

## Acrinova AB (publ) Green Finance Second Opinion

November 23, 2021

Acrinova AB (publ) ("Acrinova") is a Swedish property owner and manager of primarily commercial real estate active across the Swedish part of the Öresund region. Real estate segments represented in the portfolio include logistics & light industry, retail, residential and office which make up 43%, 20%, 17% and 13% of the portfolio by market value respectively. In 2020, Acrinova had 79,785 m² under long-term management in addition to 28,542 m² meant for refurbishment or further development, as well as 13,353 m² new projects.

The green finance framework of Acrinova covers the categories Green and energy efficient buildings and Energy efficiency. The majority of the proceeds will, according to the issuer, go to new financing of Green and energy efficient buildings in the form of new financing. The eligibility criteria for green finance proceeds for buildings are based on environmental certification schemes complemented by an energy efficiency criterion securing a specific energy use at least 20% below current building regulations. Major renovations should result in reduced energy consumption of at least 30% compared to pre-renovation. Energy efficiency projects cover retrofits such as heat pumps, converting to LED lighting, improvements in ventilation systems, extension of district heating and cooling systems, on-site solar panels, geothermal heating, etc.

Acrinova does not have any quantitative targets when it comes to energy use or energy efficiency of its current portfolio, neither do they have quantitative targets for greenhouse gas emissions (scope 1+2). However, all new projects undertaken by Acrinova are subject to its ambitious zero-vision policy. This policy includes requiring that environmentally friendly materials and transport methods are chosen, whilst working to actively minimize the overall climate impact of the project. Upon completion, projects are also to be certified at least Miljöbyggnad Silver, or achieve the equivalent standard. Ultimately, the zero-vision ensures that new properties rely only on renewable energy sources while aiming to be energy self-sufficient. The broader target, applicable to all properties, is for energy consumption to be completely fossil-free. It is unclear whether or how climate resilience issues are considered in the selection process of eligible projects. The issuer does not follow the TCFD guidelines for reporting on climate risks

Based on the overall assessment of the eligibility criteria in this framework, governance and transparency considerations, and the prioritized use of proceeds, the framework receives a **CICERO Medium Green** shading and a governance score of **Good**. In order to achieve a darker green shading, the green finance framework would need stronger eligibility criteria in the Green and energy efficient buildings category and better reporting on Acrinova's climate footprint.

### SHADES OF GREEN

Based on our review, we rate the Acrinova's green finance framework CICERO Medium Green.

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



### GREEN BOND and GREEN LOAN PRINCIPLES

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





### **Contents**

1	Terms and methodology	3
	Expressing concerns with 'Shades of Green'	
2	Brief description of Acrinova's green finance framework and related policies	4
	Environmental Strategies and Policies	4
	Use of proceeds	5
	Selection	5
	Management of proceeds	5
	Reporting	
3	Assessment of Acrinova's green finance framework and policies	8
	Overall shading	8
	Eligible projects under the Acrinova's green finance framework	8
	Background	
	Governance Assessment	10
	Strengths	11
	Weaknesses	11
	Pitfalls	11
Appe	endix 1: Referenced Documents List	13
Appe	endix 2: About CICERO Shades of Green	14



### 1 Terms and methodology

This note provides CICERO Shades of Green's (CICERO Green) second opinion of the client's framework dated November 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** Examples Dark green is allocated to projects and solutions that correspond to the long-term Wind energy projects with a strong vision of a low carbon and climate resilient future. Fossil-fueled technologies that governance structure that lock in long-term emissions do not qualify for financing. Ideally, exposure to integrates environmental concerns 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-Bridging technologies such as term emissions do not qualify for financing. Physical and transition climate risks might be plug-in hybrid buses 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 Efficiency investments for fossil short-term GHG emission reductions, but need to be managed to avoid extension of fuel technologies where clean equipment lifetime that can lock-in fossil fuel elements. Projects may be exposed to the alternatives are not available physical and transitional climate risk without appropriate strategies in place to protect them.

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 finance 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 finance 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 Acrinova's green finance framework and related policies

Acrinova AB (publ) ("Acrinova") is a Swedish property owner and manager of primarily commercial real estate active across the Swedish part of the Öresund region. The company was founded in 2014 with the aim of constructing, acquiring, and managing properties both internally and externally for clients.

Acrinova's value-creation model rests on three pillars; acquisitions & disposals of assets, property and project developments and finally refurbishments. Real estate segments represented in the portfolio include logistics & light industry, retail, residential and office which make up 43%, 20%, 17% and 13% of the portfolio by market value respectively.

In 2020, Acrinova had 79,785 m<sup>2</sup> under long-term management in addition to 28,542 m<sup>2</sup> meant for refurbishment or further development, as well as 13,353 m<sup>2</sup> new projects, with values of 648m SEK, 133m SEK and 84m SEK, respectively.

### **Environmental Strategies and Policies**

In December 2020, Acrinova received the ISO certification 14001:2015 (environmental management).

Acrinova does not have any quantitative targets when it comes to energy use or energy efficiency of its current portfolio, neither do they have quantitative targets for greenhouse gas emissions (scope 1+2). However, all new projects undertaken by Acrinova are subject to its zero-vision policy. This policy encompasses the full life cycle of a construction project and includes requiring that environmentally friendly materials and transport methods are chosen, whilst working to actively minimize the overall climate impact of the project. New projects will not always be certified but will be built to at least the equivalent standard of at least Miljöbyggnad Silver. Ultimately, the zero-vision ensures that new properties rely only on renewable energy sources while aiming to be energy selfsufficient. The broader target, applicable to all properties, is for energy consumption to be completely fossil-free. For existing properties, Acrinova also targets a minimum 30% reduction in energy consumption when completing major renovations. Long-term ambition is for 100% of the properties to be powered by self-generated fossil-free electricity. As part of its zero-vision policy, the company has to date completed one property classified as climate neutral in terms of energy consumption. This means that the property only relies on renewable energy generated on-site through, for example, photovoltaic facilities and geothermal energy. A further two properties currently under construction are to be climate neutral upon completion, according to Acrinova. Expected completion is in 2022 and 2023, respectively. We note that 'climate neutral' in this context means energy self-sufficient with only renewable energy.

Acrinova has a 'green appendix' to all new agreements with tenants. This means that the company follows up on energy consumption with the tenants annually and works together with them to reduce consumption. There are subsequently requirements for the tenant to purchase green electricity or join Acrinova's electricity supplier. Acrinova also has an annual review of all their properties where *inter alia* physical climate risks are assessed. As part of its ISO certification, Acrinova is obliged to impose certain requirements on its suppliers, including if they themselves are certified.

Acrinova has started to investigate what the EU taxonomy would mean for the company's activities. As of now, Acrinova lacks some of the data and methodologies required to perform a complete EU Taxonomy assessment.



Acrinova does not report on portfolio energy use nor company greenhouse gas emissions and does not follow the TCFD guidelines of climate risk reporting.

### Use of proceeds

An amount equivalent to the net proceeds from Acrinova's Green Finance Instruments shall be used to finance or re-finance, in part or in full, eligible projects and properties providing distinct environmental benefits ("Green Eligible Assets") fulfilling the criteria in table 1 below. The criteria cover the two categories: Green and energy efficient buildings and Energy efficiency. Acrinova estimates that 70% of the proceeds will be for new financing, and that 90% of the proceeds will be for Green and energy efficient buildings.

### 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.

The selection of green eligible assets is managed by a dedicated group, the Green Finance Committee ("GFC"). Members of the GFC consist of CEO, CFO and a representative from the Property Management team. Acrinova will assure that the sustainability expertise always relies within the GFC. All decisions are made in consensus, and that applies to the selection process of green eligible assets as well. The evaluation is conducted in-house, but Acrinova does rely on external expertise for e.g., energy calculations and sustainability analyses of properties. There is a screening for potentially controversial projects. Project situated near public transport hubs are prioritized. A list of green eligible assets is to be kept up to date by Acrinova and the CFO is responsible for keeping this list up to date.

The list of green eligible assets is monitored on a regular basis during the term of the green finance instruments to ensure that the proceeds are sufficiently allocated to green eligible assets. This is a responsibility of the GFC.

Acrinova informs us that there is an evaluation of suppliers that is done according to the ISO certification process. This evaluation is conducted continuously for new suppliers and once a year for new ones. Procurement requirements is in line with Miljöbyggnad Silver and Acrinova's new guidelines for sustainable procurement (under development).

The proceeds of the Acrinova's green finance instruments will not be used to finance either fossil fuel energy generation, fossil fuel-based infrastructure like heating systems, nuclear energy generation, the weapons and defense industries nor potentially environmentally negative resource extraction, gambling, or tobacco.

### **Management of proceeds**

CICERO Green finds the management of proceeds of Acrinova to be in accordance with the Green Bond Principles and Green Loan Principles.

Net proceeds from Acrinova's green finance instruments will be tracked using a spreadsheet where all amounts of green finance instruments issued will be inserted. The spreadsheet will also contain the list of green eligible assets.

<sup>&</sup>lt;sup>1</sup> As a significant supplier to Acrinova, it is required that a documented environmental work is in place and that it is maintained and improved. In the supplier assessment, a third-party environmental certification is highly valued and provides an advantage for continued business and agreements. In its collaboration with Acrinova, the supplier will work to reduce the environmental impact caused by transport, energy use and the environmental impact of buildings.



Information available in the spreadsheet will in turn serve as basis for regular reporting described below. Allocation of proceeds will be subject to an annual review by an external part/verifier. A verification report provided by the external part will be published on the Acrinova's website.

All green finance instruments issued by Acrinova will be managed on a portfolio level. This means that a green finance instrument will not be linked directly to one (or more) pre-determined green eligible assets. The company will keep track and ensure there are satisfactory green eligible assets in the portfolio. Projects can, whenever needed, be removed, or added to/from the green eligible assets portfolio.

Any unallocated proceeds temporary held by Acrinova will be placed on the company's ordinary bank account or in the short-term money market. Should there be any unallocated proceeds, Acrinova strives to allocate them within one year.

### 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.

To be fully transparent towards the investors and other stakeholders, Acrinova commits to regular reporting at least on an annual basis. The Chief Financial Officer (CFO) will be responsible for the reporting. The first report is expected to be released in conjunction with the 2022 annual report and will be published on the company's website. Acrinova commits to allocation and impact reporting until no green finance instruments are outstanding. The report will cover total amount of green finance instruments issued; the share of proceeds used for financing/refinancing as well as share of proceeds for the two eligible categories; and share of unallocated proceeds (if any). All financed projects will be listed. Reporting will be done on a project-by-project basis but will not be linked to individual bonds.

Acrinova intends to report on quantitative impact indicators where reasonable and where relevant data is available for the two eligible categories.

Green and energy efficient buildings: Information on the energy consumption (kWh/m²/year), estimated annual greenhouse gas emissions reduced or avoided (tCO<sub>2</sub>e), energy performance certificate class, if any, and type of certification including level, if any (e.g., Miljöbyggnad Silver etc.).

Energy efficiency: amount of energy saved per m<sup>2</sup> and estimated annual greenhouse gas emissions reduced or avoided (tCO<sub>2</sub>e).

Acrinova will use the grid factor recommended in the Nordic Public Sector Issuers' 'Position paper on green bonds impact reporting' from 2020<sup>2</sup>. For existing properties, reduced emissions will be defined as the differential to emissions from the previous year. For construction projects, the first full year of reporting after construction has been completed the baseline shall be the differential to the current building regulation (BBR). Thereafter, emissions shall be compared to the previous year. The same calculation method will be used for acquired properties where relevant data is missing.

<sup>&</sup>lt;sup>2</sup> https://kommuninvest.se/wp-content/uploads/2020/02/NPSI Position paper 2020.pdf



Allocation of proceeds will be subject for an annual review by an external part/verifier. A verification report provided by the external part will be published on the company's website. Impact reporting will not be reviewed or verified by an independent party.

### 3 Assessment of Acrinova's green finance framework and policies

The framework and procedures for Acrinova's green finance 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 Acrinova should be aware of potential macrolevel impacts of investment projects.

### Overall shading

Based on the project category shadings detailed below, and consideration of environmental ambitions and governance structure reflected in Acrinova's green finance framework, we rate the framework CICERO Medium Green.

### Eligible projects under the Acrinova's green finance 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 finances 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".

### Eligible project types Category **Green Shading and some concerns** Green and All new construction, existing and acquired Medium Green energy buildings that either have or with the objective to The criteria allow for buildings with efficient receive: varying energy performance, but always at least 20% better than regulation. buildings (i) New construction and existing buildings that either have, or with the objective to receive, Acrinova has a policy to make new an energy performance certificate (EPC) of buildings energy self-sufficient and this class A or B. is very close to the long-term vision of (ii) New construction and existing buildings that passive or net negative energy houses. either have, or with the intention to receive, However, the criteria for this category in major well-known environmental the framework allows for other buildings certifications, such as: as well. Buildings with direct heating a. LEED "Silver" or better with fossil fuels are excluded, but small b. BREEAM "Very Good" or better fractions of fossil elements may remain c. BREEAM-In-Use "Very Good" or better in district heating. d. Nordic Swan Ecolabel (Sw. "Svanen") Acrinova expects foremost to be active e. Miljöbyggnad "Silver" or better in the Swedish part of the Öresund f. Green building region during the tenor of the bond. g. Passive house (Sw. "Passivhus") However, in the case that a project or h. Or any other well recognized certification property is acquired in Denmark, the scheme of similar level subject to approval Danish building regulation BR18 will be from the GFC. used instead of the Swedish BBR29.

- In addition, new construction and existing buildings within this category must also either currently or upon completion have an energy consumption of at least 20% below the current building regulation (Swedish BBR29).
- (iii) Major renovations resulting in reduced energy consumption of at least 30% compared to prerenovation.
- (iv) New construction and existing buildings with an energy use per year 20% below the national building regulation, such as Boverket's Building Regulations ("BBR"), applicable at time of construction.
- Green project values defined under 'Green and energy efficient buildings' are based on the estimated project value (subject for completion within 24 months) for new buildings, and the market value reported in the balance sheet for existing buildings.
- Point based environmental certification schemes like BREEAM and LEED 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, and sustainable building materials. This weakness is mitigated by Acrinova's additional energy requirement.
- According to Acrinova, the level of "any other well recognized certification scheme" should be similar to Miljöbyggnad Silver.
- In the Nordic context, approximately half of emissions stem from buildings materials and efforts should be made to reduce those indirect emissions in the design phase of the buildings. Wood as construction material is far preferable to other materials from a climate perspective. We note that Acrinova has policies in place aiming at reducing embodied emissions.
- IPCC recommends 50% energy efficiency improvement in deep renovations. According to IEA, efficiency of building envelopes needs to improve by 30% by 2025 to be aligned with the Paris target.

### **Energy** efficiency





Energy retrofits such as heat pumps, converting to Medium to Dark Green LED lighting, improvements in ventilation systems, extension of district heating and cooling systems, on-site solar panels, geothermal heating, sewer improvements etc.

- Eligible Green Projects and Properties under 'Energy efficiency' correspond to the relevant invested amount.
- District heating can involve some fossil fuel elements.

Table 1. Eligible project categories



### **Background**

The construction and real estate sector have a major impact on our common environment. According to the National Board of Housing, Building and Planning's environmental indicators, it accounts for 32% of Sweden's energy use, 31% of waste and 19% of domestic greenhouse gas emissions. Calculations from Sveriges Byggindustrier indicate that the climate impact of new production of a house is as great as the operation of the house for 50 years.

The building sector accounts for a large share 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 sources.<sup>3</sup> The energy efficiency of buildings is dependent on multiple factors including increasing affluence and expectations of larger living areas, growth in population and unpredictability of weather, and greater appliance ownership and use. Additionally, in the Nordics, approximately half of life-cycle emissions from buildings stem from materials/construction<sup>4</sup>. 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. All of these factors should therefore be considered in the project selection process. In addition, voluntary environmental certifications such as BREEAM or equivalents measure or 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>5</sup>

The Exponential Roadmap<sup>6</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. The roadmap advocates for standardised strategies that are globally scalable within areas such as new procurement practices for construction and renovation that require dramatically improved energy and carbon emission standards, developing new low-carbon business models for sharing space and smart buildings to achieve economies of scale, and allocating green bond funding for sustainable retrofitting and construction.

Choice of building materials is becoming more important for climate footprint than heating/cooling and power. A large number of life cycle analyses (LCA) show that wood-frame building results in lower primary energy and GHG emission compared to non-wood alternatives including concrete and steel. Less energy, in particular fossil fuels, is needed to manufacture wood-based building materials compared with alternative non-wood materials. Wooden materials also store carbon during their lifetime, temporary sequestering carbon from the atmosphere. Hence, wood-based buildings are appropriate for long-term strategies for reducing fossil fuel use and GHG emissions when combined with sustainable forestry<sup>7</sup>. Quantitative estimates are imprecise, but some studies indicate energy savings of the order of one third in the construction phase of wood buildings compared to buildings using mainly other materials.

### **Governance Assessment**

Four aspects are studied when assessing the Acrinova's governance procedures: 1) the policies and goals of relevance to the green finance framework; 2) the selection process used to identify eligible projects under the

<sup>&</sup>lt;sup>3</sup> https://www.iea.org/reports/building-envelopes

<sup>&</sup>lt;sup>4</sup> Sustainable Edge Sector Brief: Real Estate, https://cicero.oslo.no/file/2/sectorbriefs realestate 17 12.pdf/download

<sup>&</sup>lt;sup>5</sup> https://www.worldgbc.org/how-can-we-make-our-buildings-green

<sup>&</sup>lt;sup>6</sup> https://exponentialroadmap.org/wp-

content/uploads/2020/03/ExponentialRoadmap 1.5.1 216x279 08 AW Download Singles Small.pdf

<sup>&</sup>lt;sup>7</sup> R&D Fund for public real estate, The Swedish Association of Local Authorities and Regions (2016): Climate impacts of wood vs. non-wood buildings.

### °CICERO Shades of Green

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.

Acrinova does not have any quantitative targets when it comes to energy use or energy efficiency of its current portfolio, neither do they have quantitative targets for greenhouse gas emissions (scope 1+2). However, all new projects undertaken by Acrinova are subject to its ambitious zero-vision policy. This policy encompasses the full life cycle of a construction project and includes requiring that environmentally friendly materials and transport methods are chosen, whilst working to actively minimize the overall climate impact of the project. Ultimately, the zero-vision ensures that new properties are built to be energy self-sufficient whilst relying only on renewable energy sources. The broader target, applicable to all properties, is for energy consumption to be completely fossil-free. The company follows up on energy consumption with the tenant annually and works together with them to reduce consumption. However, the lack of energy and greenhouse gas reporting makes difficult to measure progress towards the zero vision targets.

Life cycle analysis, choice of materials with a low climate footprint and due considerations of climate change physical risks are all part of Acrinova's internal environmental and sustainability policy. The issuer does not follow the TCFD guidelines for reporting on climate risks.

Management of proceeds is in accordance with the Green Bond Principles. The reporting is good. The report will cover total amount of green finance instruments issued, the share of proceeds used for financing/refinancing as well as share of proceeds for the two eligible categories, and share of unallocated proceeds (if any). All financed

projects will be listed. Reporting will be done on a project-by-project basis but will not be linked to individual bonds. Acrinova intends to report on quantitative impact indicators where reasonable and where relevant data is available for the two eligible categories.

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



### **Strengths**

Most of the proceeds from the green financing are meant for the category Green and energy efficient buildings. Here, the eligibility criteria include an energy requirement securing that both new and existing eligible projects will have a specific energy use 20% below current regulations. This is clearly a strong point in the framework. The exclusion of fossil fuel technologies and a policy to ensure that new properties are built to be energy self-sufficient with renewable energy are also strengthen of the framework.

### Weaknesses

We find no material weaknesses in Acrinova's green finance framework.

### **Pitfalls**

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 IEA, 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 sources. Although Acrinova has as an ambition that new buildings should be self-



sufficient in only renewable energy, the criteria for eligible projects under the Green and energy efficient buildings category are good, but do allow for buildings not yet delivering the solutions needed in a low carbon 2050 perspective (passive house technology and similar). The issuer is taking a step in this direction with the energy efficiency criteria. In order to achieve a darker green shading, the green finance framework would need a stronger energy efficiency criteria in eligible green building projects.

Lack of quantitative target for greenhouse gas emissions at the company level in both short-term and long-term (at least scope 1 and 2), is currently a weakness in governance. Lack of time series reporting of emissions makes it difficult to assess progress towards its long-term green development. There is also a lack of scenario analysis whether or not formally in alignment with the TCFD recommendations.

Acrinova's relationsship with construction companies is described as close by the issuer, but still lack clear and quantifiable formal requirements when it comes to selection of materials, life cycle climate footprints, local transport solutions and climate resilience concerns.

The grid factor used will be aligned with the Nordic Public Sector Issuers Position Paper. In Sweden, this is usually higher than the local *de facto* grid factor and hence the CO<sub>2</sub>-effects are likely to be high estimates. Investors should be aware of this when Acrinova starts to report on grid based greenhouse gas emissions.

To the extent that the buildings rely on district heating, there is an inherent probability that some fossil fuel fractions (e.g., plastics) will be involved, although Swedish district heat providers generally are good at tracking and reducing fossil fractions. The investors should be aware that the share of fossil fuels in district heating are significantly higher in Denmark.

Rebound effects represent a category of macro impacts. For example, improved energy efficiency of a dwelling and lower energy costs may induce tenants to increase the indoor temperature, partly offsetting the initial anticipated energy and carbon dioxide savings. Acrinova mitigates the climate effect to some extent by requiring tenants to use clean energy.



# Appendix 1: Referenced Documents List

Document Number	Document Name	Description
1	Green Finance Framework - Acrinova AB (publ)	Acrinova's Green finance framework, dated November 2021
2	Annual report 2020	Acrinova's Annual report 2020
3	h-llbarhetspolicy-publik-20200508	Acrinova's public Sustainability policy, <a href="https://www.acrinova.se/files/h-llbarhetspolicy-publik-20200508.pdf">https://www.acrinova.se/files/h-llbarhetspolicy-publik-20200508.pdf</a>
4	Styrande dokument miljö- och hållbarhetskrav Acrinova	Acrinova's policy on environmental and sustainability requirements



## **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.

