

# Shifters Bruxelles réponse à la consultation de la Commission Européenne sur la stratégie long-terme de réduction des émissions de GES

Mensuelle Shifters  
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[www.theshiftproject.org](http://www.theshiftproject.org)

# Public consultation on the strategy for long-term EU greenhouse gas emissions



[https://ec.europa.eu/clima/news/public-consultation-strategy-long-term-eu-greenhouse-gas-emissions-reduction\\_en](https://ec.europa.eu/clima/news/public-consultation-strategy-long-term-eu-greenhouse-gas-emissions-reduction_en)

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## FUTURE CLIMATE & ENERGY POLICY

Contribution of The Shift Project

As Europe reaffirms its commitment to fight climate change and continues its transition towards a society powered by low-carbon energy sources, the question of which long-term strategy to embrace naturally arises. The Shift Project, as an independent think-tank dedicated to serve the common good by performing and publishing high-quality research on issues revolving around the energy transition and climate change, has explored a broad range of options which would allow to substantially decrease European greenhouse gas emissions by 2050 and fit in the long-term European strategy for greenhouse gas emissions reduction. Nine key proposals have been identified and put forward in the "Manifesto to decarbonise Europe", which is summarised in the present document. The problem tackled in each proposal is briefly introduced with a series of facts, and solution avenues are then presented. The envisioned benefits of these solutions are highlighted and quantified in terms of greenhouse gas emissions that may be avoided by 2050. Their projected costs are also estimated for clarity and comparison purposes. The full details of the analyses performed as well as a complete set of references is readily available on the webpage of the Shift Project.

The first proposal looks at electricity production in Europe. The EEA reckoned in 2012 that electricity production in the Union accounted for approximately 25% of its total greenhouse gas emissions. In particular, coal power plants are responsible for approximately 65% of carbon dioxide emissions in the European electricity sector. As a result, phasing out coal and replacing it with carbon-free or low-carbon electricity generation technologies, namely traditional renewable power plants such as solar, wind or hydro, as well as dispatchable plants like nuclear power plants would contribute 750 megatons (Mt), or 24% of carbon dioxide equivalent emissions reductions towards achieving the minimum objective of the Paris Agreement. An obvious side benefit of this measure would be a significant improvement in air quality in regions where coal power is prominent, thereby contributing to reduce the pollution causing the premature death of hundreds of thousands of European citizens each year. Overall, such measures are estimated to cost between 400B€ and 1300B€ between 2015 and 2050, depending on the choice of coal substitutes across countries. The lower bound of the range is representative of a scenario in which coal is replaced by nuclear in all concerned countries, and corresponds to a cost of 533€/t of carbon dioxide emissions avoided.

The second, third and fourth proposals focus on various aspects of transportation and its implications for climate policy. According to the European Environment Agency (EEA), road transportation roughly accounted for a whopping 94% of transportation-based emissions in Europe in 2012. More precisely, private vehicles and small utility vehicles contributed 58% and 8% towards this total, respectively. In light of this, promoting the development and widespread use of highly fuel-efficient private and small utility vehicles appears as a welcome measure to reduce the carbon dioxide emissions in the transportation sector. Policies should be enacted that favour the development and commercialisation of vehicles consuming approximately 2L/100km, as well as systematically penalising the biggest emitters. Such policies would make it possible to reduce the annual carbon dioxide equivalent emissions in the European transport sector by 400 mega tons by 2050, which corresponds to approximately 14% of the total emissions cuts required to meet the carbon budget targets set out in the Paris Accord. The investments needed to implement such measures can range from nothing to 2000B€, depending on the pace of progress made it in improving fuel efficiency and the scale of research and development programmes supported by such policies.

Still within the realm of transportation, urban mobility is an area envisioned to hold great potential for greenhouse gas emissions cuts. Indeed, within the European Union, it is estimated that about 40% of transportation-based carbon dioxide equivalent emissions stem from mobility in an urban setting. In particular, private vehicle use represents a substantial proportion of those emissions. In order to tackle this issue, the development of dedicated transport solutions, along with the promotion of bicycle use, the encouragement of carpooling and the establishment of express bus networks in semi-urban areas should be aggressively pursued. Additionally, valuable side benefits of such measures would be a significant improvement in the health and quality of life of city dwellers, notably as a result of reduced pollution and congestion, the latter having a substantial economic cost nearing 1% of the European Union gross domestic product. The implementation of such measures could allow to slash as much as 170 Mt of carbon dioxide emissions, which constitute almost 6% of the total emissions reductions to reach the targets enshrined in the Paris Accord. Overall, the estimated cost of such measures would range between 750B€ and 1050B€, which translate to costs of 4400€ and 8100€ per ton of carbon dioxide emissions avoided.

## ET SI ON DÉCARBONAIT VRAIMENT L'EUROPE ?

DECARBONIZEUROPE.ORG

### DÉCOUVREZ NOS 9 PROPOSITIONS POUR DÉCARBONER L'EUROPE

L'Accord de Paris sur le climat engage l'Europe à réduire autant que possible ses émissions de gaz à effet de serre d'ici 2050

La mise en oeuvre de ces 9 propositions permettrait de réaliser l'essentiel des réductions d'émissions nécessaires pour respecter notre « budget carbone »\*

\*Chaque pourcentage est une estimation de la part du potentiel de réduction d'émission de chaque mesure afin de respecter notre « budget carbone ». Ce « budget carbone » désigne le plafond d'émissions de gaz à effet de serre, soit en 2050, correspondant à une division par quatre des émissions de 1990 des pays développés. Le potentiel de réduction d'émission de chaque proposition est indiqué toutes choses égales par ailleurs.



2050

### 9 PROPOSITIONS ÉCONOMIQUEMENT RÉALISTES

Investissement annuel requis par ces mesures

Des investissements finançables à l'échelle européenne



Représenterait moins de 3% du PIB annuel de l'Union européenne\*  
\*PIB UE = 15 000 Mds€/an environ

Soit près de **1000€** d'investissements par habitant chaque année