

'Second Opinion' on Willhem's Green Bond Framework

26th January 2018

Summary

Overall, Willhem's Green Bond Framework provides a clear and sound framework for climate-friendly investments. The framework lists eligible categories of assets that are supportive of the objective of promoting a transition to low-carbon and climate-resilient growth and is supported by a strong governance structure.

In a low carbon 2050 perspective the energy performance of buildings is expected to be improved, with passive and plus house technologies becoming mainstream and the energy performance of existing buildings greatly improved through refurbishments. Willhem is not there yet but is taking valuable steps towards this long-term vision. Thus, new buildings are required to have energy intensities at least 25% below the current building standards (BBR requirements) and /or meet the requirements for a level of green building certification that requires some level of energy efficiency. The criteria used for classification of buildings are not the strictest in use and in the framework, there is no requirement to obtain an actual certification. In the case that a building meets the criteria for a green building certification, but lacks the actual certification, the issuer should report transparently on the technical aspects of the building, showing compliance with criteria, and the process used to determine compliance. The issuer has informed us that the majority of buildings will likely be Miljöbyggnad certified (minimum silver) which corresponds to 20-30 % reduction in energy consumption for new buildings compared to regulations. Willhem's green bond framework also lists renewable energy projects and projects related to environmentally friendly transport. Managing of proceeds and reporting are of high standards and includes impact reporting.

Proceeds from Willhem's green bonds will not be used to finance any fossil fuel energy projects. However, there is a small risk that some of the buildings acquired could be heated by fossil fuels such as natural gas. In such cases the company has in place a strategy that fossil fuel energy production should be replaced with renewables. Car pool solutions eligible for green bond financing could include fossil fuel cars.

Overall, Willhem's Green Bond Framework is in accordance with the Green Bond Principles. Based on the overall assessment of the assets and project types that will be financed by the Willhem's Green Bond and governance and transparency considerations, Willhem's Green Bond Framework gets a Medium Green shading. A dark green shading would require a higher focus on implementing 2050-solutions today such as plus or passive houses and avoidance of fossil fuel cars in car-pools.



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1 Introduction and background

As an independent, not-for-profit, research institute, CICERO (Center for International Climate and Environmental Research - Oslo) provides Second Opinions on institutions' framework and guidance for assessing and selecting eligible projects for green bond investments, and assesses the framework's robustness in meeting the institutions' environmental objectives. The Second Opinion is based on documentation of rules and frameworks provided by the institutions themselves (the client) and information gathered during meetings, teleconferences and e-mail correspondence with the client.

CICERO 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 has established the global Expert Network on Second Opinions (ENSO), a network of independent non-profit research institutions on climate change and other environmental issues, to broaden the technical expertise and regional experience for Second Opinions. CICERO works confidentially with other members in the network to enhance the links to climate and environmental science, building upon the CICERO model for Second Opinions. In addition to CICERO, ENSO members currently include Basque Center for Climate Change (BC3), International Institute for Sustainable Development (IISD), Stockholm Environment Institute (SEI), and Tsinghua University's Institute of Energy, Environment and Economy. A more detailed description of CICERO can be found at the end of this report. ENSO encourages the client to make this Second Opinion publically available. If any part of the Second Opinion is quoted, the full report must be made available.

CICERO's Second Opinions are normally restricted to an evaluation of the mechanisms or framework for selecting eligible projects at a general level. CICERO does not validate or certify the climate effects of single projects, and thus, has no conflict of interest in regard to single projects. CICERO is neither responsible for how the framework or mechanisms are implemented and followed up by the institutions, nor the outcome of investments in eligible projects.

This note provides a Second Opinion of Willhem's Green Bonds Framework and policies for considering the environmental impacts of their projects. The aim is to assess Willhem's Green Bonds Framework as to its ability to support Willhem's stated objective of promoting the transition to low-carbon and climate resilient growth.

This Second Opinion is based on the green bond framework presented to CICERO by the issuer. Any amendments or updates to the framework require that CICERO undertake a new assessment. CICERO takes a long-term view on activities that support a low-carbon climate resilient society. In some cases, activities or technologies that reduce near-term emissions result in net emissions or prolonged use of high-emitting infrastructure in the long-run. CICERO strives to avoid locking-in of emissions through careful infrastructure investments, and moving towards low- or zero-emitting infrastructure in the long run. Proceeds from green bonds may be used for financing, including refinancing, new or existing green projects as defined under the mechanisms or framework. CICERO assesses in this Second Opinion the likeliness that the issuer's categories of projects will meet expectations for a low carbon and climate resilient future.

Expressing concerns with 'shades of green'

CICERO Second Opinions are graded dark green, medium green or light green, reflecting the climate and environmental ambitions of the bonds and the robustness of the governance structure of the Green Bond Framework. The grading is based on a broad qualitative assessment of each project type, according to what extent it contributes to building a low-carbon and climate resilient society.

This Second Opinion will allocate a 'shade of green' to the green bond framework of Willhem:

- Dark green for projects and solutions that are realizations today of the long-term vision of a low carbon and climate resilient future. Typically, this will entail zero emission solutions and governance structures that integrate environmental concerns into all activities.
- **Medium green** for projects and solutions that represent steps towards the long-term vision, but are not quite there yet.
- **Light green** for projects and solutions that are environmentally friendly but do not by themselves represent or is part of the long-term vision (e.g. energy efficiency in fossil-based processes).
- **Brown** for projects that are irrelevant or in opposition to the long-term vision of a low carbon and climate resilient future.

The project types that will be financed by the green bond primarily define the overall grading. However, governance and transparency considerations are also important because they give an indication whether the institution that issues the green bond will be able to fulfil the climate and environmental ambitions of the investment framework. The overall shading reflects an ambition of having the majority of the project types well represented in the future portfolio, unless otherwise expressed by the issuer.

2 Brief Description of Willhem's Green Bond Framework and rules and procedures for climate-related activities

Willhem is a Swedish real estate company. The company has around 240 employees and has its headquarter in Gothenburg. It is owned by the first AP Fund (one of the Swedish Pension funds) and has 25 000 rental apartments in its portfolio. The company has set annual targets in order to reduce energy consumption in their portfolio to an average of 92 kWh/m² in 2025 down from 180 kWh/m² in 2011. The company has also set a target of cutting its emissions by half in the same period. Since this target was achieved in 2015, partly by switching to hydro powered electricity, a new target has been set to further reduce emissions by 25 percent from 2015 levels. From 2015 the issuer purchases certificates of origin for hydro powered electricity for all electricity. The company has no strategy on resilience other than following the policies of the municipalities where they invest.

Definition:

Energy efficiency projects in buildings (development, renovation and acquisition) are eligible under the framework. Also, renewable energy projects and transportation are listed as project categories. Green Bond proceeds can be used for refinancing. Bonds will not finance fossil fuel energy generation projects.

Selection:

Eligible projects will be selected in consensus by the Treasury and the Sustainability Functions in the company. According to the issuer, the sustainability function will have knowledge about a broad set of issues including, energy and environmental issues. The issuer recognizes the importance of lifecycle assessment, but clarifies that green bond projects will not undergo such assessments. The focus will be on compliance with the green bond eligibility criteria.

Management of proceeds:

An amount equal to the net proceeds of the issue of the Green Bonds will be credited to a Special Account that will support Willhem's Eligible Projects. Until disbursement to Eligible Projects, the special account balance will be placed in liquidity reserves.

Transparency and Accountability:

Willhem will provide an annual Green Bond Investor Letter to investors including 1) a list of projects financed including information about energy use and certifications when relevant 2) a description of a selection of project examples and 3) a summary of Willhem's Green Bond development. According to the issuer they will also report number of electric charging stations and renewable energy produced.

The internal tracking method, the allocation of funds from the Green Bond proceeds and the investor letter will be assured by Willhem's internal Audit Function. The investor letter and the opinion of the internal Audit Function will be made publically available on Willhem's web page.

The table below lists the documents that formed the basis for this Second Opinion:

Document Number	Document Name	Description
1.	Willhem Green Bond Framework – 6 November 2017	
2.	Årsredovisning inkl. Hållbarhetsredovisning (GRI-Index, see pp 116-117).	Annual report 2016
3.	Policy och riktlinjer för hållbar utveckling	Policy and guidelines for sustainable development
4.	Policy och riktlinjer för inköp och upphandling	Policy and guidelines for subcontractors and procurement
5.	Policy och riktlinjer för nyproduktion	Policy and guidelines for new construction
6.	Personalpolicy	
7.	Övergripande miljömål	Environmental ambitions and goals
8.	Affärsplan 2017-2021 bostäder	Business Plan 2017-2021 for housing
9.	Energistrategi 2017-2021 bostäder	Energy Strategy 2017- 2017 housing
10.	Energiprojekt – exempel	Energy project - example
11.	GRESB Benchmark Report 2015 – Willhem	GRESB is a global standard that compares key ESG indicators and related performance metrics across global real estate and infrastructure portfolios.

12.	GRESB Benchmark Report 2016 – Willhem	
13.	Förteckning över lagar och andra krav Willhem AB	Regulations and other requirments
14.	Uppförandekod för leverantörer och entreprenörer	Procurement for suppliers and entrepreneurs
15.	Pris för Sydsveriges smartaste fastighet (Fastighetsmässan i Malmö 2016) http://www.easyfairs.com/sv/events_216/fastighetsmaessan-oeresund-2016_56616/fastighetsmaessan-oeresund-2016_56007/	(Real Estate Exhibition Malmö 2016)
16.	https://www.sgbc.se/var-verksamhet/greenbuilding	Sweden Green Building Council has since June 1 2010 been responsible for EU-green building in Sweden.

Table 1. Documents reviewed

3 Assessment of Willhem's Green Bond framework and environmental policies

Overall, the Willhem's green bond framework provides a detailed and sound framework for climate-friendly investments.

The framework and procedures for Willhem'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, whereas the weaknesses are typically areas that are unclear or too general. Pitfalls are also raised in this section to note areas where issuers should be aware of potential macro-level impacts of investment projects.

Eligible projects under the 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 certainty to investors 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
Energy efficiency/buildings	Development and acquisition of	Medium Green
With an m² basic cent lov applica regulation byggregical control of the cont	 With an energy use per year on a m² basis that is at least 25 per cent lower than that required by applicable Swedish codes and regulations (Boverkets byggregler, BBR) at the time of approval 	✓ Building criteria are good,
	 With an energy use per year on a 	✓ The specified LEED and BREEAM certification levels alone, do not ensure improved energy efficiency,
	m ² basis that is at least 25 per cent lower than that required be applicable BBR at the time of approval, and meet the criterial for and preferably have a certification from:	passive or plus housing. Additional energy requirements are therefore important. The remaining green

building certification levels do have energy efficiency

- LEED with a minimum certification of Gold
- **BREEAM or BREEAM** In-use with a minimum certification of Very good
- requirements, but at varying levels resulting in the potential funding of buildings with low energy efficiency gains
- In the case that a building meets the criteria for a green building certification, but lacks the actual certification, the issuer should report transparently on the technical aspects of the building, showing compliance with criteria, and the process used to
- determine compliance The issuer has informed us that the majority of buildings will likely be Miljöbyggnad certified

Or

- That meet the criteria for and preferably have a certification from:
 - Miljöbyggnad with a minimum certification of Silver
 - Svanen 0
 - EU Green Building
 - Feby-12 (Mini-energy building)

Energy efficiency/buildings

Major renovation of residential and commercial properties leading to a reduced energy use per year on a m2 basis of at least 25 per cent.

Medium Green

- Quantified energy efficiency requirements in the framework is good.
- Be aware of possible rebound effects.

Energy efficiency

Energy efficiency projects leading to Medium Green a reduction of energy use of at least a 25 per cent.

- Quantified energy efficiency requirements in the framework is good.
- Be aware of possible rebound effects.

Renewable energy

Incl. solar power, geothermal power, Dark Green bioenergy and wind power.

> Issuer has informed us that bioenergy projects will be installation of wooden pellets boilers.

Clean transportation

Incl. electric cars and related infrastructure and provision of car pools.

Light Green

The issuer has informed us that car pools could include fossil fuel cars. Special focus should be on rebound effects such as less use of public transportation. More efficient use of fossil fuels technologies are typical examples of light green projects.

Table 2. Eligible project categories

Strengths

The Green Bond framework includes a comprehensive list of project and asset categories that are important for low-carbon and climate change resilient growth. CICERO takes a long-term view on climate change, and thus recommends excluding projects that support prolonged use of fossil fuel-based infrastructure that will contribute to greenhouse gas emissions in the long run. Willhem's exclusion of fossil fuel projects is a clear strength in this perspective.

Willhem's quantitative targets for both new constructions and refurbishment of older buildings is a clear strength. In a low carbon 2050 perspective the energy performance of buildings is expected to be improved, with passive or plus house technologies becoming mainstream and the energy performance of existing buildings greatly improved through refurbishments. Willhem is not quite there yet, but is through its focus on energy efficiency and annual improvements taking important steps towards this long-term vision.

Willhem has been focusing on environmental issues for several years and has in place ambitious energy efficiency policies and emission reduction targets. The annual report is substantial on environmental issues and company has been rated according to GRESB in both 2015 and 2016. GRESB is a global standard that compares key ESG indicators and related performance metrics across global real estate and infrastructure portfolios.

CICERO finds that Willhem has a good structure for approval of projects and assets in place. The Green Bond framework outlines a procedure for providing a detailed investor report.

Weaknesses

We find no obvious weaknesses in Willhem's Green Bond framework.

Pitfalls

The criteria used for classification of buildings are not the strictest in use and there is no requirement for an actual certification. Voluntary environmental certifications such as Miljöbyggnad, Svanen, Feby-12, EU Green building, LEED, and BREEAM provide some level of measurement of the environmental footprint of a building, usually including energy efficiency measures. In the case that a building meets the criteria for a green building

certification, but lacks the actual certification, the issuer should report transparently on the technical aspects of the building, showing compliance with criteria, and the process used to determine compliance

According to the issuer there is a small risk that some of the buildings acquired could be heated by fossil fuels such as natural gas. In such cases, the company has in place a strategy that fossil fuel energy production should be replaced with renewables.

The issuer has informed us that car pools could include fossil fuel cars. Special focus should be on rebound effects such as less use of public transportation. More efficient use of fossil fuels technologies are typical examples of light green projects.

Impacts beyond the project boundary

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.

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. Willhem should be aware of such effects and possibly avoid Green Bond funding of projects where the risk of rebound effects is particularly high.

Appendix:About CICERO

CICERO Center for International Climate Research is Norway's foremost institute for interdisciplinary climate research. We deliver new insight that helps solve the climate challenge and strengthen international climate cooperation. We collaborate with top researchers from around the world and publish in recognized international journals, reports, books and periodicals. CICERO has garnered particular attention for its work on the effects of manmade emissions on the climate and the formulation of international agreements and has played an active role in the UN's IPCC since 1995.

CICERO is internationally recognized as a leading provider of independent reviews of green bonds, since the market's inception in 2008. CICERO received a Green Bond Award from Climate Bonds Initiative for being the biggest second opinion provider in 2016 and from Environmental Finance for being the best external review provider (2017).

CICERO Second Opinions are graded dark green, medium green and light green to offer investors better insight in the environmental quality of green bonds. The shading, introduced in spring 2015, reflects the climate and environmental ambitions of the bonds in the light of the transition to a low-carbon society.

CICERO works with both international and domestic issuers, drawing on the global expertise of the Expert Network on Second Opinions. Led by CICERO, ENSO is comprised of trusted 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). ENSO operates independently from the financial sector and other stakeholders to preserve the unbiased nature and high quality of second opinions.

cicero.oslo.no/greenbonds



