

This edition of the World Energy Issue Monitor 2024 highlights some perceptions that resonate with facts or actions undertaken in recent months.

According to Météo-France, 2022 was the hottest year ever recorded in France, and in mainland France, climate warming has already reached 1.7°C over the last decade compared to the period 1850-1900. The effects of climate change—extreme rainfall, heatwaves, droughts, forest fires—are already being felt throughout the country, and this will continue, highlighting the importance of climate adaptation.

A plan to accelerate ecological transition

In this context of climatic, meteorological, and environmental emergencies, France has developed a plan to accelerate the ecological transition. After a year of work involving all ministries, economic sectors, representatives of local authorities, think tanks, and environmental associations, France has drawn up a plan to tackle five environmental challenges:

- Mitigating climate change
- Adapting to the inevitable consequences of global warming
- · Preserving and restoring biodiversity
- Preserving resources
- · Reducing pollution affecting health

This ecological plan (Planification Ecologique), placed under the authority of the Prime Minister, is based on 20 projects with specific and quantified objectives and involves the whole of society. Its aim is to offer everyone—citizens, local authorities, companies, associations—a way of working together to reduce our footprint and to imagine a world that is liveable, fair, and desirable. A pathway where everyone finds their place and has the means, skills, and influence to take effective action.

The plan is based on the implementation of 55 actions to reduce emissions by around 200 MtCO2e between 2019 and 2030 across all sectors (energy, transport, industry, agriculture, buildings, carbon sinks). As early as 2023, there has been a noticeable acceleration in the reduction of CO2 emissions across all sectors.

National Energy and Climate Strategy

2023 has seen the launch of the government consultation on the new energy and climate strategy (Stratégie Française pour l'Energie et le Climat).

France's choice, several decades ago, of electrical independence and nuclear power means that today 90% of electricity production is carbon-free and covers most of the national needs. In addition, over the last fifteen years, the country has made a major effort to develop renewable energies, and this development is set to extend to all energy carriers: biomethane, bioliquids, biomass, geothermal energy, renewable electricity, etc. However, the energy mix is still dominated by fossil fuels, with oil accounting for 37% and natural gas for 21% of final energy consumption.

The energy and climate strategy submitted for consultation by the government was based on three major challenges:

- REDUCING ENERGY CONSUMPTION BY 40 TO 50% BY 2050.
- ENDING COAL-FIRED POWER GENERATION BY 2027 AND ENDING DEPENDENCE ON FOSSIL FUELS BY 2050
- INCREASING LOW CARBON ENERGY PRODUCTION (Electricity and low-carbon gas, heat, and fuel)

In the survey, the representation of French energy issues is particularly marked by the Ukrainian conflict, which appears as a common thread fuelling uncertainty and the assessment of potential impacts. Unsurprisingly, the **risk** to peace is the theme with the greatest uncertainty and one of the strongest impacts. This goes hand in hand with concerns about **supply chains** and **energy security**, given the remaining dependence on imports and the growing competition for control of technologies and supplies for the energy transition, whether in terms of strategic raw materials or key components for low-carbon energy technologies.

The uncertainty mentioned about **demand management** may encompass several aspects: 1) long-term uncertainty about the dynamic of evolving uses to achieve the demand reduction for fossil fuels; 2) a short-term question on the (still) low level of demand observed after the energy price crisis; or 3) the management of the flexibility of electricity demand to adapt to the development of a growing intermittent energy supply.

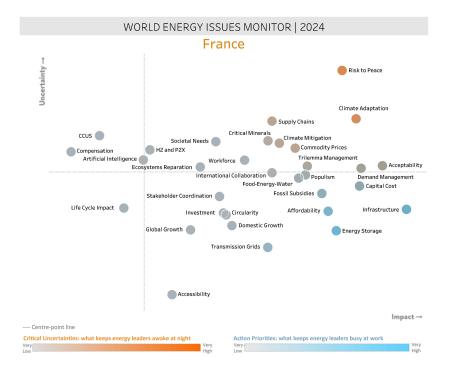
The considerable investment required to develop or adapt energy infrastructures (networks, production, storage) in the next decades raises questions about their **acceptability** and the time needed to obtain licenses and permits. This is a key challenge regarding the targets for increasing low-carbon domestic production. In 2023, two laws were thus promulgated in France: one to accelerate the production of renewable energies, and the other to accelerate the procedures linked to the construction of new nuclear power plant and the operation of existing nuclear power plant.

Among the priority actions in France is the **availability of workforce and skills** to successfully carry out the energy transition in all its components. A University of Nuclear Professions was thus set up to support the strong long-term need for recruitment in the sector, along with a Battery School and a Networks School for the energy transition.

An important point, which was not raised as such in the answers to the questionnaire, is **energy equity** and **affordability** for households and industry. This dimension occupies a significant part of the public debate in France and is undoubtedly essential to guarantee a fair and accepted energy transition.

The survey conducted in early 2024 already revealed several areas of concern, stemming in particular from the international context—firstly the Russian-Ukrainian conflict, and now the situation in the Middle East.

It seems likely that the level of uncertainty in 2024 will remain high.





Acknowledgements French Member Committee