

BLOG POST April 26th 2017

Financing the energy transition: it's not just about the money

Auteur

Andreas Rüdinger

Coordinator for the energy transition in France

🕒 Reading time: 6 min



With the massification of successful energy retrofits, the accelerated development of renewable energies and the deployment of new sustainable mobility solutions, the energy transition is a huge challenge in terms of mobilising investment, against a backdrop of modest economic recovery and limited budgetary leeway. Although the French Energy Transition for Green Growth Act has brought its share of reforms, it has failed to establish financing mechanisms of sufficient scope. What proposals have the presidential candidates made to address these issues and are they up to the challenge?

What are the economic impacts of the transition?

The energy transition is costly (between 12 and 33 billion euros of additional investment per year), but less costly than doing nothing and suffering the consequences of uncontrolled climate disruption and energy price hikes. Depending on the trajectory chosen (see [here](#) for further explanations), this could generate cumulative gains of between 300 and 1,000 billion euros by 2050. This is the key finding of a French National Debate on the Energy Transition (DNTE) report of 2013, entitled “Quels coûts, quels bénéfices et quel financement de la transition énergétique?” (Costs, benefits and financing for the energy transition).^[1] Although these estimates help to define an initial useful framework, one central question persists: which mechanisms should be implemented to finance these investments? And, over and above the mobilisation of additional capital, which policy tools should be established to guarantee the effectiveness of these mechanisms?

The candidates' proposals: priority to the creation of new “investment funds”

Most of the candidates say they intend to accelerate the energy transition through the adoption of quantified investment plans and the creation of new funds, partially supplemented by raising ecotaxes. Jean-Luc Mélenchon, Benoît Hamon and Emmanuel Macron, for example, all propose launching investment plans for the energy transition, standing at 50 billion euros for Mélenchon, 100 billion for Hamon and 30 billion for Macron. According to Marine Le Pen, 1 600 billion euros of investment are required for fossil fuel phase-out, and she plans to mobilise the Banque de France to achieve this. With a [recent report by the Cour des Comptes](#) pointing out that France has one of the worst track records in Europe in terms of environmental taxation (24th out of 28), François Fillon's priority is raising French ecotaxes and strengthening the European carbon market (EU ETS) in order to secure additional funds. Benoît Hamon's approach is similar, highlighting the need to double the Contribution Climat-énergie (French carbon tax) relative to its current trajectory, taking it to 200 euros/tonne of CO₂ in 2030 (compared to the 100 euros currently planned), in line with the [ADEME recommendations on environmental taxation](#).

Positive signals that nevertheless lack precision

The figures given here seem to indicate a degree of consensus on the urgent need for action in order to accelerate the energy transition and on the associated potential for job creation (or even [green growth](#)). However, these proposals remain somewhat vague on three aspects:

- **There is a considerable disparity in the figures given** which, over and above political differences regarding the budget priority to be given to the transition, seems to indicate that the associated additional investment needs are not always clearly identified.
- **The priority given to new investment funds** suggest that the challenge of financing the transition primarily concerns the need to raise additional capital, which is not always the case (see below).
- Finally, **the proposals remain somewhat vague concerning the mechanisms needed to raise these new funds** and the tools to guarantee their effectiveness. Yet it is often the finer details of implementation that determine the effectiveness of new mechanisms, far more than the volume of funds mobilised.

It's not just about the money

The issue of financing the energy transition is [more complicated than it seems](#), since it entails not one, but several financing challenges, which must be examined on a case-by-case basis. First, the challenge is often not the provision of additional funds but the need to redirect existing investment towards the most efficient operations. For example, in 2011, investment in housing renovation stood at almost 40 billion euros. Of that amount, 15 billion euros were invested in works that had an impact on energy efficiency, but only a very small portion went towards highly efficient “low-energy housing” renovations, the development of which is crucial in order to meet long-term targets: reducing carbon intensity and energy consumption. Above all, [better alignment of regulatory and support tools](#) is therefore required. A key variable for the economic viability of energy transition projects because of their lifespan and capital intensity, the cost of capital is a second major challenge. And it depends **as much on financial engineering (mechanisms to raise funds based on national savings, bond markets or interbank markets) as on regulatory and policy frameworks themselves**. Thus, the problem is not generally a lack of funds, as institutional investors, increasingly aware of the risks of climate change, are eager for long-maturity, low-risk investments. Energy transition projects could be the perfect answer to this demand, but are often considered to be too risky because of the uncertainties and the lack of clarity surrounding regulatory frameworks. Moreover, since most of these projects are local in scope, they are too small to be of interest to the large institutional investors, unless appropriate aggregation mechanisms exist. Although the stability and clarity of regulatory frameworks are a cross-cutting priority, the financial engineering solutions to be implemented may vary according to the sector and the challenges. In some cases, the (massive) provision of preferential loans, as is the case with the German government-owned bank KfW, may enable the massification of investments, while making them less costly. In other cases, more targeted intervention may be needed to reduce the risks taken by project developers and associated investors, for example through third-party financing companies, guarantee funds (to facilitate access to debt financing) or venture capital funds to finance the project development phase (which are particularly suited to facilitating [citizen renewable energy projects](#)).

Towards a genuine financing strategy?

While we might welcome the priority given to the energy transition by a number of candidates, the mobilisation of substantial financial resources will not be enough. This needs to be part of a genuine strategy to finance the energy transition. [According to research by IDDRI](#), this strategy must be based on the three following components:

- **The establishment of large-scale financing tools**, capable of raising funds on a massive scale at low cost, while limiting transaction costs;
- **The deployment of innovative, targeted financial solutions** to meet the needs of the different sectors and project developers;
- **The coherent management of all regulatory frameworks and economic signals** affecting the financial risks of projects, including environmental taxation and the simplification of support for energy efficiency and renewable energy projects.

[1] The documentation produced during the National Debate on the Energy Transition has been removed from the websites of the French Ministry for Environment, Energy and the Sea. But the reports can be found using a search engine on other websites. ***This blog post is part of a series on energy transition in the French presidential election:***

- [2017, a pivotal year for French energy transition](#)
- [Four scenarios for understanding the energy programmes of the Presidential candidates](#)
- [Energy renovation in France: the challenge of implementing the national objectives](#)
- [What is the citizen participation in the energy transition?](#)

CLIMATE