



THE MULTIANNUAL *Energy Plan*

The multiannual energy plan aims at completing the transition towards an energy system which is more efficient, less wasteful, more diverse and therefore more resilient. It reaffirms our commitment to reducing energy consumption, particularly energy from fossil fuels. The future of France's energy sector lies in striking a harmonious balance between different energy sources. These strategic decisions will help us to meet our objectives to keep greenhouse gas emissions to a minimum in line with our commitments to the EU and to the Paris Climate Agreement, to protect human health and the environment and to ensure access to energy at a reasonable cost whilst stimulating economic activity and employment in France.

A ROADMAP DEVELOPED *with all stakeholders*

The multiannual energy plan (MEP), established by the French Energy Transition For Green Growth Act, sets out the government's strategic priorities in terms of energy policy.

For the first time, France has implemented a comprehensive strategy which covers all aspects of energy policy and all forms of energy. Citizens, local authorities, consumers and companies operating in the transport and energy sectors have all been **closely involved in the**

drafting of this plan (22 workshops, 800 participants, more than 200 written contributions and oral presentations, over 5,000 contributions in the public consultation), for which a strategic environmental assessment has also been carried out.

This MEP is consistent with the national low-carbon strategy adopted in October 2015, and is a vital tool for the implementation of the Paris Climate Agreement.

STEERING THE ENERGY TRANSITION

with ambition, responsibility and effectiveness

In order to meet the ambitious targets set out in the Energy Transition for Green Growth Act, we need to take action immediately.

The MEP sets out two fundamental priorities: reducing energy consumption, particularly fossil fuel consumption, and developing renewable energy sources. These will be the central tenets of our energy system as it evolves to meet the demands of the low-carbon economy.

The transition also needs to safeguard the security of the energy supply and the competitiveness of our businesses, as we develop a more flexible and less-centralised energy system.

With a strategic commitment to developing clean mobility, the MEP devotes considerable attention to the transport sector.

Allowing for the uncertainties currently surrounding the energy sector, while remaining on course to hit our targets for 2030, the MEP is initially divided into two periods (2016-2018 and 2019-2023), and will be reviewed in 2018.

A biennial review of the MEP indicators will be submitted to the National Council for Ecological Transition, allowing us to adapt our future actions in light of the results already obtained.

IMPROVING ENERGY EFFICIENCY AND REDUCING FOSSIL FUEL CONSUMPTION

MEP results by 2023

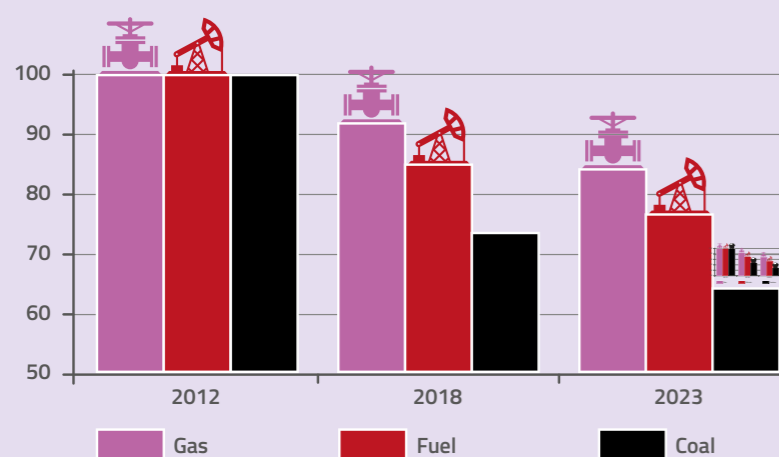
- Final energy consumption decreased by **12.3%**, working toward our target of -20% by 2030.
- Primary fossil fuel consumption decreased by **22.6%** in order to reach our target of -30% by 2030.

Concrete initiatives

- Decrease the energy consumption of buildings by 15% between now and 2023, and carry out energy-efficiency renovations on 500,000 homes each year from 2017 onwards.
- Improve the funding mechanisms for energy-efficiency initiatives (guarantee funds, third-party financing etc.).
- Allocate €3 billion from the Caisse des Dépôts to fund the renovation of social housing and public buildings.
- Ramp up the Energy Efficiency Obligation Scheme (white certificates), by setting more ambitious targets.

EVOLUTION OF PRIMARY FOSSIL FUEL CONSUMPTION, BY CATEGORY

Base 100 in 2012, reference scenario



ACCELERATING THE DEVELOPMENT OF RENEWABLE ENERGIES

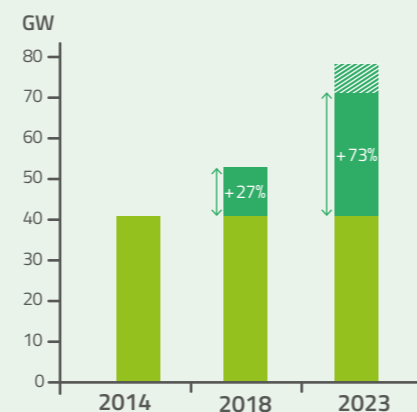
MEP results by 2023

- Increase installed electricity generation capacity from renewable sources by over **70%** and increase renewable heat generation by **35%** compared to their 2014 levels, to reach our target of 32% of final energy consumption from renewable sources by 2030.

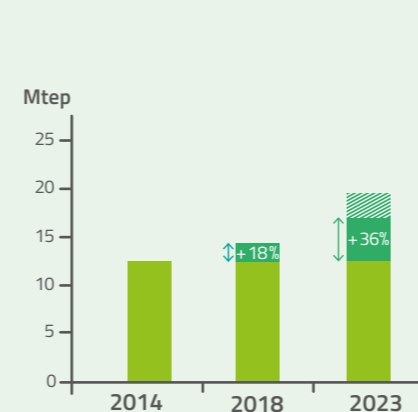
Concrete initiatives

- Publish a clear timetable for calls for tender involving renewable energy projects.
- Continue the policy of administrative simplification already in place, in order to bring down development lead times and cut costs.
- Support the development of crowdfunding and projects led by citizens and local authorities.
- Boost the Heat Fund in order to attain the targets set for 2018 and 2023, and expand the scheme to new heat resources.
- Establish a regulatory framework to support the injection of biomethane.
- Consolidate the financial support for onshore wind farms by the end of 2016.
- Promote ground-level solar panels, while protecting natural resources and farmland.

TOTAL ELECTRICITY FROM RENEWABLE SOURCES (capacity)



TOTAL HEAT FROM RENEWABLE SOURCES (energy)



PROMOTING CLEAN MOBILITY

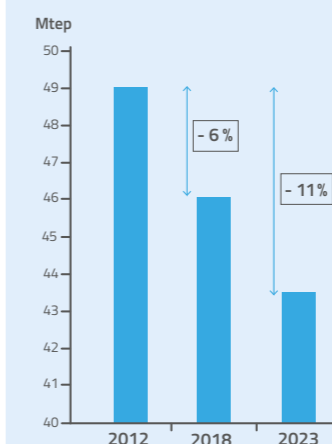
MEP results by 2023

- Reduce energy consumption in the transport sector by **11.5%**.

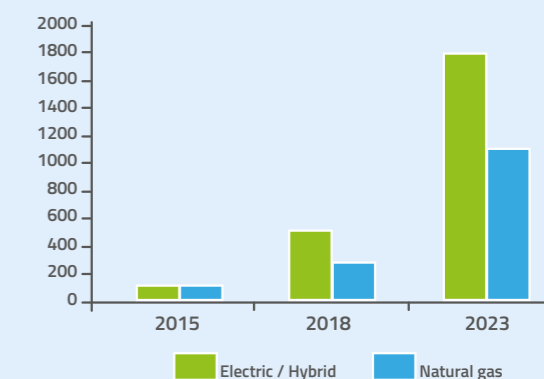
Concrete initiatives

- Put 2.4 million electric and hybrid vehicles on the road by 2023, with incentives for consumers and the installation of a million charging stations by 2020.
- Convert 3% of HGVs to natural gas by 2023, and increase the proportion of biogas to 20% of natural gas for vehicles by 2023.
- Set new targets for the incorporation of advanced biofuels: 1.6% by 2018 and 3.4% by 2023 for petrol, and 1% by 2018 and 2.3% by 2023 for diesel.
- Make it easier to get autonomous vehicles on the road, based on feedback and the results of research currently in progress.
- Strengthen the 'CO₂ Haulage Pact' voluntary programme, with a new 'Objective CO₂' certification scheme for road haulage.
- Support modal transfers and green mobility, with support for bicycle use.

FINAL ENERGY CONSUMPTION TRANSPORT



CONSUMPTION OF GAS AND ELECTRICITY BY VEHICLES (base 100 in 2015)



MAINTAINING A HIGH LEVEL OF SECURITY OF SUPPLY WITH RESPECT FOR OUR ENVIRONMENTAL OBLIGATIONS

MEP results by 2023

- Achieve **6 GW** demand-side response capacities.
- Maintain the existing reliability standards for the security of the electricity and gas supply, while reducing our use of fossil fuels.

Concrete initiatives

- Refuse to authorise any new coal-fired power stations unless they are equipped with carbon capture, storage or conversion systems. Prepare for the closing of all coal-fired plants within the timeframe of this MEP.
- Launch the capacity mechanism in January 2017, in order to make energy suppliers responsible for guaranteeing the security of the electricity supply.
- Continue to develop interconnections with neighbouring countries, subject to cost-benefit analyses.
- Ensure the underground gas storage facilities which are necessary for the security of supply are sufficiently stocked.
- Ensure that our strategic oil stocks are efficiently distributed throughout the country, learning lessons from the crisis of May 2016.
- In the context of the energy transition and efforts to reduce primary consumption of fossil fuels, the exploration and exploitation of hydrocarbon fuel resources in France is not a priority of the MEP.

PREPARING FOR THE ENERGY SYSTEM OF THE FUTURE

MEP results by 2023

- Launch hydroelectric storage projects to reach capacity of **1 - 2 GW** between 2025 and 2030.

Concrete initiatives

- Develop intelligent networks: supporting the transition from the demonstrator phase to full-scale industrial roll-out.
- Support the development of new storage systems.
- Launch experimental initiatives to develop energy self-generation and self-consumption.
- Issue ministerial orders withdrawing the operational authorisation for the two reactors at the Fessenheim plant in accordance with the cap of 63.2 GW placed on nuclear generation capacity.
- Based on the evolution of electricity consumption and exports, the development of renewable energies, the findings of the ASN and the priority of ensuring the security of supply, make decisions within the timeframe of the second MEP on whether to close or extend the operating permits of certain nuclear reactors beyond their fourth ten-yearly inspection. According to the scenarios envisaged in the MEP, the reduction in annual nuclear energy generation by 2023 will range between 10 and 65 TWh.
- Facilitate the development of heat networks.

A MULTIANNUAL ENERGY PLAN WHICH BENEFITS TO EVERYONE

consumers • businesses • employees • regions

The multiannual energy plan incorporates an economic and social impact assessment, which demonstrates the benefits for the French economy of implementing this strategy rather than continuing to follow the current trend.

Specific initiatives have been developed to support the stakeholder most subject to changes in the energy sector: consumers living in fuel poverty, energy-intensive businesses and those faced with international competition, as well as employees in need of guidance for their career development.



Employees

The MEP will create 283,000 extra jobs by 2030

- Draft the "skills and jobs programming plan" included in the French Energy Transition for Green Growth Act..



Businesses

By 2030, the MEP will add 0.7% to the rate of wealth creation in the industrial sector

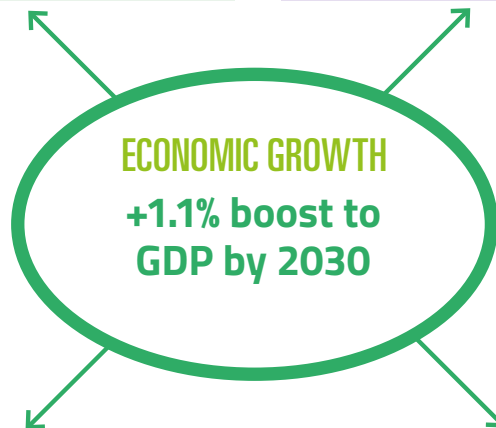
- Support the competitiveness of French industry by promoting the flexibility of industrial facilities and adapting the grid tariffs for energy-intensive facilities.



Consumers

Increasing gross disposable household income by € 13 billion by 2018 and 32 billion by 2023

- Fight against poverty, with the introduction of a new energy cheque scheme and a new system of energy-saving certificates for households living in energy poverty, with a target of 150 TWh in total energy savings by the end of 2017.



Regions

Giving local authorities and citizens a leading role in the energy transition

- Award 'Energy-Positive Territories for Green Growth' status to 500 local authorities in France, allocating €250 million from the Energy Transition Fund.
- Implement local climate-air-energy plans and regional strategies for air quality and energy.
- Allow access to data collected by gas and electricity distribution system operators, in order to help local authorities improve their energy planning.

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