

The role of the EU ETS funding mechanisms in delivering the European Green Deal



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Executive Summary

The EU Emissions Trading System (ETS) is a cornerstone of the EU’s climate change mitigation policy that aims at providing an efficient mechanism to reduce emissions in power stations and industrial plants.

The revision for the fourth phase of the EU ETS, covering the period 2021 - 2030, introduced a number of important changes concerning the ‘funding mechanisms’ in the system.

In line with the Communication on the European Green Deal (EGD) adopted in 2019, and the Communication on the 2030 Climate Target Plan adopted in September 2020, which seeks to increase the EU’s greenhouse gas (GHG) emission reductions target for 2030 to at least 55%, Member States enter to the final phase of negotiations on the 2030 climate plan.

The European Council is expected to reach an agreement on the issue at its December meeting with a view to agreeing a new emissions reduction target for 2030. This decision could potentially also have a strong impact on the four funding mechanisms part of the EU ETS

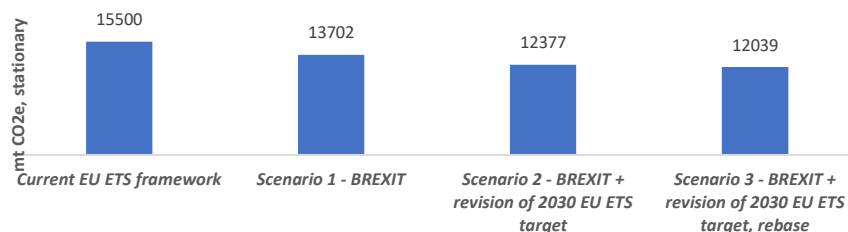
In this paper, ERCST and CEEP provide an overview of the size and functioning of the funding mechanisms which are part of the EU ETS, i.e. the Solidarity Provision, Article 10c Derogation, the Modernisation Fund, before and after the use of the flexibility mechanism, and the Innovation Fund.

It further discusses how Member States (MSs) have made use of this flexibility mechanism and explains reasons regarding the use of the Article 10c Derogation by MSs. In addition, it seeks to provide an overview of current developments and regulatory decisions made in 2020, with a focus on:

- the state of play of the Modernisation Fund, and the Innovation Fund,
- the national frameworks which are being put in place by MSs to select investments from the Modernisation Fund,
- detailed information for the 10 Central and Eastern European (CEE) Member States, who are eligible for the Modernisation Fund and Article 10c Derogation.

This paper seeks to address the issue of the size of the EU ETS funding mechanisms under different scenarios. It shows how developments like a recalculation of the cap following Brexit, or an increase in the 2030 target, would affect the amount of allowances available under the EU ETS in phase 4, and under the individual funding mechanisms.

Cumulative amount of allowances available in phase 4 of the EU ETS under the current framework and in three scenarios



Source: Own calculations¹ based on the EU ETS Directive and EEA data

¹ Figures are rounded to the nearest tenth.

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Note to the reader

Rationale for the paper

ERCST and CEEP have been working together on this topic for the last few years, aimed at facilitating a debate within and between Member States on how to successfully operationalise and utilise the EU ETS funding mechanisms, deepen the common understanding of the regional financing needs and priorities and provide regular updates to stakeholders through papers and workshops.

In 2018, ERCST and CEEP published a paper² where we delved into the four mechanisms' functioning, eligibility criteria, governance and size, while highlighted a number of issues and questions that needed to be addressed during the implementation phase.

Over the course of 2019, several workshops were organised in beneficiary Member States and a stakeholder sentiment analysis was conducted. The main takeaways of this analysis were captured in a second paper³, which also shed light on the preliminary decisions made by beneficiary Member States regarding the use of Article 10c Derogation and the flexibility mechanism.

This third paper seeks to provide an overview of current developments and regulatory decisions made in 2020, and look ahead at the potential impacts that Brexit and an increased 2030 GHG target could have on the size of these funding mechanisms.

Methodology and reference

For simplification, the use of the term 'funding mechanisms' refers not only to the Modernisation and Innovation Funds, but also to Article 10c Derogation and the Solidarity Provision, as all four of these mechanisms provide some sort of funding or redistribution of EU ETS allowances.

Information regarding countries included in the paper was provided in October by officials or experts in relevant capitals and by selected companies based on a questionnaire.

Data and graphs have been prepared by ERCST and CEEP based on data from the European Commission and own calculations using the EU ETS Directive, data from the European Environmental Agency (EEA), Member State National Allocation Plans (NAPs)⁴ and other European Commission documents, in particular:

- The cumulative amount of allowances available in phase 4 of the EU ETS was calculated using the Linear Reduction Factor (LRF) as stipulated in the EU ETS Directive, and the average total quantity of allowances issued annually in 2008-2012 following Member State's NAPs;
- Allowances available per Member State in the Modernisation Fund were calculated using the percentages in Annex IIb of the EU ETS Directive;
- Allowances to be auctioned for each Member State for the purpose of the Solidarity Provision and allowances available to be used for Article 10c Derogation were calculated using EEA data to estimate the share of verified emissions in the baseline period (the year 2005, or the average of

² <https://ercst.org/publication-implementation-of-the-funding-mechanisms-in-the-fourth-phase-of-the-eu-ets-state-of-play/>

³ <https://ercst.org/publication-funds/>

⁴ https://ec.europa.eu/clima/policies/ets/pre2013/nap_en

years 2005-2007, whichever is highest), which is the reference for the division of the allowances to be auctioned among Member States, and the percentages mentioned in Annex IIa of the ETS Directive;

- The amount of unused allowances for the use of Article 10c in phase 3 were calculated using data from the European Commission's report on the functioning of the European carbon market⁵ and the European Commission's status tables on transitional free allocation⁶;
- The potential impacts of Brexit and a higher 2030 target were calculated using EEA data, the European Commission's impact assessment accompanying the 2030 climate target plan⁷ and the UK's NAP. For the recalculation of the EU ETS cap following Brexit; Sandbag's methodology⁸ was followed for estimating the impact of Brexit.

Introduction

The revision for the fourth phase of the EU Emissions Trading System (ETS), covering the period 2021 - 2030, introduced a number of changes concerning the funding mechanisms for climate and transition which are part of the system. They will be a key financing tool to deliver upon the European Green Deal and updated 2030 climate targets.

Three of the funding mechanisms are aimed at helping lower-income Member States to modernise their energy sectors and finance their transition to a low-carbon economy:

- “**Article 10c Derogation**”, through which eligible Member States can provide free allocation to their energy sector to finance investments, also in phase 4;
- the **Modernisation Fund**, which was introduced in phase 4 to support also investments aimed also at improving energy efficiency and just transition;
- the **Solidarity Provision**, which redistributes a share of the allowances to be auctioned over phase 4 and which is continued and linked to the two funding mechanisms aforementioned.

Apart from these 3 listed mechanisms, for the period 2020-2030, the **Innovation Fund** was set up. As the successor of the NER 300 programme, the Innovation Fund aims to finance carbon capture and storage (CCS) and renewable energy (RES) technologies in all Member States and is the world's largest funding programme for the demonstration of innovative low-carbon technologies.

Overview and state of play of the Funding Mechanisms

The Solidarity Provision

In the EU ETS, the general rule is that 90% of the quantity of allowances to be auctioned are distributed among Member States in accordance with their share of verified emissions during the baseline period.⁹

⁵ [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52019DC0557R\(01\)&from=EN](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52019DC0557R(01)&from=EN)

⁶ https://ec.europa.eu/clima/policies/ets/allowances/electricity_en#tab-0-1

⁷ https://ec.europa.eu/clima/policies/eu-climate-action/2030_ctp_en

⁸ <https://ember-climate.org/wp-content/uploads/2017/05/Brexit-and-EUETS-Final-Report.pdf>

⁹The year 2005, or the average of years 2005-2007, whichever is highest.

The remaining 10% of the allowances are allocated to 16 less wealthy Member States. This is done for “the purpose of solidarity, growth and interconnections within the Union’, i.e. the Solidarity Provision. This provision was introduced in phase 3 of the ETS, and is maintained for phase 4.

In total, **798.5 million allowances** are allocated to eligible Member States through the provision, in accordance with the percentages mentioned in Annex IIa of the ETS Directive, increasing the amount of allowances auctioned by them by over 30%.

Table 1. Distribution of allowances to be auctioned by MSs pursuant to Article 10(2)b for the purpose of Union solidarity and growth (the Solidarity Provision)

	Allowances without Solidarity Provision (in millions)	% increase following the solidarity provision	Allowances including Solidarity Provision (in millions)
Bulgaria	129,9	53%	198,6
Croatia	45	2%	56,7
Cyprus	17,4	20%	20,9
Czech Republic	280,5	31%	367,3
Estonia	44,3	42%	62,8
Greece	236,4	17%	276,5
Hungary	87,1	28%	111,4
Latvia	9,6	56%	14,9
Lithuania	21,9	46%	31,9
Malta	6,6	23%	8,1
Poland	687,6	39%	955,2
Portugal	120,7	16%	140
Romania	230,7	53%	352,8
Slovakia	83,6	41%	117,8
Slovenia	29,4	20%	35,3
Spain	608,7	13%	687,6
TOTAL	2 639,4		3 437,9

Source: Own calculations¹⁰ based on the EU ETS Directive¹¹ and EEA data¹².

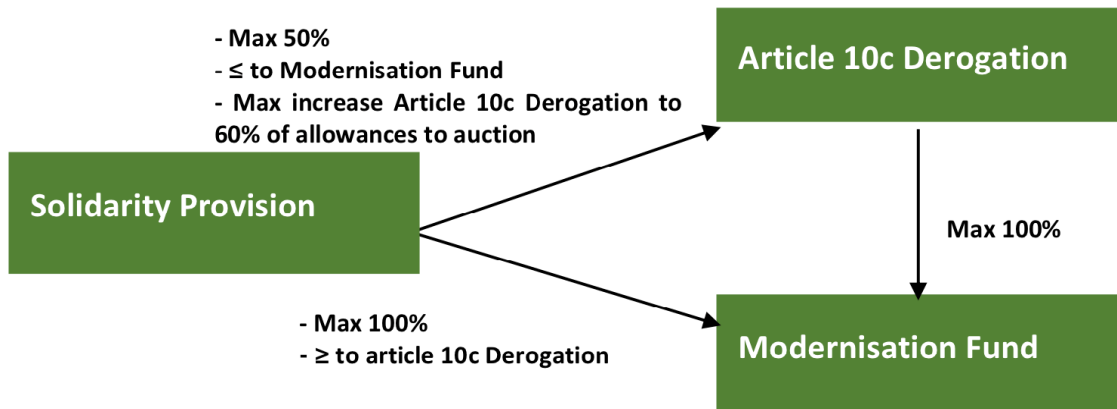
The novelty introduced in phase 4 is the so-called ‘flexibility mechanism’, which allows eligible Member States to repurpose their solidarity allowances for Article 10c Derogation (up to 50%) and/or the Modernisation Fund (up to 100%). It also allows for increasing the Modernisation Fund equivalent to the potential size of Article 10c Derogation (40% of allowances to be auctioned).

¹⁰ Figures are rounded to the nearest tenth.

¹¹ <https://www.eea.europa.eu/data-and-maps/dashboards/emissions-trading-viewer-1>

¹² <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02003L0087-20200101&qid=1604650933354>

Figure 1: Overview of the flexibility mechanism



Source: ERCST and CEEP

In the chapter on the Modernisation Fund, we will discuss how Member States have made use of this flexibility mechanism. More information on each Member State can also be found in Annex II.

Article 10c Derogation

Article 10c of the EU ETS Directive provides a derogation from the general rule of auctioning, through which ten lower-income Member States¹³ have the option to grant free allocation to electricity producers covered by the EU ETS to help finance projects aimed at the modernisation and decarbonisation of their energy mix. This derogation was introduced in phase 3, and continues in phase 4.

The use of this Derogation is *optional* and up to 40% of the eligible Member State's allowances to be auctioned (excluding the allowances from the solidarity provision) can be used for this purpose. By using the flexibility mechanism, Member States can increase the number of eligible allowances up to 60%. Any allowance granted for free under the derogation are deducted from the Member State's own auction pool.

Through the derogation, up to 70% of a project's investments costs can be covered through granting free allowances. There are two procedures possible to select projects:

- Smaller projects (up to €12.5 million) could be selected by Member States based on 'objective and transparent criteria' and communicated to the European Commission by the 30th June 2019;
- Larger projects are selected by Member States through a competitive bidding processes.

In contrast to Phase 3, where 8 out of 10 Member States used the derogation, only Bulgaria, Hungary and Romania have decided to use the derogation in phase 4, as shown in the table below. Member State officials provided a variety of reasons regarding their decision to not make use of the derogation, including:

- the mixed track-record of using it¹⁴,

¹³ 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.

¹⁴ Many allowances initially requested during Phase 3 under the derogation remained 'unused', as no suitable projects could be found or projects were not fully implemented – more details can be found in Annex II.

- the introduction of the ‘phase-out obligation’¹⁵,
- the limited applicability of the Derogation compared to the Modernisation Fund¹⁶;
- avoiding unnecessary administrative costs through operating two similar schemes (Article 10c and the Modernisation Fund), including the obligation to set up a competitive bidding process;
- criticism received by NGOs (as some investments were used in fossil fuel power installations).

Table 2. Amount of allowances that could be used by Member States under Article 10c Derogation in the base case vs. amount of allowances that Member States have decided to use.

	Allowances in base case ¹⁷ (in millions)	Allowances to be used (in millions)
Bulgaria	51,9	51,9
Croatia	18	0
Czech Republic	112,2	0
Estonia	17,7	0
Hungary	34,8	34,8
Latvia	3,8	0
Lithuania	8,8	0
Poland	275	0
Romania	92,3	4,2
Slovakia	33,5	0
TOTAL	648	91

Source: Own calculations¹⁸ based on the EU ETS Directive, EEA data and information obtained from Member States

Only Romania submitted a list for 14 small-scale projects to the European Commission to be financed through Article 10c Derogation. Both Bulgaria and Hungary will only select projects through a competitive bidding process, regardless of the project’s size. More information can be found in each Member State’s overview in Annex II.

The Modernisation Fund

The Modernisation Fund is a newly introduced fund which has the aim to support investments to modernise energy systems and improve energy efficiency. The eligible Member States 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 projects, newly developed financing schemes or co-finance existing schemes.

¹⁵ The ‘phase-out obligation’ requires that when an investment leads to additional electricity- generation capacity, a corresponding amount of capacity with higher emission intensity has to be decommissioned. This obligation did not exist during phase 3.

¹⁶ See Table 5 in Annex I for a comparison.

¹⁷ The base case is the hypothetical situation where each eligible Member State makes use of Article 10c Derogation up to the limit of 40% of the allowances it can auction

¹⁸ Figures are rounded to the nearest tenth.

2%¹⁹ of the total quantity of allowances available during phase 4, or 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 determined by Annex IIb of the EU ETS Directive.²⁰

In 2019, ERCST and CEEP conducted a series of stakeholder consultations which clearly revealed stakeholder's preference for the Modernisation Fund over Article 10c Derogation, which was also confirmed by the European Commission's stakeholder process²¹.

By 30 September 2019, the Czech Republic, Lithuania, Romania, Slovakia decided to enhance their Modernisation Fund using the flexibility mechanism, more than doubling its size as shown in the table below. While it was initially reported²² that Croatia would also enhance the Modernisation Fund, Member State officials have since then declared that this will not be the case. More details on each Member State's decisions can be found in Annex II.

Table 3. Amount of allowances available per Member State in the Modernisation Fund

	% of Modernisation Fund	Allowances in a base case (in millions)	Allowances after use of flexibility mechanism (in millions)
Bulgaria	5,84 %	18,1	18,1
Croatia	3,14 %	9,7	9,7
Czech Republic	15,59 %	48,3	203,9
Estonia	2,78 %	8,6	8,6
Hungary	7,12 %	22,1	22,1
Latvia	1,44 %	4,5	4,5
Lithuania	2,57 %	8	16,7
Poland	43,41 %	134,6	134,6
Romania	11,98 %	37,1	186,3
Slovakia	6,13 %	19	54,5
TOTAL	100%	310	659

Source: own calculations²³ based on the EU ETS Directive and information obtained from Member States.

It is important to highlight the difference between the baseline number of 310 million allowances and the allowances that are added through Member State's decisions. While the starting point for the Modernisation Fund is a redistribution of allowances from the EU as a whole to the 10 eligible Member States, the additional allowances following Member States' decisions represent an internal shuffle of recourses within these Member States. Indeed, while the overall size of the Modernisation Fund does increase following these decisions, no *additional* redistribution from 'richer' to 'poorer' Member States takes place.

¹⁹ This can be increased to 2.5% if the so-called 'free allocation buffer' is not fully used to avoid the application of the cross-sectoral correction factor (CSCF)

²⁰ <https://www.eea.europa.eu/data-and-maps/dashboards/emissions-trading-viewer-1>

²¹ https://ec.europa.eu/clima/events/technical-workshops-eu-ets-funding-mechanisms-modernising-energy-sector-including_en

²² https://ec.europa.eu/clima/news/five-beneficiary-member-states-opt-transfer-additional-allowances-modernisation-fund_en

²³ Figures are rounded to the nearest tenth.

The decisions made by the Czech Republic, Lithuania, Romania and Slovakia to increase their share of the Modernisation Fund are commendable as they effectively earmark a larger part of their auctioning revenues to finance climate and energy investments.

However, as we highlighted in last year's paper, this does not necessarily mean that Member States who decided not to do this are dedicating a smaller share of their auctioning revenues for climate and energy spending.²⁴ Latvia and Croatia already earmarked their auction revenues towards climate and energy purposes, while Poland announced to establish a new national fund for the modernisation of the energy sector, separate from the Modernisation Fund, and financed by auctioning revenues.

With regards to the operationalisation of the Modernisation Fund, the most important development this year was the adoption of the Implementing Regulation²⁵ on 9 July 2020, laying out the Fund's detailed governance and reporting rules.

It was already known that the Modernisation Fund would distinguish between priority and non-priority investments²⁶, each with their own financing rules. While the Modernisation Fund operates under the responsibility of the eligible Member States (i.e. they can select investments and are responsible to monitor the implementation), the European Investment Bank (EIB) has the important role of confirming the priority status of the investment proposals, and the Investment Committee can vote on whether non-priority investments can be financed or not.²⁷

The Implementing Regulation lays out additional details regarding the timeline of this process:

- Each year, by 30 November (including in 2020), Member States are required to submit an overview of planned investments for which it intends to submit an investment proposal during the next two calendar years;
- The Investment Committee will meet twice a year: ahead of 15 July and 15 December to assess submitted investment proposals;
- Member States can submit their investment proposals at any time during the calendar year, but only those submitted six weeks (in the case of priority investments) or ten weeks (for non-priority investments) before the upcoming biannual meeting will be assessed at that meeting.

After a decision has been made at the biannual meeting, the European Commission is to make a formal disbursement decision before the funds are given to the Member State by the EIB.

While most Member States indicate to overall be satisfied with the Implementation Regulation, some raised concerns regarding:

- the lack of a clear schedule for the biannual meetings of the Investment Committee;
- administrative costs incurred by Member States, which cannot be covered by the Modernisation Fund; and

²⁴ Also see page 25 of the 2020 State of the EU ETS report on the overall use of auctioning revenues by Member States - <https://secureservercdn.net/160.153.137.163/z7r.689.myftpupload.com/wp-content/uploads/2020/04/2020-State-of-the-EU-ETS-Report-Final-2.pdf>

²⁵ <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32020R1001>

²⁶ As defined Article 10d(2) of the EU ETS Directive – also see Table 5 in Annex I.

²⁷ For a more detailed overview, see our previous reports: <https://ercst.org/publication-implementation-of-the-funding-mechanisms-in-the-fourth-phase-of-the-eu-ets-state-of-play/> and <https://ercst.org/publication-funds/>

- the requirement to annually submit an overview of planned investments, as they could potentially differ substantially from the actual investments made, and just increase the administrative burden.

With the Implementing Regulation adopted, the preparatory work at EU level has mostly been finalised. It is now up to the Member States to decide on a national framework to make use of the Modernisation Fund, and to set up a selection procedure to identify investments, develop a new multiannual scheme and/or to direct resources from the Modernisation Fund to existing schemes.

Details on where Member States are with setting up this national framework can be found in Annex II. Overall, while the process has not yet been concluded in any Member State, there are large differences in preparedness, or at least in the availability of information, regarding the envisaged national governance and selection process for the Modernisation Fund.

Indeed, while in countries like Hungary and the Czech Republic there are clear indications as to what type of investments will be eligible to receive support, little to no information is known in other countries, leading to uncertainty for domestic stakeholders and project developers.

The next date to pay attention to is the approaching deadline of 30 November 2020 for Member States to submit an overview of planned investments. Member States are putting together this list in various ways, including public calls for proposals, market studies or through the help from consultants. It remains to be seen how well these initial lists will reflect the actual investments that will be financed through the Modernisation Fund in the coming years.

The Innovation Fund

The final funding mechanism, the Innovation Fund, is the successor of the NER 300 programme²⁸, and aims to support innovation in low- carbon technologies and processes. In contrast with the other funding mechanisms, the Innovation Fund supports projects in all Member States, as well as in Norway and Iceland, focusing on five investment areas²⁹. in sectors covered by the EU ETS.³⁰

The size of the Innovation Fund is **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 to avoid the application of the cross-sectoral correction factor (CSCF) is not fully used.

The delegated regulation establishing the Innovation Fund was adopted on 26 February 2019, and outlined its governance, the projects' eligibility requirements, and the modalities for calls for proposals.³¹

The first call for proposals³², exclusively for large-scale projects (above €7.5 million of capital expenditure), was launched on July 3, 2020 and ran until 29 October. 311 applications were submitted to

²⁸ https://ec.europa.eu/clima/policies/innovation-fund/ner300_en

²⁹ See Table 5 in Annex I.

³⁰ See Annex I of the EU ETS Directive - <https://www.eea.europa.eu/data-and-maps/dashboards/emissions-trading-viewer-1>

³¹ For a more detailed overview, see our previous reports: <https://ercst.org/publication-implementation-of-the-funding-mechanisms-in-the-fourth-phase-of-the-eu-ets-state-of-play/> and <https://ercst.org/publication-funds/>

³² https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/innovfund/wp-call/call-fiche_innovfund-lsc-2020-two-stage_en.pdf

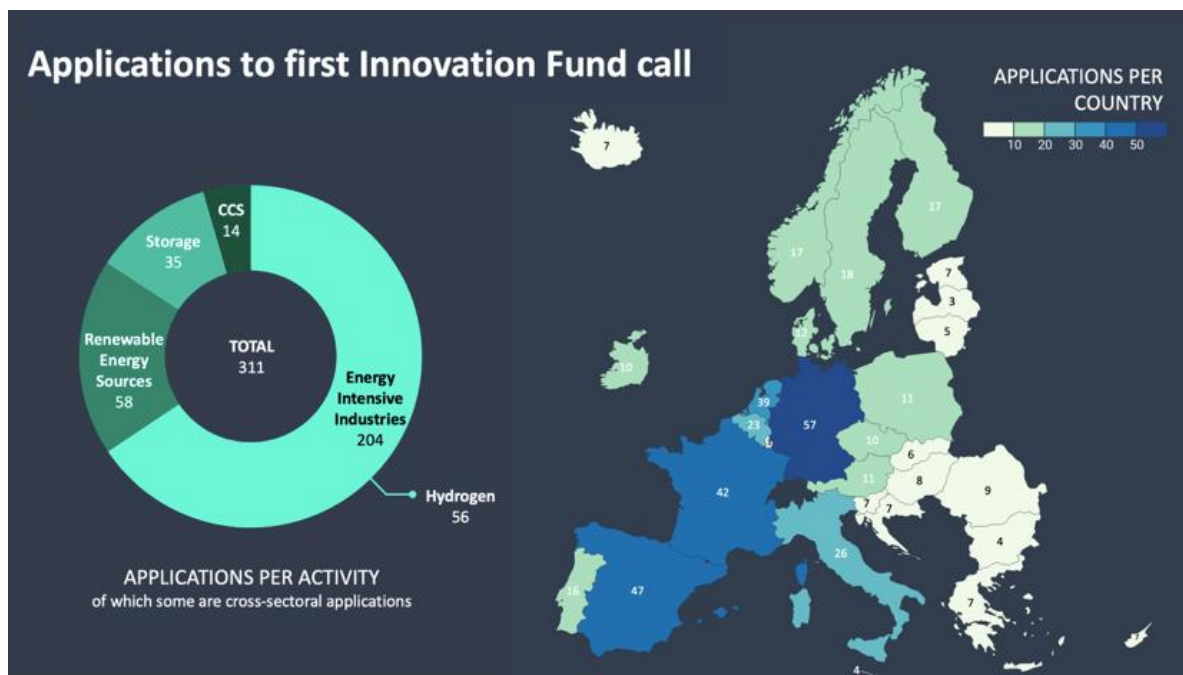
European Commission, requesting a total of €21,7 billion and promising to reduce around 1,2 billion tonnes of CO₂ emissions during their operating period.³³

The figure below shows the activities in which applications were received, as well as the applications per country. About 1/4th of the applications were submitted from within the ten CEE Member States.

The evaluation process is carried out by the Innovation and Networks Executive Agency (INEA), and assisted by an independent expert group. Five criteria³⁴ are used for the assessment. The evaluation process is divided in a two-stage process:

- During the first stage, proposals will be assessed based on the first three selection criteria: GHG emissions avoidance, degree of innovation and project maturity. The 70 highest-scoring applications will be invited to submit their full application by 23 June 2021.
- During the second stage, project proposals will undergo a thorough evaluation against all five selection criteria. A final decision on the award of grants for this call for proposals is expected by the end of 2021.

Figure 2. Applications per Activity and per country for first call of the Innovation Fund



Source: European Commission³⁵

³³https://ec.europa.eu/clima/news/first-innovation-fund-call-large-scale-projects-311-applications-eur-1-billion-eu-funding-clean_en

³⁴ The five criteria are:

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

³⁵https://ec.europa.eu/clima/news/first-innovation-fund-call-large-scale-projects-311-applications-eur-1-billion-eu-funding-clean_en

Successful applications can receive funding for up to 60% of their relevant costs³⁶, which includes both capital and operation expenses. The financing process has been made more flexible compared to NER 300: part of the support can be provided before financial close; support can be combined with other types of public support; and applicants can also receive support for project development assistance.³⁷

A call for proposals of €100 million dedicated for small-scale projects is expected to be launched on 1 December 2020.

Looking ahead: implications of Brexit and the European Green Deal

There are a number of elements that can affect the size of the funding mechanisms discussed in this paper. In our previous reports³⁸, we already discussed the possible impact of:

- the Market Stability Reserve, which has also been highlighted by ICIS³⁹ and Sandbag.⁴⁰
- the ‘free allocation buffer’ that needs to be used to avoid the application of the cross-sectoral correction factor.

This paper seeks to highlight that also Brexit and the review of the EU ETS in light of the implementation of the European Green Deal will have a serious impact on the size of the funding mechanisms.

Impact of Brexit on the funding mechanisms

The UK remains a full participant to the EU ETS up to 31 December 2020. As of 1 January 2021, the UK will effectively leave the EU ETS and it is seen as highly unlikely that an agreement similar to the ‘Norwegian model’⁴¹ will be agreed upon.

Rather, a linking agreement following the Swiss model⁴², a stand-alone ETS or a domestic Carbon Tax are considered to be more likely⁴³. Any of these three options would imply a recalculation of the ETS cap for the remaining EU and EEA Member States, and thus a reduction of the overall amount of allowances available during Phase 4 of the EU ETS.

³⁶ 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’).

³⁷ For a more detailed overview, see our previous report: <https://ercst.org/publication-implementation-of-the-funding-mechanisms-in-the-fourth-phase-of-the-eu-ets-state-of-play/>

³⁷https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/innovfund/wp-call/call-fiche_innovfund-lsc-2020-two-stage_en.pdf

³⁸<https://ercst.org/publication-implementation-of-the-funding-mechanisms-in-the-fourth-phase-of-the-eu-ets-state-of-play/> and <https://ercst.org/publication-funds/>

³⁹ <https://www.icis.com/explore/resources/news/2019/06/21/10381731/power-sector-derogation-modernisation-fund-likely-to-grow>

⁴⁰ see for example <https://ember-climate.org/wp-content/uploads/2019/06/Optimising-EUETS-transition-funds.pdf>

⁴¹ The Norwegian model would see the UK remain part of the EU ETS, following the approach adopted by the European Economic Area countries, including Norway. This option would impose certain complications given the UK’s decision to leave the single market, including regarding the jurisdiction of the Court of Justice of the European Union

⁴² Where the UK would set up a national ETS and link it with the EU ETS through a negotiated agreement with the EU leading to the acceptance of each other’s allowances.

⁴³<https://www.gov.uk/government/publications/meeting-climate-change-requirements-if-theres-no-brexit-deal/meeting-climate-change-requirements-if-theres-no-brexit-deal>

Some Member States have highlighted the level of uncertainty that Brexit brings, as the recalculation of the cap will impact the amount of allowances available under the Solidarity Provision, Article 10c Derogation and the Modernisation Fund.⁴⁴ Until the European Commission comes forward with a proposal to recalculate the cap, the magnitude of impact will remain unclear.

Using Sandbag's methodology⁴⁵, we can recalculate the cap and estimate the impact of the UK leaving the EU ETS on the size of the funding mechanisms, using EEA data. We estimate that the cumulative amount of allowances available over phase 4 would decrease by about 1.8Gt CO₂, or by roughly 11.6% following a recalculation of the cap due to Brexit, as shown in Figure 3.

If no other changes are made to the EU ETS Directive following this recalculation of the cap, the amount of allowances available for each Member State in the funding mechanisms (except for the Innovation Fund) would decrease by a similar percentage. For example, the default size of the Modernisation Fund would decrease from 310 million allowances to 274 million allowances. The same results are obtained by e.g. ICIS⁴⁶

More details regarding what Brexit would mean for each Member State can be found in Annex II.

Impact of the European Green Deal on the funding mechanisms

The other development which could potentially impact the size of the EU ETS funding mechanisms stems from the European Green Deal. As part of the implementation of the European Green Deal, the 2030 GHG reduction target is expected to be enhanced. In September, the European Commission presented its plan to reduce net GHG emissions by at least 55% by 2030, and the European Commission will come forward with a proposal to enhance and review the EU ETS by June 2021.

While there is no agreement yet on the updated 2030 target, which is expected to be decided upon by the European Council in December 2020, or how the EU ETS will be reviewed, two scenarios⁴⁷ from the EC's impact assessment have been used in this paper to estimate the impact of a higher target on the size of the funding mechanisms. In the 'REG', 'MIX' and 'C Price' scenarios, a GHG reduction target of -65% compared to 2005 levels is shown for stationary installations in the ETS's current scope.

The figure below shows the impact of these two scenarios. We estimate that a higher 2030 target for the EU ETS, in combination with the UK leaving the EU ETS, would decrease the cumulative amount of allowances available by 20,1% in phase 4. If a one-off 'rebasement of the cap' by 250mt CO₂ in 2026 is introduced, it would reduce the cumulative availability of allowances by an additional 2.2%.

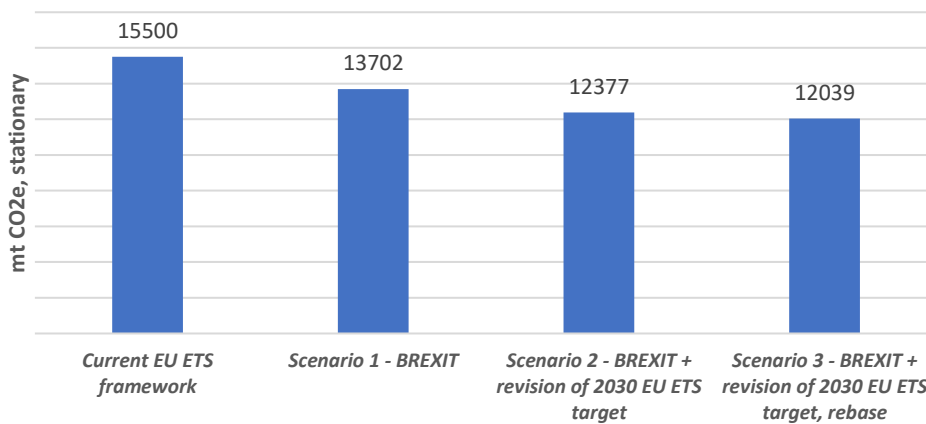
⁴⁴ Because the size of these three funding mechanisms is relative to the total amount of allowances available in phase 4. This is not the case for the Innovation Fund, for which a defined absolute quantity of allowances is available.

⁴⁵ by removing the UK's emissions from the EU ETS 2005 baseline emissions and applying the same reductions to the EU27 portion of the cap in order to still achieve the 2030 climate target as set out by the 2014 Council Conclusions – see <https://ember-climate.org/wp-content/uploads/2017/05/Brexit-and-EUETS-Final-Report.pdf>

⁴⁶ <https://www.icis.com/explore/resources/news/2019/06/21/10381731/power-sector-derogation-modernisation-fund-likely-to-grow>

⁴⁷ Both scenarios have an increased GHG reduction target of 64.85% compared to 2005 by 2030, with a new linear reduction factor (LRF) starting in 2026. The second scenario includes a one-off 'rebasement of the cap' of 250mt CO₂e in 2026, which is included as an option under consideration in the impact assessment.

Figure 3. Cumulative amount of allowances available in phase 4 of the EU ETS under the current framework and in three scenarios



Source: Own calculations⁴⁸ based on the EU ETS Directive and EEA data.

More details regarding the estimated amount of allowances available in the 10 CEE Member States for Auctioning, the Solidarity Provision, Article 10c Derogation and the Modernisation Fund under the current framework and in these three scenarios can be found in Annex III.

Conclusions

The size of the funding mechanisms is becoming an important element in the negotiations for the updated 2030 climate target. The EU will need to demonstrate its support for the low-income Member States in reducing their GHG emissions and adapting to climate change.

To facilitate a transition to a climate-friendly economy, there is a need to deliver actions which will contribute to a green recovery from the current COVID-19 crisis. Reducing GHG emissions to at least 55% by 2030, if agreed upon, will require significant additional investments, and revenues generated by the EU ETS can play an important role in meeting these investment needs.

This has raised the question whether the ETS funding mechanisms should be expanded in order to help meet the investment needs in CEE Member States. Some CEE countries are putting forward their views and proposals: The Czech Republic had already suggested to increase the share of allowances allocated to the Modernisation Fund from the current 2% to 4%, while Hungary proposed an increase to 6%⁴⁹.

In addition, Poland recently presented a non-paper to the Environment Council, in which it argued to increase the size of the Modernisation Fund, establish a new 'energy solidarity fund' financed through EU ETS allowances, as well as update the baseline period used to calculate the division of allowances to be auctioned by Member States.

It is clear that Brexit and the anticipated increase of the 2030 target will lower the quantity of allowances available in the ETS funding mechanisms as shown in Annex III. However, it is difficult to assess the net

⁴⁸ Figures are rounded to the nearest tenth.

⁴⁹ <https://carbon-pulse.com/113796/>

impact this will have in terms of the monetary value of the funding mechanisms, as this depends on both the quantity of allowances available, as well as the carbon price.

In the ‘REG-scenario’ in the Commission’s Impact Assessment, EUA prices do not increase compared to the baseline scenario, which would result in a decrease of the funding mechanism’s net monetary value.⁵⁰ In contrast, many carbon market analysts expect prices to rise substantially over phase 4 following an increase of the 2030 target.⁵¹

What is more certain, is that investments will have to increase substantially in order to deliver the additional GHG reductions needed to reach a higher 2030 target. As shown by the EC’s impact assessment, an estimated €102 billions of additional annual energy system investments (excluding transport) are required in the REG scenario compared to the reference scenario.

The next crucial moment to follow is a potential compromise regarding the 2030 GHG emissions reduction targets between Member States during the European Council on 10-11 December 2020, and the upcoming review of the EU ETS Directive.

Table 4. Overview of allowances available through the Solidarity Provision, Article 10c Derogation and the Modernisation Fund, before and after the use of the flexibility mechanism.

Member State	Solidarity provision		Article 10 c derogation		Modernization Fund	
	Amount of allowances before use of flexibility mechanism (in millions)	Amount of allowances after use of flexibility mechanism (in millions)	Amount of allowances that can be used through the Derogation, base case ⁵² (in millions)	Amount of allowances that Member States decided to use through the Derogation (in millions)	Amount of allowances, base case (in millions)	Amount of allowances after use of flexibility mechanism by Member States (in millions)
Bulgaria	68,7	68,7	51,9	51,9	18,1	18,1
Croatia	11,7	11,7	18	0	9,7	9,7
Cyprus	3,5	3,5	n/a	n/a	n/a	n/a
Czech Republic	86,8	43,4	112,2	0	48,3	203,9
Estonia	18,5	18,5	17,7	0	8,6	8,6
Greece	40,1	40,1	n/a	n/a	n/a	n/a
Hungary	24,3	24,3	34,8	34,8	22,1	22,1
Latvia	5,3	5,3	3,8	0	4,5	4,5
Lithuania	10	10	8,8	0	8	16,7
Malta	1,5	1,5	n/a	n/a	n/a	n/a
Poland	267,6	267,6	275	0	134,6	134,6

⁵⁰ The expected carbon price does increase in the Impact Assessment in other policy scenarios where more emphasis is put on the role of carbon pricing in driving emission reductions. In these scenarios, the scope of the EU ETS is also extended to other sectors, which would increase the cumulative amount of allowances available in the system. As this development would raise many additional questions (e.g. will there be a transition period before these sectors are introduced, will they have access to a separate pool of allowances similar to is the case for aviation and has been proposed for maritime shipping, etc), we have limited this analysis to the REG-scenario for simplicity reasons.

⁵¹ <https://carbon-pulse.com/109931/>

⁵² The base case is the hypothetical situation where each eligible Member State makes use of Article 10c Derogation up to the limit of 40% of the allowances it can auction.

Portugal	19,3	19,3	n/a	n/a	n/a	n/a
Romania	122,0	61,0	92,3	4,2	37,1	186,3
Slovakia	34,2	32,2	33,5	0	19	54,5
Slovenia	5,9	5,9	n/a	n/a	n/a	n/a
Spain	79,0	79,0	n/a	n/a	n/a	n/a
Total	798,5	683,3	648	91	310	659

Source: own calculations⁵³ based on the EU ETS Directive and EEA data

⁵³ Figures are rounded to the nearest tenth.

ANNEX I - Overview of Funding Mechanisms

Table 5. Overview of the main elements for each of the 4 Funding Mechanisms

	Eligibility	Size	Investment Areas	% of costs that can be covered	Investment selection	Governance
Solidarity Provision	16 Member States (2013 GDP per capita <90% of the Union average)	798,5m EUAs (10% of total quantity of allowances to be auctioned)	/	/	/	Member State
Innovation Fund	27 Member States, Iceland and Norway	450m EUAs	Focus on the following areas (can differ between calls for proposals): <ul style="list-style-type: none"> • Low-Carbon technologies and processes in energy-intensive industry, including product substitution <ul style="list-style-type: none"> • Carbon capture and utilisation (CCU) • Construction and operation of carbon capture and storage (CCS) <ul style="list-style-type: none"> • Renewable energy generation • Energy Storage 	Up to 60%	EU-wide Call for proposals	European Commission
Article 10c Derogation	10 Member States (2013 GDP per capita <60% of the Union average)	648m EUAs (Up to 40% of each Member State's EUAs to be auctioned)	Investments in electricity generating installations covered by EU ETS, in particular for: <ul style="list-style-type: none"> • Retrofitting and upgrading infrastructure; <ul style="list-style-type: none"> • Clean technologies; • Diversifying their energy mix and sources of supply 	Up to 70%	National competitive bidding process (not necessary for small-scale projects)	Member State (EC approves process)
Modernisation Fund	10 Member States (2013 GDP per capita <60% of the Union average)	798,5m EUAs (2% of total quantity of EUAs)	Priority areas (renewables, energy efficiency, electricity transmission grids, interconnections and Just Transition) Non-priority areas 'consistent with 2030 framework and Paris Agreement'	Priority up to 100% Non-priority up to 70%	Selected by Member State approved by the EIB and the Investment Committee	Mixed



ANNEX II - Overview of Member States

Bulgaria

Use of allowances during Phase 4 (2021-2030) of the EU ETS

Bulgaria decided to continue using Article 10c Derogation during Phase 4, and will not make use of the flexibility mechanism.

	<i>Amount of allowances, base case⁵⁴ (in millions)</i>	<i>Amount of allowances after use of flexibility mechanism (in millions)</i>
Auctioning	77,9	77,9
Solidarity Auctioning	68,7	68,7
Article 10c Derogation	52	52
Modernisation Fund	18,1	18,1

Source: own calculations based on the EU ETS Directive and information obtained from Member States. Figures are rounded to the nearest tenth.

Article 10c derogation

Unused allowances from Phase 3

At the time of writing, 11,7m EUAs have remained unused for Article 10c Derogation, out of which 9,5m were auctioned by 2018. Bulgaria has indicated that it will auction any remaining allowances.

Use of Article 10c Derogation in Phase 4

Bulgaria will continue to make use of Article 10c Derogation during Phase 4. Initially, the government intended to both submit a list for small scale projects, as well as to organise a competitive bidding process to select larger projects.

However, after a call for small scale projects, the government received several hundred requests for funding, equal to 80% of expected total Article 10c budget. Given that high interest, Hungary decided not to use a list for small-scale projects, but 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.

The first call for large-scale projects took place in the first half of 2020, but a decision on which projects will be financed has not yet been made. The first call for small-scale projects is expected to take place in the first half of 2021.

⁵⁴ The 'base case' assumes that Article 10c is used up to 40% of the amount of EUAs to be auctioned by the Member State. The figures presented in this table do not take into account the functioning of the MSR, the use of the CSCF buffer or Brexit.



Modernisation Fund

As the Ministry of Energy is still in the preparatory phase, no decisions have been made at the time of writing about the eligibility, selection process or timeframe of the Modernisation Fund, and they were unable to share any preliminary information.

Croatia

Use of allowances during Phase 4 (2021-2030) of the EU ETS

Croatia has decided to not make use of Article 10c Derogation during Phase 4, and will not make use of the flexibility mechanism.

	<i>Amount of allowances, base case (in millions)</i>	<i>Amount of allowances after use of flexibility mechanism (in millions)</i>
Auctioning	27	45
Solidarity Auctioning	11,7	11,7
Article 10c Derogation	18	0
Modernisation Fund	9,7	9,7

Source: own calculations based on the EU ETS Directive and information obtained from Member States. Figures are rounded to the nearest tenth.

Article 10c derogation

Unused allowances from Phase 3

As Croatia only joined the EU mid-2013, it was not eligible to use Article 10c Derogation during Phase 3, and has thus no unused allowances left over.

Use of Article 10c Derogation in Phase 4

Croatia decided not to make use of Article 10c Derogation during Phase 4. As Croatia imports over 1/3rd of the electricity that is consumed and has a relatively low-carbon domestic electricity production, the Ministry did not consider Article 10c Derogation as an effective tool.

Especially the phase-out obligation and the administrative costs associated with operating two funds simultaneously were conclusive factors in this decision.

Modernisation Fund

The recently formed Ministry of Economy and Sustainable Development is responsible for the Modernisation Fund. The Environmental Protection and Energy Efficiency Fund, which finances projects and activities in the areas of environmental protection, energy efficiency, and the use of renewables, will likely be the implementing agency.

At the time of writing, no formal decision has been made regarding the operationalisation, selection process or timeframe of the Modernisation Fund. While a decision at ministerial level is expected to be made in the first half of 2021, it is expected that the fund will both be used to finance projects as well as multi-year programs.

Croatia plans to submit an 'indicative lists of planned investments for the following two years' to the EIB by 30 November 2020, based on previously carried-out market research.



Czech Republic

Use of allowances during Phase 4 (2021-2030) of the EU ETS

The Czech Republic decided not to make use of Article 10c Derogation during Phase 4. It used the flexibility mechanism to increase the size of the Modernisation Fund with 100% of the Article 10c Derogation allowances, and 50% of the allowances from the Solidarity provision.

	<i>Amount of allowances, base case (in millions)</i>	<i>Amount of allowances after use of flexibility mechanism (in millions)</i>
Auctioning	168,3	168,3
Solidarity Provision	86,8	43,4
Article 10c Derogation	112,2	0
Modernisation Fund	48,3	203,9

Source: own calculations based on the EU ETS Directive and information obtained from Member States. Figures are rounded to the nearest tenth.

Article 10c derogation

Unused allowances from Phase 3

At the time of writing, 0,4m EUAs have remained unused for Article 10c Derogation, out of which 0,3m were auctioned by 2018. The Czech Republic has indicated that it will auction any remaining allowance.

Use of Article 10c Derogation in Phase 4

The Czech Republic decided not to make use of Article 10c Derogation during Phase 4. Czechia decided to pool all allowances in the Modernisation Fund in order to reduce the overall administrative burden, allow for a wider financing scope and avoid the need to decommission existing capacity through the phase-out obligation.

Modernisation Fund

The Czech Republic has already set up a governance process for the Modernisation Fund, consisting of a 'steering group', a committee and a stakeholder platform. The Ministry of Environment, Ministry of Industry, Ministry of Finance and the State Environmental Fund are the key players.

A Structural Reform Support Service (SRSS) project has been ongoing since December 2019, and has provided recommendations to the Czech Republic on the potential programmes to be set up under the Modernisation Fund.

While a formal decision regarding the eligibility, selection process and timeframe for the modernisation fund is still to be made later this year, it is expected that 9 programmes will be set up in the following areas:

1. Project in the heat sector – e.g. fuel change or reconstruction of networks;
2. Renewables & accumulation of energy projects;
3. Emission reduction and energy efficiency in installations covered by the EU ETS;
4. Energy efficiency in industry;



5. Clean mobility in the private sector;
6. Clean mobility in the public sector;
7. Energy efficiency improvements in public buildings;
8. Community energy projects;
9. Public lightning investments.

The Czech Republic is planning to submit an 'indicative lists of planned investments for the following two years' to the EIB by 30 November 2020, based on market research by the SSRS consultants and information obtained from stakeholders.

The first call for proposals is expected to be held in the first quarter of 2021, with a September 2021 deadline. It is expected that the first investment proposals will be submitted to the EIB and Investment Committee in the spring of 2022.



Estonia

Use of allowances during Phase 4 (2021-2030) of the EU ETS

Estonia decided not to make use of Article 10c Derogation during Phase 4, and will not make use of the flexibility mechanism.

	<i>Amount of allowances, base case (in millions)</i>	<i>Amount of allowances after use of flexibility mechanism (in millions)</i>
Auctioning	26,6m	44,3m
Solidarity Auctioning	18,5m	18,5m
Article 10c Derogation	17,7m	0
Modernisation Fund	8,6m	8,6m

Source: own calculations based on the EU ETS Directive and information obtained from Member States. Figures are rounded to the nearest tenth.

Article 10c derogation

Unused allowances from phase 3

About 2,8m EUAs have remained unused for Article 10c Derogation. Estonia has already auctioned all of these unused allowances.

Use of Article 10c Derogation in Phase 4

Estonia decided not to make use of Article 10c Derogation during Phase 4.

The Ministry of Environment preferred rather to fully utilize the auctioning revenues for financing projects and measures that could best help them achieve their energy and climate goals.

Modernisation Fund

The Estonian government is currently discussing a proposed framework for the eligibility, selection process and timeframe. However, at the time of writing, a final decision has not been taken.

The government plans to publish a list with targeted investment areas by the end of 2020.

The Estonian industry has proposed their own list of project areas that should, according to them, be eligible to receive financing including:

- pump hydro projects;
- offshore wind projects;
- biomass projects;
- electro-mobility projects;
- utilisation of gases produced from shale oil extraction; and
- electricity data hubs.



Hungary

Use of allowances during Phase 4 (2021-2030) of the EU ETS

Hungary decided to continue using Article 10c Derogation during Phase 4, and will not make use of the flexibility mechanism.

	<i>Amount of allowances, base case (in millions)</i>	<i>Amount of allowances after use of flexibility mechanism (in millions)</i>
Auctioning	52,3	52,3
Solidarity Auctioning	24,3	24,3
Article 10c Derogation	34,8	34,8
Modernisation Fund	22,1	22,1

Source: own calculations based on the EU ETS Directive and information obtained from Member States. Figures are rounded to the nearest tenth.

Article 10c derogation

Unused allowances from Phase 3

Hungary only made use of Article 10c derogation in 2013 and, at the time of writing, 0,9m allowances remain unused. Hungary has indicated that it will auction any remaining allowances.

Use of Article 10c Derogation in Phase 4

Hungary will continue to make use of Article 10c Derogation during Phase 4, as it appreciates the simplicity in using the derogation to finance projects.

A draft national framework for the Article 10c competitive bidding process was finalised in June 2019, and subsequently published for public consultation. The European Commission's approval is still pending.

If approved, Hungary plans to organise one call for proposals in 2021. The competitive bidding process will both be used for small-scale and large-scale projects.

Modernisation Fund

A national framework for the Modernisation Fund has been set up, and a call for proposals has been published which will inform the governments' submission of an 'indicative lists of planned investments for the following two years' to the EIB, due by 30 November 2020.

Investments in 5 areas are eligible to receive funding through the Modernisation Fund:

1. Flexibility of energy system (for example in the area of energy storage);
2. Development of electricity grids;
3. Residential sector (small investments in energy storage, energy community, smart metering);
4. District heating;
5. Energy efficiency projects in the building sector.



Latvia

Allocation of allowances in Phase 4 (2021-2030)

Latvia decided not to make use of Article 10c Derogation during Phase 4, and will not make use of the flexibility mechanism.

	<i>Amount of allowances, base case (in millions)</i>	<i>Amount of allowances after use of flexibility mechanism (in millions)</i>
Auctioning	5,7	9,6
Solidarity Provision	5,3	5,3
Article 10c Derogation	3,8	0
Modernisation Fund	4,5	4,5

Source: own calculations based on the EU ETS Directive and information obtained from Member States. Figures are rounded to the nearest tenth.

Article 10c derogation

Unused allowances from Phase 3

Latvia did not make use of Article 10c during Phase 3, and has thus no unused allowances left over.

Use of Article 10c Derogation in Phase 4

Latvia decided not to make use of Article 10c Derogation during Phase 4.

Latvia's auctioning revenues are already earmarked to finance climate change projects via an existing fund i.e the Emission Allowances Auctioning Instrument (EAAI). As such, making use of Article 10c Derogation would reduce the auctioning revenues flowing to the EAAI, and would thus not result in an increase in climate finance but only increase the overall administrative burden, argues the government.

Moreover, the EAAI can be used to finance a wider range of climate measures. Indeed, since the power production capacity in Latvia already has a relatively low carbon-content, it is expected that the impact of using Article 10c derogation in terms of CO₂ reduction would be limited.

Modernisation Fund

At the time of writing, negotiations regarding the operationalisation, selection process and timeframe of the Modernisation Fund are still ongoing between the Cabinet of Ministers and ministries. While a decision is not expected to be taken before November 2020, Latvia will likely make use of the Modernisation Fund through a multi-annual scheme.



Lithuania

Allocation of allowances in Phase 4 (2021-2030)

Lithuania decided not to make use of Article 10c Derogation during Phase 4. It used the flexibility mechanism to increase the size of the Modernisation Fund with 100% of the Article 10c Derogation allowances, and any unused allowance from the use of Article 10c Derogation during Phase 3.

	<i>Amount of allowances, base case (in millions)</i>	<i>Amount of allowances after use of flexibility mechanism (in millions)</i>
Auctioning	13,1	13,1
Solidarity Auctioning	10	10
Article 10c Derogation	8,8	0
Modernisation Fund	8	16,9

Source: own calculations based on the EU ETS Directive and information obtained from Member States. Figures are rounded to the nearest tenth.

Article 10c derogation

Unused allowances from Phase 3

At the time of writing, 1,3m EUAs have remained unused for Article 10c Derogation, out of which 1,1m were auctioned by 2018. Lithuania has indicated that it will transfer any remaining unused allowances to the Modernisation Fund.

Use of Article 10c Derogation in Phase 4

Lithuania decided not to make use of Article 10c Derogation during Phase 4.

Lithuania has a mixed track record of using the Article 10c Derogation, as many foreseen projects failed to get implemented, leaving about 50% of the initially foreseen allowances unused. Lithuania also wants to avoid an increase in the unnecessary administrative burden from operating two funding mechanisms.

Modernisation Fund

Discussions on the eligibility, selection process and timeframe for the Modernisation Fund are still ongoing in Lithuania. A commission, comprising of multiple Ministries, has been set up, and will be responsible for selecting investments.



Poland

Use of allowances during Phase 4 (2021-2030) of the EU ETS

Poland decided to not make use of Article 10c Derogation during Phase 4, and will not make use of the flexibility mechanism.

	<i>Amount of allowances, base case (in millions)</i>	<i>Amount of allowances after use of flexibility mechanism (in millions)</i>
Auctioning	412,6	687,6
Solidarity Auctioning	267,6	267,6
Article 10c Derogation	275	0
Modernisation Fund	134,6	134,6

Source: own calculations based on the EU ETS Directive and information obtained from Member States. Figures are rounded to the nearest tenth.

Article 10c derogation

Unused allowances from Phase 3

At the time of writing, 0,4m EUAs have remained unused for Article 10c Derogation, out of which 55,8m were auctioned in 2019, and another 49,52m allowances are being auctioned this year. Poland has indicated that it will auction any remaining allowance.

Use of Article 10c Derogation in Phase 4

Poland decided not to make use of Article 10c Derogation during Phase 4. The Polish government deems the process to complicated, and the general terms of use unfavourable (i.e. the phase-out obligation and the fact that allocation of allowances can only be done after the project has been completed).

Poland decided not to move the Article 10c allowances to the Modernisation Fund, but to establish a separate national fund for the modernisation of the energy sector using the auctioning revenues from these 275m allowances. More details about the national fund will be provided in the first half of 2021.

Modernisation Fund

The National Fund for Environmental Protection and Water Management will be responsible for selecting investments under the Modernization Fund. Investments will mainly be devoted to prosumer, e-mobility and small-scale projects. Large projects will be rather not eligible for financing through the Modernisation Fund.

A draft act concerning the regarding the eligibility, selection process and timeframe for the Modernisation Fund has been drafted but has not yet been submitted to the Polish Parliament. Projects will likely be financed both through subsidies and repayable loans.

Poland is still in the process of setting up a list of eligible projects, and companies still have the opportunity to submit project proposals at the time of writing. These proposals will inform Poland's 'indicative list of planned investments for the following two years, to be submitted to the EIB by 30 November 2020.



Romania

Use of allowances during Phase 4 (2021-2030) of the EU ETS

Romania decided to continue using Article 10c Derogation during Phase 4. It used the flexibility mechanism to increase the size of the Modernisation Fund with the remaining allowances of the Article 10c Derogation, and 50% of the allowances from the Solidarity Provision.

	<i>Amount of allowances, base case (in millions)</i>	<i>Amount of allowances after use of flexibility mechanism (in millions)</i>
Auctioning	138,4	138,4
Solidarity Provision	122	61
Article 10c Derogation	92,3	4,2
Modernisation Fund	37,1	186,3

Source: own calculations based on the EU ETS Directive and information obtained from Member States. Figures are rounded to the nearest tenth.

Article 10c derogation

Unused allowances from Phase 3

At the time of writing, 19m EUAs have remained unused for Article 10c Derogation, out of which 15,4m were auctioned by 2018. Romania has indicated that it will auction any remaining allowances.

Use of Article 10c Derogation in Phase 4

Romania decided to continue making use of Article 10c Derogation during Phase 4, but only for small-scale projects. In June 2019, a list of 14 projects totaling €114 million was submitted to the European Commission.

Modernisation Fund

The Ministry of Economy, Energy and the Business Environment is responsible for the implementation of the Modernisation Fund. At the time of writing, no decision has been made yet regarding the operationalisation, selection process or timeframe in Romania.

Over the summer, the ministry has commissioned a study, which is to carry out a market analysis to identify potential eligible projects and suggest an implementation framework, including a selection process.

Moreover, a call for project proposal was launched by the ministry earlier this year with an October 16 deadline. Responses to the call for proposals will inform the Ministry's 'indicative list of planned investments for the following two years', to be submitted to the EIB by 30 November 2020.

Slovakia

Use of allowances during Phase 4 (2021-2030) of the EU ETS

Slovakia decided not to make use of Article 10c Derogation during Phase 4. It used the flexibility mechanism to increase the size of the Modernisation Fund with 100% of the Article 10c Derogation allowances, and 5.85% of the allowances from the Solidarity provision.

	<i>Amount of allowances, base case (in millions)</i>	<i>Amount of allowances after use of flexibility mechanism (in millions)</i>
Auctioning	50,2	50,2
Solidarity Auctioning	34,2	32,2
Article 10c Derogation	33,5	0
Modernisation Fund	37,1	54,5

Source: own calculations based on the EU ETS Directive, EEA data and information obtained from Member States. Figures are rounded to the nearest tenth.

Article 10c derogation

Unused allowances from Phase 3

Slovakia was not eligible for Article 10c derogation during the current phase, and has thus no unused allowances.

Use of Article 10c Derogation in Phase 4

Slovakia decided not to make use of Article 10c Derogation during Phase 4 and to pool all allowances in the Modernisation Fund.

Based on consultations with stakeholders and experts, Slovakia concluded that the Modernisation Fund would allow for more flexibility in terms of which projects can be eligible and how much funding they can receive, i.e. they stressed the importance of having the possibility to finance up to 100% of the relevant costs for ‘priority investments’.

Modernisation Fund

The recently adopted Emissions Trading Act included some provisions regarding the implementation of the Modernisation Fund. A Committee was established, consisting of representatives of the Environment and Economy Ministries, which is responsible for selecting investments.

A first evaluation of the selection criteria was supposed to be carried out by the end of October 2020. Slovakia expects that 2/3rd of the Modernisation Fund will be used to finance investments in the area of electricity and heat production.

ANNEX III

Table 6. Estimated amount of allowances available for Auctioning, the Solidarity Provision, Article 10c Derogation and the Modernisation Fund under the current framework and in three scenarios

Member State	Purpose	Scenario			
		Current EU ETS framework ⁵⁵ (in millions)	Scenario 1 ⁵⁶ (in millions)	Scenario 2 ⁵⁷ (in millions)	Scenario 3 ⁵⁸ (in millions)
Bulgaria	Auctioning	77,9	68,8	62,1	60,4
	Solidarity Provision	68,7	60,7	54,7	53,2
	Article 10c Derogation	51,9	45,9	41,4	40,2
	Modernisation Fund	18,1	16	14,5	14,1
Croatia	Auctioning	45,0	39,8	35,9	34,9
	Solidarity Provision	11,7	10,3	9,3	9,1
	Article 10c Derogation	0	0	0	0
	Modernisation Fund	9,7	8,6	7,8	7,6
Czech Republic	Auctioning	168,3	148,6	134,1	130,4
	Solidarity Provision	43,4	38,3	34,6	33,6
	Article 10c Derogation	0	0	0	0
	Modernisation Fund	203,9	180,1	162,6	158,1
Estonia	Auctioning	44,3	39,1	35,3	34,3
	Solidarity Provision	18,5	16,4	14,8	14,4
	Article 10c Derogation	0	0	0	0
	Modernisation Fund	8,6	7,6	6,9	6,7
Hungary	Auctioning	52,3	46,1	41,6	40,5

⁵⁵ After use of flexibility mechanism by Member States

⁵⁶ BREXIT

⁵⁷ BREXIT + revision of 2030 EU ETS target

⁵⁸ BREXIT + revision of 2030 EU ETS target, including one-off rebasing of the cap by 250mt CO₂ in 2026

	<i>Solidarity Provision</i>	24,3	21,5	19,4	18,9
	<i>Article 10c Derogation</i>	34,8	30,8	27,8	27
	<i>Modernisation Fund</i>	22,1	19,5	17,6	17,1
Latvia	<i>Auctioning</i>	9,6	8,4	7,6	7,4
	<i>Solidarity Provision</i>	5,3	4,7	4,3	4,1
	<i>Article 10c Derogation</i>	0	0	0	0
	<i>Modernisation Fund</i>	4,5	4	3,6	3,5
Lithuania	<i>Auctioning</i>	13,1	11,6	10,5	10,2
	<i>Solidarity Provision</i>	10	8,9	8	7,8
	<i>Article 10c Derogation</i>	0	0	0	0
	<i>Modernisation Fund</i>	16,7	14,8	13,3	13
Poland	<i>Auctioning</i>	687,6	607,1	547,8	532,6
	<i>Solidarity Provision</i>	267,6	236,3	213,2	207,3
	<i>Article 10c Derogation</i>	0	0	0	0
	<i>Modernisation Fund</i>	134,6	119	107,5	104,5
Romania	<i>Auctioning</i>	138,4	122,2	110,3	107,2
	<i>Solidarity Provision</i>	61,0	53,9	48,6	47,3
	<i>Article 10c Derogation</i>	4,2	4,2	4,2	4,2
	<i>Modernisation Fund</i>	186,3	164	147,6	143,4
Slovakia	<i>Auctioning</i>	50,2	44,3	40	38,9
	<i>Solidarity Provision</i>	32,2	28,4	25,7	25
	<i>Article 10c Derogation</i>	0	0	0	0
	<i>Modernisation Fund</i>	54,5	48,1	43,4	42,2

Source: Own calculations⁵⁹ based on the EU ETS Directive, EEA data and information obtained from Member States

⁵⁹ Figures are rounded to the nearest tenth.



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