



## Executive Summary

### A new European impetus

At a time when the European Union has just announced a major plan to support the energy transition (Green Deal), Institut Montaigne wanted to make a contribution to this major debate for the future of our society. Our

approach is deliberately European, with a particular focus on France, Germany and Poland, with the aim to underline the heterogeneity of situations within the European Union. This report, which is the result of numerous exchanges with interlocutors from all walks of life (academia, politics, industry, civil society), examines the means and tools implemented to meet the carbon neutrality objective that the 27 European States wish to attain by 2050. The reduction of European CO<sub>2</sub> emissions must significantly accelerate in order to reach the ambitious targets that Europe has set for itself, which require a radical transformation of energy production, transformation and consumption systems as well as halting the use of hydrocarbons in Europe almost completely - and all this within the next 30 years. This decarbonization strategy also implies a profound transformation of skills and sets of behaviour, as well as the development of numerous technological innovations in order to decarbonize the sectors for which there are no solutions yet.

### In search of a community consensus

Despite significant progress, the European energy transition still faces many challenges. In particular, it is encountering a strong divergence in national objectives and priorities, inherited from the industrial choices and geographical specificities of each country. In addition, the economic and social situations of the various member-states remain very heterogeneous, which does not facilitate consensus in a European decision-making process that can still be improved.

### Seizing the opportunities of this transition

The financial manna represented by the European recovery plans makes it clearly possible to accelerate the energy transition. But this manna does not guarantee its success. We need to ensure that investments to reduce CO<sub>2</sub> emissions are effective while guaranteeing the Union's energy security and controlling the economic impact of this transformation. The European energy transition offers the opportunity to create new centres of economic and technological competitiveness and new sectors of excellence, in particular

in the field of renewable energies, hydrogen and electric batteries – which are sectors that create value and “green” jobs. The energy transition is a potential economic lever and represents geopolitical and social opportunities for the European Union.

### Making rational choices

In the absence of a significant carbon price covering all emitting sectors (i.e. ETS market), there is no “market economy” favorable to the widespread and rational deployment of decarbonization solutions. This shortcoming must be remedied by an appropriate regulatory framework. We also need to take the heat out of the debate on the choice of technologies and make informed and concerted decisions based on a systematic scientific, technical and economic approach to the various options. The European Union must provide itself with the means to achieve better community coordination based on informed technological and economic decisions. In this respect, the transformation of the European electricity system – around the copper plate – will be a major element in the success of this transformation.

**This report proposes guidelines to accelerate and complete the European Green Deal in order to move towards a unified European strategy for energy transition that integrates the divergent interests of the different member states and accompanies the effects of this transformation over time.**

### Our Proposals

**Proposal #1 : Strengthen the European CO<sub>2</sub> pricing policy and redistribute its revenues to ensure social justice**

A growing carbon pricing trajectory is needed to support the transition to a “climate neutral Europe”. Strengthening the current pricing policy is necessary and legitimate: better price signal, greater predictability, facilitation of investment decisions, whilst taking into account the climate constraint. As green taxation is essentially regressive, it is necessary to ensure the proper redistribution of its revenues to the poorest households.

#### Recommendations

1. Renew the European CO<sub>2</sub> emissions trading scheme
2. Create a European Central Climate Bank
3. Redistribute the revenues from carbon pricing to the poorest households

**Proposal #2: Strengthen coordination on energy transition issues and build support within the European Union**

There is a growing divergence between the EU and the member states on energy policies, particularly on the social aspects of the energy transition. The fight against global warming remains a major international concern, but is prioritized differently by each member state due to the heterogeneity of national contexts (social, cultural, industrial, economic, etc.). This makes it difficult to reach a consensus on the measures that need to be adopted within a European decision-making framework that remains complex.

### Recommendations

1. Create an independent European Energy Transition Agency (EETA) with extended competences, by bringing together the existing European institutions (Agency for the Cooperation of Energy Regulators and Environment Agency).
2. Change the paradigm of the energy transition by avoiding reducing?? this transition to the climate objective it pursues.
3. Plan the closure of European coal mines and power plants by supporting the conversion of the affected areas and employment basins.

### Proposal #3 : Implement a carbon traceability system to inform consumers, evaluate companies and facilitate the implementation of an ambitious carbon adjustment at the borders.

The carbon impact of consumer products is often abstract and subject to many approximations which are often erroneous. While the response to global warming cannot solely depend on individual behaviour, individual responsibility remains part of the solution to the climate challenge, alongside systemic and collective measures. It is therefore necessary to put into place the means to enable consumers to make informed decisions, in line with the claimed commitment to fight global warming.

### Recommendations

1. Develop a European carbon accounting system to determine the carbon content of goods produced and consumed in the EU.
1. Impose carbon content labelling on production and consumer goods in the EU.
1. Gradually extend carbon adjustment at the EU's borders to new sectors and more complex products through carbon accounting.

### Proposal #4: Seize the opportunity of the European recovery plans to accelerate the decarbonization of the European economy through targeted reforms and investments.

While the national recovery plans highlight the differences between the three countries (Germany, Poland, France), both in terms of the state of play and the ambitions for the energy transition, they also underline common challenges and shared trajectories that could greatly contribute to accelerating the European energy transition. This is particularly the case for the two key areas of the development of hydrogen technology and decarbonization of the transportation sector. While these two objectives are widely shared, the governments' commitments emphasize different ambitions. For example,

while Poland seems to be focusing on a limited part of the car fleet, Germany and France have adopted a broader and more ambitious vision to make the fleet greener, but also to strongly support the rail sector. Similarly, these three countries have decided to support the development of hydrogen technology, sometimes as part of a broader hydrogen strategy, with longer-term investments (this is particularly the case in Germany and France). However, these strategies remain national and could lead to the duplication of investments, the divergence of future industrial standards, or at least the weak development of European synergies in this sector.

Thus, while the national recovery programs highlight the ambitions of the member states and the convergence between them, they also demonstrate that complementary actions are still needed to truly accelerate the European energy transition, particularly in key areas such as transportation. A considerable effort remains to be made to evaluate the socio-economic and environmental costs and benefits of this proliferation of climate actions.

In order to propose pan-European projects that are consistent with the recovery plans and contribute to the green transition, we wanted to focus on complementary measures that would help decarbonize the transportation sector. Similarly, the development of hydrogen technology holds great promise for the green transition, and this has been well understood by member states such as Germany and France, which have given it a prominent place in their recovery plans. However, in order to facilitate the emergence of a European sector of excellence, it is essential to coordinate national recovery plans at the European level and to promote cross-border initiatives. The objective must be to avoid a multiplication of redundant initiatives that would hinder the proper allocation of capital while slowing down the development of the sector.

### Recommendations

1. Accelerate the decarbonization of transportation through targeted investments in the rail network.
2. Promote coordinated development and cross-border projects in the hydrogen sector.