Memo to the commissioner responsible for climate policy

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The European Union has set ambitious climate targets and, to reach them, has rolled-out a wave of legislation. But despite this momentum, the pace of decarbonisation has not been fast enough. Your overriding challenge for the next five years is to accelerate EU decarbonisation in sectors such as buildings and transport, while addressing the social impacts of climate policy. Whether green industrialisation can be fostered and an effective green social contract can be put in place will make or break the European Green Deal.

You must then lay the foundations for a 'Fit for 90' package, tackling emissions in agriculture and land use, among other difficult policy questions. A new governance framework for climate adaptation must be developed as climate impacts increase. Finally, it will be important to scale-up the EU's green global reach, strengthening diplomacy, ramping-up climate finance and pushing new green industrialisation partnerships.

Firm-up 2040 emissions reduction plans

Establish a green social contract and focus on adaptation

Extend the EU's green global reach

State of affairs

The European Union has set binding climate targets for 2030 and 2050 and, to reach them, has rolled-out a wave of legislation. A three-pillar governance structure has been developed to ensure the implementation of the European Green Deal plan for climate neutrality: emissions trading (ETS) to coordinate decarbonisation also in most sectors (including buildings and transportation from 2027 under the so-called ETS2); National Energy and Climate Plans to coordinate decarbonisation in the remaining sectors and to somewhat coordinate energy policy; and EU financial support to address the social and distributional implications of EU climate policy (Pisani-Ferry *et al*, 2023).

The EU has taken the first step towards the adoption of a 2040 climate target, recommending a 90 percent reduction relative to 1990 The EU has also taken the first step towards the adoption of a 2040 climate target, recommending a 90 percent reduction relative to 1990. This represents the starting point for the EU to update its emissions pledge – the Nationally Determined Contribution (NDC) at the important United Nations climate conference (COP30) in Brazil in 2025.

But despite the targets and the EU's decoupling of GDP growth from emissions since about 2010, the pace of decarbonisation has not been fast enough. The 2030 target is in jeopardy. Over the last decade, most greenhouse gas emissions reductions in the EU happened in sectors covered by the ETS, most notably in the power sector. In non-ETS sectors, including transport and buildings, emissions reductions have been relatively small. Agriculture has remained almost untouched.

Notwithstanding this, the European Green Deal has faced popular and political resistance. The 2024 European elections underlined the mounting discontent about ambitious climate action, with groups –in the European Parliament that are sceptical about the Green Deal gaining momentum, while the Greens lost seats.

Meanwhile, climate impacts are increasing. Europe is the fastest-warming continent. Extreme heat, once relatively rare, is becoming more frequent, while precipitation patterns are changing. Downpours and catastrophic floods are increasing in frequency and severity. At the same time, southern Europe can expect declines in rainfall and more severe droughts. Current water,

energy, buildings and agriculture infrastructure is not adapted to the changing climate, exacerbating the economic and human cost of extreme events. Unless the EU takes much stronger action in climate adaptation (eg floodproof zoning), an unfortunate sequence of such events could undermine financial and economic stability.

Rising global emissions while the EU's share is quickly declining also poses a challenge for the justification for domestic climate policies. However, as a global leader, the EU encourages, facilitates and catalyses global decarbonisation. Hence, a key criterion for domestic climate policies should be how they contribute to decarbonisation elsewhere. Innovation in technology and policy instruments, climate diplomacy, climate finance and trade policy will need to be combined in a broadly consistent strategy.

The EU has played a major role in supporting the Paris process to keep global warming within two degrees Celsius above preindustrial levels. This has included teaming up with the United States on important pledges from methane to renewables and energy efficiency. The EU and its member states have continued lead on climate finance, and have initiated with other G7 partners new initiatives such as the Just Energy Transition Partnerships (JETPs). However, it has become clear that the EU needs to reinforce its climate diplomacy and international partnerships to contribute in a more effective manner to global decarbonisation and fairness.

This notably calls for more and more targeted climate finance, which is at the centre of global climate fairness conversations and is the cornerstone of the Paris Agreement's main principle of common but differentiated responsibilities. It also calls for new measures on carbon pricing and international taxation for development and climate policy, new green industrial partnerships with emerging and developing economies and new plurilateral agreements on green subsidies and tariffs. This is the crossroads where climate policy meets development, foreign and industrial policy.

The FU needs to reinforce its climate diplomacy and international partnerships to contribute more effectively to global decarbonisation

Challenges

The overriding challenge is to accelerate EU decarbonisation

To meet the 2030 55 percent emissions reduction target, ETS sector emissions must drop by 35 percent compared to 2022, while emissions from buildings and transport should be reduced four times faster than in the past decade. To get there, multiple problems must be tackled.

Increasing marginal cost of abatement

Decarbonisation will move in the coming years into sectors where the cost of abatement is higher and will increasingly require green investment Decarbonisation will move in the coming years into sectors where the cost of abatement is higher and will increasingly require green investment. For example, larger shares of renewables in the system require more investment in grids and flexibility solutions such as batteries. Electric vehicles require charging infrastructure. Buildings must be retrofitted. Industrial processes must electrify, and green hydrogen production must grow. The EU needs to keep contributing to this, even when post-pandemic recovery funding from NextGenerationEU (NGEU) phases down.

EU climate governance is not 'fit for 55'

The three-pillar governance structure described above is insufficient to sustain the deep decarbonisation trajectory the EU will face in the coming years. The EU has limited tools to push governments to implement the energy and climate strategy they have agreed to at EU level. This is particularly true for the 2030 targets, which are not binding at national level, unlike the 2020 targets.

Distributional implications between countries

The distribution of the costs of decarbonisation between EU countries will change as decarbonisation moves towards harder-to-abate sectors. While power-sector decarbonisation primarily hits coal-based countries in the east, buildings and transport sector decarbonisation will also hit core countries. A more specific issue relates to the ETS. Carbon prices impact different EU countries differently, because of their differing starting conditions. This

cannot be resolved through the initial allocation of ETS allowances as the distribution of decarbonisation costs between countries is uncertain and varies over time.

The burden of complying with new regulations will be high for low-income households, but also for middleincome households

Distributional implications within countries

Decarbonisation will affect households unequally: the burden of complying with the new regulations by set deadlines (for example, the phase-out of combustion-engine cars by 2035) will be high for low-income households of course, but also for middle-income households, for which renovating property or buying an electric car could require investment of about a year's income. Policies that have the effect of requiring these investments could easily trigger political backlash if they are not properly designed and explained.

Higher cost of capital

Many of the needed clean technologies are characterised by high capital expenditures and low operating expenses. This is true for renewable energy sources including wind and solar, but also for electric vehicles. The response of central banks to the 2021-22 inflation shock has increased real interest rates across Europe, making financing for both households and private companies more expensive. If higher interest rates persist, investment in key cleantechnologies may be dragged down.

EU fiscal constraints

The public investment needed for decarbonisation is harder to find if fiscal space is constrained - and increasingly focused on other areas, such as defence. The new EU fiscal rules might be too restrictive when it comes to climate policy (Zettelmeyer et al, 2023).

Reconciling the climate agenda with industrial competitiveness

There are widespread fears that climate action predominantly based on carbon pricing and regulation will hurt EU industrial competitiveness. Ensuring decarbonisation is compatible with industrial competitiveness is critical for the political sustainability of climate policy.

Maintaining the political and social momentum on climate action will inevitably become more challenging

More pressing priorities

The Russian war of aggression against Ukraine has put national security at the top of policymakers' agendas and the cost of living at the forefront of citizens' concerns. This may have contributed to the loss of support in the 2024 European elections for green and liberal parties that were pushing the Green Deal. In addition, maintaining the political and social momentum on climate action will inevitably become more challenging as the transition moves from plans to actions that require sacrifices from households and companies.

Climate adaptation

While adapting to climate change certainly is mostly a matter of regional and local action, there are several reasons why the EU should play a greater role. These involve scale advantages, territorial spillovers and impacts that relate specifically to the EU's other competences, such as ensuring the functioning of the single market. Emergency response to major climate-related disasters is a very practical example where scale can make a difference. National response capacities can easily be overwhelmed by large-scale floods or forest fires. Since time is often of the essence, pooling resources for fast and decisive interventions can prevent substantial damages and loss of life.

Prepare to become 'fit for 90'

You will have to oversee the approval of the 2040 climate target and start preparing the next wave of legislation for the post-2030 period. This also includes very difficult questions such as whether to start preparations for an ETS3 for agriculture, and how to incentivise negative emissions.

Green global reach

The EU needs a new climate diplomacy and partnerships plan aimed at supporting global decarbonisation while addressing increasingly pressing competitiveness and security concerns. Developing this external dimension is challenging, as plenty of trade-offs exist between the various policy objectives, such as the interplay between decarbonisation, competitiveness and security, and how to allocate limited fiscal resources to domestic decarbonisation and international climate finance.

Recommendations

Boost green industrialisation and establish a green social contract

The previous Commission promoted the European Green Deal as Europe's new growth agenda. However, the socio-economic aspect remains a weakness of the initiative, creating the risk of a serious political backlash against green policies in the coming years if not adequately addressed. Addressing this backlash convincingly will be essential to ensure the implementation of the legislation to meet the 2030 emissions target.

Green industrialisation

One challenge facing Europe is how to pursue the green transition while preserving - and ideally boosting - industrial competitiveness. Climate policy represents a burden to certain European industries, as it implies higher costs for them compared to their international competitors. However, the transition is also an historic occasion to innovate and create new markets, starting with clean technologies.

On this front, limited progress has been achieved so far. It will be crucially important for you to work with the commissioner responsible for internal market and competitiveness to create a strong and innovation-driven EU green industrial policy. This entails working on both horizontal (single-market deepening) and vertical (targeted interventions, such as smart subsidies for innovative clean technologies) actions. You have an opportunity to further develop the Innovation Fund as the EU's main instrument to support clean-tech demonstration.

Green social contract

Climate action should not increase inequality. Seeking the political support of coal-intensive eastern European countries and learning from the French experience with the gilets jaunes, the European Green Deal has been profoundly shaped by distributional considerations. The Just Transition Fund was the first flagship initiative to be adopted under the Green Deal, while

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the Social Climate Fund has been created alongside the ETS2, as the best economic literature on carbon dividends would prescribe. However, the creation of these funds is insufficient to address the profound distributional implications of climate policies.

To do better, you will need to: 1) work with other relevant commissioners to streamline and simplify EU funding instruments - from the under-utilised Just Transition Fund to Regional and Cohesion funds - to accompany the transformation of coal and carbon-intensive regions; 2) guide an efficient utilisation of the Social Climate Fund, with actions targeted in a way to maximise impacts on both emissions reductions and social fairness; 3) push for a comprehensive rethink of the sustainable agriculture agenda and of the Common Agriculture Policy, in view of the next EU budget (Multiannual Financial Framework, MFF) cycle, with the aim of supporting small-scale farmers and requiring more effort from the agri-food industry instead. This should lead to a 'Rural Green Deal' that further contributes to the political sustainability of the initiative.

You should work with colleagues on the creation of a new EU Green **Investment Plan**

Green investment plan

You should work with colleagues on the creation of a new EU Green Investment Plan to maintain the current level of EU grants after the end of NGEU in a way that will strengthen EU climate governance. EU funds should support projects that, overall, allow for more efficient decarbonisation, such as investment in electricity grids.

Lay the foundations for 'Fit for 90'

The 'Fit for 55' package created ETS2 for buildings and road transport. After its entry into operation, most economic sectors will be covered by a carbon-pricing mechanism, with the notable exception of agriculture and land-use, land-use change and forestry (LULUCF)1. As all sectors must contribute to the 2050 climateneutrality objective - and to negative emissions thereafter - this gap should be addressed by a future Fit for 90 package. Applying a carbon-pricing mechanism to the agriculture and LULUCF

¹ Other sectors not covered by a carbon pricing mechanism will be: international aviation and maritime; non-CO2 emissions from energy production, transport and combustion; and some smaller sectors including waste landfilling and wastewater treatment.

sectors would provide a clear financial incentive for farmers and forest managers to reduce emissions and increase removals, and for consumers to reduce the consumption of emission-intensive agricultural products. But this will be politically very challenging and will require attentive calibration and communication.

Meanwhile, there is a need to start a serious reflection on the 'ETS endgame'. By 2039, carbon allowances will no longer be created. As a result, 15 years from now, utilities and energyintensive industries will only be able to use carbon allowances they have previously banked or bought from other market participants. This raises important questions about if and how the market will work, and what the options should be to face this new scenario. To provide visibility to all players covered by the ETS, and to ensure a conducive investment environment for decarbonisation, it will be important to provide early answers to this looming question.

Develop EU climate adaptation policy

Develop a new governance framework to structure EU-member state cooperation on climate adaptation

With the aim of facilitating the exchange of information between different governance levels and introducing verifiable targets to guide action. The Commission should be responsible for helping to generate, collect and spread scientific knowledge (such as satellite imagery and model simulations), and for providing a platform through which national and sub-national governments can share ideas, experiences and adaptation practices in a structured way.

You should also take additional steps to mainstream adaptation in other policy areas, starting with the Common Agriculture Policy. The Commission should help countries establish national adaptation plans with clear targets, consistent with those of neighbouring countries. This would be a step beyond than what is required by the European Climate Law. You should require the inclusion of strategic interventions that have EU-wide relevance, such as for the protection of key infrastructure. National adaptation plans should serve as a guide for local government action. This framework is meant to be flexible and cooperative rather than overly rigid and hierarchical. However, agreed adaptation

The Commission should be responsible for helping to generate, collect and spread scientific knowledge

Work to create a new EU climatedisaster insurance mechanism to tackle the impacts of climate change

plans should be formal and linked to a new EU climate-disaster insurance instrument.

You should work with the commissioner responsible for regional policy to create a new EU climate-disaster insurance mechanism to tackle the increasing impacts of climate change. EU countries are all exposed to various climate impacts, creating a rationale for all to be insured against catastrophic impacts that will occur at different times across the continent, while of course accepting that they are unlikely to be willing to accept large and structural fiscal transfers to compensate for long-term climate-induced damages. The European Solidarity Fund can be a good starting point for this new initiative. It could be scaled-up to cover an agreed set of costs that are expected to arise from climate damages, also to soften the fiscal blow for affected countries. Access to the fund might be made partly conditional on development and implementation of solid national adaptation plans.

Scale-up the EU's green global reach

Re-orient green diplomacy from targets to implementation

Targets agreed at UN climate summits are impactful to the extent that they are implemented. For this, it is first of all important to have dedicated secretariats to ensure monitoring and promote coordination on a continued basis. The Climate and Clean Air Coalition is the secretariat for the Global Methane Pledge, but a secretariat is also needed for the Global Renewable Energy and Energy Efficiency Pledge. This will be important for promoting bottom-up initiatives for global climate action, and engaging the private sector and cities.

Ramp-up international climate finance

Financial commitments provided by advanced countries must be increased substantially. One way to do this could be through JETPs, which should be given larger financing and expanded to cover other large emitting emerging and developing economies (EMDEs), including Colombia, Kazakhstan, Nigeria, Mexico, Thailand and India. The benefits for the EU and G7 of scaling up climate finance largely outweigh the fiscal costs, but doing so is

fraught with political-economy challenges. A minimal requirement for overcoming these challenges is demanding more detail in the conditions that would trigger the release of funding, and a governance structure to monitor that conditions are met (Bolton et al, 2024).

New carbon pricing and international green taxation diplomacy

Implementation of the carbon border adjustment mechanism (CBAM), intended to equalise carbon costs of certain domestic and imported good, will test the EU's capability to deliver and manage international repercussions. But there should be no backwards step on CBAM. Taken seriously at global level, it illustrates the important role of the EU market. The implementation should focus on maximising incentives for decarbonisation - implying resolve on principles and flexibility on details. In this context it is important to ramp-up CBAM diplomacy in partner countries and assess possible targeted interventions to offset its impacts for the poorest countries.

Push for international taxation for development and climate action

Levies on heavy fuel oil and kerosene used in international aviation and shipping would help provide much needed capital to boost loss and damage and adaptation funding in developing countries.

New green industrialisation partnerships and guardrails

You should promote bilateral green industrial partnerships with EMDEs. The EU should focus on engaging with EMDEs in moving up the supply chain, from extraction to refining for example. EU governments will not be able to intervene directly, but can, for instance, support guaranteed offtake agreements (in which buyers commit to purchase a volume of product, to help secure loans for infrastructure and other high-cost projects). You should also work with commissioner for trade to promote plurilateral agreements on green subsidies and tariffs – green trade wars would hold back global decarbonisation. You should reach out to the US and China to build green subsidy and tariff guardrails. A three-way agreement could be pursued, that would then be expanded to others, or the World Trade Organisation.

The EU should focus on engaging with **EMDEs** in moving up the supply chain, from extraction to refining

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