



Renewables in the post- COVID-19 recovery package of France



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THIS ANALYSIS IS PART OF A [COMPILATION OF RECOVERY PACKAGE ANALYSES](#) AND AIMS AT EXPLORING THE ROLE OF RENEWABLES IN POST-COVID19 RECOVERY SCHEMES. AS A SERIES, THIS RESEARCH IS CONDUCTED CONTINUOUSLY AND WILL BE ADDED TO, ONCE INFORMATION IS AVAILABLE.

“Our goal is clear: to become the first major European decarbonised economy. To achieve this, 30 billion of the [plan] will be devoted to four priority sectors: energy renovation of buildings, transport, agricultural transition and energy.”

—France Re-launch Plan, September 2020

Introduction

Like many of its European neighbours, France has grappled with the COVID-19 pandemic, having recorded over 2.75 million cases and more than 67,000 deaths.¹ The country’s economy has been hit hard, with GDP shrinking by 13.8% between April and June 2020, the biggest quarterly fall since the Second World War. Overall, the country’s economy is expected to have shrunk by 9-10% in 2020. In response, the French government has deployed a range of measures to kick-start the economy, which they claim are underpinned by a commitment to the country’s transformation to a green economy.

“France re-launch”

As an initial response to the COVID-19 crisis, the French government introduced in March 2020 a EUR 300 billion state-guaranteed loan programme to direct cash to companies to help them through the economic downturn caused by the lockdown measures. Administered by a state-owned development bank, the scheme only covered new loans, which had to be applied for between 16 March 2020 and 31 December 2020.²

In subsequent stimulus interventions, the French government came to the rescue of specific struggling industries. For example, in April 2020 a EUR 7 billion aid package was made available to Air France, but it came with “climate conditions”. More specifically, in order to meet the bailout conditions, Air France needs to halve its overall CO₂ emissions per passenger-kilometre by 2030 (as compared to 2005 levels) and on domestic flights, this goal needs to be reached by the end of 2024.³

After the European Union reached an historic agreement in July to make EUR 750 billion available in grants and loans to counter the impact of the pandemic, on 3 September 2020 the French government set out its own plans for repairing the economic damage in a more comprehensive and sustainable manner.

Entitled “France Relance” (“France Re-launch” in English), the package aims to enable the economic, social and ecological rebuilding of the country over the period 2020-2030, with a focus

¹ As of 9 January 2021, <https://www.who.int/countries/fra/>

² <https://home.kpmg/xx/en/home/insights/2020/04/france-government-and-institution-measures-in-response-to-covid.html>

³ <https://www.flightglobal.com/strategy/french-government-sets-green-conditions-for-air-france-bailout/138160.article>

on reversing rising unemployment, aiding French investment competitiveness through tax cuts for businesses, and providing specific incentives for the country's transition to a green economy.⁴

The document is divided into three major topics: ecology, competitiveness and social cohesion. The budget allocated stands at EUR 100 billion (the equivalent of 4% of France's annual economic output), 40% of which is coming from the European Union's stimulus fund.

The role of renewables

The plan allocates EUR 30 billion for the "ecological transition" and the development of greener energy policies.⁵ More specifically, the package includes support for:

1. Energy renovation of buildings and small and medium-sized enterprises
2. Biodiversity and combating the "artificialisation" of soils
3. Decarbonisation of industry
4. Advancing the circular economy
5. Ecological transition of the agriculture sector
6. Making fisheries and ports more environmentally-friendly
7. Accelerating the transition to low-carbon transport and related infrastructure
8. Strengthening the uptake of green technologies, including hydrogen
9. Establishing new climate financing schemes under Bpifrance (the national public investment bank)

Some of the key measures in the package that deal with advancing France's energy transition and drive to become carbon-neutral by 2050 are included in the table below, with the related allocation of funds.

The green technology portion of the "Re-launch" plan reveals a clear decision of the government to support the development of green hydrogen, which it regards as a "high-potential sector of the future".⁶ The French government allocates EUR 7.2 billion between now and 2030 to support green hydrogen R&D, as well as industrial projects for the development of electrolysis. The country is not alone in this strategic choice, as Germany earlier in the year included in its stimulus package 9 billion Euros earmarked for the expansion of hydrogen capacity at home and abroad.⁷

⁴ <https://www.gouvernement.fr/france-reliance>

⁵ A regularly updated scorecard on how much of the Re-launch plan has been spent can be found here: <https://www.economie.gouv.fr/plan-de-reliance/suivi-mesures-indicateurs#>

⁶ <https://www.pv-magazine.fr/2020/09/04/france-reliance-un-plan-dote-de-30-milliards-deuros-pour-la-transition/>

⁷ <https://www.dw.com/en/germany-and-hydrogen-9-billion-to-spend-as-strategy-is-revealed/a-53719746>

Key energy transition measures as part of the France Re-launch plan ⁸	(EURmio)
Energy renovation of schools and administrative buildings	4,000
Energy renovation of social housing	500
Energy renovation of private buildings	2,000
Energy renovation of SMEs/VSEs	200
Decarbonisation of industry (energy efficiency, climate adaptation and low-carbon heating)	1,200
Circular economy (reducing use of plastic and improving recycling and sorting)	500
Reforestation and protection of forests	200
Greening of ports	200
Greening of the state's car fleet	180
Improving the rail network (including increasing electrification and hydrogen)	4,700
Support for the increase in electric vehicles (and related infrastructure)	1,900
Accelerate transport infrastructure (including the creation of charging stations)	550
Improving electrification of rural areas (including through the installation of solar PV)	50
Development of green hydrogen	2,000
As part of the "Fourth Programme for Investments for the Future" (PIA4): development of the green hydrogen market, improving recycling, developing agricultural equipment for the ecological transition, etc.	3,400
Development of the nuclear industry	200-470
Support for the restructuring and innovation of the car and aeronautical industry	2,600
Bpifrance financial support for key aspects of the energy and ecological transformation	2,500

A month after the launch of the plan, on 12 October 2020, the Minister for the Ecological Transition and the Minister of Transport unveiled more detailed plans and procedures for reaching the goal of installing 100,000 charging stations in France by the end of 2021, as stated in the France Re-launch plan.⁹ Towards that end, the government is preparing a EUR 100 million fund to speed up the installation of fast charging points at all highway parking areas by the end of 2021.¹⁰

⁸ For the full overview of the entire Re-launch plan, see: https://www.gouvernement.fr/sites/default/files/cfiles/mesures_france_relance.pdf (p. 291)

⁹ As of 2 December 2020, around 32,000 charging stations were in place in France. <https://www.clairitec.com/en/innovation-en/100000-charging-stations/#:~:text=The%20%E2%80%9C100%2C000%20charging%20stations%20target,30%20million%20euros%20by%202025.>

¹⁰ An overview of the range of financial incentives rolled out to achieve these goals can be found here: https://wallbox.com/en_us/france-ev-incentives

Key policies and laws: increased ambitions and revised timelines

“France Re-launch”, 2020

Recovery package in response to the COVID-19 pandemic and its economic consequences, which sets EUR 30 billion aside for the ecological transformation and green energy transition. The package builds on previous laws and policies dealing with the energy transition.

Law on Energy Transition for Green Growth, 2015

Sets a 75% target for reduction of greenhouse gas emissions by 2050, compared to 1990 levels; 30% target for reduction of fossil energy consumption by 2030; 32% share of renewables in gross final energy consumption by 2030; 50% reduction in nuclear power by 2025; introduced the National Low-Carbon Strategy, which serves as a roadmap for climate change mitigation.

Multiannual Energy Programme (PPE), 2019-2028

Sets the goal of carbon neutrality by 2050; increases the target for reduction of fossil energy consumption to 40% of 2012 levels by 2030 (as opposed to 30% previously); declares the end of coal-based electricity generation in Metropolitan France by 2022; extends the timeline for halving the share of nuclear power to 2035 (as opposed to 2025 previously).

Law Regarding Energy and Climate, 2019

Declares an “ecological and climate emergency” as the main objective of French energy policy; amends the French Energy Code to include the goal of attaining carbon neutrality by 2050, through a more than six-fold reduction of greenhouse gas emissions. As part of this objective, the law sets the aspiration of reducing French consumption of fossil fuels to 60% of 2012 levels by 2030.

Relation to existing policy framework

The France Re-launch plan is best understood as supporting and operationalising previous laws and policies on climate mitigation, green growth and the ecological transformation. Indeed, according to the French government, the EUR 30 billion set aside for the ecological transition will make it possible to complete the financing of the Law on Energy Transition for Green Growth of 2015, which also introduced the National Low-Carbon Strategy. The Low-Carbon Strategy has the dual ambition of achieving carbon neutrality by 2050 and reducing the carbon footprint of French consumption.¹¹

In 2019, the French government adopted the Multi-annual Energy Programme (PPE), which sets the goal of carbon neutrality by 2050.¹² To that end, it adopts a 40% target for the reduction of fossil energy consumption by 2030, as compared to 2012.

¹¹ The initial 2015 Low-Carbon Strategy set as a goal a 75% reduction in its GHG emissions by 2050 compared to 1990, but this ambition was raised to the goal of carbon neutrality by 2050 when the strategy was revised in 2018-2019.

¹² <https://www.ecologie.gouv.fr/sites/default/files/PPE-Executive%20summary.pdf>

Regarding renewables, the PPE sets the target of 74 GW installed capacity for renewable electricity production by 2023 (a 50% increase compared to 2017) and 102-113 GW by 2028 (double the amount compared to 2017). Within that target, the PPE specifies the goals of 24,100 MW installed onshore wind and 20,100 MW installed solar PV capacity by the end of 2023.¹³ The PPE also sets a target of 65,000-100,000 PV sites for self-consumption in 2023, which has been implemented in recent years through successive calls for tenders.¹⁴ These targets are intended to help France achieve the goal of 32% of renewables in gross final energy consumption, as set by the Law on Energy Transition for Green Growth.¹⁵

Renewables in France: 2019-2020

In 2019, France produced 23% of its electricity with renewable energy technologies.

In the second quarter of 2020, that figure inched up to 33.2% of energy demand being covered by renewable sources (solar, wind, hydro and biomass).

France's total renewables capacity reached 55.3 GW in September 2020.

(Sources: *RenewablesNow* and *renews.biz*)

The PPE also set the goal of 1.2 million private electric cars (electric and rechargeable hybrids) on the roads by 2023. In May 2020, the French government announced a EUR 8 billion package to support the automotive industry in France to recover from the COVID-19 crisis.¹⁶ The package includes bonuses for private and business purchases of electric vehicles until June 2021 (after it was extended beyond its original deadline of 31 December 2020).¹⁷ Aside from incentivising consumers to purchase electric cars, the package also aims to boost manufacturing of electric and hybrid cars, with President Macron expressing during the package's launch his goal to "make France Europe's top producer of clean vehicles by bringing output to more than 1 million electric and hybrid cars per year over the next five years."¹⁸

Conclusion

Through the Re-launch Plan, France has mobilised significant funding for advancing the ecological transformation of the country. The ambition is clearly stated: to become the first large decarbonised economy of Europe. Indeed, the Plan deploys a range of measures and financing mechanisms to achieve climate and energy goals stated throughout policies and laws adopted in the last few years.

What underpins the Plan is a big bet on "green hydrogen", as the technology of the future. Hydrogen is not a source of energy; rather, it is a vector to store and move energy around. France is not alone in investing heavily in developing this technology source, attempting to escalate it from prototypes

¹³ A useful overview of regulations covering renewables in France can be found here:

<https://cms.law/en/int/expert-guides/cms-expert-guide-to-renewable-energy/france>

¹⁴ <https://www.pv-magazine.com/2019/06/20/france-resumes-self-consumption-tenders/>

¹⁵ <https://www.iea.org/policies/8737-law-on-energy-transition-for-green-growth-ltecv>

¹⁶ <https://www.dw.com/en/france-unveils-stimulus-plan-worth-8-billion-for-car-industry/a-53578294>

¹⁷ Private consumers buying electric cars (of up to EUR 45,000) get EUR 7,000 (up from EUR 6,000), while business customers can get a EUR 5,000 bonus. A EUR 2,000 bonus was made available for plug-in hybrid vehicles, provided they can travel at least 50km on battery power alone and cost no more than EUR 50,000.

¹⁸ <https://europe.autonews.com/automakers/france-help-auto-sector-measures-worth-88b>

and micro-projects to a massive industry. As green hydrogen is currently more expensive to generate than hydrogen produced from fossil fuels, and the sector is not yet mature, the Re-launch Plan's EUR 7.2 billion for green hydrogen development until 2030 will primarily take the shape of subsidising its production through calls for tenders, on the model of other renewable energy sources.

One concern that some environmental groups have raised is that the Plan seems ambiguous about whether the government plans to generate exclusively "green hydrogen" (meaning it's produced from electricity of wind, solar or hydraulic origin) or whether the door is kept open to hydrogen produced from fossil fuels, gas or nuclear electricity. When hydrogen is produced through fossil fuels, it releases carbon into the atmosphere. Currently, hydrogen in France is mostly produced from oil and gas and primarily for industrial use and there is a risk of large oil and gas industry players attempting to use the hydrogen boom to continue polluting practices under the guise of offering a green solution.

Moreover, as much as the Plan touts the future role of green hydrogen as an "energy for the future", the Plan includes scarce reference to, or support for, traditional renewables and the role decentralised energy generation and policy can play in curbing emissions, democratising the energy debate and empowering local communities. That's very unfortunate as both fossil and renewable hydrogen are very energy-intensive and expensive when compared to traditional renewable alternatives.

Regarding the Re-launch Plan's support, as well as incentives offered through other policies, for boosting the production and purchases of "cleaner vehicles", there is some concern about the inclusion of plug-in hybrids, even if the bonus is set considerably lower than for electric vehicles. That's because recent research has revealed that real-world CO₂ emissions of plug-in hybrid cars are on average more than two-and-a-half times higher than the values listed from official test.¹⁹

Finally, it's worth noting that the unprecedented COVID-19 related state aid packages that have been made available to salvage the economy have brought into clear focus the issue of tax-payer money being used to prop up polluting practices. The example of the bailout of Air France being made conditional upon "climate conditions", as well as commitments to the green recovery throughout France Re-launch and other aid packages, illustrates this. Such "climate conditions" are clearly to be welcomed but climate groups have raised concern over the conditions not going far enough and their non-binding nature.²⁰

¹⁹ <https://www.transportenvironment.org/publications/uk-briefing-plug-hybrid-con>

²⁰ <https://www.flightglobal.com/strategy/french-government-sets-green-conditions-for-air-france-bailout/138160.article>