



Fastighets AB Balder Green Bond Second Opinion

May 15, 2019

Overall, Balder's Green Bond Framework provides a clear and sound framework for investments in projects that align with the Green Bond Principles (2018). Eligible project categories include Green (and energy efficient) Buildings, Energy Efficiency improvements, and Renewable Energy.

The eligibility criteria for buildings include energy efficiency requirements, which is positive. However, since buildings have a long lifetime and standards continuously improve, only a subset of building specifications are awarded best-in-class rating. The green bond proceeds can be used to finance new projects as well as refinance existing eligible projects.

Balder has in place a sound structure for managing its green bond framework. The green bond committee will consist of the company's Head of Finance and Head of Sustainability. Eligible projects require unanimous approval.

The issuer will provide regular reporting on green bond allocations and project achievements to investors. The reporting plans demonstrate ambition and attention to detail.

Balder has positive ambitions in terms of the overall sustainability profile of its operations. The company's sustainability policies and procedures are good and will be undergoing further improvements. Balder has not yet signed the Global Compact nor is it undertaking full LCA analysis or GHG reporting on sub-suppliers, but the company has communicated that commitments in these areas are likely to be further strengthened in the coming years.

Based on the overall assessment of the project types that will be financed by the green bonds and governance and transparency considerations, Balder's Green Bond Framework receives a **Medium Green** shading. Balder is encouraged to consider construction phase emissions, screen for physical climate risks and systematically work on reducing emissions related to transportation to and from the properties.

SHADES OF GREEN

Based on our review, we rate the Balder green bond framework **Medium Green**.

Included in the overall shading is an assessment of the governance structure of the green bond framework. CICERO Shades of Green finds the governance procedures in Balder's framework to be **Good**.



GREEN BOND PRINCIPLES

Based on this review, this Framework is found in alignment with the principles.



°CICERO
Medium Green



Contents

1	Terms and methodology	3
	Expressing concerns with 'shades of green'	3
2	Brief description of Fastighets AB Balder's green bond framework and related policies	4
	Environmental Strategies and Policies:	4
	Use of proceeds:	5
	Selection:	5
	Management of proceeds:	5
	Reporting:	6
3	Assessment of Balder's green bond framework and policies	7
	Overall shading	7
	Eligible projects under the Balder's green bond framework	7
	Building sector certification schemes and CICERO's assessment of Green Bond Frameworks	9
	Governance Assessment	9
	Strengths	10
	<i>Governance</i>	10
	<i>Project Categories</i>	10
	Pitfalls	11
	<i>Governance</i>	11
	<i>Project Categories</i>	11
	Appendix 1:	12
	Referenced Documents List	12
	Appendix 2: About CICERO Shades of Green	13



1 Terms and methodology

This note provides CICERO Shades of Green's (CICERO Green) second opinion of Fastighets AB Balder's (henceforth 'Balder') green bond framework dated 10/05/2019. This second opinion remains relevant to all green bonds issued under this framework for the duration of three years from publication of this second opinion, as long as the framework remains unchanged. Any amendments or updates to the framework require a revised second opinion. CICERO Green encourages the client to make this second opinion publicly available. If any part of the second opinion is quoted, the full report must be made available.

The second opinion is based on a review of the framework and documentation of Balder's policies and processes, as well as information gathered during meetings, teleconferences and email correspondence with the issuer.

Expressing concerns with 'shades of green'

CICERO Green second opinions are graded dark green, medium green or light green, reflecting a broad, qualitative review of the climate and environmental risks and ambitions of the bonds. The shading methodology aims to provide transparency to investors that seek to understand and act upon potential exposure to climate risks and impacts. Investments in all shades of green projects are necessary in order to successfully implement the ambition of the Paris agreement. The shades are intended to communicate the following:

CICERO Shades of Green



Dark green is allocated to projects and solutions that correspond to the long-term vision of a low carbon and climate resilient future. Fossil-fueled technologies that lock in long-term emissions do not qualify for financing. Ideally, exposure to transitional and physical climate risk is considered or mitigated.



Medium green is allocated to projects and solutions that represent steps towards the long-term vision, but are not quite there yet. Fossil-fueled technologies that lock in long-term emissions do not qualify for financing. Physical and transition climate risks might be considered.



Light green is allocated to projects and solutions that are climate friendly but do not represent or contribute to the long-term vision. These represent necessary and potentially significant short-term GHG emission reductions, but need to be managed to avoid extension of equipment lifetime that can lock-in fossil fuel elements. Projects may be exposed to the physical and transitional climate risk without appropriate strategies in place to protect them.



Brown is allocated to projects and solutions that are in opposition to the long-term vision of a low carbon and climate resilient future.

Examples



Wind energy projects with a strong governance structure that integrates environmental concerns



Bridging technologies such as plug-in hybrid buses



Efficiency investments for fossil fuel technologies where clean alternatives are not available



New infrastructure for coal

Sound governance and transparency processes facilitate delivery of Balder's climate and environmental ambitions as laid out in the framework. Hence, the governance aspects are carefully considered and reflected in the overall shading of the green bond framework. CICERO Green considers four factors in its review of Balder's governance processes: 1) the policies and goals of relevance to the green bond framework; 2) the selection process used to identify and approve eligible projects under the framework, 3) the management of proceeds and 4) the reporting on the projects to investors. Based on these factors, we assign an overall governance grade: Fair, Good or Excellent.



2 Brief description of Fastighets AB Balder's green bond framework and related policies

Fastighets AB Balder (henceforth "Balder") is a Swedish listed property company, headquartered in Gothenburg. Balder's real estate portfolio had a value of SEK 118.1 billion as of 31 December 2018. The company was established in 2005 and is listed on Nasdaq Stockholm, Large Cap.

Balder acquires, develops and manages residential and commercial properties in larger cities and cities with growth potential in Sweden, Denmark, Finland, Norway, Germany and Great Britain. The largest component (as measured by carrying amount (December 31, 2018 figures)) of its real estate portfolio is in Helsinki (26%), followed by Stockholm (20%), Gothenburg (19%) and Öresund (16%).

Environmental Strategies and Policies:

Balder states that it takes a long-term perspective on urban development and property development, prioritising stable cash flows and satisfied customers and employees. It recognizes that buildings have a large impact on society and the environment, and that sustainability is a crucial component of its business. Its environmental strategy focuses on minimising the use of energy, water and chemicals.

The company's ambition is to choose renewable sources of energy whenever possible as well as non-hazardous building materials (using schemes such as Swedish Building Materials Assessment or SundaHus, and certifications such as FSC or PEFC for wood products). It has introduced measures to minimise waste and encourage re-cycling amongst tenants. In order to minimize its carbon footprint from transport, Balder has a travel policy which supports more environmentally friendly means of transportation, and alternatives to business trips, such as video conferences and telephone meetings, are encouraged. It has installed charging stations for electric vehicles in several of its buildings.

Energy consumption is the largest single contributor to Balder's environmental footprint. In order to lower the energy use of its buildings, Balder trains its employees in how to relay sustainability options to tenants, and conducts projects aimed at improving performance of the insulation, ventilation, laundry rooms, light systems and windows of its buildings. Plans to switch the heating energy source to district heating have been made in those instances where buildings are still reliant on oil/natural gas. The company owns two wind farms and is looking to expand installations of on-site photovoltaics.

Balder has environmental certificates such as Miljöbyggnad, BREEAM, LEED and Green Building for some of its buildings. In Denmark several buildings are constructed according to the Nearly Zero-Energy Building (NZEB) standard. The goal is for all new residential constructions in Sweden to meet the requirements of Miljöbyggnad Silver or equivalent certification.

Socially, Balder strives to be a positive influence in the neighbourhoods where it owns property. To do this, Balder undertakes projects to improve integration, security and community satisfaction in cooperation with other members of the community such as municipalities, schools, the police and local associations.



Use of proceeds:

The proceeds from Green Bonds issued under this framework will be invested in assets and projects which contribute either to climate change mitigation or adaptation. The eligible categories are Green (and Energy Efficient) Buildings, Energy Efficiency, and Renewable Energy – as per the ICMA Green Bond Principles 2018 definition. Proceeds may be used for both the funding of new assets and projects as well as re-financing.

Green Bonds will not be used to finance investments linked to fossil energy generation, nuclear energy generation, the weapons and defense industries, potentially environmentally negative resource extraction, gambling or tobacco.

Selection:

The selection process is a key governance factor in the Green bond Principles. CICERO Green considers how climate and environmental considerations are taken into account when evaluating whether projects can qualify for green bond funding. Balder's green bond framework outlines a detailed and transparent selection procedure that is in line with the Green Bonds Principles.

A Green Bond Committee has been formed, consisting of Balder's Head of Finance and Head of Sustainability. The committee will meet at least twice yearly and is responsible for evaluating and selecting assets and projects eligible for Green Bond funding. Eligible assets and projects must be aligned with i) the structure outlined in the Use of Proceeds section of the Green Bond Framework as well as ii) all relevant internal policies and guiding documents, including the company's Sustainability Policy and Code of Conduct.

Suggestions for potentially eligible assets and projects will be brought to the Green Bond Committee by project managers and other employees. A record will be kept by the committee of the assessment and decisions regarding the selection of projects.

The Green Bond Committee will be responsible for any future updates to the Green Bond Framework.

The company has clarified that should either the Head of Sustainability or the Head of Finance (i.e. any member of the Green Bond Committee) oppose the selection of an asset for green bond financing, it will not be selected.

Management of proceeds:

The net proceeds of any bond issued under this Green Bond framework will be tracked by Balder in accordance with its internal instructions and will be monitored by the internal auditing department. Balder will keep a record of which assets have been financed with proceeds from a Green Bond.

If an asset or project financed by a Green Bond no longer qualifies as eligible during the life of the bond, the asset or project will be replaced by other assets or projects that meet the definitions set out in this Green Bond Framework. Balder's executive management team will ensure that the amount of identified eligible assets and projects exceeds the total amount of Green Bonds outstanding at the maturity of the bonds.

Balder will keep and monitor a separate register of Eligible Projects and net proceeds from the combined Green Bond issuance. If, at any time, the total amount of proceeds from Green Bonds exceed the total value of Eligible Projects, this will be placed in line with Balder's handling of short term excess liquidity. Proceeds from Green Bonds will not be used to finance investments linked to fossil energy generation, nuclear energy generation, the weapons and defence industries, potentially environmentally negative resource extraction, gambling or tobacco.



Reporting:

Transparency, reporting, and verification of impacts are key to enable investors to follow the implementation of green bond programs. Procedures for reporting and disclosure of green bond investments are also vital to build confidence that green bonds are contributing towards a sustainable and climate-friendly future, both among investors and in society.

Balder will provide transparency on the impact related to investments made with proceeds from their Green Bond issuances by means of an Impact Report. The report will be published annually on Balder's website so long as Balder has Green Bonds outstanding.

The report shall include the following components related to the allocation of proceeds:

- A list of all eligible assets and projects funded including amounts allocated
- More detailed descriptions of a few selected projects and/or assets financed by Green Bonds
- Amounts invested in each investment category as defined in the Use of Proceeds section and the relative share of new financing versus refinancing

The report shall include the following components related to impact:

Balder will strive to report on the actual environmental impact of the investments financed by their Green Bonds. If/when actual impact for some reason is not observable, or unreasonably difficult to source, estimated impact shall be reported.

The impact indicators may vary by investment category, and may include the following:

Green and energy efficient buildings

- A list of all buildings funded showing, per building:
 - i) Environmental certification,
 - ii) Energy consumption by absolute consumption (kWh) and intensity (kWh/sq meter) per year
 - iii) Carbon dioxide emissions avoided(tCO₂e)
 - iv) Energy source by relative split

Energy efficiency

- Amount of energy saved (MWh) or estimated annual GHG emissions reduced or avoided (tCO₂e) per project

Renewable energy

- Annual generation (MWh) or estimated annual GHG emissions avoided (tCO₂e)

The issuer has clarified that the estimation method will be presented alongside the estimates. GHG emissions reporting will be in accordance with the GHG Protocol. Balder has also confirmed that, if CO₂ savings are presented, the same grid factor will be applied to the calculations as the one used for calculating the company's emissions as a whole

Balder has not yet decided if its investor report will be externally verified.



3 Assessment of Balder’s green bond framework and policies


The framework and procedures for Balder’s green bond investments are assessed and their strengths and weaknesses are discussed in this section. The strengths of an investment framework with respect to environmental impact are areas where it clearly supports low-carbon projects; weaknesses are typically areas that are unclear or too general. Pitfalls are also raised in this section to note areas where Balder should be aware of potential macro-level impacts of investment projects.

Overall shading

Based on the project category shadings detailed below, and consideration of environmental ambitions and governance structure reflected in Balder’s green bond framework, we rate the framework **CICERO Medium Green**.

Eligible projects under the Balder’s green bond framework

At the basic level, the selection of eligible project categories is the primary mechanism to ensure that projects deliver environmental benefits. Through selection of project categories with clear environmental benefits, green bonds aim to provide investors with certainty that their investments deliver environmental returns as well as financial returns. The Green Bonds Principles (GBP) state that the “overall environmental profile” of a project should be assessed and that the selection process should be “well defined”.

Category	Eligible project types	Green Shading and some concerns
Green and energy efficient buildings 	Newly constructed, acquired, refurbished or existing buildings which have at least one of the following certificates: <ul style="list-style-type: none"> • Miljöbyggnad “Silver” certification (or better) • LEED “Gold” certification (or better) • BREEAM “Very Good” certification (or better) • Nordic Swan Ecolabel • BREEAM in-use Very Good certification • Nearly Zero Energy Building¹ are eligible 	Medium to Light Green <ul style="list-style-type: none"> ✓ Miljöbyggnad Silver means that energy use has to be 25% lower than that required by Swedish Building Regulations (if heated by electricity, it has to be 5% lower) ✓ The addition of energy efficiency requirements add comfort to investors who are concerned with

¹ Near Zero Emission Buildings are defined in line with EC Article 2(2) of the EPBD (EU directive ' Energy Performance of Buildings Directive '). Nordic, zone 5: i) offices 55-70 kWh/(m2.y) of net primary energy with typically, 85-100 kWh/(m2.y) of primary energy use covered by 30 kWh/(m2.y) of on-site renewable sources and ii) new single family houses 40-65 kWh/(m2.y) of net primary energy with, typically, 65-90 kWh/(m2.y) of primary energy use covered by 25 kWh/(m2.y) of on-site renewable sources.



In addition to the certificates, all eligible buildings have additional requirements on energy efficiency. Eligible new buildings and buildings with major renovations done to them will have at least 25% better energy efficiency compared to National Building Regulation valid at the time of approval by the Green Bond Committee. Eligible existing buildings will have at least 25% better energy efficiency compared to National Building Regulation valid when the building was awarded a certificate.

the energy footprint of buildings, however an existing building's energy efficiency performance will depend on the year in which it was built.

- ✓ Buildings in Denmark are subject to high requirements when it comes to energy performance. Denmark has chosen to interpret 'near zero' (EU legislation) as a maximum consumption of 20 kWh/m² per year for residential buildings, which corresponds to a 75% reduction compared to the requirement in 2008.
- ✓ The reference to light green is because eligible buildings could be heated directly by fossil fuels in e.g. UK and Germany. In the Nordic countries the issuer has confirmed that all direct fossil fuel heating will be replaced by district heating.
- ✓ Be aware of lock-in effects, especially when it comes to investments in Germany and the UK where buildings today may be primarily heated by fossil fuels.

Energy Efficiency



Projects which aim to improve the energy efficiency by at least 25 %. These may include,

Medium Green

- ✓ According to the IEA, a 30% reduction would be necessary to be in line with the IEA 'well below 2 C' target
- ✓ For investments into energy efficiency, the



but are not limited to, performance improvement to the insulation, ventilation, light systems and windows of buildings owned by Balder.

issuer should consider the potential for rebound effects for energy consumption and lock-in effects of upgrades of fossil-fuel based heating sources.

Renewable Energy



To increase the share of renewable energy used within Balder's building stock and operations, Balder will invest renewable energy sources, exemplified by but not limited to solar power equipment and various types of geothermal energy solutions.

Dark Green

- ✓ The issuer should be mindful of the potential for heavy metal pollution from geothermal energy

Table 1. Eligible project categories

Building sector certification schemes and CICERO's assessment of Green Bond Frameworks

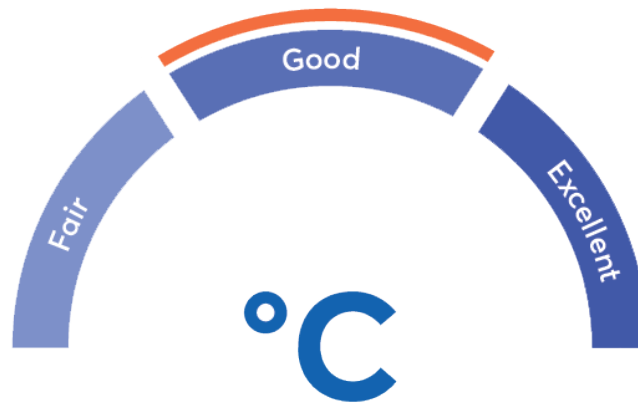
In addition to energy performance certificates (EPCs), buildings can be certified by sustainability schemes such as the Sweden-specific *Miljöbyggnad* (in addition to energy use, indoor climate and material use are assessed), the Nordic Swan (*Svanen*) system, Passive House, Green Building (a reduction in energy use of 25% is required), LEED, BREEAM or BREEAM-SE. These schemes provide varying degrees of measurement of the environmental footprint of a building, including energy use. Some are more stringent than others and also offer internal gradings (excellent-good, platinum-silver, etc.). Certifications such as LEED and BREEAM measure or estimate the environmental footprint of buildings and raise awareness of environmental issues however they fall short of guaranteeing an environmentally-friendly building. Therefore, CICERO also looks at the energy efficiency improvements of the building and targets which exceed existing regulations. In a low carbon 2050 perspective, the energy performance of buildings is expected to be improved, with passive house technology becoming mainstream and the energy performance of existing buildings greatly improved through refurbishments. According to the International Energy Agency (IEA), efficiency of buildings needs to improve by 30% by 2025 in order to reach the Paris Agreement well below 2°C climate goal².

The CICERO Dark Green shading is difficult to achieve in particular in the building sector because buildings have a long lifetime. CICERO Dark Green shading in the building sector should therefore conform to strict measures and is reserved for the highest building standards such as LEED Platinum, Zero-Energy buildings and passive houses.

Governance Assessment

Four aspects are studied when assessing the Balder's governance procedures: 1) the policies and goals of relevance to the green bond framework; 2) the selection process used to identify eligible projects under the framework; 3) the management of proceeds; and 4) the reporting on the projects to investors. Based on these aspects, an overall grading is given on governance strength falling into one of three classes: Fair, Good or Excellent.

² Source: <https://www.iea.org/tcep/>



The overall assessment of Balder’s governance structure and processes gives it a rating of Good.

The company’s sustainability policies and procedures are good and will be undergoing further improvements. Balder has not yet signed the Global Compact nor is it undertaking full LCA analysis or GHG reporting on sub-suppliers (Scope 2 and 3) but the company has communicated that commitments in these areas are likely to be further strengthened in the coming years. The company does not yet undertake scenario analysis – an important tool for climate change adaptation - for its construction activities but has identified this as an area it would like to develop. Balder has an environmental working group consisting of the Head of Energy, Environment and Technology and the Head of Sustainability. An energy controller has recently been hired, and together, this group will work on establishing more goals and KPIs in the environmental area.

Strengths

Governance

Balder has positive ambitions in terms of the overall sustainability profile of its operations. For the areas where it is currently lagging behind current best-practice, it has signaled intent to improve and increasingly become aligned with high standards.

Project Categories

Balder’s Green Bond Framework provides a clear framework for financing its green ambitions related to energy efficient and environmentally friendly buildings.

For the category ‘Green and Energy Efficient Buildings’, the Green Bond Framework requires energy efficiency improvements of 25 % compared to standard regulatory requirements. This is positive, as energy use is one of the most direct drivers of climate change.

Weaknesses

We find no overall weaknesses in Balder’s Green Bond Framework.



Pitfalls

Governance

Management of Proceeds: While Balder has applied several exclusion criteria for the temporary management of bond proceeds (before they are allocated, or re-allocated to eligible green projects), its instructions fall short of industry best-practice and recommendations of the Green Bond Principles³ (which recommend that *the issuer shall make known to investors the intended types of temporary placement for the balance of unallocated net proceeds*).

Project Categories

Whilst the addition of energy efficiency requirements to eligible green buildings is positive, the 25% improvement for existing buildings applies in comparison to the year in which it was awarded certification which may or may not have had stringent building regulations.

CICERO Green also assesses if there is any screening for potential impacts from more extreme weather events, such as flooding and forest fires. Flood risk for properties is of particular concern in vulnerable geographic regions such as those close to rivers that are exposed to flood risks. We also factor in if there have been any considerations around transportation solutions and environmental impacts in the construction phase of the building (building material and waste considerations). The issuer does not screen for physical risks and only has some examples of investments in electric charging infrastructure related to its buildings. The issuer is therefore encouraged to systematically screen for physical climate risks and work on reducing emissions related to transportation to and from the properties.

Impact beyond the project boundaries

Due to the complexity of how socio-economic activities impact the climate, a specific project is likely to have interactions with the broader community beyond the project borders. These interactions may or may not be climate-friendly, and thus need to be considered with regards to the net impact of climate-related investments.

Balder is aiming to increase its use of life-cycle analysis (LCA) and this would be a positive step in this regard.

Rebound effects

Efficiency improvements may lead to rebound effects. When the cost of an activity is reduced there will be incentives to do more of the same activity. From the project categories in Table 1, an example is green buildings. Balder should be aware of such effects and if possible avoid Green Bond funding of projects where the risk of rebound effects is particularly high.

³ ICMA, 2018, Green Bond Principles



Appendix 1: Referenced Documents List

Document Number	Document Name	Description
1	Balder Green Bond Framework Final Draft (10.05.19)	Balder's Green Bond Framework
2	Balder Uppforandekod	Balder's Code of Conduct
3	Balder hållbarhetspolicy	Balder's Sustainability Policy
4	Outlook: Annual Report 2018	Balder's Annual Report for 2018
5	https://www.sato.fi/en/sato-company/environment	Misc. document on Sato: a majority-owned (54%) company in Balder's portfolio
6	Green Bonds 09.04.19	Description of Balder's near-zero buildings in Denmark



Appendix 2: About CICERO Shades of Green

CICERO Green is a subsidiary of the climate research institute CICERO. CICERO is Norway's foremost institute for interdisciplinary climate research. We deliver new insight that helps solve the climate challenge and strengthen international cooperation. CICERO has garnered attention for its work on the effects of manmade emissions on the climate and has played an active role in the UN's IPCC since 1995. CICERO staff provide quality control and methodological development for CICERO Green.

CICERO Green provides second opinions on institutions' frameworks and guidance for assessing and selecting eligible projects for green bond investments. CICERO Green is internationally recognized as a leading provider of independent reviews of green bonds, since the market's inception in 2008. CICERO Green is independent of the entity issuing the bond, its directors, senior management and advisers, and is remunerated in a way that prevents any conflicts of interests arising as a result of the fee structure. CICERO Green operates independently from the financial sector and other stakeholders to preserve the unbiased nature and high quality of second opinions.

We work with both international and domestic issuers, drawing on the global expertise of the Expert Network on Second Opinions (ENSO). Led by CICERO Green, ENSO contributes expertise to the second opinions, and is comprised of a network of trusted, independent research institutions and reputable experts on climate change and other environmental issues, including the Basque Center for Climate Change (BC3), the Stockholm Environment Institute, the Institute of Energy, Environment and Economy at Tsinghua University and the International Institute for Sustainable Development (IISD).

