

COUNTRY FACTSHEET

FRANCE

WHAT ARE THE NATIONAL CIRCUMSTANCES THAT INFLUENCE DEEP DECARBONIZATION IN FRANCE?

- Relatively low level of energy consumption (2.6 toe/cap) due to low energy intensity of GDP, making further improvements quite challenging.
- Low GHG emission intensities relatively to other OECD countries (5.7 tCO₂/cap), notably because of the currently dominant role of nuclear energy in the electricity sector (around 75% of power supply).
- Centralized energy system; need to leave more room for decentralized sources and local initiatives.
- A National Debate on Energy Transition (2012-2014) framed around two main pillars: the Factor Four (75% reduction in GHG emissions by 2050 compared to 1990), and the medium-term reduction of nuclear in the electricity mix to 50% in 2025.
- The law on Energy Transition and Green Growth (July 2015) sets the target of reducing final energy demand by 50% over 2010-2050 and introduces several sectoral targets as well as a carbon tax (which will gradually increase to €100/tCO₂ in 2030).

WHAT ARE THE MOST PROMINENT STRATEGIES TO BE IMPLEMENTED FOR DEEP DECARBONIZATION IN FRANCE?

- Overcoming the energy efficiency gap in all sectors, notably in the thermal retrofit of the entire stock of existing buildings, which requires scaling up heavy rehabilitation, to be incentivized by, notably, subsidies to reduce the cost of investment, environmental taxes to increase energy prices and adequate funding packages.
- Ambitious changes in transport dynamics to control individual mobility (reorganization of urban systems to limit commuting and promote public transportation), to foster decoupling of freight transport and GDP (reorganization of logistics and distribution, ecodesign of products) and to increase the modal share of rail freight (development of infrastructure, including multimodal platforms).

Illustrative pathway: FR - Efficiency*

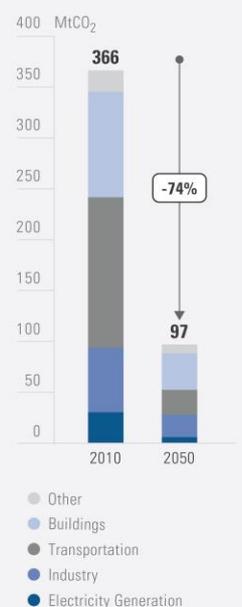
Development indicators from 2010 to 2050



Pillars of decarbonization from 2010 to 2050



Energy-related CO₂ Emissions



*This illustrative pathway is one of the 2 pathways developed in the DDPP country report.

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- ▶ Technological decarbonization of the entire car fleet through the deployment of electric, hybrid-electric, and natural-gas vehicles.
- ▶ Important surge of renewable energies in power generation (in parallel with the reduction of the share of nuclear), including variable renewable energies (VREs) accounting for up to 50% of power generation by 2050 and the development of other renewable sources such as biomass and heat in local and regional decarbonized energy system.
- ▶ Organization of training programs to develop new skills (for thermal retrofitting for instance) and smooth the professional transition away from road freight transport, car industry and nuclear energy (representing around 10% of active population).

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