



# Raising and strengthening EU climate ambition: Priorities and options for the next five years

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Assuming it is adopted, the EU will need to translate into action its new EU long-term strategy for a GHG neutral European economy in 2050. The Clean Energy Package (CEP) was an important step forward for EU climate policy, but the Commission's draft long-term strategy highlights the need for Europe to put in place the enabling conditions for deep and fundamental transformation of key emitting sectors of the economy.

Translating the EU's long-term strategy into action also means engaging more deeply with the different opportunities, challenges and conditions to unlock specific challenges faced by individual Member States or sub-national regions. A common European approach to decarbonisation and common legislative tools are of course needed. However, the EU must also work harder to integrate the diversity of national opportunities and challenges that stems from the unique circumstances of each Member State into a common vision of the pathways to GHG neutrality. In the short and medium term, the EU will also need to revise its NDC by 2020 and again, more fundamentally, by 2025. This is essential both for EU's own policies to be consistent with its 2050 goals. It is also essential to help maintain international momentum behind the Paris Agreement.

### **KEY MESSAGES**

The EU needs to develop a more "sector-strate-gy"-based policy framework to incentivise and enable deep and systemic changes in major emitting sectors to capital stock, infrastructure, business models, finance and consumer behaviour, consistent with the goal of GHG neutrality by 2050.

The EU's institutions will need to dialogue more with Member States to reveal these opportunities and challenges on the pathway to GHG neutrality. They will then need to identify ways for the EU to help Member States to unlock them.

In 2020, at a minimum the EU can formalise its implicit target of at least "-45%" reductions that flows from the CEP. In addition, the EU has an opportunity to adopt new commitments in terms of deepening the transformations of major emitting sectors, consistent with its soon to be adopted new Long Term Strategy to 2050. For the NDC revision in 2025, an even more systematic translation of the LTS into enabling conditions will need to be prepared as part of a broader review of the Clean Energy Package.

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#### 1. INTRODUCTION

With the adoption of the Clean Energy for All Europeans Package in early 2019, the European Union will have taken a significant step forward for EU climate policy. Together with the Clean Mobility Package, and forthcoming support from the next European Budget, the EU will be in a relatively strong position to implement its NDC commitments under the Paris Agreement of 2015. On 28 November 2018, the European Commission also presented its strategic long-term vision for a prosperous, modern, competitive and climate-neutral economy by 2050.

However, paradoxically, because of the rapidly evolving policy context, some of the most critical questions for the future of EU climate policy actually remain open, despite the massive efforts that went into preparing the Clean Energy Package. The next European Commission will need to address an evolving and challenging context for climate and energy policy. A few issues stand out:

- First, in the wake of the Paris Agreement—whose ambition far exceeded expectations when the Clean Energy Package was first drafted—the EU will need to grapple with the question of how to raise its climate ambition beyond what is contained in the Clean Energy Package. For instance, the EU will need to grapple with how to achieve GHG neutrality, and to pursue effort for reductions consistent with the goal of 1.5°C. This is a step change from the current -80% 2050 goal of its NDC. Leadership on the global stage by the European Union (EU), the world's largest economic bloc, is necessary for the Paris Agreement to play its role in coordinating global efforts to tackle climate change. The 5-yearly stocktake and revision cycles of the Agreement call for an EU signal to commit to a higher NDC as soon as by 2020 and again before 2025, for an effective revision to take place globally.
- Second, as the Commission's analysis accompanying its long-term GHG reduction strategy shows, aiming for climate neutrality by 2050 in Europe is a qualitatively different task to achieving -80% by 2050, as per the EU's 2015 NDC. Reaching a more ambitious long-term goal requires revisiting short-term ambition.

Third, in its long-term vision for a GHG neutral economy, the European Commission outlined a compelling case for the EU to aim for a net-zero GHG economy by 2050. By aiming for GHG neutrality, the EU as a whole stands to make its citizens more prosperous, more resource efficient, more energy secure, healthier, more innovative and competitive in industry, and more secure from the worst climate change impacts. Delivering this goal must therefore be a structurally essential part of the future of the European project post-Brexit.

However, while the Energy Union and Governance Regulation provides a number of technical hooks to tackle these challenges (such as revision dates for legislation, plans etc.), there is a broader question of what an optimal process would look like. This is new territory for the EU, which has tended to take a period of 3-5 years of intense negotiations to adopt decade-long packages of measures—how can it be more nimble while not diluting the overall level of collective ambition? Moroever, how can it avoid a technocratic approach to revising existing policies, so that it can integrate the broader economic, social and industrial policy implications of its new GHG neutrality vision?

The question of how the EU should determine and manage its climate ambitions relates to a broader debate about the future of Europe itself. The direction of the European project itself, as well as the approach of EU institutions towards it and their priorities, will be up for discussion at a summit in Sibiu (Romania) in May 2019. In the wake of Brexit, and with the rise of anti-European populism, there is a need to find ways to renew and strengthen the "buy-in" of Member States' citizens to the European project. It is difficult to see how this fundamental transformation of Europe's economic system can occur if it is not at the heart of a renewed European project in the wake of Brexit. The transition to GHG neutrality, because of how deeply it touches key parts of the economy, has the potential to either aggravate or help tackle existing problems that are a source of anti-European sentiment. So a key question becomes: how can the EU create prosperity, create a more equal and inclusive and decent society, provide better health and greater security for its citizens, and do

this not despite, but via its climate policy? This also means tackling another question: How can the vast differences between member states—in terms of their national priorities—be bridged while raising and implementing climate ambition?

Finally, the EU's new Strategic Long-Term vision for a climate neutral economy reveals that ambition cannot be raised effectively unless the sense of direction of the economy as a whole, and in individual sectors like transport, industry or agriculture is clear. In other words, short to medium term policy ambition must increasingly be based on insights and backcasting from credible long-term strategies to climate neutrality. Indeed, these insights from long term strategies will be needed to provide concrete and practical guidance for broader integration of climate policy into a renewed European project with an inclusive and just transition to decarbonisation at its heart.

Raising EU climate ambition is therefore not just a question of by how much the EU should reduce total emissions in 2030 or 2035. Rather, it is intimately tied to some more fundamental questions about the EU's general approach to climate policy. To be clear, this does not mean reopening old legislative debates on the EU governance regulation, but instead using the governance regulation and other EU governance tools to address these questions of ownership and shared vision.

Much will depend on the manner in which the new governance tools in the Energy Union Governance Regulation, are used in practice and linked together into a coherent approach to raising and managing European climate ambition.

This paper identifies three basic priorities:

- Adopting a targeted approach by overlaying the legislative acquis with a stronger focus on facilitating implementation in Member States, differentiating needs by specific groups of countries.
- Organising the discussion on the EU's aggregate ambition by placing a greater onus on Member States to own the process and determine their own economic transformation pathway instead of only reacting to the Commission's proposals.
- Improve the coherence between the short-term policies and the long-term vision by integrating a 'backcasting' approach into revisions to EU ambition and policy evaluation.

The remainder of this paper is structured as follows: section 2 details three outstanding issues that remain relevant for the EU's climate governance; section 3 suggests policy options in relation to each of these issues, before the final concluding section (section 4).

### 2. THREE STRATEGIC QUESTIONS FOR THE FUTURE OF EU CLIMATE POLICY

# 2.1. How should the EU's approach to climate policy evolve to reflect new opportunities and challenges facing the transition?

# 2.1.1. Climate mitigation must structure reflections on the future of the European economy

The Commission's November 28<sup>th</sup> Communication on a new Strategic long-term vision for a climate neutral economy outlined a compelling case for the EU to aim for a net-zero GHG economy by 2050. By aiming for GHG neutrality, the EU as a whole stands to make its citizens more prosperous, more resource efficient, more energy secure, healthier, more innovative and competitive in industry, and more secure from the worst climate change impacts. Delivering this goal must therefore be a structurally essential part of the future of the European project post-Brexit.

However, the pathway to this goal is challenging to implement. It requires major transformation of the European economy: energy production, transformation and distribution, transport, production of energy intensive industrial goods, energy consumption in buildings, agriculture, land use, waste management. This requires essentially a significant industrial mobilisation in these sectors.

Given the scale of the task, the EU will need to see climate policy not only as the role of one or two DGs, or certain legislative documents, but as a core priority across multiple Directorates of the Commission. For example, if the future vision of the EU economy is at stake, decarbonisation cannot be a third or fourth order priority of, e.g. the economy, industry or finance directors and council and parliamentary formations. There is thus a strong case that climate policy and thus DG Clima and DG Ener must be more integrated in helping to calibrate policy priorities in other areas, such as transport, industry, innovation, public spending and economic reform, allocation and prioritisation of EU funds, state aid, etc.

### 2.1.2. The EU as a facilitator of enhanced national action

The EU's leadership must not only make the case to its citizens and to national governments that this transition is in their interest, or that it is feasible in the abstract. It must also demonstrate that it is there to help Member States and their citizens implement and benefit from this change, mitigating negative impacts where they exist.

For a long time, the EU's institutions have been the ones to drive forward the ambition of climate policy in European Member States.

TABLE 1 Member States with more ambitious objectives than those required by EU legislation (as of 09/11/2018)

	GHG 2030 target	GHG 2050 target	Coal phase out date	Fossil fuel phase out date	Transport
Austria			2025		
Denmark			2030	2050 (energy)	ICE ban 2030
Finland		Neutrality	2029		
France		Neutrality	2021		ICE ban 2040
Germany^^	-55%	-80 to -95%	2035-2038		
Ireland			2025		
Italy			2025		
Netherlands^	-49%	-95%	2029		
Portugal		Neutrality	2030		
Spain	-37%μ	-90% in 2050, then neutrality^^^	Under discussion	2050 (electricity)	
Sweden		Neutrality*	2022	2045	-70% by 2030
UK	-57%**		2021		ICE ban 2040

Source: IDDRI, based on publically available information

Notes: \*Sweden's neutrality target is for 2045 \*\*UK's carbon budget goal for 2028-2032 ^Netherlands targets were in the process of approval by the parliament and seemed likely to succeed at the time of writing. ^^Germany's coal phase out was under discussion at the time of writing. ^^Spains draft new climate law (still to be adopted) sets goal of neutrality, although this would not be completely achieved by 2050, with a -90% reduction by 2050 and 100% renewable power also in 2050. µSpain's 2030 GHG goals are on par with EU requirements for GHG emissions. However, their renewable energy and energy efficiency goals are above the EU requirements.

All G HG targets are compared to 1990 and include LULUCF, except for Sweden.

This was mainly been done *via* EU-wide legislation compelling Member States to act in a coordinated manner. To be fair, other more "facilitative" elements, such as earmarking of EU funds to support climate-related projects, or LIFE funds have sought to build member state capacity. However, these tools have been implemented with varying effectiveness to date, often due to their relatively tangential connection to dedicated climate transition strategies in the Member States.

EU legislation is necessary, essential and has notable advantages. It has helped to ensure a harmonised and shared approach to decarbonisation that helps the EU to project ambition and speak with one voice internationally, provided stability for the functioning of the internal market for European businesses, and helped to ensure that by and large Member States implement and achieve their goals in order to avoid sanction.

However, EU legislation is not sufficient to drive the transition to net zero. As the energy transition goes deeper towards decarbonisation, the differences in the nature of the issues faced at national and sub-national level will become more prominent. This means that the EU will need to significantly raise its capacity not simply as a legislator, but also a facilitator of national transitions that tackle in some cases quite different issues and priorities. The EU has a role to play because it must coordinate a common transition for Europe as whole, but a softer touch than Directives and regulations may also be required.

One example of this is the growing differences between levels of ambition (and implementation capacity) of Member States. For example, there are number of Member States whose electorates are calling for action that goes beyond the minimum

required by EU legislation. Table 1 highlights some of these examples. This is not a homogenous group and ambition various across sectors for political economy reasons. Nonetheless, many of the Member States in this group tend to support higher climate ambition in various ways. For these Member States, raising ambition is not a question of EU legislative targets, but of how to implement and be supported in pursuing this higher ambition.

On the other hand, there are many Member States (or specific sectors within Member States) for whom the EU's targets under the 2030 package currently represent the full extent of their own climate ambition. These sectors can even pertain to some of the Member States listed in Table 1 above. In these cases, climate action is sometimes be perceived as a nuisance because it challenges vested interests of incumbents (such as the coal industry), is a low political priority by governments, or is something for which there is simply a lack of allocated resources and implementation capacity. In these cases, significant effort is required simply to meet the 2030 targets and the requirements of the Clean Energy Package. Therefore, several Member States tend to oppose more climate ambition for Europe.

Moreover, achieving 2030 goals, let alone net zero GHG emissions by 2050 has distinct challenges for Member States. For example, social challenges to decarbonisation may be greater in Germany or Poland where significant numbers of coal sector workers are employed. Some countries have more abundant sink potential than others. Others have stronger infrastructure challenges given their geography. Others face higher political economy challenges in terms of transitioning

the transport equipment manufacturing sector from internal combustion engines than others. Paying for the cost of increased rates of investment in decarbonised power, hydrogen and e-fuel networks may be most challenging in lower income countries. These challenges call for a targeted approach so that future EU policy can systematically remove these bottlenecks, thus creating the conditions to achieve the 2050 objectives.

Thus, a real question arises as to how the EU should approach the question of raising ambition in the EU, going forward. As suggested above, it is likely to be insufficient to raise ambition simply through (packages of) "one-size-fits-all" legislative measures. A more nuanced approach that confronts the differences between Member States in a more direct way may be required. Agreed targets and common packages can be seen as necessary, setting a basic level of ambition and ensuring collective progress in a common direction. However, the EU will also need to develop additional tools (and improve existing ones), that aim to help exploit opportunities for Member States to go beyond the EU legislative minimum where they are willing, while doing more to create the conditions for Member States to remove specific bottlenecks to domestic action where they access.

# 2.2. How should the European Commission organise the discussion with Member States?

The EU faces an immediate question of how to raise its climate ambition in line with 5-yearly ambition cycles of the Paris Agreement. A first "deadline" for doing so is 2020, where ambition to 2030 would need to be increased. A second deadline is 2025, when ambition for the 10 years out to 2035 will need revising. The challenges and issues raised by each of these dates is somewhat different.

#### 2.2.1. Raising ambition by 2020

The revision of ambition by 2020 is somewhat challenging because the EU has only just finished a long and difficult negotiation on the Clean Energy Package. Fortunately, this negotiation ultimately led to agreement to raise the EU's renewable energy and energy savings targets to 32% and energy savings to -32.5% by 2030 respectively. Modelling by the Commission for its Strategic long-term vision suggests that if these goals are fully implemented, together with the rest of the Clean Energy Package, the EU would be on track to exceed its NDC target for 2030, reaching 46-48% GHG reductions instead the -40% goal in the NDC target.

However, a challenge is to formalise this GHG target with the Member States, who thus far have resisted raising headline GHG ambition beyond the official -40%. The implicit -46-48% "baseline" depends on certain assumptions about the evolution of the non-renewable part of the energy mix that may turn out differently to the Commission's forecasts. It is also not binding for Member States, as it has not been translated into the EU's GHG legislation, as is the ETS cap or Effort Sharing Regulation.

Also, Member States National Climate and Energy Plans may not necessarily integrate GHG mitigation equivalent to the -46-48% goal. Although an NDC does not necessarily have to be binding, it does need to have a credible means of implementation behind it.

Another issue with an effort to raise ambition by 2020 is that so far it has largely ignored the possibility that new insights could emerge from EU's new Strategic long term vision for a GHG neutral economy by 2050, which call for more sectoror technology-specific ambition. This strategy has revealed, for instance, that achieving net zero emissions will require stronger development of solutions such as electrification of end use, hydrogen, e-fuels, demand side efficiency for materials, new industrial processes, additional infrastructure, changes in demand patterns for transport, etc. All of these issues are currently outside the scope of the discussion about how to raise EU ambition in 2020, putting the EU at risk of ignoring the insights from its own strategy.

Despite those challenges, it is critical that EU leaders realize the level of expectation behind an EU revision of its NDC in the current geopolitical context lacking international leadership. Fortunately, and as explained in chapter 3, below, there are numerous options that the EU has to raise its ambition while navigating the above constraints.

It also needs to be remembered that a key issue at this time is signalling (credible) ambition revisions, even if all details are not yet fully resolved. Thus, for example, a Head of State or Environment Council decision would suffice to convey to any final decision on an upgrade of ambition to the UNFCC.

### 2.2.2. Raising further and improving the quality of ambition by 2025

In practice, the EU's capacity to address all of the new strategic insights and priorities identified by its Strategic long-term vision in 2020 will be limited. Time will be very short between the installation of a new Commission in late 2019, and the date of submission of a revised NDC to the UNFCCC "by [the end of] 2020" (pursuant to Paragraph 23 of Decision 1/CP.21). This will be too short for drafting and passing major new legislation-opening the question of the status of the revised NDC. Several issues emerging from the Strategic long-term vision, or at least their formalisation, will therefore need to be addressed as part of the ambition cycle culminating in 2025.

This raises the question of how the process of revising EU ambition by 2025 should be organised. After all, there are several issues that will need to be reconciled and which have implications for the political and institution process itself. Firstly, there will be a need to develop policy priorities based on "backcasting" insights from the EU's Strategic long-term vision (more on this below). Done correctly, this likely means going beyond the current focus purely on the traditional EU files of GHG, renewable energy and energy efficiency. A more dedicated focus on the transformations required in each key sector (and in the coupling of sectors as part of broader systems transformation) will be needed.

This in turn implies that a policy discussion dominated only by ETS revision and effort sharing targets would risk obscuring broader economy wide transformations that until now have received too little attention. What will be the EU's electrification, hydrogen or e-fuels strategy for instance? What needs to be done to promote greater material efficiency and recycling of CO<sub>2</sub>-intensive materials like cement, steel, aluminium, glass? What needs to happen to promote decarbonised freight infrastructure? How can carbon sinks be developed? How can the depth and rate of building retrofits be improved? Etc. How can the EU finance the transition given the large investment amounts needed to aim for neutrality? Such questions will need to be part of the discussion.

However, given the growing breadth and complexity of the issues to be addressed, its hard to see how the EU can achieve an ambitious outcome on so many fronts without creating stronger ownership and buy-in from Member States. How is this ownership and buy-in to be generated? It is difficult, for example, to imagine how this could be achieved if discussions between Member States largely resemble those on the Clean Energy Package, where the Commission proposes legislation and Member States then fall over themselves to explain why the targets they are given is impossible.

A more positive and productive dynamic will be needed than what has currently prevailed in discussions on the Clean Energy Package. These experiences, although pursued admirably by the Commission during a challenging time for Europe, as well as the scale of the challenge still before the EU to achieve net zero GHG by 2050, necessarily call for a re-evaluation of how fundamental, structural sources of conflict over ambition can be overcome. Thus, the EU will need to confront head on the vastly different challenges and opportunities Member States have to go further in their respective transitions. To this end, the way the process and dialogue with Member States is organised will be critical. More responsibility on Member States to diagnose national bottlenecks to action, to identify opportunities and to propose domestic solutions and the conditions for their successful implementation will also be important.

Furthermore, horizontal level dialogue and cooperation between member states (or even sub-national policy makers or companies) should not be ignored. Many EU member states are at different stages of implementing their national transitions, or face common challenges where they could learn from others' experiences and policy thinking.

# 2.3. How to better align long-term strategies and short-term policies?

The analysis accompanying the Commission's long-term vision for a GHG neutral economy highlighted that major industrial transformations of key sectors of the economy will be needed to achieve the goal of net zero emissions by 2050. Given the urgency of the problem, and the long life of many investment decisions in the energy or industrial sector, these transformations have concrete implications for the policy choices made today and during the next five to ten years.

### 2.3.1. Aligning long-term and short-term at the national level

At the national level, Article 14.3 of the Governance Regulation states that "The integrated national energy and climate plans referred to in Article 3 shall be consistent with the long-term strategies". However, there are three potential sources for inconsistency.

Regarding timing, Article 9 of the Regulation requires Member States to submit a draft NECP (plan for the period 2021-2030) by end of 2018. Article 14 on long-term strategies does not require an initial draft submission, and sets January 2020 as the deadline for submitting the long-term strategies (LTS). Thus, in practice many Member States are preparing their 2030 plans prior to starting to work on their long-term strategies, creating a risk of the "tail" of the NECPs wagging the "dog" of the LTS.

For most Member States, many of their climate-related targets and policies will be dictated by the new targets and policy requirements set out in EU law in 2030 Clean Energy Package. Since Member States have legal obligations to the EU to transpose these into national law, and since they are wide-ranging instruments, they will tend to dominate the national discussion on targets and policy measures for the period 2021-2030. It is of course good that Member States take EU obligations seriously. However, it can become a problem if it means that the focus on meeting the EU's legal requirements hinders the thinking about how to integrate 2050 goals into current policies.

For most Member States, *only* implementing the necessary policies to comply with the EU's Clean Energy Package will almost certainly not be compatible with achieving the EU's mid-century goals. After all, most EU policies are not designed with member state-specific pathways to decarbonisation in mind. Furthermore, there are strong reasons to suspect that the EU's policy package runs some risk of carbon lock-in on the way to the 2050 goals. -40% in 2030 effectively represents a linear pathway to the 2050 goal of -80-95%,. Meanwhile most Member States that have 2050 targets and that apply back-casting to short-term goal setting tend to propose a significantly higher interim emissions target for 2030. This is true both in terms of aggregate GHG targets and in terms of energy and other sectoral goals.<sup>2</sup> It cannot be expected that simply

<sup>1</sup> For example, climate targets will in many cases likely to simple copy and pastes of the assigned national targets under the revised Effort Sharing Regulation. Similarly, measures to promote energy efficiency, renewable energy or clean transportation will likely be a transposition of the newly revised requirements of the EU sectoral legislation covering these issues

<sup>2</sup> For instance, the UK's 5th carbon budget set a goal of reducing emissions by 57% below 1990 levels between 2028 and 2032. This is significantly more ambitious than the -40% target in 2030 that the EU has set as a whole. In Germany, where a target of -80-95% exists for 2050, the recently published 2050 Climate Protection Plan proposed a goal to reduce total emissions by 54-56% below 1990 levels, compared the EU's -40% target. In Sweden, where a new climate law has set a goal of achieving GHG neutrality by 2045, a reduction target of -70% (vs 2010) of the climate impact of transport has been set (in part because transport accounts for most of Sweden's emissions). This is well beyond the -35% improvement in CO<sub>2</sub> emissions performance by 2030 agreed for passenger vehicles under the EU's clean mobility package. In the

by Member States' short-term policies will be coherent with mid-century decarbonisation 'automatically', simply on the basis of EU policies alone.

### 2.3.2. Aligning short-term and long-term at the EU level

The problem of whether long-term strategies can be better exploited for short-term policy also remains unresolved at the FLL level

The European Commission has historically supported its proposals for new policy packages with techno-economic impact assessment modelling of pathways to its 2050 targets. These modelling results tend to develop a shared and transparent assessment on the impact of proposed measures and policy initiatives and to provide some grounding for the GHG and sectoral targets that are then set subsequently.

However, impact assessment modelling is not the same as policy driven by "back-casting" from long-term goals into short and medium term goals. Indeed, from an outside observers' perspective, it is far from clear to what extent a back-casting is used at all in the definition of EU policy packages. To give but one example, the European Commissioner for Energy and Climate, Arias Canete, recently advocated for the EU to raise its climate ambition by 2030 by raising its renewable energy and energy efficiency targets by roughly 2-2.5 p.p. respectively. While this proposal may have had a certain political rationale, it is also far from clear that the 2-2.5% more energy efficiency or renewable energy in 2030 are the difference between coherence and incoherence with the EU's 2050 sectoral transformation goals. For example, the recently released Strategic long-term vision suggested that net zero emissions by 2050 would require cutting energy demand in half and roughly 80% share of renewable energy by the same date. It is far from clear that this is consistent with the measures and approach to deployment required to achieve the EU's 2030 goals.

Indeed, the lack of a systematic back-casting approach to defining EU policy packages also leads to policy blind spots. For instance, policy packages have to date tended to focus on some sectoral transformation issues, such as renewable energy, energy efficiency, transport and buildings, but at the expense of overlooking other critical sectoral issues, such as agriculture<sup>3</sup> or energy intensive industry.<sup>4</sup> Moreover, amid the

Czech Republic, the 2050 climate strategy sets targets for 2030 that would see emissions reduce by 31% compared to 2005 levels. This also compares favourably to the more modest -14% emissions reductions target allocated to the

Czech Republic under the new Effort Sharing Regulation, even if one allows for the theoretical possibility of slightly higher reductions in the ETS sector.

- 3 While agriculture is included under the emissions limits of the effort sharing decision, it does not benefit from sectoral legislation or policies with a predominantly climate focus, let alone a focus on back-casting-based policy for 2050 climate goals.
- 4 Similarly, energy intensive industry is notionally covered by the EU ETS. However, the ETS, while it may provide some price signals, it does not necessarily help to unlock the range of barriers energy intensive industries face to deep decarbonisation. The Innovation Fund goes only part way to addressing

focus on energy efficiency and renewables, critical new energy vectors, such as electrification, synthetic gas and liquids, and hydrogen, have remained somewhat out of the picture in the 2030 climate and energy package. Going forward, however, these issues will require growing EU level coordination given the techno-strategic and cross border infrastructure issues involved and a focus on enabling factors such as an evolution of the regulation frameworks to integrate them.

Another place where the EU does not really apply a solid back-casting approach is in its monitor tools for the Energy Union. The bulk of indicators used in the development of the EU's monitoring and State of the Energy Union report are essentially focused on EU short and medium term targets. This is obviously important to monitor, however there is a notable lack of indicators that reflect longer term transformation but which do not have a corresponding EU legislative target, such as, for example, the share of electrification of the energy mix, or the GHG intensity of agricultural production, etc. (Sartor, 2016). The transition to a low carbon energy union requires monitoring indicators—and a related policy process—that reflects the long-term goal and their implications for the present.

The question discussed in this subsection therefore relates to the former question of how one organises the discussion with Member States on both monitoring implementation and raising ambition.

### 3. ELEMENTS OF A NEW EU CLIMATE MITIGATION "PHILOSOPHY" POST-2020

As written earlier in this paper, the EU does not need a major reinvention of EU institutional arrangements in order to find solutions to the questions raised in the preceding section. On the contrary, the EU's legislative acquis has generally served it well and remains relevant going forward.

However, the EU's new governance framework itself provides new opportunities for resolving the questions raised above. It is possible that with careful implementation of existing tools, the EU could make a significant step toward more ambitious and robust climate policy. The issue is therefore not one of creating new legislation, but rather of exploiting the opportunities offered by new and existing tools.

this problem, as it may be used to support some innovative pilot projects, but these still leaves key issues of promoting circularity with a focus on carbon intensive materials, conditions for commercialization of key technologies, and incentives to phase out old technology in the face of free allowance allocations.

# 3.1. Adopting a more targeted approach to the diverse challenges of Member States

### 3.1.1. Maintaining the EU's acquis as a common baseline for the EU27

Going forward, EU institutions must continue to play a leading role in driving forward climate policy in Europe. The EU's legislative acquis on climate and energy will continue to be vital to efforts to achieve the bloc's long-term climate goals. In practical terms, EU climate *legislation* will remain relevant beyond 2020 in several important ways:

- By continuing to improve and broadening of minimum best practice climate and energy policies performance standards across Member States
- By underpinning EU targets and sectoral transformation objectives—especially those that are likely to be politically challenging for Member States to implement and which therefore are likely to benefit from the additional obligation of legal compliance by the Member States with respect to EU legislation.
- By facilitating greater consistency between climate and energy policy and the functioning of the internal market

However, as noted in section 3, the EU will also need to come to terms with governing a transition across very different sets of Member States with different problems. This will require the EU's institutions to develop other non-legislative tools as part of a more nuanced approach to climate policy in the EU.

## 3.1.2. Supporting sub-groups of Member States to raise ambition beyond EU norms

One way this might be achieved could be for the EU's institutions to support so-called Enhanced cooperation between willing subsets of Member States. For Member States that are demanding more ambition from the EU and that have relatively ambitious policies (cf. e.g. the Green Growth Group Statement, July 2018), a goal could be to both recognise and support them more vigorously in going beyond the minimum legislative requirements under EU policy. For example, EU policy could take a favourable view of and, where necessary, facilitate national policies that raise ambition beyond EU norms. Examples of this could include things like:

- Facilitating willing Member States in the implementation of a regional carbon price floor, by clarifying its compatibility and interaction with EU energy taxation rules, internal energy market regulations and the EU ETS.
- Expanding EU strategic infrastructure funding and technical support for critical and innovative infrastructure for low carbon transition such as wind turbines and power lines in the Northern sea, hydrogen or e-fuels distribution networks or charging infrastructure for EVs, e.g. via reforms to the Connecting Europe Facility to earmark funds for innovative decarbonised energy infrastructure beyond the current

- focus on electricity interconnectors and gas pipelines reinforcement
- Supporting Member States pursuing pilots and especially early stage commercialisation of breakthrough technologies potentially crucial for the low carbon transformation with innovation funds.<sup>5</sup>
- Authorizing public subsidies to incubate green industrial champions..
- Via the European Semester, supporting economic, taxation and fiscal budget reforms that go in the direction of greening the economy consistent with the EU's 2050 decarbonisation strategy
- Allocating EU structural funds and a reformed European Globalisation adjustment fund to be spent on workers and regions affected by the phase out of fossil fuel industry phase down (including in higher GDP/capita Member States).
- Promoting exchanges of best practice across Member States for implementing transformational projects consistent with the long-term climate objective.
- Promoting "front runners" by supporting Member States that wish to mitigate the "waterbed" effect within European tradable certificate instruments by cancelling unused allowances (e.g. under the EU ETS or Effort Sharing Regulation).
- Giving special allowances for increased public spending on crucial long-term infrastructure and innovation for the low carbon transformation from calculations under the EU budget deficit rules.

The EU would in effect be facilitating future negotiations on target setting by creating the broader conditions and momentum for raising ambition. Moreover, by helping to deepen the transition in "front-running" Member States, the EU could help to create pressure on more ambivalent or less ambitious Member States to "keep up with the leaders".

# 3.1.3. Supporting implementation of NECPs through a more efficient use of EU funds for climate

For other Member States, however, greater efforts might focus on building financial and technical capacity for implementation. In doing so, member state's capacity to implement their existing targets would be supported. Indirectly, this would also help to raise future ambition by both building domestic capacity for implementation of future targets, but also by highlighting that financial support can be available for implementing the transition. It would also help to reassure on feasibility and achievability of ambitious goal, which comforts decision makers to go further in developing future targets.

On the financial side, efforts should focus on more efficient use of resources earmarked in the next EU budget currently

<sup>5</sup> Financing could be done through various funds under the new EU budget, such as the InvestEU Fund, the EU ETS Innovation Fund or the Global Challenges and Industrial Competiveness pillar of the R&I funding pillar.

under definition as part of the Multiannual Financial Framework for 2021-2027 and avoiding EU funds are spent on projects harmful for climate. In particular, greater climate gains for each euro spent could be achieved in Europe first and foremost by requiring that spending on climate and energy under Operational Programs (OPs) are checked for consistency with National Energy and Climate Strategies. At the moment, there is no clear responsibility to check the consistency of programs with future NECPs. Emitting harmonized guidelines on how to reconcile EU funds disbursements with national plans could be one of the first tasks of the new EU commission. A further step would be to ensure that future EU budget dispersments are 100% compatible with the GHG neutrality goals of the Paris Agreement and the EU's Long term GHG neutrality strategy.

Furthermore, experience with previous EU budgets shows that a large share of EU structural and cohesion funds are simply not spent by Member States. This is known as the "paradox of absorption" (Notre Europe, 2018). It reflects the fact that those Member States with the most need for funding also paradoxically have the least technical and co-financing capacity to develop attractive projects and programs to utilise EU funds (Bachtler & Mendez, 2016). Consequently, much money is either spent on low value added infrastructure or not used.

Requiring Member States to plan out their energy and climate investment ahead of time, as could be done with the new NECPs, is therefore one way to promote a more efficient process for identifying investment opportunities with forthcoming EU funds. Further, closer scrutiny at the Commission of the coherence between member state OPs under future EU budgets and NECPs could also be very helpful. Lower thresholds and/or creative solutions to member state "co-funding" rules for some vital projects could also be explored.

For some Member States, the European Commission could perhaps also monitor progress and help to provide technical expertise and support to Member States that appear likely to fail to spend their climate earmark. This expertise could perhaps take the form of manpower to help identify project opportunities that can be monetised *via* EU funds that are consistent with the national energy and climate plan (NECP) and/or national Long-Term Strategy, identify specific funds that can be accessed, and potentially help with administrative aspects of access.

## 3.1.4. Supporting implementation of NECPs through enhancing technical capacity

In many Member States, a range of policy reforms could generally be undertaken that would help to make nationally policy more consistent across ministries and push policy towards the best practice frontier. The EU's capacity to **provide technical expertise and capacity** to Member States could also be utilised more fully to tackle challenging national barriers to deep decarbonisation at the request of Member States. The EU should of course respect the principle of subsidiarity. However, where national capacity is lacking and help is sought, the European Commission could potentially offer to provide technical capacity to in Member States to review their existing policies

and identify opportunities for reforms based on best practice examples in other Member States. In this way, the EC could behave as a conduit of information and a facilitator of better implementation. A basis for this role could perhaps be the newly created "structural reform commission" which supports the European Semester process.

In short, the EU could attempt to take on a much stronger role as a facilitator of climate ambition through very practical support for concrete implementation. It would of course retain its existing role in driving the overall EU targets and revising the legislative acquis. However, this would be complemented by a more nuanced role of facilitator to different groups of Member States in more differentiated ways, depending on their national circumstances and barriers to implementation.

### 3.1.5. Strengthening the integration of climate policy with industrial and economic policy

Climate policy must be more than a legislative burden for Member States to implement. It is also an opportunity to achieve other social and economic goals. At the same time, an important feature of climate policy is that for a number of key emitting sectors, it effectively requires a transformative revolution of these industries—in turn a sectoral industrial policy approach. This creates challenges, but it also provides opportunities for the EU to support climate and industrial innovation, competitiveness and the future of European industries simultaneously.

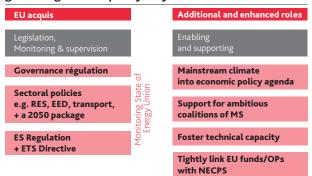
Closer integration between industrial and climate policy has potentially very significant political advantages, because it can help to recast climate policy as a job-creating source of investment for Member States. It is also concrete and visible, as is for instance the case of the industrial cooperation on Airbus. Such initiatives can be symbolically powerful tools in support of otherwise abstract narratives about the importance of Europe to ordinary citizens. As China develops the Belt and Road Initiative, and American innovators even in the private sector develop projects such as Tesla, what is Europe's answer? This is not just about politics, it also about developing the technologies and net-zero compatible high-value added industrial products and processes that are critical to a competitive 21st century industrial sector in Europe.

Some caveats apply, however. First, European policy should not support links between industrial policy and climate benefits in a non-systematic fashion. Industrial policy on climate must be guided by a close coherence between projects and the EU's and/or Member States' long-term strategies to decarbonise their economies. Otherwise, the EU's industrial policies risks being a hindrance rather than a support to climate policy, and strategic advantages from new innovation will be short-lived.

Secondly, industrial policy is not the same thing as research and innovation policy. Past history of EU industrial strategy on climate has left a number of pilot projects that ultimately ran into "valley of death" financing problems before they could make it to commercialisation. In practice, the EU therefore needs to support early stage commercialisation of promising technologies and to work with Member States to ensure that

policy settings are there to make projects economically viable into commercialisation and scale up.

FIGURE 1. Possible evolution of the EU's approach to governing climate policy: key elements



# 3.2. Organising the discussion on raising ambition

### 3.2.1. Formalising the EU's higher 2030 ambition by 2020

In 2020, it will be difficult for the EU to adopt new legislation or pursue an elaborate translation of the long-term strategies insights into existing legislation—given the limited time frame.

A less complex, but still politically difficult option would be to make a "one-off" revision to its ETS and Effort sharing agreements to reflect the -46-48% baseline for emissions that it assumes would occur if the package were fully implemented. If there were an agreement and a mandate by Member States in the council to do this during 2020, the EU could potentially communicate this formal decision in a revised NDC to the UNFCCC in 2020. It could communicate this, together with a revised ambition level for 2050—ideally reflecting the GHG neutrality target in 2050 and replacing the current -80% goal—by submitting the first iteration of its long-term strategy as invited by the Paris Agreement.

The EU could potentially add credibility to these new pledges in a couple of ways. For example, it could already adopt a resolution, calling on the Commission to develop a 2050 package of measures, aiming at filling gaps in its regulatory framework identified by the long-term strategy as requiring further work in order to implement its net zero target. This would allow time to develop a more comprehensive package for adoption by 2023/24, but also signal credible commitment to implementation today.

However, if the EU cannot embed its new assumed 2030 baseline of -46-48% in legislation by 2020, then one might need to explore less desirable fallback options. These might include:

- Formally adopting the higher GHG target for 2030 as a joint resolution of all Member States.
- The EC working with Member States to ensure that the sum of 2030 GHG targets in the National Climate and Energy Plans (finalised end 2019) add up to the agreed -46 or -48% figure that is adopted.

- Agreeing to an "assurance" mechanism to withdraw an equivalent number of allowances from the EU ETS in 2030 to compensate for the gap between actual GHG emissions in 2030 and the -46% target.
- Committing to the development of a given number of zero carbon energy intensive industry large scale demonstration projects, products and other new infrastructure announcement, to be commissioned by 2030, which would be consistent with the 2050 strategy.
- Going beyond existing financing initiatives from multi-lateral development banks into a more complete "packages" that can compete more readily with the Belt and Road Initiative and other investments in fossil fuel infrastructure in developing countries. In particular, by better packaging services that facilitate the roll out along the entire value chain, from policy reform to technology provision, to competitive finance, to skills transfer for operation.<sup>6</sup>

In practice, policy makers will have to make the necessary decisions based on political circumstances in the EU once the new parliament and commission has been formed. Nonetheless, the importance of EU leadership in driving forward a raising of ambition in 2020 will be essential.

# 3.2.2. Organising an internal stock-take of EU progress based on back-casting from the EU's new long term strategy for a GHG neutral economy in 2050

Regarding the issue of raising ambition in 2025, the EU faces a choice:

- Should it try to pass a whole new "clean energy package 2.0", setting new targets aiming out to 2035 or 2040?
- Or should it aim to delay this process out to the second half of the 2020s, with some form of "Mid-century enabling package" of measures and revisions to existing ambition levels being deployed in the meantime—in order to better reflect the insights of the long-term strategy?

<sup>6</sup> While the world on aggregate is moving away from coal, specific countries, such as Japan, India, Vietnam, Indonesia, Mongolia, Turkey, Bangladesh, Pakistan, South Korea and some parts of Africa are still building new coal and gas plants. Policymakers in many developing countries are keen to support industrialisation. In this context, they are often offered coal energy investment packages—often by Chinese SOEs (cf. https://www.eco-business.com/news/ chinas-belt-and-road-initiative-will-make-or-break-global-climate-fight/) containing cheap finance, technology, construction, skills transfer, and the promise of "cradle-to-grave" services. These packages tend to outcompete renewables in the current market, even though alternatives to coal could be just as cheap, fast to build and reliable under the right (but missing) policy conditions. But thus far, high climate ambition countries and multi-lateral development banks have not yet been able to work with recipient countries to provide a sufficiently attractive alternative, at the scale required, to crowd out new coal. Better integration of the packages provided by MDBs in Europe to provide clean alternatives that are sufficiently well packaged to be competitive are therefore needed.

The former solution has the advantage of being a more thorough approach, and would include a new set of legislative targets for all Member States under effort sharing. However, it may be challenging to implement in a robust way given the tight timeframe to negotiate across the various legislative files. As noted above, effort sharing negotiations may prove a barrier to raising ambition in various ways. Finally there would be the limited experience with the 2030 Package as of the beginning of the process to guide a new ten-year revision.

Therefore, the starting point for revising EU ambition by 2025 should perhaps not be 2030 GHG targets, but rather the insights provided by the EU's 2050 long-term strategy. After all, the purpose of the long-term strategy is to help clarify a common vision for a decarbonised EU economy and to highlight key choices and strategic priorities for achieving it. Thus, this process could focus first and foremost on developing a diagnosis and internal stock-take of the remaining gaps between the pathways to decarbonisation outlined in the EU's new MCS and current EU targets, policies and measures.

Although DG's Clima and Ener would inevitably play a leading role from an analytical point of view, this process should not only be for only for the Commission to perform independently. Crucially, it would need to engage Member States directly in an iterative process—including for instance national stakeholder dialogues across Member States— which would help build a common understanding and goal domestically and allow for buy-in and political cover. Member States would also be called to provide input on their national assessment of progress towards a) their long-term decarbonisation goals, b) opportunities to go further, and c) challenges they face and where help could be appreciated. Member state engagement could help to generate ownership of the collective diagnosis and ambition-raising process, as a precursor to raising ambition.

#### 3.2.3. Adopting a stronger sectoral policy focus

A second step would then be for Member States to update their NECPs, integrating collective needs for improvement from the above-mentioned stocktake process. These updates would be driven by the identification of specific opportunities for the EU as a whole and individual Member States to raise their ambition, that would be identified by the collective "internal stocktake" described above.

As per the Energy Union Governance Regulation, Member States' NECP revisions would take place first as part of an iterative process—i.e. with both draft, reviewed by the Commission and fellow Member States and then final versions of the updated NECPs. An iterative process would accompany NECP revisions, to support a collective picture that leads the EU towards its long-term objectives.

In parallel to the revision of NECPs, a "mini package" of updates to the European legislative acquis could also prepared to accompany the bottom up revision of the Member States NECPs. The "mini package" could give the EU a chance to propose legislative updates or revisions, especially to sectoral legislation, to fill critical gaps or opportunities that have been identified by the MCS

and the stocktake process as essential to achieving the sectoral transformations required for the EU's long-term climate goals. As measures of pan European relevance, they could help to buttress revision of the NECPs in areas of strategic importance, such as energy efficiency or circular economy, for example. In keeping with the appropriate role of the EU, these measures would focus on those thematic issues that require some degree of centralised coordination—for instance, the development of decarbonised freight or synthetic gas infrastructure.

### 3.2.4. Create space to focus on priorities beyond the effort-sharing mechanism

Crucially, however, the EU would not revise the 2030 effort sharing decision during the 2023-2025 ambition cycle. Attempting to renegotiate effort-sharing targets would risk plunging the process into a negative dynamic that both resists ambition and that distracts from back-casting approaches to short-term policy setting. We therefore propose that this round of policy revision would focus on sectoral issues and in particular on improving the integration of back-casting approaches from long-term strategies into sectoral policy settings. A full-scale revision of the effort sharing decision would thus be pushed back to the latter-half of the 2020s, when the broader revision of the package setting new EU and national targets out to 2040 would be in place.

Not setting new effort sharing targets in 2025 would mean that Member States would not be legally bound to achieve higher reductions by 2030 for the emissions of their effort sharing sectors. However, they would retain their existing 2030 targets as per the Clean Energy Package, thus placing a hard legal floor on ambition for the 2030 effort sharing goals. Member States would also face indirect legal constraints on emissions by virtue of revisions to sectoral files. For example, a revision of energy efficiency directive, to EU material recycling policy or CO<sub>2</sub> limits for transport vehicles made that time would contribute to raising ambition in the effort sharing sectors with a legal backing indirectly via the sectoral legislation. Similarly, reforms to the carbon market could potentially help to support a stronger CO<sub>2</sub> price, including the revision of the MSR mechanism. Finally, higher EU goals are more likely to help lead to higher goals internationally, which would help reinforce the case in Europe for implementation.

It may be objected that even if some EU Member States are called to revise the headline ambition of their NECPs upwards, and independently of EU legal obligations, then they would most likely fail simply to implement their pledges. However, in practice, it is most likely that Member States that would significantly lift ambition levels would do so at the demand of a domestic policy constituency, that would be mobilised by this process. This domestic constituency would thus be expected to apply domestic political pressure to implement. This domestic political pressure would then also be combined with the EU's subsequent oversight of the implementation of the NECPs under the rules of the governance regulation and the State of the Energy Union process.

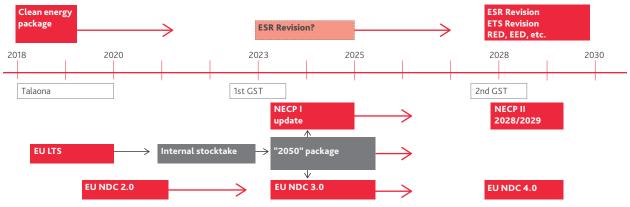


FIGURE 2. Organising the discussion on raising ambition

GST : Global Stocktake

National governments tend to implement climate policies when they are seen as politically, economically and technically feasible. However, otherwise willing Member States can miss to implement policies either because of a gap in administrative and technical capacity, or because of vested interests from incumbents in specific sectors. In the case of a capacity gap, legally-binding targets may be a heavy handed solution to the problem, especially since it only concerns certain Member States.

In the latter case, legal constraints or the risk of financial penalties flowing from EU legislation, may help, in some cases, to tip the balance of considerations in government in favour of finding the political courage to address more political challenging issues. The fact of EU legislative backing as a guarantee on national ambition may generally be considered have the highest value added where it puts constraints on sectors where government's electoral courage with respect to key constituencies needs buttressing. Thus, thing like carbon pricing, CO<sub>2</sub> performance standards for vehicles, CO<sub>2</sub> performance standards for power or industrial plant, etc, may have a higher value added in the nearterm in terms of political capital spent on revising legislation, rather than focusing on effort-sharing across the board.

# 3.3. Improving coherence between the EU's 2050 long-term strategy and current policies

#### 3.3.1. Coherence between short-term and longterm at the EU level

As noted above, the process of revising EU climate ambition in 2023-25 should start with a stocktake that compares the pathways mapped out under EU's long-term strategy with its projections under business as usual. However, as noted above, the EU could also take further steps to facilitate a better integration of insights from its long-term strategies into its current and future policies.

Secondly, the EU's own internal monitoring process, which tracks progress on decarbonisation as part of the State of the Energy Union, could be adjusted based on the results from the MCS. The indicators used to track progress will need to be

revised in order to reflect key drivers of the transformation—especially at the sectoral level—that are revealed by the long-term strategy. Without a close match between the drivers of sectoral change identified in the MCS using back-casting, and the specific indicators tracked for the State of the Energy Union, the EU will not be able to meaningfully track progress.

Thirdly, the EU's State of the Energy Union report each year could make a better distinction between progress towards, on the one hand, 2030 targets, and, on the other hand, progress made towards the transformation of key sectors in line with the 2050 or mid-century target. This could be done simply by the decarbonisation chapter of the State of the Energy Union being split into an overview of progress on headline targets, on the one hand, and a systematic analysis of sectoral progress and gaps in light of 2050 pathways. By doing so, the State of the Energy Union would become much more effective in helping to identify blind spots in EU ambition or implementation which require further collective discussion and action, when policies are next revised.

Fourth, the EU could generally aim to redefine the way in which it communicates its climate ambitions by adopting a stronger 2050 framing for short-term targets. For example, rather than presenting its NDC as a long term 2050 target and a set of GHG, RES, and EE targets for 2030, the EU could perhaps highlight more systematically its key objectives across each major emitting sector, and explicitly link these objectives to its strategy for achieving its mid-century goals. This way, the framing of its short and medium-term objectives would be the long-term target and strategy, rather than the latter appearing as a kind of afterthought. Although a minor change in communication in practice, this could help to create a different mind-set and awareness of the importance of Long-term and short-term policy coherence across the key sectors.

### 3.3.2. Coherence between short-term and long-term at the national level

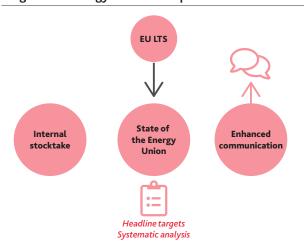
At the member state level, the EU's capacity to influence the internal details of Member States' planning and policy processes is limited by subsidiarity. However, it can nonetheless help to

promote a more prominent role of long-term strategies (LTS) in national planning and policy making indirectly.

If the EU wishes for Member States to take their LTS more seriously in their internal governance, then it also needs to take these documents seriously. Thus, the EU should make explicit use of the national and EU LTS where relevant to discussions with Member States. For instance, in developing its long-term strategy, the EU could arguably be giving Member States a chance to engage more directly in the process by offering to take their own national LTS directly into account in the formulation of the strategy. This could be done, for instance, by the EU following up on its draft strategy document with a more structured dialogue and comparison process with Member States' LTS, where they are available. Ultimately, if the Commission wants to get the necessary buy-in into its long-term strategy for climate, it will need to allow Member States to see their own visions for achieving decarbonisation reflected in the strategy.

Engaging with member state's own long-term strategies is also an opportunity for the EU's institutions to better identify those challenging areas where Member States need dedicated help to achieve "2050 decarbonisation compatible" policies. Ultimately, raising ambition in line with deep decarbonisation objectives will require confronting those challenges in specific Member States that make more ambitious policies look unattractive. Fortunately, the Long-term strategy process, because of its exploratory nature, can be helpful for revealing these challenges and structuring an informed discussion around them. These tools could therefore be used to help structure dialogue between the EU institutions and Member States on both the opportunities and challenges to deep decarbonisation, such that these can then be prioritised in future policy development, whether under the EU budget, as part of EU technical assistance support, or in other ways.

FIGURE 3. Improving coherence between the EU's long-term strategy and current policies



#### 4. CONCLUSION

The next European Commission and Parliament will face major strategic choices about how the EU conducts climate policy post-2019. Achieving GHG neutrality by 2050 is essentially about making clear choices for the future of the European economy. To succeed, the European project will need to place decarbonisation at the heart of its industrial, fiscal, agricultural and innovation policy. Greater mainstreaming and closer integration between climate and energy policy and other EU competences will be essential.

Achieving GHG neutrality by 2050 will require strong "buyin" and ownership from all Member States. Getting this buy-in will require to EU to create a more positive, constructive and cooperative dynamic in the discussion it has with Member States and their citizens, and doing a better job convincing them of the opportunities presented by the transition. EU legislation and standards will remain essential. However, the EU will also need to scale up and refine its efforts to help Member States tackle their own domestic bottlenecks and roadblocks to stronger action.

An immediate priority for the next European Commission and Parliament will be to revise the EU's NDC (its climate mitigation ambition) under the Paris Agreement by 2020 by reflecting the sectoral targets agreed to in recent legislation. Once its 2050 long-term strategy has been finalised and adopted, it will also need to begin a discussion on how the EU can broaden the scope of the transition beyond the scope of the Clean Energy Package. As implied by the draft MCS, this will be essential in order to make EU climate and energy policies compatible with the demands of a net-zero by 2050 objective.

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### Raising and strengthening EU climate ambition: Priorities and options for the next five years

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The Institute for Sustainable Development and International Relations (IDDRI) is an independent think tank that facilitates the transition towards sustainable development. It was founded in 2001. To achieve this, IDDRI identifies the conditions and proposes the tools for integrating sustainable development into policies. It takes action at different levels, from international cooperation to that of national and sub-national governments and private companies, with each level informing the other. As a research institute and a dialogue platform, IDDRI creates the conditions for a shared analysis and expertise between stakeholders. It connects them in a transparent, collaborative manner, based on leading interdisciplinary research. IDDRI then makes its analyses and proposals available to all. Four issues are central to the institute's activities: climate, biodiversity and ecosystems, oceans, and sustainable development governance.

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