

## Climate Action Regulation 2.0 –

EU Framework for Making Non-ETS Sectors Climate Neutral

A decorative graphic on the left side of the page consisting of several overlapping triangles in shades of grey and blue, pointing towards the right.

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## Key Messages

Legally binding reduction targets for Member States under the Climate Action Regulation (CAR aka Effort Sharing Regulation) have been a key driver for reducing greenhouse gas emissions, both at national and EU level. They should continue after 2030. But to achieve the EU's new 2030 climate target and climate neutrality by 2050, significantly higher targets and a considerably stronger compliance system are necessary. Such reforms of the CAR are possible with the necessary political will and full commitment to the EU's new climate targets.

Extending emission trading (ETS) to road transport and buildings is another idea for reforming the CAR. Depending on its exact designs, an extension of emission trading promises in principle important benefits: considerable certainty of meeting reduction targets, revenue generation, and increased economic incentives to reduce emissions. A stringent cap in line with EU climate targets is a prerequisite for delivering these promises. Because the EU can adopt rules on energy taxation only by unanimity, extension of emission trading is probably the only viable way to introduce meaningful carbon prices at EU level for road transport and buildings.

Extending the ETS, however, involves important risks. Extension of the ETS is a complex and time consuming process, and unlikely to be operational before the mid-2020s. If the discussion on ETS extension drags on too long, this can delay climate action at a time when the EU is committed to scale up its mitigation efforts drastically. Another risk is that extending the ETS could result in the weakening or even abandonment of the current system of legally binding reduction targets for Member States – a bedrock of EU climate policies. An extended ETS could also weaken the existing EU ETS.

To address these risks, the question of whether and how to extend ETS must be settled quickly. Extending the ETS should only be considered if it were to become a strong additional driver to decarbonize road transport and buildings through a stringent cap and sufficient carbon prices. Regardless of the designs of an extended ETS, legally binding targets for Member States will remain an important safety net. As carbon prices alone are incapable of driving necessary emission reductions, an extended ETS would be only one component of a broader policy mix that encompasses, for example, strengthened standards.

## Summary

The Climate Action Regulation (CAR aka Effort Sharing Regulation) regulates about 57 % of the EU's greenhouse gas emissions. Consequently, the EU cannot achieve climate neutrality and its new 2030 climate target without major contributions from the sectors currently regulated by the CAR. This makes reforming the CAR one of the EU's most important legislative processes in 2021. For achieving EU climate targets, it is a **dealmaker or deal breaker**. There are various ideas about how to turn the CAR into a strong driver for achieving the EU's climate neutrality target by 2050. Ideas range from largely continuing the current system to almost completely replacing it by an extended emission trading scheme (ETS).

### Extending emission trading to sectors covered by the CAR

Extending the ETS to road transport and buildings is one of the most consequential CAR reform ideas. There are **many ideas about how to extend the emission trading to CAR sectors**. Ideas include, for example, extending the existing EU ETS to road transport and buildings sectors (with or without continued regulation by the CAR), establishing a new ETS for road transport and buildings or require Member States to establish a national carbon pricing system for road transport and buildings.

In theory, it is possible to turn emission trading into a strong driver for making the CAR sectors climate neutral, but it is equally conceivable that doing so would undermine these efforts. Although the Commission's impact assessment has made the discussion more concrete, **the exact impact of ETS extension will remain uncertain** until legislative details are on the table.

Regardless of these uncertainties, there are a **number of important risks** that will to be addressed in any design of an extended ETS:

- **ETS extension has many implications for climate policies, risking delays:** ETS extension is one of the most fundamental design questions of EU climate policies, and answers to it have implications across EU climate policies. The extension of ETS is a challenging, time-consuming and politically sensitive process, and its implementation is complex. It is very likely that extending ETS to road transport and buildings will not be operational before the mid-2020s – which is the crucial period for achieving the EU's new 2030 and 2050 targets. This involves important risks. If the discussion on ETS extension drags on, it could cause significant delay in all policy fields relevant for EU climate action. For this reason, the question of how to extend ETS must be settled quickly.
- **Carbon prices are probably low:** Extending carbon pricing to new sectors is intended to strengthen economic incentives to reduce emissions. Experience of existing ETS systems covering transport and buildings, however, shows that carbon price sensitivity in the buildings and transport sector is relatively low, hence prices either cannot overcome all barriers or might need to be very high to achieve the desired outcome. In the case of Germany, for example, a carbon price of 65 € per ton are expected to increase the price of one liter of petrol by only 13 ct. Such low prices alone are incapable of driving necessary reductions and investments.
- **Member State responsibility and accountability may be weakened?** An extended ETS would probably apply primarily to companies, and not to countries. In turn, holding Member States to account could become more difficult. This is a risk because Member States could delay necessary policies and measures if they are no longer obliged to meet legally binding targets. This risk would be particularly pressing when an extended

ETS is not yet fully operational or remains weak. For these reasons, legally binding targets for Member States will remain an important safety net, regardless of the designs of an extended ETS.

- **Discrediting climate policies as being potentially socially unfair:** Heating and fuels costs make up a larger share of poor households' expenses. In consequence, extending ETS to road transport and buildings could disproportionately burden poorer households. This is not only unfair but also politically problematic because it can be used to discredit climate policies. Energy prices are an important political issue in poorer Member States. Effectively, only Member States can cushion the financial impact but they have very different capacities to compensate poor households.
- **Undermining the existing EU ETS:** Abatement costs in road transport and buildings are significantly higher than in the energy sector. In consequence, a uniform carbon price could shift abatement incentives from road transport and buildings to energy, undermining the decarbonization of the transport and building sectors. At the same time, carbon prices sufficient to incentivize required reductions in the road transport and building sectors could be a major challenge for energy intensive industries.

**Acceptance of these risks is a political decision** – which would require that the potential benefits of ETS extension would outweigh the risks. Potential benefits of an extended ETS include increased economic and more harmonised incentives to reduce emissions, revenue generation and considerable certainty of meeting reduction targets. To deliver these benefits, an extended ETS needs to comply with the following.

- **Hard cap:** It is essential that an extended ETS builds on a hard and stringent cap that is in line with the EU emission reduction targets and trajectories, consistent with an EU emission budget representing the EU's fair share in remaining global emissions. Without such a cap, the achievement of the EU's reduction targets is at risk. It is important that the cap is set based at least in part on scientific advice from independent institutions, while remaining a political decision set by democratic processes.
- **Adequate carbon price:** Although carbon pricing alone will not drive required reductions, it is essential that the extended ETS delivers carbon prices that are sufficient to help keep emission below the cap, and that are adequate to incentivize required investments.
- **Revenues:** An extended ETS would generate additional revenues. This requires that allowances are auctioned and not allocated for free. Free allocation is a safeguard for sectors at a significant risk of carbon leakage, which is not the case for buildings and road transport. Revenues should be earmarked to support achieving climate neutrality and addressing some of the regressive effects of carbon pricing.

### **Continuing the current architecture – which reforms can deliver climate neutrality?**

Similar to discussions on extending ETS, there are various ideas about how to reform the CAR. Depending on the exact design, a reformed CAR may become a strong driver for climate neutrality or a weak tool. Assuming the current CAR continues in principle, there are four crucial areas of reforms:

- **Targets:** The new CAR should include a legally binding reduction target for 2030 and 2050 and for the sectors covered. Targets should commit the EU and Member States. These targets will have to correspond to the increased overall EU targets, as enshrined in the European Climate Law.

- **Emission budget:** The Effort Sharing Decision (ESD) and the CAR establish emission budgets for each Member State and combined for the EU as whole – until 2030. While providing this important function, the current system has two problems: (1) it runs only until 2030, not 2050, and (2) it does not specify in transparent manner the overall amount of permissible emissions. To address these problems, the new CAR should establish a process to define the overall amount of permissible emissions until 2050, i.e. an emission budget for the EU, Member States and sectors covered.
- **Flexibilities:** The flexibilities of borrowing and banking should be maintained in principle. Transferring and trading of AEAs should be further enhanced and the participation of the private sector should be encouraged. Meanwhile, ETS and LULUCF flexibility plus the so-called safety reserve should be discontinued.
- **Compliance:** The CAR has a fairly robust compliance system but to support required reductions this system needs strengthening. There are at least three options to strengthen compliance. First, learning from ETS compliance system, the new CAR could provide for an excess emissions penalty for non-compliant Member States. Second, the Commission could be mandated to propose suspension of EU funding (such as regional and structural funds) if a Member State is not in compliance. Third, under the specific compliance rules of the CAR, the compliance check for 2021-2025 will occur only in 2027 and be finally resolved only in late 2028. This is too late for corrective action until 2030. For this reason, the Commission should conduct the compliance check already in 2023.

## Content

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<b>1</b>	<b>Introduction.....</b>	<b>9</b>
<b>2</b>	<b>What has the Effort Sharing Decision achieved?.....</b>	<b>10</b>
<b>3</b>	<b>Is the Climate Action Regulation fit to deliver reductions of 55% or 60%?.....</b>	<b>11</b>
<b>4</b>	<b>Is ETS extension the right strategy for supporting climate neutrality? .....</b>	<b>12</b>
	<b>4.1 Risks of extending ETS.....</b>	<b>13</b>
	<b>4.2 Criteria for extending emission trading to new sectors.....</b>	<b>16</b>
<b>5</b>	<b>What reforms are necessary to make the Climate Action Regulation an effective tool for climate neutrality? .....</b>	<b>18</b>
	<b>5.1 Targets .....</b>	<b>18</b>
	<b>5.2 Emission budget.....</b>	<b>19</b>
	<b>5.3 Distribution of targets and / or emission budget to Member States.....</b>	<b>20</b>
	<b>5.4 What are the right flexibilities to support climate neutrality cost-effectively? .....</b>	<b>20</b>
	<b>5.5 Compliance.....</b>	<b>22</b>
<b>6</b>	<b>References .....</b>	<b>23</b>

# 1 Introduction

The EU has agreed to become climate neutral by 2050. It is also set to increase its current 2030 emission reduction target from 40 % to probably 55% or 60 % (compared with 1990 levels).<sup>1</sup> These targets will be legally binding once the European Climate Law is adopted, probably in early 2021. Even with the full implementation of current policies, the **EU will not achieve any of these targets**. By 2030, current policies are expected to lead to a reduction of around 45%;<sup>2</sup> and of around 60% by 2050<sup>3</sup> (compared to 1990 levels).

To fill these gaps, the EU will reform its climate and energy rules. Reforms will include, among others, amendments to the EU Emissions Trading System (EU ETS), possibly leading to its extension to new sectors, such as road transport, buildings and shipping. Reforms will also encompass the Climate Action Regulation (CAR aka Effort Sharing Regulation). Covering about 57 % of EU greenhouse gas emissions, the reform of the CAR is an indispensable element for making EU climate policies fit for achieving its 2030 and 2050 targets. The Commission has announced that it will table legislative proposals to this end in summer 2021. The European Council stated it would discuss the future of the CAR in spring 2021.<sup>4</sup> Given the complexity of these legislative files, it is likely that reforms will be adopted in late 2022 at the earliest, entering into force not before early 2023.

This paper discusses how a reformed CAR can support the EU and Member States to meet the new climate targets for 2030 and 2050: Which reforms can turn the CAR or a successor instrument into a powerful driver to make the sectors outside the ETS climate neutral within the next 30 years? To answer this question, the paper reviews briefly the achievements of the Effort Sharing Decision (ESD), the predecessor of the CAR (chapter 3). Chapter four discusses to what extent the CAR is capable of achieving its targets. Then chapter five briefly discusses whether emission trading should be extended to road transport and buildings, outlining the risks of extending the ETS and its requirements. Chapter six presents ideas for CAR reform, based on the assumption that the CAR continues in principle.

## **Reform criteria: Maintaining and strengthening the effectiveness of EU climate policy**

As its most important function, the new system needs to be a key driver to achieve the EU's new 2030 target, its 2050 climate neutrality target and to help the EU to stay within remaining emission budgets compatible with the Paris Agreement.

To serve this function, the new system needs to

- be a potent driver for adequate national and EU policies,
- strengthen Member State responsibility and accountability through building a stronger monitoring and compliance system,
- help ensure cost effectiveness in the short and long term for businesses and economies through flexibilities, while avoiding loopholes;
- facilitate coordination between Member States.

<sup>1</sup> In its conclusion of 11 December 2020, the European Council endorsed "a binding EU target of a *net* domestic reduction of at least 55% in greenhouse gas emissions". The position of the European Parliament on the European Climate Law called for gross 2030 reduction target of - 60 % (compared to 1990 levels).

<sup>2</sup> Communication from the Commission: Stepping up Europe's 2030 climate ambition, COM(2020) 562 final

<sup>3</sup> Impact Assessment, accompanying: Stepping up Europe's 2030 climate ambition SWD(2020) 176 final, p. 10

<sup>4</sup> European Council meeting (10 and 11 December 2020) – Conclusions, para. 19

## 2 What has the Effort Sharing Decision achieved?

The **Effort Sharing Decision (ESD)** – adopted in 2009 – sets legally binding 2020 reduction targets for all Member States and for all sectors outside the ETS. Based on Member States' GDP per capita and adjustments for cost-effectiveness, national emission targets range from reductions of 20% (from 2005 levels) for the richest Member States to a 20% increase for the poorest Member States. In total, the ESD requires the EU to reduce non-ETS emissions by 10%. In addition, the ESD establishes a compliance system, and flexibilities to support achievement of targets. It also sets non-ETS emission budgets for Member States and – indirectly – for the EU.<sup>5</sup>

In this manner, **the ESD provides a roof for EU greenhouse gas emission reductions outside the ETS.** According to the logic of this system, the implementation of the ESD targets rests on action by Member States. The system is complemented by EU sectoral legislation, such as CO<sub>2</sub> standards for cars or energy performance standards for buildings. These sectoral rules set an additional framework for Member State action. The ESD itself is not a vehicle for directly implementing emission reductions.

This regulatory **framework serves various crucial regulatory functions and achieved the following:**

- **Emission reductions:** In 2018, emission from covered sectors in the EU-27 were 10 % below 2005 levels. Emission levels during the period 2015-2019 remained above 2014 levels, largely because of increased emissions in road transport.<sup>6</sup> In 2018, seventeen Member States had emissions levels at or below their respective annual targets.<sup>7</sup>
- **Holding Member States accountable for pursuing climate policies:** With its legally binding targets for every single Member State, the ESD established a robust system to hold Member States' governments to account for their mitigation efforts. Commitments under the ESD contributed to stimulating national policies and measures without putting significant administrative burden on Member States.<sup>8</sup> For a number of Member States, there were no or only weak domestic policies in place before the ESD was adopted. This suggests that without the ESD the actions may not have been taken, or may have been taken at a slower pace.<sup>9</sup> Because of its reporting requirements, the ESD improved the quality of the emissions data and projections. The ESD also a driver for more stringent EU measures.
- **Flexibilities and cooperation among Member States:** The ESD provided for a number of options for flexibility to support Member States in achieving targets, some of them designed to facilitate cooperation between Member States.
- **Compliance:** In addition to infringement procedures, the ESD contains a specific compliance system, including corrective action and a compliance check.
- **No distortion of internal market:** According the Commission, national policies implementing the ESD have not unduly distorted competition in the EU internal market.<sup>10</sup>

<sup>5</sup> To this end, it entitles the Commission to determine Member States' annual emission allocations for the period from 2013 to 2020, i.e. the Commission allocates amounts of eligible emissions to Member States in tonnes of carbon dioxide equivalent.

<sup>6</sup> European Environment Agency, Trends and Projections, 2020.

<sup>7</sup> European Environment Agency Trends and projections, 2019

<sup>8</sup> Ricardo Energy & Environment: Evaluation of Decision No 406/2009/EC (Effort Sharing Decision), 2016

<sup>9</sup> Ricardo Energy & Environment: Evaluation of Decision No 406/2009/EC (Effort Sharing Decision), 2016

<sup>10</sup> Compliance ESD

However, while these achievements are significant, the **ESD did not achieve other objectives**:

- **Emission reductions were not at the required scale and pace:** As its most critical shortcoming, the ESD's overall reduction target of 10 % by 2020 (compared to 2005 levels) did not represent a sufficient contribution to decarbonizing the EU at the required scale. The lack of ambition has postponed reductions, which will require higher reductions later.
- **Consensus among Member States on coordinated and common EU climate action:** During the negotiations leading up to the adoption of the ESD, allocation of national targets was the most contested issue. Reflecting the framing of “*effort sharing*”, Member States were primarily concerned about their own reduction requirements in the short term, and less about the overall reductions needed in the EU in the long term. To this extent, the ESD did not create a sense of common responsibility for the EU as whole. The ESD was portrayed and often perceived as something external and imposed by EU.
- **Clarity for investors about the long-term direction of policy travel at national level was lacking:** The ESD targets were short term and provided no clarity about what level, if any, of climate action would be required in the post 2020 period. This denied investors clarity about the long-term direction for policy and distorted calculations concerning the cost and value of early and ambitious action.
- **Lack of transparency about admissible emission volumes:** Although the ESD builds on national targets, linear reduction paths and quantified emission allocations, it was incapable of effectively communicating to policymakers and the public the overall amounts of eligible of EU emissions in the sectors covered (see below).
- **Compliance system appears weak:** Although not tested, the ESD compliance system – consisting of corrective action, a correction factor of 1,08 and infringement procedures – has not been seen as a strong driver for compliance.

### 3 Is the Climate Action Regulation fit to deliver reductions of 55% or 60%?

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Adopted in 2018, the Climate Action Regulation (CAR) is the ESD's successor. It covers the period 2021 - 2030. The **CAR continues the overall framework of the ESD** – in particular the allocation formula for target distribution and compliance system –, **but includes a few important changes**.

- **Higher targets:** The CAR establishes a higher reduction target for the EU and Member States of minus 30 % by 2030 (compared to 2005 levels). While under the ESD poorer Member States were allowed to increase their emissions to specific limit, the CAR allows no Member States to increase emissions. CAR reduction requirements range from 0 % to 40 % in 2030.
- **Additional flexibilities:** The CAR also establishes new flexibilities for target achievement – new ETS and LULUCF flexibilities plus a so-called safety reserve – but ends the flexibility option of using international offsets for compliance.

**Member State projections** indicate that emissions covered by the CAR will decrease by around 19 % (compared to 2005 levels) if existing and adopted policies and measures are implemented, i.e. well below the current reduction target of – 30 %. However, reductions would amount to - 32 % if additional policies and measures are included, as outlined in the National Energy Climate Plans (NECPs).<sup>11</sup> In addition, at least six Member States – Sweden, Luxembourg, Finland, Denmark, Spain, Portugal – have adopted national targets that would place their non-ETS sector emissions reductions close EU-wide GHG target of -55 %.<sup>12</sup>

Even in the best-case scenario, **projected emission reductions under the current CAR would constitute a clearly insufficient contribution to a new EU reduction target of 55 %**, if reduction requirements are distributed proportionally between the ETS and the non-ETS sectors. According to *Agora Energiewende*, for example, emission reductions of 55 % would entail that the target for CAR emissions is 47 % below the base level of 2005 (central scenario).<sup>13</sup> The Commission expects that national 2030 targets would have to be increased on average of 10 to 11 percentage points if the current policy framework were to continue, while required to help achieve the increased 2030 target.<sup>14</sup> In addition to its insufficient level of ambition, the **CAR has not addressed the other ESD gaps** discussed above.

## 4 Is ETS extension the right strategy for supporting climate neutrality?

Extending the ETS to new sectors is potentially the **single most consequential proposal for reforming the CAR**. There are many ideas about how to extend the ETS to sectors currently covered by the CAR. In its 2030 impact assessment, the Commission, for example, explored the following options (in broad terms with various sub-options):

- (1) Road transport and buildings sectors would be included in the existing EU ETS and would no longer be regulated by the CAR,
- (2) Road transport and buildings sectors would be covered by the ETS but the CAR continues to regulate them,
- (3) Road transport and buildings sectors would not be covered by the EU ETS but by a new and separate ETS at EU level, or
- (4) Member States would be required to establish a national carbon pricing system for road transport and buildings sectors, which could include a national ETS.

The **Commission sees important benefits** in expanding emissions trading. It believes that extending ETS would increase the likelihood of achieving new climate targets and would help to deliver them in an “economically efficient manner”.<sup>15</sup> Other stakeholders share the Commission’s views without specifying ETS extension in regulatory detail, while others disagree.<sup>16</sup>

<sup>11</sup> European Commission, EU climate action progress report, November 2020, [https://ec.europa.eu/clima/sites/clima/files/strategies/progress/docs/com\\_2020\\_777\\_en.pdf](https://ec.europa.eu/clima/sites/clima/files/strategies/progress/docs/com_2020_777_en.pdf)

<sup>12</sup> Öko-Institut and Agora Energiewende (2020): How to Raise Europe’s Climate Ambitions for 2030: Implementing a -55% Target in EU Policy Architecture

<sup>13</sup> Agora Energiewende, for additional ranges, depending on ETS and CAR scope: [https://www.transportenvironment.org/sites/te/files/publications/2020\\_02\\_TE\\_EGD\\_vision\\_How\\_EU\\_transport\\_can\\_contribute\\_minus\\_55.pdf](https://www.transportenvironment.org/sites/te/files/publications/2020_02_TE_EGD_vision_How_EU_transport_can_contribute_minus_55.pdf) page 31

<sup>14</sup> European Commission: Stepping up Europe’s 2030 climate ambition, Investing in a climate-neutral future for the benefit of our people, Impact Assessment, 17.9.2020, SWD(2020) 176 final, p. 101

<sup>15</sup> European Commission: Stepping up Europe’s 2030 climate ambition, Investing in a climate-neutral future for the benefit of our people, Communication, 17.9.2020, COM(2020) 562 final, p. 15

<sup>16</sup> Letter from various NGOs to the Commission President: <https://www.transportenvironment.org/sites/te/files/publications/Joint%20letter%20on%20road-building%20ETS%20-%20December%202019%20%281%29.pdf>

In theory, it is **possible to design an ETS** for the CAR sectors that would be a strong driver for making the CAR sectors climate neutral within the next 30 years. But it is equally possible that weak designs undermine these efforts. It is also a possibility that extending ETS may lead to the discontinuation of the CAR, and the abandonment of the current system of national accountability through legally binding reduction targets.

Although the Commission's impact assessment has made the discussion more concrete, the **debate lacks relevant regulatory details**. This is understandable but also a problem. A fully informed discussion of the implications of extending ETS is only possible if regulatory proposals are spelled out in detail. As ETS extension can take many different forms and the devil is in the details, the debate will struggle with uncertainties until legislative proposals are on the table. The Commission is currently conducting public consultation and is preparing an impact assessment for its legislative proposal that could include extended ETS.

Regardless of these uncertainties, there are a number of **risks** involved in any extension of ETS, as discussed in the next subchapter (5.1.). Making the political decision to accept these risks would require that the potential benefits would outweigh them. This would be the case if extending ETS to new sectors meets the **criteria** discussed in the subchapter 5.2.

## 4.1 Risks of extending ETS

Extending the ETS to road transport and buildings involves the **following risks**, regardless of how the extension is designed:

- **Extending ETS is a big political investment with many implications for climate policies:** Extending the ETS is one of the most fundamental questions for designing EU climate policies, and the solutions proposed will have implications across EU climate policy. It is a challenging, time-consuming and politically sensitive process, and its implementation will be complex, making a start before 2025 unlikely. This involves significant risks. If the discussion drags on, there will be significant delays in all policy fields relevant for EU climate action. In one way or another, most legislative initiatives under the Green Deal relevant for climate action will be impacted by ETS extension. For these reasons, the question of ETS extension needs to be settled quickly. There is also the risk that extending ETS will become a pretext for a deliberate slowdown of EU climate policies.
- **Carbon pricing incentives are probably too low:** Extending ETS is intended to strengthen economic incentives to reduce emissions through carbon pricing. Experience of existing ETS systems covering road transport and buildings, however, shows that ETS prices can be high, while fuel costs increases remain low. In New Zealand, for example, a carbon price of 60 Euro per ton added only 3 cents, or 2.5%, to the pump price. Germany expects that its fixed carbon price of 25 – 65 Euros per ton would increase petrol prices by 6 ct and 13 ct per liter respectively. Expected increases in gas prices would result in a mere 0,5 ct / kwh and 1 ct / kwh.<sup>17</sup> Such price increases are unlikely to incentivise required investments. Concerning Germany, estimates assume that carbon prices of around 46 € for 2021 and around 120 € for 2030 are required to stay within the cap, which is nearly twice as much as currently set out by the German system.<sup>18</sup> In addition, price incentives of the ETS are limited due to large diversity of

<sup>17</sup>[https://www.dehst.de/SharedDocs/downloads/EN/nehs/nehs-backgroundpaper.pdf?jsessionid=AFD5EDF7BB2BF6ACC197510B88916B5B.1\\_cid292?\\_\\_blob=publicationFile&v=2](https://www.dehst.de/SharedDocs/downloads/EN/nehs/nehs-backgroundpaper.pdf?jsessionid=AFD5EDF7BB2BF6ACC197510B88916B5B.1_cid292?__blob=publicationFile&v=2)

<sup>18</sup> Edenhofer, O. et al: Bewertung des Klimapakets und nächste Schritte, 2019, p. 5

national fuel tax systems.<sup>19</sup> Against this background, the Commission points to “ample evidence that at least in the short term price sensitivity in the buildings and transport sector is relatively low”.<sup>20</sup>

- **Member State responsibility and accountability could be blurred.** An extended ETS would probably apply primarily to companies, and not to countries. In turn, holding Member States to account could become more difficult. Although the ETS has shown that emission reductions are possible without legally binding reduction targets for Member States, this is a risk because Member States could delay necessary policies and measures if they are no longer obliged to meet legally binding targets. This risk would be particularly pressing when an extended ETS is not yet fully operational or remains weak.

In this context, it is noteworthy that price signals are most effective if companies and consumers have alternatives, which often become available only through regulatory action by Member States. It should also be noted that reductions in the ETS sectors were not driven by the ETS Directive alone but also by national targets under the Renewable Energy Directive and the Energy Efficiency Directive. For these reasons, legally binding targets for Member States will remain an important safety net, regardless of the designs of an extended ETS.

- **Combining upstream, downstream systems and national carbon pricing schemes is challenging:** For practical reasons, extending ETS to transport and buildings is bound to be an upstream system. Combining up and downstream systems is complicated, and may lead to double counting or omitting CO<sub>2</sub> emissions. This is further complicated by the fact that transport and – to a much lesser extent – buildings are subject to various forms of energy taxation. These regulatory overlaps can require complex account settlements. The complexity of the pertaining rules of the German ETS in fuels illustrates these challenges (see text box below).
- **Possibly disproportional impacts on poorer households:** Compared to wealthier households, heating and fuels costs make up for a larger share of poor households’ expenditures. In consequence, extending ETS to road transport and buildings could disproportionately burden poorer households. This is not only unjust but also politically problematic because it may discredit EU climate policies as socially unfair, elitist and detached from people’s daily concerns.

Member States can cushion the financial impact but they have fewer possibilities to compensate poor households. Policies to cushion financial consequences can also have different environmental impacts. Switzerland uses ETS revenues to support reducing emissions from buildings and replenishing the Technology Fund.<sup>21</sup> In the case of Germany’s fuel ETS, for example, it is possible that commuters may even be over-compensated, creating perverse incentives to drive more. It should also be noted that cushioning cost impacts is a particular challenge in the building sector because – by and large – the building stock in poorer Member States requires higher investments than buildings in richer Member States. At the same time, revenues generated by the new system can be used to address this imbalance – possibly at the expense of investments.

<sup>19</sup> European Commission: Stepping up Europe’s 2030 climate ambition, Investing in a climate-neutral future for the benefit of our people, Impact Assessment, 17.9.2020, SWD(2020) 176 final, p 103

<sup>20</sup> European Commission: Stepping up Europe’s 2030 climate ambition, Investing in a climate-neutral future for the benefit of our people, Impact Assessment, 17.9.2020, SWD(2020) 176 final, p. 103

<sup>21</sup> EDF: Switzerland: AN Emission Trading Case Study, [https://www.ieta.org/resources/Resources/Case\\_Studies\\_Worlds\\_Carbon\\_Markets/switzerland\\_case\\_study\\_may2015.pdf](https://www.ieta.org/resources/Resources/Case_Studies_Worlds_Carbon_Markets/switzerland_case_study_may2015.pdf)

- **Shrinking space for the right policy mix?** It is largely uncontested that carbon prices alone would not be sufficient to reduce road transport and building emissions at the required speed and scale. In its impact assessment, the Commission clearly stated that a policy mix consisting of carbon pricing and regulation remains necessary.<sup>22</sup> At the same time, however, certain groups might argue that a carbon price makes other regulation like CO<sub>2</sub> standards for cars redundant. This risk remains, but the following arguments address it. First, even the EU ETS is not a stand-alone instrument decarbonizing the sectors covered but is accompanied by other instruments, such as IED, RED or EED. Second, as the share of fossil fuels in the energy mix shrinks and more low carbon technologies become cheaper, the importance of the ETS and carbon pricing is likely to decrease.
- **Politics won't go away:** Some Member States already have difficulties in fulfilling current emission reduction targets for 2030. This makes negotiating even stricter obligations difficult, leading almost certainly to delays or even deadlock. Extending the ETS to road transport and buildings could offer a way out because an extended ETS would probably not require a commitment by countries, but rather by companies. However, tempting this may seem, redesigning commitment will not cause the underlining interests and implications of higher reduction requirements to disappear. As shown by years of ETS negotiations, Member States will be exposed to pressure by those groups committed by the new system, many of whom are well-organized and politically powerful. In other words, achieving higher reduction targets require primarily the necessary political will, regardless of regulatory designs.
- **Abandoning the established system under the CAR?** Adopted in 2009, national reduction targets in the sectors outside the ETS are an established and tested pillar of EU climate policies. Building on this system, the new CAR could support achieving increased targets without developing new regulatory structures. Extending ETS, in contrast, would mark a fundamental shift in the EU climate framework, requiring the establishment of new regulatory structures. Regulated entities would be obliged to obtain and surrender allowances, and to establish monitoring, reporting and verification systems. Public authorities would ensure compliance. Making this regulatory structure operational will take time, risking delay in other areas.
- **Undermining the existing EU ETS?** Although the EU ETS directly or indirectly covers around 30% of buildings emissions from heating, abatement costs in road transport and buildings are significantly higher than in the energy sector. In consequence, a uniform carbon price could shift abatement incentives from road transport and buildings to energy and industry, undermining the decarbonization of the road transport and building sectors. At the same time, carbon prices sufficient to incentivize required reductions in the road transport and building sectors would be a major challenge for the emissions intensive industry.<sup>23</sup> Finally, building heating and road transport services do not effectively constitute a single market across Member States, and end-user prices in these sectors are politically sensitive, in particular in poorer Member States. For these reasons, simply extending the existing EU ETS to road transport and buildings seems too risky.

<sup>22</sup> European Commission: Stepping up Europe's 2030 climate ambition, Investing in a climate-neutral future for the benefit of our people, Communication, 17.9.2020, COM(2020) 562 final, p. 13

<sup>23</sup> Umweltbundesamt: Raising the EU 2030 GHG Emission Reduction Target, Implications for ETS and non ETS sectoral targets, 2020, <https://www.umweltbundesamt.de/en/publikationen/raising-the-eu-2030-ghg-emission-reduction-target>

### National reduction targets in the European Climate Law

Extension of the ETS to road transport and buildings would probably mean that primarily companies and the consumers they serve would be affected by the new system, not Member States. In turn, holding Member States to account could become more difficult, which could weaken EU climate policies and action at national level significantly. To address this problem, the European Climate Law could feature legally binding targets for Member States – not only for meeting sector-specific reduction targets but economy-wide targets.

This would be the case if the position of the European Parliament on the ECL becomes law. In this case, Member States would be subject to a legally binding climate neutrality target for 2050 but – importantly – not to any interim target. However, if the position of the Commission or the Council were to be adopted, Member State accountability beyond 2030 would be discontinued because neither institution calls for legally binding Member State targets, only for collective EU targets.

If the Council and Commission's position were to become law, it should be understood that the new CAR remains the only vehicle which could maintain the system of legally binding national targets – and responsibilities.

## 4.2 Requirements for extending emission trading to new sectors

The EU ETS has become effective tool for emission reductions. Emissions from stationary sources declined by 33% between 2005 and 2018, and emissions dropped further by almost 9% in 2019.<sup>24</sup> In addition, compliance with the EU ETS is very high. Each year around 99% of the emissions are covered by the required number of allowances in a timely manner. In 2018, less than 0.5% of the installations reporting emissions failed to surrender the required allowances on time.<sup>25</sup> At least at first sight, this makes for a strong case to expand the ETS to other areas. However, the ETS became effective for emission reductions only after a number of significant reforms, notably the tightening the linear reduction factor and the introduction and strengthening of the Market Stability Reserve (MSR).

In theory, it is **possible to design an ETS** for the CAR sectors that would be effective for making the CAR sectors climate neutral within the next 30 years. To this end, it will have to take account of the following requirements:

- **Adequate cap set with support from independent institutions:** It is essential that any cap on fuel emissions is derived from an economy-wide emission reduction target in line with the requirement to make the EU climate neutral, and within an emission budget that represents the EU's fair share in remaining global emissions (see below). According to a recent UBA study, the cap would have to be aligned with a sectoral reduction target in the range of 37 % (reductions of 55 %) up to 52 % (reductions of 60 %) – compared to 2005 levels. Clearly defining mitigation responsibilities, an extended ETS should determine which companies fall under the cap. The cap needs to be reduced over time.

<sup>24</sup> Communication from the Commission: Stepping up Europe's 2030 climate ambition, COM(2020) 562 final

<sup>25</sup> [https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52019DC0557R\(01\)&from=EN](https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52019DC0557R(01)&from=EN)

Despite the crucial importance of the cap for the integrity of the ETS, it should be stressed that the ETS is not the only possible vehicle that introduces emission caps and budgets. Like the ETS, the CAR also operates with emission budgets or a cap. This cap is different from the ETS cap as it applies to Member States only but – in principle – it also introduces a cap system.

- **Cap setting with support from independent institutions:** To align the cap with science, it is important that setting a cap is based partly on scientific advice from independent institutions, while remaining a political decision within democratic processes.
- **Strong compliance:** ETS compliance is very high but the system does not guarantee the automatic achievement of the targets. Non-compliance is possible, and it should be noted that even with additional measures, emission reductions will amount to only 41% in 2030, missing by a small margin the 43 % reduction target.<sup>26</sup> Regardless of the caveat, ETS's enforcement mechanisms are strong because they apply directly to the entities causing the emissions. In the CAR, in contrast, the compliance obligation is on Member States (see below). This is not a strong argument for ETS extension because it is possible to levy penalties, possibly similar to the ETS fining system, on Member States as well (see below).
- **Ensure revenue generation:** An extended ETS should generate additional revenues. This requires that allowances – at least in large parts – are auctioned and not allocated for free. According to a recent study, a scheme based on auctioning could generate up to € 179 bn per year if about 70 % of 2018 ESD emissions were covered and the carbon price were between € 50 and € 100.<sup>27</sup> Revenues should be earmarked to support achieving climate neutrality and addressing the regressive effect of carbon pricing on low income households
- **Support trading:** The EU ETS is a functioning and established market with thousands of participants. Annual Emissions Allocations (AEA) trading under the ESD, in contrast, has been very limited – only Member States participate. It is also obscure because trading takes place behind closed doors. With a few exceptions, Member States have not transferred AEAs among each other. If they did, transfers were based on bilateral agreements, the contents of which are confidential. If AEA market participants remain exclusively Member States it is unlikely that the current structure would be capable of establishing liquid AEA markets. In consequence, it is very likely that only extension of ETS would be capable of creating liquid AEA markets.
- **Creating a level playing field for carbon pricing:** The Commission argues that extending ETS to buildings would provide a level playing field in “terms of carbon pricing of domestic fossil-fueled heating systems with district heating and electric heating already now covered by the ETS”. The Commission also argues that “covering road transport emissions fully by the current ETS would provide a level playing field in terms of carbon pricing of fossil-fueled road transport and rail with electric vehicles and electrified rail”. In principle this is possible but only if other schemes of carbon pricing – notably taxes on fuels – cease to impact fuel prices. This is unlikely to happen, weakening the prospect of a creating level playing field for pricing fuels in the EU.

<sup>26</sup> <https://www.eea.europa.eu/publications/the-eu-emissions-trading-system>

<sup>27</sup> Umweltbundesamt: Raising the EU 2030 GHG Emission Reduction Target, Implications for ETS and non ETS sectoral targets, 2020, <https://www.umweltbundesamt.de/en/publikationen/raising-the-eu-2030-ghg-emission-reduction-target>

### **Germany’s national fuel emissions trading system for transport and buildings**

Adopted in 2019, Germany’s national fuel emissions trading system for transport and buildings (Fuel Emissions Trading Act) will start in 2021. It covers emission from transport and buildings fuels such as petrol, diesel, heating oil, natural gas and coal that are not covered by the ETS. Subject to specific requirements, it also covers biofuels. Fuel deliveries to ETS facilities are exempt from the system. It will exist in parallel to the EU-ETS. Distributors that put fuels into circulation or suppliers of the fuels are obliged to participate in the system, about 4,000 companies (‘upstream’ emissions trading). Participating companies are obliged to buy certificates; no free allowances are allocated. It is the rationale of Germany’s system that the fuel distributors pass on the costs to customers, incentivizing them to reduce emissions.

The federal government sets a total emissions limit for transport and heating fuels in line with its annual total non-ETS targets. Emission allowances are transferable and can be traded. They will be auctioned but, during an initial phase allowances are sold to companies at a fixed price (2021: 25 euros per allowance, 2022: 30 euros, 2023: 35 euros, 2024: 45 euros, 2025: 55 euros, 2026 in auctions with a price corridor of 55 – 65 euros). If emissions budgets do not suffice, Germany may make use of the flexibility of the CAR, including buying emission allocations from other member states.<sup>28</sup> In other words, the cap is not fixed but flexible within the limits of the CAR.

## **5 What reforms are necessary to make the Climate Action Regulation an effective tool for climate neutrality?**

Assuming the current system under the CAR will continue in principle and is not fully replaced by extension of ETS, there are four areas of reforms that are particularly important to make the CAR fit for purpose: supporting the achievement of the EU’s climate neutrality in 2050 as well as its new 2030 climate target. These four areas include legally binding reduction targets, emission budgets, options for flexibility and compliance.

### **5.1 Targets**

Although not formally adopted yet, the European Climate Law is set to establish a legally binding climate neutrality target for the EU: by 2050, EU emission must be net zero. In all likelihood, the ECL will also include a legally binding climate target for 2030 and will establish a process for adopting a 2040 climate target.

Achieving these targets is the main function of CAR. To this end, the new CAR will have to include a legally binding reduction target for the sectors covered – for 2030 and 2050 as well 2040 once adopted. This new target will have to correspond to the increased overall EU targets. It would be illogical if the European Climate Law would contain an increased reduction target but the CAR would not reflect the corresponding level of ambition.

<sup>28</sup> DEHSt: Nationales Emissionshandelssystem Hintergrundpapier, 2020

## 5.2 Emission budget

The Commission allocates the **amount of AEAs in terms of tons of CO<sub>2</sub> equivalent** to Member States through an implementing act (Article 4.3 of the CAR). The Commission calculates the AEA amounts on the basis of Member State targets and the linear reduction path. In the case of the ESD, the reduction trajectory is a linear pathway from the average emission of 2008-2010 to the respective 2020 targets (Article 2.2). The CAR applies the same principle but the linear reduction path starts at the average emissions 2016 - 2018 and ends at the respective 2030 target (Article 4.2 and 4.3). Member States' emissions have to stay within the allocated AEA quantities – either by reducing their emissions according to the allocated AEAs or by applying the regulation's flexibilities (see below).

In this sense, the **ESD and the CAR establish emission budgets for each Member State and combined for the EU as whole – until 2030**. Setting emission budgets for Member States and – indirectly – for the EU is one of the CARs and ESDs most important functions. This budget system recognizes that cumulative amount of emissions over time and corresponding concentration of greenhouse gases in the atmosphere is what matters for the climate. Reduction targets only require specific reductions as of a certain point in time, but say nothing about the overall quantity of admissible emissions.

While providing this important regulatory function, none the less, the current system has **important problems that reforms need to address**:

- **EU emission budget is only set until 2030:** The EU only has emission budgets until 2030 – when the CAR ends – but not until 2050, when the EU intends to become climate neutral. This is an important shortcoming because the EU's fair contribution to global mitigation efforts remains unquantified and – in consequence – in the dark.
- **EU's existing emission budgets are obscure:** The EU emission budget is not derived from an ex-ante decision introducing a quantified EU emission budget but only from a calculation of reduction targets and trajectories. This makes the system unclear and only accessible to experts. Moreover, the various flexibilities in the ETS and the CAR obscure the EU's 2030 emission budget further. This is a major shortcoming because the lack of transparency hides the importance of total cumulative emissions and – crucially – the urgency for immediate action.
- **Safeguard flexibilities:** If the current CAR continues in principle, it is very likely that flexibilities will also stay. Emission budgets setting total amounts of permissible emissions are a good way to avoid that flexibilities undermine the integrity of the CAR.
- **EU reduction trajectory will probably be weaker in the future:** The EU's current emission budget derives implicitly from reduction targets and binding trajectories, either set by the ETS or the CAR. As it is unclear whether legally binding trajectories will continue after 2030 – Council and Parliament call for an indicative trajectory in the European Climate Law–, it might become more difficult to calculate the overall amount of eligible EU emissions until 2050. Indicative trajectories would weaken climate policies.

A clearly **quantified emission budget for the EU would solve these problems**. Possibly set by the Commission, this budget should represent EU's fair share of the remaining global emissions. The emission budget should guide EU climate policies, in particular for setting trajectories and targets.

### 5.3 Distribution of targets and / or emission budget to Member States

The 2020 and 2030 targets are distributed among Member States according to the relative wealth measured in the GDP per capita. Accordingly, the poorest countries are subject to the lowest targets, while the wealthiest have the highest reduction targets. **This distribution formula cannot continue for the following reasons:**

- **Changing per capita emissions:** In 2005, Member States with a GDP per capita below 60 % of the EU average had lower per capita emissions than the richer Western European nations. This is changing. By 2030, many poorer Member States could have higher per capita emissions than the EU average. For this reason, distributing the higher targets for Member States using the current spread of 40 percentage points between poorer and richer countries would undermine the achievement of the EU's 2050 climate target.
- **Shift to a climate neutrality target:** When the CAR was adopted, there was no specific endpoint for the EU's emission reduction efforts. With the adoption of the 2050 climate neutrality target, this has changed. As the EU's sink capacities are limited, all Member State will have to reach net zero emissions by around 2050. It is possible that some Member States reach climate neutrality before 2050 but this does not imply that other Member States could achieve climate neutrality well after 2050.

For these reasons, the **new distribution formula** should take into account decarbonization needs and potential, in addition to cost-effectiveness and economic capacity. It should narrow the spread of national targets to, for example, 30 percentage points.<sup>29</sup> According to this spread, e.g. Bulgaria's target would be 25 % below 2005 levels, while the target for richest two countries would be 55 %. Developing these targets should also take into consideration the financial support provided to the poorer Member States towards reaching their goals and the possibilities for using sinks to meet targets.

### 5.4 What are the right flexibilities to support climate neutrality cost-effectively?

ESD and CAR contain the **following flexibilities.**

Banking	Article 3.5	Member States may carry over unused AEAs of a specific year to any future year until 2020 - without limitations.
Borrowing	Article 3.3.	Member States may borrow from the following year a quantity of up to 5% of their AEAs.
Trading between Member States	Article. 3.4.	Member States may transfer up to 5% of their AEAs of a future year to other Member States. The receiving Member State may use this emission allocation any time until 2020.

<sup>29</sup> Öko-Institut and Agora Energiewende (2020): How to Raise Europe's Climate Ambitions for 2030: Implementing a -55% Target in EU Policy Architecture

Project-based mechanism with link to ETS Directive	Article 5.7	Member States may use credits from projects under Article 24a of Directive 2003/87/EC, “without any quantitative limit whatsoever”. This option is not operational and not used.
Surplus	Article 5.6	Member States may transfer the unused AEA to another Member State without quantitative limitations.
Use of JI/CDM	Article 5 (discontinued after 2020)	Member States may use JI/CDM credits to meet their respective targets. When using credits, project-based emission credits are capped on a yearly basis up to 3% of 2005 non-ETS emissions in Member States.
One-off ETS	Article 6, new under CAR	MS listed in Annex II may have a limited cancellation of up to a maximum of 100 million EU ETS allowances
LULUCF	Article 7, new under CAR	Additional use of up to 280 million net removals from LULUCF
Safety reserve	Article 11, new under CAR	Up to 105 million tonnes CO2 equivalent for poor MS

While maintaining existing borrowing and banking in principle, **the following changes should be considered** to enhance cooperation between Member States and to strengthen flexibilities, while closing loopholes:

- **AEA transfers between Member States:** AEA transfers are an important option to help Member States to meet their obligations but there are a number of problems that impede greater use of this type of flexibility. First, with increased targets, it is likely that demand will sharply increase around 2025-26. Currently, AEA transfers seems viable and important part of Member State mitigation strategies, but not for much longer as demand increases and supply decreases. Second, trading between Member States comes with high transaction costs, as there is essentially no price determination mechanism. Third, by the time potential buyer Member States would realize that they need to look for projects (e.g. around 2025), there would be almost no time left until 2030 to develop projects.

There are various options for addressing these problems. If there were an EU-level exchange where AEA offers and bids could be anonymously published, cumbersome bilateral negotiation process could be eliminated or at least reduced. A centralized auction mechanism, where some of the AEAs are set aside to be auctioned among Member States, is another option.<sup>30</sup>

- **ETS flexibility:** The CAR permits Member States listed in Annex II to cancel up to a maximum of 100 million of EU ETS allowances collectively taken into account for their compliance under this Regulation (Article 6). This system makes ETS volumes/prices

<sup>30</sup> Numerous ideas on enhancing AEA trading have been discussed in recent years, and it is not within the scope of this paper to discuss the issues in detail. For an overview: Meyer-Ohlendorf, Nils; Benjamin Görlach; Ennid Roberts 2016: EU Effort Sharing Decision after 2020: Auctioning of AEAs. Berlin.

more unpredictable, and its economic benefits are unclear. This complicates the CAR further, and should be reconsidered.

- **Deletion of LULUCF flexibility:** Subject to specific requirements, Article 7 of the CAR allows Member States to use a specific sum of net removals from the combined land accounting categories of afforested land, deforested land, managed cropland, managed grassland in order to comply with its reductions targets.

This flexibility should be deleted because removals are an inherently weaker way of climate protection than emission reductions. All removals, including removals from LULUCF, face challenges that reductions do not have. Removed and stored CO<sub>2</sub> can leak, while emissions reductions cannot. The monitoring and enforcement of CDRs is fundamentally more difficult than the monitoring and enforcing of emission reductions. The LULUCF flexibility treats removals and reductions alike – one removal unit equals one reduction unit – which not only compares apples and oranges but undermines the integrity of EU climate action.<sup>31</sup>

- **Deletion of safety reserve:** Article 11 of the CAR establishes a so-called safety reserves. Subject to specific requirements, poorer Member States may use this reserve if their emissions exceed their annual emission allocations in the period from 2026 to 2030. The safety reserve has a ceiling of up to a total of 105 Million tons, and is subject to the fulfilment of the EU's 30 % target for 2030. Although in principle this ceiling safeguards the integrity of the CAR and its targets, this flexibility should be deleted. Rather than permitting emissions from this reserve, non-compliant Member States should be (1) supported and (2) subject to the compliance measures set out in Article 9 (see next subchapter). The reserve also makes an already complex system more complicated.

## 5.5 Compliance

According to Article 9 of the CAR, the **Commission assesses whether Member States comply** with their obligations under the CAR. If the Commission finds that a Member State is not making sufficient progress towards meeting its obligations, this Member State shall submit to the Commission within three months a so-called corrective action plan. This plan must include (1) additional actions taken by the Member State to meet its obligations, and (2) a strict timetable for their implementation. The Commission evaluates the corrective action plans. The Member State “take utmost account” of the Commission’s evaluation and may revise its plan accordingly.

In addition to this annual compliance cycle, Article 9 of the CAR establishes a five-yearly compliance cycle, the so-called **compliance check in 2027 and 2032**. According to this compliance check, the reduction obligations of non-compliant Member States are multiplied by a factor of 1,08, and non-compliant Member States are prohibited from transferring AEAs to another Member State until it is in compliance. Alongside this specific compliance regime, infringement procedures, the EU’s general compliance system, will continue to apply. Infringement procedures can lead to imposing significant fines on Member States after proceedings before the European Court of Justice, which usually take years.

<sup>31</sup> To combined environmental integrity and incentives for removals, EU climate policies should establish clearly separated systems for reductions and removals – through separate targets and separate instruments, Meyer-Ohlendorf, Nils 2020: EU Framework for CO<sub>2</sub> Removals – Targets and Commitments. Berlin: Ecologic Institute.

Although hardly tested<sup>32</sup>, this is a robust system in principle but it **needs strengthening to support steep emission cuts** that are required to achieve climate neutrality within 30 years:

- **Learning from ETS compliance system:** The ETS has strong enforcement, scoring high on certainty to deliver the environmental outcome.<sup>33</sup> It provides for an excess emissions penalty of € 100 for each ton of CO<sub>2</sub> emitted for which no allowance has been surrendered when due. This fine is imposed on the non-compliant company by the relevant Member State authority. Furthermore, the shortfall in compliance is added to the target for the following year. The EU ETS Directive requires Member States to adopt “effective, proportionate and dissuasive” rules on penalties for breaches of the EU ETS Directive, including criminal or administrative penalties. Learning from this system, the reformed CAR could feature the imposition of similar fines directly on Member States in case of non-compliance.
- **Linking compliance with EU funding:** In addition, it is worth discussing the linkage of compliance with EU funding, including recovery, structural or regional funds. Member States could be suspended from receiving EU funding if they are not complying with their commitments. To this end, the Commission could be empowered to propose suspension from EU funding if a Member State is not in compliance to its reduction obligations. The Council could be empowered to validate the Commission’s proposal by a decision taken by qualified majority. Alternatively, the Commission could be entitled to take decision on suspending funding, which enters into force immediately unless the Council objects to this decision by qualified majority within a specific timeframe. There are other options for suspending or even cancelling EU funding but any of these options would have the benefit that financial impacts occur immediately, not only after court proceedings.
- **Checking compliance is too late:** Under the specific compliance rules of the CAR, only the compliance check involves a penalty – an obligation to increase emission reductions by a factor of 1,08. This is in contrast to the annual compliance cycle that involves a corrective action plan which implementation remains voluntary. However, the compliance for 2021-2025 will occur only in 2027 and only be finally resolved in late 2028. That leaves exactly no room for corrective action until 2030.<sup>34</sup>

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<sup>32</sup> For the years 2013-2015, all Member States complied with their ESD targets. 27 Member States did not exceed the allocated AEA; one Member State purchased allocations from another Member State to comply with the ECD. No Clean Development Mechanism or Joint Implementation credits have been used for compliance with the ESD

<sup>33</sup> Ia 2030, p. 101

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