



# Willhem

## Green Bond Second Opinion

September 9<sup>th</sup>, 2021

**Willhem is a residential company based in Gothenburg that owns, manages and develops rental apartments in 13 different cities in Sweden.** The company has about 26 500 rental apartments in its portfolio, mostly from the 1960s and 1970s. The issuer has 1 542 apartments under construction at the moment.

**Categories in this framework cover green buildings (~70%, mostly for financing of new buildings), energy efficiency (~20%), and the remaining 10% to renewable energy, clean transportation, and pollution prevention & control categories.** Green proceeds will only be allocated to projects in Sweden. The green building criteria includes either certification schemes and/or energy use requirements, or energy performance certificate (EPC) with energy class A or B, or major renovation that leads to a 30% decrease in overall energy use. Investors should be aware that some of the eligible certification schemes are weak on absolute performance of the buildings, such as Miljöbyggnad iDrift which has no explicit regulation of energy intensities. The framework further does not require for new buildings to be better than regulations, if such certifications alone are eligible. However, the issuer confirms that only a negligible share of the proceeds will be attributed to buildings with such certification.

**Willhem aims to have net-zero greenhouse gas emissions by 2030 in scope 1 and 2. The company calculates scope 3 emissions and aims to reduce by 50% scope 3 emissions by 2030.** The company aims to reduce the energy consumption in its portfolio to 92 kWh/m<sup>2</sup> on average by 2030, corresponding to a 3,6% annual reduction, and in line with the Paris agreement (3,2%). To achieve these targets, the company invests in energy reduction and optimization in its buildings. The company is addressing climate-related risks in the planning processes, and an overall risk assessment of individual property is made yearly, however, the issuer is not reporting in accordance with the TCFD, nor uses climate scenarios. The environmental ambition level is not the highest but represents steps in the right direction.

**Willhem has an excellent governance structure in place.** The issuer has set quantifiable selection criteria and requirements for the projects categories, and has a well-defined selection process that evaluates the resilience and environmental impact of eligible projects, as well as potential lock-in and rebound effects. The issuer further has excellent allocation and impacts reporting practices.

Based on the overall assessment of the project types in Willhem's Framework, governance and transparency considerations, the green finance framework receives an overall **CICERO Medium Green** shading and a governance score of **Excellent**. Despite having excellent governance procedures in place, the framework could be substantially improved by having more ambitious eligibility criteria in the green buildings category supported by evidence of significant energy efficiency improvement over time. The issuer would also benefit from implementing the TCFD recommendations.

### SHADES OF GREEN

Based on our review, we rate the Willhem's green bond framework **CICERO 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 Willhem's framework to be **Excellent**.



### GREEN BOND PRINCIPLES

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



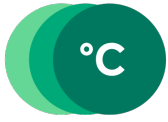


# Contents

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<b>1</b>	<b>Terms and methodology</b>	<b>3</b>
	Expressing concerns with 'Shades of Green' .....	3
<b>2</b>	<b>Brief description of Willhem's green bond framework and related policies</b>	<b>4</b>
	Environmental Strategies and Policies .....	4
	Use of proceeds .....	5
	Selection .....	5
	Management of proceeds .....	6
	Reporting .....	6
<b>3</b>	<b>Assessment of Willhem's green bond framework and policies</b>	<b>8</b>
	Overall shading .....	8
	Eligible projects under the Willhem's green bond framework .....	8
	Background .....	11
	Governance Assessment .....	11
	Strengths .....	12
	Weaknesses .....	13
	Pitfalls .....	13
	<b>Appendix 1: Referenced Documents List</b>	<b>14</b>
	<b>Appendix 2: About CICERO Shades of Green</b>	<b>15</b>

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# 1 Terms and methodology

This note provides CICERO Shades of Green's (CICERO Green) second opinion of the client's framework dated **July 2021**. This second opinion remains relevant to all green bonds and/or loans 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 the client's policies and processes, as well as information gathered during meetings, teleconferences and email correspondence.

## 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. 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.

### 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

Sound governance and transparency processes facilitate delivery of the client's climate and environmental ambitions laid out in the framework. Hence, key governance aspects that can influence the implementation of the green bond are carefully considered and reflected in the overall shading. CICERO Green considers four factors in its review of the client'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. Please note this is not a substitute for a full evaluation of the governance of the issuing institution, and does not cover, e.g., corruption.



## 2 Brief description of Willhem's green bond framework and related policies

Willhem is a Swedish residential company that owns, manages and develops rental apartments, mostly residential, and less than 10% commercial, in 13 different cities in Sweden. The company has around 280 employees and has its headquarter in Gothenburg. It is owned by the first AP Fund (one of the Swedish Pension funds) and has about 26 500 rental apartments in its portfolio. The issuer informed us that there is an important widespread in the years of construction of the buildings, from 1950s until today, but most of the rental apartments are from the 1960s and 1970s. The issuer further informed us that it has 1 542 apartments under construction at the moment.

### Environmental Strategies and Policies

Willhem's emissions in 2020 represented 205 tons CO<sub>2</sub>e for scope 1 (including natural gas energy consumption and commercial transport), 15,217 tons CO<sub>2</sub>e for scope 2 (including district heating energy consumption), and 71,951 tons CO<sub>2</sub>e for scope 3 (including energy indirect emissions, indirect emissions from service vehicles and business trips, material for construction and renovation, as well as customer's household electricity, residual waste and car driving from all the residents). Willhem aims to have net-zero greenhouse gas emissions by 2030 in scope 1 and 2, and a reduction of scope 3 emissions by 50% by 2030. These targets are in line with the Paris Agreement, according to Willhem, and the company mentioned that these targets have been approved by the Science Based Targets Initiative and published on SBTi website in July 2021. To reach these targets, a roadmap is being developed and should be finalized within 2022, which includes energy efficiency measures, as well as the transition to low carbon electricity and district heating, not only for green utility contracts, but for the entire grids. The company's roadmap shows a transition both in embedded carbon, transport sector and more.

The average energy intensity of Willhem's portfolio was around 141 kWh/m<sup>2</sup> in June 2021, while it was around 172 kWh/m<sup>2</sup> at the end of 2015, and at 184 kWh/m<sup>2</sup> ten years ago, according to the issuer. In line with this reduction in average energy intensity over the last ten years, the company aims to reduce the energy intensity in its entire portfolio to 92 kWh/m<sup>2</sup> on average by 2030, which represents a 3,6% annual reduction. To achieve these targets, the company has set annual objectives for energy use and makes investments in energy reduction and energy optimization in its buildings. Efficiency measures include roof insulation, window replacements, energy-efficient appliances, heat pumps and solar panels for electricity generation. Also, from 2015, the issuer purchases certificates of origin for hydro powered electricity for all electricity. The company informed us that it owns zero building with oil boiler at the moment, and one building with gas boiler was acquired in 2020. The company further aims to replace gas or oil boilers if such are already in place in properties when the company acquires them. However, buildings with gas or oil boilers are excluded from the framework according to the issuer.

Willhem has developed a concept for standardized renovations of single apartments. The concept, known as Willhemlyftet (the Willhem boost), ensures optimized transport routes and no unused, left-over material, according to the issuer. Furthermore, development projects follow high standards in material selection and resource management with low environmental impacts. The company also mentions using sustainable purchasing channels and sustainable production and logistics solutions. The issuer mentioned that the goal of using the Willhem boost method is to ensure waste minimizing. The company informed us that it is close to zero waste in construction thought its life cycle considerations, but it has not yet calculated how much waste has been saved using this method.

Willhem also participates annually in GRESB, a global sustainability benchmark for real estate companies assessing governance and transparency, compliance, risk management and environmental and social sustainability.



The benchmark also serves as a tool with the aim to improve the company's sustainability performance and governance of sustainability aspects. The company received a score of 80 points on a total of 100 points in 2020, and its long-term goal is to achieve 85 points within the next 5 to 10 years, allowing the group to be in the top 20% of real estate companies according to GRESB.

On a local level, an overall assessment of each individual property is made every year, resulting in a business plan for each property to reduce the risks of owning and managing the properties. Some potential risks identified include high indoor temperatures during heatwaves, and flooding and weather exposure due to increased wind and precipitation. When developing new properties, the company mentioned addressing climate-related risks in the early stages of the planning process together with local authorities. This is a change since the previous framework, as the company had no strategy on resilience other than following the policies of the municipalities where they invest, back in 2018. However, the company is not reporting in accordance with the TCFD recommendations, nor is using climate scenarios. The company rather focuses on improving and implementing a separate ESG risk analysis, which will include climate risk, but not to the extent that TCFD requires.

Willhem follows the UN Global Compact Standards and Principles for human rights, working conditions, the environment and corruption. These principles form the basis of the company code of conduct.

### Use of proceeds

An amount equal to the net proceeds from green bonds issued by Willhem will be used to finance new eligible projects (around 80% will be attributed to new projects according to the issuer), or to refinance eligible projects in whole or in part that are financed by Willhem or its subsidiaries (i.e., approximately 230 property owning companies within the Willhem's group), in each case as determined by Willhem and in accordance with the green project categories. The Green projects categories are the following: Green buildings, energy efficiency, renewable energy, clean transportation, and pollution prevention and control, where each project category has eligibility criteria that are defined in the table below. The issuer informed us that around 70% of the net proceeds will be attributed to the green buildings category, 20% to the energy efficiency category, and the remaining 10% distributed among the other categories. The green projects will form a portfolio of projects eligible for financing and refinancing by green bonds. New projects are defined as projects that have been finalized during the 365-day period prior to the issuance of the bond. The distribution between new financing and refinancing will be reported in the annual allocation report according to the company's green bond framework.

Net proceeds from green bonds, or any other bonds issued by Willhem, will not be allocated to projects whose purpose is fossil-based energy generation, nuclear energy generation, the arms and defence industry, potentially environmentally negative resource extraction (such as rare-earth elements or fossil fuels), gambling or tobacco.

### Selection

The selection process is a key governance factor to consider in CICERO Green's assessment. CICERO Green typically looks at how climate and environmental considerations are considered when evaluating whether projects can qualify for green finance funding. The broader the project categories, the more importance CICERO Green places on the governance process.

Willhem has a green bond committee to evaluate and select eligible projects for funding by the net proceeds raised under the Framework. The committee is responsible for monitoring the green portfolio and reporting on its environmental benefits. The green bond committee consists of members from the finance and sustainability departments. The committee will evaluate the resilience and environmental impact of eligible projects and potential lock-in and rebound effects. To evaluate the environmental impact, the issuer informed us that environmental impact assessments (EIAs) are carried out before the development of projects according to what is



required by regulations, as well as based on certification schemes. However, the issuer mentioned not always being involved in EIAs. Eligible projects will be selected in consensus by the finance and sustainability departments. At a minimum, the committee will meet once a year. The company further mentioned that they never have been involved in any controversial projects, and is relying on the concerned municipality's approval before starting any project.

A list of eligible projects is kept by the finance department, which is also responsible for keeping the list up to date. In case of outstanding green bonds, the list of eligible projects will be used to monitor and ensure proceeds are fully allocated to eligible projects. Any future updates of the framework must first gain the approval of the green bond committee.

### Management of proceeds

CICERO Green finds the management of proceeds of Willhem to be in accordance with the Green Bond Principles.

The net proceeds raised under the framework will be tracked and monitored by Willhem and credited to a separate account (the "green account"). At the end of every fiscal quarter during which there are green bonds outstanding and the green account has a positive balance, funds will be withdrawn from the green account and added to Willhem's lending pool of eligible projects in an amount equal to all disbursements from said pool made during such a quarter in respect of eligible projects. If at any time the total amount of net proceeds exceeds the total value of eligible projects, the green account excess balance will be placed in liquidity reserves. The issuer further mentioned that it has no intention to issue more green bonds than what is required for eligible projects. However, in case of unallocated funds, they will be kept in the company's bank account.

Willhem will keep and monitor a record of net proceeds raised and eligible projects financed (the "green register"). If for any reason a financed eligible project ceases to comply with the eligibility criteria set out in Willhem's green bond framework, the asset will be removed from Willhem's lending pool of eligible projects and funds for the asset will be re-credited to the green account.

### Reporting

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

Willhem will publish an annual green bond investor letter with details on allocations to eligible projects and related performances. The green bond committee is responsible for compiling and publishing the green bond investor letter. The allocation and impact reporting will be covered in the green bond investor letter.

The allocation reporting will include a list of funded eligible projects with amounts allocated to each sub-category as defined in the Use of Proceeds section, a detailed description of selected eligible projects, a description of the share of new financing vs refinancing, as well as unallocated amounts (if any).

Willhem will report on impact and performance, including the methodology, according to the issuer, on a category level using quantitative impact indicators. Assessments will be made on a best-effort basis and in the case of non-operational projects, ex-ante (i.e. forecast) impacts or performance will be provided. Metrics for each green projects category will be included in the green bond investor letter. Metrics examples are, but are not limited to, environmental certification and level; annual energy performance (kWh/m<sup>2</sup>), as compared to applicable national building code (new buildings); annual energy saved (MWh) as compared to the applicable national building code



(pre-renovation level in case of renovations); Estimated annual GHG emissions, Scope 1 and 2 ( $\text{gCO}_2\text{e}/\text{m}^2$ ) and annual GHG emission savings ( $\text{tCO}_2\text{e}$ ); annual renewable energy production (MWh); and estimated annual GHG emissions reduced or avoided ( $\text{tCO}_2\text{e}$ ). The issuer further specified that emissions factors will be grid specific for district heating. However, the issuer has not yet decided if an inventory approach or a comparative approach should be used. Willhem also mentioned that scope 3 emissions will most likely not be material to report, with the exception of indirect energy emissions such as transportation of fuel, etc.

Willhem has appointed an external independent auditor to confirm annually that the selection process for the financing of eligible projects and the net proceeds of the green bonds are allocated in accordance with the framework. The framework, the second party opinion and the investor letter will be publicly available on the company website.





### 3 Assessment of Willhem’s green bond framework and policies



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; weaknesses are typically areas that are unclear or too general. Pitfalls are also raised in this section to note areas where Willhem 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 Willhem’s green bond framework, we rate the framework **CICERO Medium Green**.

#### Eligible projects under the Willhem’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
<b>Green Buildings</b>  	Financing of development, acquisition, refurbishment and renovation according to any or the four categories below that:  1. Have an energy performance level in kWh per sq m and year at least 20% lower than the applicable national building code, and a design stage certification, a post-construction certification or an in-use certification that fulfils the requirements of at least BREEAM or BREEAM In-Use Very Good, LEED Gold, or  2. Have a design stage certification, a post-construction certification or	<b>Light to Medium Green</b>  ✓ The majority of the proceeds will be attributed to this category (70%), and green buildings will be built in 13 different cities within Sweden.  ✓ The issuer informed us that buildings with fossil fuel infrastructure are excluded from the framework.  ✓ Certification schemes, such as BREEAM and LEED, do not ensure improved energy efficiency, passive or plus housing.  ✓ Miljöbyggnad Silver means that energy use has to be 20 % lower than that required by BBR.  ✓ Miljöbyggnad iDrift is considerably weaker on absolute performance of the buildings, with no explicit regulation of e.g., energy intensities. However, the issuer confirms that only a negligible share of the proceeds will be attributed to buildings with such certification.  ✓ Nordic Swan Ecolabel requires that life cycle analysis of the emissions from the building materials has to be done, from raw materials to production, use, disposal and recycling. Building materials and chemical products are inspected. In Sweden, the Nordic Swan





	an in-use certification that fulfils the requirements of at least Miljöbyggnad Silver, Miljöbyggnad iDrift, the Nordic Swan Ecolabel, EU Green Building or an equivalent environmental system determined by Willhem, or	Ecolabel requires an energy use 10-15% lower than BBR.
3.	Have or will undergo a major renovation that leads to a 30% decrease in overall energy use, or	✓ The EU Green Building certification requires that the building uses 25% less energy than before or compared to the new construction requirements in BBR <sup>1</sup> . However, it does not cover a broader set of issues such as buildings material, life cycle emissions and climate resiliency. However, the issuer confirms that only a negligible share of the proceeds will be attributed to buildings with such certification.
4.	Have an energy performance certificate (EPC) with energy class A or B, or	✓ Regarding refurbishment of existing buildings, according to IEA, efficiency of building envelopes needs to improve by 30% by 2025 to be aligned with the Paris target. ✓ Willhem has on average an energy use of 141 kWh/m <sup>2</sup> in 2021 including newly constructed buildings. Willhem's older buildings could have much higher energy use than the average. The criteria for existing buildings do not guarantee an energy performance above applicable regulation.
5.	Achieve an energy use per sq m not exceeding the targets set below:	✓ An EPC of A or B in Sweden represents between 50% and 25% better than the requirement for a new buildings <sup>2</sup> .
	<u>Construction year</u> <u>Energy use per m<sup>2</sup>:</u>	✓ The BBR requirement is now set at 75 kWh/m <sup>2</sup> /year in Sweden <sup>3</sup> . The issuer mentioned that from 2006, the requirements were 110 kWh/m <sup>2</sup> in the south of Sweden (where Willhem primarily operates) and 130 kWh/m <sup>2</sup> in the north of Sweden, where Willhem also has activity.
	Before 1971: 135 kWh 1971-1999: 125 kWh 2000-2006: 115 kWh After 2006: At least 20% lower than the applicable national building code.	✓ The issuer informed us that public transport in considered when selecting a new site for development.

### Energy Efficiency



Financing of investments to decrease overall energy use of for example heat pumps, geothermal heating/cooling, district heating/cooling, energy efficient lighting or windows, upgrading of ventilation systems or related IT-technology. Willhem will strive to include investments that avoid negative long-term impact on the climate.

### Medium Green

- ✓ 30% of the proceeds will be attributed to this category.
- ✓ Efficiency measures in existing buildings is a good way to lower the climate footprint of buildings.
- ✓ The company mentioned that this project category will mainly focus on energy efficient buildings and reduction of energy consumption. However, the company mentioned not having quantified energy efficiency requirements, nor for specific project at the moment.

<sup>1</sup> <https://www.sgbc.se/certifiering/greenbuilding/certifiera-med-greenbuilding/>

<sup>2</sup> [Energy performance certificate - Boverket - Boverket](#)

<sup>3</sup> [Boverkets byggregler BBR. Konsoliderad version.](#)



- ✓ The company informed that the distribution and sources of energy that goes into the district heating systems where the company operates varies greatly depending on the location (between 1-108g CO<sub>2</sub>/kWh), as they represented 18 different grids in 2020. The weighted average for all district heating used was 69 CO<sub>2</sub>g/kWh, according to the issuer.
- ✓ Beware of a small amount of fossil fuel use in district heating, e.g., plastics.
- ✓ Be aware of potential rebound effects following energy efficiency improvements.

**Renewable Energy**



Financing of investments that produce renewable energy or aim to increase the share of renewable energy use, e.g. installation of solar panels or solar farms, wind and geothermal power, bioenergy or related infrastructure.

**Dark Green**

- ✓ Renewable energy is part of a Dark Green Solution and is key to a low-carbon transition.
- ✓ At the moment, around 7% of the property portfolio is equipped with solar panels on the roof, representing around 3000 kW according to the issuer. No separate solar PV projects have been included in the renewable energy category. However, development projects with solar pv panels have previously been included in the green buildings category according to the issuer.
- ✓ The issuer confirmed that it has no limit on emissions for geothermal power, nor do life cycle analysis for its renewable energy projects at the moment.
- ✓ To be aligned with the EU Taxonomy, CO<sub>2</sub> emissions should be lower than 100 gCO<sub>2</sub>/kWh.

**Clean Transportation**



Financing of investments into infrastructure for clean transportation such as charging stations and bicycle facilities as well as zero-emission electric vehicles and the provision of carpools as used in Willhem's operations.

**Medium to Dark Green**

- ✓ The issuer informed that this category will most likely include the installation of charging stations at parking spaces that already exist.
- ✓ It is unclear to what extent the carpool service's share of electric cars is more significant than the share of hybrid and fossil fuel cars.
- ✓ The issuer informed that the carpool service is provide by an external company, and not by the company itself.

**Pollution Prevention and Control**



Financing of investments that aim to manage, remove, replace or decrease the level of waste and harmful substances and increase the level of reuse and recycling, e.g. waste facilities, recycling

**Medium Green**

- ✓ Fossil fuels can be used by certain activities, e.g., removal of harmful substances, according to the issuer. These services are not provided by the company itself, but by another service provider, according to the issuer. Very small amount of the



installations, HVAC systems or soil remediation.

proceeds. However, the issuer mention that it helps to reuse the waste and reducing it.

- ✓ The highest shading level, dark green, needs quantitative standards besides the soft principles rules.

Table 1. Eligible project categories

## Background

The building sector accounts for 40% of primary energy consumption in most countries, and the IEA reports that the efficiency of building envelopes needs to improve by 30% by 2025 to keep pace with increased building size and energy demand – in addition to improvements in lighting and appliances and increased renewable heat source<sup>4</sup>. Additionally, approximately half of life-cycle emissions from buildings stem from materials/construction. The other half stems from energy use, which becomes less important over time with the increasing adoption of off-grid solutions such as geothermal and solar. In Sweden, the building sector accounts for 32% of Sweden's energy use, 31% of waste and 19% of domestic greenhouse gas emissions The Exponential Roadmap<sup>5</sup> lays out a trajectory for reducing emissions by 50% by 2030 and requires that emissions reductions strategies within the buildings sector be rapidly scaled up.

As members of the EU, Sweden is subject to the EU's climate targets of reducing collective EU greenhouse gas emissions by 40% by 2030 compared to 1990 levels, increasing the share of renewable energy to 32% and improving energy efficiency by at least 32.5% . However, the Commission proposed in September 2020 to raise the 2030 greenhouse gas emission reduction target, including emissions and removals, to at least 55% compared to 1990. This as not been implemented yet<sup>6</sup>. The European Green Deal aims for carbon neutrality in 2050.<sup>7</sup> Sweden has developed a National Energy and Climate Plan (NECP) in which it outlines the targets and strategies in all sectors.<sup>8</sup> These strategies include measures such as, improving energy efficiency. Non-ETS emissions, of which public buildings and households are a part, must decrease by 63% by 2030.

In addition, voluntary environmental certifications, such as BREEAM or equivalents, can estimate the environmental footprint of buildings and raise awareness of environmental issues. These points-based certifications, however, fall short of guaranteeing a low-climate impact building, as they may not ensure compliance with all relevant factors e.g., energy efficiency, access to public transport, climate resilience, sustainable building materials. Many of these factors are covered under the World Green Building Council's recommendations for best practices for developing green buildings.<sup>9</sup> CICERO Shades of Green assesses all of these factors when evaluating the climate impact of buildings.

## Governance Assessment

Four aspects are studied when assessing the Willhem'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. Please note this is not a substitute for a full evaluation of the governance of the issuing institution, and does not cover, e.g., corruption.

<sup>4</sup> [Building Envelopes – Analysis - IEA](#)

<sup>5</sup> [ExponentialRoadmap 1.5.1 216x279 08 AW Download Singles Small.pdf](#)

<sup>6</sup> [https://ec.europa.eu/clima/policies/strategies/2030\\_en](https://ec.europa.eu/clima/policies/strategies/2030_en)

<sup>7</sup> [https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal\\_en](https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en)

<sup>8</sup> [https://ec.europa.eu/energy/topics/energy-strategy/national-energy-climate-plans\\_en](https://ec.europa.eu/energy/topics/energy-strategy/national-energy-climate-plans_en)

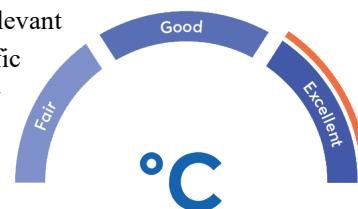
<sup>9</sup> <https://www.worldgbc.org/how-can-we-make-our-buildings-green>



Willhem has appropriate and relevant strategies for the sector, which are quantifiable on an annual basis. Willhem has specific SBTi approved emissions reduction targets for scope 1, 2, and 3. The company also aims to reduce the energy consumption in its portfolio to 92 kWh/m<sup>2</sup> on average by 2030 which corresponds to a 3,6% annual reduction, which is more than what the IEA says is needed to be aligned with the Paris agreement (3,2%)<sup>10</sup>. The company also mentioned using sustainable purchasing channels and sustainable production and logistics solutions for recycling of material to reduce waste, via the company's life cycle approach. When developing new properties, the company informed addressing climate-related risks in the early stages of the planning process together with local authorities, and confirmed that an overall assessment of each individual property is made every year, resulting in a business plan for each property to reduce the risks, including climate risks of owning and managing the properties. However, the issuer is not reporting in accordance with the TCFD at the moment, no using climate scenarios.

Willhem has a green bond committee to evaluate and select eligible projects for funding by the net proceeds raised under the framework. The committee is responsible for monitoring the green portfolio and reporting on its environmental benefits. The green bond committee consists of members from the finance and sustainability departments. The committee will evaluate the resilience and environmental impact of eligible projects, through environmental impact assessments in which Willhem is not always involved, as well as potential lock-in and rebound effects. Eligible projects will be selected in consensus by the finance and sustainability departments. At a minimum, the committee will meet once a year.

Willhem has appointed an external independent auditor to confirm annually that the selection process for the financing of eligible projects and the net proceeds of the green bonds are allocated in accordance with the framework. The framework, the second party opinion and the investor letter will be publicly available on the company website. All projects categories are covered by at least one relevant indicators. The issuer further specified that emissions factors will be grid specific for district heating. However, the issuer has not yet decided if an inventory approach or a comparative approach should be used. Willhem also mentioned that scope 3 emissions will most likely not be material to report, with the exception of indirect energy emissions such as transportation of fuel, etc.



The overall assessment of Willhem's governance structure and processes gives it a rating of **Excellent**.

### 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. However, 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 annual improvements taking important steps towards this long-term vision.

<sup>10</sup> [World Energy Outlook 2018 – Analysis - IEA](#)



CICERO finds that Willhem has an excellent governance structure in place. The issuer has set ambitious and quantifiable selection criteria and requirements for each projects categories. Willhem also has a well-defined selection process that include environmental expertise and that evaluate the resilience and environmental impact of eligible projects, as well as potential lock-in and rebound effects. The issuer further has excellent reporting practices. Such a commitment to impact and allocation reporting increases transparency to investors.

### Weaknesses

There is a lack of scenario analysis and the implementation of the TCFD recommendations when it comes to climate risk assessments. Other than that, we find no material weaknesses in the framework

### Pitfalls

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 Zero-Energy buildings and passive houses. Some of the certification requirements for green buildings eligible under the framework are falling short of the long-term vision of zero-energy buildings or passive houses. Further, some of the required certifications can be consider weaker on absolute performance of the buildings, such as Miljöbyggnad iDrift with no explicit regulation of e.g., energy intensities. The framework further does not require for new buildings to be better than regulations, if such certifications alone are eligible. Moreover, other certification schemes, such as the EU Green Building certification, can fall short on a broad set of issues such as buildings material, life cycle emissions and climate resiliency. However, the issuer confirms that only a negligible share of the proceeds will be attributed to buildings with such certifications.

Wilhem has on average an energy use of 141 kWh/m<sup>2</sup> in 2021, including newly constructed buildings. Willhem's older buildings could have much higher energy use than the average. The criteria for existing buildings do not guarantee an energy performance above applicable regulation.

We note that district heating/cooling is the predominant heating/cooling method in Sweden and probably represents a major part of Willhem's and tenant's energy use. Also, most of the district heating companies seek to minimize the use of oil or other fossil fuels. However, when waste-to-energy is utilized, it is sometimes difficult to know the fossil fraction of the waste stream, e.g., the amount of plastics. Again, many Swedish district heating companies have strong policies to minimize these types of fractions, but without specific information of suppliers of district heating, it is difficult to guarantee totally against the use of some fossil fractions.

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 listed in table 1, energy efficiency investments in buildings, for example, may, in part, lead to more energy use or a failing to reach the potential reductions.

The issuer has informed us that car pools related to the clean transportation category could include fossil fuel cars. Special focus should be on rebound effects such as less use of public transportation.

Despite its ambitious objective of reusing and recycling waste, investors should be aware that fossil fuels can be used by certain activities, e.g., removal of harmful substances, within the project category of pollution prevention and control.



# Appendix 1: Referenced Documents List

Document Number	Document Name	Description
1	Willhem's Green Bond Framework	Framework dated July 2021
2	Års- och hållbarhetsredovisning 2020	<a href="#">Om Willhem - Finansiell information   Willhem</a>
3	Policy hållbar utveckling	Sustainable Development Policy
4	Policy för inköp och upphandling	Purchasing and procurement policy
5	Policy för nyproduktion	Policy for new production
6	Personalpolicy	Personnel policy
7	Affärsplan 2021-2025	Business plan 2021-2025
8	Energistrategi 2027-2021	Energy Strategy 2027-2021
9	Hållbarhetsstrategi 2021-2025	Sustainability strategy 2021-2025
10	GRESB Benchmark Report 2019	GRESB (the global ESG Benchmark for real Assets)- Benchmark Report 2019
11	GRESB Benchmark Report 2020	GRESB (the global ESG Benchmark for real Assets)- Benchmark Report 2020
12	Uppförandekod för medarbetare	Code of conduct for employees
13	Uppförandekod för leverantörer	Code of conduct for suppliers



## 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, the International Institute for Sustainable Development (IISD) and the School for Environment and Sustainability (SEAS) at the University of Michigan.

