

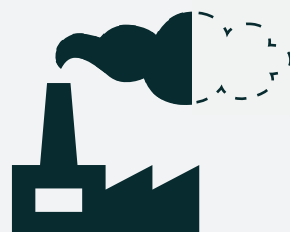


5/ The new industrial revolution

Our proposal

Invent post-carbon heavy industry

Priority to the circular economy and eco-design, reinforcement of the European emissions trading system, research support, particularly research relating to CO₂ capture and storage, with a view to halving the sector's emissions.



The stakes for the climate

Industrial decarbonization should lead to a reduction in greenhouse gas emissions of around **€200 million tonnes of CO₂ equivalent** by 2050, i.e. **almost 7% of the total emission reductions required to meet our "carbon budget" * responsibilities.**

Other reasons to adopt this solution

Job creation

The impact on jobs is likely to be low in these relatively non-labour-intensive sectors. Creation of high added-value jobs for process improvements.

Economic activity

The introduction of new regulatory constraints and the potential drop in production may initially cause difficulties in the sectors concerned.

But the overall impact should be positive, given the increase in added value (produce less, but of better quality, boosting competitiveness), and thanks to falling fossil energy costs.

New markets for cutting-edge technologies will emerge.

Environment, health & well-being

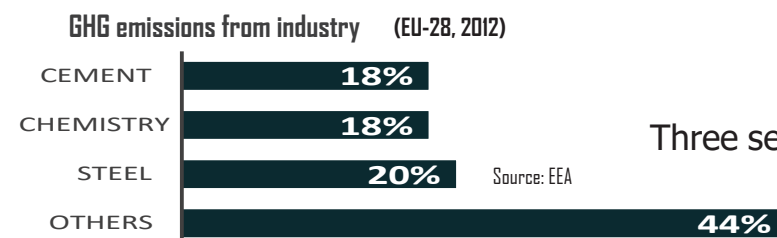
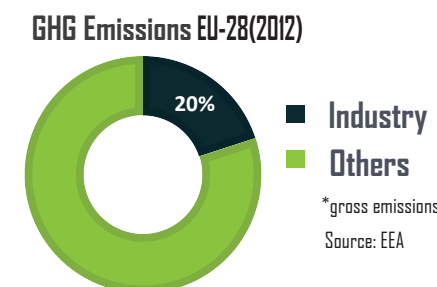
This transition will help alleviate pressure on the environment by reducing and rationalizing the use of raw materials, and minimizing waste emissions, as well as the associated risks of heavy pollution.

* Our "carbon budget": target greenhouse gas emission ceiling for 2050, corresponding to a four-fold reduction in European Union Member State emissions compared to 1990 levels.

5/ The new industrial revolution

Why ?

Industry is responsible for almost **20% of greenhouse gas emissions** in the EU.



Three sectors: the steel, chemicals and cement industries generate the vast majority of industrial greenhouse gas emissions across the European Union

How ?

- Direct actions:

- For heat production, replace fossil fuels with alternative fuels (waste or materials sourced from biomass) or processes that emit lower levels of greenhouse gases
- Improve the carbon intensity of production processes
- Promote the development of a more "circular" economy incorporating more recycling and greater material efficiency and targeting longer life-spans

- Regulatory and legislative support:

- Promote "green investment" funding
- Create a regulatory framework that is more favourable to the emergence of a more circular economy
- Reinforce the CO₂ price signal in the European Union emissions trading system

- Research & Development:

- Implement government funding for research and development, particularly focusing on low-carbon technologies and CO₂ capture and storage.

How much does it cost ?

For a programme similar to the one we are proposing (direct actions and R&D), the European Commission evaluates the annual investment required to be **€10 billion**, i.e. a cumulative investment of around **€300 billion by 2050**.

Who pays ?

Funding for cutting-edge technologies can be provided by public-private partnerships and several European funds, particularly the NER 300/400 programme (this reserve, funded by the sale of 300 million followed, in 2020, by 400 million CO₂ emission allowances, is aimed at financing low-carbon energy demonstration projects).