°CICERO Shades of Green

# Annehem Fastigheter AB

## Shades of Green assessment

March 28, 2022

Sector: Real Estate

Region: Sweden

**Annehem Fastigheter AB (Annehem) owns and manages commercial properties in the Swedish regions of Stockholm, Gothenburg and Skåne, and the Nordic cities Helsinki and Oslo.** Annehem began, in 2020, as a wholly owned company under Peab AB. On December 11, 2020, Annehem became an independent company and took possession of a number of properties from Peab with a value of SEK 3,318 million.

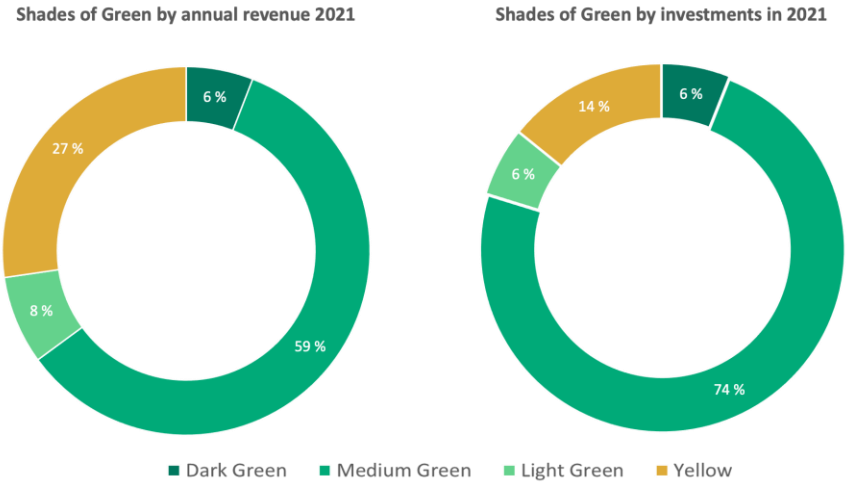



**Figure 1 Annehem's 2021 revenue and investments by Shades of Green.**

**In 2021, 73% of the rental revenue, 41% of operating costs and 86% of investments where from buildings shaded green[2].** The Shade of Green assigned to a property reflects its overall climate risk and environmental impact. From a climate perspective, it is better to maintain existing buildings rather than build new ones. However, in a 2050 perspective, the average energy intensity of Annehem's portfolio of 82 kWh/m$^2$ needs to improve over time. Buildings that are energy efficient compared to similar building stock or have other environmental benefits, as demonstrated by a high level of green building certification, are assessed as green.

**The Shade of Green assigned to Annehem's properties reflects the energy use of the building and level of environmental certification.** Dark Green is assigned to one property with low energy use, an energy performance certificate of A (EPC A) and a high level of green building certification. Medium Green is assigned to properties with high levels of environmental certification or with an energy use less than 20% of current building regulations or EPC B. Light Green is allocated to properties with a high level of certification and existing older buildings with energy use within the top 15% of similar stock. A Yellow shade is assigned to one energy inefficient and fossil fuelled building and parts of two business parks consisting of a multitude of different buildings. The yellow shading is due to lack of data for these properties, but also one of the parks (Ljungbyhed) contains an old airport used for educational services – i.e., non-green activities. Investments

### Nasdaq Green Designation[1]

CICERO Green assesses that Annehem meets the requirements for Nasdaq Green Equity Designation set out in the Nasdaq Green Equity Principles.

[1] CICERO Shades of Green is an approved reviewer to assess alignment with the Nasdaq Green Equity Principles, Nasdaq.com/Solutions/Nasdaq-Nordic-Green-Designations

2 For the purpose of this assessment, revenue and turnover are used interchangeably, as are operating costs and OPEX, investments and CAPEX. The numbers, which are based on the 2021 accounts, have been reported by Annehem to us.

at airports can lead to capacity increase of activities and associated significant risks of rebound effects in total emission. Otherwise, the repurpose of older facilities are generally positive for the climate.

**The analysis of properties is based on our assessment of Annehem's governance and management of these key environmental concerns: GHG emissions, Energy use, Building certifications, Materials and waste, Climate Resilience & Transportation solutions.** The company has a focus on certification, where all buildings constructed after 2016 shall be BREEAM-In-Use certified as Good or Very good and new constructions shall be certified according to Miljöbyggnad Silver. Annehem's further key aspirations are to reduce scope 1 emissions by 9% and scope 2 emissions by 30% to 2024 and increase the share of environmentally certified buildings considerably. Energy intensity and $CO_2$ emissions (scope 1+2) was 82 kWh/m$^2$ and 0.78 kg$CO_2$/m$^2$ in 2021. Note that energy intensity is measured from bought energy and includes both landlord and tenant energy use.

**Annehem is exposed to transitional risks and physical risks associated with climate change and more frequent extreme weather**. For the Swedish building sector, the most severe physical impacts will likely be increased flooding, heavier snow loads and urban overflow, as well as increased storms and extreme weather. Annehem has conducted analysis of flooding risks for some of their properties and is planning to cover the whole portfolio going forward.

**The most relevant EU Taxonomy criteria are Acquisition and ownership of buildings**. The Property Owner's association (Fastighetägarna) has published a report[3] which in our view provides adequate evidence for criteria for a building belong to the top 15% of similar stock energy wise. In addition, we find it reasonable to use the current building code (BBR29) as a proxy for Near Zero Energy Buildings (NZEB). Based on this we find that 73% of revenue and 86% of investments in 2021 were likely aligned with the specific technical climate mitigation criteria. However, Annehem appears not to be fully aligned with the do-no-significant-harm (DNSH) criteria on Climate adaptation since Annehem does not perform a full climate risk assessment according to the taxonomy. A more modest assessment of flooding risk is however undertaken. CICERO Green considers that Annehem likely fulfils the minimum social safeguards of the EU Taxonomy.

**Annehem is a young company and has as such few written policies and strategies**. Quantitative targets have recently been formulated, and annual data are being made public for the first time this year. The targets cover environmental certification, energy use and intensity, scope 1, 2 and 3 greenhouse gas emissions as well as some additional target for water use, waste handling, type of vehicles in own transport and sustainability audits of strategic suppliers. Going forward, Annehem plans for more comprehensive reporting, aligned with TCFD guidelines.

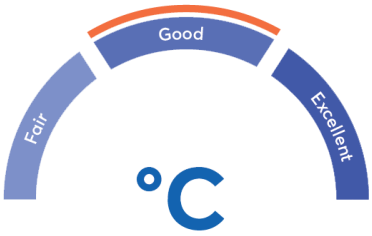



**Figure 2 CICERO Green assess Annehem's governance structure and practice to be Good.**

**Annehem is aware of potential social risks related to violations of human rights and workers' rights in their supply chain, and states that their procurement activities should be in line with human rights standards. However, they currently have no formal policy or code of conduct in place to reduce these risks.** Annehem has informed us that they have taken steps to reduce risks, and that they are developing key policies, which are important steps to improving social risk management. To date, Peab AB has been main supplier to Annehem, and Peab has solid policies and procedures when it comes to mitigating social risks.

**Table 1: Sector spesific metrics[4]**

| | Energy use[5] (kWh/m$^2$ Atemp) | Environmentally certified (% of area) | Emission intensity scope 1 + 2 (kg$CO_2$e/m$^2$) | Heated directly by fossil fuels (% of area) |
|---|---|---|---|---|
| ***2021*** | 82 | 30 | 0.8 | 0.5 |
| ***2020*** | 89 | 28 | 3.4 | 0.5 |

[3] https://via.tt.se/data/attachments/00014/d6fe5697-2ed2-4d35-ae12-3b8f86c098bd.pdf
[4] Annehem was established in 2020 and therefore has little historic data. Energy and emission data are estimates where annual data for some properties are estimates based on data for shorter time periods and estimates of tenant's energy use.
[5] Landlord primary energy intensity.

°CICERO Shades of Green

# Contents

°CICERO Shades of Green

# 1 Annehem's sustainability management

## Company description

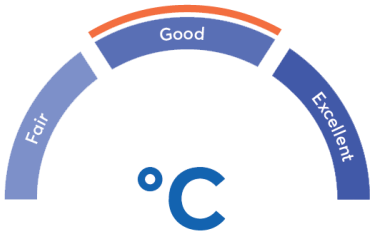
Annehem Fastigheter AB (Annehem) owns and manages commercial properties in the Swedish growth regions of Stockholm, Gothenburg and Skåne, and the Nordic cities Helsinki and Oslo. The properties are largely modern, allow for flexible use and have good access to public transport, but also includes two business parks established on old airports. This latter property contains a wide variety of building, like hangars and other buildings meant for storage as well as offices and other types of buildings.

In 2020, Peab AB formed the company Annehem Fastigheter AB as a wholly owned company for Peab AB. On November 12, 2020, Peab held an extraordinary general meeting where the shareholders decided to distribute all shares in Annehem to the shareholders in Peab. On December 11, 2020, Annehem became an independent company. In the process of becoming an independent company, Annehem acquired and took possession of a number of properties from Peab with a value of SEK 3,318 million.

In 2021 income from property management amounted to SEK 226 million. The fair value of investment properties amounted to SEK 3,994.1 million and investments in existing properties amounted to SEK 137.3 million.

## Governance Assessment

The overall assessment of Annehem's governance structure and processes gives it a rating of **Good.** Annehem is a young company and has as such few written policies and strategies for sustainability. Quantitative targets have mostly just been formulated, and annual data are being made public for the first time this year. Going forward, Annehem plans for more comprehensive reporting, possibly aligned with TCFD guidelines.




The main quantitative targets are (2021 values in parenthesis):

Environmental certifications[6]:

- Share of portfolio value environmentally certified in 2024: 90% (85%)
- Share of environmentally certified new acquisitions in 2024: 100% (100%)

Energy:

- Share of portfolio value among the top 15% when it comes to energy efficiency in 2024: 90% (85%)
- Energy use and energy intensity to be reduced by 9% from 2021 to 2024[7]
- Energy from solar power should reach 3 kWh/m$^2$ by 2024 (0.5 kWh/m$^2$)

Emissions[8]:

- Reduce scope 1 emissions by 9% from 2021 to 2024 (in 2021: 57.8 $tCO_2$)

[6] Certification is given as a share of property value and not area as some of the properties ('Parks') mainly consists of older offices and warehouses and the area for these buildings are disproportional according to the value of the buildings.
[7] In 2021 the energy intensity was 91 kWh/m$^2$ including estimates of tenants' energy use.
[8] Scope 3 emissions were 607.1 $tCO_2$ in 2021. There is no target for this as Annehem cannot control emissions from tenants.

- Reduce scope 2 emissions by 30% from 2021 to 2024 (in 2021: 95.7 t $CO_2$). Carbon neutral in scope 2 by 2030.

Others:
Annehem has established additional targets for water use intensity (-1% per year), waste handling, type of vehicles in own transport in addition to audit of strategic suppliers and some social related targets, see Annual report 2021.

Annehem states that they will aim for the BREEAM level "Very good" but cannot guarantee this. While certification schemes like BREEAM and LEED take many environmental issues into account, they do not always secure high energy standards and a small climate footprint. It is therefore good that Annehem has as an aspiration for energy use and intensity as well as scope 1 and 2 emissions. The longer-term goal is to be climate neutral by 2030.

For new investments, Annehem requires that they must contribute in a positive manner to the level of green properties in the portfolio, at least over time. Properties shall be certified at least at the level Miljöbyggnad Silver and Energy performance classification of B or better. Annehem evaluates the developer according to social risks and secure that they adhere to Swedish law with regard to staff on site. So far, Annehem have only bought properties from Peab who has well-established social and environmental risk controlling procedures.

When it comes to other sustainability issues, the focus of Annehem seems to be on tenants and own employees, and less on suppliers and contractors. Thus, there are well-developed policies securing that Annehem should be a good workplace. The procurement policy of Annehem focus on financial and contractual due diligence, with little or no focus on environmental concerns.

## Sector risk exposure

The below text box highlights some key risks for the real-estate sector. See Appendix 3 for additional background on the real estate sector more generally.

!

***Physical climate risks***. For the Nordic building sector, the most severe physical impacts will likely be increased flooding, snow loads and urban overflow, as well as increased storms and extreme weather. Developing projects with climate resilience in mind is critical for this sector. The real estate sector is also exposed to climate risks through links to the construction industry and the utilities sector.

***Transition risks***. Annehem is exposed to transition risks from stricter climate policies e.g., mandatory efficiency upgrades. The company is also exposed to liability risks due to e.g., legal challenges if preventable damages from climate change increases. In addition, the real estate sector is exposed to changing consumer preference for more climate smart and energy efficient buildings.

***Environmental risks***. The construction sector is at risk of polluting the local environment during the erection of the properties, e.g., from poor waste handling. There are also risks related to impacts on local biodiversity/habitats as well as the use of un-sustainably sourced material like tropical wood.

***Social risks***. The social risks related to the real estate and construction sector include risks for human rights violations primarily in the supply chain in the sourcing of materials and services. Risks in relation to workers' rights are particularly linked to health and safety for the issuers'/the companies' own employees as well as those of subcontractors. Corruption can be a challenge in this sector and should be paid extra attention to.

## Sustainability Management

Annehem has the advantage of having a mostly modern portfolio of properties that are flexible and energy efficient. The majority of Annehem's property value is already environmentally certified according to BREEAM, LEED or Miljöbyggnad. However, there are also two 'parks' in the portfolio, e.g., an old airport used for educational purposes, and containing a wide variety of buildings of uneven standard.

Annehem has as a target to obtain environmental certificates for at least 90% of the property value by 2024. Current status is 85%. All buildings built after 2016 shall be certified BREEAM-In-Use or equivalent. The company has also stated that they will annually reduce the proportion of purchased energy (to reach 30% reduction by 2024) and reduce the carbon footprint of operations for comparable holdings. Scope 1 emissions shall be reduced by 3% per annum. The longer-term goal is to be climate neutral by 2030 in scope 2 emissions. Similarly, water consumption per square meter should also be reduced by 1% per year. By 2024, all tenants should have access to waste stations with separated waste streams.

In the business parks, Annehem will evaluate and implement energy saving maintenance after the ongoing energy declaration of 34 buildings.

The sustainability policy is quite general and focus, in addition to the quantified energy and emission targets quoted above, mostly on social and human affairs. Climate risks are not covered, but for acquisition of existing buildings, climate risk assessment is part of the due diligence process at Annehem.

### *Governance structure*

The sustainability policy includes the following description of the governance structure for sustainability: The CEO of Annehem shall set goals for certain selected parts of the policy, ensure that the goals are implemented in the business and regularly follow up on these goals and related activities, and annually report on responsible business in a separate report for external use and/or in Annehem's annual report. In addition to what is stated in this policy, the CEO must ensure that guidelines and processes are in place to help the business achieve the goals for responsible business.

### *Risk assessment*

For new constructions, climate resilience is dealt with in the local planning process. For acquisition of existing buildings, climate risk assessment is part of the due diligence process at Annehem. So far Annehem has vetted the suppliers through the Peab Purchasing department. The top 10 list of suppliers to Annehem consists of companies with good internal controls according to Annehem, so their assessment is that the social risks they are exposed to is fairly limited.

We note that investments at the old airport can lead to capacity increase of activities and associated significant risks of rebound effects in total emissions.

### *Reporting*

The current sustainability reporting covers key performance indicators like energy use and intensities as well as greenhouse gas emissions (scope 1, 2 and 3) in addition to other indicators related to water use, waste handling, employers' satisfaction, supplier audits, and customers' satisfaction. The guidelines of TCFD are currently not being followed, but this is planned.

## Key issues

### *GHG Emissions*

Annehem estimates that Scope 1, 2 and 3 $CO_2$ emissions in 2021 was 3.7 $kgCO_2/m^2$. Annehem has as an ambition that scope 1 emissions shall be reduced by 3% per year. Purchased energy should be reduced by 30% by 2024. Annehem has as a target to annually reduce the carbon footprint of operations for comparable holdings. The longer-term goal is to be climate neutral in scope 2 by 2030.

| Emissions | Total (tons $CO_2eq$[9]) | Scope 1 | Scope 2 | Scope 3 |
|---|---|---|---|---|
| **Main targets (2022)** | | Reduce by 3 % annually | Reduce purchased energy by 30 % by 2024 | No target |
| **2021** | 771,1 | 57,8 | 106,2 | 607,1 |
| **Main sources** | Scope 3 is the largest share of total emissions | Direct emissions | Purchased energy – sold energy to tenants | Scope 3 includes tenant energy use and business travel |

**Table 2: The table summarizes Annehem's GHG-emissions and main emission reduction targets.**

### *Energy*

Average energy intensity in those of Annehem's properties that are reporting energy use was 91 $kWh/m^2$ in 2021. We note, however, that this figure is based on estimates of annual energy use based on shorter observation periods for some properties, and that tenant's energy use sometimes are estimated. The calculated average is therefore an uncertain number. Based solely on landlord primary energy, the intensity estimate is 82 $kWh/m^2$. Eight out of 15 properties under management in 2021 have energy performance certificates (EPCs) within the range EPC A-B, which generally is considerably better than regulations in the Nordic countries.

| Energy type | Percent | Comments |
|---|---|---|
| **Renewable energy** | 99,5% | Purchased energy. |
| **Fossil fuels** | 0,5% | |

**Table 3: The table gives information on the energy use for Annehem.**

### *Building Certifications*

Annehem uses BREEAM, LEED, the Nordic Swan Ecolabel (Svanen) and Miljöbyggnad as certification schemes. About 85% of Annehem's property value currently has a certification, spanning from BREEAM Good to LEED Platinum. The target for 2024 is to have 90% of the property value certified.

### *Materials and waste*

Annehem has so far not initiated any new constructions and there are no plans for such activity in the future. There are thus no policies or requirements on type of material used or handling of construction waste. Annehem secures that tenant have access to waste systems with sorting of the waste streams.

[9] $CO_2e$, carbon dioxide equivalent, is a measurement term for greenhouse gas accounting.

### *Climate Resilience*

Annehem reviews the dimensioning and capacity of stormwater management and air conditioning systems prior to acquiring new properties. Previous flooding problems during heavy rainfall to some of their older buildings, have been eliminated by erecting flood barriers.

### *Transportation solutions*

Annehem's properties are all located in central places with good availability to public transport. Transport related environmental impacts are thus of minor concern.

### *Key social issues*

Annehem is aware of the risk for violations of workers' rights and human rights in their supply chain. In their sustainability policy, they state that the company's procurement activities must be in line with the UN's guiding principles for companies and human rights, the principles in the UN's Global Compact and the OECD's guidelines for multinational companies. They will evaluate their future sub-contractors for facility management regarding social risks as they see them as representing the highest social risk. Annehem sets requirements for the use of ID06[10] cards for staff on construction sites for a good working environment.

Annehem actively opposes discrimination, harassment, sexual harassment and unequal treatment and has a policy for diversity and equal opportunity and states in the sustainability policy that employees have the right to organize and collective bargaining. If an employee or a sub-contractor experience corruption, bribery or the like the company has a whistleblower function.

Annehem states that they have zero tolerance for all forms of corruption and financial irregularities, such as bribery, illegal commissions, fraud, embezzlement and money laundering. Going forward, Annehem will evaluate future subcontractors for facility management regarding social risks. Annehem will attach and have their code of conduct as a part of the agreements.

**Table 2 CICERO Green assessment of Annehem's management of key environmental issues**

| Key issue | CICERO Green comments |
|---|---|
| GHG emissions | ✓ Annehem in 2022 is reporting all three scopes of greenhouse gas emissions, where scope 3 includes emissions caused by tenants.<br>✓ Annehem's greenhouse gas emission intensities are not among the lowest in the real estate sector. However, the ambition to reduce scope 1 emissions and the target of being climate neutral by 2030 in scope 2, should lead to improvements. |
| Energy | ✓ The energy intensities in Annehem's portfolio varies from the very good (below 50% of the current building regulation) to not so good values (several times higher specific energy use than current regulations), depending much on the use and age of the buildings. |
| Building Certifications | ✓ Many of the properties are certified as BREEAM Very Good or Miljöbyggnad Silver. Others have LEED Platinum, while others again have weaker or no certification. |

[10] ID06 is a system to be able to easily identify people in the workplace and connect each person to an employer. See: https://id06.se/om-oss/

| | |
|---|---|
| Materials and waste | ✓ Annehem does not have a separate policy on choice of building materials or requirements for handling of construction waste. This is explained by the fact that Annehem up until now has had very little activity associated with construction of new buildings.<br>✓ Part of Annehem's business parks are currently shaded yellow due to lack of data, but probably represent a good re-use of buildings which is positive from a climate footprint perspective. It may, on the other hand, support some non-green activities, e.g., through activities on an old airport.<br>✓ The tenants of Annehem are provided with waste sorting facilities. |
| Climate Resilience | ✓ Annehem relies on the public planning process when it comes to securing climate resilience. They are, however, well aware of the risk of flooding during heavy rainfalls and are taking precautionary steps to mitigate damage from such events. |
| Transport solutions | ✓ Annehem does not have a separate policy on transport solutions in connection to their properties. However, the properties in the current portfolio are all located in central places with good access to public transport. |
| Key social issues | ✓ Historically, Annehem has relied much on Peab when it comes to procurement and social risk associated with sub-contractors. Annehem's Sustainability policy states that the company's procurement activities must be in line with the UN's guiding principles for companies and human rights, the principles in the UN's Global Compact and the OECD's guidelines for multinational companies. Thus, Annehem is likely aligned with the EU taxonomy's minimum social safeguards. |

# 2 Assessment of Annehem's revenues and investments

### Shading of Annehem's revenue, operating expenses and investments[11]

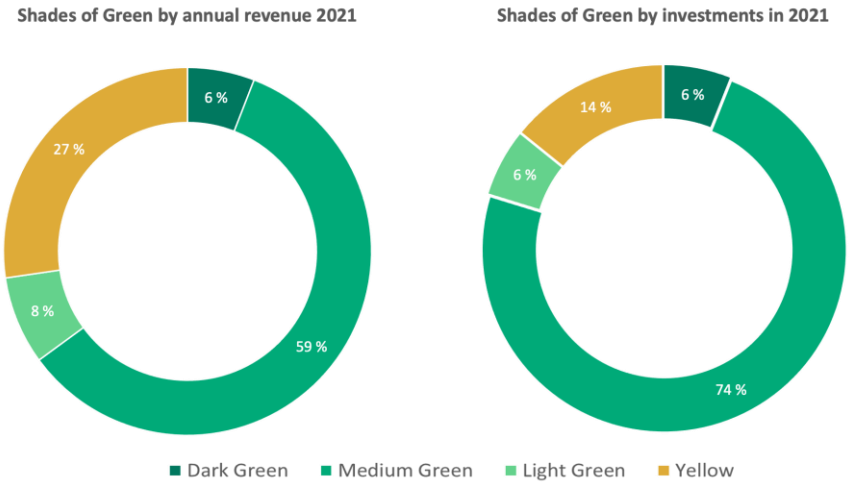



**Figure 3 Annehem's 2021 revenue and investments by Shades of Green.**[2]

Figure 3 shows our shading of Annehem's revenues and investments in 2021. The figures are aligned with Annehem's financial reporting; however, some small discrepancies may occur as our analysis requires allocating revenue, operating expenses, and investments to specific projects.

The Shade of Green assigned to a property reflects its overall climate risk and environmental impact. We have assessed and allocated a shade of green to each property in the portfolio. In assigning a shade of green to Annehem's revenue and production cost streams, we have used data on the relevant properties energy use (measured against the applicable building regulation) and the building's environmental certification level, taking into account building materials, resilience, transportation solutions and other environmental considerations, to assign a shading.

**Dark Green** is allocated to projects and solutions that correspond to the long-term vision of a low carbon and climate resilient future. These projects should be Paris aligned or have zero emissions around mid-century. This shade has been assigned to one exceptionally energy efficient property with a specific energy use below 50% of current regulation and a good environmental certification.

**Medium Green** is allocated to projects and solutions that represent steps towards the long-term vision but are not quite there yet. This shade is assigned to highly energy efficient properties with an energy use 20% below current regulations or very good environmental certifications, e.g., LEED Platinium.

**Light Green** is allocated to transition activities. This shade is allocated to properties with a high level of certification and for existing older buildings with energy within the top 15% of similar stock.

[11] For the purpose of this assessment, revenue and turnover are used interchangeably, as are operating costs and OPEX, investments and CAPEX. The numbers, which are based on the 2020 accounts, have been reported by Annehem to us.

For properties not fulfilling any of the above criteria, a shade of yellow or red is allocated based on actual energy use and year of construction or last major renovation. The yellow category is assets where data is lacking or classified as land with too little information on the current or intended usage of the plots. Part of Annehem's two business parks fall into this category. One of the parks (Ljungbyhed) contains an old airport for used for educational services. Airport activities are generally not assessed as green. Investments at airports can lead to capacity increase of activities and associated significant risks of rebound effects in total emissions. However, we note that the reuse of these diverse building complexes is positive from a climate footprint perspective. There is also an energy inefficient property in this category.

With these provisions, we find that for 2021 6% of rental revenue came from assets considered Dark Green, 59% from assets shaded Medium Green, 8% from assets shaded Light Green, and 27% from non-green assets shaded Yellow. Out of five Yellow labelled properties, three are due to lack of data. Overall, 73% of the rental revenue came from assets with some shade of green.

Investments was in 2021 6% Dark Green, 74% Medium Green, 6% Light Green, and 14% was assigned a Yellow shade. This suggests that 86% of the investment will have some shade of green. The shading is partially based on expected future certification levels and energy efficiencies, which may be uncertain. According to Annehem, all new building projects will be environemtally certified targeting Miljöbyggnad Silver.

When it comes to operating costs in 2021, these were distributed with 4% shaded Dark Green, 27% Medium Green, 9% Light Green, and 60% Yellow[12]. Overall, we find that 41% of operating costs were associated with assets with some shade of green.

Investors should note that our assessment is based on data reported or estimated by the company and has not always been verified by a third party. We analyse revenue, operating costs and investments, however there is typically not an explicit link between sustainability and financial data[13]. Our shading often requires allocating line items in financial statements to projects or products, for this we rely on the company's internal allocation methods. In addition, there are numerous ways to estimate, measure, verify and report e.g., data on energy use and emissions, which may make direct comparisons between companies or regulatory criteria difficult and somewhat uncertain.

## Nasdaq Green Designation

CICERO Green confirms that Annehem meets the requirements for Nasdaq Green Equity Designation set out in the Nasdaq Green Equity Principles.

In 2020, 73% of Annehem's turnover came from assets with some Shade of Green, exceeding the 50% threshold for green activities for company turnover. The sum of OPEX and CAPEX allocated a Shade of Green is 85%. This exceeds the 50 % threshold for investments, defined as the sum of CAPEX and OPEX. In 2020, Annehem had no turnover assessed shaded Red, meeting the threshold of less than 5% of the company's turnover being derived from fossil fuel activities.

In addition, this report provides transparency on alignment of the company's activities with the EU Taxonomy and transparency on the company's environmental targets and KPIs is provided.

[12] Some of the "Yellow" operating costs here is costs associated with the head quarter of Annehem. These were rendered Yellow since the average operating cost of the building portfolio is of this shading.
[13] Most accounting systems do typically not provide a break-down of revenue and investments by environmental impact, and the analysis may therefore include imprecisions and may not be directly comparable with figures in the annual reporting

## EU Taxonomy

The mitigation criteria in the EU taxonomy includes specific thresholds and do-no-significant-harm (DNSH) criteria for activities relevant for the company[14]. The relevant activity for Annehem is Acquisition and ownership of buildings. Comments on alignment are given below, and detailed thresholds, NACE-codes and likely alignment with DNSH criteria are given in Appendix 1. Input on our methodology is given in section 3.

The main technical thresholds applicable to Annehem are:

- For buildings built before 31 December 2020, the building has at least Energy Performance Certificate (EPC) class A. As an alternative, the building is within the top 15% of the national or regional building stock expressed as operational Primary Energy Demand (PED) and demonstrated by adequate evidence, which at least compares the performance of the relevant asset to the performance of the national or regional stock built before 31 December 2020 and at least distinguishes between residential and non-residential buildings.
- Where the building is a large non-residential building it is efficiently operated through energy performance monitoring and assessment.

Annehem also has two properties constructed after 31 December 2020, and for those the following criteria is applicable:

- The Primary Energy Demand is at least 10 % lower than the threshold set for the nearly zero-energy building (NZEB) requirements in national regulation. The energy performance is certified using an Energy Performance Certificate (EPC).

We consider a recent report from Fastighetsägarna[15] to provide adequate evidence for what constitutes the top 15% of the various building stocks in Sweden, although this has not been formally confirmed by the Swedish Building Authority. Similarly, we find that the current building code (BBR29) gives a reasonable definition of NZEB.

Annehem appears to be not fully aligned with the DNSH criteria on Climate adaptation since Annehem does not perform a full climate risk assessment according to the taxonomy. A more modest assessment of flooding risk is however undertaken.

CICERO Green considers that Annehem currently fulfill the minimum social safeguards of the EU Taxonomy. The company assesses key social risks and reports that it is currently exposed to low risks related to sub-contractors. In addition, Annehem is currently developing key policies including a Code of conduct for sub-contractors, which is an important step to improving social risk management.

Based on this, we find likely shares of portfolio alignment with the EU Taxonomy as follows:

| Overall EU Taxonomy alignment (Technical Criteria + DNSH + minimum safeguards) | Revenue | OPEX | CAPEX |
|---|---|---|---|
| **Total share eligible (activities covered by criteria)** | 100% | 100% | 100% |
| **Total share likely aligned** | 0% | 0% | 0% |
| **Total share likely aligned to Technical Criteria only** | 73% | 41% | 86% |

[14] taxonomy-regulation-delegated-act-2021-2800-annex-1_en.pdf (europa.eu)
[15] https://www.fastighetsagarna.se/globalassets/dokument/pdf/nyheter/analys-av-primarenergital-for-de-15-procent-basta-byggnaderna.pdf?bustCache=1645072604931

# 3 Terms and methodology

The aim of this analysis is to be a practical tool for investors, lenders and public authorities for understanding climate risk. CICERO Green encourages the client to make this assessment publicly available. If any part of the assessment is quoted, the full report must be made available. Our assessment, including on governance, is relevant for the reporting year covered by the analysis. This assessment is based on a review of documentation of the client's policies and processes, as well as information provided to us by the client during meetings, teleconferences and email correspondence. In our review we have relied on the correctness and completeness of the information made available to us by the company.

### Shading corporate revenue and investments

Our view is that the green transformation must be financially sustainable to be lasting at the corporate level. We have therefore shaded the company's current revenue generating activities, as well as investments and operating expenses.

The approach is an adaptation of the CICERO Shades of Green methodology for the green bond market. The Shade of Green allocated to a green bond framework reflects how aligned the likely implementation of the framework is to a low carbon and climate resilient future, and we have rated investments and revenue streams in this assessment similarly. We allocate a shade of green to the revenue stream and investments according to how these streams reflect alignment of the underlying activities to a low carbon and climate resilient future and taking into account governance issues.

| SHADES OF GREEN | EXAMPLES |
|---|---|
| **Dark green** is allocated to projects and solutions that correspond to the long-term vision of a low carbon and climate resilient future. | Solar energy projects |
| **Medium green** is allocated to projects and solutions that represent steps towards the long-term vision but are not quite there yet. | Green buildings with a high level of certification and energy efficiency |
| **Light green** is allocated to transition activities. These projects and solutions could have lower emissions, but do not by themselves represent or contribute to the long-term vision. | Substantially more efficient manufacturing of fossil fuel intensive materials |
| **Yellow** is allocated to projects and activities that do not contribute to transition. These activities could have some emissions and be exposed to climate risks. This category also includes activities with too little information to assess. | Efficiency in fossil fuel infrastructure |
| **Red** is allocated to projects and activities that have no role to play in a low-carbon and climate resilient future. These are heaviest emitting assets, with the most potential for lock-in of investments and risk of stranded assets. | New infrastructure for coal |

In addition to shading from dark green to red, CICERO Shades of Green also includes a governance score to show the robustness of the environmental governance structure. When assessing the governance of the company, CICERO Green looks at five elements: 1) strategy, policies and governance structure; 2) lifecycle considerations including supply chain policies and environmental considerations towards customers; 3) the integration of climate considerations into their business and the handling of resilience issues; 4) the awareness of social risks and the management of these; and 5) reporting. 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.

In April 2021, EU published its delegated act to outline proposed criteria for climate mitigation and adaptation, which it was tasked to develop after the EU Taxonomy Regulation entered into law in July 2020. The mitigation criteria in the EU taxonomy includes specific thresholds for real estate sector activities relevant for the company[16].

Do-No-Significant-Harm criteria include measures such as ensuring resistance and resilience to extreme weather events, preventing excessive water consumption from inefficient water appliances, ensuring recycling and reuse of construction and demolition waste and limiting pollution and chemical contamination of the local environment, as well as restriction on the type of land used for construction (no arable or forested land).

CICERO Green has assessed potential alignment against the mitigation thresholds and the DNSH criteria in the delegated acts published in April 2021.

In order to qualify as a sustainable activity under the EU regulation 2020/852 (the taxonomy) certain minimum social safeguards must be complied with. The safeguards require compliance with the OECD Guidelines for Multinational Enterprises and UN Guiding Principles on Business and Human Rights, including the International Labour Organisation's ('ILO') declaration on Fundamental Rights and Principles at Work, the eight ILO core conventions and the International Bill of Human Rights. CICERO Green has completed a light touch assessment of the above social safeguards with a focus on human rights and labor rights risks[17]. We take the sectoral, regional and judicial context into account and have on the basis of information provided by the company focused on the risks likely to be the most material social risk.

Our assessment of alignment against the EU Taxonomy is based on a desk review of the listed source documents against the Taxonomy Delegate Act and following our own shading methodology.

[16] taxonomy-regulation-delegated-act-2021-2800-annex-1_en.pdf (europa.eu)

[17] CICERO Green is in the process of further developing its assessment method to ensure that it encompasses the object and purpose of the minimum safeguards.

# Appendix 1: EU Taxonomy criteria and alignment

Complete details of the EU taxonomy criteria are given in [taxonomy-regulation-delegated-act-2021-2800-annex-1_en.pdf (europa.eu)]

## Acquisition and ownership of buildings

| **Framework activity** | **Green buildings** | | |
|---|---|---|---|
| **Taxonomy activity** | **7.7 Acquisition and ownership of buildings (NACE Code L68)** | | |
| | **EU Technical mitigation criteria** | **Comments on alignment** | **Alignment** |
| Mitigation criteria | • Substantial contribution to climate change mitigation<br><br>**Acquisition and ownership of buildings, eligible if:**<br><br>• For buildings built before 31 December 2020, the building has at least Energy Performance Certificate (EPC) class A. As an alternative, the building is within the top 15% of the national or regional building stock expressed as operational Primary Energy Demand (PED) and demonstrated by adequate evidence, which at least compares the performance of the relevant asset to the performance of the national or regional stock built before 31 December 2020 and at least distinguishes between residential and non-residential buildings.<br>• Where the building is a large non-residential building it is efficiently operated through energy performance monitoring and assessment.<br><br>For buildings built after 31 December 2020, buildings are eligible if:<br><br>• The Primary Energy Demand is at least 10 % lower than the threshold set for the nearly zero-energy building (NZEB) requirements in national regulation. The energy performance is certified using an Energy Performance Certificate (EPC). | **Relevant contextual information**<br><br>• The use of current regulations as a proxy for NZEB is done in the absence of an officially determined NZEB.<br>• We consider the report from Fastighetsägarna to provide adequate evidence for the energy efficiency of the top 15% of the national building stock.<br><br>**Information provided by the issuer**<br><br>• Eight properties are certified with the EPC label A or B, representing 61% of total revenues in 2020.<br>• Annehem confirms that large non-residential buildings have energy management systems installed. | **We find that 73% of revenue, 41% of operational expenses and 86% of investment were likely aligned to the taxonomy criteria in 2021.**<br><br>**Likely aligned to energy management criteria** |
| | **EU Taxonomy DNSH-criteria** | **Comments on alignment** | **Alignment** |

| | | | |
|---|---|---|---|
| Climate change adaptation | The physical climate risks that are material to the activity have been identified (chronic and acute, related to temperature, wind, water, and soil) by performing a robust climate risk and vulnerability assessment with the following steps[18]:<br>**(a)** screening of the activity to identify which physical climate risks from the list in Section II of this Appendix may affect the performance of the economic activity during its expected lifetime;<br>**(b)** where the activity is assessed to be exposed to physical climate risks, a climate risk and vulnerability assessment to assess the materiality of the physical climate risks on the economic activity;<br>**(c)** an assessment of adaptation solutions that can reduce the identified physical climate risk.<br><br>The climate projections and assessment of impacts are based on best practice and available guidance and take into account the state-of-the-art science for vulnerability and risk analysis and related methodologies in line with the most recent Intergovernmental Panel on Climate Change reports, scientific peer-reviewed publications, and open source or paying models.<br><br>For existing activities and new activities using existing physical assets, the economic operator implements physical and non-physical solutions ('adaptation solutions'), over a period of time of up to five years, that reduce the most important identified physical climate risks that are material to that activity. An adaptation plan for the implementation of those solutions is drawn up accordingly.<br><br>For new activities and existing activities using newly-built physical assets, the economic operator integrates the adaptation solutions that reduce the most important identified physical climate risks that are material to that activity at the time of design and construction and has implemented them before the start of operations.<br><br>The adaptation solutions implemented do not adversely affect the adaptation efforts or the level of resilience to physical climate risks of other people, of nature, of cultural heritage, of assets and of other economic activities; are consistent with local, sectoral, regional or national adaptation strategies and plans; and consider the use of nature-based solutions or rely on blue or green infrastructure to the extent possible. | **Information provided by the issuer**<br><br>Annehem reviews the dimensioning and capacity of stormwater management and air conditioning systems prior to acquiring new properties. Previous flooding problems during heavy rainfall to some of their older buildings, have been eliminated by erecting flood barriers. | **Likely not fully aligned.** |

[18] The Taxonomy is referring to Appendix A in the Taxonomy Annex 1.

# Appendix 2: Referenced documents list

| Document Number | Document Name | Description |
|---|---|---|
| 1 | annehem-fastigheter-publishes-annual-report-for-2020-84602_Annehem-AR-2020-ENG | Annehem's Annual report 2020 |
| 2 | P06_Inköp_Sammanställning – process | Description of Annehem's procurement process |
| 3 | Policy för Hållbarhet 200407 | Annehem's Sustainability policy |
| 4 | PCS Assessment tool V9.6 rev 5 | BREEAM assessment tool, version 2009 |
| 5 | Peabs miljopolicy | Peab's environmental policy |
| 6 | 100323 Annehem - 7. Sjukfrånvaro 20-12 (2) | Overview of sick leaves in 2020 |
| 7 | 100323 Annehem - 7. Sjukfrånvaro 202108 | Overview of sick leaves in 2021 |
| 8 | Husguiden Sadelplatsen 4 | A house guide to Sadelplatsen 4 |
| 9 | Planbeskrivning Sadelplatsen 4 mfl inkl miljökonsekvens | An example of a detailed plan for a site including environmental impact assessment |
| 10 | Deltaljplan Sadelplatsen 4 mfl Fördröjning av dagvatten krav | An example of a detailed plan to secure delay of stormwater |
| 11 | Annehem_övergripande resultat - Kundundersökning | A customer survey |
| 12 | Rapport Annehems Medarbetarundersökning 2020 | Annehem's employee survey 2020 |
| 13 | Miljöpolicy Property Partner - Driftentreprenör | Environmental policy of Project Partner – an operating contractor |
| 14 | Miljö- och hållbarhetspolicy- IXX vår it leverantör | Annehem's environmental and sustainability policy for its IT supplier |

| | | |
|---|---|---|
| 15 | Visselblåsar ärende 211019 | Annehem’s whistle blower report 2021 |
| 16 | Policy för hållbarhet, ink. code of conduct, visselblåsning (23 Oktober 2020) | Annehem’s sustainability policy |
| 17 | Actic - Grön hyresavtal | An example of a green lease |
| 18 | Energideklaration 2021 Sadelplatsen 4 | An energy declaration |
| 19 | Ultimes_energiatodistus-32072-fi | An energy declaration |
| 20 | Ultimes II 108B UBG2 Energiatodistus_käyttöönotto_25.2.2019 | An energy declaration |
| 21 | ED Ledvolten 1 Solna | An energy declaration |
| 22 | DD-lista Annehem (Datum) | Due diligence information sheet |

# Appendix 3: Background

According to the International Energy Agency (IEA), the buildings and buildings construction sectors combined are responsible for 36% of global final energy consumption in 2018 and nearly 40% of total direct and indirect $CO_2$ emissions. Appliances (excluding heating, cooking and cooling appliances) are responsible for around 17% of final electricity use by buildings.

Emissions from heating of buildings in Sweden have decreased from 9.3 million tonnes $CO_2$e to 0.8 million tonnes over the period from 1990 to 2019. In 2019, the sector accounted for less than 2% of Sweden's total emissions[19]. Emissions from production of materials, construction and demolition of the buildings constitute additional emission[20]. These (scope 3) emissions become increasingly important as buildings are built more energy efficient and the electricity and heat supply is converted to 'greener' sources, reducing scope 1 and 2 emissions. Around half of all life cycle greenhouse gas emissions in new buildings comes from heat and energy use[21], while approximately 40% comes from use of materials. Emissions associated with construction and demolition accounts for 2-5%.

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.

As members of the EU, Sweden, Denmark and Finland are subject to the EU's climate targets of reducing collective EU greenhouse gas emissions 40% by 2030 compared to 1990 levels, increasing the share of renewable energy to 32% and improving energy efficiency by at least 32.5%.[22] The European Green Deal aims for carbon neutrality in 2050.[23] Sweden has developed a National Energy and Climate Plan (NECP) in which it outlines the targets and strategies in all sectors.[24] These strategies include measures such as increasing renewable energy capacity, improving energy efficiency, facilitating the large scale implementation of clean transportation alternatives, and implementing carbon sinks through reforestation and the LULUCF sector. Non-ETS emissions, of which public buildings and households are a part, must decrease by 63% by 2030. In February 2020, Norway released updated targets for 2030 to cut GHG emissions by 50-55% from 1990 levels[25].

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.[26] The energy efficiency of buildings is dependent on multiple factors including increasing affluence

[19] Naturvårdsverket: https://www.naturvardsverket.se/Sa-mar-miljon/Statistik-A-O/Vaxthusgaser-utslapp-fran-uppvarmning-av-bostader-och-lokaler/
[20] https://www.miljostatus.no/tema/klima/norske-klimagassutslipp/klimagassutslipp-bygg/
[21] Asplan Viak AS (2018): Utredning av livsløpsbaserte miljøkrav i TEK, https://dibk.no/globalassets/02.-om-oss/rapporter-og-publikasjoner/utredning_av_livslopsbaserte_miljokrav_i_tek_asplan_viak_2018.pdf
[22] https://ec.europa.eu/clima/policies/strategies/2030_en
[23] https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en
[24] https://ec.europa.eu/energy/topics/energy-strategy/national-energy-climate-plans_en
[25] https://www.regjeringen.no/no/aktuelt/norge-forsterker-klimamalet-for-2030-til-minst-50-prosent-og-opp-mot-55-prosent/id2689679/
[26] https://www.iea.org/reports/building-envelopes

and expectations of larger living areas, growth in population and unpredictability of weather, and greater appliance ownership and use. 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. All of these factors should therefore be considered in the project selection process. In addition, voluntary environmental certifications such as LEED and 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.[27] CICERO Shades of Green assesses all of these factors when evaluating the climate impact of buildings.

The Exponential Roadmap[28] lays out a trajectory for reducing emissions by 50% by 2030 and requires that emissions reduction 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.

A large number of LCA studies 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. Wood-based materials use primarily biomass residues for processing energy. Wooden materials also store carbon during their lifetime, temporarily sequestering carbon from the atmosphere. Large amounts of biomass residues are produced during the manufacture and end-of-life of wood products, and these can be used to replace fossil fuels. Hence, wood-based buildings are appropriate for long-term strategies for reducing fossil fuel use and GHG emissions when combined with sustainable forestry[29]. Quantitative estimates are imprecise, but some studies indicate energy savings in the order of one third in the construction phase of wood buildings compared to buildings using mainly other materials.

[27] https://www.worldgbc.org/how-can-we-make-our-buildings-green
[28] https://exponentialroadmap.org/wp-content/uploads/2020/03/ExponentialRoadmap_1.5.1_216x279_08_AW_Download_Singles_Small.pdf
[29] R&D Fund for public real estate, The Swedish Association of Local Authorities and Regions (2016): Climate impacts of wood vs. non-wood buildings. https://webbutik.skl.se/bilder/artiklar/epub/7585-377-2.epub

# Appendix 4: 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, sustainability and sustainability-linked bond investments. CICERO Green also provides Company Assessments, providing an assessment and shading of a company's revenues and investments as well as assessing the governance structure to indicate the greenness of a company. CICERO Green is internationally recognized as a leading provider of independent reviews of green bonds, since the market's inception in 2008. CICERO Green is independent of the entity issuing the bond, its directors, senior management and advisers, and is remunerated in a way that prevents any conflicts of interests arising as a result of the fee structure. CICERO Green operates independently from the financial sector and other stakeholders to preserve the unbiased nature and high quality of second opinions.

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