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Second Party Opinion

Liven AS Green Finance Framework

March 21, 2024

Location: Estonia

Sector: Real estate

Alignment With Principles

Aligned = ✓ Conceptually aligned = ○ Not aligned = ✗

- ✓ Green Bond Principles, ICMA, 2021 (with June 2022 Appendix 1)
- ✓ Green Loan Principles, LMA/LSTA/APLMA, 2023

See [Alignment Assessment](#) for more detail.

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Light green

Activities representing transition steps in the near-term that avoid emissions lock-in but do not represent long-term low-carbon climate resilient solutions.

Our [Shades of Green Analytical Approach](#) >

Strengths

Liven's upstream value chain management has a strong environmental focus. The issuer has informed us that standard contract terms for general contractors include requirements such as energy conservation, proper waste management, and limiting environmental impacts, to name a few. The terms also state that the issuer has the right to verify a contractor's compliance.

Weaknesses

None to report.

Areas to watch

Liven is yet to calculate its entire portfolio's greenhouse gas emissions. This limits our visibility on the historical performance and the carbon footprint of the financed assets.

The framework criteria do not address embodied emissions. The issuer partially mitigates these by replacing high-emitting materials, such as concrete and brick, with low-carbon solutions where feasible. While these efforts are positive, new construction is still associated with high emissions given that the knowledge and methodologies for tackling this industry-wide challenge are just starting to evolve.

While priority is given to brownfield land for the construction purposes, greenfield sites are still eligible. However, the issuer commits to getting an Environmental Impact Assessment (EIA) done before selecting land and plans to implement mitigation and compensation strategies.

Eligible Green Projects Assessment Summary

We assess eligible projects under the issuer's green finance framework based on their environmental benefits and risks, using Shades of Green methodology.

Green Buildings

Light green

Construction of new residential buildings, including brownfield land designated for development, should be designed to achieve, once completed, a nearly zero-energy building (NZEB) status in accordance with local standards. Buildings must also be assessed for material climate-related risks and meet at least one of the following criteria:

- attain a minimum BREAAAM certification of "Very Good" or higher, or
- secure LEED certification of "Gold" or higher, or
- in Germany, KfW 40 or better, or
- the Primary Energy Demand (PED) is at least 10% lower than the threshold for NZEB requirements in national building regulations.

See [Analysis Of Eligible Projects](#) for more detail.

Issuer Sustainability Context

This section provides an analysis of the issuer's sustainability management and the embeddedness of the financing framework within its overall strategy.

Company Description

Liven AS is a residential real estate developer, based in Tallinn, Estonia. Since incorporation in 2014, it has completed about 700 homes. At the end of 2023, the group had about 1,500 more homes in its development pipeline, to be built over the next few years, with an estimated sales volume of about €375 million. The group recently acquired a plot in Berlin, Germany, expanding its footprint outside of Estonia.

Material Sustainability Factors

Climate transition risk

Increased energy use in buildings has been a major contributor to climate change, representing around a third of global greenhouse gas emissions on a final-energy-use basis according to the IEA. This leaves the sector highly susceptible to growing public, political, legal, and regulatory pressure to accelerate climate goals. Building occupiers and operators may face higher energy bills as power prices rise, and higher capital expenditure for upgrades required to accommodate the energy transition and meet more stringent efficiency standards. This could affect households' purchasing power and the competitive strengths of commercial and industrial properties. Incremental climate-related investments can require significant capital outlays but could potentially reduce the risk of obsolescence brought about by changes in regulation or climate goals. Low-carbon properties might also achieve greater cost efficiencies or attract premium rents in the longer term, therefore enhancing their value. Embodied emissions from building materials can be a major contributor to a building's carbon footprint over its life cycle.

Physical climate risk

The geographically fixed nature of real estate assets exposes them to physical climate risks. While varying by location, these could include acute risks—such as wildfires, floods, and storms—which are becoming more frequent and severe, as well as chronic risks—such as long-term changes in temperature and precipitation patterns and sea level rise. Acute and chronic risks could damage properties or place tenant health and safety at risk, as well as require investments to manage potential effects or, in severe cases, relocate tenants. While the aggregate impact is moderate—because the type, number, and magnitude of risks vary by region—highly exposed regions may be subject to material physical climate risks. Most participants have some insurance coverage, but this could become more difficult to secure for the most exposed assets, absent adaptation. Estonia's climate has wide temperature ranges, spanning up to 60°C between summer and winter. According to the OECD's 2022 economic survey of Estonia, climate change could expose its coastal settlements to rising sea levels, in addition to increasing precipitation and wind speeds. These changes could lead to more flooding and more extreme and volatile weather.

Biodiversity and resource use

The construction industry faces significant resource-use challenges including energy consumption, extensive materials usage, and water depletion. Resource-intensive materials and practices pose risks to finite resources and water scarcity concerns arise from construction-related usage. Addressing these problems through resource-efficient designs, alternative materials, and the responsible management of resources is key to reducing the industry's impact on local habitats and its global footprint.

Workforce health and safety

Construction sites can expose workers to heightened safety risks from the use of heavy machinery, workers falling, hazardous chemicals, and other potentially dangerous situations, translating into fatality and injury rates that are high relative to other

sectors. In 2019, more than one fifth (22.2%) of all fatal work accidents in the EU were in the construction sector (Eurostat). Reliance on temporary employees and subcontractors also poses risks because safety protocols can be less stringent than at larger companies that typically have better training, policies, and standards, particularly in developed markets.

Issuer And Context Analysis

The framework's eligible projects aim to address climate transition risk, which we consider one of the most material sustainability factors for real estate project developers. Considering the project category--green buildings--and the focus on new construction, we also view physical climate risks and biodiversity as material sustainability considerations. Indeed, buildings are tangible assets and are therefore inherently exposed to physical climate risks, while new developments, especially on greenfield land, can impact local ecosystems and biodiversity.

Liven is in the early stages of measuring its carbon footprint and has so far not set any greenhouse gas reduction targets. The issuer has identified several ways to mitigate its climate impact. These include ensuring high energy efficiency in buildings, prioritizing heating/cooling solutions from non-fossil sources such as geothermal, and limiting emissions related to building materials. The climate impact from new construction is high, so we view these efforts positively. However, issuer is not yet calculating the carbon footprints of all its projects. In our view, more systematic and comprehensive measuring of its greenhouse gas emissions would allow it to better monitor the impact and progress of these mitigating measures.

Liven relies on public studies to assess the exposure of its projects to physical climate risks. Its projects have historically been located mostly in Tallin. The issuer has identified flooding risks, notably from evolving precipitation patterns and their likely increase in volume and variability. To address these risks, Liven is working on measures to ensure rainwater collection and absorption. We think its assessment of vulnerability to physical climate risks could be more comprehensive, for example using climate scenario analysis and analysing such risks systematically at each property. More thorough vulnerability assessments will become particularly relevant if the issuer expands its activities to new locations, as it has done recently in Berlin.

Liven's development activities could have a biodiversity impact, particularly its greenfield projects given their potential to disturb local ecosystems. The issuer favors brownfield (previously developed) sites. Nonetheless, Liven also has some greenfield developments in its pipeline. For these projects, the issuer confirmed that local regulators systematically screen and validate via EIAs. Following these assessments, mitigation and compensation measures are implemented if needed--reforesting other areas, for example.

Alignment Assessment

This section provides an analysis of the framework's alignment with the Green Bond and Loan principles.

Alignment With Principles

Aligned = ✓ Conceptually aligned = ○ Not aligned = ✗

- ✓ Green Bond Principles, ICMA, 2021 (with June 2022 Appendix 1)
- ✓ Green Loan Principles, LMA/LSTA/APLMA, 2023

✓ Use of proceeds

We consider Liven's overall use-of-proceeds commitments to be aligned with the Principles. The issuer commits to allocate 100% of net proceeds issued under the framework exclusively to finance or refinance eligible green projects, specifically the construction of green buildings. Please see the Analysis of Eligible Projects section for more on our analysis of the environmental benefits of the expected use of proceeds. The framework specifies a two-year look-back for refinancing and the issuer commits to a two-year look-forward for newly financed projects, which we view favorably. The framework also contains an exclusions list preventing the financing of energy efficiency projects that result in increased resource consumption, fossil energy (including natural gas) generation, and fossil fuel transportation, among others.

✓ Process for project evaluation and selection

Liven has a Green Finance Working Group (GFWG), comprising the CEO, CFO, the Business Development Manager responsible for ESG matters, the Project Director, and Land Acquisition Director. This working group is responsible for the selection and evaluation of potential projects under the framework's eligibility criteria. The GFWG also develops systems to measure greenhouse gas emissions, conducts lifecycle analyses, and test projects' resilience to physical climate risks, among other tasks. It meets semi-annually. To manage perceived social and environmental risks, the GFWG is tasked with identifying environmental and/or social risks tied to eligible green projects and ensuring they comply with relevant environmental and social laws. The group will also guarantee, wherever possible, adherence to the EU Taxonomy's Do No Significant Harm (DNSH) criteria and the associated Minimum (Social) Safeguards, on a best effort basis.

✓ Management of proceeds

The CFO will track net proceeds allocations through a green register to ensure that green instruments exclusively finance eligible projects. If a project no longer meets the eligibility criteria, the issuer will remove it from the Green Portfolio and reallocate the net proceeds to eligible projects within 24 months. The issuer commits to periodically adjusting the balance of net proceeds to match the value of its green portfolio. Unallocated proceeds will be held in demand deposits and the issuer confirmed they will not be temporarily invested in short-term financial instruments.

✓ Reporting

The issuer commits to annually report on the allocation of proceeds and the environmental impact of eligible green assets in its Green Financing Report on its website, until full allocation. The report, among other aspects, will include descriptions of green projects, the share of proceeds used for financing versus refinancing, and the breakdown of amounts allocated to each project. In our view, the impact indicators to be reported on are particularly relevant. These include materials used in buildings and heating sources, Energy Performance Certificates, greenhouse gas emissions reduction compared to a business-as-usual scenario, and information on primary energy demand, if available. Another strength is that Liven will appoint an external independent auditor to review the allocation of proceeds annually until full allocation, although we note it has not made a similar commitment regarding the verification of impact indicators.

Analysis Of Eligible Projects

This section provides details of our analysis of eligible projects, based on their environmental benefits and risks, using the Shades of Green methodology.

Over the three years following issuance of the financing, Liven expects to allocate 100% of proceeds to the green buildings project category.

The issuer expects the majority of proceeds to be allocated to financing new green projects.

Overall Shades of Green assessment

Based on the project category shades of green detailed below, and considering the environmental ambitions reflected in Liven's Green Finance Framework, we assess the framework as Light green.

Green project categories

Green buildings

Assessment

 Light green

Description

Construction of new buildings

Green residential buildings, including brownfield land designated for development, should be designed to achieve, once completed, an Energy Performance Certificate (EPC) A (in accordance with local standards). They must also be assessed for material climate-related risks and meet at least one of the following criteria:

- The Primary Energy Demand (PED) is at least 10% lower than the threshold set for the nearly zero-energy building (NZEB) requirements in national building regulations.
- Attain a minimum BREAAAM certification of "Very Good" or higher.
- Secure LEED certification "Gold" or higher.
- Energy efficiency class of KfW40 or better in Germany.

Analytical considerations

- In a new construction project, energy performance, embodied emissions associated with building materials, and biodiversity and physical climate risks are key low-carbon considerations. We view the financed assets as green given the issuer's application of design-phase certification, its exclusion of direct fossil-fuel heating, and that it pays some attention to physical climate and biodiversity risks. However, it has no quantified thresholds for embodied emissions and its energy efficiency ambitions related to its green building certifications are uncertain. This limits our assessment to Light green.
- All proceeds will finance the construction of new residential buildings in Estonia and Germany. As one of the options in the eligibility criteria, these properties might align with the Primary Energy Demand requirements in the EU Taxonomy, requiring their energy demand to be at least 10% below the threshold for NZEB. In Estonia, residential NZEBs align with primary energy demand of 105 kWh/m² per year, according to the issuer. However, we note that energy performance thresholds are not directly comparable in Estonia and Germany because of differences in primary energy factors, energy flows, and input data in NZEB definitions.
- As an alternative to the EU Taxonomy criteria, construction projects may also be eligible depending on whether they obtain selected external certifications focused on the construction and design phase. Green building certification standards cover a broad set of issues that are important for a low-carbon future. However, their requirements can differ significantly. The robustness of the certification will depend on the version used and the certification process. The issuer expects all financed properties in Estonia to obtain an EPC label A. Although we view this positively, this requirement does not, by itself, qualify to be

Light green

Activities representing transition steps in the near-term that avoid emissions lock-in but do not represent long-term low-carbon climate resilient solutions.













Our [Shades of Green Analytical Approach](#) >

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assigned a shade of green. This is because receiving an EPC A is required for all new construction projects in Estonia, according to the local building code.

- In Germany, the KFW40 standard is eligible and has reasonably strict requirements. Under this standard, a building is limited to 40% of primary energy consumption compared to the reference property, as outlined in the German Building Energy Act, and therefore results in buildings that use 60% less primary energy annually. However, this standard does not include requirements such as self-generated renewable energy sources, battery storage, and heat recovery, which are demanded in the more stringent KFW40-plus standard. Overall, in our view, the ambition of the selected design phase green building certifications (such as LEED "Gold", BREEAM "Very Good", and KFW40) is somewhat modest in terms of their climate impact. We reflect this in our Light green assessment.
- New construction projects are associated with significant climate impact, particularly in terms of embodied emissions. New buildings that minimize emissions embedded in construction materials have a key mitigating role. The framework lacks criteria to address such emissions, which account for a significant part of a building's lifecycle emissions. We note positively that the issuer commits to selecting construction materials with a lower climate impact--such as timber, instead of concrete and brick--whenever feasible and developing its assessment method. However, it has yet to define the scope and timeline.
- We consider exposure to physical climate risks to be a relevant factor in the real estate sector. For financed buildings in Estonia and Germany, the issuer identified increased precipitation and flooding stemming from rising sea levels, rivers, and lakes as the most material risks. Liven will implement rainwater harvesting solutions, along with other passive measures. We note that the issuer's analysis of physical climate risks is based on external research and there are no further considerations, such as climate-related scenario analysis, in the eligibility criteria to future-proof the assets.
- The construction of new buildings also leads to other non-climate environmental risks. The issuer informed us that while it will prioritize brownfield land, some projects in the pipeline will be built on greenfield land. Biodiversity and land use risks associated with greenfield land are partly mitigated by preliminary EIAs being performed by authorities and the feasibility of mitigation and compensation measures being determined before such lands are chosen. Examples of compensation measures include replacing vegetation in cooperation with Tallinn's environmental unit. Regarding upstream environmental risks, we note positively that the issuer evaluates contractors and suppliers based on their environmental performance and the standard contract term for contractors has a strong environmental focus. In terms of wood sourcing, the issuer mostly relies on local products, which are less directly exposed to unsustainable forest management practices compared to other regions.

S&P Global Ratings' Shades of Green

Assessments					
 Dark green	 Medium green	 Light green	 Yellow	 Orange	 Red
Description					
Activities that correspond to the long-term vision of an LCCR future.	Activities that represent significant steps toward an LCCR future but will require further improvements to be long-term LCCR solutions.	Activities representing transition steps in the near-term that avoid emissions lock-in but do not represent long-term LCCR solutions.	Activities that do not have a material impact on the transition to an LCCR future, or, Activities that have some potential inconsistency with the transition to an LCCR future, albeit tempered by existing transition measures.	Activities that are not currently consistent with the transition to an LCCR future. These include activities with moderate potential for emissions lock-in and risk of stranded assets.	Activities that are inconsistent with, and likely to impede, the transition required to achieve the long-term LCCR future. These activities have the highest emissions intensity, with the most potential for emissions lock-in and risk of stranded assets.
Example projects					
 Solar power plants	 Energy efficient buildings	 Hybrid road vehicles	 Health care services	 Conventional steel production	 New oil exploration

Note: For us to consider use of proceeds aligned with ICMA Principles for a green project, we require project categories directly funded by the financing to be assigned one of the three green Shades.

LCCR--Low-carbon climate resilient. An LCCR future is a future aligned with the Paris Agreement; where the global average temperature increase is held below 2 degrees Celsius (2 C), with efforts to limit it to 1.5 C, above pre-industrial levels, while building resilience to the adverse impact of climate change and achieving sustainable outcomes across both climate and non-climate environmental objectives. Long term and near term--For the purpose of this analysis, we consider the long term to be beyond the middle of the 21st century and the near term to be within the next decade. Emissions lock-in--Where an activity delays or prevents the transition to low-carbon alternatives by perpetuating assets or processes (often fossil fuel use and its corresponding greenhouse gas emissions) that are not aligned with, or cannot adapt to, an LCCR future. Stranded assets--Assets that have suffered from unanticipated or premature write-downs, devaluations, or conversion to liabilities (as defined by the University of Oxford).

Mapping To The U.N.'s Sustainable Development Goals

Where the Financing documentation references the Sustainable Development Goals (SDGs), we consider which SDGs it contributes to. We compare the activities funded by the Financing to the International Capital Markets Association (ICMA) SDG mapping and outline the intended linkages within our SPO analysis. Our assessment of SDG mapping does not impact our alignment opinion.

This framework intends to contribute to the following SDGs:

Use of proceeds	SDGs
Green buildings	 7. Affordable and clean energy  11. Sustainable cities and communities*

*The eligible project categories link to these SDGs in the ICMA mapping.

Related Research

- [Analytical Approach: Second Party Opinions: Use of Proceeds](#), July 27, 2023
- [FAQ: Applying Our Integrated Analytical Approach for Use-of-Proceeds Second Party Opinions](#), July 27, 2023
- [Analytical Approach: Shades of Green Assessments](#), July 27, 2023
- [Purchased Energy Emissions in Second Party Opinions and ESG Evaluations](#), March 2023
- [S&P Global Ratings ESG Materiality Maps](#), July 20, 2022

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