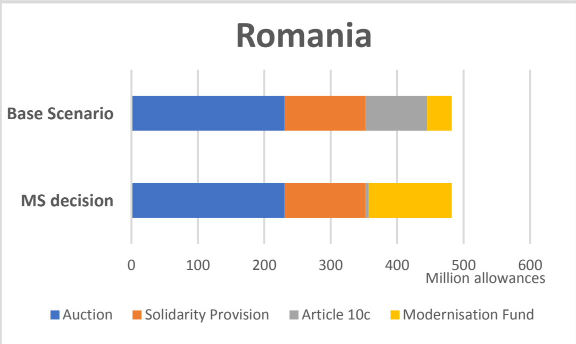


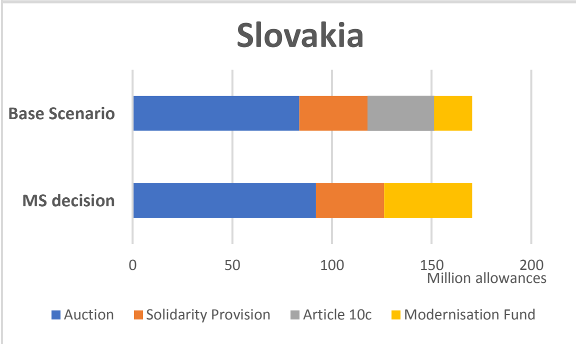












Annex II. Breakdown of Member State decisions

Bulgaria

In June, the government published its draft rules for the implementation of the 'national framework for investment for the period 2021-2030', which also cover the rules for the continued use of Article 10c Derogation in phase 4[18].

Originally, it was intended to both make use of a list for small scale projects as well as a competitive bidding process. However, after a call for small scale projects, the government received several hundred requests for funding, representing over 80% of the total Article 10c budget. Given that high interest, they stepped away from using a list, and it was decided to organise two separate competitive bidding processes:

- One for small-scale projects only, organised in two rounds.
- A second one for larger-scale projects which will be organised in three rounds.

While the formal decision is yet to be made, it is expected that Bulgaria will keep all funding mechanisms as separate entities, meaning that the flexibility to move allowances will not be used. However, the government is exploring the possibility to have leftover funds from Article 10c (in case any would remain after the last call for proposals, which would take place in 2027) added to the Modernisation Fund.

Croatia

In May the government published a new draft climate protection law which includes the transposition of the phase 4 EU ETS review into national law[19]. At the time of writing, it was still under discussion and only establishes the various funds without going into detail about their operationalisation.

The draft law reads that the use of Article 10c Derogation will be used in phase 4, but that only half of the allowed amount of allowances will be used (equal to 20% of Croatia's amount of allowances to be auctioned). The other half will be added to the Modernisation Fund. Moreover, it further reads that Croatia plans to add its entire share of the Modernisation Fund to an existing national fund – the "Fund for Environmental Protection and Energy Efficiency".

At the time of writing, there was no formal agreement yet about Croatia's intention to use the flexibility mechanism to move allowances from the Solidarity Provision to the Modernisation Fund. However, it is expected that they will not make use of this flexibility.

Czech Republic

In the Czech Republic, the law transposing the phase 4 ETS review into national law is currently being debated in the parliament, and will likely soon be adopted. The law fully lays out the use of the funds as well as the moving of allowances between them. This outcome resulted from a national agreement between the responsible ministries and stakeholders, which also includes the adoption of a system for indirect costs compensation, which will start in 2021.

The Czech Republic will not continue its use of Article 10c Derogation in phase 4, and will move all Article 10c allowances to the Modernisation Fund. While they say the overall experience with Article 10c over phase 3 was good, they see some clear advantages of pooling allowances in the

---

[18] https://www.me.government.bg/bg/news/ministerstvoto-na-energetikata-predlaga-za-obshtestveno-obsajdane-pravila-za-organizaciyata-i-kontrola-2750.html.

[19] https://esavjetovanja.gov.hr/ECon/MainScreen?entityId=11078.

Modernisation Fund: next to reducing the overall administrative burden, they cite the wider scope of eligible companies and absence of a mandatory decommissioning requirement. Moreover, as part of the agreement, the total value of the Article 10c allowances moved to the Modernisation Fund will be reserved for investments in installations covered by the EU ETS.

The Czech Republic is also the only Member State that has decided to move part (50%) of its Solidarity allowances to the Modernisation Fund. With this decision, the Czech Modernisation Fund will quadruple in size.

Estonia

Estonia is one of the Member States that decided not to continue using Article 10c Derogation in phase 4. In order to have the 'maximum flexibility with regard to the use of ETS revenues', the government opted to auction all Article 10c allowances, including the ones that remain unused from phase 3.

While the Modernisation Fund is considered to be an important tool in meeting Estonia's low-carbon investment needs, its size will not be extended by using the flexibility mechanism.

Hungary

Hungary decided to continue using Article 10c Derogation in phase 4. A draft national framework for the Article 10c competitive bidding process was finalised in June, and published for public consultation[20].

Hungary will organise only one call for proposals, taking place in 2021. If this call is unsuccessful (e.g. not enough candidates applied or approved to deplete the funds available) they will organise *one* additional call. At this point, any leftover allowances will be added to the general auction pool.

The evaluation of applications will be done in two steps. During the first step, an evaluation committee will perform a general check of the project's technological and economic viability, as well as the requirements outlined in article 10c(2) of the EU ETS Directive. Subsequently, all projects approved during the first check will be ranked based on two criteria:

- The total amount of net CO2 savings provided by the project; and
- The ratio of net CO2 savings per amount of support given.

Successful projects will be financed ex-post based on yearly progress reports.

The Modernisation Fund is treated as a stand-alone fund, and will not be enlarged with any allowances from the Solidarity Provision. The government plans to use the funds for energy storage projects, as well as projects to improve the energy efficiency of district heating and the efficiency of the electricity grid.

Latvia

Latvia was the only eligible Member State that did not make use of transitional free allocations during phase 3. For phase 4, the government published a conceptual report[21] in July, in which it analysed the cost and benefits of using the system, and subsequently decided also not to use it in phase 4. Some of the motives to not make use of Article 10c Derogation include:

---

[20] https://www.kormany.hu/download/7/16/a1000/10c%20nemzeti%20keret%20ki%C3%ADrás%2020190628.pdf.

[21] https://likumi.lv/ta/id/308331-par-konceptualo-zinojumu-par-bezmaksas-emisijas-kvotu-pieskirsanu-elektroenergijas-razotajiem-eiropas-savienibas-emisiju.

- Since Latvia's auctioning revenues are already earmarked to finance climate change projects (via an existing fund, the ECII), making use of Article 10c Derogation would not result in an increase in overall climate finance, but would increase administrative burden.
- Power production capacity in Latvia already has a relatively low carbon-content, meaning that the overall impact of using Article 10c would also be limited in terms of CO2 reductions.

At the time of writing, there was no information available about Latvia's intention to use the flexibility mechanism to move allowances from either the Solidarity Provision or Article 10c Derogation to the Modernisation Fund, as it is still being discussed within the government.

Lithuania

Lithuania is one of the countries that will not continue using Article 10c Derogation in phase 4, as both the government and stakeholders are of the opinion that it is not the most effective tool to finance investments. The use of transitional free allocation had a mixed track record over phase 3, as a number of projects that were granted allowances did not get implemented – overall, close to 50% of the 10c allowances remain unused. The government plans to auction these remaining allowances and use the revenues for the National Climate Change Fund.

With regard to the flexibility mechanism, Lithuania further decided to move all Article 10c allowances to the Modernisation Fund, effectively doubling its size. In contrast, no transfers from the Solidarity Provision to the Modernisation Fund will be made.

Poland

Poland is one of the Member States that will not continue using Article 10c Derogation in phase 4. Contrary to most Member States that will not use Article 10c, the allowances will not be transferred to the Modernisation Fund, but added to the general auction volume. The Polish government has proposed to use the revenues of those 275 million 10c allowances to establish a new national fund for the modernisation of the energy sector.

Over the course of phase 3 (2013-2018), roughly 125 million allowances remain unused by Poland for Article 10c. Poland decided to auction a first part of 55.8 million allowances over the course of 2019, while the remainder of unused allowances will be auctioned in the following two years.

With regard to the Modernisation Fund, Poland plans to reserve 57.5 million allowances from its share of projects in the energy sector, with a focus on grid development, energy storage and renewable energy projects. The remaining allowances are to be used for other, yet to be decided, investments, with a general focus on the Priority projects.

The flexibility mechanism will not be used, so no allowances from the Solidarity Provision will be added to the Modernisation Fund.

Romania

The Romanian government published a document in June outlining its decision on the use of Article 10c Derogation and the Modernisation Fund after a public consultation was organised[22]. The Government decided to continue using transitional free allocation, but only for small-scale

[22] https://sgg.gov.ro/new/wp-content/uploads/2019/06/MEMORANDUM.pdf.

projects. A list of 14 projects, totalling €114 million, was subsequently published and submitted to the European Commission[23].

It further decided that the funding for larger value projects will be done through the Modernisation Fund, which implies that the majority of 10c allowances will be moved there, effectively tripling its size.

Reasons for Romania's preference to use the Modernisation Fund mentioned in the document include:

- Avoiding increasing the administrative burden by managing two funds;
- the possibility to cover 100% of the relevant costs of an investment;
- the lack of a phase-out obligation; and
- more flexibility to co-finance projects.

At the time of writing, there was no information available yet about Romania's intention to use the flexibility mechanism to move allowances from the Solidarity Provision to the Modernisation Fund, as it is still being discussed within the government.

Slovakia

The national law implementing the phase 4 revision of the EU ETS was adopted in September 2019[24]. Slovakia, which was not eligible for Article 10c Derogation during phase 3, decided not to make use of the transitional free allocation for the next phase.

The emphasis instead will lie on the Modernisation Fund, which the government plans to use to invest in three focus areas: development of central heating systems (cogeneration plants), waste incineration projects, and support for regions in transition.

The new law further stipulates that the flexibility option will be used to add 30% of the auction volume to the Modernisation Fund, without specifying from where, effectively more than doubling its size.

[23] https://energyindustryreview.com/energy-efficiency/14-projects-in-romania-proposed-for-funding-by-the-ec-through-the-eu-ets-scheme/.

[24] https://www.zakonypreludi.sk/zz/2012-414.