

## Is the French recovery and resilience plan climate-compatible? A preliminary analysis

**Nicolas Berghmans** | Senior Research Fellow at the Institute for Sustainable Development and International Relations (IDDRI) | @n\_berghmans 

*This paper is part of a series analysing the contribution of the national recovery and resilience plans of the EU's five largest greenhouse gas emitters (Germany, France, Italy, Poland and Spain) to the fight against climate change. The analyses have been coordinated by the Elcano Royal Institute and can be found at Elcano's website.*

### Theme

France has climate change as a central pillar of its recovery and resilience plan, with significant additional funds devoted to key sectors where emission reductions have been lagging. However, additional sectoral policy changes will be necessary to put the country on track to achieve its 2030 and 2050 climate objectives.

### Summary

Almost a year after the Franco-German proposal<sup>1</sup> paving the way for the creation of the European Recovery and Resilience Facility,<sup>2</sup> the French government unveiled its recovery and resilience plan (henceforth the French NRRP) on 27 April 2021, jointly with its German counterpart and just ahead of the Spanish and Italian submission of their NRRPs to the EC on 30 April. A careful assessment of the French NRRP shows that climate change is a central pillar of its recovery actions. Up to 51% of the total NRRP according to the French government, and 46% according to the European Commission's draft evaluation,<sup>3</sup> are allocated to climate action. The main priorities of the French NRRP are building energy retrofitting, transport infrastructure, a new hydrogen plan and low carbon innovation especially focused on greening aviation. This is an important achievement because most of the initiatives correspond to areas where climate progress has so far been too slow. The French NRRP is one of the national recovery and resilience plans with the highest climate content. It is also a response to a growing national political discussion around climate action regarding the organisation of the Citizens' Convention on climate and the implementation of its proposals.<sup>4</sup>

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<sup>1</sup> 'Initiative franco-allemande pour la relance européenne face à la crise du coronavirus', <https://www.elysee.fr/admin/upload/default/0001/07/d4fe338244d28de018c5bf0c538c83c337285d0e.pdf>.

<sup>2</sup> [https://ec.europa.eu/info/business-economy-euro/recovery-coronavirus/recovery-and-resilience-facility\\_en](https://ec.europa.eu/info/business-economy-euro/recovery-coronavirus/recovery-and-resilience-facility_en).

<sup>3</sup> EC (2021), Annex to the Proposal for a Council Implementing Decision on the approval of the assessment of the recovery and resilience plan of France.

<sup>4</sup> See Home - Convention Citoyenne pour le Climat.

More specifically, the measures contained in the French NRRP, which amount to €41 billion -to come from the Recovery and Resilience Facility, RFF-, are a subset of those contained in the broader *France relance* plan launched at the end of August 2020, including €100 billion in economic recovery measures. The French NRRP is structured around the same three priorities as the *France relance* plan: environment, competitiveness and cohesion. Most of the measures included under the environment priority of the *France relance* plan are included in the French NRPP. A few measures under the competitiveness and cohesion priorities, such as general R&D and training support or the hospital renovation initiative, are considered to partially contribute to climate objectives in the French NRPP. Overall, €20.7 billion of the €40.9 billion (51%) funds included in the French NRRP are earmarked for climate action. This figure is well above the minimum threshold of 37% set by the Council's agreement and the declared 30% share of the total *France relance* plan<sup>5</sup> devoted to environmental protection.

The extent to which the French NRPP contributes to climate objectives heavily depends on existing and future sectoral regulation and policy changes, such as building renovation support and incentives for clean car purchasing and freight transport modal shifts. The building and transport sector reforms and investments are receiving additional funds from the NRRP.

## Analysis

### Climate change: a central pillar of the French NRRP

The French NRRP draws on the *France relance* plan presented in August 2020. Both of them include the same three main priorities, namely, the environment, economic competitiveness and social cohesion. Climate is a clear priority: 51% of the total NRRP according to the French government (46% according to the European Commission's draft evaluation)<sup>6</sup> is allocated to climate action, above the European objective of 37% and one of the highest climate ratios of all EU national plans.<sup>7</sup> This comes as no surprise. From the outset of the COVID-19 crisis and after a first wave of emergency measures, the need for a recovery plan with a strong green component has been central in the French policy debate. Several contributions from think tanks,<sup>8</sup> business leaders<sup>9</sup> and

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<sup>5</sup> Independent evaluations have estimated the ratio to be lower than 30%, at 19% to 28%. See Green Recovery Tracker, <https://www.greenrecoverytracker.org/country-reports/france>; and Haut Conseil pour le Climat (2020), <https://www.hautconseilclimat.fr/actualites/le-hcc-presente-son-rapport-france-relance-quelle-contribution-a-la-transition-bas-carbone/>.

<sup>6</sup> EC (2021), Annex to the Proposal for a Council Implementing Decision on the approval of the assessment of the recovery and resilience plan of France.

<sup>7</sup> For a quick comparison between the French, German, Spanish and Italian recovery and resilience plans see Bruegel (2021), 'Setting Europe's economic recovery in motion: a first look at national plans', <https://www.bruegel.org/2021/04/setting-europes-economic-recovery-in-motion-a-first-look-at-national-plans/>.

<sup>8</sup> I4CE (2020), 'Relance, comment financer l'action climat', [https://www.i4ce.org/wp-core/wp-content/uploads/2020/07/I4CE-Relance\\_FinancementActionClimat-52p-2.pdf](https://www.i4ce.org/wp-core/wp-content/uploads/2020/07/I4CE-Relance_FinancementActionClimat-52p-2.pdf).

<sup>9</sup> [https://www.lemonde.fr/idees/article/2020/05/03/mettons-l-environnement-au-c-ur-de-la-reprise-economique\\_6038523\\_3232.html](https://www.lemonde.fr/idees/article/2020/05/03/mettons-l-environnement-au-c-ur-de-la-reprise-economique_6038523_3232.html).

NGOs and unions<sup>10</sup> highlighted the multiple co-benefits of investing in the ecological transition.<sup>11</sup> In addition, the Citizen's Convention on Climate,<sup>12</sup> which was ongoing when the COVID-19 crisis hit, produced a special contribution to the economic recovery including 50 proposals from its work in April 2020.<sup>13</sup> All these contributions showed that greening the recovery was a priority among many different stakeholders and laid the ground for an ambitious uptake by policymakers.

More specifically, if the French NRRP includes most priorities of the *France relance* plan, there are differences between the two plans, as shown in Table 1 below. Most environmental measures have been included in the NRRP with the exception of the climate investment support from the Public Investment Bank (BPI).<sup>14</sup> On the other hand, the production tax decrease (€20 billion over two years), considered to be negative to climate,<sup>15</sup> has been left out of the French NRRP. In some cases, France only asks the EU for partial funding. For instance, of an overall €1.2 billion budget for industrial decarbonisation projects France only asked for €300 million from the EU recovery and resilience facility. Finally, measures included in the two other priorities of the French recovery and resilience plan (competitiveness and cohesion), such as support for innovative companies, research and development, renovation of hospitals and training, are considered to contribute to climate protection in the French NRRP, which was not the case in the initial *France relance* plan.

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<sup>10</sup> See, for instance, Le Pacte du Pouvoir de vivre (2020), 'Les 15 mesures indispensables pour le pouvoir de vivre dès la fin du confinement', <https://www.pactedupouvoirdevivre.fr/wp-content/uploads/2020/05/DOSSIER-DE-PRESSE-OK-15mesures.pdf>.

<sup>11</sup> Terra Nova & I4CE (2020), 'C-bénéfices environnementaux et sanitaires de l'action publique: it's (also) the economy, stupid!', [https://tnova.fr/system/contents/files/000/002/013/original/Terra-Nova\\_Cycle-Covid19\\_Co-b\\_n\\_fices-environnementaux-et-sanitaires-de-laction-publique\\_070520.pdf?1588781732](https://tnova.fr/system/contents/files/000/002/013/original/Terra-Nova_Cycle-Covid19_Co-b_n_fices-environnementaux-et-sanitaires-de-laction-publique_070520.pdf?1588781732).

<sup>12</sup> The CCC is an innovative policy process launched in October 2019 involving 150 randomly selected citizens to propose measures to reach the French 2030 climate target in a spirit of social justice. For more information see <https://www.conventioncitoyennepourleclimat.fr/en/>.

<sup>13</sup> Convention citoyenne pour le climat (2020), 'Contribution de la CCC au plan de sortie de crise', <https://www.conventioncitoyennepourleclimat.fr/wp-content/uploads/2020/04/Contribution-de-la-CCC-au-plan-de-sortie-de-crise-1.pdf>.

<sup>14</sup> The Public Investment Bank is not funded through the national budget, which explains why it does not appear in the NRRP.

<sup>15</sup> The Green Recovery tracker identifies this measure as having a negative impact, whereas the High council for climate qualifies it as being aligned with Business as usual that is not aligned with the long-term decarbonisation strategy. See Green Recovery Tracker, <https://www.greenrecoverytracker.org/country-reports/france>; and Haut Conseil pour le Climat (2020), <https://www.hautconseilclimat.fr/actualites/le-hcc-presente-son-rapport-france-relance-quelle-contribution-a-la-transition-bas-carbone/>.

**Figure 1. Main climate-relevant differences between the 2020 *France relance* plan and the 2021 French Recovery and Resilience plan**

	Total amount (€ bn)	Total amount (€ bn) allocated to climate	Total funding – of which climate (in € bn)			Measure with Climate impact excluded from the NRRP
			Priority 1 Environment	Priority 2 Competitiveness	Priority 3 Cohesion	
<i>France relance</i> plan (August 2020)	100	Unspecified	30	34	36	Positive: support for climate products from the Public Investment Bank (BPI) (€2.5 bn)
French NRRP (April 2021)	40.9	20.7	20.2-18.3	5.6-0.2	15.2-2.3	Negative: lower production taxes without green conditionality (€20 bn)

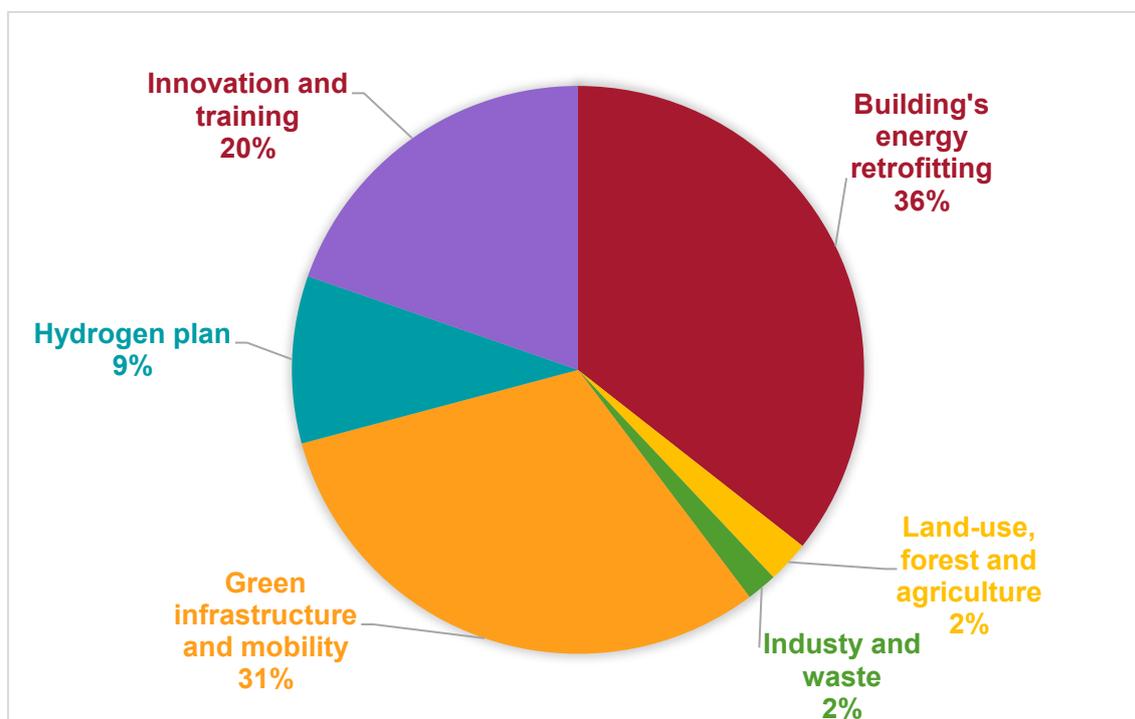
Source: *Gouvernement français* (2021), 'National recovery and resilience plan summary and France relanc Senior Research Fellow at Institute for Sustainable Development and International Relations (IDDRI) e', *dossier de presse*.

Overall, measures included in the French NRPP were selected according to their eligibility to agreed European criteria.<sup>16</sup> As a result, the French NRPP appears greener than the overall *France relance* plan with €21 billion out of €41 billion (51% of the total) earmarked for climate action, making it one of the EU NRRPs with the highest climate contribution.<sup>17</sup> The difference between the share of green investments presented by France in its NRRP (51%) and its overall *France relance* plan (30% according to the government) highlights one of the loopholes in the European rules on the RRF. Because Member States can choose the actions they submit for approval in the RFF, France selected the one that would better match European green criteria and the 'do no significant harm' principle. Some recovery measures with a more ambiguous or negative impact on climate can simply be left out of the NRRP.

<sup>16</sup> *Gouvernement français* (2021), 'Plan national de relance et de résilience', p. 13, [https://www.contexte.com/medias/pdf/medias-documents/2021/04/20210427\\_PNRR\\_version\\_finale.pdf](https://www.contexte.com/medias/pdf/medias-documents/2021/04/20210427_PNRR_version_finale.pdf).

<sup>17</sup> A. Averchenkova, L. Lázaro-Touza & G. Escribano (forthcoming), *Green recovery in the EU's 'Big Five' (emitters): key elements and caveats*, Elcano Royal Institute; and Bruegel (2021), 'Setting Europe's economic recovery in motion: a first look at national plans', <https://www.bruegel.org/2021/04/setting-europes-economic-recovery-in-motion-a-first-look-at-national-plans/>.

**Figure 2. Sectoral allocation of the French NRPP when accounting for its % contribution to climate change, according to the French government**



Source: the author.

### Divining into the French NRRP

The sectoral allocation of the French NRPP shows a strong emphasis on sectors where progress on climate mitigation has been too slow (see Table 2 at the end of this paper for detailed data).<sup>18</sup> EV uptake and low carbon infrastructure development in transport (€6.4 billion) and building retrofitting (€7.4 billion) account for more than half of the overall climate-related budget. The plan also includes the development of a hydrogen economy (€1.9 billion), an important change of scale compared with the pre-existing hydrogen plan (of €0.1 billion)<sup>19</sup> that can accelerate industrial and transport decarbonisation and contribute to the decarbonisation of the energy system. Additional support includes industrial decarbonisation and circular economy projects (€0.39 billion), soil artificialisation<sup>20</sup> and ecosystem restoration projects (€0.318 billion), forest adaptation to climate change (€0.150 billion) and an agricultural protein plan<sup>21</sup> (€0.03 billion). Cross-sectoral measures include a strong support for low carbon innovation (€3.8 billion) –with 40% of it targeted on low carbon aviation– and training support in green industries (€0.3 billion). In its evaluation of the French NRRP, the European Commission revalued the climate content of some actions included in the plan, which would, if approved, slightly

<sup>18</sup> HCC (2021), 'Redresser le cap, relancer la transition – rapport annuel', [https://www.hautconseilclimat.fr/wp-content/uploads/2020/07/20210330\\_hcc\\_rapports\\_annuel-2020.pdf](https://www.hautconseilclimat.fr/wp-content/uploads/2020/07/20210330_hcc_rapports_annuel-2020.pdf).

<sup>19</sup> <https://www.ecologie.gouv.fr/nicolas-hulot-annonce-plan-deploiement-lhydrogene-transition-energetique>.

<sup>20</sup> The measure contains support for municipalities with increasing urban density in their housing projects, the reconversion of wasteland and urbanised areas.

<sup>21</sup> This measure includes investment subsidies for plant-based protein production projects.

change the overall numbers. In particular, it reclassified public subsidies not targeted on zero emission vehicles as partially contributing to climate mitigation (40%). Some support for R&D in aviation, agriculture and the circular economy were also reclassified.<sup>22</sup> The climate impact of the NRRP depends on regulatory changes accompanying the additional green public funds.

All these initiatives are well embedded in existing policy processes and the national budget so it is likely the funds will be spent as planned. The progress in recovery-measure disbursement is monitored close to real time for certain key indicators such as the number of building energy renovations supported or the number of clean vehicles purchased with a subsidy. These two indicators show a rapid uptake of the associated public subsidies financed through the NRRP.<sup>23</sup> The level of support is also high with several stakeholders welcoming the unprecedented addition of financial resources for ecological transition that would help bridge the investment gap in the different sectors according to current estimates.<sup>24</sup> At the same time, many players<sup>25</sup> signalled the need to complement additional funding with regulatory changes in several sectors to ensure environmental efficiency and alignments with climate targets.

The NRRP mentions regulatory changes and initiatives accompanying the funds. Most of these measures were already underway before the plan was proposed, apart from the Climate & Resilience law currently being debated in parliament. The law was initiated following the citizen assembly's final recommendations published in June 2021,<sup>26</sup> has a large sectoral coverage (building, transport, industry and agriculture) and includes either changes in the ambition of existing policies or new measures to achieve the current 2030-climate objective of -40 % GHG emissions compared with 1990. However, several studies show that there is still a significant gap to reach the -40% GHG target, even after taking into account the additional measures brought about by the new law. This is illustrated by an impact assessment<sup>27</sup> commissioned by the Environment Ministry, which showed that out of the 107 MtCO<sub>2</sub> necessary emission reduction between 2018 and 2030 to reach the national 2030 climate target, only 21 MtCO<sub>2</sub> are likely to be achieved with existing measures. The same impact assessment estimated that 29 MtCO<sub>2</sub> are difficult

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<sup>22</sup> The changes in the EC evaluation are shown in the Annex. For more details on the EC evaluation see EC (2021), Annex to the Proposal for a Council Implementing Decision on the approval of the assessment of the recovery and resilience plan of France.

<sup>23</sup> <https://www.economie.gouv.fr/plan-de-relance/tableau-de-bord/ecologie#decarbonation-industrie>.

<sup>24</sup> See I4CE (2020), 'Landscape Climate Finance in France', [https://www.i4ce.org/go\\_project/landscape-climate-finance-france/](https://www.i4ce.org/go_project/landscape-climate-finance-france/); and P. Jolivet, G. Callonnec & H. Gouédard (2021), 'Relance verte: le potentiel d'un double bénéfice écologique et économique', *The Conversation*, <https://theconversation.com/relance-verte-le-potentiel-dun-double-benefice-ecologique-et-economique-144953>.

<sup>25</sup> See, for instance, RAC (2020), 'Un plan de relance vert pale', <https://reseauactionclimat.org/un-plan-de-relance-vert-pale/>; or I4CE (2020), 'Plan de relance et budget 2021 – L'analyse d'I4CE', [https://www.i4ce.org/wp-core/wp-content/uploads/2020/10/20-10-14-I4CE\\_Version-pour-le-site.pdf](https://www.i4ce.org/wp-core/wp-content/uploads/2020/10/20-10-14-I4CE_Version-pour-le-site.pdf).

<sup>26</sup> Convention Citoyenne pour le Climat (2021), 'Rapport final', <https://propositions.conventioncitoyennepourleclimat.fr/le-rapport-final/>.

<sup>27</sup> See, for instance, MTES (2021), 'Evaluation climat des mesures du quinquennat', [https://www.ecologie.gouv.fr/sites/default/files/2021.03.01.Etude\\_BCG\\_Evaluation.climat.des\\_mesures.du\\_quinquennat.pdf](https://www.ecologie.gouv.fr/sites/default/files/2021.03.01.Etude_BCG_Evaluation.climat.des_mesures.du_quinquennat.pdf); and Carbone 4 (2021), 'L'Etat français se donne-t-il les moyens de son ambition climat?', <http://www.carbone4.com/wp-content/uploads/2021/03/LEtat-franc%CC%A7ais-se-donne-t-il-les-moyens-de-son-ambition-climat.pdf>.

to achieve with existing measures whereas 57 MtCO<sub>2</sub> can be achieved if existing or new measures are implemented voluntarily. The NRRP is a step in the right direction by providing additional climate funding in sectors where emissions reduction has been lagging, although its ability to put France on track to achieve its 2030 and 2050 climate objectives is uncertain and depends on additional policy changes.

More specifically, there are three areas where the NRRP provides additional funds for issues whose goals are considered uncertain or difficult to achieve with current measures: the energy renovation of private residential buildings, freight transport and incentives for clean cars.<sup>28</sup> The measures proposed for private energy renovation are again a step in the right direction, although insufficient. Future bans for inefficient housing are introduced that aim to provide financial support for vulnerable populations and to deep energy retrofits. However, the amount of financial support remains too limited while the complexity of the multiple support mechanisms continues to put a hold on the uptake of energy renovation.<sup>29</sup> As for freight transport, the lack of a freight railway strategy and incentives for a modal shift have been noted,<sup>30</sup> questioning the alignment of the sector with long-term decarbonisation objectives. Finally, the automotive bonus-malus system<sup>31</sup> could be reinforced with a higher malus for CO<sub>2</sub> intensive and heavier vehicles in order to be better aligned with the new European car regulations that will also be revised by the European Commission as part of the Green Deal.<sup>32</sup>

The French NRRP mentions the plan's compatibility with several European initiatives, among them hydrogen strategy and the renovation wave. Two initiatives mention a possible complementarity with other European funds, industrial decarbonisation projects whose funding could complement the ETS innovation fund, the FEDER or the Just Transition Fund and the hydrogen strategy that could be funded through European innovation funds. Three specific domains for cooperation between France and Germany and that are open to other Member States are identified, among them the Important Project of Common European Interest (IPCEI) on hydrogen, that earmarked €1.5 billion to finance electrolyser fuel cells and material developments, with an objective to notify it to the European Commission this year.

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<sup>28</sup> Incentives for industrial decarbonisation projects through production processes change, electrification and CCS are also considered insufficient but they are not part of the perimeter of industrial decarbonisation projects included in the RPP plan, which only supports energy efficiency and circular economy projects.

<sup>29</sup> A. Rüdinger (2021), 'Energy renovation: what is the outlook for the recommendations of the French Citizens' Climate Convention after the recovery plan?', <https://www.iddri.org/en/publications-and-events/blog-post/energy-renovation-what-outlook-recommendations-french-citizens>.

<sup>30</sup> Y. Briand *et al.* (2020), 'How the Rail Freight Development Strategy can reinforce the sector's ambition in France', Iddri issue brief nr 6/2020.

<sup>31</sup> The automotive bonus-malus system defines purchasing premiums and taxes for new cars according to their emission levels.

<sup>32</sup> Q. Perrier (2020), 'Bonus-malus Automobile: la norme européenne rebat les cartes', <https://www.i4ce.org/automobile-bonus-malus-norme-europeenne-climat/>.

The NRRP contains no significant measure on the reconversion of regions and industries affected by the transition<sup>33</sup> or fiscal measures. It is mainly an investment plan with no significant fiscal measures. Critics of the plan questioned the capacity to induce significant changes as regards some of its measures. For example, the ability to trigger additional investments for the recapitalisation of the national railway company was criticised by NGOs as investment volumes merely compensate the economic impact of the loss of passenger traffic during lockdown periods.<sup>34</sup> In addition, the absence of green conditionality linked to the decrease of production taxes that could be detrimental to climate change has been highlighted,<sup>35</sup> although this latter measure included in *France relance* has been left out of the French NRRP.

### Governance and evaluation of climate compatibility of the plan

A dedicated governance framework has been created for the *France relance* plan with a dedicated secretariat under the Prime Minister and the Economic and Finance Ministry's office and regional operational committees helping to identify projects for the disbursement of the plan in each territory. In addition, a national steering committee involving parliaments, local authorities, stakeholders, NGOs and economists have a dedicated role in ensuring the good execution of budgetary measures, social and environmental efficiency and the equilibrium of sectoral and territorial elements.

To support this assessment, the plan proposes 150 diversified indicators. Overall, only two directly refer to CO<sub>2</sub> emission reduction objectives on industrial decarbonisation. With no clear evaluation or target on the amount of CO<sub>2</sub> reduction associated to these actions, an ex-post evaluation of the climate impact of the plan will be limited. An *ex-ante* evaluation of the *France relance* plan climate impact is provided in the NRRP: 55 MtCO<sub>2</sub> to 60 MtCO<sub>2</sub> over the lifetime of the investments. However, the transparency of this evaluation is poor with no clear reference to the underlying hypothesis and methodology provided. Furthermore, the evaluation is made against a business-as-usual scenario, whereas the High Council for Climate<sup>36</sup> recommended the evaluation to be made taking the national low carbon strategy as a reference. Against this background, a committee in charge of evaluating the recovery plan was formed on 4 June 2021.<sup>37</sup> Hence, methodological changes, new indicators and evaluation milestones should be developed to improve the climate impact evaluation of the plan and help to better allocate the funds to the most climate efficient projects and initiatives.

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<sup>33</sup> Only an overall coherence objective with the just transition territorial plans is mentioned with the national agency in charge of cohesion policy. Gouvernement français (2021), 'Plan national de relance et de resilience', [https://www.contexte.com/medias/pdf/medias-documents/2021/04/20210427\\_PNRR\\_version\\_finale.pdf](https://www.contexte.com/medias/pdf/medias-documents/2021/04/20210427_PNRR_version_finale.pdf).

<sup>34</sup> RAC (2020), 'Un plan de relance vert pale', <https://reseauactionclimat.org/un-plan-de-relance-vert-pale/>.

<sup>35</sup> N. Berghmans & L. Vallejo (2021), 'Conditionnalités des aides publiques aux entreprises: éléments de gouvernance pour une relance durable', <https://www.iddri.org/sites/default/files/PDF/Publications/Catalogue%20iddri/Propositions/202101-PB0221-conditionnalite%CC%81s.pdf>.

<sup>36</sup> Haut Conseil pour le Climat (2020), "France Relance": Quelle contribution à la transition bas-carbone'.

<sup>37</sup> <https://www.gouvernement.fr/partage/12317-installation-du-comite-en-charge-de-l-evaluation-du-plan-de-relance>.

## Conclusion

France made a significant effort to align its economic recovery with climate goals by proposing to spend 51% of the funds to climate action in the French NRRP, expected to arrive from the Recovery and Resilience Facility, elevating the green transition to the highest political level. It is an investment-focused plan with no demand-side measures included. The measures of the plan with a climate content correspond well to priority areas for decarbonisation. By increasing climate investments in buildings and transport to levels comparable to existing investment gap analysis,<sup>38</sup> it lays the groundwork for accelerating France's low carbon transition. However, its climate impact will depend on policy changes to ensure environmental efficiency at the sectoral level. At this stage, several policy recommendations can be made to ensure a stronger contribution of the recovery plan to the fight against climate change:

- Efforts should be maintained to strengthen sectoral policies and regulations before the exhaustion of the funds to ensure they are spent as efficiently as possible. Critical climate-related areas include the design of policy instruments for private building renovation, clean vehicle uptake and freight modal shifts. The European 'fit-for-55' package debate should help reassess climate ambition and sectoral measures in France.
- The plan's climate monitoring is insufficient to date with almost no objectives in terms of absolute levels of CO<sub>2</sub> emission reduction. This is critical to ensure the plan's climate efficiency and to monitor the achievement of the overall 55 to 60 MtCO<sub>2</sub> emission reduction impact expected from it. The definition of the level of these indicators should be made in consultation with stakeholders and the scientific community.
- In addition, the methodology to evaluate the plan's climate impact should be changed and based on its compatibility with the low carbon strategy and National Energy and Climate Plan (NECP) rather than a simple comparison with a business-as-usual scenario, in accordance with the proposals of the High Council for Climate.
- The dedicated process to evaluate the impact of the recovery plan around the committee in charge of the plan's evaluation should include political milestones and coordinate its evaluation with the regular assessment of climate policy made by the High Council for Climate to better inform about possible adjustments to the recovery plan and future climate policy cycles.

Finally, the French NRRP only covers the investments over the next two years. However, achieving climate objectives requires sustaining the level of climate investments over the long term to achieve climate neutrality by 2050. Details on how these funds could be maintained or compensated by other types of policies after 2023 would be very useful in order to inform climate policy-making in the longer run, based on the assessment of the climate impact of the NRRP, so as to achieve the -55% target by 2030 and climate neutrality in 2050.

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<sup>38</sup> See I4CE (2020), 'Landscape Climate Finance in France', [https://www.i4ce.org/go\\_project/landscape-climate-finance-france/](https://www.i4ce.org/go_project/landscape-climate-finance-france/).

## Annex

Figure 3. Sectoral disaggregation of climate-relevant measures included in the French Recovery and Resilience plan

Sector	Priority in the French RRP	Intervention	Total financial amount in bn euros (% of the amount considered as contributing to Climate in RRP)	Total financial amount in bn euros (% Climate) in the EC evaluation of the Plan <sup>39</sup>	Environmental objective	Policy instruments with positive climate related impacts	Cross-border cooperation
Buildings	Energy retrofitting	Public & private buildings retrofitting	5.825 (99%)	5.825 (99%)	Climate mitigation	Subsidies, tax rebates or direct public investments for public & private building renovation	None
	Research, <i>Séгур de la Santé</i> /dependency, territorial cohesion	Investment in hospital renovation (with energy content)	4 (40%)	4 (40%)		Reform of thermal building regulations	
	Research, <i>Séгур de la Santé</i> /dependency, territorial cohesion	Patrimonial building renovation	0.093 (40%)	0.093 (50%)	Climate mitigation		
Land-use	Biodiversity & environment	Soil artificialisation reduction & ecosystem preservation	0.795 (40%)	0.795 (40%)	Climate mitigation, adaptation & biodiversity	Grants to projects and public investments	
Industry & waste	Biodiversity & environment	Industrial decarbonisation	0.3 (40%)	0.3 (40%)	Climate mitigation	Grants, subsidies & loans for EE & RE heat industrial projects & the recycling industry	
		Circular economy	0.420 (57%)	0.245 (40%)			

<sup>39</sup> EC (2021), 'Documents de travail des services de la Commission: Analyse du plan pour la reprise et la résilience de la France', [https://ec.europa.eu/info/sites/default/files/swd\\_2021\\_173\\_fr.pdf](https://ec.europa.eu/info/sites/default/files/swd_2021_173_fr.pdf).

Agriculture & forestry	Biodiversity & environment		Protein independence plan	0.07 (40%)	0.07 (40%)	Climate mitigation & adaptation	Grants & subsidies for agricultural & forestry projects
			Forest adaptation	0.150 (100%)	0.150 (100%)		
Transport	Green infrastructure & mobility	Clean vehicles and EV uptake		1.14 (100%)	1.14 (54%)	Climate mitigation	Subsidies for clean vehicles & EVs purchase & investments in public clean vehicles fleet & EV charging infrastructure  Recapitalisation of the national railway company, public investment for EE of railway infrastructure & freight  Public investments & grants for transport infrastructure  Green budgeting
		Railway infrastructure		4.39 (92%)	4.04 (91%)		
		Public transport		0.9 (100%)	0.9 (100%)		
		Greening of ports		0.2 (88%)	0.087 (100%)		
		Other clean transport infrastructure		0.350 (54%)	0.025 (0%)		
Energy	Green energy & technologies		Hydrogen strategy	1.925 (100%)	1.925 (100%)	Climate mitigation	Grant for hydrogen production & key application technologies. €1.5 bn earmarked for financing the Hydrogen IPCEI jointly with Germany and other EU Member States  Hydrogen production support scheme  Public investments in rural electricity grids
	Green infrastructure & mobility		Electric network resilience	0.05 (100%)	0.05 (100%)		

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Innovation	Green energy & technologies	R&D for aviation decarbonisation	1.67 (89%)	0.96 (100%)	Climate mitigation & adaptation	Grants for R&D projects or innovative companies
		Support for the development of key markets for green technologies	1.7 (100%)	1.55 (86%)		Investments in research & innovation ecosystems & national research agency funding
		Technical sovereignty & independence	Support for innovative companies	0.75 (30%)	0.225 (100%)	
		Research, <i>Ségur de la Santé</i> /dependency, territorial cohesion	General support for R&D with a share on Climate	0.75 (25%) & 0.428 (40%)	0.187 (100%) & 0.171 (100%)	
Green Training	Job preservation, young people, persons with disabilities, vocational training	Support for training in green industries	0.75 (40%)	0.3 (100%)	Climate mitigation and adaptation	Subsidies for work-study programmes