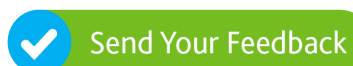


ASSESSMENT

22 November 2023



Contacts

Tom Collet
 Sustainable Finance Analyst
 tom.collet@moodys.com

Jill Shioda (Kuo-Tsing-Jen)
 Associate Lead Analyst-Sustainable Finance
 jill.shioda@moodys.com

Shahdiya Kureshi
 Associate Lead Analyst-Sustainable Finance
 shahdiya.kureshi@moodys.com

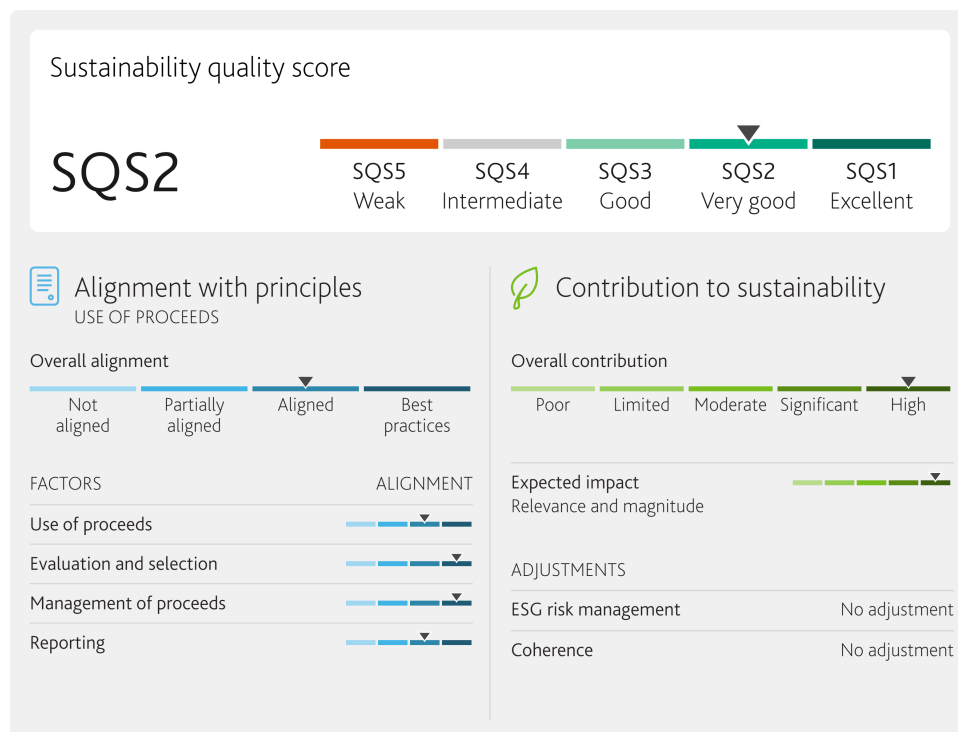
Adriana Cruz Felix
 VP-Sustainable Finance
 adriana.cruzfelix@moodys.com

Bordeaux Métropole

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

Summary

We have assigned an SQS2 Sustainability Quality Score (very good) to Bordeaux Métropole's sustainability bond framework dated November 2023. Bordeaux Métropole has established its use-of-proceeds framework with the aim of financing projects across seven eligible green categories and three eligible social categories. The framework is aligned with the four core components of the International Capital Market Association's (ICMA) Green Bond Principles (GBP) 2021 (with the June 2022 Appendix 1), Social Bond Principles (SBP) 2023 and Sustainability Bond Guidelines (SBG) 2021. The framework demonstrates a high contribution to sustainability.



Scope

We have provided a Second Party Opinion (SPO) on the sustainability credentials of Bordeaux Métropole's sustainability bond framework including the framework's alignment with the ICMA's GBP 2021 (with the June 2022 Appendix 1), SBP 2023 and SBG 2021. Under the framework, Bordeaux Métropole plans to issue use-of-proceeds green, social and sustainable bonds with the aim of financing projects comprising seven green categories and three social categories, as outlined in Appendix 2 of this report.

Our assessment is based on the framework provided by the issuer on 13 November 2023, and our opinion reflects our point-in-time assessment of the details contained in these materials, and other public and nonpublic information provided by the company.

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

Issuer profile

Bordeaux Métropole is the fourth-largest metropole in France, comprising 28 municipalities in the Nouvelle-Aquitaine region. It is the fast-growing metropole, with more than 830,000 inhabitants, and the population is projected to grow 20% over the next seven years, reaching one million inhabitants by 2030. Between 2014 and 2020, the metropole's population grew at an annual average of 1.2%, exceeding the average of 0.3% for France. The metropole's GDP per capita is €37,200, which is slightly higher than the French average. Bordeaux's diverse economy, largely driven by agriculture, aerospace, tourism and technology sectors, and its growing population provide a favorable climate for business investment.

Similar to other local governments in advanced economies, Bordeaux Métropole is exposed to environmental risks including physical climate risks such as a rise in sea level associated with accelerating climate change. While Bordeaux Métropole's exposure to social risks is relatively low, largely because of good access to quality education, housing, health and safety, and basic services, it still faces longer-term challenges from its aging population, which are partially offset by its expanding economy and population growth.

Strengths

- » A large share of funds will be allocated toward eligible projects that could make a significant contribution to reducing greenhouse gas (GHG) emissions.
- » Comprehensive and transparent project evaluation and selection processes are in place, and include relevant expertise.
- » The management of proceeds process is clearly defined, and there will not be temporary investments of unallocated proceeds.

Challenges

- » For a minority of eligible categories, there is a lack of detailed eligibility criteria.
- » The impact reporting will only be verified internally.

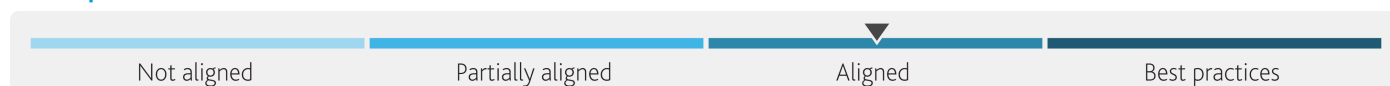
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Alignment with principles

Bordeaux Métropole's sustainability bond framework is aligned with the four pillars of the ICMA's Green Bond Principles 2021 (including June 2022 Appendix 1), Social Bond Principles 2023 and Sustainability Bond Guidelines (2021):

- 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

Bordeaux Métropole has communicated the nature of expenditures, and clearly defined the eligibility and exclusion criteria for most of the seven eligible green categories and three eligible social categories. The bond proceeds will be used to finance capital spending, public investments and subsidies, and all eligible projects will be located within Bordeaux Métropole.

Clarity of the environmental or social objectives – BEST PRACTICES

Bordeaux Métropole has clearly outlined the environmental objectives associated with all 10 eligible categories. These objectives include climate change mitigation, pollution prevention and control, biodiversity and natural resource conservation, climate change adaptation, affordable housing, access to essential services and socioeconomic advancement. All eligible categories are relevant to the respective environmental objectives to which they are aiming to contribute. The objectives are coherent with recognized international standards, including the UN Sustainable Development Goals (SDGs), and the projects are likely to contribute to the advancement of SDG 4 - Quality Education, SDG 6 - Clean Water and Sanitation, SDG 7 - Affordable and Clean Energy, SDG 8 - Decent Work and Economic Growth, SDG 11 - Sustainable Cities and Communities, SDG 12 - Responsible Consumption and Production, SDG 13 - Climate Action, and SDG 15 - Life on Land.

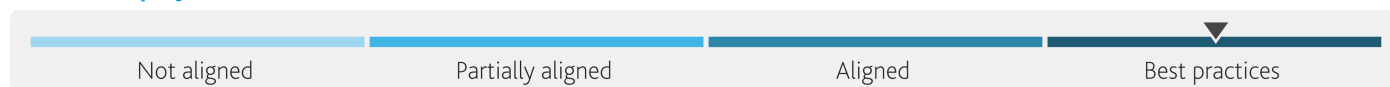
Clarity of expected benefits – BEST PRACTICES

Bordeaux Métropole has identified clear and relevant expected environmental benefits for all 10 eligible categories based on the projects likely to be financed under each category. The company has identified measurable indicators for all eligible categories, which will be quantified in the reporting. The issuer has confirmed that any issuances under this framework will only finance eligible expenditures within the same fiscal year, and that there will be no refinancing.

Best practices identified – use of proceeds

- » 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

Bordeaux Métropole has established a clear and structured decision-making process for determining the eligibility of projects and assets in its framework, which will be published on its website. The eligible projects will be selected among those proposed by the directorates under Bordeaux Métropole's multiannual investment program, and the project proposals will be documented throughout the selection and evaluation process. The process is coordinated by Bordeaux Métropole's General Directorate of Finance and Public Procurement, in conjunction with the technical departments responsible for activities under the respective eligible green and social project categories. In addition, the metropole has established a Sustainable Finance Committee (CFD), which comprises elected officials from the metropolitan development, finance, energy transition, health and transportation infrastructure agencies.

The CFD's responsibilities are clearly defined and include relevant expertise. The CFD will assess the eligibility of projects in accordance with the eligibility criteria detailed in the framework; the proceeds are used in accordance with the framework; and such information is gathered for the reporting. The CFD will meet twice a year to evaluate ongoing or completed projects, after which the technical departments responsible for the projects will continue to monitor for compliance of selected projects with the eligibility and exclusion criteria regularly throughout the life of the bond. Bordeaux Métropole will replace any financed projects that are no longer compliant with the eligibility criteria or have been divested or subject to significant controversies with another eligible project within 24 months.

Environmental and social risk mitigation process – BEST PRACTICES

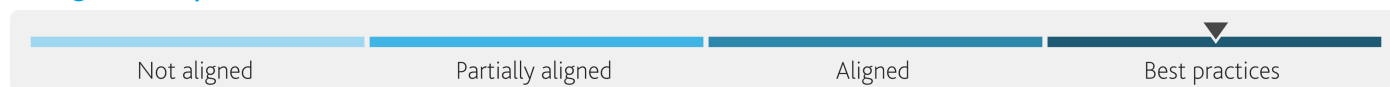
Bordeaux Métropole has established an adequate environmental and social risk identification and mitigation process to manage risks related to the eligible projects. This process is outlined in the framework, which will be published on the metropole's website.

Monitoring for potential controversies associated with the financed projects will be conducted at least twice a year throughout the life of the bond. Monitoring will be conducted by the management team responsible for the project. In the event of an environmental or social risk, a panel of internal representatives with relevant expertise from the respective technical department, Bordeaux Métropole's legal department and the finance department will convene to assess the risk and decide on the next steps to be taken to resolve the issue. Identified environmental or social risks will be disclosed, and the resolution actions will be detailed in the impact report.

Best practices identified – process for project evaluation and selection

- » 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

Bordeaux Métropole has defined a clear process for the management and allocation of proceeds, which is detailed in its framework that will be publicly available on its website. Net proceeds from any bond issuance covered by the framework will be placed in the issuer's general treasury account held with the French Treasury, in accordance with French law. The funds will be tracked to ensure that they are only used for eligible projects. There will be periodic tracking of how funds have been matched to eligible projects financed within one year of the green, social or sustainable bond's issuance. The company has committed to allocate net proceeds within 12 months.

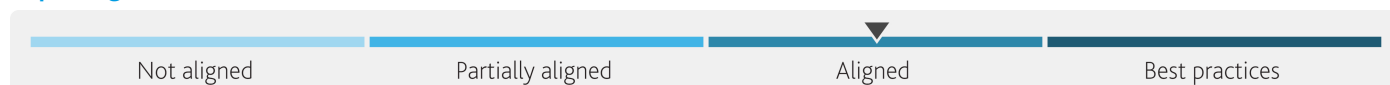
Management of unallocated proceeds – BEST PRACTICES

Net proceeds from any green bond issuance covered by the framework will be placed in the issuer's general treasury account held with the French Treasury, in accordance with French law. The funds will be tracked to ensure that they are only used for eligible projects, and the issuer has confirmed there are no temporary placements for unallocated proceeds. In the event of a project's cancellation, divestment or noncompliance with the eligibility criteria, the issuer has formalized in its framework that it will reallocate an equal amount of the funds to other eligible projects within 24 months.

Best practices identified – management of proceeds

- » 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
- » Disclosure on temporary placement and presence of exclusion criteria toward environmentally or socially harmful activities
- » Commitment to reallocate proceeds to projects that are compliant with the framework

Reporting



Transparency of reporting – ALIGNED

Bordeaux Métropole will report annually on the use of proceeds issued under the framework as well as in the event of significant developments. Until full allocation of proceeds, the issuer will publish an allocation report that will include details and brief descriptions on the financed eligible projects or categories, the amount of proceeds allocated at the project or category level, the outstanding amount of unallocated net proceeds, and any significant developments, including issues or controversies related to the projects.

In addition, the issuer will publish an impact report on its website that will cover the expected environmental and social impact indicators related to the green and social eligible projects financed. The issuer has identified relevant environmental reporting indicators for all of the eligible categories, which are disclosed in the framework. The calculation methodologies and assumptions used to report on the environmental impact and related metrics will be included in the reporting.

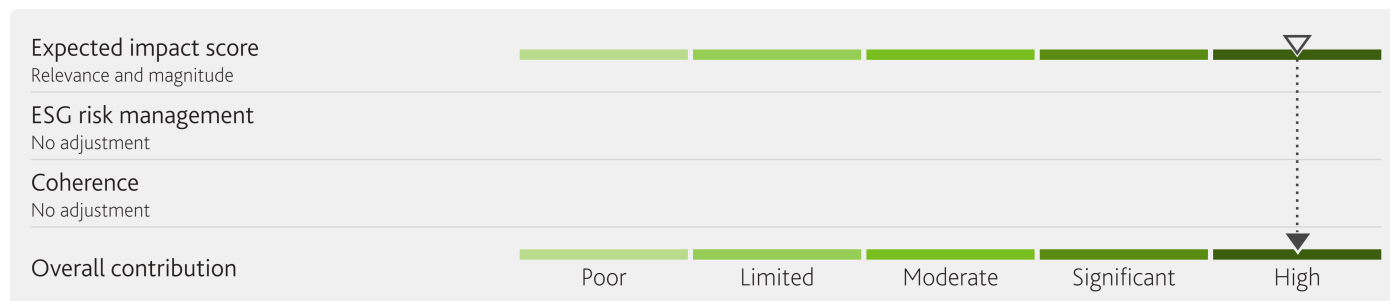
Each allocation report will be verified by a chartered accountant from Bordeaux Métropole's Regional Directorate of Public Finances until full allocation. However, there will not be an independent impact assessment of the environmental and social benefits associated with the financed projects.

Best practices identified – reporting

- » 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

Contribution to sustainability

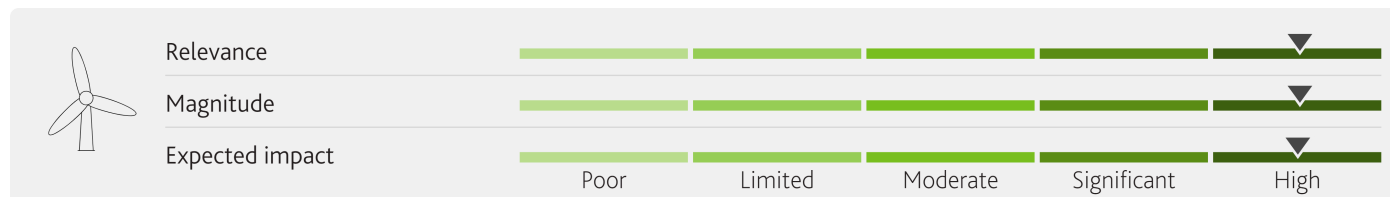
The framework demonstrates a high overall contribution to sustainability.



Expected impact

The expected impact of the eligible categories on the environmental and social objectives is high. Based on information provided by the issuer, we expect the clean transportation, and the sustainable buildings and energy efficiency categories to comprise most of the proceeds from forthcoming issuances, with other categories representing relatively minor shares. We therefore assign a higher weight to those two category scores when we assess the framework's overall contribution to sustainability. A detailed assessment by eligible category is provided below.

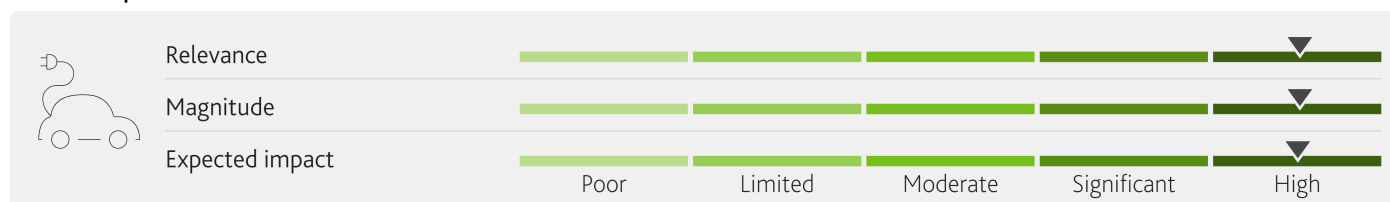
Renewable energy



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 2022¹. France has pledged to increase the share of renewables to 45% by 2035, alongside the phasing out of the remaining four coal-fired power plants by 2027, which is specifically outlined in France's multiannual energy program *Stratégie française sur l'énergie et le climat, Programmation Pluriannuelle de l'énergie 2024-2028*. In terms of final energy consumed, heating accounts for 45% of the total and most of this energy is produced by fossil fuel sources. By focusing on both electricity and heating needs, the category addresses a highly relevant environmental issue in the context of the country.

This category covers development of solar, wind, geothermal and biomass energy. However, the metropole has mentioned that no wind projects were contemplated yet, and that concentrated solar power and enhanced geothermal systems are not to be financed under this category. Solar and geothermal power are in line with the best-available standards with a carbon intensity factor less than 100 gCO₂/kWh calculated on a life cycle assessment basis for the latter. The issuer has mentioned that biomass will be sourced in compliance with the criteria of EU directive 2018/2001, with emissions set at 0.013 kgCO₂/kWh, and will comprise mostly waste woody biomass, which is not in line with the climate bond initiative criteria. Woody biomass will be supplied from a place less than 100 km away with a PEFC/FSC label, in line with at least the eligibility criteria for the ADEME Heat Fund, which is considered to be in line with the best-available standards. All these factors combined result in our assessment of a high magnitude for this category.

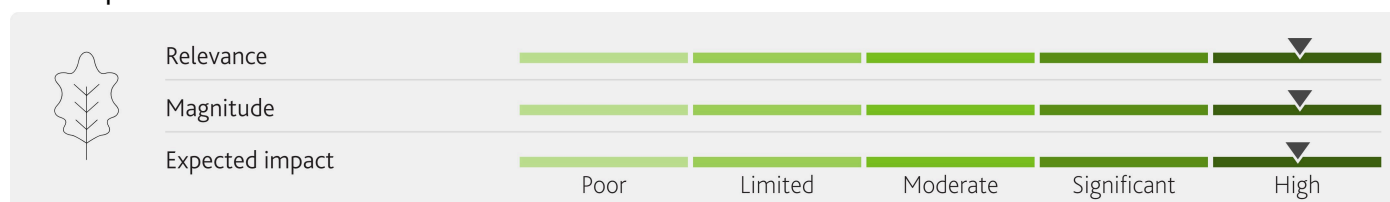
Clean transportation



According to the latest High Council on Climate 2023 report², transportation accounts for 32% of the country's total GHG emissions. Among the different modes of transport, individual cars are responsible for most of the emissions (52%). In Bordeaux, the local public transportation network, Transports Bordeaux Métropole — which serves the 28 municipalities of Bordeaux Metropole — is composed of four tramway lines, 79 regular bus lines, two river shuttle services and 2,000 bicycles available for public use. The vast majority of buses in operation run on fossil fuels (natural gas). There is an urgent need for decarbonization of transportation at both the national and local levels; therefore, the relevance of this category is considered high.

The category aims at financing electrified transportation modes including tramways, buses, and river shuttles and associated infrastructures. By developing clean transportation means in the Metropole of Bordeaux, the metropole intends to both increase the supply of public transport and reduce the use of individual cars by residents, while also initiating the greening of its public transport fleet. All assets are dedicated to or are supporting public zero-tail pipe emission vehicles and therefore are following the strictest market standards, which results in our assessment of a high magnitude for this category.

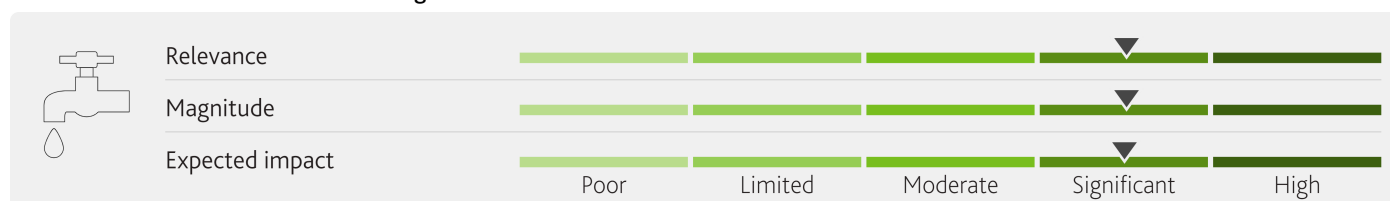
Pollution prevention and control



In 2021, 343 million tonnes of waste was produced in France (all waste combined), up 6.4% from the level in 2016, and 22% was sent to landfills³. Waste accounted for 4% of France's total GHG emissions in 2022⁴. However, reducing waste to landfill, in line with European and French objectives, is integral to France's regulatory-prescribed waste management methods, which encompass recycling, energy recovery and targeted reductions in landfill waste. The French legislation mandates a 50% reduction in landfill waste by 2025, while the European Parliament advocates a recycling rate of 55% by 2025, 60% by 2030 and 65% by 2035⁵; in line with that objective, the relevance of this category is considered high.

The category covers waste prevention measures, recycling facilities and recovery in the form of composting. Methanization and incineration units are not covered under this category. The issuer has provided information regarding waste hierarchy, and has stated that compost will be used as fertilizer or soil improver, in line with best market standards. Even if not financed under the category, the fleet for transporting waste is to be electrified. The category is well-defined, and details have been provided in the internal document that outlines the strategy that respects the waste hierarchy. This includes prevention, collection, recycling, and treatment, as well as the means of achievement and quantified targets, leading to our assessment of a high magnitude score for the category.

Sustainable water and wastewater management

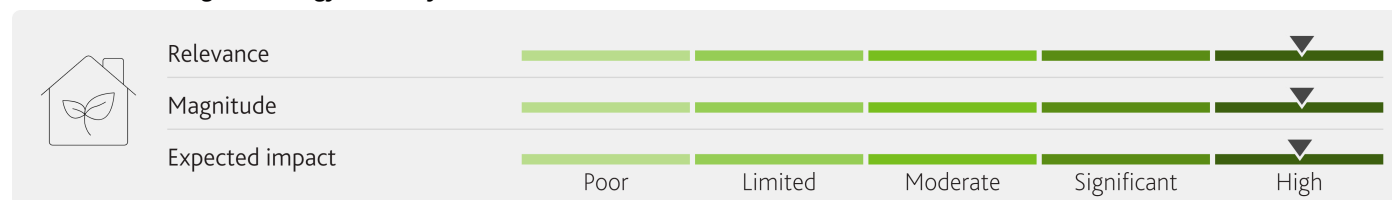


This category covers wastewater recovery, water reuse and recycling, water-saving initiatives and water distribution infrastructure. The issuer plans to construct 3,220 km of drinking water pipes, 54 km of aqueducts, 130,000 m³ of storage structures, 49 storage works, 140 treatment installations and 103 collection points for 3,000,000 inhabitants. France annually extracts about 31 billion cubic

meters of fresh water but faces water restrictions because of overuse, dry weather and droughts. The national water strategy aims for a 10% reduction in water consumption by 2030, against a predicted 30%-40% decrease in water availability. Currently, only 1% of water is reused in France, compared with 15% in Spain, emphasizing the need for improved water reuse and recycling. Bordeaux withdraws a significant amount of water from the Eocene aquifer to meet its needs. Understanding the importance of sustainable water management, Bordeaux established L'Eau Bordeaux Métropole, which is a public entity responsible for managing water supply and sanitation for 800,000 users across 28 municipalities. Overall, the region is still rated low in terms of water depletion and water stress in the area according to the World Resources Institute's Aqueduct Water Risk Atlas⁵. The need for bolstering water management, coupled with the less urgent need to mitigate water stress in the region, underlines the category's significant relevance score.

The implementation of water-saving initiatives and the development of water distribution infrastructure are in line with France's national water strategy, which calls for promoting efficient use of water and access to quality water by developing the infrastructure needed to deliver water services. From 2024, the water operators financed under this category has to reduce GHG emissions by 5% annually and is currently using 85% renewable energy. Energy-efficient technologies, such as optimized pump management, high-efficiency motors, and early pump replacement, will be implemented. Using anaerobic digestion, wastewater plants aim to capture 100% of biogas generated, compared with the current level of 77%. This approach aligns with Bordeaux Métropole's Territorial Air Energy Climate Plan, which has set a goal to generate 50 GWh of energy from wastewater treatment-derived biogas by 2026. The Bordeaux Metropole Water Board is targeting a reduction of more than 13 million m³ in losses from the Eocene aquifer by 2028, through improved network efficiency. The possibility of over-extraction, which dramatically reduces water table levels and harms ecosystems, alongside uncertainties related to the extraction technology, results in our assessment of a significant magnitude score for this category.

Sustainable buildings and energy efficiency

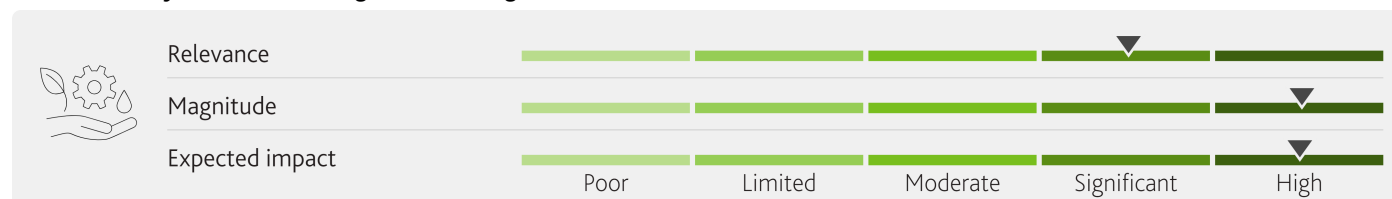


This category involves constructing new buildings and renovating existing ones in Bordeaux Métropole. Real estate contributes significantly to France's carbon emissions (27%) and energy consumption (45%), therefore, energy-efficient retrofitting is a priority. France's Energy Transition Law (2015) aims for all housing to meet "low-consumption building" standards by 2050. Under its framework, the metropole intends to expand its investments in both thermal renovation of public buildings and homes (via MarénoV Bordeaux), and construction of high-performance buildings. The National Low-Carbon Strategy mandates the complete renovation of 500,000 buildings annually from 2015 to 2030, and 700,000 buildings annually from 2030 to 2050, a significant increase from the current rate of less than 300,000. France's domestic energy performance certificate, Diagnostic de Performance Énergétique, estimates the energy consumption and GHG emissions of a building on a scale from A (most efficient) to G (least efficient). A significant proportion of French homes falls into the D (21%) or E (33%) categories, while 14% are rated F or G. These statistics underscore the critical need for enhancing building efficiency across the country⁷. All new buildings, governed by the RE2020 regulations, must undergo an exhaustive life cycle assessment, including the construction stage. Even if the Gironde department is less affected by these least-efficient dwellings as it has less than 10% of F or G category dwellings on its territory⁸, the pressing need for constructing new energy-efficient buildings and for improving the energy efficiency of existing structures in the country, underpins our high relevance score in this category.

The construction of new buildings will be falling under the RE2020. Compared with other countries' targets, France's RE2020 approach is unique because of its comprehensive inclusion of construction and operational emissions, and its stringent certification standards. France's RE2020 stands out because of its holistic approach, which encompasses not only operational emissions, a common focus in many countries, but also construction emissions, which account for 60%-90% of total life cycle emissions in the country. New buildings will also be seeking to attain additional green building certifications including LEED (Gold or higher), BREEAM (Excellent or higher), HQE (Very good or higher) or BBCA. Additionally, projects are evaluated by Bâtiments Durables Nouvelle-Aquitaine across seven themes, further reinforcing RE2020's goals. Existing buildings, predominantly from the 1970s, aim for a 30%-40% reduction

in energy use based on size. Buildings over 1000m² target a 40% reduction, complying with the Tertiary Decree and its calculation methodology. This involves insulation and renewable energy system installation. This category addresses the entire life cycle of new buildings and targets energy efficiency thresholds in line with best market recommendations for renovations, which explains our high magnitude assessment for this category.

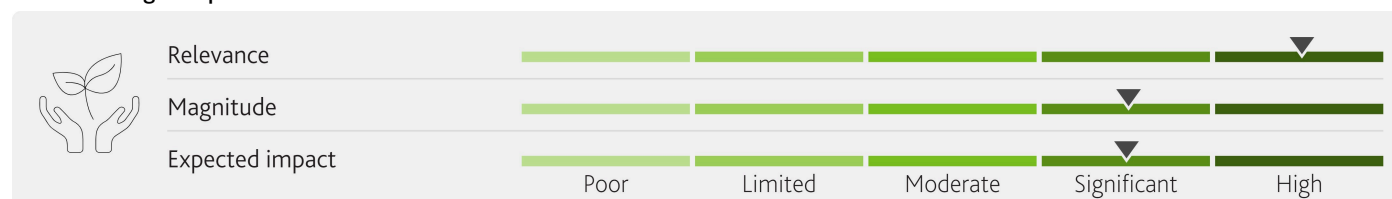
Environmentally sustainable management of living natural resources and land use



The category addresses several issues that are relevant in the French context, namely development of forests and vegetated areas, and rehabilitation of ecosystems including wetlands and watercourses. The region, in particular, is as an above-average performer in terms of the afforestation rate within mainland France⁹. Conversely, Bordeaux appears to lag other French cities in terms of canopy index, falling short of the international target of 40%. Furthermore, despite its rich biodiversity, the area is not considered to be among regions with internationally significant wetlands¹⁰. However, it is important to note that the challenge of biodiversity and overall soil protection is particularly acute in France, with Bordeaux identified as a region with high protection needs. Based on these considerations, we deem the relevance of the category to be significant.

The metropole, under its "Biodiver'Cité" action plan, is implementing a range of measures that seem to offer a comprehensive solution to address biodiversity and soil degradation in the area. This strategy includes specific programs including the LIFE Biodiver'Cité initiative and the identification of an ecological network that aims to reduce landscape fragmentation, all in an effort to preserve nature (accounting for more than 50% of the metropole's surface). Furthermore, the plan offers detailed insights into the allocation of funds, including specific information for several completed projects, with a clear timeline and transparency regarding the oversight of the projects and their objectives. The efforts put in place with regard to biodiversity have been recognized by the label "Territoire engagé pour la nature", which is awarded to territories that demonstrate significant commitment and concrete action toward biodiversity preservation. Given these factors, we assess the magnitude of the category to be high.

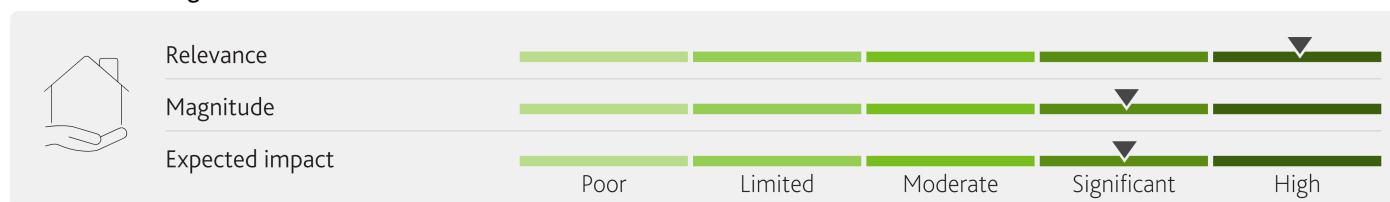
Climate change adaptation



Regarding climate change exposure, the area is considered as a territory at significant risk of flooding: 229 municipalities in the department face the risk of overflowing mapped watercourses. According to the data set produced under the Flood Directive of the European Directive, Gironde is a designated territory at risk of flooding, suggesting a recognized vulnerability to such natural disasters. In the summer of 2022, France experienced an unprecedented number of wildfires, with a record level of more than 62,000 hectares burned. Gironde, which is part of Nouvelle-Aquitaine and has forest area that covers 520,000 hectares, or half (50.2%) of the area of the department, is no exception to this trend, with 32,000 hectares burned last year¹¹. The notable recurrence of both wildfires and floods within this period accentuates the pressing need for anticipatory and robust disaster management approaches in the region, leading to a high relevance score for this category.

This category is dedicated to the building of flood prevention, management of aquatic environments and restoration of dikes. Although the issuer has disclosed the specific projects that will be undertaken, the absence of details on the technology or its thresholds hinders the ability to thoroughly assess their impact. This level of transparency, coupled with the clarity on the specific projects, results in a significant score for the category's overall impact magnitude.

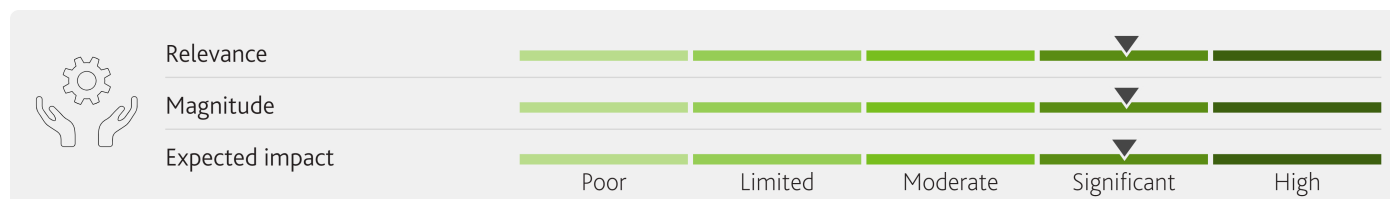
Affordable housing



Increasing access to affordable housing will be critical for Bordeaux Métropole to meet the needs of its rapidly growing population amid rising housing costs across France, which, according to the Organization for Economic Cooperation and Development, outpaced income growth over 2015–22¹². Developing more affordable housing has been a key priority for the metropole and its social transition plan, with initiatives such as its recently passed legislation to regulate the rental market and urban housing policies tailored to the population's needs. Moreover, as businesses continue to invest in the metropole, ensuring affordable housing will be essential for attracting and retaining a competitive labor force to support the territory's economic development, which explains our high relevance score for this category.

Projects under this category comply with Bordeaux Métropole's Urban and Housing Policy Intervention Regulations (*Règlement d'intervention en faveur de la politique de la ville*), and will be located in urban areas with adequate access to public transportation and essential services. Expanding the supply of social housing rentals and homes for purchase at regulated prices could alleviate housing pressures for the target population, which includes households that meet income thresholds set by the French government for affordable housing, the elderly population and people with disabilities. However, the socioeconomic range of the potential beneficiaries is broad, extending beyond the most vulnerable households experiencing acute housing insecurity, who are eligible for the Prêt Locatif Aidé d'Intégration (PLAI) and Prêt Locatif à Usage Social (PLUS) programs. This also includes low- to middle-income households eligible for the Prêt Locatif Social (PLS) and Prêt Social Location Accession (PSLA) programs. As a result, the magnitude score for this category is significant.

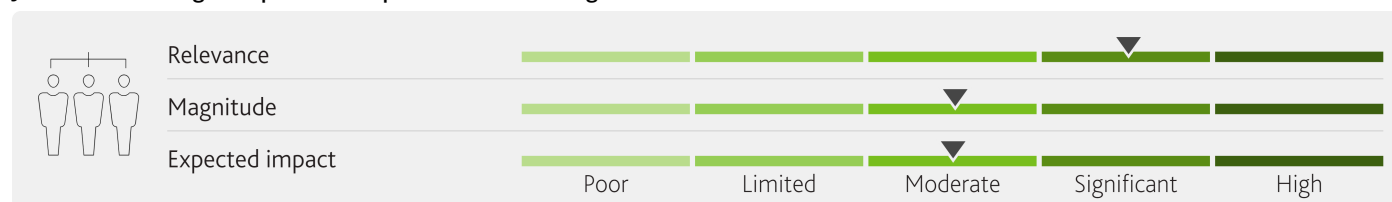
Access to essential services: Education



Investments to improve education infrastructure and vocational training programs in digital literacy are relevant for ensuring access to education and narrowing the digital divide among the inhabitants of Bordeaux Métropole as its population expands and economy transforms. Promoting digital literacy and inclusion is imperative for developing and maintaining the skills needed in an increasingly evolving labor market, and ensuring employment opportunities within Bordeaux Métropole's rapidly growing digital economy. Moreover, the territory's efforts to close the digital divide support the French National Plan for Digital Inclusion to achieve digital inclusion for at least one-third of the French population over the next 10 years, which is aligned with the European Commission's Digital Decade's 2030 targets¹³. While improving access to early education is important for ensuring successful educational outcomes and well-being of children and families, Bordeaux Métropole's relatively good-quality education, and France's achievement of its SDG and EU targets for pre-primary and primary school enrollment make it a less critical social issue to address¹⁴, resulting in a relevance score of significant for this category.

Eligible projects to provide vocational training programs on digital technologies to disadvantaged groups, including youth, people with disabilities and low-income households, could help reduce social disparities and provide long-term socioeconomic benefits, given the growing importance of the territory's digital economy for the employment market. In addition, projects under this category to build public preschool and primary school facilities prioritize neighborhoods with high population growth or buildings in high need of repair, which could improve access to early education. However, the criteria for building new schools do not include socioeconomic considerations, such as areas with high unemployment rates or low household incomes, and therefore do not specifically target the most underserved populations, resulting in a magnitude score of significant for this category.

Job creation through the potential impact of SME financing and microfinance



Business dynamism across Bordeaux Métropole has been on the rise, with the number of new businesses established doubling over the last decade¹⁵. Supporting small and medium-sized enterprises (SMEs) with financing to scale up and create jobs is significantly relevant for promoting the metropole's long-term economic growth and reducing unemployment. Several studies show that SMEs, which account for about half of the employment in France, are catalysts for job creation and can also help reduce income inequality¹⁶. However, the capacity of SMEs to generate employment will largely depend on each company's activity and its potential for job creation, into which we do not have visibility, resulting in a relevance score of significant for this category.

Investments under this category to provide SMEs and very small enterprises in Bordeaux Métropole with access to finance as well as support programs for startups would moderately improve employment opportunities in the territory. The eligibility criteria for the projects are broad, with support available to small businesses operating across a wide range of sectors, including the social and solidarity economy, which demonstrate a commitment to decarbonizing their activities. The projects do not consider socioeconomic criteria to ensure that the funds support SMEs that have the highest needs but are most likely to be excluded from financing — such as businesses owned by low-income individuals or SMEs that intend to create local jobs in areas with stagnant or low employment growth, resulting in a magnitude score of moderate for this category.

ESG risk management

We have not applied a negative adjustment for ESG risk management to the expected impact score. Bordeaux Métropole operates within the jurisdiction of France, which 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 require the country 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 in the government's decision-making process regarding environmental and social impacts.

Coherence

We have not applied a negative adjustment for coherence to the expected impact score. To address the growing environmental challenges related to climate change, Bordeaux Métropole is strengthening its climate plan and is mobilizing its programming, public policies and stakeholder support across the region toward its climate goals to become a resilient, low-carbon and inclusive territory, and achieve carbon neutrality by 2050. To reach its climate and environmental goals, the metropole has implemented several initiatives including expanding its renewable energy capacity, developing clean transportation systems and implementing natural resource preservation programs, such as the sustainable management of the Gironde estuary water sources. To meet the needs of its growing population and aging society, Bordeaux Métropole has also implemented several initiatives to ensure the quality of life, health and well-being of its inhabitants, while continuing to generate employment and develop the local economy. The issuer's sustainability bond framework, and the associated eligible categories coherently align with Bordeaux Métropole's strategic sustainability priorities and contribute to achieving its sustainable commitments and goals.

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

The 10 eligible categories included in Bordeaux Métropole's framework are likely to contribute to eight of the UN Sustainable Development Goals (SDGs), namely:

UN SDG 17 Goals	Eligible Category	SDG Targets
GOAL 4: Quality Education	Access to Essential Services	4.4: Increase the number of youth and adults with technical and vocational skills for employment and entrepreneurship
GOAL 6: Clean Water and Sanitation	Sustainable water and wastewater management	6.3: Improve water quality by reducing pollution, eliminating dumping and minimizing hazardous chemicals and materials
	Renewable Energy	7.2: Increase substantially the share of renewable energy in the global energy mix
GOAL 7: Affordable and Clean Energy	Green Building and energy efficiency	7.3: Double the global rate of improvement in energy efficiency
GOAL 8: Decent Work and Economic Growth	Job Creation	8.3: Promote policies that support productivity, job creation, entrepreneurship, innovation, and encourage the growth of SMEs
	Affordable Housing	11.1: Ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums
GOAL 11: Sustainable Cities and Communities	Clean Transportation	11.2: Provide access to safe, affordable, accessible and sustainable transport systems for all
	Sustainable water and wastewater management	12.4: Achieve environmental management of chemicals and all wastes, and reduce their release to air, water and soil
GOAL 12: Responsible Consumption and Production	Pollution Prevention and Control	12.5: Substantially reduce waste generation through prevention, reduction, recycling and reuse
	Renewable Energy	
	Green Building and energy efficiency	13.2: Integrate climate change measures into national policies, strategies and planning
GOAL 13: Climate Action	Clean Transportation	
GOAL 15: Life on Land	Adaptation to Climate Change	15.2: Promote the implementation of sustainable management of all types of forests

The UN SDGs mapping 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 SDG Mapping Guidance and the UN SDG targets and indicators.

Appendix 2 - Summary of the eligible categories in Bordeaux Métropole's framework

Eligible Project Category	Description	Sustainability Objectives	Impact Reporting Metrics
Renewable Energy	Projects aimed at the development of solar, wind, geothermal and biomass energy		Quantity of renewable energy produced or used (MWh) Quantity of energy saved (MWh) Quantity of CO2 emissions avoided/reductions made (tCO2e) Volume of locally-produced renewable energy (EnR Locale certification) consumed within the metropolitan territory Power capacity of solar panels installed on canopies, public and private buildings and on the ground (MW)
Clean Transportation	Projects aimed at the financing electrified transportation modes including tram, buses and river shuttles and associated infrastructures	Climate Change Mitigation	Modal shift (number of additional users) Reduction in greenhouse gas emissions (tCO2e) Number of electric vehicles deployed Number of passengers transported in clean transport Number of charging stations for electric vehicles Number of kilometers of vehicles saved Increase in bike traffic, bike shelters and bike loans Number of pedestrian crossings freed
Pollution Prevention	Projects aimed at waste prevention measures, recycling facilities and recovery in the form of composting. Waste hierarchy will be respected and that composting will be used for fertilizer or soil improver in line with best market standards	Climate Change Adoption	Reduction of waste volumes (kg/inhabitant) Number of projects using materials from reuse of circular economy Greenhouse gas emissions saved or avoided (tCO2e) Number of buildings enrolled on waste sorting schemes % of waste recycled or recovered Number of individual, collective and public compost bins Number of electric waste containers
Sustainable water and wastewater management	Projects aimed at wastewater recovery, water reuse and recycling, water-saving initiatives, and water distribution infrastructure		% reduction in water consumption Annual water collection in m3 Area covered by sustainable resource management practices m3
Green buildings and energy efficiency	Projects aimed at constructing new buildings and renovating existing ones in Bordeaux and metropolitan France New buildings that have received one of the following certifications: LEED (>gold), BREEAM (>excellent), HQE (>Very good), BBCA. Existing buildings (insulation and installation of renewable energy production systems) leading to an energy efficiency improvement of 30% or more	Climate Change Mitigation	kWh/m2 saved and/or % reduction in energy consumption Reduction in the carbon footprint of renovated buildings (tCO2e) Proportion of organic, geo-sourced and recycled materials used in all construction projects within the territory
Environmentally sustainable management of living natural resources and land use	Projects aimed at development of forests and vegetated areas and rehabilitation of ecosystems including wetlands and watercourses		Urban spaces replanted or rewilded, in hectares or m ² Surfaces de-artificialized or protected Number of urban heat islands (UHIs) treated out of total UHIs identified Number of trees planted, number of trees saved
Climate change adaptation	Projects aimed at construction of dikes/embankments against flooding, the maintenance and development of the banks, as well as awareness raising considering the prevention of forest fires and forest related activities	Climate Change Adoption	Number of wetlands protected Number of flood mitigation infrastructure projects
Affordable housing	Projects aimed at funding of the development of affordable housing as well as renovation and maintenance of existing social housing. Expansion of the supply of social housing rentals to alleviate housing pressures for the target population	Access to housing	Number of beneficiaries of affordable housing projects Number of social and collective homes built or renovated each year Amount of aid allocated
Access to essential services	Projects aimed at the construction of public education facilities and digital literacy programs Build public pre-school (maternelle) and primary school facilities prioritize neighborhoods identified as having high population growth or buildings in high need of repair.	Access to Essential Services	Number of school groups created or renovated Number of beneficiaries of digital training programmes
Employment generation	Projects aimed to support small and medium-sized enterprises (SMEs) and very small enterprises (VSEs) in Bordeaux Métropole with access to finance and support programs for start-ups		Number of green and greening jobs Number of employment integration clauses included in public contracts Number of social and solidarity economy initiatives and start-ups

Endnotes

- 1 [Share of renewables in energy production](#), Enerdata, 2023.
- 2 [Rapport annuel du Haut conseil pour le climat](#), 2023.
- 3 [Waste Generation and Recycling](#), extract from France's 2021 environmental performance preview.
- 4 [Rapport annuel du Haut conseil pour le climat](#), 2023.
- 5 [LOI n° 2015-992 du 17 août 2015 relative à la transition énergétique pour la croissance verte](#) (1), 2015.
- 6 [World Resourced Institute's Aqueduct Water Risk Atlas](#).
- 7 [Diagnostic immobilier: diagnostic de performance énergétique \(DPE\)](#), site officiel de l'administration française.
- 8 [Baromètre des DPE](#), FNAIM September 2023.
- 9 [La forêt française état des lieux et évolutions récentes panorama des résultats de l'inventaire forestier](#), 2018.
- 10 [Protection des milieux humides](#), Ministère de la Transition écologique et de la Cohésion des territoires
- 11 [Une réglementation pour protéger les forêts contre les incendies](#), les services de l'Etat en Gironde.
- 12 [OECD Data: Housing Prices](#), 2023.
- 13 [France - National Plan for Digital Inclusion](#), EU Digital Skills and Jobs Platform, 2022.
- 14 [L'état de l'École](#), Ministère de l'Éducation Nationale et de la Jeunesse, 2023.
- 15 [Dossier complet: Intercommunalité-Métropole de Bordeaux Métropole](#), Institut national de la statistique et des études, 2022.
- 16 [OECD SME and Entrepreneurship Outlook](#), Country Profiles, 2021.

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