CITY OF BARCELONA SUSTAINABILITY BOND FRAMEWORK

SECOND-PARTY OPINION BY SUSTAINALYTICS

November 17, 2017



www.sustainalytics.com

Catarina da Silva (Amsterdam) Senior Associate, Advisory Services catarina.dasilva@sustainalytics.com (+31) 20 205 00 45

Marion Oliver (Toronto) Manager, Advisory Services marion.oliver@sustainalytics.com (+1) 647 317 3644 Floriana Cau (Paris) Associate, Institutional Relations Floriana.cau@sustainalytics.com (+33) 18 488 0644

TABLE OF CONTENTS

1.	Introduction	3
2	Sustainalytics' Opinion	4
	Section 1: Sustainalytics' Opinion on the City of Barcelona Sustainability Bond Framework	4
	Section 2: The City of Barcelona's environmental and social mandate	5
	Section 3: Impact of Use of Proceeds	6
	Conclusion	9
AP	PENDICES	10
	Appendix 1: 2017 Sustainability Bond: Sample Eligible Projects	10
	Appendix 2: Green Bond Programme External Review Form	11
SU	STAINALYTICS	17



1. INTRODUCTION

The City of Barcelona is the capital and largest city in the Spanish municipality of Catalonia. Its inhabitants number 1.6 million within city limits and 4.7 million within its metropolitan area, making it the sixth largest urban area in the European Union and the largest metropolis on the Mediterranean Sea. Despite its strong economic and cultural influence, vulnerabilities in the city's socioeconomic model became increasingly evident during the economic crisis. This lead to a recognition that to maintain its position as a leading European city, it must work towards creating a fairer and more inclusive and sustainable urban environment.

With this in mind, the City of Barcelona has developed a Sustainability Bond Framework¹ under which it plans to issue sustainability bonds the proceeds of which will finance capital expenditures related to promoting social and environmental development projects that are at the heart of the city's mandate.

The net proceeds of the sustainability bonds will be used to finance, in whole or in part, existing and future projects that contribute to the city's social and/or environmental objectives and promote sustainable economic development. To be eligible for the sustainability bonds proceeds, the activities funded must meet one or more of the following 'Eligible Project Categories'.

- Access to Essential Services
- Socioeconomic advancement
- Affordable housing
- Employment generation
- Energy efficiency
- Clean transportation
- Pollution prevention and control
- Sustainable water

For a sample of Eligible Projects for its inaugural sustainability bond, please refer to Appendix 1.

The City of Barcelona has engaged Sustainalytics to provide a second-party opinion on its Sustainability Bond Framework and the framework's environmental and social credentials. As part of this engagement, Sustainalytics held conversations with various members of the city's authorities to understand the scope of Eligible Project Categories and the social and environmental impacts associated with the proposed projects. Sustainalytics also reviewed relevant public information. Following this engagement between the City of Barcelona and Sustainalytics, some elements of the Sustainability Bond Framework were clarified to ensure an alignment with the level of disclosure expected by ICMA's Sustainability Bond Guidelines 2017.² This document contains Sustainalytics' opinion of the City of Barcelona's Sustainability Bond Framework and should be read in conjunction with that framework.

² The Sustainability Bond Guidelines 2017, dated 2 June 2017, issued by the International Capital Markets Association (ICMA)



¹ Available at http://governobert.bcn.cat/estrategiaifinances/sites/default/files/Documents/PDF/AB_SustainabilityBondFramework_2017.pdf

2 SUSTAINALYTICS' OPINION

Section 1: Sustainalytics' Opinion on the City of Barcelona Sustainability Bond Framework

Overall, Sustainalytics is of the opinion that the City of Barcelona Sustainability Bond Framework creates meaningful social and environmental impact, is transparent, and aligns with the Sustainability Bond Guidelines 2017. Some specific elements of the Framework that Sustainalytics views favourably include:

- All green and social Eligible Project Categories for the use of proceeds are recognized by the Sustainability Bond Guidelines 2017 as project categories with clear environmental and social benefits, and Sustainalytics views these categories as having a positive impact (for additional information on impact see Section 3).
- Although many of the Eligible Social Projects benefit the City of Barcelona's population in general, vulnerable populations will receive the most support in terms of social expenditures, benefiting from several programmes specifically developed to support their social integration and improve their living conditions. In Sustainalytics' view, this aligns with recommendations by the Social Bond Principles.³
- The City of Barcelona has a dedicated internal Selection, Monitoring, and Evaluation Committee that will analyse and select Eligible Projects that will receive funding from the sustainability bonds. The Committee is formed by senior finance and investment services executives along with members of the Urban Ecology and Social Rights Management groups. This is aligned with market practice.
- The City of Barcelona's disclosure and process with respect to management of proceeds are in line with market practice.
- Annual allocation reporting will be made available to investors on the City of Barcelona's website. The reporting will outline the total amount allocated to the various eligible projects until all proceeds have been allocated. This information will be externally reviewed, which is in line with market best practice.
- The City of Barcelona has committed to publishing an annual Performance Report, which will include quantitative reporting on selected KPIs where feasible. For example, this report will include, among other indicators, the number of affordable housing units built, the number of jobs created, and the amount of greenhouse gas emissions reduced or avoided. This is aligned with market practice.

Alignment with the Sustainability Bond Guidelines 2017

Sustainalytics has determined that the City of Barcelona Sustainability Bond Framework aligns with the Sustainability Bond Guidelines 2017.⁴ For detailed information please refer to Appendix 2: Green Bond Programme External Review Form.

⁴ Sustainability Bonds are aligned with the four core components of both the Green Bond Principles 2017 and the Social Bond Principles 2017, with the former being especially relevant to underlying Green Projects and the latter to underlying Social Projects



³ The Social Bond Principles 2017, dated 2 June 2017, issued by the International Capital Markets Association (ICMA)

Section 2: The City of Barcelona's environmental and social mandate

A Clear Commitment to Social Development

Social development and improving the quality of life of its citizens is core to the City of Barcelona's mandate. In order to achieve this mandate, the city developed the 2016-2019 Municipal Action Plan,⁵ which delineates its social and environmental strategy for the coming years. Sustainalytics reviewed and analysed this document, which sets out the steps of the city's three-year socio-economic plan aimed at reducing the inequalities among its citizens. The plan outlines social objectives in several areas including housing, education, social inclusivity and employment.

Under the first strategic area "A Diverse Barcelona that Ensures a Good Life," the City of Barcelona outlines several education and housing objectives and strategic initiatives. Specifically, the city aims to guarantee quality public education for everyone and reduce the inequalities among citizens' access to education by building new public educational facilities for deprived neighbourhoods and improving vocational training. The city also aims to improve access to social and cooperative housing by supporting the construction of 4,000 new homes, most of which are part of an affordable rent regime to help meet the demand for low-income housing. The homes will be targeted to vulnerable populations, such as low-income families, young people, and the elderly.

Sustainalytics is of the opinion that the social projects to be funded under the Eligible Project Categories -access to essential services, socioeconomic advancement, and affordable housing, are aligned with the City of Barcelona's social objectives and help advance the targets of the city's Action Plan 2016-2019 and its mandate to support social development.

The City of Barcelona's Environmental Commitments

Sustainalytics reviewed the City of Barcelona's Citizen Commitment to Sustainability 2012-2022, which outlines the Barcelona City Council's overall sustainability commitments and goals for the coming years.⁶ In order to achieve this vision, the Commitment is structured around 10 focus areas with different lines of action. Of these, the following three environmental focus areas are closely aligned with the objectives of the sustainability bond.

Focus Area 2012-2022	Issues covered	Related sustainability bond eligible project category
Public Space and Mobility	Safe, sustainable, and active mobility, bicycle friendly city, access to interconnected public transport, and deterring the use of private motor vehicles.	Clean transportation
Environmental quality and health	Quality of air and drinking water, creating low- emissions zones.	Pollution prevention and control, sustainable water
Efficient, productive and zero emission city	Energy refurbishment of buildings, urban planning, sustainable buildings, and clean and renewable energy amongst others.	Energy efficiency

⁵ http://ajuntament.barcelona.cat/seguretatiprevencio/en/municipal-action-plan

⁶ http://www.sostenibilitatbcn.cat/attachments/article/413/Commitment_22_UK_web.pdf



Sustainalytics is of the opinion that the environmental projects to be funded under the Eligible Project Categories of energy efficiency, clean transportation, pollution prevention and control, and sustainable water are aligned with the three above-mentioned focus areas of the Citizen Commitment to Sustainability 2012-2022.

Furthermore, the city's Municipal Action Plan, mentioned above, outlines clear environmental objectives under the priority area "A more human Barcelona in ecological transition" which include the development of urban green zones, sustainable mobility, energy efficiency, and climate change adaptation, objectives that Sustainalytics believes align with the environmental projects funded by the city's sustainability bonds.

Overall, Sustainalytics is confident that the City of Barcelona is well positioned to issue sustainability bonds and that the issuance of sustainability bonds aligns and positively contributes to the city's mandate and achieving its social and environmental objectives.

Section 3: Impact of Use of Proceeds

Proceeds of the City of Barcelona's sustainability bonds will be directed towards the following eight Eligible Project Categories: access to essential services, socioeconomic advancement, affordable housing, employment generation, energy efficiency, clean transportation, pollution prevention and control, and sustainable water.

Overall, Sustainalytics is of the opinion that the proceeds from the bonds will have clear positive social and environmental impacts. All eight categories align with the Sustainability Bond Guidelines 2017. Below, for additional context, Sustainalytics has provided an opinion on the local sustainability impact of several Eligible Project Categories that will be funded by bond proceeds.

Contributing to the provision of affordable housing for disadvantaged populations

Proceeds from the bonds will finance the development and provision of social housing for disadvantaged populations. The city recognizes the negative effects that were generated from the real estate bubble and mortgage crisis in 2008 that resulted in the unfair evictions of thousands of Barcelona families.⁷ To address this challenge, within the Right to Housing Plan 2016-2025, the city outlines four main action areas which include maintaining emergency housing, guaranteeing the good use of housing, expanding the number of affordable apartments, and rehabilitating surrounding green spaces.⁸ The action plan includes initiatives undertaken by the City of Barcelona to increase emergency housing by 14% and social housing aid to vulnerable families to over €7 million by 2025.⁹ Sustainalytics considers this is an impactful use of

⁹ Barcelona Right to Housing Plan 2016 https://bcnroc.ajuntament.barcelona.cat/jspui/bitstream/11703/102247/1/pla-dret-habitatge-2016-2025-balanc2016.pdf.pdf



⁷ https://bcnroc.ajuntament.barcelona.cat/jspui/bitstream/11703/102247/1/pla-dret-habitatge-2016-2025-balanc2016.pdf.pdf

⁸ Barcelona Right to Housing Plan 2016 https://bcnroc.ajuntament.barcelona.cat/jspui/bitstream/11703/102247/1/pla-dret-habitatge-2016-2025-balanc2016.pdf.pdf

proceeds, especially considering the eligibility criteria, such as the income level, for beneficiaries to ensure affordable housing is provided to those in need.

Contributing to education and social inclusion

With the proceeds of the sustainability bonds, the City of Barcelona is planning to finance the construction, maintenance, and renovation of a number of public schools, public nurseries, and projects that serve youth and improve the social inclusion of vulnerable groups. Sustainalytics considers access to inclusive and equitable quality education a fundamental human right, recognized as bringing significant positive social benefits to society, especially when it is focused on children and other vulnerable groups. The City of Barcelona offers a wide network of public schools and nurseries. In 2017, the city offered 103 nursery schools (0-3 years), 172 schools for young children (3-6 years). In addition, there is an important network of public primary (165 in 2017) and secondary schools (70 in 2017), as well as special education schools (41 in 2017). With the proceeds of the 2017 sustainability bond, the city plans a number of improvements for public school and public nurseries located in disadvantaged neighbourhoods, including construction, purchase of furniture, and reconditioning for the Escola Massana (primary school), expansion of the Escola Ignasi Iglesias (primary school), and construction of the Guarderia Raval (nursery school). In addition, the city plans to fund a number of projects that improve the social cohesion of the city, such as equipment for people with disabilities and renovations to senior centres. Sustainalytics is of the opinion that supporting public education and social inclusion has meaningful positive social impacts.

Energy efficiency improvements for public markets

The City of Barcelona plans to fund a number of energy efficiency projects that will help it meet its 2030 target of reducing CO₂ emissions per capita by 40% compared to 2005 levels,¹⁰ and transition the city towards a low-carbon economy. Following an assessment of the 2017 Eligible Project portfolio, Sustainalytics concluded that a significant number of energy efficiency projects are focused on renovating public markets. In recent decades, markets have evolved by improving their infrastructure and modernizing logistics. Planned market improvement projects for this bond include improvements to ventilation systems, air conditioning systems, electricity consumption, and the incorporation of renewable energy, thereby lowering the energy efficiency, recommended practice in the green bond market is to invest in technologies that ensure a minimum of 20-30% performance improvement in energy efficiency. Despite no clear commitment with a minimum threshold, in the city's Strategic Plan for Markets, it is estimated that improving the energy efficiency of markets will result in significant energy savings, amounting to 6.8 kWh/m².¹¹ Taking this into consideration, it is Sustainalytics view that investing bond proceeds into market improvement projects that reduce energy use and greenhouse gas emissions will have positive environmental impacts and help the city achieve its overall CO₂ reduction targets.

¹⁰ http://ajuntament.barcelona.cat/premsa/wp-content/uploads/2015/11/Compromis_Bcn_Clima.pdf

¹¹ Strategic Plan for Barcelona's Markets 2015-2025 http://ajuntament.barcelona.cat/mercats/sites/default/files/Llibre%20pla%20estrategic.pdf



Alignment with the UN SDGs

The Sustainable Development Goals (SDGs) were set in September 2015 and form an agenda for achieving sustainable development by the year 2030. This Sustainability Bond Framework advances, in particular, the following SDG goals and targets:

Use of	SDG	SDG target
Proceeds		
Category		
Access to	4. Quality	4.2 - By 2030, ensure that all girls and boys have access to quality early childhood
Essential	Education	development, care and pre-primary education so that they are ready for primary
Services		education.
	10. Reduced	4.A - Build and upgrade education facilities that are child, disability and gender
Socioeconomic advancement	Inequalities	sensitive and provide safe, nonviolent, inclusive and effective learning environments for all.
	11. Sustainable	10.2 - By 2030, empower and promote the social, economic and political inclusion
Affordable Housing	Cities and Communities	of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status.
Housing	Communities	11.7 - By 2030, provide universal access to safe, inclusive and accessible, green and
		public spaces, in particular for women and children, older persons and persons with
		disabilities.
		11.1 - By 2030, ensure access for all to adequate, safe and affordable housing and
		basic services and upgrade slums.
Employment	8. Decent work	8.3 - Promote development-oriented policies that support productive activities,
generation	and economic	decent job creation, entrepreneurship, creativity and innovation, and encourage
Serieration	growth	the formalization and growth of micro-, small- and medium-sized enterprises,
	5	including through access to financial services
		8.6 - By 2020, substantially reduce the proportion of youth not in employment,
		education or training
Energy	9. Industry,	9.4 - By 2030, upgrade infrastructure and retrofit industries to make them
efficiency	Innovation, and	sustainable, with increased resource-use efficiency and greater adoption of clean
	Infrastructure	and environmentally sound technologies and industrial processes, with all countries
		taking action in accordance with their respective capabilities
Clean	11. Sustainable	11.2 - By 2030, provide access to safe, affordable, accessible and sustainable
Transportation	Cities and	transport systems for all, improving road safety, notably by expanding public
	Communities	transport, with special attention to the needs of those in vulnerable situations,
		women, children, persons with disabilities and older persons.
Pollution	6. Clean Water	6.1 - By 2030, achieve universal and equitable access to safe and affordable drinking
prevention and	and Sanitation	water for all.
control		6.3 - By 2030, improve water quality by reducing pollution, eliminating dumping
C		and minimizing release of hazardous chemicals and materials, halving the
Sustainable		proportion of untreated wastewater and substantially increasing recycling and safe
water		reuse globally.



Conclusion

By issuing sustainability bonds to finance environmental and social projects that promote a fairer and more inclusive society, improve the quality of life of vulnerable citizens, and enhance environmental sustainability, the City of Barcelona is carrying out the objectives of its social and environmental mandate.

Sustainalytics is of the opinion that the Eligible Project Categories will have clear social and environmental benefits, will contribute to achieving the City of Barcelona's sustainability vision and goals, and will help to advance SDGs 4, 6, 8, 9, 10 and 11.

All eligible projects will be vetted by an internal committee, comprised of members from the city's finance, investment services, urban ecology management, and social rights management offices. This is in line with market practice. Furthermore, the city will publish an annual Performance Report, in which it will provide, where feasible, information on a number of relevant social and environmental impact metrics. This is in line with market practice.

Based on the above, Sustainalytics is confident that the City of Barcelona is well positioned to issue sustainability bonds, and that the City of Barcelona Sustainability Bond Framework is robust, transparent, and aligned with the Sustainability Bond Guidelines 2017.



APPENDICES

Appendix 1: Sample Eligible Projects for the 2017 sustainability bond

Project Name	Description	Eligible Project Category
Massana School	Massana school construction	Access to Essential Services
Library Comtes de Bell-Iloc.	Library Comtes de Bell-Iloc, renovation	Access to Essential Services
Encants Nursery School	Encants nursery school construction	Access to Essential Services
Joan de Borbó, 44. Housing	Joan de Borbó, 44 housing renovations	Affordable Housing
Domestic violence shelters	Renovation of shelters for female victims of domestic violence	Affordable Housing
Raval Buildings renovation	Raval buildings, renovation and conservation	Affordable Housing
Equipment for vulnerable people	Furniture for vulnerable people	Socioeconomic advancement
Elderly housing	Elderly housing C. Calàbria, 256-260, renovations	Socioeconomic advancement
Information and Communication Technologies	Acquisition of ICT equipment	Socioeconomic advancement
Promotion of entrepreneurship	Promotion of entrepreneurship, improve facilities	Employment generation
Promotion of entrepreneurship	Promotion of entrepreneurship, information systems development	Employment generation
Social and economic projects	Adaptation of buildings for social and economic solidarity projects	Employment generation
Bon Pastor Market	Renovation of Bon Pastor Market	Energy Efficiency
Sant Andreu Market	Renovation of Sant Andreu Market	Energy Efficiency
City lighting	Comprehensive maintenance plan for city lighting	Energy Efficiency
Electric vehicles	Installation of charging stations	Clean Transportation
Promotion of cycling	Improvements for the promotion of cycling	Clean Transportation
Public transit	Transit control centre systems improvements	Clean Transportation
Urban waste collection	Improvements to the San Andreu area solid waste collection system	Pollution prevention and control
Sewer and drainage systems improvements	Sewer master plan upgrade, drainage and sewer network	Pollution prevention and control
Environmental monitoring equipment	Repair and improvement of environmental monitoring equipment	Pollution prevention and control
Water network improvements	Water network, improvements, repairs, and commissioning of facilities	Sustainable water
Alternative water resources plan	Upgrades to the plan for harnessing alternative water resources	Sustainable water
Irrigation networks renewal	Comprehensive rehabilitation plan for the renewal of irrigation networks	Sustainable water



Appendix 2: Green Bond Programme External Review Form

Green Bond Programme External Review Form

Section 1. **Basic Information**

Issuer name: The City of Barcelona

Green Bond ISIN or Issuer Green Bond Framework Name: City of Barcelona Sustainability Bond Framework

Review provider's name: Sustainalytics

Completion date of this form: November 17th, 2017

Publication date of review publication: November 17th, 2017

Section 2. Review overview

SCOPE OF REVIEW

The review assessed the following elements and confirmed their alignment with the GBPs:

- X Use of Proceeds Process for Project Evaluation and Selection \times
- \mathbf{X} Management of Proceeds \times Reporting

ROLE(S) OF REVIEW PROVIDER

- Consultancy (incl. 2nd opinion) Certification X Rating П
- Verification Π
- Other (please specify):

EXECUTIVE SUMMARY OF REVIEW and/or LINK TO FULL REVIEW (*if applicable*)

Please refer to the City of Barcelona Sustainability Bond Framework, available at http://governobert.bcn.cat/estrategiaifinances/sites/default/files/Documents/PDF/AB_SustainabilityBo ndFramework_2017.pdf and Second Opinion Document above. The Sustainability Bond Guidelines have been referenced for this external review form



Section 3. Detailed review

1. USE OF PROCEEDS

Overall comment on section

Sustainalytics is confident that the issuance of the City of Barcelona's sustainability bonds aligns with the city's social and environmental mandate and will advance the city's long-term sustainability goals. Proceeds of the Sustainability Bond will be used to finance existing projects and future projects in the following categories: access to essential services, socioeconomic advancement, affordable housing, employment generation, energy efficiency, clean transportation, pollution prevention and control, and sustainable water. The eligible categories are aligned with those recognized by the Sustainability Bond Guidelines 2017. Furthermore, Sustainalytics is of the opinion that the planned use of proceeds from the Sustainability Bond will have clear environmental and social benefits and contribute to advancing the United Nation's Sustainable Development Goals 4,6,8,9,10, and 11.

Use of proceeds categories as per GBP:

- □ Renewable energy
- Pollution prevention and control
- Terrestrial and aquatic biodiversity conservation
- Sustainable water management
- □ Eco-efficient products, production technologies and processes

- ☑ Energy efficiency
- Sustainable management of living natural resources
- ☑ Clean transportation
- □ Climate change adaptation
- ⊠ Other
 - Access to Essential Services
 - Socioeconomic advancement
 - Affordable Housing
 - Employment Generation
- Unknown at issuance but currently expected to conform with GBP categories, or other eligible areas not yet stated in GBPs

If applicable please specify the environmental taxonomy, if other than GBPs:



2. PROCESS FOR PROJECT EVALUATION AND SELECTION

Overall comment on section:

The City of Barcelona has a dedicated internal Selection, Monitoring, and Evaluation Committee that will analyse and select eligible programs/projects that will receive funding from the sustainability bonds. The committee is formed by senior finance and investment services executives along with members of the Urban Ecology and Social Rights Management groups. This is aligned with market practice.

Evaluation and selection

- Defined and transparent criteria for projects eligible for Green Bond proceeds
- Summary criteria for project evaluation and selection publicly available

Information on Responsibilities and Accountability

- □ Evaluation / Selection criteria subject to In-house assessment external advice or verification
- □ Other (please specify):

3. MANAGEMENT OF PROCEEDS

Overall comment on section (*if applicable*):

The proceeds of the sustainability bonds will be allocated to eligible programs in the General Budget of the City of Barcelona, corresponding to the fiscal year of the Sustainability Bond issuance.

The total expenditures required for the eligible programs will equal or exceed the net bond proceeds.

• Proceeds from the Sustainability Bonds will be immediately allocated. In any case where this does not occur, the management of proceeds pending allocation is carried out in line with the City of Barcelona's liquidity management practice. If there are any projects that do not materialize in the fiscal year of the bond issuance, or if an allocated project no longer meets the eligibility criteria, proceeds from the bonds will be re-allocated towards new Eligible Projects. This is in line with market practice.

Tracking of proceeds:

- Green Bond proceeds segregated or tracked by the issuer in a systematic manner
- Disclosure of intended types of temporary investment instruments for unallocated proceeds
- □ Other (please specify):

Additional disclosure:



- Documented process to determine that projects fit within defined categories
- □ Other (*please specify*):

- □ Allocations to future investments only
- Allocation to individual disbursements
- Disclosure of portfolio balance of unallocated proceeds

4. REPORTING

Overall comment on section:

Allocations to both existing and future investments

- □ Allocation to a portfolio of disbursements
- □ Other (*please specify*):

Annual allocation reporting will be made available to investors on the City of Barcelona's website. The reporting will outline the total amount allocated to the various eligible projects until all proceeds have been allocated. This information will be externally reviewed, which is in line with market best practice. The City of Barcelona has committed to annual impact reporting on quantitative KPIs relevant to both green and social project categories. For example, this reporting will include, among other indicators, the number of affordable housing units built, the number of jobs created, and the amount of greenhouse gas emissions reduced or avoided due to Energy Efficiency and Clean Transportation investments. This is aligned with market best practice.

Use of proceeds reporting:

\boxtimes	Project-by-project		On a project portfolio basis				
	Linkage to individual bond(s)		Other (please specify):				
Info	rmation reported:						
	⊠Allocated amounts		GB financed share of total investment				
	□ Other (please specify):						
Frequency:							
	⊠Annual		Semi-annual				
	□ Other (please specify):						
Impact reporting:							
	Project-by-project	\boxtimes	On a project portfolio basis				
	Linkage to individual bond(s)	\boxtimes	Other (please specify):				
			Detailed by project where feasible				
Frequency:							
	⊠Annual		Semi-annual				

□ Other (*please specify*):

Information reported (expected or ex-post):

⊠GHG Emissions / Savings

☑ Energy Savings

⊠Other ESG indicators Number of beneficiaries Number of dwellings Number of projects Number of SMEs supported Number of jobs created/preserved

Means of Disclosure

- □ Information published in financial report
- Information published in ad hoc documents
- □ Information published in sustainability report
- Other (please specify):
 Allocation reporting made publicly available on website
 Performance Report will be published on impact metrics

Reporting reviewed (if yes, please specify which parts of the reporting are subject to external review): Allocation reporting reviewed by an independent auditor

USEFUL LINKS (e.g. to review provider methodology or credentials, to issuer's documentation, etc.)

http://governobert.bcn.cat/estrategiaifinances/sites/default/files/Documents/PDF/AB_SustainabilityBondFramework_2017.pdf

SPECIFY OTHER EXTERNAL REVIEWS AVAILABLE, IF APPROPRIATE Type(s) of Review provided:

 ☑
 Consultancy (incl. 2nd opinion)
 □
 Certification

 □
 Verification / Audit
 □
 Rating

 □
 Other (please specify):
 □

Review provider(s):

Date of publication:



ABOUT ROLE(S) OF REVIEW PROVIDERS AS DEFINED BY THE GBP

- (i) Consultant Review: An issuer can seek advice from consultants and/or institutions with recognized expertise in environmental sustainability or other aspects of the issuance of a Green Bond, such as the establishment/review of an issuer's Green Bond framework. "Second opinions" may fall into this category.
- (ii) Verification: An issuer can have its Green Bond, associated Green Bond framework, or underlying assets independently verified by qualified parties, such as auditors. In contrast to certification, verification may focus on alignment with internal standards or claims made by the issuer. Evaluation of the environmentally sustainable features of underlying assets may be termed verification and may reference external criteria.
- (iii) Certification: An issuer can have its Green Bond or associated Green Bond framework or Use of Proceeds certified against an external green assessment standard. An assessment standard defines criteria, and alignment with such criteria is tested by qualified third parties / certifiers.
- (iv) Rating: An issuer can have its Green Bond or associated Green Bond framework rated by qualified third parties, such as specialised research providers or rating agencies. Green Bond ratings are separate from an issuer's ESG rating as they typically apply to individual securities or Green Bond frameworks / programmes.

Disclaimer

All rights reserved. No part of this second party opinion (the "Opinion") may be reproduced, transmitted or published in any form or by any means without the prior written permission of Sustainalytics.

The Opinion was drawn up with the aim to explain why the analyzed bond is considered sustainable and responsible. Consequently, this Opinion is for information purposes only and Sustainalytics will not accept any form of liability for the substance of the opinion and/or any liability for damage arising from the use of this Opinion and/or the information provided in it.

As the Opinion is based on information made available by the client, Sustainalytics does not warrant that the information presented in this Opinion is complete, accurate or up to date.

Nothing contained in this Opinion shall be construed as to make a representation or warranty, express or implied, regarding the advisability to invest in or include companies in investable universes and/or portfolios. Furthermore, this Opinion shall in no event be interpreted and construed as an assessment of the economic performance and credit worthiness of the bond, nor to have focused on the effective allocation of the funds' use of proceeds.

The client is fully responsible for certifying and ensuring its commitments` compliance, implementation and monitoring.



SUSTAINALYTICS

Sustainalytics is an independent ESG and corporate governance research, ratings and analysis firm supporting investors around the world with the development and implementation of responsible investment strategies. With 13 offices globally, Sustainalytics partners with institutional investors who integrate environmental, social and governance information and assessments into their investment processes. Today, the firm has more than 300 staff members, including 170 analysts with varied multidisciplinary expertise of more than 40 sectors. Through the IRRI survey, investors selected Sustainalytics as the best independent responsible investment research firm for three consecutive years, 2012 through 2014 and in 2015, Sustainalytics was named among the top three firms for both ESG and Corporate Governance research. The firm was also named the Best SRI or Green Bond Research Firm by Global Capital in 2015 and Most Impressive Second Opinion Provider in 2017. For more information, visit www.sustainalytics.com

Sustainalytics info@sustainalytics.com www.sustainalytics.com









