INSTITUT MONTAIGNE





Executive summary

We must put an end to perceived ideas on energy: our policy in this sector and our actions for climate should be based on objective assessments. However, over the past ten years, our efforts have focused on the electricity mix, and notably on renewable and nuclear energies.

Insufficient attention has been drawn to the principal sources of greenhouse gas (GHG) emissions which are transport and heating, sectors that massively depend on the importation of fossil fuels.

I. Energy policy and climate action must rely on objective statements

Energy consumption in France remains mainly reliant on fossil fuels.

Energy consumption in France remains mainly reliant on fossil fuels, which are the main sources of GHG emissions. Petrol, gas and coal represent over half of our primary energy consumption and two thirds of our final energy consumption. Reducing our GHG emissions implies that we reduce our importation of hydrocarbons, which are the main responsibles for our GHG emissions.

Energy consumption in France has been decreasing since the years 2000

A slow economic growth, notably in the industry, and efforts for energy efficiency explain the general tendency to reduce energy consumption.

• The French energy bill remains in structural deficit

The French energy balance (for petrol and gas) remains negative and still amounts to around 40 billion euros per year, despite the drop in gross prices. Electricity exportations (2 billion euros in 2015) only compensate this imbalance slightly.

Overall, France issues little GHG

France represents only 1.2% of world GHG emissions while it contributes to around 4.2% of world GDP.

Whether in the aim of achieving energy independence, restoring our trade balance equilibrium, or reducing GHG

emissions, France must concentrate its efforts on reducing its fossil fuels consumption (and thus the importation thereof).

II. French energy policy should answer to four priority challenges: heating, transports, electricity market and nuclear

Heating, an important GHG emitter, should become a priority again

The French heating system has the particularity of being essentially based on electricity, which implies particular constraints on to the whole system (high seasonality, difficulty managing the "winter peak"...).

The renovation of the residential and tertiary sectors harbours significant potential energy savings.

Progress in the transport sector requires a better fiscality and the electrification of the sector

The convergence of fuel fiscalities is necessary in order to stop favorising diesel, which issues the most fine particles. Furthermore, the diminution of GHG emissions will require the development of electric vehicles.

Energy production remains subject to strong market dysfunctions

The European electricity market is in production overcapacity. The decrease of world prices, subventions to sustainable energy and counter-cycle capacity investment decisions have largely contributed to this imbalance between supply and demand.

This situation has led to a reduction of electricity wholesale prices, which weakens large energy producers.

The European Union has failed to build an efficient market that benefits for both producers and consumers. Indeed, the reduction of electricity wholesale prices has paradoxically translated itself in Europe, and notably in France, into an increase of the bill paid by the final consumer via taxes enabling a financing of networks and renewable energy.

• France's nuclear power plants are reaching the end of their theoretical life

France's nuclear plants, built between 1980 and 1990, will reach the end of their theoretical 40-year life between 2020 and 2030. Decisions to extend, to stop or to renew should be planned in the next five years. A new nuclear energy can only be considered if there is a significant diminution of costs, and this despite the augmentation of safety norms, which should be taken into account.



III. French energy policy should articulate itself around a climate policy based on carbon taxation

 Although insufficient, the Paris Agreement reached during the COP21 represents a significant move forwards

It is now essential for G20 countries to concentrate on pursuing their efforts and fulfilling their commitments.

 Europe and France have all the good reasons to fight global warming

Europe should promote a genuine "carbon transition" aiming to reduce our economies' dependence on fossil fuels, and constitute an economic and diplomatic axis of influence on this matter.

Carbon taxation: an efficient economic and environmental measure

The European Union created a carbon market that reached its limits because the carbon price was so low it was not inciting enough. The challenge is now to find a remedy for these weaknesses, in order to restore the credibility of this mechanism, notably for important industrial emitters.

For lesser important emitters, resorting to the carbon tax enables to orientate agency behaviours. We must seize the opportunity to make fiscality "greener" rather than overburdening it without being certain of it being accepted.

Our proposals

Proposal n°1: Master the development of sustainable energy and anticipate changes in consumers' attitudes.

- Contain the weight of past and future budgetary commitments
- Concentrate efforts on competitive sectors, capable of winning exportable markets
- Anticipate changes in consumption modes of renewable energy with self-consumption

Proposal n°2: Ensure the continuity of France's nuclear power plants

- Extend the life expectancy of existing nuclear plants, as long as their safety and their economic reliability are guaranteed
- Make new nuclear energy more competitive
- Complete the restructuring of the French nuclear sector

Proposal n°3: Develop heat and biogas networks for heating and encourage better insulation of existing buildings

- Reinforce policies which support the development of heating networks
- · Promote the long-term development of biogas
- Base the thermic regulation of buildings on different heating systems' GHG emissions and according to a methodology that evaluates the amount of CO2 contained in different usages of electricity
- Evaluate and rationalise the different tools to promote building insulation and better evaluate their costs
- Encourage dialogue on responsibility between landlords and tenants regarding housing insulation

Proposal n°4: Develop the electrification of transports and adapt the fiscal framework of fossil fuels

- Progressively rebalance the fiscality applicable to fuel and diesel
- Search for a better cooperation in the sector, the development of norms and charging stations
- Maintain financial mechanisms of support for buying these electric vehicles
- Prioritise, through adapted price signals, slow charging at home and at work, during off-peak hours

Proposal n°5: Reinforce our climate action and base it on carbon taxation

- At the European level, fix a consensual aim to reduce hydrocarbon importation which would enable for Member States to choose the means to attain this goal, respecting the subsidiarity principle and aiming to reduce costs
- Establish a minimum price for carbon at 30 euros per ton in the European Union
- Maintain the evolution trajectory established by the "Contribution Climat Énergie" by lowering, in parallel, business and household taxation
- Direct a part of carbon tax yields towards climate action such as support for sustainable energy, heating networks, electric and hybrid vehicles, building insulation...