



## EXECUTIVE SUMMARY

---

With a budget line of 100 billion euros, the "France Relance" plan (France Recovery Plan) was announced by the President of the Republic during his speech on 14 July 2020. At a time when the first wave of the Covid-19 pandemic was coming to an end and a second wave remained hypothetical, the recovery plan was supposed to take over from the Financial Support Measures for Businesses and last until 2022. The plan was officially presented by the Minister of the Economy, Finance and Economic Recovery at the Council of Ministers on 3 September 2020.

Its stated ambition is twofold. The first objective, which is a cyclical objective, is to enable the economy to return to its pre-crisis level before the end of the plan's deployment, i.e. by the summer of 2022. The plan also aims to improve the competitiveness of French companies and prepare all the economic players for long-term challenges, particularly the ecological and digital transitions.

The Committee for the Assessment of the Recovery Plan was created by the Initial Finance Act (LFI, loi de finance initiale) for 2021, and set up in spring 2021. It takes over from the committee for the monitoring and assessment of support measures for businesses faced with the Covid-19 epidemic; its composition was carefully thought out to reflect the social and ecological dimensions of the recovery plan. Chaired by Benoît Cœuré until January 2022, then by Laurence Boone from April to July 2022, it brings together representatives of the finance committees of the National Assembly and the Senate, associations of regions, departments and mayors of France, representative employers' and trade union organisations, the Cour des Comptes et Administrations (General Directorate of the Treasury, Dares, CGDD (*General-Commissariat for Sustainable development*)), as well as three field experts, Messrs Philippe Bouyoux, Yannick L'Horty, and Benoît Leguet. The committee's secretaryship is provided by France Stratégie and by the Inspectorate General for Finances. The desire for an independent and quick assessment is a two-fold specificity - of the France Recovery plan over previous investment plans, and of France compared to its European partners.

In the mission statement sent to Benoît Cœuré on 3 April 2021, the Prime Minister asked the committee to focus its assessment work on ten to fifteen measures in the recovery plan, and mentioned that this list could include the following measures: energy renovation of private

housing, energy renovation of public buildings, measures supporting demand for low-emission vehicles, measure to reduce production taxes, profit-sharing loans, long-term short-time working, strengthening of the FNE-Formation system schemes, and the bonus for hiring young people.

The committee decided to broaden the analysis of the bonus for hiring young people to include the whole "1 jeune, 1 solution" (1 young person, 1 solution) plan and add the following measures: support for investment and modernisation in industry, and support for the industry of the future, decarbonisation of industry, support for carbon-free hydrogen, and investments in plant proteins. In the mission statement sent to Laurence Boone on 28 April 2022, the Prime Minister took note of this broadening of the committee's scope of analysis, and requested an interim report by autumn 2022, and a final report by autumn 2023.

The first report, published in autumn 2021, focused on the macroeconomic analysis of the recovery plan from a European perspective, as well as on a first *in itinere* assessment of five measures: energy renovation of private housing, energy renovation of public buildings, support for investment and modernisation of industry, support for the industry of the future, and the "1 jeune, 1 solution" plan. To conclude its opinion, the committee stated that "the short-term objective is about to be reached, but the specific contribution of the France Recovery plan cannot be estimated at this stage", and it highlighted a risk: "The short-term recovery objective should be achieved without neglecting medium-term objectives".

A year later, this report tries to update this provisional conclusion, firstly in light of the new macroeconomic context and the interplay of the recovery plan and the other economic support plans implemented by the government (Chapters 1 and 2); secondly, by mobilising new elements of analysis for each of the measures studied (Chapters 3 to 12).

## 1. General overview

The France Recovery plan is based on three pillars: "Ecology", "Competitiveness", and "Cohesion".

- The "Ecology" pillar (30 billion euros), while supporting economic recovery, should help France meet its environmental and climate commitments. It includes measures supporting energy renovation, the rail sector, the production of carbon-free hydrogen, the decarbonisation of industry, demand for low-emission vehicles, as well as agriculture and biodiversity.
- The "Competitiveness" pillar (€34 billion) aims to support the supply side of the economy by strengthening the competitiveness of companies. In the short term, the purpose is to support companies, particularly those affected by the crisis, among other things by supporting industrial investments. In the long term, the measures under this pillar should make it possible to correct certain weaknesses in the French production system, in particular through a permanent reduction in production taxes and support for innovation.

- The "Cohesion" pillar (€36 billion) brings together measures aiming to ensure territorial and social cohesion by initiating a homogeneous recovery in all territories and for all generations. These funds are designed in particular to protect jobs via long-term short-time working schemes, increase the employability of young people with the "1 jeune 1 solution" plan, support the territories where public services are the most difficult to access, and invest in the health system.

At the end of August 2022, the commitment rate of the recovery plan reached 89% (with a target of 100% at the end of 2022), and the disbursement rate 62%. The differences in the implementation of the various pillars are moderate<sup>1</sup> (see Table I).

**Table I - Budgetary implementation of the recovery plan by sections at the end of August 2022**

Section	Initial budget line (€bn)	Commitments at end of August 2022 (€bn)	Commitment rate in relation to initial budget line	Disbursements at end of August 2022 (€bn)	Disbursement rate in relation to initial budget line
Ecology	30	28.2	94%	15.0	50%
Competitiveness (including reduction in production taxes)	34	31.4	92%	26.2	77%
Competitiveness (excluding reduction in production taxes)	14	11.4	81%	6.2	44%
Cohesion	36	29.8	83%	21.0	58%
<b>Total</b>	<b>100</b>	<b>89.4</b>	<b>89%</b>	<b>62.2</b>	<b>62%</b>

Source: Department of the Budget

### **Monitoring and evaluation are made more complex by the intertwining of the recovery plan with other plans rolled out by the government**

As the health crisis was succeeded by the crisis resulting from the war in Ukraine, the government announced successive plans, from emergency measures to the Economic and Social Resilience Plan, through the France Recovery and France 2030 plans. In this context, the France Recovery plan, itself a hybrid with its two-fold cyclical and structural ambition, includes a number of convergences with each of these plans, making its monitoring and assessment complex.

<sup>1</sup> In terms of disbursements, the "Competitiveness" section stands out as having a higher implementation rate when the reduction in production taxes is not adjusted.

The example of the articulation with the France 2030 plan is enlightening. Alongside its specific short-term objectives, the France Recovery plan shares the longer-term objective of transforming our economy with France 2030. In this respect, more than a quarter of the France Recovery Plan is designed to support business investment, of which 11 billion is financed by the Future Investment Programme 4 (PIA, Programme d'Investissements d'Avenir) and dedicated to innovation and research. The strategic orientations of the recovery plan, such as the development of green hydrogen and the decarbonisation of industry, as well as the speeding up of the production of electric and hybrid vehicles, are thus included in the France 2030 plan. Generally speaking, among the ten strategic priorities of France 2030, only the theme of the "seabed" did not appear in the recovery plan. It should be noted, however, that France 2030 also aims to heavily support breakthrough innovation, while the France Recovery plan only involves the modernisation (and greening) of the production system.

Out of the 54 billion euros allocated to the France 2030 plan, 34 billion correspond to the amount granted in the 2022 Initial Finance Act further to the announcement of this plan, and 20 billion correspond to the additional appropriations granted in the 2021 Initial Finance Act under PIA 4, of which €11 billion were earmarked for the France Recovery plan, and partly already used and committed in this regard. The threefold labelling of PIA 4, the France Recovery Plan and France 2030 with a total budget of 11 billion euros has a high risk of confusion between the various budget lines. Thus, certain calls for projects financed by the Future Investment Programme appropriations initially earmarked for the France Recovery plan now appear as France 2030. Furthermore, several schemes or even calls for projects combine the France Recovery plan and PIA 4 appropriations, adding some complexity to the distinction between the two.

The partial overlapping of the measures is detrimental to the readability of the recovery plan for business leaders: almost two thirds of the business leaders questioned (64%) say they are aware of the recovery plan, but only 14% say they know precisely what it is about, and they cannot distinguish between the aids introduced by the government, citing first the government-backed loan scheme (PGE), the solidarity fund or short-time working, such as measures of the recovery plan (which they are not).

While this confusion does not call into question the effectiveness of the measures introduced, it is nevertheless an additional difficulty for the assessment of these plans and for the monitoring of their implementation. Indeed, the assessment of macroeconomic effects requires the ability to measure the additional public investment and public expenditure attributable to each of the plans.

### ***The short-term macroeconomic objective was achieved.***

The analysis of the economic situation is obviously far from enough in order to assess the effectiveness of the recovery plan; but it makes it possible to rank France in relation to its main European partners, to check whether the short-term objective of the recovery plan has been reached, and to assess the extent to which the recovery plan is still appropriate in light of developments in the macroeconomic situation.

The objective of the recovery plan was to restore the pre-crisis level of GDP by the summer of 2022. This target was met, with GDP in the third quarter of 2022 1.1% above its level in the fourth quarter of 2019. This is more favourable than in Germany (+0.2%), the UK (-0.4%) and Spain (-2.0%), but as good as in Italy (+1.8%) and the US (+4.2%). There are two drawbacks.

Firstly, the return of GDP to its pre-crisis level does not mean that the impact of the crisis has been neutralised, as it is still necessary to make up for the lost economic growth - which would have occurred in the absence of the crisis. Quantifying this loss implies estimating the evolution of the productive potential of the economy beyond the economic situation, known as "potential GDP"<sup>1</sup>, the measurement of which is a controversial topic. The OECD considers that France's economic growth would have experienced a cumulative shortfall close to 3% from 2019 to 2022, compared to the evolution of the economy's productive potential (which would have been unaffected by the 2020 crisis).

Then, since the third quarter of 2021, there has been a slowdown of activity, with GDP growing by only 1% over the last four quarters. The evolution of the international context and the consequences of the war in Ukraine could raise concerns about a stagnation of activity in the coming quarters.

The macroeconomic context has completely changed in the past two years: when the recovery plan was introduced, a sharp increase in the unemployment rate seemed certain, deflation was feared, and zero interest rates seemed set for the long term. In 2022, inflation and unemployment are at their highest and lowest levels in over 25 years, respectively, and monetary policy is set to continue to be tightened indefinitely. In addition, our partners have been introducing policies since 2020 on themes targeted by the recovery plan, which are to be taken into account when assessing certain support measures for the industry. The assessment of the recovery plan and the redeployment or extension decisions made in 2022 must also be carried out in light of this changing macroeconomic context, which potentially calls for adjustments to public policies.

---

<sup>1</sup> The potential GDP of an economy corresponds to its maximum sustainable level of production, compatible in particular with long-term price stability.

### Macroeconomic situation: some points of reference

- Total employment in the third quarter of 2022 is 3.4% higher than in the fourth quarter of 2019. France is the most dynamic country in the sample assessed, where total employment is even below its pre-crisis level in Spain and the UK. Recruitment difficulties are at a very high level, above their 2019 level.
- The median situation of France in terms of activity, and very favourable in terms of employment, resulted in a sharper fall of productivity in France. In manufacturing, for example, in the second quarter of 2022, it remains 6% below its pre-crisis level, while the gap is close to zero in Germany, Italy and Spain.
- According to INSEE, the purchasing power of households was expected to stagnate in 2022 (and even fall by 0.6% in relation to the number of inhabitants), despite the support policies introduced, because wages hardly keep up with inflation. Nevertheless, the purchasing power per capita should follow a more favourable trend in France in 2022. It is expected to be 1.4% higher than its 2019 level, while it will probably deteriorate in Italy, Spain and the UK to -0.7%, -6.9% and -2.3% below its 2019 level, respectively.
- After the improvement observed in 2021, when the current balance was positive, France's external position deteriorated again in 2022. The trade deficit on goods broke historic records (39.8 billion euros in the third quarter alone), due to the soaring energy bill (33.6 billion in the third quarter alone); but the current balance (which also includes services and the balance of income from abroad) held up (18.3 billion deficit in the third quarter), and the deterioration since 2019 was rather lower in France (-0.9 points of GDP, against, for example, -2.4 points for the United Kingdom, -2.8 points for Italy, -1.4 points for Germany), admittedly compared to a less favourable initial position.
- After improving in 2021 to reach an all-time high in the second quarter of 2021 under the effect of business support measures and the reduction in production taxes, the margin rate of French companies fell and should reach 32% on average in 2022 according to INSEE, close to its 2019 level (corrected for the double year of the Competitiveness and Employment Tax Credit).
- French corporate debt has risen more than that of our main European partners since 2019, and remained higher in 2022 than in the UK, Germany, Italy, Spain, and the US. However, this increase is partly the result of the success of the government-backed loan scheme (PGE, prêt garanti par l'État), which in turn generated an increase in cash flow for many companies.

- According to business surveys, the cash flow situation of companies has deteriorated significantly since the beginning of 2022, in service sector but above all in industry, particularly affected by the rise in the cost of raw materials and energy.
- Finally, business failures have been rising steadily since the beginning of 2022, but remain well below their pre-crisis rate.

## 2. Analysis of schemes

The report contains a chapter dedicated to the assessment of each of the schemes selected by the committee<sup>1</sup>. There is not yet enough hindsight to carry out a comprehensive assessment. The schemes have not yet been fully deployed (decarbonised hydrogen), or they are deployed but the investments have not been completed (decarbonisation of industry, renovation of local authority buildings), or the data are not available (reduction in production taxes) or are still partial (MaPrimeRénov', APLDF/FNE-Formation), or have not been transmitted to the secretariat in time (plant proteins, equity).

Even when data is available, assessment is a complex process: given the size of the recovery plan, and the large number and variety of measures, some interact (e.g. measures in favour of industry); for some measures, the distinction between current appropriations and the recovery plan is not easy to make, *a fortiori* for their extension; the overlapping of the various government plans highlighted *above* adds to the complexity, in particular for the measures in favour of industry; post-Covid economic disruptions (supply problems, soaring energy prices) make it even more difficult to identify the effects of the measures (e.g. Supporting demand for low-emission vehicles); finally, some measures have a medium-term impact (such as the reduction in production taxes or the measures in the '1 jeune 1 solution ' plan), and cannot be evaluated on the basis of their first year of implementation<sup>2</sup>. That said, for most of the schemes, the Secretariat was able to collect enough data to draw some useful initial lessons, which at the very least identify some positive outcomes and areas for attention. These key messages

---

<sup>1</sup> The renovation of public buildings (in the 'Ecology' section) and measures to support investment and modernisation of industry as well as support for the industry of the future (in the 'Competitiveness' section), which were studied in detail in the 2021 report, have not been analysed this year due to a lack of new information.

<sup>2</sup> For all these reasons, when the secretariat launched seven calls for research projects in the spring of 2022, four were unsuccessful.



are outlined here<sup>1</sup>.

## 2.1. 'Ecology' section

### *Energy renovation of local authority buildings<sup>2</sup>*

The 1.3 billion euro budget line for the energy renovation of the buildings of local authorities was increased by two grants to support local authorities' investments decided before the Recovery Plan – 650 million euros for the municipal unit (allocation to support local investments - DSIL) and 300 for the departmental unit (allocation to support departmental investments - DSID) - and also provides for a 300 million allocation to support regional investments (DRI). Projects are selected based on two main criteria: the ability of the project holder to implement the project quickly as well as an overall environmental performance criterion.

In total, 6,212 energy renovation projects of local authority buildings were selected, for an estimated total of 3 billion euros of work subsidised to the tune of 1.3 billion euros (see Table II). The 5,361 projects financed thanks to the allocation to support local investments account for 86% of the total, but only 56% of the works financed, as they are of a much smaller scale, and less than 50% of the subsidies paid, as the subsidy rate is also lower. At the same time, the 283 projects funded by the allocation to support regional investments (DRI, dotation régionale d'investissement) account for 4.5% of the total for 24% of the work funded, and 33% of the subsidies received.

**Table II - Key data on subsidised projects**

	DSIL	DSID	DRI	Total
Number of projects	5,361	568	283	6,212
Amount of works (€M)	1,700	643	719	3,000
Amount of grants (€bn)	643	301	427	1.3
Apparent subsidy rate <sup>(1)</sup>	38%	47%	59%	43%

<sup>(1)</sup> Calculated here by correlating total subsidies with amount of the work.

Source: Directorate-General for Local Authorities - short-listed projects; France Stratégie calculations

School buildings are the main beneficiaries for each level of government. They account for

<sup>1</sup> The reaching of targets (quantitative objectives associated with the deployment of the recovery plan) and milestones (qualitative objectives such as the entry into force of part of the unemployment insurance reform) that determine the partial reimbursement of the recovery plan by the EU was not examined by the committee.

<sup>2</sup> Support for the renovation of government buildings was analysed in detail in the [first report](#) of the Committee for the Assessment of the France Recovery Plan (October 2021). It is not covered in this report.

63% of the total budget line, for 39% of the projects, with a grant rate close to the average.

Various allocation strategies can be observed within the regions<sup>1</sup>. Some, such as Brittany and Pays de la Loire, allocated subsidies in a relatively even way across their territories, while others targeted less densely populated departments: Occitanie favoured its least populated department, Lozère, with 81 euros per inhabitant; Auvergne-Rhône-Alpes did likewise, favouring Allier with a 90-euro subsidy per inhabitant, while its most populated department, Rhône, received 12 euros per inhabitant.

The expected savings in energy consumption, expressed as a percentage of the consumption before the works, were provided by the project holders for about three quarters of the projects, also accounting for three quarters of total subsidies<sup>2</sup>. In this sample, most subsidies were granted to projects with significant claimed savings: 85% of the projects (76% of the projects, respectively) were estimated to result in energy savings of at least 20% (30%, respectively), for 85% of total subsidies (75% of subsidies, respectively). In total, the energy savings were expected to reach 43%, which is in line with the requirement set by the Elan law (40% reduction in energy consumption by 2030).

This average naturally conceals contrasting distributions: in twelve départements, at least 30% of their subsidies support projects with an energy efficiency of less than 20%: Eure, Marne, Bouches-du-Rhône, Puy-de-Dôme, Somme, Haute-Vienne, Oise, Indre, Meuse, Cher, Loiret, and Corrèze.

These departmental contrasts were also observed in terms of the efficiency of a euro invested: in the departments of Aude, Paris, Gers and Rhône, the annual energy savings are less than 0.1 kWh per euro invested, whereas in Haute-Corse, Orne, Maine-et-Loire, Landes, and Loiret-Cher, there are equal to 1 kWh per euro invested.

All these figures relate to expected energy savings, which will need to be confirmed *ex-post*, based on actual consumption data, and which would benefit from being established for all projects.

---

<sup>1</sup> The projects funded were jointly selected by the regional prefects and the presidents of the regional councils.

<sup>2</sup> Savings in kWh were less well reported, for just over half of the projects, accounting for half of the grants.

## MaPrimeRénov'

There are many schemes to support the energy renovation in housing. The energy transition tax credit (CITE) was replaced in 2020 by MaPrimeRénov', which takes the form of bonuses, defined by the type of action according to the associated theoretical energy performance, targeted at modest and very low-income households.

As part of the recovery plan, MaPrimeRénov' started to undergo several changes as of January 2021: it was extended to households with higher incomes<sup>1</sup>, to landlords and to work on the shared areas of co-ownerships. Flat rates are also being introduced for comprehensive renovations that result in greater energy savings.

The assessment of the recovery plan is therefore particularly difficult, as it requires a distinction to be made between what comes from the recovery plan early 2021, and what comes from the ramping up of the scheme introduced on 1st January 2020.

Besides, at this stage of our assessment, without even wanting to highlight the specific contribution of the recovery plan, the contribution of MaPrimeRénov' to the trajectories of reduction in greenhouse gas emissions and energy consumption cannot be precisely estimated, even *ex ante*, since neither the initial energy source nor the surface area of the homes are specified in the subsidy application files. Furthermore, and most importantly, without actual consumption data after the work has been completed, it is not possible to assess the effectiveness of the renovation, or even the extent of any rebound effect.

Having said this, it is possible to make a number of observations, bearing in mind these limitations.

Even though MaPrimeRénov' is open to all homeowners, the modulation of aid according to income means that the most low-income households remain the main beneficiaries of the aid, since they account for 68% of validated applications for 83% of the total amount of premiums in 2021, including 45% and 62% for very modest households. This targeting makes a reduced deadweight effect more likely.

The quantitative objectives assigned to MaPrimeRénov' were exceeded: although the France Recovery plan targeted 400,000 validated applications for premiums in 2021, 640,000 applications were actually validated in 2021, after only 117,000 in 2020. Initial data for the first half of 2022 suggest that the 2021 pace is being maintained (315,000). However, MaPrimeRénov' struggled to find its audience in collective housing (which accounts for 4% of subsidised renovations, for a total amount of subsidies of 25 million euros, even though it

---

<sup>1</sup> Previously in the recovery plan, this extension was planned for 1st January 2021, but with an exclusion of households belonging to deciles 9 and 10.

accounts for 43% of principal residences).

The scheme mainly supports single-step renovations, with 83% of applications validated in 2021 (for 55% of the amount of grants awarded). This share is certainly decreasing, since it was 91% in 2020, and reached 78% in the first half of 2022, but it reflected an insufficiency of large-scale renovations necessary to achieve the objective of reducing final energy consumption. Only 2,026 MaPrimeRénov' comprehensive renovation files<sup>1</sup> were validated, i.e. 0.3% of the files validated in 2021 (for a total of 64 million euros of work and 18 million euros of subsidies). It has to be said that the aid is small in relation to the amount of work involved (7,000 euros for intermediate households, 3,500 euros for upper-income households).

Low-income households carrying out a comprehensive renovation project are entitled to the "MaPrimeRénov' Sérénité" scheme, which replaced the "Habiter Mieux Sérénité" scheme that existed prior to the recovery plan. In the first half of 2022, more than 16,000 files were validated, for a total amount of 536 million euros of work and 269 million euros of subsidies (an average of 17,000 euros of subsidy per file). This brings the total to 5% of overall renovations when MaPrimeRénov' Sérénité is included. It is interesting to note that ambitious renovation works resulting in significant energy savings do not systematically result in the eradication of leaky homes or the completion of low-energy buildings. This is the case for renovations to switch from G to F, which are among the most energy-efficient (with an estimated average gain of 332 kWh per year).

From a geographical point of view, it should be noted that the proportion of work subsidised through MaPrimeRénov' in relation to principal residences is positively correlated with the proportion of leaky homes. However, some departments stand out. For example, the departments of Paris, Val-de-Marne and Hauts-de-Seine have a high proportion of leaky homes but very low use of MaPrimeRénov', which is related to the difficulty MaPrimeRénov' has in finding its audience for collective housing.

With regard to the emission reductions generated by the work subsidised by MaPrimeRénov', it should be noted that, based on the estimates of the average gain per gesture made by the National Energy Renovation Observatory (ONRE), applications validated in 2021 in the context of MaPrimeRénov' should make it possible to save 1.85 MtCO<sub>2</sub> each year, according to the DPE metrics (taking into account both direct and indirect emissions<sup>2</sup>, with conventional behavioural assumptions). It is tempting to observe that this reduction is close to the annual target set for the residential sector by the National Low Carbon Strategy (NLCS, Stratégie nationale bas-carbone) currently in force but, in addition to being based on rather fragile estimates of the

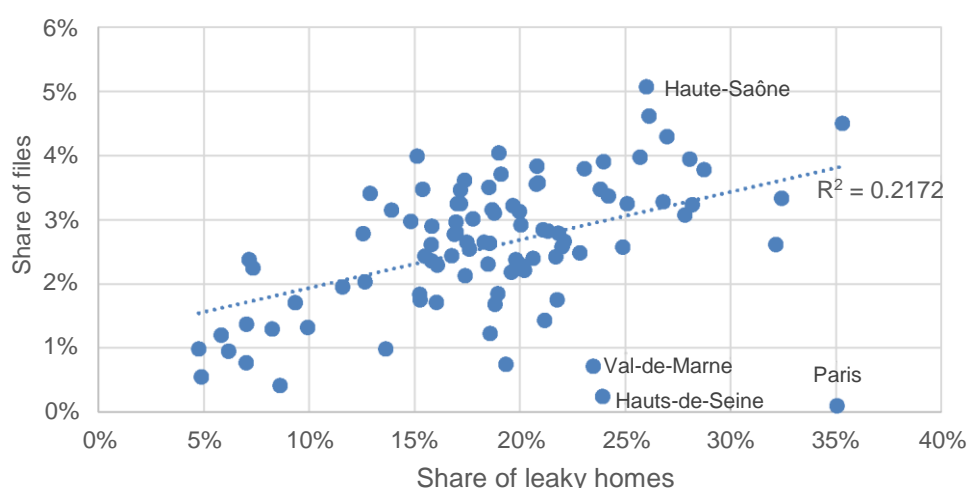
---

<sup>1</sup> We take into account the files that benefited from the global renovation package as well as those that helped eradicate leaky homes or obtain the low consumption building status.

<sup>2</sup> Direct emissions come from the combustion of fossil fuels in homes. Indirect emissions are linked to the production of electricity consumed, heat production delivered by heating networks and the extraction and transport of fuels.

average gain per gesture (which, in particular, do not take into account either the initial energy source or the surface area of the homes, which are not specified in the subsidy application files), this comparison is undermined by two main biases. The first is that the sectoral targets of the National Low Carbon Strategy cover only direct emissions. The second is that they relate to real emission reductions. Besides the question of the quality of work, the latter may be lower than the reductions estimated in a conventional manner due to low-income households limiting the extent before the work, with a gap that is all the greater as they may choose to increase the heating temperature after the work (rebound effect). The use of actual consumption data therefore appears necessary to define how much the contribution of the work assisted by MaPrimeRénov' meets the objectives of the SNBC. This should be possible in 2023 thanks to the availability of individual data on both energy consumption after works and the use of MaPrimeRénov'. Finally, it is not enough to estimate the savings made thanks to the work subsidised through MaPrimeRénov' to assess the effectiveness of this scheme, as some of the subsidised work could have been initiated even without this aid (what economists call the "deadweight effect", which is a *priori* low for low-income households).

**Graph I - Work subsidised thanks to MaPrimeRénov' depending on the rate of leaky homes in the department**



Reading: the work subsidised by MPR (estimated by the share of files in relation to the number of main residences in the department) is correlated with the share of leaky homes in each department. With 23,396 leaky homes (i.e. 26% of the department's principal residences), Haute-Saône submitted 4,557 MPR files (i.e. 5% of the department's principal residences).

Source: calculation by the Committee secretariat

### Support for low-emission vehicles

The SNBC adopted at the beginning of 2020 provides for a ban on the sale of new combustion engine vehicles from 2040 (a ban which will be brought forward to 2035 in the future SNBC currently being prepared). To achieve these objectives, several instruments coexist in

European and French regulations.

Firstly, all European countries are subject to motor vehicle emission standards, known as Euro standards, which are evolving and becoming increasingly stringent. European regulations set a limit of 95 g/km for the average CO<sub>2</sub> emissions of car manufacturers for new passenger cars for 2021, on pain of a fine. In April 2019, Europe also committed to a further 37.5% reduction in average CO<sub>2</sub> emissions for new cars by 2030 compared to 2021, i.e. a new threshold of 60 g/km.

Secondly, French regulations (like most European Union member states) provide for a bonus-penalty system for purchases, as well as a conversion premium (when a vehicle over 15 years old is destroyed), which were reinforced in the recovery plan. 1.9 billion<sup>1</sup> euros were earmarked for the 2020-2022 period, through three measures<sup>2</sup>:

- i) the reinforcement of the ecological bonus for the purchase or long-term leasing of a low-emission vehicle (985 million euros), which mostly consisted of an increase of 1,000 euros from 1 June 2020 to 30 June 2021 for electric vehicles (from 6,000 to 7,000 euros), and of 2,000 euros for plug-in hybrid vehicles (which were initially not eligible), reduced to 1,000 euros on 30 June 2021;
- ii) the extension of the conversion premium (795 million euros) to the return of Crit'air 3 vehicles;
- iii) aids for the deployment of charging stations on all public service areas for electric vehicles (100 million euros), with the aim of reaching 100,000 charging points for electric vehicles open to the public on motorways and the national road network by 2022.

The share of electric vehicles and plug-in hybrids in new vehicle sales in France significantly increased in 2020 and 2021. While these vehicles accounted for only 2.1% of sales in 2018 and 2.8% in 2019, this figure rose to 10.8% in 2020 (an increase of 4.7 percentage points for electric vehicles and 3.3 percentage points for plug-in hybrids between 2019 and 2020), then to 18% in 2021 (an increase of 3.1 percentage points for electric vehicles and 4.1 percentage points for plug-in hybrids between 2020 and 2021). In the field of electric vehicles alone, the market share increased from 1.9% in 2019 to 9.7% in 2021. These increases therefore occurred simultaneously with the strengthening of the measures described above (premium and European standard in particular) and the supply policy rolled out by car manufacturers (launch of new electric and plug-in hybrid car models). However, it is premature to consider that the increase in the market share of electric and hybrid vehicles from 2020 onwards is

---

<sup>1</sup> Then brought to 1.6 billion euros through redeployment.

<sup>2</sup> The aids extended in the recovery plan target low-emission cars regardless of where they are produced, unlike the support introduced in the US Inflation Reduction Act in August 2022.

linked to the recovery plan measures, for several reasons<sup>1</sup>.

Firstly, an equivalent or even greater dynamism is found in all the European countries studied: in Germany, Denmark, Norway and Sweden, the increase in the share of electric vehicles was greater than 11 percentage points between 2019 and 2021, while for Spain, Italy, France and the Netherlands this increase was between 2 percentage points (Spain) and 8 percentage points (France). In the UK, the increase was strong (+10 points from 2019 to 2021), while the green premium was reduced from £3,500 to £3,000 at the beginning of 2020.

Moreover, this increase in market share in France occurred as early as January 2020, with an almost fourfold increase (in the first quarter of 2020 compared to the last quarter of 2019) for electric cars (7.5%), and a two-fold increase for plug-in hybrids in the share of new passenger cars (2.5%), i.e. a few months before the recovery plan, and while the ecological premium scheme had been restricted compared to 2019<sup>2</sup>.

Finally, the increase in the market share of low-emission vehicles has continued since the summer of 2021, although in particular the temporary 1,000-euro increase in the premium was removed.

In general, the cost linked to purchasing electric vehicles compared to combustion engine vehicles is, of course, an important criterion in the choice households make, but it is not the only one. The availability of charging points, expectations of electricity and petrol prices, and the extent of households' preference for the current situation are also important criteria, and it is not clear whether the temporary 1,000-euro increase in the premium (or 2,000 euros for hybrid vehicles) granted as part of the recovery plan explains most of the observed increase in the market share of low-emission vehicles.

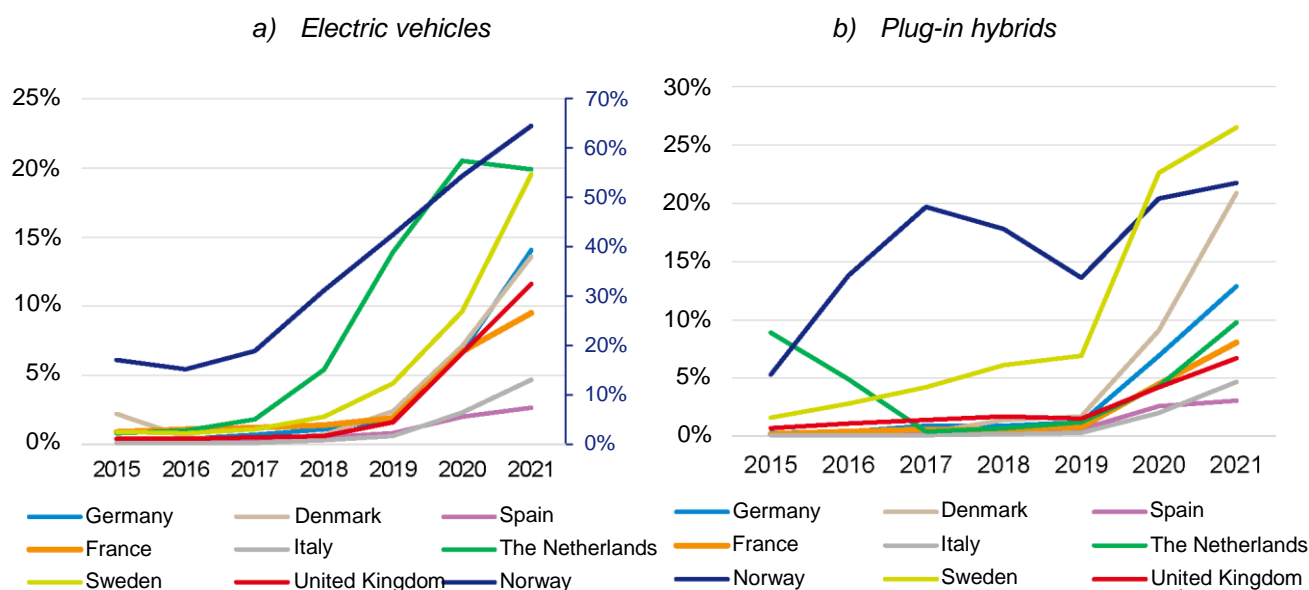
Finally, it should be noted that the target of 100,000 charging points will probably not be reached by the end of 2022: on 1 December 2022, France had a total of 77,000 charging points, a 51% increase over the last twelve months.

### **Graph II - Market shares of individual electric and plug-in hybrid cars in European countries, annual average**

---

<sup>1</sup> The tightening of European emission standards mentioned *above* could in part explain this increase in the share of electric vehicles observed since early 2020. It compelled car manufacturers to reduce the average emissions of their new sales, in particular by improving their range of low-emission vehicles.

<sup>2</sup> Via a tightening up for the most expensive vehicles.



Note: in the left-hand chart, Norway is shown on the right-hand scale.

Source: EEA, ICCT

## Industry decarbonisation

By 2030, industry will need to speed up the pace of its decarbonisation while pursuing the objective of relocating production. To meet this two-fold challenge, the France Recovery plan specifically mobilised €1.2 billion in aid. In addition to existing tools, and in particular the European Emissions Trading Scheme (ETS), three calls for projects (CFP), supervised by Ademe, support investments in energy efficiency and process decarbonisation (INDUSEE and DECARBIND) as well as renewable heat (BCIAT). An investment support office for improved energy efficiency projects was also set up for smaller projects. Furthermore, this decarbonisation investment support will be extended by France 2030, which allocates 5.6 billion euros to this topic.

By the end of June 2022, energy efficiency CFPs (INDUSEE and DECARBIND) supported 140 winners, with a total grant amount of €553 million. The projects thus financed are expected to help save 2.7 M<sub>t</sub>CO<sub>2</sub> per year<sup>1</sup>. Regarding the call for projects to support carbon-free heat production (BCIAT)<sup>2</sup>, it gave rise to the payment of 449 million euro grants in investment grants for 89 projects. This call for projects should make it possible to avoid 1.56 M<sub>teq</sub>CO<sub>2</sub> per year. The Committee secretariat does not have any implementation data on the decarbonisation investment support office operated by the Services and Payment Agency.

<sup>1</sup> Based on *ex-ante* assessments made by project holders and cross-examined by Ademe.

<sup>2</sup> The BCIAT CFP also contains an "Operating Aid" (OPEX) section.



The amount of subsidised decarbonisation investments, totalling 2.4 billion euros, can be compared with INSEE's estimate of all annual investments by industry for environmental protection (1.6 billion euros, of which 0.4 billion for greenhouse gas limitation, in 2020). In addition, the projects financed as part of the France Recovery plan should contribute to reducing the industry's annual emissions by approximately 4.3 MteqCO<sub>2</sub>, for an emissions reduction target set by the SNBC 2 at 30 MteqCO<sub>2</sub> in 2030 compared to 2019 (i.e. almost 15% of the reduction target over the period).

Statistical analysis shows that the amount of the subsidy in relation to the tonnes of CO<sub>2</sub> avoided was a dominant criterion in awarding decisions. Thus, the design of calls for projects, their execution and the appropriations made it possible to meet the objective of rapid and massive support for the decarbonisation of industry as the crisis ended.

The distribution of subsidies by sector of the DECARBIND and INDUSEE CFPs is consistent with that of industry emissions: the most emitting sectors - and in particular metallic minerals and construction materials, chemicals and refining sectors - are the main beneficiaries.

The profitability of the winning projects of the DECARBIND and INDUSEE PAAs varies significantly from one sector to the next and within sectors. This heterogeneity can be explained in particular by the nature of the projects, which differ greatly from one sector to the next. In addition, the high volatility of fossil fuel input prices and of the price of a tonne of carbon in the ETS market, and therefore of the gains associated with the project, could lead project holders to only apply if they anticipate a high return on their investment, because of the risk taken. However, this analysis cannot be conclusive about the risks of overfunding due to partial data on the earnings and costs associated with the winning projects.

With regard to the support measure for carbon-free heat, a team of researchers from the Institute for Public Policy assessed the profitability of the projects linked to the BCIAT CFP both from the point of view of the company carrying out the project and from that of society, taking into account the reduction in emissions. Selected winners do not appear to be overfunded according to the price conditions of the publication of the call for projects. However, if the sharp rise in energy prices in 2021 and 2022 is taken into consideration, all projects would have been profitable without subsidies, and new investment projects could be financed independently of the scheme.

Finally, it should be remembered that these initial analyses do not allow us to conclude as to the causal impact of the measures on investments in decarbonisation and emission reduction.

### ***Supporting carbon-free hydrogen***

To meet climate objectives and decarbonise uses for which direct recourse to electricity is not possible, hydrogen and its derivatives (ammonia, methanol, e-fuels) appear necessary.

Following the presentation on 8 July 2020 of the hydrogen strategy for the European Union, France presented in September 2020 the National Strategy for the Development of Decarbonised Hydrogen, with the mobilisation of 7 billion euros between now and 2030, including 2 billion financed by the recovery plan from 2021-2022.

The €2 billion recovery plan is based on four schemes:

- the “Hydrogen territorial ecosystems” call for projects with a budget line of 275 million euros over the 2021-2023 period, including 75 million from the recovery plan. It finances projects aimed at promoting the deployment of territorial ecosystems that bring together infrastructures for the production of hydrogen by electrolysis and the distribution of hydrogen, as well as the various uses of this energy. At this stage, seven projects have been awarded a total of €57 million in subsidies. They add to the 18 winning projects beyond the CFP’s recovery plan (54 million);
- the call for projects known as “Technological bricks and hydrogen demonstrators” with a budget line of 350 million euros, jointly earmarked France Recovery plan and Future Investment Programme. The call for projects is still ongoing, since it was open until 31 December 2022. It aims to support innovation work to develop or improve components and systems linked to the production, storage and transport of hydrogen, and its uses on the one hand, and to support projects for demonstrators or the first commercial projects in the sector, on the other;
- the “Hy2Tech” Important Project of Common European Interest (IPCEI) (€1.575 billion, of which €1.275 billion from the recovery plan and €0.3 billion from the Future Investment Programme). It aims to support research and innovation, as well as the first industrial deployment, with a particular focus on electrolysis and mobility. It will include 41 projects from 35 companies, including 10 French companies (Alstom France, Arkema, Elogen, Faurecia, Genvia, Hyvia, John Cockerill, Mc Phy, Plastic Omnium France, and Symbio);
- the support mechanism for the production of carbon-free hydrogen (650 million euros). It is not yet fully defined but will be deployed through a remuneration supplement in the context of a call for tenders to increase the production of low-carbon hydrogen.

With the IPCEI on hydrogen and the “Hydrogen Territorial Ecosystems” CFP, the recovery plan targets electrolysis as a way of producing hydrogen. As emphasised in the recent report of the commission on abatement costs chaired by Patrick Criqui<sup>1</sup>, this course offers new technological and industrial developments around electrolysis, and therefore a possible future industrial leadership; but it can only be implemented in France, on a massive scale and under

---

<sup>1</sup> Criqui P. (2022), *Les coûts d'abattement. Partie 4 – Hydrogène*, report of the commission on abatement costs, France Stratégie, May.

conditions that effectively contribute to decarbonisation, provided there is a very strong development of decarbonised electricity production, therefore not conceivable before 2040 at the earliest, and provided storage facilities are developed to absorb production variations. Although not a necessary condition in the 'Territorial Ecosystems' CFP, the use of decarbonised electricity is encouraged by an associated increase in the grant rate. The recovery plan does not, at this stage, finance blue hydrogen, which consists of capturing and sequestering carbon from methane reforming. Even if caution is advised given the lack of large-scale deployment of this technology today and the questions of acceptance that such deployment could raise, it appears *a priori* to be a low-cost decarbonisation option that is relevant in the short term compared to methane reforming without capture. Finally, the Criqui Commission's results highlighted that decarbonised hydrogen provides the highest emission reductions when dedicated to "specific" hydrogen uses, i.e. mainly to current industrial uses, as well as to primary steel production, which currently involves coal. For a future assessment, it will therefore be necessary to pay attention to the winning projects of the "Hydrogen technology bricks and demonstrators" CFP.

### **Supporting the "plant protein" sector**

France produces only half of the plant protein-rich materials needed for animal feed (soybean, rapeseed, sunflower oilcake, etc.) and one third of those for human consumption. Yet the plant protein sector is of strategic importance. The recovery plan is the financial lever to boost the national strategy for the development of plant proteins. With an initial budget of 100 million euros, the "Plant proteins" section of this plan has been completed to reach a budget of more than 150 million euros. These support measures are in line with the National Strategy for the Development of Plant Proteins launched in 2020 by the Ministry of Agriculture and Food, itself a successor to the "Plant Proteins" plan launched in 2014.

In the long term, the aim is to double the area cultivated to reach 8% of the useful agricultural area, i.e. 2 million hectares. In the shorter term, by 2023, the strategy aims to increase this area by 40%. These measures are expected to have a triple impact on the economy, the environment, and public health.

To achieve this, the budget line allocated by the France Recovery plan to help develop plant proteins is broken down into six main schemes:

- a budget line of 50 million euros for the structuring of sectors. The call for projects is divided into a collective section, supporting collective projects structuring the sectors led by economic operators, and an individual section encouraging downstream tangible investments that meet the objectives of post-harvest logistics or processing for food or feed;
- a measure with a budget to 75 million euros to support investments in farms and the

purchasing of seeds to enrich grasslands with legumes. With an initial budget line of 20 million euros, this measure was complemented with 2 additional budgets, of 22 million euros and 33 million euros, respectively, given the strong momentum of the first wave of Covid-19;

- a second scheme with a budget line of 3 million euros aims to support research on varieties of legumes and develop new forms of proteins;
- a budget line of 1.2 million euros for the campaign to promote legumes aimed at consumers;
- a budget line of 2 million euros dedicated to subsidies via Bpifrance for companies processing and promoting plant proteins;
- and a last budget line of 20 million euros allocated to research and innovation through the Cap Protéines programme.

The secretariat was unable to analyse the short-listed projects, as it only had the budgetary implementation data for each scheme<sup>1</sup>. In total, on 1st November 2022, 144 million euros had been committed and 85 million euros spent.

## 2.2. 'Competitiveness' section<sup>2</sup>

### ***Reduction in production taxes***

The €10 billion cut in so-called 'production' taxes is characterised by its permanent nature (€20 billion are included in the recovery plan, corresponding to the first two years of decrease, 2021 and 2022) and its *a priori* effect on all companies. Together with the gradual reduction in the corporate tax rate (from 33% in 2017 to 25% in 2022), it aims to strengthen the competitiveness of French companies over the long term, and to encourage the establishment of production sites, particularly those of industrial companies.

Taxes on production are a collection of disparate compulsory levies. Broadly speaking, a distinction can be made between taxes based on production (social solidarity contribution of companies or C3S - in this case, turnover, which is close) or value added (the contribution on business value added - CVAE), and taxes based on production factors, and in particular real estate, (property tax, for companies that own property, and business premises contribution -

---

<sup>1</sup> Initial, but partial, data submissions per project were made in November 2022, too late to be used.

<sup>2</sup> The measures to support industry investment and modernisation and the support for the industry of the future, which were studied in detail in the 2021 report, were not analysed this year due to the lack of information at this stage once the subsidised investments had been made.

CFE<sup>1</sup>). All these taxes have the characteristic of being payable by companies irrespective of their profitability (unlike corporate tax). As for the rest, they have different characteristics: schematically speaking, taxes on production have the main disadvantage of introducing a distortion in the organisation of the value chain, by taxing companies in different way depending on their degree of vertical integration (this is also the case of the contribution on business value added for the smallest companies, as the entry threshold is calculated according to its turnover). Taxes on real estate lead to companies being taxed according to the number of square metres they occupy (and own), which, all other things being equal, constitutes an incentive to reduce their real estate capital and the surface areas they use, and contributes to reducing the attractiveness of France in their choice of location, particularly for production sites<sup>2</sup>.

In the economic literature, these taxes on production are considered to be particularly "distortionary and harmful to activity". Given these negative impacts on French growth, and while they are at a high level in France (3.1% of GDP in 2019) compared to the European average (1.7% of GDP), the Economic Analysis Council recommended in 2019 that the abolition of the C3S, which was interrupted in 2017, be finalised as a matter of priority, and that the abolition of the contribution on business value added be programmed in a second phase.

The reduction in production taxes in the recovery took the following form:

- cutting by half the tax rate of the contribution on business value added for all companies, regardless of their sector of activity, by eliminating the regional share;
- reduction by half in the rental value of industrial establishments, used as a reference for the calculation of the business premises contribution (CFE) and the property tax on developed land (TFPB, *taxe foncière sur les propriétés bâties*);
- lowering the cap on the local economic contribution (CET) by one percentage point, thus setting the combined sum of the contribution on business value added and business premises contribution at 2% of the company's value added so as not to limit the effects of the first two measures.

Included in the Finance Act for 2021, these measures resulted in an annual tax revenue shortfall estimated at €7.3 billion for the contribution on business value added, €1.8 billion for the property tax on developed land, and €1.5 billion for the business premises contribution – i.e., a gross cost of €10 billion per year, given the combined effects of these measures.

---

<sup>1</sup> This tax, levied on companies, can be compared to the housing tax for households.

<sup>2</sup> This incentive to save space could, on *the other hand*, be seen as desirable from an ecological perspective, if the tax base related to the space artificially created by the land area, which is not the case.

Considering the increase in profit resulting from the reduction in these taxes, and the associated increase in corporate tax revenue, these measures generate a permanent reduction in tax resources estimated at €8.2 billion annually.

In total, industry is the main beneficiary of the reform insofar as it is the main contributor to the reduction in production taxes between 2019 and 2021, which amounted to 10.4 billion euros<sup>1</sup>. It contributed 4.2 billion euros (i.e. 40%) to the observed decline, a share more than twice its weight in the market economy; by tax, the industry sector contributed 90% of the reduction in the business premises contribution between 2019 and 2021, three quarters for the property tax on developed land and one quarter for the contribution on business value added.

Although the reduction in production taxes was not targeted at the companies most affected by the health crisis, it may have provided an opportune boost to economic activity. Thus, companies belonging to the decile most affected by the health crisis in 2020 benefited from a reduction in production taxes equivalent to almost 0.5% of their value added, close to the average of 0.6% for all companies.

On the whole, this reform seems capable of meeting the long-term objectives set by the Government by helping to strengthen the competitiveness of French companies, and contributing to the attractiveness of France for investment. However, a microeconomic assessment based on tax data will be necessary to measure the causal effect of the measure to reduce production taxes on the profitability and competitiveness of French companies, and the attractiveness of the country, and to compare the economic benefits of this reform with its budgetary cost. This should be made possible as early as next year with the availability of tax data for the years 2021 and 2022. However, the high volatility of the macroeconomic context and the concomitant reduction in the corporate tax rate will pose additional difficulties in identifying the causal effect of the reduction in production taxes. Furthermore, the impact of this reform on the structure of local authorities' resources, with a reduction in their power to set rates, and a decrease in the link between local economic activity and tax revenue at regional level, should be studied.

### ***Supporting companies' equity***

Following the 2020 crisis, several surveys (including those by Bpifrance and the Banque de France) showed that a small minority of companies will have difficulty meeting the repayment schedules of their government-backed loans as of 2022. More generally, there was concern that the equity of some SMEs and mid-market companies had been permanently weakened by the crisis. In this context, the France Recovery plan created three additional targeted

---

<sup>1</sup> It should be noted that this decrease is only an estimate, as the decline in production taxes is also partly due to the changing economic situation.

measures to support companies' equity capital, for a total budget line of 3 billion euros.

- The "Relance" label, launched on 19 October 2020, is a scheme enabling SMEs and mid-market companies to access financial resources in the event of proven difficulties. It helps savers identify and *subsequently* redirect their savings towards investments that are most likely to provide equity and quasi-equity support to French SMEs and mid-market companies affected by the crisis. This "Relance" label is granted to certain collective investment schemes, known as OPCs, whose activities benefit the recovery of French companies. It is granted until the end of December 2022 for a period of four years.

As of 31 October 2022, 232 Relance funds were registered, including 26 new funds registered since the beginning of 2022 for an outstanding amount of EUR 22.37 billion. Taking into account the fundraising and investment targets of the funds being launched, by June 2022, more than 73% of the labelled funds had been invested in French companies in terms of equity and quasi-equity, and 59% in French intermediate-sized enterprises, SMEs, and mid-market companies. All Relance funds have contributed to nearly 1,000 capital increases or IPOs since 31 December 2020.

- A system of profit-sharing loans and subordinated bonds, available to French SMEs and mid-market companies between May 2021 and June 2022, was set up to ease access to financing for economically viable companies, to help them resume their development.

As of May 2022, the Recovery Profit-sharing Loans (PPR, prêts participatifs Relance) have reached an amount of almost €868 million. The largest share of these stocks was allocated to the wholesale and retail sector (19.3%), followed closely by the manufacturing sector (18.8%). Most PPRs benefit mid-market companies with 62.7% of the fund's assets, followed by SMEs with 34.8% and intermediate-sized enterprises with 2.4%. The weighted average rate of the loan portfolio is 4.6%.

As for the Relance bonds, at the beginning of June 2022, 38 companies - 16 mid-market companies (€283 million) and 22 SMEs (€128 million) - used them, for a financing amount of 410 million euros. Most investments made are in the manufacturing sector (22%), building industry (16%) and the specialised scientific and technical activities sector (15%).

- Finally, the recovery plan supported by Bpifrance created the State-Regions France Relance Fund (FFRER). With a budget of 250 million euros, the FFRER will help increase the support capacities of SMEs at local level. No data was available at the time this report was drawn up.

## 2.3. 'Social Cohesion' section

### *1 jeune 1 solution (1 young person 1 solution)*

The "1 jeune 1 solution" plan was rolled out from the summer of 2020 in order to alleviate the effects of the health crisis on young people, in a context where the fear of a sharp increase in the youth unemployment rate was shared by many economists. In particular, it aims to limit the risk of an increase in the number of young people experiencing exclusion and precariousness as a result of the Covid-19 crisis. It complements and, above all, amplifies pre-existing measures to support employment, training, and help for young people.

The plan has three main sections.

- *Facilitate the integration of young people into the labour market.* Among the main measures of this section, there are exceptional aids to support apprenticeships and vocational training contracts, subsidies for hiring young people (AEJ, aides à l'embauche des jeunes) and the revival of subsidised contracts for young people, which had largely been phased out before the health crisis.
- *Supporting young people experiencing the greatest difficulty in accessing the labour market.* This section is mainly made up of an increased number of places in the schemes managed by the community aid projects for young people and Pôle emploi, in particular the Contractualised Support Pathway to Employment and Autonomy, and the Youth Guarantee (for community aid projects for young people) and the Intensive Support for Young People (AIJ - Accompagnement intensif des jeunes, for Pôle emploi).
- *Guiding and training young people.* This section consists of a wide range of measures, both an increase in the number of training places, particularly in the context of the Skills Investment Plan (PIC, Plan d'investissement dans les compétences), but also additional resources for a myriad of smaller schemes (boarding schools of excellence, 'cordées de la réussite', personalised pathways for 16-18 year-olds who do not meet the training obligation, etc.).

In the third quarter of 2022, the youth employment rate increased by 5.1 percentage points compared to the end of 2019. More than half of this increase would be linked to the increase in work-study training, which is heavily subsidised through the "1 jeune 1 solution" plan: until 31 December 2022, apprenticeship or vocational training contracts entitled all companies to 8,000 euros (or 5,000 euros for minors) up to Master's level<sup>1</sup> (but subject to conditions for companies with more than 250 employees). The share of young people neither in employment nor in training was expected to fall slightly in 2022, but was not expected to be on the same positive trend as the general indicators for young people. In other words, it would appear that although young people as a whole are in a fairly favourable economic situation, there is still a fairly large number of young people who are experiencing the greatest difficulties in accessing

---

<sup>1</sup> Thus creating a monthly 95-euro excess to be borne by the employer for an apprentice aged 18 to 20 (€272 for those aged 21 to 25).



the labour market, and who are not taken care of as part of a training or study course, despite significant efforts made to increase the number of young people who are supported by the community aid projects for young people or the Pôle emploi, or who are being trained.

This situation, which could not be anticipated two years ago, could call for policies targeted more at the least qualified, where the measures of the "1 jeune 1 solution" plan that were extended, including the exceptional aid for work-study training (from February to June and then December 2022), were extended without any change being made to the eligibility conditions.

For example, apprentices preparing a three-year Higher Education diploma or qualification or over, for whom the difficulties of accessing the labour market are *a priori* less than those of less qualified young people, contribute half of the increase in apprenticeship figures from 2019 to 2021, which amounts to just over 100% over the period. In contrast, young people preparing for vocational qualifications contributed only 13 percentage points to the increase in apprenticeships. The once-off aid, the commitments of which were expected to reach a maximum of 3.4 billion euros for 2020, 5.1 billion for 2021, and 5.8 billion for 2022<sup>1</sup>, thus in part benefited a group with better access rates, for whom the effect of apprenticeship on employment should be estimated<sup>2</sup>.

The call for projects concluded with the Institute for Public Policy, the results of which should be available in the second half of 2023, will make it possible, on the one hand, to identify, in the dynamics of apprenticeship since 2019, what can be attributed to the recovery plan and, on the other hand, to quantify the effect of apprenticeship both from the point of view of the employing companies and from that of the subsequent professional trajectory of young people who have entered apprenticeship.

### ***APLD/FNE-Formation***

Introduced in the summer of 2020 to take over from the short-time working (AP) deployed as a matter of urgency, in a context where the health crisis was coming to an end and where its economic consequences were concentrated on a few sectors, long-term partial activity (LTPA) is more restrictive than short-time working: it is conditional on a company or branch agreement, and is usually capped at 40% of the employee's working time. On the other hand, the excess

---

<sup>1</sup> Source: French General Delegation for Employment and Vocational Training (DGEFP, Délégation Générale à l'Emploi et à la Formation professionnelle) The figures correspond to the maximum commitment of the State if all contracts are completed. The total expenditure forecasts per cohort, taking into account in particular contract terminations, are estimated at 2.8 billion euros, 4.2 billion, and EUR 4.8 billion respectively over the period.

<sup>2</sup> It can be noted that the development of apprenticeships in higher education can help make them more desirable for lower qualification levels. On the other hand, apprenticeship in higher education may help students from low-income social backgrounds finance their studies.

to be borne by the company is only 10%, whereas the cost of short-time work was gradually increased to 24% by the summer of 2021. With a view to making the most of the unworked time to train employees to the future challenges of the company, FNE-Formation was reactivated to cover the costs of training. The cases in which FNE-Formation can be used were extended in 2021 to companies experiencing difficulties, undergoing changes or whose business is picking, and training courses financed have had to be structured around training paths.

Two years later, the following observations can be made.

- 1.5 billion euros of credits had been mobilised for long-term partial activity at the end of June 2022, out of the 6.6 billion euros defined in the recovery plan. This under-spending can be in part explained by the fact that the common law short-time work scheme remained generous for longer than expected due to the multiplication of Covid-19 waves until 2021. The share of employees in long-term partial activity among employees on short-time working thus remained close to 10% until the spring of 2021, before rising sharply when the common law short-time work scheme was restricted, stabilising at around 50-60% during the autumn and winter of 2021-2022, and capping at around 85% until June 2022 (the latest date available).

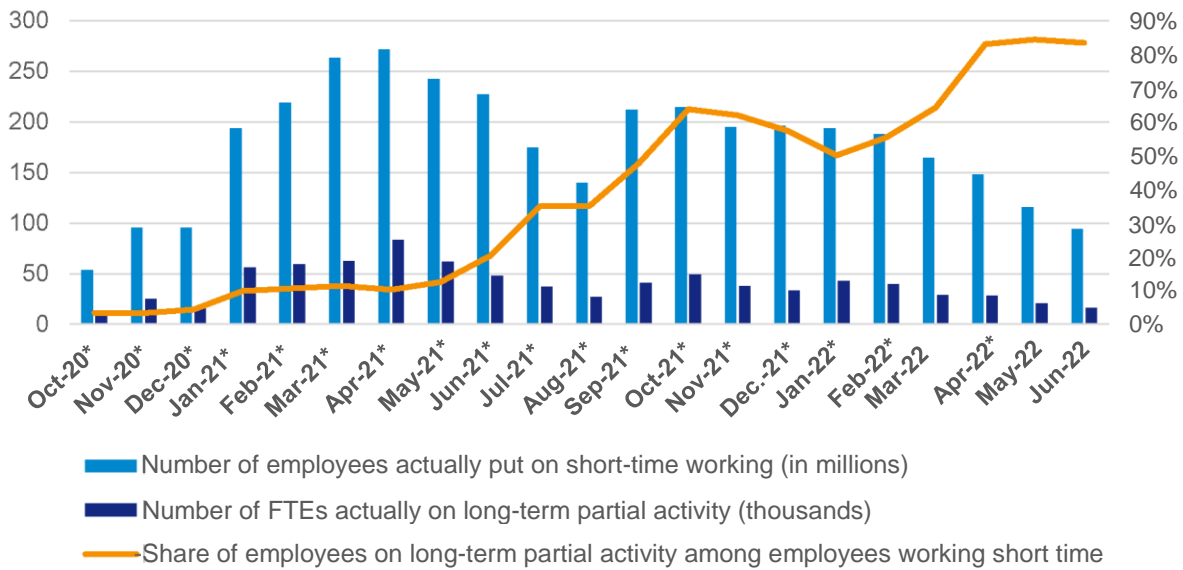
- From July 2020 to June 2022, 679,000 employees had to switch at least once to long-term partial activity for a total of 121 million hours. From early 2021 to late Spring 2022, the monthly number of employees on long-term partial activity remained almost permanently above 150,000 (with a peak above 250,000 in the Spring of 2021), but it appeared to be on a downward trend in the Spring of 2022 (falling below 100,000 in June 2022).
- Industry is over-represented in the use of long-term partial activity, and in particular transport equipment (a sector accounting for 24% of employees on long-term partial activity since 2020), which explains the over-representation of establishments with over 500 employees, men, managers and experienced employees. The amount of the allowance paid to the company is less than EUR 10 per hour for more than half of the employees.
- Collective agreements at company level cover 75% of those on long-term partial activity, more than 80% of the amounts compensated, and about half of the companies that lodged a claim. An initial analysis of all the sector-wide agreements relating to long-term partial activity underlines varying levels of commitment in terms of jobs, solidarity efforts by managers and increases in compensation.
- In view of the available information systems, it was not possible at this stage to carry out a detailed analysis combining the use of the long-term partial activity and FNE-Formation. However, it appears that since 2020 (until June 2022), almost 1.1 billion euros were committed in respect of FNE-Formation by skills operators (Opco), for a total of almost 30 million hours of training. The expenditures meant for companies using the long-term partial activity scheme since 2021 reach almost 93 million for a total of 3.1 million hours of training. Approximately 115,000 employees of companies using the long-term partial activity scheme benefited from training financed thanks to FNE-Formation, compared with the 679,000 employees who had to switch at least once to long-term partial activity<sup>1</sup>.
- Like long-term partial activity, FNE-Formation mainly focuses on industry, the field skills operators accounted for 40% of the trainees financed by the recovery plan, and 72% of the trainees in long-term partial activity.
- At the beginning of 2021, the duration of training financed by FNE increased as a result of the strengthening of the training path logic, with an average duration of between 30 and 40 hours throughout 2021, after 18 hours in 2000. However, from the summer of 2021 onwards, the length fell to 25 hours in the spring of 2022, as a result of the new economic

---

<sup>1</sup> It should be noted, however, that these two figures are not strictly comparable. On the one hand, employees of companies which used the long-term partial activity scheme may have benefited from training financed thanks to FNE-Formation without themselves having to switch to long-term partial activity. On the other hand, employees in long-term partial activity may have been offered training by their company, without the company seeking funding as part of FNE-Formation.

recovery.

**Graph III - Number of employees and FTEs on long-term partial activity and change compared to all employees working short-time**



Sources: SI APART claims, DSN; Dares estimate