Paper Series

Green Deal reloaded — Perspectives for a Sustainable and Just Transition of the EU

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Carbon Pricing: The Key to Economic Transformation

Europe has set itself the ambitious goal of reaching carbon neutrality within the next three decades. While no one today can say what our economy will look like in that context, it is clear that if we are to get there, we have to embrace profound changes in our way of life, and changes to the structure of capital in our economy (industry, infrastructure, housing and transport).

In 2018, the European Commission estimated that achieving this change would require between €175 and €290 billion in additional investment in Europe each year between 2030 and 2050. Even though part of this change will come through necessary public sector investments, most of the burden — which will severely affect households' purchasing power — will be carried by the private sector and transferred to consumers through increases in the relative prices of energy-intensive goods and services. Until the discovery of a technological miracle that will make it possible to produce renewable energy at a lower cost than fossil fuels, for the good of future generations, these sacrifices are unavoidable. We should make sure that these sacrifices are minimized for the given EU climate ambition.

For this, the best climate policy is to reorient the allocation of capital in our economies toward low-carbon technologies through a carbon price that increases over time, and that is set at a level that matches the EU's ambitious climate objectives.

Reforming the EU Emissions Trading System (ETS) market

What is the most effective way to orchestrate this transition, in other words, to implement it at the lowest cost for European citizens? First of all, it is important to note that the management of this key issue should be made at the European level, both for our collective prosperity and for the global common good that is our climate. What is more, following the approach taken in the photovoltaic and hydrogen sectors and resorting to a climate race to the bottom, or green national champion one-upmanship, would spell disaster.

The size of the European recovery plan might lead us to believe that only states are in a position to make these investments, for example by piloting and financing investment plans in target sectors. This suggests that European politicians are operating on the assumption that if the ecological transition is slow, it is because green entrepreneurs aren't able to access sufficient credit in the markets. But there is no basis for such a conclusion. The level of interest rates across Europe and the amount of liquidity in the financial markets suggest an altogether different state of affairs.

The fact is that there are myriad green projects on the continent. Many of them are socially desirable to implement, but they remain unprofitable when compared to their more carbon-intensive competitors. The problem European climate policy has to solve is not that the green sector does not have enough access to capital. Rather, it is that the many green businesses are not competitive. And this lack of competitiveness is rooted in the fact that their competing brown activities are implicitly subsidized because they don't pay for the climate externality that they generate. We see it for example in wind and solar (in countries without feed-in-tariffs), in transport (electric cars, and rail transport in countries where electricity is carbon-free), and in housing. This is why Europe should impose a unique carbon price on all EU emissions, whether they originate within the continent (using the ETS mechanism) or elsewhere (using a carbon border adjustment).

The European Union as a whole is much better placed than any of its individual members to implement such a ›polluter pays‹ principle. The ETS permit market should therefore be extensively reformed and applied to all sectors, as well as to importers through the border adjustment: exemptions must be eliminated, the distribution of free permits abolished, a progressively increasing floor price imposed, and »carbon income« redistributed to citizens as a mechanism for reducing related inequalities.

The 2°C target leaves Europe with a global carbon budget of only 600Gt CO_2. This carbon budget limit can be expressed as a value for carbon, one that, as we know, must increase over time. The carbon value should be defined such that if all the actions that have a cost per ton of CO_2 saved lower than that carbon value, the carbon budget will be balanced, and we will not cross the 2°C threshold. In principle, if this is the value that we use to set a unique carbon price, we can efficiently decentralize the allocation of climate action across our liberal economic system. The price would be just under €100 per ton of CO_2 today, increasing at 4–5% per year plus inflation.

How can we redirect capital for a successful energy transition?

Public opinion tends to favor policies of prohibition and coercion when they are applied to private investments. This is true for example in the housing sector (e.g. mandatory thermal renovation, phasing out the use of gas boilers), transportation sector (phasing out combustion engines over 15 years), and electricity sector (banning investment in gas infrastructure, closing power plants). Proponents may try to justify similar policies at the household level, using paternalistic arguments about consumers' potential inability to understand how future increases in the price of carbon will affect their budget. For manufacturers, however, that would be unthinkable. With the current CO_2 price per ton over €40, natural gas already dominates coal in European electricity production. In fact Germany's unjustifiable policy of abandoning coal by 2038 is becoming obsolete, because the markets will solve the problem on their own. Instead, what states should do is manage this socially costly transition in the mining industries, using appropriate policies to transition jobs through a supranational solidarity mechanism (the Just Transition Fund).

The same applies to natural gas. Should there be a set date for banning new investment in this sector? Given that it is still not possible to store electricity, natural gas will remain a fossil fuel back-up to wind and solar energy. The price set for carbon should integrate current uncertainty about the emergence of technologies for mass electricity storage, which would put the onus on manufacturers to manage the industrial risk. For the time being no one can say exactly when Europe should phase out natural gas efficiently. Legislating an artificial deadline would be significantly less efficient than leaving it to actors within the sector to manage that risk. It would be up to investors, understanding this, to act accordingly. But the contract must be clear: freedom of enterprise will be balanced against penalties on emissions by way of an increasing carbon price, with no state aid for companies that make high climate-risk investments.

Today's stimulus plans under the pandemic must remain focused on the main objective: saving businesses and jobs from the temporary shock of the lockdowns, and smoothing this shock over time through a common debt strategy. This includes saving the most polluting sectors. At the same time, the ideal would be to combine these stimulus plans with the announcement of both a unique carbon price floor and the rate of its growth over time, so that capital will be redirected toward technologies that generate less CO_2.

The public sector will have to face significant expenditure in order to green our public transport and our public infrastructure (schools, administrative buildings), and to support the fundamental and applied research we will need to produce the innovations essential to achieving our climate objectives. There must be a serious socio-economic evaluation of public investments in this sector, to ensure that we only implement actions that have a cost per ton of CO_2 below the carbon value. The major advantage of a massive subsidy plan for green R&D is that if the innovations it generates allow green technologies to compete with brown technologies, it will mobilize actors around the word — even in the absence of local political will to fight climate change.

Conclusion

There is real consensus between France and Germany on the need to steer the transition to green energy using the price signal of the ETS system and well-targeted European policies, such as R&D to overcome the current obstacles of electricity storage and e-mobility. While some may try to use climate change as a justification for destroying the free market system, comparing the relative merits of the free market with those of planned economies is little more than a rehash of a Cold War debate. Even though climate change presents an existential danger to our civilization, all that we need to address it is a single instrument: a carbon price, used intensively. This would align the myriad private interests at stake with the public good by putting a value on the thing that is most precious to us, the environment.

Author
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The Series
The paper series »Green Deal reloaded — Perspectives for a Sustainable and Just Transition of the EU« is a joint project of the Genshagen Foundation and the Institut Montaigne as part of the Genshagen Forum for French-German Dialogue. In the context of the COVID-19 crisis and the European recovery programmes, it aims to promote a high-level French-German dialogue on the economic, social and political implications of climate policies. The series provides a platform for leading French and German experts to outline a more sustainable and resilient model for the future and examine the European Union's potential as a key actor of the ecological transformation.

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The Genshagen Forum for German-French Dialogue has been organized since 2010 in cooperation with the Institut Montaigne in Paris. In view of the numerous challenges Europe is facing, Germany and France must take on particular responsibility for the future of the EU and work on the development of joint strategies. The Genshagen Forum actively supports this process by fostering constructive dialogue and networking between young leaders from both countries. The participants come from the areas of politics and administration, business, science and media. They belong to the age group between 30 and 40 years and are personally invited on the basis of their expertise.

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