Liven

# **Green Financing Report 2024**

Reporting period: May 2024 - March 2025

May 2025

# Contents

1. About Liven	3
2. Liven's environmental focus areas and Green Financing Framework	4
3. Green Financing and Green Portfolio Overview	5
4. Impact report	7
5. Allocation Report	9
6. Independent Party Limited Assurance Assessment	10

## 1. About Liven

Liven AS (together with subsidiaries, Liven or the group) is a housing developer established in 2014 and operating in Tallinn, Estonia and since 2024 Berlin, Germany. In its relatively short period of operation, Liven has become one of the leading real estate developers in Estonia.

Liven develops residential real estate and, since its inception, has created and delivered more than 800 homes. The development portfolio comprises several projects in different stages of development with nearly 114,000 square meters of sellable area and more than 1,400 homes. The estimated sales volume of the portfolio exceeds 370 million euros.

At the core of Liven's value proposition are thoughtful concepts and layouts, along with various furnishing alternatives and the opportunity for the customers to participate in the design of their new home. Customers' satisfaction with both their new home as well as the entire planning-purchasing-after-sales process is important to us, and regular customer satisfaction measurement is deeply ingrained into our operation.

According to Kantar Emor's annual survey on the homebuyers and -seekers awareness and reputation of real estate brands, Liven has firmly established itself in the market. In 2024, Liven became the most reputable property developer in Tallinn and the surrounding area, according to the survey. The top position came after featuring the runner-up position for the five previous consecutive years while jointly sharing the top award in 2022. Liven is valued in the market for the most attractive developments and is described as a trendsetter with stylish and modern architecture.



## 2. Liven's environmental focus areas and Green Financing Framework

As global environmental concerns increase, so does the importance of the construction sector in improving environmental sustainability. At Liven, we are committed to shaping a sustainable future and contributing to the achievement of the EU's ambitious 2050 targets for carbon neutrality and environmental protection. Our sustainability action plan is not just a strategy, but a true commitment to environmental protection and responsible resource management. Through our activities, we strive to make a positive contribution to global sustainability efforts, while ensuring the long-term success of our business operations.

Liven's key environmental focus areas include:

**1. Projects with green labels.** We prefer projects with sustainability certifications, such as LEED or BREEAM, which increase transparency and accountability in our construction practices.

**2. Energy efficiency.** We aim to design buildings that exceed national standards, to be in the top 10% of developers in our communities in terms of energy efficiency, and to exceed the minimum energy efficiency requirements.

**3. Integration of sustainable materials.** We are committed to tracking and replacing materials with high CO<sub>2</sub> emissions with sustainable alternatives, such as wood, thereby promoting a circular economy model and resource efficiency and reducing our environmental impact.

In 2024, we formalised our existing plans and activities into Liven's Green Financing Framework (**the Framework**). The Framework was established to align our core development activities with internationally recognised sustainability principles and to provide an investment opportunity for capital that supports our long-term environmental values. It follows the International Capital Market Association's (ICMA) Green Bond Principles and the Loan Market Association's (LMA) Green Loan Principles.

It also enables us to transparently track and report how financing supports projects expected to deliver measurable energy and emissions benefits. Additionally, the Framework reflects our response to growing stakeholder expectations and evolving regulatory standards. The Framework has received an independent second-party opinion from the international credit rating agency S&P Global Ratings and this report should be read together with both documents.

### What qualifies as "green"?

The capital raised through green bonds can only be used to finance or refinance projects that meet the eligibility criteria set out in the Framework. The criteria are designed to align with the EU Taxonomy (on a best-effort basis) and support specific UN Sustainable Development Goals, such as reducing energy use and improving resource efficiency.

Essentially, to qualify, projects must be planned to meet at least one of the following criteria at completion:

- LEED certification (Gold or higher)
- BREEAM certification (Very Good or higher)
- KfW 40 standard (Germany)
- Energy performance at least 10% better than the Class A (Estonia)

# 3. Green Financing and Green Portfolio Overview

### Green bond Issuance and reporting period

In May 2024, we raised 6.2 million euros through the first public offering of green bonds (ISIN: EE3300004332) in the Baltic real estate sector to finance existing and new projects eligible under the Framework. The bonds are listed and publicly traded on Nasdaq Baltic regulated bond market.

Under the Framework, Liven is required to publish a Green Financing Report within 12 months of the first bond issuance in May 2024. For practical and reporting coherence, this inaugural report covers the period from May 2024 through the end of first quarter of 2025.

In March 2025 we raised another 6.2 million euros through the second series of green bonds (ISIN: EE0000000354) under Liven's existing bond program. Series II bonds are also covered in this report to reflect their initial allocation status. They will be fully integrated into the subsequent reporting cycle as allocation progresses. All proceeds raised from the bonds are used exclusively to finance projects that meet the predefined eligibility criteria set out in the Framework.

### Green Portfolio - the eligible projects

During the reporting period, Liven's Green Financing Working Group convened twice to review and confirm the eligibility of projects under the terms of the Framework. The following section outlines the current composition and progress of the Green Portfolio - i.e., the developments financed or refinanced using green bond proceeds - as well as the methods and data foundations being established to support future environmental impact reporting.

As per the Framework all Green Portfolio projects are developments (including brownfield land designate for development) of residential new buildings, are designed to achieve, once completed, a nearly zero-energy building (NZEB) status in accordance with local standards, have been assessed for material climate-related risks and are designed to meet at least one of the specific eligibility criteria specified in the Framework. The projects eligible for green financing (the Green Portfolio) in 2024, including the specific predefined eligibility criteria, are presented in the table below:

Project name	Project legal entity	Project stage	Eligibility criteria
Regati	Liven Kodu 20 OÜ	Under construction	LEED Platinum
Wohngarten	Liven HW11 GmbH	Pre-sales	KfW 40
Olemuse	Liven Kodu 22 OU	Pre-sales	At least 10% better than Class A energy performance
Juhkentali 48	Liven Kodu 17 OÜ	Detailed spatial plan	LEED Gold
Kadaka tee 88	Liven Kodu 10 OÜ	Detailed spatial plan	At least 10% better than Class A energy performance*
Peakorter	Liven Kodu 18 OŬ	Detailed spatial plan	At least 10% better than Class A energy performance*

\*The feasibility of international certification is yet to be assessed and decided

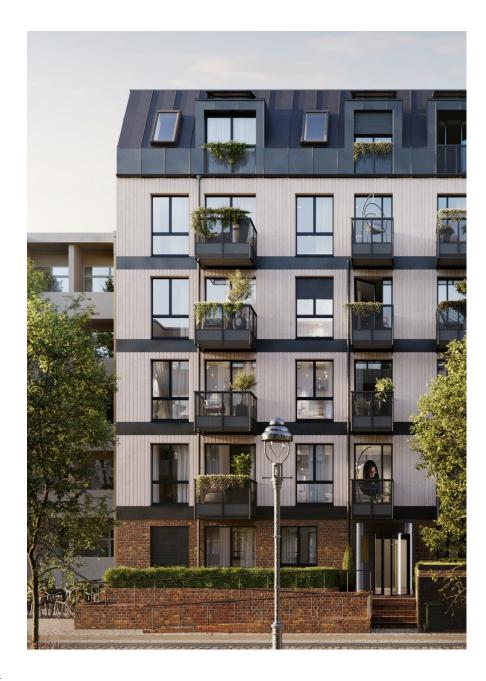
Of the Green Portfolio projects the Regati project (developed by the project company Liven Kodu 20 OÜ) has been designed and is being currently built to meet the criteria necessary to obtain the LEED Platinum certificate. The construction of the first phase of the project started in Q1 2024, and the currently ongoing construction is expected to be completed in the second half of 2025.

It has been previously internally decided that the Juhkentali 48 project (Liven Kodu 17 OÜ) will be designed to meet at least LEED Gold certificate requirements. The project is currently in detail spatial planning phase.

Wohngarten project (Liven HW11 GmbH) and Olemuse project (Liven Kodu 22 OÜ) are both already in the pre-sales stage at the date of the current report with the former designed to meet the KfW 40 standard criteria and the latter to achieve 10% better energy performance compared to the Class A energy label. The construction of both projects is planned to commence in 2025.

Both Kadaka tee 88 project (Liven Kodu 10 OÜ) and Peakorter project (Liven Kodu 18 OÜ) are still in the detail spatial planning phase. The final decision of whether an international certificate or at least 10% better energy performance than Class A energy label buildings is yet to be made for both projects.

All Green Portfolio projects are currently in either the construction or planning phase. As none of the buildings have been completed, no formal certifications can yet be carried out or obtained, but, as per Framework, all Green Portfolio projects are on track to meet the criteria.



### 4. Impact report

This inaugural report initiates Liven's environmental performance reporting. As projects are currently in early stages, our emphasis is on establishing a foundation for future impact assessment and data collection.

The Framework allows allocation to projects initiated within two years prior to bond issuance (the "look-back" period, 2022–2024). Thus, no financed projects have reached completion yet, and final certifications or operational data are not currently available. This timing is typical in green financing, where early investment precedes formal certification.

A primary challenge in assessing our projects' environmental impact is the limited availability of comprehensive, locally verified lifecycle CO<sub>2</sub> data in Estonia. The local emission factor database was mainly built up on the basis of Finnish data, where data from Estonian producers were missing. However, at the time of consulting the available data was largely incomplete with as much as 80% of the necessary data unavailable.

More specific product based Environmental Product Declaration (EPD) data can be considered alternatively, but as there is no Estonian EPD database use of foreign database are commonly used instead. Due to database size and quality considerations and local regulatory alignment using Norwegian EPD dataset for Estonian manufacturers publishing their product data.

There is an ongoing local academic research initiative to lay foundation of Estonian EPD database. As part of as a first step, baseline assessments and reference values are being calculated for Liven's non-green project, Iseära, within the initiative. Although the EPD compliance is not a formal part of our Framework criteria, we are supporting their regional development and regard this to have a good potential as a part of our future whole-life carbon tracking aligned with future EU Taxonomy guidance.

Still, to illustrate the anticipated impact of our Green Portfolio on annual CO<sub>2</sub> emissions, we have prepared preliminary estimates based on publicly available data and typical performance improvements associated with each certification type. These estimates are indicative and rely on rough best-effort assumptions rather than formal life-cycle assessments, reflecting the current data availability limitations. These calculations compare estimated emissions per square meter for each eligibility type against the established local minimum construction requirement baselines, multiplied by the known planned floor area of each project, to derive total estimated illustrative CO<sub>2</sub> savings.

In Estonia, the annual  $CO_2$  emissions of buildings rated as energy class A are estimated to range between 15 and 20 kg  $CO_2$  per square meter, depending on the energy source. We use a median reference value of 17.5 kg  $CO_2/m^2/year$ , and apply a 10% efficiency gain for "A+10%" buildings, resulting in 15.75 kg  $CO_2/m^2/year$ . In Germany, new residential buildings built to the KfW 55 standard also emit approximately 20 kg  $CO_2/m^2/year$ .

Based on publicly available data the KfW 40 standard buildings are approximately 27.3% more efficient relative to the local minimum requirement standard corresponding to an estimated 14.54 kg  $CO_2/m^2/year$ . For the LEED-certified buildings, we have relied on publicly available industry data estimating the typical reductions in carbon footprint achieved at different certification levels:

- LEED Platinum:  $\sim$ 30% lower emissions than the Class A baseline, i.e. 12.25 kg CO<sub>2</sub>/m<sup>2</sup>/year
- LEED Gold: ~15% lower emissions than the Class A baseline i.e. 14.88 kg  $CO_2/m^2/year$

Based on current estimates, the Green Portfolio projects collectively reduce CO<sub>2</sub> emissions by approximately 16.6% relative to local standards.

.

Project name	Project legal entity	Net area	Baseline emission	Estimated emission	Savings	Savings %
		m²	kg CO <sub>2</sub> /year	kg CO <sub>2</sub> /year	kg CO <sub>2</sub> / year	
Regati	Liven Kodu 20 OÜ	20 669	361 708	253 195	108 512	30,0%
Wohngarten	Liven HW11 GmbH	1 110	22 204	16 142	6 062	27,3%
Olemuse	Liven Kodu 22 OÜ	6 854	119 945	107 951	11 995	10,0%
Juhkentali 48	Liven Kodu 17 OÜ	7 986	139 755	118 792	20 963	15,0%
Kadaka tee 88	Liven Kodu 10 OÜ	26 632	466 060	419 454	46 606	10,0%
Peakorter	Liven Kodu 18 OÜ	8 872	155 260	139 734	15 526	10,0%
Total		72 123	1 264 932	1 055 268	209 664	16,6%

Alongside external initiatives, we've strengthened internal sustainability competence: another team member achieved LEED Green Associate accreditation, with further advancement toward LEED Accredited Professional certification in progress. We continue benchmarking international best practices and metrics to enhance our sustainability management.

Although not directly environmental, we proudly note that no workplace accidents have occurred on our construction sites to date.

Liven remains firmly committed to sustainability and environmental protection. By integrating sustainability into our day-to-day activities and governance structures, we are not only building for today, but also creating a better tomorrow for future generations.

## **5.** Allocation Report

On 23 May 2024 Liven issued I Series green bonds with the obligation to disclose the first report within 12 months. Therefore, the first report is issued in May 2025 and covers the reporting period of May 2024 – March 2025. In March 2025, Liven issued Series II green bonds.

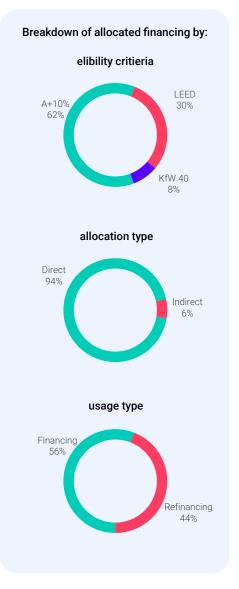
### Green Account and Green Portfolio allocation approach

Liven maintains a dedicated "Green Account" through which all green financing transactions are routed. This account receives the gross proceeds from green financing and holds any unallocated amounts until investment in eligible Green Portfolio projects. For clarity, "allocation" refers—both in the Framework and in this report—to the designation of green financing to eligible projects under the portfolio approach. This includes direct transfers to project-owning legal entities as well as proportionally assigned indirect allocations. Eligibility of the allocated proceeds is ensured by allocating the proceeds only to projects that are planned to meet the eligibility criteria once the projects are completed, including the necessary certificates obtained.

A total of EUR 12.4 million has been raised across the two green bond series (EUR 6.2 million each). In line with the Framework, any uninvested proceeds must be allocated within 24 months of issuance, or sooner if feasible. Until invested, unallocated amounts are held in liquidity reserves or short-term instruments such as bank deposits. As of 31.03.2025 the total allocated gross proceeds amounted to EUR 7.8 million, with 100% of Series I being allocated and 25% of Series II being allocated, with EUR 4.6 million (75%) unallocated.

Green funds are allocated to eligible project-owning legal entities within the Liven consolidation group in the form of subordinated internal lending, regarded as **direct allocation**. For efficiency and flexibility, the Green Account is also used to make interest payments on the green bonds, as such payments benefit the underlying green projects, fall within the Framework's portfolio allocation approach and are deemed as eligible costs. These constitute **indirect allocation** of the proceeds, where interest costs are proportionally attributed to each project based on its time- and allocation-weighted share of the financing, including both actual and estimated usage.

As development projects generate limited income before completion, recurring costs—across both green and nongreen projects—are typically financed through internal lending within the Liven group. The green financing operates in a similar manner, i.e. without a one-to-one matching against specific invoices. Where previous external or internal lending has been refinanced with green financing, the amounts are identified as "refinancing".





**KPMG Baltics OÜ** Ahtri 4 Tallinn 10151 Estonia

Telephone Internet +372 6 268 700 www.kpmg.ee

#### Independent Practitioner's Assurance Report

To the Management of Liven AS

We have been engaged by the management of Liven AS (hereafter "Liven") to provide limited assurance on a selected indicator (hereafter "Green Finance Information") presented in Liven's Green Financing Report 2024 dated May 2025 (hereafter the "Report") (Appendix 1) for the reporting period 1.5.2024–31.3.2025.

The Green Finance Information subject to the limited assurance consists of the following:

- The total allocated gross proceeds amounting to EUR 7.8 million presented on page 9 of the Report.

#### Management's Responsibility

The management of Liven is responsible for the preparation and presentation of the Green Finance Information in accordance with the reporting criteria, i.e. Liven's Green Financing Framework dated April 12, 2024 and published on Liven's webpage and the Company's own internal reporting principles described on page 9 of the Report (hereafter the "Criteria"). This responsibility includes designing, implementing and maintaining internal control, maintaining necessary documentation, as well as making estimates relevant to the preparation of the Green Finance Information that are free from material misstatement, whether due to fraud or error.

#### Independent Practitioner's Responsibilities

Our responsibility is to perform a limited assurance engagement and to provide an independent conclusion based on our engagement. We performed our assurance engagement in accordance with International Standard on Assurance Engagements (ISAE) 3000 (Revised) "Assurance Engagements other than Audits or Reviews of Historical Financial Information". This Standard requires that we plan and perform the engagement to obtain limited assurance about whether the Green Finance Information is free from material misstatement. The nature, timing and scope of the limited assurance procedures are based on professional judgement, including an assessment of material misstatement due to fraud or error, and we maintain professional scepticism throughout the engagement. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

We have complied with the independence and other ethical requirements of the International Code of Ethics for Professional Accountants (including International Independence Standards) (IESBA Code) issued by the International Ethics Standards Board for Accountants, together with the ethical requirements that are relevant to limited assurance engagements on sustainability statements in Estonia. Our firm applies International Standard on Quality Management (Estonia) 1 (Revised) and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

#### Description of the Procedures That Have Been Performed

As the methods of obtaining evidence are more limited in a limited assurance than in a reasonable assurance, an assurance obtained is more limited than in a reasonable assurance. We have designed and performed procedures to obtain sufficient and appropriate evidence for limited assurance and to provide a basis for our conclusion, therefore we do not obtain all the evidence, which is required in reasonable assurance. While we consider the design of internal controls when determining the nature and scope of our assurance procedures, our limited assurance engagement does not include the testing of the operating effectiveness of internal controls. Our procedures did not include control testing or performing procedures related to combining and calculating data within IT systems. The limited assurance engagement consists of inquiries of individuals who are responsible for preparing the Green Finance Information and related information, as well as for carrying out analytical and other procedures.

In the engagement, we have performed the following procedures, among others:

 We interviewed Liven's relevant personnel responsible for the preparation and gathering the Green Finance Information.

> KPMG Baltics OÜ, an Estonian limited liability company and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. Reg no 10096082.



- We assessed if the projects to which the total allocated gross proceeds have been allocated to are eligible projects as per the Criteria.
- We assessed that the total allocated gross proceeds have been transferred to the project's legal entity bank
  account (in case of the direct allocation) and that the interest payments have been made to Nasdaq (in case of
  the indirect allocation).
- We familiarized ourselves through interviews with the key data management processes, information systems and working methods used to collect and consolidate the Green Finance Information.
- We read the disclosed Green Finance Information and assessed its quality and definitions of reporting boundaries.
- We assessed the Green Finance Information's data accuracy and completeness through an inspection of the original documents and other records on a sample basis.

#### Inherent Limitations of the Engagement

Inherent limitations exist in all assurance engagements due to the selective testing of the information being examined. Therefore fraud, error or non-compliance may occur and not be detected. Additionally, non-financial data may be subject to more inherent limitations than financial data, given both its nature and the methods used for determining, calculating and estimating such data.

#### Conclusion

Based on the procedures performed and the evidence obtained nothing has come to our attention that causes us to believe that the total allocated gross proceeds amounting to EUR 7.8 million for the reporting period 1.5.2024–31.3.2025 subject to the limited assurance engagement have not, in all material respects, been allocated to eligible projects in accordance with the Criteria.

KPMG Baltics OÜ Licence No 17

/digitally signed/ Siim Kannistu Certified Public Accountant, Licence No 607 Tallinn, 21 May 2025