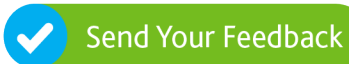


ASSESSMENT

28 September 2023



Contacts

Amaya London
 AVP-Sustainable Finance
 amaya.london@moodys.com

James Southwood
 Associate Analyst
 james.southwood@moodys.com

Camille Bienayme
 Associate Analyst
 camille.bienayme@moodys.com

Adriana Cruz Felix
 VP-Sustainable Finance
 adriana.cruzfelix@moodys.com

Rahul Ghosh
 MD-Sustainable Finance
 rahul.ghosh@moodys.com

Government of France

Second Party Opinion – Sustainability Bond Framework Assigned SQS2 Sustainability Quality Score

Summary

We have assigned an SQS2 sustainability quality score (very good) to the Government of France's Green OAT Framework dated January 2017. The sovereign has established its use-of-proceeds framework to finance projects across seven eligible green categories (buildings, transport, energy [including smart grids], living resources, adaptation, pollution and eco-efficiency, and transversal). France has shared the list of eligible expenditures financed for the 2021 and 2022 budget years covering the seven eligible categories. The framework is aligned with the four core components of the International Capital Market Association's (ICMA) Green Bond Principles 2021 (including the June 2022 Appendix 1). The framework also demonstrates a significant overall contribution to sustainability.

Sustainability quality score

SQS2



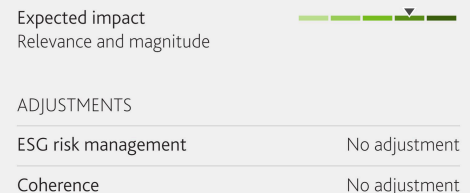
Alignment with principles USE OF PROCEEDS



FACTORS ALIGNMENT



Contribution to sustainability



Scope

We have provided a second party opinion (SPO) on the sustainability credentials of the Government of France's bond framework dated January 2017, including the framework's alignment with the four core components of the ICMA's Green Bond Principles 2021 (including the June 2022 Appendix 1). Under its framework, the French Republic issued three French sovereign green bonds respectively in 2017, 2021, and 2022, to finance projects across seven green categories, as outlined in Appendix 2. Moreover, to maintain the liquidity of this Green OAT through tap issues after the initial issuances, the AFT has carried out several re-issuances.

Our assessment is based on the last updated version of the Government of France's framework dated January 2017 and focuses on green bond issued in 2022, allocated to green eligible expenditures for the 2021 and 2022 budget years. Our opinion reflects our point-in-time assessment of the details contained in this version of the framework, and other public and non-public information provided by the issuer.

We produced this SPO based on our [Framework to Provide Second Party Opinions on Sustainable Debt](#), published in October 2022.

Issuer profile

France has a population of around 67 million and ranks as the world's seventh-largest economy by nominal GDP. As a member of the European Union (EU), France steered and jointly endorsed the collective pledge to reduce greenhouse gas (GHG) emissions by 40% by 2030, from 1990 levels, a target that has since been strengthened to a 55% reduction by 2030. Because of its predominantly nuclear electricity generation capacity, France has one of the lowest carbon intensity values in the Organisation for Economic Co-operation and Development (OECD) group. Although air pollution is decreasing, it remains above World Health Organization (WHO) recommendations, and there is scope for improvement in energy intensity and for increasing the share of renewables in the electricity grid, which is only half the OECD average.

Compared with its OECD peers, France has an overall high proportion of sites that are important for terrestrial biodiversity. As of 2020, 80% of such sites are covered by protected areas.¹ However, the country's Red List Index has recorded a deteriorating trend over the last 20 years, ranking over this period as one of the highest indicated biodiversity losses observed among OECD countries².

France's exposure to environmental risks is low across all risk categories, including physical climate risks, carbon transition, water management, natural capital, and waste and pollution. Wildfires have become more recurrent but remain concentrated in the south, limiting the country's overall exposure to physical climate risks. In 2022, France (like other European countries) experienced one of its warmest summers on record, with heat waves, droughts and wildfires. However, the credit impact of these climate events was minimal.

Strengths

- » Several eligible categories intend to finance activities that potentially contribute to a significant reduction in GHG emissions and accelerate the transition of France to a low-carbon economy.
- » The environmental benefits associated with the eligible projects are clearly defined and relevant.
- » Comprehensive and transparent project evaluation and selection processes are in place, and include relevant expertise.
- » Sophisticated impact and allocation reporting, including independent verification, ensures a high level of transparency for investors.

Challenges

- » Although the eligible green project list is accompanied by supplemental explanatory material, eligibility criteria can lack supporting thresholds in some categories.
- » There is no explicit provision for temporary placements with respect to GHG intensive activities or controversial activities.

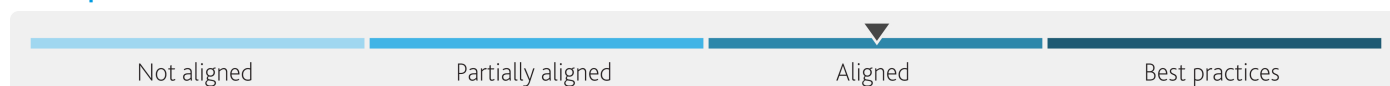
This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on <https://ratings.moody's.com> for the most updated credit rating action information and rating history.

Alignment with principles

The Government of France's green bond framework is aligned with the four pillars of the ICMA's Green Bond Principles 2021 (including the June 2022 Appendix 1).

- Green Bond Principles (GBP)
- Social Bond Principles (SBP)
- Green Loan Principles (GLP)
- Social Loan Principles (SLP)
- Sustainability-Linked Bond Principles (SLBP)
- Sustainability Linked Loan Principles (SLLP)

Use of proceeds



Clarity of the eligible categories – ALIGNED

The Government of France has established projects across seven eligible green categories and has shared a detailed list of expenditures financed via the 2022 Green OAT issuance, which provides clear visibility into the projects and activities financed with the bond proceeds. The list of expenditures is accompanied by publicly available documentation with detailed project descriptions. However, some projects lack granularity in terms of technical thresholds. The bond proceeds have been used exclusively to finance and refinance investments in accordance with applicable budgetary regulations and the eligibility criteria of the framework. The projects are predominantly based in mainland France, with a minority of projects in emerging countries.

Clarity of the environmental or social objectives – BEST PRACTICES

The government has clearly outlined four environmental objectives associated with the projects, which are coherent with national and international standards, such as the French Green Fin label or the European Union (EU) taxonomy. These objectives are presented in Appendix 2. All financed projects are considered relevant for the respective environmental objectives.

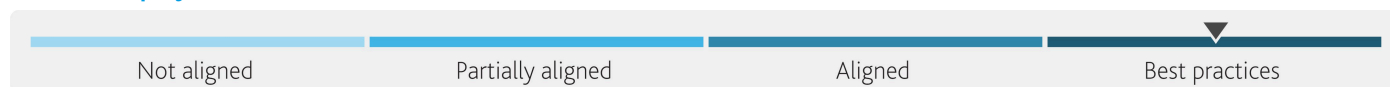
Clarity of expected benefits – BEST PRACTICES

The sovereign has identified clear expected environmental benefits for all the eligible categories. These benefits are measurable and will continue to be quantified in the reporting, and are considered relevant for all eligible categories. All the raised bond proceeds have been allocated to expenditures for the 2022 budget year. The government has transparently disclosed that the proceeds from issuance in 2022 have been allocated both to expenditures realized in 2021 (representing a maximum of 50% of the allocation) and to expenditures realized in 2022, where a small portion may be reserved for future allocation for a few expenditures under the category of "Invest for the Future" projects ("Programme d'investissements d'avenir" in French).

Best practices identified

- » Objectives set are defined, relevant and coherent for all project categories
- » Relevant benefits are identified for all project categories
- » Benefits are measurable and quantified for most projects, either ex-ante with clear baselines or with a commitment to do so in future reporting
- » Commitment to transparently disclose the share of proceeds used for refinancing where feasible
- » Commitment to transparently communicate the associated lookback period(s) where feasible

Process for project evaluation and selection



Transparency and quality of the process for defining eligible projects – BEST PRACTICES

The Government of France has established a clear, structured process for evaluating and selecting eligible expenditures formalized in its publicly available framework. An inter-ministerial working group has been set up for collaboration between the ministries involved in Green OAT issuances. Each ministry is responsible for identifying eligible green expenditures within its programs, and the inter-ministerial working group is in charge of monitoring the continued fulfillment of eligibility throughout the life cycle of the bond. The monitoring of potential ESG controversies is performed before the selection of expenditures and during the reporting process throughout the life of the bonds. The environmental benefits of the Green OAT's expenditures are the subject of specific studies supervised by the Green OAT Evaluation Council, including an analysis of mitigation measures for the associated risks. Roles and responsibilities within the working group are clear and include relevant internal expertise, with support from external consultants.

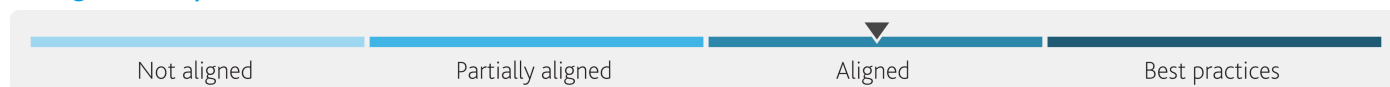
Environmental and social risk mitigation process – BEST PRACTICES

The environmental and social risk mitigation process is formalized and disclosed in publicly available documentation. As a general rule, when draft legislation is transmitted to parliament, it is accompanied by an impact study covering the economic, financial and social implications. In addition, and more specifically, the environmental benefits of the Green OAT's expenditures are the subject of specific studies supervised by the Green OAT Evaluation Council, including an analysis of mitigation measures for the associated risks.

Best practices identified

- » The roles and responsibilities for project evaluation and selection are clearly defined and include relevant expertise
- » There is evidence of continuity in the selection and evaluation process through the life of the financial instrument(s), including compliance verification and procedures to undertake mitigating actions when needed
- » The process for project evaluation and selection is traceable
- » Material environmental and social risks for most project categories are identified
- » Presence of corrective measures to address environmental and social risks across projects
- » ESG controversies are monitored

Management of proceeds



Allocation and tracking of proceeds – BEST PRACTICES

The government has defined a clear process for the management and allocation of bond proceeds in its publicly available framework, and this process falls under the responsibility of the Ministry of Finance. The proceeds are placed in a centralized account and tracked to ensure that the amount of green bonds issued during the year remains less than the estimated amount of green eligible expenditure. The proceeds are allocated within a maximum allocation period of one year.

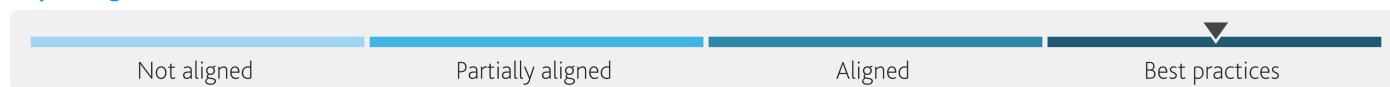
Management of unallocated proceeds – ALIGNED

The intended type of temporary placements are managed according to the state cash management strategy. Investments may take the form of unsecured loans or securities repurchase agreements, and will be publicly disclosed. In case of postponement or cancellation, proceeds will be reallocated to other green projects. However, there is no explicit provision for temporary placements with respect to GHG intensive activities or controversial activities.

Best practices identified

- » Broad disclosure of a clearly articulated and comprehensive management of proceeds policy to external stakeholders; bondholders or lenders at a minimum
- » Short allocation period, for example typically less than 24 months
- » Commitment to reallocate proceeds to projects that are compliant with the framework

Reporting



Transparency of reporting – BEST PRACTICES

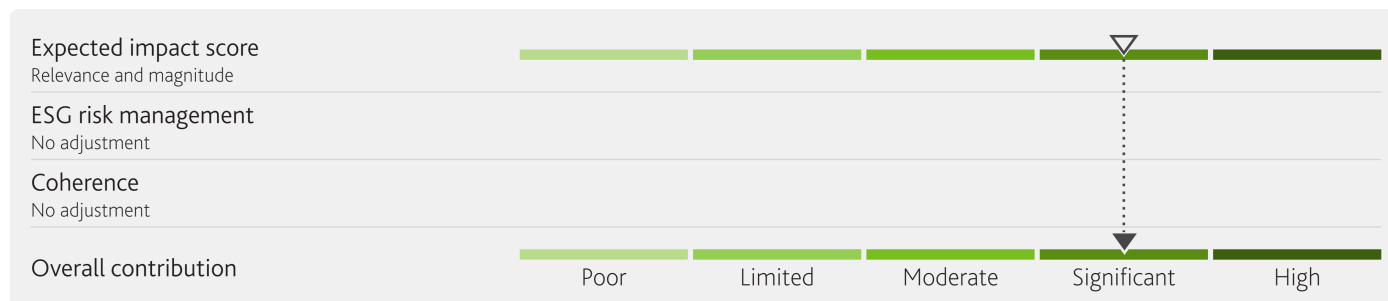
The government will keep reporting annually on the bonds issued under its framework, and this reporting will continue to be made publicly available. The reporting is exhaustive and includes the description of financed projects, expected green benefits, the amount allocated across eligible expenditures, the share of refinancing and unallocated proceeds. The sovereign has identified relevant environmental reporting indicators for all seven eligible categories, which are publicly disclosed in the framework and supporting documentation. The methodologies and assumptions used to report on the environmental impact of eligible projects will continue to be publicly disclosed in the reporting. Additionally, with regard to annual reporting, a dedicated Green OAT Evaluation Council defines the specifications and schedule for evaluation reports on the environmental impact of green eligible expenditures financed by France's green sovereign bonds. The council also provides its opinion on the quality of the evaluation reports, and the impact and relevance of the findings. All of its work is publicly available. Finally, the government has committed to seek an independent verification of its proceeds allocation and impact on an annual basis until the maturity of the issued instruments.

Best practices identified

- » Reporting until full bond maturity or loan payback
- » Reporting covers material developments and issues related to the projects or assets
- » Reporting on allocation of proceeds and benefits done at least at eligible category level
- » Exhaustive allocation reporting – balance or % of unallocated funds, types of temporary investments (e.g. cash or cash equivalent) and share of financing vs re-financing
- » Clear and relevant indicators to report on the expected environmental/social impact of all the projects, where feasible, or eligible categories
- » Disclosure of reporting methodology and calculation assumptions to bondholders or lenders at a minimum
- » Independent audit of the tracking and allocation of funds at least until full allocation and in case of material changes
- » Independent impact assessment on environmental benefits by a qualified third-party reviewer at least until full allocation and in case of material changes and/or case studies to report on the social impact/benefits

Contribution to sustainability

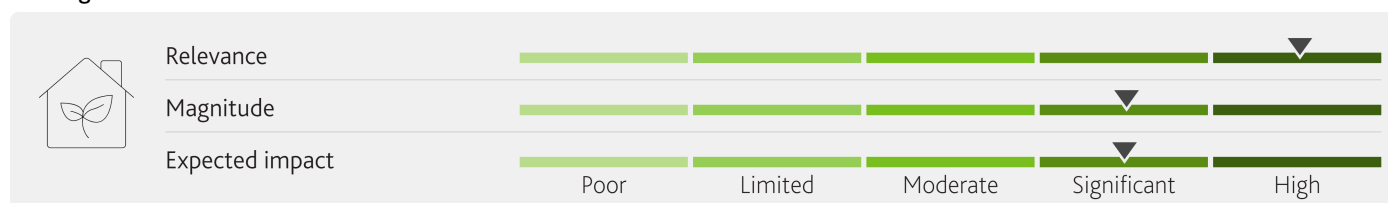
The framework demonstrates a significant overall contribution to sustainability.



Expected impact

The expected impact of the eligible categories on the environmental objectives is significant. Based on the information provided by the issuer, we have weighted the categories according to the actual proceeds allocation for the 2022 budget year. The category with the highest share of proceeds for the 2022 budget year is buildings, followed by transversal, energy, living resources and transport. Adaptation and pollution and eco-efficiency make up relatively minor shares of total allocation.

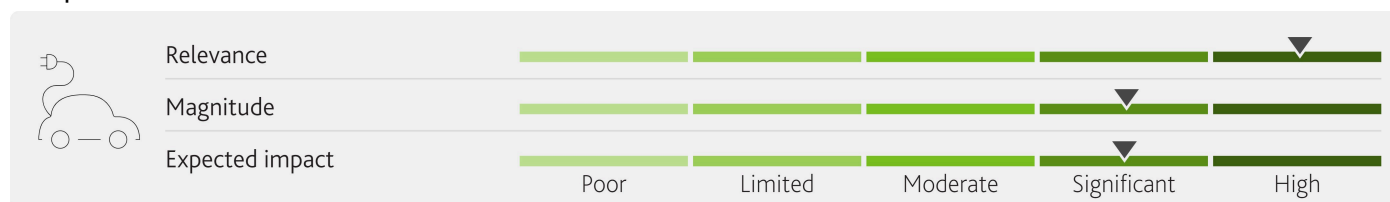
Buildings



Real estate is the second-most polluting sector in France, accounting for 27% of carbon emissions and 45% of final energy consumption, making investment in energy efficiency retrofitting a key priority for the country³. Most of the proceeds within this category are allocated toward the financial incentivization of the MaPrimeRénov program, which is the nationwide retrofit implementation program for private houses and residential buildings. A minority of the expenditure is allocated to thermal renovation for administrative buildings. The requirement for EU countries to adopt a long-term renovation strategy is set out in the Energy Performance of Buildings Directive (2020/31/EU), and renovation of both public and private buildings has been singled out in the European Green Deal. Energy gains are pursued under the EU Renovation Wave strategy, which aims to double annual energy renovation rates between 2020 and 2030. France published its long-term strategy in 2020 in response to this directive. Under its Energy Transition law (2015), the country set the goal to achieve a level of energy performance in line with “low-consumption building” standards for the entire housing stock by 2050. The regional and national need to improve building energy efficiency and undertake retrofitting activities at scale results in a high relevance score for this category.

In terms of magnitude, the minimum thresholds put forward by the MaPrimeRénov program meet the substantial contribution criteria for the EU taxonomy on building renovations — specifically, a minimum energy efficiency gain of 30%. The work program principally targets energy consumption through the retrofitting of heating systems. The program also targets primary energy demand through the insulation of residential buildings. However, some lock-in effects result from the inclusion of gas boilers, even if the gas boilers to be installed are highly energy efficient and make up only a small share of allocation. Of note, gas boilers will no longer be supported by MaPrimeRénov' after 2023. Additionally, the work package includes the installation of pellet stoves, which are not considered best-in-class technology. Their effectiveness is contingent on the type of fuel used, and there is potential for environmental externalities in the sourcing of suitable fuel and land. All these factors lead to a significant magnitude score for the category.

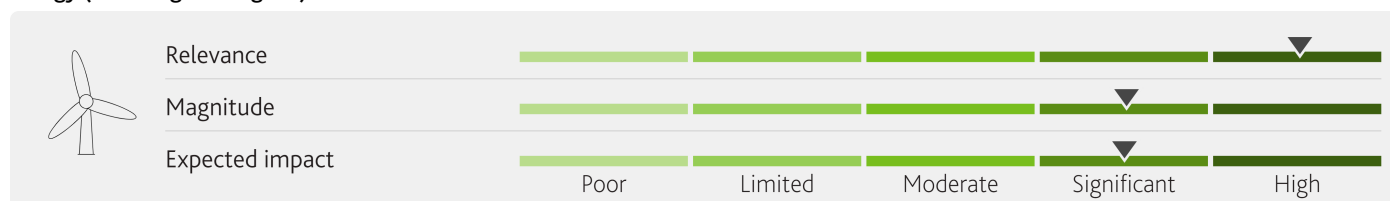
Transport



The transport sector accounts for 29% of total GHG emissions in France and is the only sector whose emissions have not decreased⁴. The transportation projects to be financed are in rail (including the Lyon-Turin railway line, representing 14% of the allocation for this category and 2% of the total use of proceeds for the year 2022) and inland waterways, notably intermodal exchange hubs to support combined transport (road and rail, or road and inland water transportation) for freight. The financing also includes support for the acquisition of zero tailpipe vehicles (electric vehicles [EVs] and bicycles), for public transportation, and for research. Most of the expenditures are focused on incentivizing the acquisition of EVs through subsidies. In 2022, the share of low-carbon vehicles was 22% of the total car fleet in France, and the sale of internal combustion engine vehicles is scheduled to be banned by 2035⁵. In general, both rail and inland water transport for freight are considered to be important enablers of GHG reduction, as compared to road freight. The market share of rail transport for freight stood at only 9% in France in 2021, as compared to 18% in the EU as a whole⁶. These factors result in a high relevance score for the category.

In terms of magnitude of the category, the category finances a wide range of projects with different levels of impact. With regards to combined transport, the French government finances the installation of new intermodal hubs and the maintenance of existing ones for which the impact is considered significant. According to a study by the French government, shifting to multimodal freight transport reduces GHG emissions by up to 91% (for rail and road transport) and up to 59% (for road and inland waterway transport), as compared to pure road freight on a 760-km journey⁷. Moreover, in France, trains used for freight transport are mostly electrified (75% in 2018)⁸. To support the modal shift, the French government is financing the installation of a new electrified railway line between Lyon and Turin. However, the positive impact of this projects is reduced by the estimated negative externalities, many of which are irreversible (including biodiversity loss, 1,500 hectares of arable land destroyed and waste contamination). Furthermore, it is estimated to take between 25 and 50 years to fully compensate for the GHG emissions generated in the construction phase⁹. For public transportation, the category finances tramways (electric, and thus with zero tailpipe emissions), but also a small part of the allocation is going to hybrid buses with no specific thresholds identified. Finally, France has implemented an ecological bonus to support the purchase of EVs or bicycles, in line with the most stringent standards, which represents most of the expenditures under the category, leading to the overall significant magnitude score.

Energy (including smart grids)

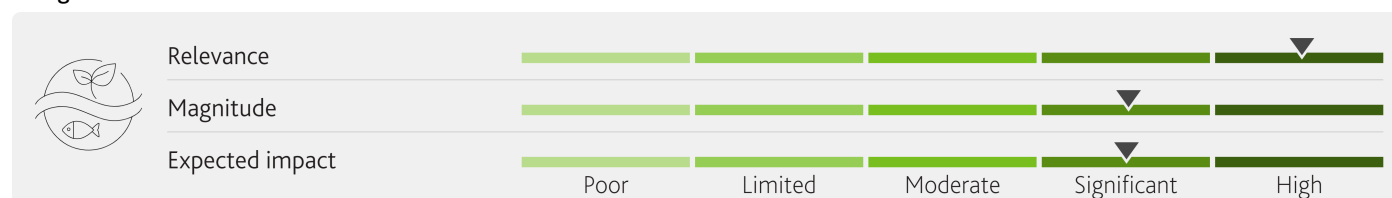


This category includes investments in renewable energy in France (mainland and islands), the promotion of the use of bio-methane for heat production, hydrogen use and research programs.

Although France has a low-carbon energy mix because of the central role of nuclear power, the share of renewable energy in the country's total power mix was only 25.5% in 2022¹⁰. France has pledged to increase the share of renewable energy consumption to 32% by 2030, whereby 40% of electricity production is intended to originate from renewable sources. In addition, the category finances the use of biomethane in district heating. Heat production represents 45% of final energy consumed in France, and 60% of heat energy continues to be derived from fossil fuels¹¹. This indicates a particular need to move to cleaner sources of heat. The energy category also focuses on the production of hydrogen and aims to support the energy transition of small and medium-sized enterprises (SMEs) to improve their energy efficiency. It is relevant for the state to support SMEs on this path as they represent 30% of France's carbon footprint¹². As all the subcomponents of the category are considered highly relevant, this results in an overall high relevance score.

In terms of magnitude, onshore wind farms and solar panels use best-in-class technologies. Additionally, the hydrogen production to be financed is using electrolysis, which results in few negative externalities due to France's low-carbon energy mix. Regarding biomethane, the French government has not established thresholds for carbon emission reduction using biomass products instead of fossil fuels. The sourcing of biomethane is mostly from agricultural residues, following best practices. However, biomethane derived from forest feedstock, which is not considered a best practice by the Climate Bond Initiative, is not explicitly excluded. For SMEs, while most funds are channelled into energy efficiency support, there is a lack of information on the specific actions taken. Overall, our assessment for the magnitude of the category, and its overall expected impact, is at the significant level.

Living resources

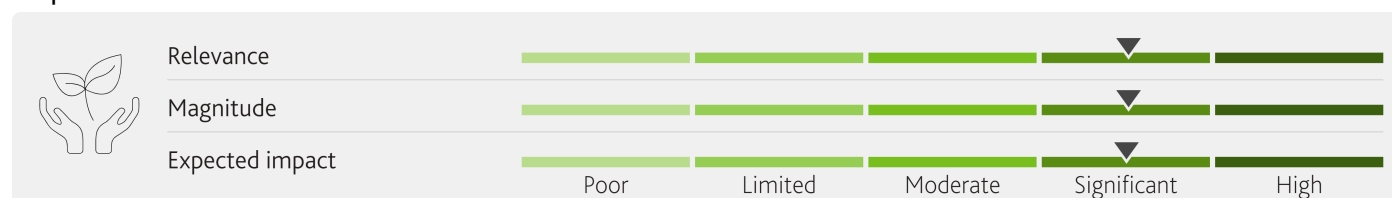


Most proceeds in this category are allocated to measures aimed at protecting specific habitats or protecting water quality. The former types of projects are principally concerned with increasing the scope of protected nature reserves in France, while the latter relate to subsidies allocated to relevant public entities. France set out its objectives for reducing anthropocentric pressures on nature in the 2030 National Strategy. As a key objective, France pledges to create a protected land and sea network of at least 30% of its territory, of which one-third should be under strong protection¹³. With regard to water, the most significant pressures on surface water bodies in France arise from diffuse agricultural pollution (nitrates and pesticides) and the recurrence and severity of droughts, which have increased significantly since 2017¹⁴.

A significant part of the proceeds have been allocated to the sustainable management of forests and to incentivize organic farming. Compared with its European peers, France scores less favorably in groundwater resources, bathing water and soil erosion¹⁵. Conventional agricultural practices amplify the pressures that drive this degradation. Despite an increase in forest coverage over the past decades, climate change threatens the health of French forests and their ability to act as a carbon sink, regulate water and conserve biodiversity. The state is the principal custodian of forestry, water and biodiversity assets, and has a key role to play in influencing agricultural production. The above-mentioned factors result in a high relevance score for this category.

In terms of magnitude, investments are made in nature conservation through the funding of organizations with suitable expertise and knowledge. However, there is a lack of granular information at project level on how the funds will be used, particularly with regard to ecosystem restoration and species recovery. In terms of agriculture, the best-available solutions are applied, which are likely to lead to the increased resilience of local ecosystems and an increase in the share of organic farming without significant associated negative externalities. The forest management plan is established for about 20 years, exceeding the best practice enshrined within the EU taxonomy, but there is a lack of information on the means through which this objective is pursued. Finally, with respect to water, expenditure is likely to facilitate the support of key infrastructure improvements that help address significant water issues. These factors combined result in a magnitude score of significant.

Adaptation

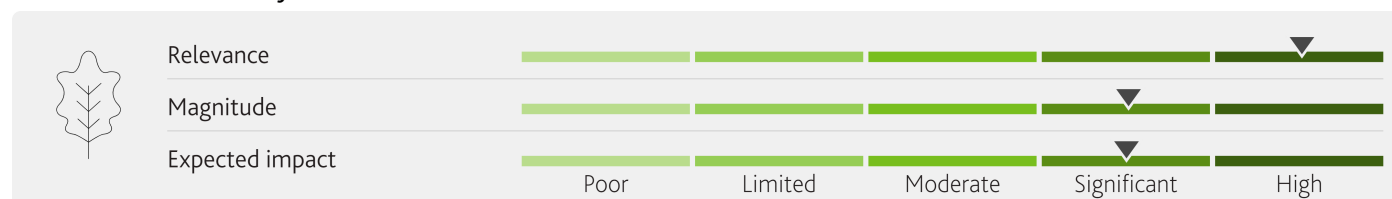


The category finances the development of spatial and meteorological technologies to better predict climate hazards and mitigate their consequences. The category also encompasses investments in international cooperation for climate change adaptation, which includes projects through French institutions (such as the Agence Française de Développement [AFD]) and international institutions (such as the UN and the World Bank), and the construction and maintenance of shelters in French Polynesia.

In France, between 2010 and 2019, average temperatures were above pre-industrial levels by 1°C, compared with 1.17°C for some southern European countries^{16,17}. Investing in meteorological technologies improves the collection of specific climate change-related data to facilitate adaptation in the short term. The French government is also investing in shelters to protect the population from extreme climate events, more specifically from cyclones. As a developed country, we expect France to finance and invest in international cooperation to participate in climate change adaptation efforts in vulnerable areas. Overall, the relevance of this category is significant.

Funds are allocated to different institutions, such as the AFD, the UN, French-speaking organizations and the European development fund. These are recognized funds at the international level, which ensure thorough implementation of programs and projects. However, the lack of granular detail on the programs and projects financed limits visibility into their impact. This results in a significant magnitude score for the category.

Pollution and eco-efficiency

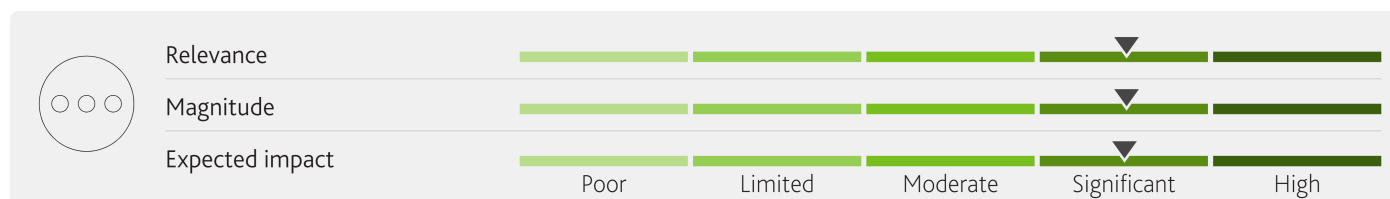


This category includes two projects that aim to improve the air quality level in France and to reduce soil artificialization through the decontamination and rehabilitation of brownfield sites.

In Europe, atmospheric pollution was responsible for 238,000 deaths in 2020¹⁸. In France, the number of early deaths attributable to atmospheric pollution is estimated at around 48,000 per year¹⁹. Not only does this pollution affect the population, it also negatively affects biodiversity, forests and cropland. As of 2022, France had not met European standards in this area. The Conseil d'Etat has imposed a €10 million penalty on the French State for each semester that it does not comply with European standards²⁰. The French government is also tackling the challenge of soil artificialization and degradation. In 2019, on average, the degraded areas in France rose to 456 square meters (m²) per inhabitant, while in Germany this level was 323 m² per inhabitant. Up to 8,300 industrialized sites were mapped as brownfields to potentially reduce soil artificialization²¹. To address this issue, the government established the 2018 Biodiversity Plan. All these factors combined result in a high relevance score for the category.

In terms of magnitude, the measures taken to improve air quality rely on the implementation of atmospheric protection plans (APP). These enable local elected representatives to take action at the local level, which is relevant as atmospheric pollution is a local issue. These plans set specific targets and target the most polluting sectors (industry, transport, agriculture and so on). The APPs are assessed every year and are reviewed every five years. Additionally, the French government tackles the threat of soil artificialization by investing in the decontamination and rehabilitation of urban and industrial brownfield sites. In the past, dedicated funds have enabled the rehabilitation of 2,700 hectares of brownfield sites²². However, due to a lack of visibility on technologies and thresholds applied for the decontamination process, the magnitude score is considered significant overall.

Transversal



This category encompasses a diverse range of subcategories, with the principal allocations being awarded to research, innovation and international aid. The importance of scientific research to deliver positive sustainability outcomes is underwritten in SDG 9.5, which stresses the role of enhanced scientific research and the upgrading of technological capabilities of industrial sectors. In addition, the relevance of multilateral aid is highlighted in Article 6 and 11 of the Paris Climate Accord, which emphasize the need for international cooperation on adaptation efforts. Taking into account the needs of developing countries is paramount, especially for those countries that are particularly vulnerable to the adverse effects of climate change. All these factors combined result in a significant relevance score for the category.

With regard to magnitude, the research outlined is conducted by relevant entities, which increases knowledge in the domain of environmental science. Environmental research has utility by informing policy and technological development. This knowledge-building is an important, albeit indirect, tool in combating climate change. In addition, the financing of multilateral aid builds capacity in locations that are less resilient and facilitates the climate transition in vulnerable economies, bringing a potential for long-term positive impact. Such expenditure helps bridge a sizable gap in climate finance for developing countries, which was \$16.7 billion in the year 2020 ²³. Nevertheless, there is a lack of visibility into the specifics of both research and aid funding. The above-mentioned factors combined result in a significant score for magnitude.

ESG risk management

We have not applied a negative adjustment for ESG risk management to the expected impact score. France is a designated country under the Equator Principles. Also, it is a signatory of all the major UN Human Rights conventions (including the European Convention on Human Rights, and the UN Guiding Principles on Business and Human Rights) and adheres to the OECD Guidelines for Multinational Enterprises, which assure that the country is required to sufficiently address the management of most ESG risks. At the international level, France has published and updated its national determined contributions to the Paris Agreement. At the local level, in 2009 France introduced a law that requires authorities to conduct environmental impact assessments before the implementation of major projects. Ex-ante impact assessments ensure the implementation of the principles of prevention, integration, precaution and public participation. They also foster transparency on the government's decision process regarding environmental and social impacts.

Coherence

We have not applied a negative adjustment for coherence to the expected impact score. The eligible categories of the framework align with the government's sustainability strategies, focusing on a transition to a net-zero economy that supports growth and energy security. France has adopted the National Low-Carbon Strategy, in line with the Paris Agreement, which drives a road map to reduce its GHG emissions by 40% by 2030 and to reach a net-zero target by 2050. These efforts are reflected in the allocation of proceeds, of which the largest shares are allocated to energy and buildings. These are also the two domains in which France lags the most.

Appendix 1 - Mapping eligible categories to the United Nations' Sustainable Development Goals

The seven eligible categories included in the Government of France's framework are likely to contribute to six of the UN's Sustainable Development Goals (SDGs), namely:

UN SDG 17 Goals	Eligible Category	SDG Targets
GOAL 7: Affordable and Clean Energy	Renewable Energy	7.1: Ensure universal access to affordable, reliable and modern energy services
	Renewable Energy	7.2: Increase substantially the share of renewable energy in the global energy mix
	Green Buildings	7.3: Double the global rate of improvement in energy efficiency
GOAL 9: Industry, Innovation and Infrastructure	Clean Transportation	9. 1: Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and
GOAL 11: Sustainable Cities and Communities	Clean Transportation	11.2: Provide access to safe, affordable, accessible and sustainable transport systems for all
GOAL 12: Responsible Consumption and Production	Living resources	12.2: achieve the sustainable management and efficient use of natural resources
GOAL 13: Climate Action	Adaptation	13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries
GOAL 14: Life Below Water		14.2: Sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts
GOAL 15: Life on Land	Living resources	15.1: Ensure the conservation and sustainable use of terrestrial and inland freshwater ecosystems and their services
		15.2: Promote the implementation of sustainable management of all types of forests
	Pollution Control and Eco-efficiency	15.5: Reduce the degradation of natural habitats and biodiversity loss, and prevent the extinction of threatened species
GOAL 17: Partnerships to achieve the Goal	Transversal	15.3: Combat desertification and restore degraded land and soil

The mapping of the UN's SDGs in this SPO takes into consideration the eligible project categories (or key performance indicators) and associated sustainability objectives/benefits documented in the issuer's financing framework, as well as resources and guidelines from public institutions, such as the ICMA's SDG Mapping Guidance and the UN's SDG targets and indicators.

Appendix 2 - Summary of eligible categories in the Government of France's framework

Eligible Category	Description	Sustainability Objectives	Main Impact Reporting Metrics
Green buildings	Improving building's energy efficiency Main Green Eligible Expenditures: - Energy efficiency investments by households, social housing corporation (tax credits, subsidized loans, etc.)	Climate Change Mitigation	- Number of households benefiting from tax credits for retrofitting its housing - Avoided carbon emissions
Clean transportation	Maintain, increase and promote public transportation and support multimodal transport solutions, and reduce use, improve energy efficiency and decrease carbon intensity of vehicles Main Green Eligible Expenditures: - Support to rail and waterways operators - Innovation in energy efficiency transportation systems and technologies - Investment in infrastructures triggering modal switch	Climate Change Mitigation	- Status of waterway network - Share of combined transport - Avoided carbon emissions
Renewable Energy	Develop renewable energies technologies and invest in assets (wind, solar, hydro, geothermal, marine), incl. their efficient integration in power systems (smart grids) Main Green Eligible Expenditures - Research and innovation in renewable energy - Investments in smart grids	Climate Change Mitigation	-Production of dedicated research activities -Innovation transfers to companies -Avoid carbon emissions
Living Resources	Promote organic farming, and enhance biodiversity and land environmental protection Main Green Eligible Expenditures: - Sustainable forestry management - Support to certified organic farming - Investment in protected areas - Research on living resources and biodiversity protection	Protection and restoration of biodiversity and ecosystems Sustainable use and protection of water and marine resources Climate Change Mitigation	-Number of Natura 2000 sites -Share of protected areas -Biodiversity-related indicators to be developed
Adaptation	Develop climate change extreme weather events observation systems and support adaptation related research, and develop adaptation related infrastructure Main Green Eligible Expenditures: - Atmosphere, oceans and biosphere monitoring systems, including ships and satellites - Research on adaptation systems and infrastructures	Climate Change Adaptation	-Performance of weather models in anticipation of extreme events -Biodiversity-related indicators to be developed
Pollution control and Eco-efficiency	Develop pollution monitoring and control systems and promote sustainable consumption and production modes (e.g., waste reduction and recycling, e.g., "circular economy") Main Green Eligible Expenditures - Monitoring Systems - Research and innovation - Promotion of the circular economy	Pollution Prevention and control Protection and restoration of biodiversity and ecosystems	-Monitoring of air quality indices -Pollution-related indicators to be developed -Recycling efficiency indicators to be developed

Moody's related publications

Second Party Opinion analytical framework:

» [Framework to Provide Second Party Opinions on Sustainable Debt](#), October 2022

Topic page:

» [ESG Credit and Sustainable Finance](#)

Endnotes

1 [Measuring distance to the SDG targets – France](#), OECD, 2022.

2 [Red List Index](#), OECD, August 2023.

3 [La rénovation énergétique](#), Government of France, July 2023.

4 [Greenhouse Gas Emissions and Carbon Footprint](#), France's Environmental Performance Review, 2021.

5 [Market share of electric and rechargeable vehicles in France from 2010 to 2022](#), Statista, May 2023.

6 [EU Rail freight transport in France](#), Internationales Verkehrswesen, October 2021

7 [The combined transport](#), French Minister for ecological transition March, 2023

8 [Le marché français du transport ferroviaire de marchandises](#), Autorité de Régulation des Transports, Décembre 2019.

9 [Infrastructure de transport de l'UE: accélérer la mise en oeuvre des mégaprojets pour générer l'effet de réseau dans les délais prévus](#), European Court of Auditors, 2020.

10 [Share of renewables in energy production](#), Enerdata, 2023.

11 [Chaleur renouvelable: la grande oubliée de la stratégie énergétique française?](#), Carbone4, November 2022.

12 [L'empreinte carbon des PME et ETI: le long chemin de la transition environnementale des entreprises](#), BPI, April 2023.

13 [Stratégie Nationale Pour Les Aires Protégées](#), Government of France, January 2021.

14 [Agriculture and Water Policies \(France\)](#), OECD, August 2023.

15 [International Environment Rankings](#), Government of France, February 2022.

16 [Changement climatique: quelle évolution des températures mondiales depuis l'ère préindustrielle?](#), Government of France, August 2021.

17 [Global and European temperatures](#), European Environmental Agency, June 2023.

18 [Bilan de la qualité de l'air en Europe](#), ATMO, France, Novembre 2022.

19 [Pollution de l'air: origines, situation et impacts](#), French Minister for ecological transition, February 2023.

20 [Pollution de l'air: le Conseil d'Etat condamne l'Etat à payer deux astreintes de 10 millions d'euros](#), State Council, October 2022.

21 [Cartofriches: plus de 8300 sites en friches répertoriés et caractérisés, l'API données foncières du Céréma en accès libre](#), Céréma, June 2023.

22 [Recyclage des friches: lancement de la 3e édition du fond friches](#), French Minister for ecological transition, May 2022.

23 [Climate Change Finance](#), OECD, August 2023.

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REPORT NUMBER

1377976