



Entra

Green Bond Second Opinion

20th December 2022

Executive summary

Entra ASA (“Entra”) is a leading property developer in Norway, with a focus on office buildings in central locations. Entra issued its first green bond in 2016, and this framework is an update of the 2018 version of the framework. As of Q4 2021, Entra’s property portfolio comprised 96 buildings, with a market value of NOK 67.5 billion.

Under the framework, most proceeds will refinance existing office buildings certified BREEAM-NOR Excellent, with some new financing to major renovations, as well as new construction with energy label A, achieving the same level of certification. The framework criteria are largely unchanged since the 2018 version of the framework, but Entra has strengthened its environmental policies since then. It has an overarching goal to reach net zero by 2030 according to the definitions and targets set out by World Green Building Council. The company is currently strengthening its efforts to reduce embodied emissions and reduce emissions across a building’s lifecycle, while continuing to improve its portfolio’s energy performance.

Based on the overall assessment of the project types in Entra’s green bond framework, governance, and transparency considerations, the framework receives an overall **CICERO Medium Green** shading and a governance score of Excellent. The Medium Green shades reflects the strengths of the energy criteria and embodied emissions considerations for most of the financed buildings and the expected weight of major renovations, which are important in a 2050 perspective. The criteria for existing buildings allow for financing buildings with an energy label C (in line with the 2010 regulation), which we consider a Light Green element, but which represent a small portion of the financed buildings. Entra could further increase the environmental ambitions of the framework by fully aligning its criteria for new construction with the company’s targets, such as a quantified reduction in emissions per square meter.

Strengths

The company’s approach to climate change resilience, its climate targets and related policies, track-record of pioneering new approaches and focus on renovation represent strengths. Its work on physical climate change risk is aligned with best practices. Entra has undertaken an analysis of physical climate risk at asset level, in line with the do-no-significant-harm (DNSH) criteria to adaptation in the EU Taxonomy. Entra’s overarching 2030 target, in combination with specific targets and measures in different areas, represent good conditions for an environmentally robust implementation of the framework. The company’s policies are comprehensive, and the approach taken to waste and re-use of materials stand out as particularly good. It is positive that Entra is pioneering

SHADES OF GREEN



°CICERO
Medium Green

GOVERNANCE ASSESSMENT



GREEN BOND PRINCIPLES

Based on this review, this framework is found in line with the principles.



ambitious environmental approaches in selected projects, for example in terms of re-use of building materials, before using the lessons learnt in other projects.

Pitfalls

Given Entra's growth ambitions, its absolute emissions across all scopes are expected to increase, even if it achieves its targets set per square meter. This pitfall is not specific to Entra and most real estate companies set targets per square meter.

While the BREEAM-NOR certification scheme is robust, it does not guarantee a low climate impact building nor a very energy efficient building. The point-based system may allow for less ambitious buildings to meet the Excellent certification level. However, this is mitigated by Entra's own policies, such as targeting an energy label A for new construction and energy performance that is 15% better than the Norwegian NZEB level, choosing low carbon materials and efforts in waste prevention, re-use and recycling. The official Norwegian NZEB level is not yet defined, but the issuer expects it to be established soon.



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1 Entra's environmental management and green bond framework

Company description

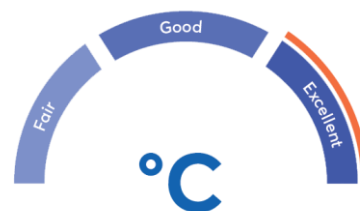
Entra is one of Norway's largest real estate companies, with a focus on developing, letting and managing attractive and environmentally friendly commercial buildings. Its portfolio consists of high-quality office buildings in central locations. Approximately 76% of the property portfolio (by value) is located in the Greater Oslo region, and the remaining in the cities of Trondheim, Bergen and Stavanger. Environmental considerations have been an integrated part of Entra's business model for more than ten years.

Governance assessment

Entra has appropriate and relevant strategies and policies for both climate change mitigation and adaptation, as well as strategies for other environmental issues, such as water use, chemicals and waste. In 2022, it launched a new environmental strategy, with a goal to achieve net zero emissions for its entire value chain by 2030.

Reporting on sustainability follows well established standards, including the TCFD. The green bond impact reporting could be more transparent on how greenhouse gas emissions for the financed buildings are calculated.

To improve, Entra could report on embodied emissions from building materials.



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



Sector risk exposure

In the Norwegian context, construction and real estate is estimated to account for some 16% of greenhouse gas emissions in Norway, when taking into account both direct and indirect emissions, and 40% of the country's energy consumption¹. According to the government's climate plan, measures to further increase energy efficiency must be weighed against the life cycle impacts of the building materials.

Physical climate risks. For the Nordic building sector, the most severe physical impacts will likely be increased flooding, changing snow/ice patterns 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. Entra is exposed to transition risks from stricter climate policies e.g., stricter regulation on energy performance or absolute limits on embodied emissions per square meter. 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.

Environmental Strategies and Policies

Entra has recently revised its targets, setting new environmental targets for both the short and long term. Its overarching target is to become Net Zero Carbon within 2030 according to the definitions and targets set out by World Green Building Council¹. The strategy is implemented through targets and detailed policies in four areas: 1) own organization (certified in accordance with the Environment Lighthouse), 2) property portfolio and management, 3) project development and 4) stakeholders, including suppliers and customers. Central for all areas are efforts to reduce energy consumption along with efforts to produce green energy. Specifically, Entra plans to reduce the operational emissions from its buildings under management by 70%, through reducing energy use, increase on-site renewable energy, replacing refrigerant gases with lower GWP alternatives, reduce waste and increase recycling and re-use, reduce water use. For new projects, Entra is planning to reduce emissions per square meter by 80% by 2030 compared to current emissions for new projects. Entra is working to reduce life cycle emissions and striving that all new developments in 2030 are in accordance with the criteria's set in FutureBuilt Zero². The 2030 target for new projects is to be achieved through highly energy efficient buildings, the use of low emissions materials, fossil free construction sites by 2025, BREEAM Excellent certification, reduced waste and an Increased share of reused materials, as well as more renewable energy. Starting from 2022, GHG accounting is done for all new projects. To reach net zero, the remaining emissions in 2030 will be compensated through offsets.

Entra has reduced the average total energy use (tenant and landlord) per square meter from 202 kWh in 2011 to 123 in 2021. In 2021, scope 1, 2 and 3 emissions from the total portfolio amounted to, respectively, 179, 3 816

¹ [The Net Zero Carbon Buildings Commitment | World Green Building Council \(worldgbc.org\)](https://www.worldgreenbuildingcouncil.org/)

² [FutureBuilt](https://futurebuilt.no/)



and 1 171 tonnes CO₂e. While scope 2 and 3 emissions somewhat fell, scope 1 emissions increased five-fold. The scope 1 increase came from the use of some fossil fuels at one school building on the coldest days in 2021.

The short-term target for energy use for 2022 is 126 kWh/m², with a long-term target to get the entire portfolio below 100 kWh/m² by 2030. For newbuilds, the target is energy label A and energy use at least 15% below the Norwegian NZEB, while targeting a 35% reduction in energy use for major renovations. These energy targets for new construction replace a previous target of energy use of 30-40 kWh/ m². While the NZEB level for Norway has not yet been defined officially, the issuer expects this to happen in the near future. Entra's energy use targets include both landlord and tenants' energy use, and this is actual measured energy use. Entra has developed its own measurement method, where it adjusts for outside temperature, energy use from server rooms, parking basement, electric car chargers, and outdoor snowmelt system.

Entra has made a strategic choice to focus on retaining existing buildings rather than demolishing and building new, while also favouring the re-use of materials. For all new developments and re-development, CO₂ accounting is done to choose low emission materials. Entra has pioneered these approaches in some flagship projects, such as an office building in Oslo being the first circular building according to the FutureBuilt criteria. These projects are used as benchmarks for other projects.

Entra has extensive sustainability reporting, in its annual report, reviewed by an external auditor. Reporting is done using the GRI standards, the recommendations of the TCFD as well as with the Sustainability Best Practice Recommendations (sBPR) from the European Public Real Estate Association. Reporting includes energy consumption, waste, water usage as well as greenhouse gas emissions in line with the GHG Protocol (scope 1, 2 and 3).

Entra has procedures for sustainable purchasing and environmental requirements are part of procurement conditions. These conditions include requirements for reduced waste, while Entra does not allow the use of materials hazardous to health and the environment that are on the Substance of Very High Concern (SVHC) list³. Entra is in active dialogue with suppliers, among other by enquiring about fossil-free construction sites. The company has also set up a scheme for working with customers on environmental measures, through so-called "green benefits agreements" where Entra and its customers identify potential environmental measures, which are then fund by increased rent for a set period of time.

Entra has identified the main physical climate change and transition risks it is exposed to, including both acute and chronic physical risks. According to this analysis, the most significant risks in the short term are stronger winds and storms, and extreme rainfall. In 2021, Entra mapped and analysed the physical climate at asset level, for all of its properties, using the requirements from BREEAM In-Use version 6, the EU taxonomy's Annex II and the TCFD criteria. To conduct the analysis, the company used external experts. Three different climate model scenarios were used, and Entra analysed its portfolio's exposure to different types of climate related weather hazards. To limit the consequences of such events Entra is working to maintain roofs and facades to make them able to withstand more extreme conditions, while also focusing on water management. In the long term, the identified risks are flooding and rising sea levels. According to the company, most of Entra's buildings are not directly exposed to rising sea level. In the purchase of any property going forwards, physical climate risks will be assessed. Assessing climate risk is an integral part of the company's general risk assessment procedures and is followed up on with mitigating actions.

³ [Which chemicals are of concern - ECHA \(europa.eu\)](https://echa.europa.eu)



Green bond framework

Based on this review, this framework is found to be aligned with the Green Bond Principles. For details on the issuer's framework, please refer to the green bond framework dated October 2021.

Use of proceeds

For a description of the framework's use of proceeds criteria, and an assessment of the categories' environmental benefits, please refer to section 2.

Selection

Entra's green bond committee will evaluate and select projects that are in line with the criteria of the framework's Use of Proceeds section. The committee meets as needed, at least on an annual basis. The committee has representatives from the treasury and project development departments, all with sustainability competence. The group sustainability representative has veto power.

The green bond committee is responsible for evaluating the compliance of proposed assets with the framework, ensuring that the pool of eligible assets is aligned with the framework's criteria and remove any assets if they no longer meet those criteria (following divestment, liquidation, concerns regarding alignment of underlying activity).

Management of proceeds

Green bond proceeds are tracked by Entra in a systematic manner. There may be periods when the outstanding net proceeds of green bonds exceed the value of eligible assets. Proceeds will then temporarily be held in accordance with Entra's liquidity management policy, where the same exclusion criteria as under the framework apply (see Use of Proceeds section). However, the issuer does not expect to have any unallocated proceeds.

Reporting

In an annual green bond report, Entra will report on all projects financed and their expected impact, as well as information on the share of green bond proceeds spent on new financing vs. re-financing.

Starting from this year or the next, an external independent auditor will annually review that the selection process and the allocation of proceeds are performed in accordance with Entra's green finance framework, as well as review the impact report. The report will be public. To date, this review has been done by an internal compliance officer.

Impact reporting will to some extent be done at a portfolio level due to confidentiality and competitiveness issues, as well as data availability. Impact indicators may include those shown in the table below. Entra will make impact calculations on a best effort basis, providing best estimates of future energy performance if data is not yet available. The report will include information methodologies used.

Project category	Examples of impact indicators
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Green Buildings	BUILDINGS
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	Fraction of each subcategory (certification type and level and the average energy consumption and respective certification level (Including reference to the complete evaluation)
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	RENOVATIONS
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	Annual energy improvement of renovation projects measured in kWh/m ² and/or CO ₂ equivalent.
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Reporting will also indicate the share of assets financed under the framework that are taxonomy aligned, for each sub-category (new/existing buildings and renovations).




2 Assessment of Entra's green bond framework

The eligible projects under Entra's green bond framework are shaded based on their environmental benefits and risks, based on the "Shades of Green" methodology.

Shading of eligible projects under Entra's green bond framework

- Entra expects most proceeds to be spent on refinancing, defined as refinancing assets older than 12 months. The look back period for refinancing is three years, while any assets already financed by green bonds may be re-financed.
- While the issuer cannot indicate the expected shares going to renovations vs. new vs. existing building, it expects the share of investments going to major renovations to increase from its current 60% of investments to 80%.
- Net proceeds from the green financing framework will not be allocated to assets where the purpose is fossil energy production, nuclear energy generation, weapons and defence, potentially environmentally harmful resource extraction (such as rare-earth elements or fossil fuels), gambling or tobacco.

Category	Eligible project types	Green Shading and some concerns
	New buildings <ul style="list-style-type: none">➤ New commercial and residential properties with certification from BREEAM-NOR with minimum certification of "Excellent" and that have received, or are expected to receive an energy efficiency threshold of EPC = A.	Medium Green <ul style="list-style-type: none">✓ The issuer expects to finance only commercial properties, in line with its strategy.✓ The criteria for new buildings and renovations, combined with Entra's environmental policies, represent steps towards the 2050-perspective as the buildings have good energy performance and efforts are made to reduce embodied emissions. Meanwhile, the energy performance of the existing buildings varies, and EPC C is not in line with current regulations, although expected to be within the top 15% of the building stock in terms of energy performance in Norway. While the buildings with EPC C represent a Light Green element, the Medium Green shades reflects the strengths of the energy and embodied emissions considerations for most of the financed buildings and the expected weight of major renovations.
	Existing buildings <ul style="list-style-type: none">➤ Refinancing of existing commercial and residential properties with certification from BREEAM-NOR with a minimum certification of "Excellent"➤ Commercial and residential properties with a minimum BREEAM In-Use certification of "Excellent", and minimum EPC C	<ul style="list-style-type: none">✓ Energy label A for new construction ensures an improvement compared to
	Redevelopment/refurbishments <ul style="list-style-type: none">➤ Major renovation projects of commercial and residential properties with certification from BREEAM-NOR with a minimum certification of "Excellent", and minimum EPC C	



regulation, for instance energy use is 22% better than regulation for office buildings with this label. Embodied emissions are calculated and low carbon materials are chosen as far as possible. According to the issuer, average lifecycle emission for its new construction projects amounts to 1000 kg CO₂/m², compared to a long-term target (2030) of 220 kg CO₂/m², in line with the FutureBuilt guideline for low carbon buildings.

- ✓ Entra has a strategic focus on renovations, and most new projects that are initiated are renovations. According to Entra, most renovation projects achieve an energy use improvement of 35% compared to pre-investment, with a few exceptions where technical constraints prevent the achievement of this level. In its renovations, Entra does robust considerations on circular economy aspects and has pioneered new ambitious approaches.
- ✓ Among Entra's existing buildings certified BREEAM-NOR Excellent (new construction), all achieved an energy label A, except one with a B. The remaining buildings in its portfolio, with In-Use Excellent certification, have varying energy performance, and the framework requirement to have at least an EPC C ensures that assets with the poorest energy performance will not be eligible under the framework.
- ✓ Entra has strong climate resilience policies, followed up on by specific measures for its buildings.
- ✓ Financed buildings are heated with electricity and/or district heating/cooling, no financed buildings will use direct fossil fuel heating. In many cases, Entra is legally obliged to connect the buildings to the district heating network. Entra makes efforts to increase on-site renewable energy generation (solar panels, heat pumps), but this is determined on a case-by-case basis, and



there are currently regulatory and commercial challenges to the widespread installation of solar panels on commercial buildings in Norway.

Table 1. Eligible project categories









3 Terms and methodology

This note provides CICERO Shades of Green's (CICERO Green) second opinion of the client's framework dated September 2022. 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.

'Shades of Green' methodology

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:

Shading	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 power plants
 Medium Green is allocated to projects and solutions that represent significant steps towards the long-term vision but are not quite there yet.	 Energy efficient buildings
 Light Green is allocated to transition activities that do not lock in emissions. These projects reduce emissions or have other environmental benefits in the near term rather than representing low carbon and climate resilient long-term solutions.	 Hybrid road vehicles

The "Shades of Green" methodology considers the strengths, weaknesses and pitfalls of the project categories and their criteria. 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, including potential macro-level impacts of investment projects.

Sound governance and transparency processes facilitate delivery of the client's climate and environmental ambitions laid out in the framework. Hence, key governance aspects that can influence the implementation of the green bond are carefully considered and reflected in the overall shading. CICERO Green considers four factors in its review of the client's governance processes: 1) the policies and goals of relevance to the green bond framework; 2) the selection process used to identify and approve eligible projects under the framework, 3) the management of proceeds and 4) the reporting on the projects to investors. Based on these factors, we assign an overall governance grade: Fair, Good or Excellent. Please note this is not a substitute for a full evaluation of the governance of the issuing institution, and does not cover, e.g., corruption.



Assessment of alignment with Green Bond Principles

CICERO Green assesses alignment with the International Capital Markets' Association's (ICMA) Green Bond Principles. We review whether the framework is in line with the four core components of the GBP (use of proceeds, selection, management of proceeds and reporting). We assess whether project categories have clear environmental benefits with defined eligibility criteria. The Green Bonds Principles (GBP) state that the "overall environmental profile" of a project should be assessed. 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 selection process. CICERO Green assesses whether net proceeds or an equivalent amount are tracked by the issuer in an appropriate manner and provides transparency on the intended types of temporary placement for unallocated proceeds. Transparency, reporting, and verification of impacts are key to enable investors to follow the implementation of green finance programs.



Appendix 1:

Referenced Documents List

Document Number	Document Name	Description
1	Entra Green Bond Framework	Entra's updated green financing framework, dated September 2022.
2	Annual report 2020	Financial annual report, including sustainability reporting, as well as sustainability policy and targets.
3	Annual report 2021	Financial annual report, including sustainability reporting, as well as sustainability policy and targets.
4	FutureBuilt Zero kriterier	Criteria for FutureBuilt Zero, guidelines for construction of buildings with 50% lower lifecycle emissions (from energy and materials) than the industry average in Norway.
5	Entra Green Bond Report 2020	Allocation and impact report published May 2021 for bonds issued until the end of 2020.



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.

