## Green Impact Report

2024

Although the challenging economic situation calls for careful prioritisation, our customers still consider sustainability a key factor in their investment decisions.

MuniFin



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finance made up more than 50% of our new long-term customer financing.

Rami Erkkilä,
Senior Specialist,
sustainable finance (p. 5)

The year 2024 was a recordbreaking year in our sustainable finance. We remained on a strong growth path, and sustainable

Energy efficiency has clearly become a matter of pride for our customers, and for good reason. As we have increased the incentive for green finance, our customers have also been able to capitalise on the benefits of setting high standards for their projects.

**Mikko Noronen,** Sustainability Manager (p. 23)





Foreword

#### **Foreword**

# Green finance promotes the achievement of national and international sustainability goals

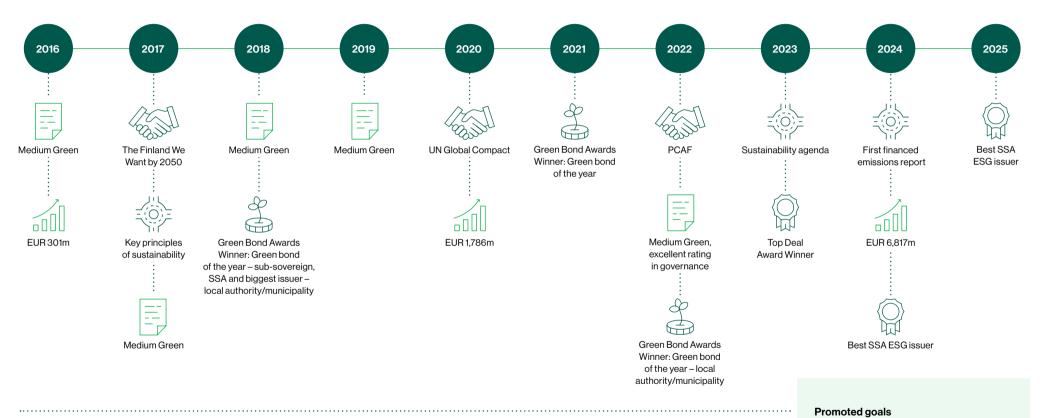
We are committed to pursuing a more sustainable society together with our customers. The biggest impacts of our operations are created indirectly through the financing we grant to our customers, who play a major role in the achievement of Finland's climate neutrality goals. Our history of green finance dates back to 2016, when we issued our inaugural green bond. Since then, we have been bridging the gap between international capital markets and the sustainable investments of Finnish municipalities and organisations providing affordable social housing.

The general aim of our green finance is to improve the sustainability of the projects we finance by offering our customers an incentive to avoid or mitigate the negative impacts of their projects and adapt their business to the changing climate. Our project evaluation is based on the criteria set in the Green Bond Framework, which is aligned with the ICMA Green Bond Principles. We source the funding for our green and social finance products from the international capital markets by issuing green and social bonds. For investors, these products offer a way to finance positive change and reduce their own negative impact. Green finance is also an integral tool for us to manage our climate and environmental risks.

The aim of our green and social finance is to create significant benefits for the environment and society. We want to support our customers' positive development and make sustainable choices even more accessible. Through our green and social finance, we aim to manage our impact and the ESG risks material to us in accordance with our sustainability agenda. In this report, we summarise the impact and calculation principles of our green finance projects. The impact of our social finance is described in a separate report.

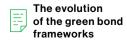


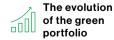
### The evolution of MuniFin's Green Finance















#### · European Green Deal · United Nations

Sustainable Carbon neutral Development Finland (Finnish Goals (SDGs) Climate Act)



### Green building also contributes to social good

The year 2024 was a record-breaking year in our sustainable finance. We remained on a strong growth path, and sustainable finance made up more than 50% of our new long-term customer financing.

Our customers were particularly active in seeking financing for their affordable social housing projects. This surge was driven by the clearing of the processing backlog at the Housing Finance and Development Centre of Finland (Ara) and the discontinuation of right-of-occupancy home construction by the end of 2025.

In 2024, we granted green finance to 154 projects. Once again, the majority of new projects in our portfolio fell under the buildings category (150). Housing construction was particularly active, but approved projects also included schools, day-care centres, culture and sports facilities, and investments in renewable energy.

Energy efficiency has made great strides in recent years.

This is of significant relevance because improved energy efficiency has a major impact on the lifecycle emissions of buildings. In an increasing number of projects, our customers have already optimised energy efficiency to such a high level

that further tweaks no longer yield meaningful benefits. As a result, more and more customers are now shifting their focus to carbon intensity instead. Carbon intensity can be reduced by various means, such as incorporating wood into building structures, using low-carbon concrete, improving construction site practices and enhancing circular economy solutions.

Our customers are dedicated to reducing their climate impacts and piloting innovative solutions. Although the challenging economic situation calls for careful prioritisation, our customers still consider sustainability a key factor in their investment decisions. These investment decisions must be not only environmentally sustainable, but also economically sustainable. Economic savings generated from sustainable investments can then be allocated to other important projects. Finding ways to use the surplus should not be a problem.

Municipalities can use land use planning as a tool to reduce carbon footprints. For example, the City of Helsinki has introduced a total carbon footprint limit in its detailed planning to promote low-carbon development. Sustainable solutions can also be encouraged through finance. We increased

the margin discount in our green finance in 2023, giving our customers even more financial incentive to make sustainable investments.

Finland is facing a situation where the government is reducing financial incentives for affordable social housing, but the need for affordable housing is not going away. Organisations providing affordable social housing have been active not only in addressing social issues but also in advancing low-carbon housing solutions. We hope this comprehensive approach to developing sustainability will continue in the future.

#### Rami Erkkilä Senior Specialist, sustainable finance

Rami Erkkilä is responsible for green and social finance products at MuniFin





### Sustainable finance is at the core of our sustainability agenda

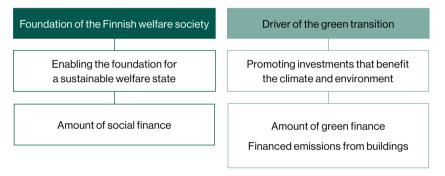
Our sustainability agenda sets the framework and goals for our impactful long-term sustainability work. Our goal is to increase the proportion of sustainable finance and reduce emissions from financed buildings.

- Our sustainability agenda is entitled 'Enabler of sustainable welfare in society', and it
  focuses especially on our business operations and the impact achieved through them.
  The financial and municipal sectors play a pivotal role in advancing both national and
  international sustainable development goals.
- The agenda is built around two main themes: foundation of the Finnish welfare society and driver of the green transition. As the themes are closely interlinked, both must be addressed for basic social needs to be met within the limits of the planet's carrying capacity and for the transition to sustainable economy to be carried out in a way that is fair to everyone.
- All the four project categories of our green finance promote the green transition. In our sustainability agenda, we set a goal of increasing the proportion of green finance to 25% of our long-term customer finance portfolio by 2030. We are making swift progress, as this figure was 19% in 2024.
- Our sustainability agenda also includes our first goal of reducing financed emissions

   the target for our residential real estate portfolio intensity is 8 kg CO2/m² by 2035. In

   2024, buildings made up 76% of our green project finance. The emission intensity of our residential real estate portfolio was 10,8 kg CO2/m² calculated with 2023 data.

#### Enabler of sustainable welfare in society





# Our key actions and future considerations in sustainable finance regulation

At the EU level, financial flows are directed strongly towards sustainable targets, and companies are encouraged to consider climate and environmental risks in the short, medium and long term.

Reporting requirements are increasing steeply, escalating the need for investors, financiers, real economy entities and other stakeholders to exchange information. Regulation aims to ensure that sustainability information is fully integrated into disclosures and that the financial system is prepared for the risks arising from climate change. The aim is to give all market participants an opportunity to make informed decisions and support a sustainable transition.

As a significant EU credit institution supervised by the European Central Bank, MuniFin is subject to a range of reporting requirements and expectations, which we actively address. Below, we have summarised some of the most relevant current topics for our company and our green finance products.

In a world where fulfilling reporting requirements takes up a great deal of resources, we should not forget the concrete actions that lead to the achievement of our shared goals: climate change mitigation and systemwide climate resilience. Through green finance, we and our customers can make significant contributions towards addressing these challenges."

#### Mikko Noronen

Sustainability Manager



#### **EU taxonomy**

Large non-financial listed companies were the first to fall subject to the reporting requirements of the EU Taxonomy Regulation. MuniFin is not subject to the Non-financial Reporting Directive (NRFD) or the first wave of the EU Taxonomy reporting.

- As a financial institution, MuniFin is subject to EU Capital Requirements Regulation (575/2013) as amended by CRR II (2019/876). In our Pillar III disclosure reports, we disclose our Green Asset Ratio (GAR) and from 2025 onwards also our Banking Book Taxonomy Alignment Ratio (BTAR) for the assets in scope of the CRR regulation.
- EU Taxonomy reporting does not currently obligate municipalities or our other customers, but the effects of these disclosures already have some indirect impacts on their activities.
- We promote the development of EU Taxonomy reporting among our customers through our
  green finance. We have considered the technical screening criteria (TSC) for the climate
  change mitigation objective as the guiding tool in defining our eligibility criteria for our Green
  Bond Framework 2022. Our goal is to apply these criteria on a best-efforts basis, focusing
  on areas where practical implementation is feasible and supported by local regulation.

- In 2024, MuniFin was involved in a project carried out by Rakennusteollisuuden Koulutuskeskus (RATEKO), an organisation providing training in the construction industry. This project seeks clear implementation measures for the criteria under the EU Taxonomy and establishes a national information pool. The project is a collaboration with the Confederation of Finnish Construction Industries RT (CFCI) and its Building Construction, Construction Product Industry, HPAC Contractors and Infrastructure branches. This work continues in 2025. We recognise the importance of keeping track of the developments, interpretations and efforts to align the Finnish building sector with the EU Taxonomy in a credible manner.
- During 2024–2025, we will analyse the data requirements and estimation methodologies
  for evaluating taxonomy alignment in key financed sectors. This work aims to provide up-todate insights into what is required to achieve credible taxonomy alignment both in MuniFin's
  operations and in the construction sector.





#### **EU Green Bond Standard (EU GBS)**

- MuniFin is closely following market developments regarding the first issuances of bonds under the EU GBS.
- We predict that issuances under frameworks in line with the EU GBS and the ICMA Green Bond Principles will co-exist in the market as viable alternatives. While further harmonisation should be the ultimate goal, flexibility is a vital tool for public sector issuers to promote the green transition.
- Our approach is to promote the green transition among our customers through green finance and to gradually increase the level of ambition by regularly updating our Green Bond Framework. In some areas, such as the energy efficiency of buildings, our framework is already more ambitious than the EU Taxonomy.

### **EU Corporate Sustainability Reporting Directive** (CSRD)

MuniFin is subject to the CSRD. The reporting requirement applies to us from 2025, with the first disclosure due in early 2026.

- The disclosure requirements of the CSRD take into account the requirements of related EU legislation and regulation, that is the European Climate Law, EU Climate Benchmark Standards Regulation, Sustainable Finance Disclosure Regulation (SFDR), EU Taxonomy and EBA Pillar 3 disclosure requirements.
- We have started to prepare for CSRD reporting by conducting a double materiality analysis and a GAP analysis during 2024.
- The first round of reporting will include the ESRS E1 standard, which is relevant in terms of green finance.
- On 26 February 2025, the European Commission
  published an Omnibus proposal, the aim of which is to ease
  the sustainability obligations of companies as part of its
  broader competitiveness strategy. We will continue our
  work towards a more sustainable future in line with current
  legislation, but will closely follow the official process around
  the Omnibus package.

### EU Sustainable Finance Disclosures Regulation (SFDR)

MuniFin is not directly subject to the SFDR, but we aim to help investors get the information they need.

- We review third-party data providers and aim to validate the information within these platforms to ensure that investors have correct data available.
- Most investor and SFDR data requirements will be covered by CSRD reporting.



#### Climate-related and environmental risks<sup>1</sup>

- During 2022–2024, the European Central Bank's (ECB) expectations focused on climaterelated and environmental (C&E) risks.
- In the first phase, the ECB focused on materiality and qualitative assessment, and in 2024 extended its focus to quantitative assessments and scenario work.
- In 2024, we made progress in our climate-related and environmental risk assessment by
  developing our capabilities to quantify the impacts of C&E risks. Additionally, we developed
  a climate stress testing framework to evaluate our economic vulnerability to C&E risk
  events.
- Our strategic target to increase the amount of green finance enables us to mitigate our exposure to climate risks through our customers.
- In 2024, we took part in an ECB conference<sup>2</sup> where selected banks and ECB supervisors
  discussed the challenges faced during the collection of energy performance data and how
  to solve them. This work is key in climate change mitigation and transition risk analysis.

### Nordic Public Issuer Position Paper on Green Bonds Impact Reporting update in 2024<sup>3</sup>

The latest edition of the Position Paper on Green Bonds Impact Reporting was released in March 2024. The material changes in the 2024 update include revised emission factors for electricity and district heating, new recommendations for vintage reporting and more specific recommendations on topics such as look-back/allocation periods and compliance with the position paper.

 We have mapped our reporting practices against the key principles of the position paper (page 31).

<sup>&</sup>lt;sup>3</sup>https://www.kuntarahoitus.fi/wp-content/uploads/2024/05/NPSI\_Position\_Paper\_2024.pdf



<sup>1</sup>Please see our Pillar 3 disclosure report for more information: https://www.kuntarahoitus.fi/en/reports-and-publications/all-reports-and-publications/all-reports-and-publications#/8898/reporttheme/reportyear/

<sup>2</sup> https://www.bankingsupervision.europa.eu/press/supervisory-newsletters/newsletter/2024/html/ssm.nl241113\_1.en.html#footnote.1

### **Green Bond Framework**

MuniFin's Green Bond Framework¹ was updated in 2022. The most notable changes concerned the introduction of more transparent and ambitious project eligibility criteria and a more streamlined project evaluation process.

Our Green Bond Framework was designed in accordance with the Green Bond Principles of the International Capital Market Association. To guide our customers and green investments increasingly towards common practices, we have also used the EU Taxonomy for Sustainable Activities and the EU Green Bond Standard proposal available at the time of the update as guiding tools in defining our eligibility criteria and overall framework structure.

CICERO Shades of Green has carried out a second party opinion<sup>2</sup> on our Green Bond Framework, including an assessment of how well our project categories align with the EU Taxonomy's technical screening criteria. The results are summarised in the table on page 20 and can be used to assess how well projects in our portfolio align with the technical screening criteria for climate change mitigation. As a whole, CICERO Shades of Green

gave our Green Bond Framework the second-best rating of Medium Green, with an excellent rating in the governance assessment.

While we aim to gradually harmonise the criteria of our framework with the EU Taxonomy where applicable and have included aspects of it in the evaluation of new buildings, our framework does not yet fully align with the Taxonomy.

MuniFin's green finance has many positive effects on society. The green projects are concrete proof of how we, as a financial institution, can collaborate with our customers to actively reduce human impact on nature and the climate.

The green projects are concrete proof of how we, as a financial institution, can collaborate with our customers to actively reduce human impact on nature and the climate.

<sup>2</sup>https://www.kuntarahoitus.fi/wp-content/uploads/2022/09/Second-Opinion-CICERO-GREEN.-final.-Munifin.-15.08.2022-3.pdf



### Ratings by CICERO Shades of Green for MuniFin's Green Bond Framework





https://www.kuntarahoitus.fi/wp-content/uploads/2024/03/MuniFin-Green-Bond-framework.pdf

MuniFin Green Bond Framework

#### Fossil fuels and nuclear power statement

In our 2022 Green Bond Framework¹, we state that we will not accept projects involving solutions that are directly powered by fossil fuels. Notably for buildings, this also excludes hybrid solutions, peak load and backup systems related to direct heating. Properties with district heating can be accepted into our portfolio even if the area's district heating production still involves a fossil fuel component. In some bioenergy heating plants, the fossil energy component cannot be completely avoided, because it may be required for the startup of the plant and to guarantee the security of supply in situations where renewable fuel is unavailable. The Green portfolio includes a few projects approved under previous frameworks which involve a fossil fuel component. More information about these projects is available on page 20.

The Act on the Municipal Guarantee Board (487/1996) determines the types of projects and customers applicable for MuniFin's financing services. Since this automatically excludes nuclear power, it is not specifically mentioned in our Green Bond Framework's exclusion criteria.

### MuniFin's Green Bond Framework has four project categories:



**Buildings** 



Transportation



Renewable energy



Water and waste water management



MuniFin Green Bond Framework

### Alignment of the Green Bond Framework criteria with the EU Green Taxonomy's technical screening criteria (Objective 1. Climate change mitigation)

Buildings		Transportation	Renewable energy	Water and waste water management
Likely aligned	<ul> <li>7.2 Renovation of existing buildings</li> <li>7.3 Installation, maintenance, and repair of energy efficiency equipment</li> <li>7.5 Installation, maintenance, and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings</li> <li>7.6 Installation, maintenance, and repair of renewable energy technologies</li> </ul>	<ul> <li>6.1 Passenger interurban rail transport</li> <li>6.3 Urban and suburban transport, road passenger transport</li> <li>6.5 Transport by motorbikes, passenger cars and light commercial vehicles</li> <li>6.7 Inland passenger water transport</li> <li>6.8 Inland freight water transport</li> <li>6.10 Sea and coastal freight water transport, vessels for port operations and auxiliary activities</li> <li>6.11 Sea and coastal passenger water transport</li> <li>6.14 Infrastructure for rail transport</li> <li>6.15 Infrastructure enabling low carbon road transport and public transport</li> </ul>	<ul> <li>4.1 Electricity generation using solar photovoltaic technology</li> <li>4.3 Electricity generation from wind power</li> <li>4.6 Electricity generation from geothermal energy</li> <li>4.22 Production of heat/cool from geothermal energy</li> <li>4.25 Production of heat/cool using waste heat</li> </ul>	
Likely partially aligned  Not possible to assess alignment	7.1 Construction of new buildings 7.7 Acquisition and ownership of buildings	6.13 Infrastructure for personal mobility, cycle logistics	4.24 Production of heat/cool from bioenergy	Construction, extension and operation of water collection, treatment and supply systems     Renewal of water collection, treatment and supply systems     Construction, extension and operation of waste water
				collection and treatment  5.4 Renewal of waste water collection and treatment

Review conducted as part of framework second party opinion. Available at:

https://www.kuntarahoitus.fi/wp-content/uploads/2022/09/Second-Opinion-CICERO-GREEN.-final.-Munifin.-15.08.2022-3.pdf



Green finance in figures

### **Green finance in figures**

Outstanding amount of green finance

**EUR** million

6,817

Share of all long-term

19.0



Total committed green finance

8,375

**EUR** million



Green portfolio duration

**13.4** years



Number of green projects

**576** 



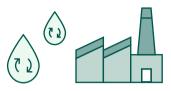
Annual energy savings (avoided/reduced)

81,056<sup>1</sup>



Annual CO<sub>2</sub> emissions avoided/reduced<sup>2</sup>

69,278° tco.



Annual amount of treated waste water in existing plants immediately after project completion

28,198,311<sub>m</sub>

Annual amount of treated waste water with increased capacity in the future

39,659,485



Annual production of renewable energy

165,073



Renewable energy production capacity

**49** M

Figures based on the outstanding amount of green finance on 31 December 2024



<sup>&</sup>lt;sup>2</sup> Calculated using the emission factor for electricity consumed in Finland (33 g CO₂e/kWh, Fingrid). When calculated using the emission factor recommended by the Nordic Position Paper on Green Bonds Impact Reporting (191 g CO₂e/kWh, 2024 draft), the figure stands at 73,245 tCO₂. The emission factor's biggest impact is on the buildings category.

<sup>3</sup> 69,278 tCO<sub>2</sub>: Equals the average annual carbon footprint of about 6,726 Finns (Source: Sitra)

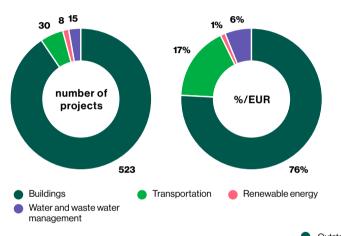


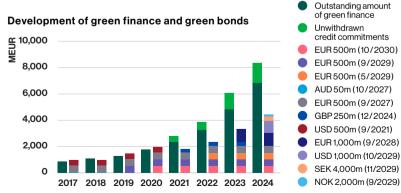
65.3%

Executive summary

### **Executive summary**

#### Green finance project breakdown







Total	6.817	69 278	N/A
Water and waste water management	403	2	0
Renewable energy	36	52,997	1,472
Transportation	1,189	8,185	7
Buildings	5,189	8,094	2
Project category	Outstanding amount, EUR million	Annual CO <sub>2</sub> emissions avoided/reduced, tCO <sub>2</sub>	Impact, tCO₂ per EUR million

#### Other impact indicators

Annual energy savings (avoided / reduced), MWh	81,056
Annual production of renewable energy, MWh	165,073
Renewable energy production capacity, MW	49
Annual amount of treated waste water in existing plants immediately after project completion, m <sup>3</sup>	28,198,311
Annual amount of treated waste water with increased capacity in the future, m <sup>3</sup>	39,659,485

#### Impact attributable to green bond investors

Outstanding amount of green bonds divided by outstanding amount of green finance (in EUR) as of 31 Dec 2024, Capped at 100%.

Amount	ISIN	Issue date	Maturity date	
500m EUR	XS2242924491	14 Oct 2020	14 Oct 2030	7.3%
500m EUR	XS2023679843	10 July 2019	6 Sept 2029	7.3%
500m EUR	XS2480922389	17 May 2022	17 May 2029	7.3%
50m AUD	XS1706174015	25 Oct 2017	25 Oct 2027	0.5%
500m EUR	XS1692485912	3 Oct 2017	7 Sept 2027	7.3%
1,000m EUR	XS2590268814	22 Feb 2023	25 Sept 2028	14.7%
1,000m USD	XS2914674408	9 Oct 2024	9 Oct 2029	13.3%
4,000m SEK	XS2942472205	19 Nov 2024	19 Nov 2029	5.1%
2,000m NOK	XS2908585933	26 Sep 2024	26 Sep 2029	2.5%

#### **Basic information**

Green bonds frameworks applied to the green finance portfolio	MuniFin Green Bonds Framework August 2022, May 2019, November 2018, August 2017 and February 2016
Reporting period	The reporting is based on the green finance portfolio as at 31 Dec 2024
Report publication date	4 March 2025
Reporting frequency	Annual
Next report planned for	March/April 2026
Reporting approach	Portfolio-based and project-by-project reporting
Reporting framework	Nordic Public Sector Issuers: Position Paper on Green Bonds Impact Reporting (2024)

### Several new green bonds finance the green transition

At the end of 2024, MuniFin had nine outstanding green bonds. We have issued a total of eleven green bonds, the first of which was issued in 2016 and matured in 2021.

Our inaugural NOK 2 billion green bond was priced in September. The transaction marks our first green bond in the Norwegian market and our second ESG-labelled NOK trade of the year.

We took another significant step in the Nordic green finance market by issuing our inaugural green bond in Swedish krona (SEK) in November. The successful SEK 4 billion issuance represents our largest green transaction outside EUR and USD benchmarks.

#### Total amount of outstanding green bonds

**EUR** million



4,454

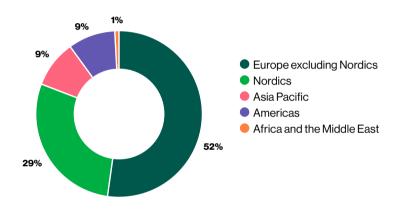
Foreign currencies in euros

#### Outstanding green bonds

EUR 500m (9/2027) AUD 50m (10/2027) EUR 1,000m (9/2028) EUR 500m (5/2029) EUR 500m (9/2029) SEK 4,000m (9/2029) USD 1,000m (10/2029) NOK 2,000m (11/2029)

EUR 500m (10/2030)

#### Investor breakdown by geography for all outstanding Green Bonds



The charts describe the investor breakdown by geography of the primary issuance of outstanding green bonds. Figures as at 31 December 2024.

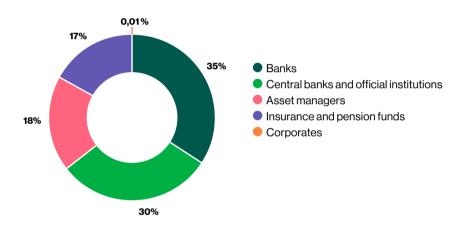


In October, we made history with our fifth benchmark of the year. The green 5-year benchmark garnered our largest order book ever at an astonishing USD 5.5 billion. Investor demand was driven by good-quality accounts. Central banks and official institutions took 61% of the allocations and bank treasuries 25%, and the remaining 14% went to fund managers and insurance or pension funds. The geographical distribution was well diversified across EMEA (Europe, the Middle East and Africa), the Americas and Asia.

In December 2024, we also received the 2025 Best SSA ESG Bond Issuer award by the CMD Portal. In its award statement, the CMD Portal emphasised our commitment to sustainable development and our success as a green and social bonds issuer. The CMD Portal produces and provides information on capital markets and acts as a network connecting bond issuers, investors and brokers worldwide.

Our 2024 green bond issuances increased our total amount of outstanding green bonds from EUR 3,330 million to EUR 4,454 million. One of our green bonds matured in December 2024.

#### Investor breakdown by investor type for all outstanding Green Bonds



The charts describe the investor breakdown of the primary issuance of outstanding green bonds. Figures as at 31 December 2024.



Green finance portfolio continued to grow steadily

# **Green finance portfolio continued to grow steadily**

At the end of 2024, the number of projects in our green finance portfolio was 576, of which 521 projects had begun to withdraw finance. The outstanding amount of green finance, which means the amount of finance disbursed minus repayments, totalled EUR 6,817 million at year-end (2023: EUR 4,795 million). Total committed finance, which is the sum of the outstanding amount and the amount of unwithdrawn credit commitments, was EUR 8,375 million (EUR 6,060 million). The green finance projects are situated in 115 different municipalities across Finland. A summary of the impacts of these projects can be found on page 35 and a detailed list of our green finance projects can be found on pages 56–90.

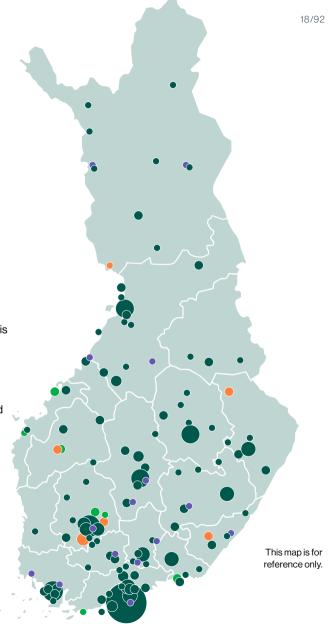
In 2024, we accepted a total of 154 new projects into our green finance portfolio, of which 106 had begun to withdraw finance at the end of the year. For projects approved in 2024, the outstanding amount of green finance totalled EUR 981 million and the total committed finance totalled EUR 2,084 million at the end of the year.

The largest category of projects approved in 2024 was buildings with 150 approved projects. In addition, we granted green finance to two transportation projects. In 2024, we

approved our first waste energy project into the renewable energy category. In this project, the waste heat energy is generated as a by-product of cooling. We also approved one new project in the water and waste water management category.

According to the reporting principle 13 of the Nordic Position Paper on Green Bonds Impact Reporting, issuers should report on the share of bond proceeds used for financing and refinancing. There are various approaches on how to make this distinction. Under the 2022 MuniFin Green Bond Framework, our green portfolio consists of 100% new projects. According to European Green Bond Standard, 100% of our portfolio is refinancing due to the portfolio approach used. As per the Nordic Position Paper, the distinction can also be made based on the allocated amounts to projects during and before the year of reporting. The share of total outstanding for loans granted prior to the reporting year was 80%. Please see the table on the next page.

- Buildings
- Transportation
- Renewable energy
- Water and waste water management





Green finance portfolio continued growing steadily

### Different framework vintages in the green finance portfolio

Since MuniFin applies a portfolio approach, projects have been approved under different framework vintages – meaning different versions of our Green Bond Framework. In the latest framework update in August 2022, we improved the transparency of our green project eligibility criteria. The new criteria are stricter than the previous, which is why some projects approved under previous frameworks no longer fulfil the new criteria. For the sake of transparency, we re-evaluated past projects using the new criteria. This re-evaluation must be done every time the criteria are tightened, but it is a necessary step to speeding up the green transition.

We are committed to maintaining a sufficient number of green finance projects in our portfolio to cover the funds raised by green bonds issued under the criteria of the current Green Bond Framework. Funds raised under the current framework cannot be allocated to projects that

do not meet its requirements. Such projects are instead financed with the bonds issued under the previous framework vintages. The projects are held in the portfolio until either the loan or the bond matures. For this reason, we monitor the balance of aligned and non-aligned projects.

A total of 544 green projects out of 576 fulfil the criteria under the current framework<sup>3</sup>. The combined outstanding amount for projects that meet the new criteria totalled EUR 6,458 million at the end of 2024. For each project, its alignment with the new criteria is disclosed in the separate Green Impact Report Spreadsheet published concurrently with this report on the MuniFin website. The outstanding amount of green bonds as per 31 Dec 2024 was EUR 4,454 million.

This report's allocation assurance only covers the projects that meet the criteria of the Green Bond Framework (August 2022).

Based on Definition Share (31 Dec 2024) Green Bond Framework Share of new projects1 100% 2022 **EU GBS** Share of financing (allocated amount 0% to projects financed after bond issuance) Share of refinancing (allocated 100% amount to projects financed before bond issuance)2 Nordic Position Paper 20% Share of total outstanding loans (option iii) granted during the reporting year 80% Share of total outstanding loans granted prior to the reporting year

	Aligned with the criteria <sup>3</sup>		Not aligned the criteria <sup>3</sup>	
	Projects	Projects MEUR P		MEUR
1. Buildings	494	4,866	29	323
2. Transportation	29	1,164	1	25
3. Renewable energy	7	29	1	7
Water and waste     water management	14	399	1	4
Total	544	6,458	32	359

<sup>&</sup>lt;sup>3</sup> https://www.kuntarahoitus.fi/wp-content/uploads/2024/03/MuniFin-Green-Bond-framework.pdf.



¹In accordance with our Green Bond Framework, new projects are ones that have been completed less than 12 months before the Green Finance Team has approved them for our green finance portfolio.

<sup>&</sup>lt;sup>2</sup>As per the 2022 Green Bond Framework, MuniFin applies a portfolio approach, meaning that one dynamic portfolio consisting of green bonds is used to finance one dynamic portfolio consisting of green finance that has been granted to eligible green projects. It is MuniFin's intention to maintain an aggregate outstanding amount of green bonds that is equal to or less than the aggregated outstanding amount of green finance. This buffer ensures that investors can be confident that the funds raised by green bonds are disbursed to green projects.

Green finance portfolio continued growing steadily

#### Exceptional projects approved under previous frameworks

At the end of 2024, our green finance portfolio included three projects that involve a fossil fuel component at the commissioning stage of the investment.

Two of these projects are the Kvarken Archipelago car and passenger ferry¹ in the transportation category and the Energy Self-Sufficient Lempäälä project² in the renewable energy category, both of which were approved for green finance before our Green Bond Framework was updated. Both projects are looking to substitute natural gas with biogas once its availability becomes sufficient, which will further reduce their carbon footprint. The reported impacts of these projects are based on the environmental impact calculations relative to the reference scenario as presented in the project documentation. Project documentation suggests that the environmental impact of these projects will be significantly improved compared to prior technology, even while using natural gas, and this positive effect will only increase once biogas becomes a technically and economically feasible option in sufficient capacity.

In the buildings category, Huvimäentie 16, a project by Joensuun Kodit Oy, was approved in 2021. Even though fossil fuel is used for heating in this building, the renovations we finance will reduce its overall  $CO_2$  emissions by more than 50%.

Previous years impact reports included the construction of an apartment building for Kiinteistö Oy Oulun Tarve at Pohjantikankuja 4 project by TA-Yhtymä Oy. It was accepted into the green finance portfolio in 2019 due to its value as an interesting pilot project, even though its energy efficiency (energy class C, 2018) did not fulfil the framework criteria. The intent of the project was to prove that by utilising brick construction and traditional architectural engineering, the original energy efficiency calculations of the project can be overturned once the building is in use. The project has been awarded by the Housing Finance and Development Centre of Finland (Ara) for its innovative solutions<sup>3</sup>. Nevertheless, the project did not fulfil its original goal which is why it has been removed from the portfolio in 2024. This has no effect on previous years impact calculation results since it was not taken into account in them.

The aforementioned projects were accepted into our green portfolio based on the criteria valid at the time of their approval and are therefore classified as non-aligned under the 2022 Green Bond Framework. We nevertheless track the progress of these projects annually and will revise their impact calculations as required. If necessary, we will remove these projects from our portfolio.

We will give out further information on any of the projects on request.

<sup>&</sup>lt;sup>3</sup> https://kivifaktaa.fi/vuoden-parhaat-ara-neliot-loytyvat-vuokrakerrostalosta-oulusta/



¹https://www.wasaline.com/en/portfolio-item/fuel-efficiency-improvement

<sup>&</sup>lt;sup>2</sup> https://www.lempaalanenergia.fi/en/lemene-lempaala-energy-community/

Case: TA-Asumisoikeus Oy

### Investing in sustainable growth

Lieto is one of the fastest-growing cities in the Turku region. Lieto aims to be a hub of sustainability with a vibrant and welcoming city centre surrounded by unique residential areas. The right-of-occupancy apartments at Simpukkatie 17 were the first in Southwest Finland to receive the Nordic Swan Ecolabel certification.

The certification criteria set by Ympäristömerkintä Suomi Oy ensured the building's sustainability from construction to material recycling. The entire process was carefully monitored, as the label requirements cover energy consumption, waste reduction and recycling, as well as factors enhancing home quality, such as natural light and acoustics.

Sustainable construction practices were heeded in material choices, with careful attention paid to chemicals and circular economy principles, such as limiting formaldehyde emissions. Over 50% of the materials used were Nordic Swan Ecolabel-certified, and 75% of construction waste was recycled. As an example of material efficiency, copper was only used in visible pipe sections, reducing the energy needed for manufacturing the plumbing system.

The project was a perfect fit for MuniFin's green loan, as the Nordic Swan Ecolabel requirements were closely aligned with the criteria for green financing.

The right-of-occupancy apartments at Simpukkatie 17 were the first in Southwest Finland to receive the Nordic Swan Ecolabel certification."





The Green Finance Team

### **The Green Finance Team**

Projects eligible for our green finance must comply with our Green Bond Framework at the time of their approval. Our Customer Solutions division screens loan and lease applications and submits potential applications for review to our Green Finance Team (GFT) that consists of our internal sustainability experts. Our internal assessment and approval process is subject to external verification. The verification statement is included at the end of this report.

The GFT reviews each project separately, only approving the project if it meets the requirements of our Green Bond Framework and is thereby considered a favourable option for the environment and climate. To encourage more environmentally friendly investments, we grant approved green finance projects a margin discount which is determined based on the project score given by the GFT. Projects are scored based on their ambition level. The project is scored higher when it exceeds the mandatory eligibility criteria. For example when the building is more energy efficient than the requider minimum level. We feel that the discount genuinely encourages our customers to make their projects more environmentally friendly.

We encourage our customers to consider sustainability aspects when producing project documentation, because the documentation is used in estimating the strength of the project's positive impact.

The GFT holds the right to remove from the green finance portfolio any eligible green projects already funded by green bond proceeds if a project for whatever reason no longer meets the eligibility criteria or is found to be or becomes controversial after its approval. The decision to remove a project from the green project portfolio requires the approval of two GFT members and appropriate documentation.



The Green Finance Team

Green financing has transitioned from the margins to the mainstream, highlighting that an increasing number of our clients' projects now incorporate diverse sustainability goals. I encourage our clients to document the impacts arising from these goals more comprehensively, allowing the achieved benefits to be properly assessed."

#### Rami Erkkilä

Senior Specialist, sustainable finance



A green mindset is something we can – and should – be proud of. Green projects pave the way to a more sustainable society, safeguarding the wellbeing of future generations.

#### Venla Laine

Junior specialist, Funding and sustainability



In 2024, we witnessed remarkable real estate renovation projects that greatly enhanced the energy efficiency of buildings. Many of these projects use renewable energy sources, such as geothermal heat and solar power.

Alongside climate efforts, the preservation of biodiversity is gaining more prominence. During the year, we assessed the first nature restoration projects in the scope of

#### **Anssi Wright**

Senior Specialist, sustainable finance

sustainable finance."



The year 2024 was at least as successful in green finance as the year before. Energy efficiency has clearly become a matter of pride for our customers, and for good reason. As we have increased the incentive for green finance, our customers have also been able to capitalise on the benefits of setting high standards for their projects. Their ambition also gives us signposts for future developments. The continued growth of the portfolio also led to several significant and successful green bond issuances and moved us closer to achieving the goals of our sustainability agenda."

#### Mikko Noronen

Sustainability Manager





### **Reporting principles**

Our Green Bond Framework defines the contents of this annual Green Impact Report. Our impact reporting is based on the recommendations of the Nordic Position Paper on Green Bonds Impact Reporting<sup>1</sup>. This report describes the impacts of the financed projects based on the available facts.

#### Our approach to impact evaluation

Our reporting applies a bond-programme-based approach, which is also known as the portfolio approach. In this approach, one dynamic portfolio consisting of green bonds is used to finance one dynamic portfolio consisting of green finance projects. We do not allocate green bond proceeds to single projects within the project portfolio. According to the portfolio approach, we may refinance a green bond at maturity in order to maintain an appropriate balance between the green bonds portfolio and the green finance project portfolio.

We carry out our impact reporting in accordance with the following principles:

- The reporting is based on the situation at the end of the reporting year, taking into account new withdrawals, repayments and redemptions. This report includes projects that the Green Finance Team had approved by the end of the year and whose offer of financing the customer had accepted. In the report, the project year refers to the year in which the Green Finance Team approved the project.
- Some projects in the green portfolio have not yet withdrawn any finance. Their impact is therefore not included in the impact assessment, and the outstanding amount of their

finance is EUR 0. Projects that were approved before the reporting year but only began to withdraw finance during the reporting year are included in the total portfolio figures.

- The impacts of a financed project are calculated based on our estimated share of the project's total finance. Our estimated share of the project's total finance refers to our outstanding amount of green finance in relation to the project's estimated total finance. If we are the project's only financier, the project's estimated total finance equals the finance that we have granted. If the project has other financiers as well, the estimated total finance is the project's total liabilities or total cost based on information derived from the customer and public sources. This figure does not include the project's self-financing or grants.
- Our reporting is based on ex-ante evaluation conducted prior to project implementation.
   The source data for the calculations is not changed annually, but the parameters used in the calculations, such as the electricity and district heating emission factors, are updated to correspond to the latest available data.
- When calculating the relative proportion of the impact of different bonds, the notional value
  of foreign currency denominated bonds is converted into euros using the exchange rate
  of the cross-currency interest rate swap of the trade date. We have chosen this approach
  because upon issuance, we enter into a cross-currency interest rate swap to convert the
  foreign currency denominated funding into euros. The projects are financed in euros.

<sup>1</sup>Nordic Public Sector Issuers: Position Paper on Green Bonds Impact Reporting (2017, 2019, 2020, draft 2024)



- Our impact assessment includes both quantitative and qualitative impacts. We have included short project descriptions in this report since 2022.
- In our most recent Green Bond Framework published in 2022, we introduced clearer
  eligibility criteria for project evaluation and selection. We have analysed all projects that
  were accepted into the green portfolio prior to the publication of the 2022 Green Bond
  Framework to assess whether they meet the criteria of the new framework. We present
  the results at the portfolio level in the section Green finance portfolio on page 19 and at a
  project level in an Excel spreadsheet available on our website.
- We engage in active discussion with investors and other market participants and welcome any development proposals.

#### Terms used in this report:

- Outstanding amount = disbursed amount minus repayments
- Unwithdrawn credit commitment = amount of finance granted to the customer but not yet withdrawn
- Total committed finance = outstanding amount + unwithdrawn credit commitment

We have selected the UN 2030 Sustainable Development Goals based on the direct impact of the projects. All projects may also have indirect impacts on the environment, individuals and society at large. The SDGs and related targets are reported by project category.

#### Changes to impact evaluation

We carried out our first green bonds impact reporting in 2016 and have published the Green Impact Report annually ever since. In the 2016 and 2017 reports, the estimated impact was presented per year for projects financed that year. The 2018 report was the first in which we analysed the impact of the entire green finance portfolio. In 2020, we introduced new indicators for projects in the water and wastewater management category. In 2021, we updated the parameters used in our calculations for the first time, including the emission factors for electricity and district heating. The developments in our reporting are driven by the harmonisation of the calculation principles that have taken place after our first evaluation.

More information on these changes is available in the corresponding year's impact report. This report shows the status of our green finance portfolio at the end of 2024. We have updated the impact of our portfolio to reflect our estimated share of the projects' total finance at the end of the year. This figure represents our share of the estimated impact of the entire project, explained in more detail on the previous page.



#### Changes to impact calculations

Compared to previous years, the key changes we have made to our impact calculations have to do with the used emission factors, and the 2018 decree on the energy efficiency of new buildings.

In 2024, the emission factor for electricity consumed in Finland was 33 g CO $_2$ /kWh. In our previous impact reports, we adhered to the recommendation of the Nordic Public Sector Issuers for the electricity emission factor (Nordic Position Paper on Green Bonds Impact Reporting, 2020). Starting with our 2022 report, we have instead used the consumption-based emission factor² published by the transmission system operator Fingrid, whose figure is derived from data on the production, import and export of electricity. More information on these two approaches and their differences is available in the above-mentioned position paper and on Fingrid's website. While this change in our calculation method significantly lowers the reported CO $_2$  emissions avoided/reduced, we believe that Fingrid's emission factor more accurately reflects the actual local impact during the reporting period. In the 2024 Nordic recommendations, the recommended electricity emission factor was set at 191 g CO $_2$ /kWh (combined margin). According to the updated Nordic recommendations, we may use our own approach, but we will also disclose the total avoided/reduced emissions based on this new factor.

For district heating, we have used the latest available municipality-specific emission factors for each year. For most municipalities, the district heating emission factors have gone down from previous years. From 2021 onwards, we have used the updated emission factors for all projects in our portfolio. As energy production becomes less carbon-dependent, it reduces

the emission factors and therefore decreases the calculated avoided and reduced  $CO_2$  emissions. The updated emission factors and the recalculation of impacts do not affect the calculated annual energy savings (avoided/reduced). It should be noted that in areas where the district heating emission factor is very low, we may report the project's avoided/reduced emissions as zero because the strong decarbonisation in district heat production, coupled with increased electricity consumption and the emission factors applied, can result in a net increase in calculated emissions despite the actual energy savings.

The impact calculations for 2019–2024 have been significantly influenced by the Decree of the Ministry of the Environment on the energy efficiency of new buildings (1010/2017), which came into effect in 2018. With the tightening of E-value limits, the relative impact of the buildings category is now considerably lower than in the previous years. Because we use the E-value to determine a reference building, the lower value affects the calculated benefit. The impact of projects that applied for a building permit before the E-value limits were tightened, but whose impact assessment has been done later, is calculated using an E-value limit that is in line with the Finnish regulation mentioned in the building's energy certificate. We primarily refer to the energy certificate drawn up during the building permit phase or, if available, the energy certificate procured by the customer when the building was commissioned.

In 2024, we changed the calculation methodology and emissions reduction source for three projects, namely phases 1–3 of the Tampere Tramway. The results were previously based on project plans, but this year we used the projections of the City of Tampere's climate neutrality roadmap. The yearly emissions reductions were calculated as the annual average of the estimated total impacts for the years 2018–2030<sup>3</sup>.

<sup>&</sup>lt;sup>3</sup> https://ilmastovahti.tampere.fi/paastoskenaariot/actions/



<sup>&</sup>lt;sup>2</sup> https://www.fingrid.fi/en/electricity-market-information/real-time-co2-emissions-estimate/

#### Changes to terms used in this report

- In our 2019 Green Bonds Impact Report, we reported a figure called disbursed amount, which we have referred to as the outstanding amount of green finance since the 2020 report. These figures are the same and thus directly comparable. In our 2016–2018 reports, we reported another figure called disbursed amount, which did not account for repayments. The figures from the 2016–2018 reports cannot therefore be compared with the disbursed amount presented in the 2019 report and the outstanding amount of green finance presented in the subsequent reports.
- In our 2016–2019 green bonds impact reports, we reported a figure called committed
  amount, which meant the contractual granted amount of finance. Since the 2020 report, we
  have instead reported the total committed finance, which is the granted amount of finance
  deducted with repayments. These two figures are not comparable.

#### Changes to report presentation

The 2022 update to our Green Bond Framework necessitated several changes to our reporting and its presentation:

- In 2022, we reduced the number of project categories and consolidated the energy
  efficiency category into the buildings category. Energy efficiency projects that were
  accepted into the green portfolio before the framework update are now reported under the
  buildings category.
- In 2022, we added sub-categories, and the criteria based on which the projects were
  accepted into the green portfolio. For projects approved before the framework update, we
  specify the criteria that these projects meet.

- To provide a more comprehensive understanding of the projects, we have included brief descriptions of the new projects highlighting their impacts and environmentally friendly considerations since 2022.
- Since 2023, we have reported the total figure for avoided/reduced CO<sub>2</sub> emissions based on both Fingrid's emission factor and the emission factor recommended by Nordic Public Sector Issues (Nordic Position Paper on Green Bonds Impact Reporting).
- In 2024, we added the share of finance and refinance.

#### Calculation principles

The calculations presented in this report are based on the Position Paper on Green Bonds Impact Reporting (2024) drawn up jointly by Nordic public sector issuers.

Starting from the 2021 report, we have conducted the environmental impact calculations of our green finance projects internally. We have since recalculated the impacts for projects that require the use of updated emission factors. This primarily affects construction projects that use emission factors for electricity and heat. The environmental impact calculations for the other project categories in our 2016–2020 reports were carried out by the consulting company Deloitte.

The calculations are based on data of the financed projects and on pre-determined calculation assumptions. We have used information from public sources (e.g. the emission factors) as well as data and reports directly related to the projects (e.g. project-specific environmental calculations) in the calculations. Where necessary, we have requested further information from the project owners.



In accordance with the Greenhouse Gas Protocol, the reported impacts cover scope 1 and scope 2 emissions, and in some cases possibly also the carbon handprint impact.

The weighted impact has been calculated based on our estimated share of a project's total finance. Our estimated share of finance has been calculated based on the outstanding amount of green finance. A more detailed explanation of our estimated share of a project's total finance is available on page 24. The calculations present the status of the outstanding portfolio as of 31 December 2024.

The calculations for the years 2016–2021 have been updated with our estimated share of finance and to correct any errors. Since 2021, we have also updated the emission factors used for electricity and district heating. More information about this is available in the section *Changes to impact calculations*.

In some projects, the estimated impact of a project is based on calculations presented in project-specific environmental impact assessments or other preparatory documents. In these cases, the emission factors applied are those used in the original calculations of these documents. In all other cases, the emission factors are as presented below.

\*The national emission factor is used because the Nordic Public Sector Issuers have not published emission factors for district heating. The generation of district heat is a regional/local activity. Whenever available, we used the municipality-specific district heating emission factor (available for 90 municipalities). When this was not available, we used an average emission factor for regions with separate generation of district heating as specified by Motiva and for regions where the separate generation of district heating is the primary method based on district heating statistics by Finnish Energy and other public information (10 municipalities). For the remaining municipalities (4), we used the Finnish national average emission factor for district heating purchased.

Emission source	Emission factor	Methodology and remarks	Source	
Consumption of electricity	33 g CO₂ / kWh	https://www.fingrid.fi/en/elec- tricity-market-information/re- al-time-co2-emissions-estimate/	Fingrid, CO <sub>2</sub> emissions estimate, emission factor for electricity consumed in Finland 2024	
Production of electricity	34gCO₂/kWh	https://www.fingrid.fi/en/electricity- market-information/real-time- co2-emissions-estimate/	Fingrid, CO <sub>2</sub> emissions estimate, emission factor for electricity produced in Finland 2024	
District heating *				
Municipality-specific emission factors for district heating	0-361g CO <sub>2</sub> / kWh depending on the project location	Efficiency method	https://www.klpaastolaskuri. fi/en	
0 0 1		Efficiency method and energy method	https://energia.fi/en/ statistics/district-heating- statistics/	
Separate generation of district heating*	77g CO₂ / kWh	Average weighted with heat sales	https://www.motiva.fi/en	
Gasoil used for heating	262g CO₂ / kWh	Assumed 4% biofuel component in energy content	Statistics Finland, fuel classification 2024	
Natural gas used for heating	200g CO₂ / kWh	Default net calorific value is transferred to default gross calorific value by multiplying it by 1.1088	Statistics Finland, fuel classification 2024	
Internal combustion engine vehicles				
Cars	95g CO₂/km	WLTP emission test procedure	climate.ec.eu/eu-action/ transport-emissions_en	
Vans	147g CO <sub>2</sub> / km	WLTP emission test procedure		
Kilometers driven per year per vehicle	8900-140000 km		Registry information from an actual example vehicle used for commercial purpose vehicles and for private use vehicles Statistics Finland average was used	



Specific calculation principles for each project type are listed in the tables below.

The emission factors for electricity and district heating referred to in the table below are the ones presented in the table on the previous page.

Project category	Indicator	Energy or CO₂ emissions avoided/reduced compared to reference situation	Methodology	Situation after project implementation	Reference scenario
Buildings	Annual energy savings (avoided/reduced), MWh	Avoided (new buildings) or reduced (renovation and other energy efficiency measures)	New buildings Difference in energy consumption between reference scenario and situation after project implementation (see a more detailed description below the table)  Renovation projects and other energy efficiency measures Difference in energy consumption between reference scenario and situation after project implementation	New buildings Consumption of electricity or district heating according to the building's energy certificate. We primarily refer to the energy certificate drawn up during the building permit phase or, if available, the energy certificate procured by the customer when the building was commissioned.  Renovation projects and other energy efficiency measures Estimated new consumption of electricity, heating and fuel after the renovation or other energy efficiency measures, according to the project plans	New buildings E-value limit, which is in line with the Finnish regulation mentioned in the building's energy certificate. We primarily refer to the energy certificate drawn up during the building permit phase or, if available, the energy certificate procured by the customer when the building was commissioned. The share of electricity, district heating and fuel are calculated according to the building's energy certificate.  Renovation projects and other energy efficiency measures Consumption of electricity, heating and fuel prior to the project, based on the building's energy certificate or plan for energy efficiency measures
	Annual CO $_2$ emissions avoided/reduced, $\mathrm{tCO}_2$	Avoided (new buildings) or reduced (renovation and other energy efficiency measures)	$\mathrm{CO}_2$ emissions resulting from production of avoided/reduced $\mathrm{CO}_2$ emissions calculated using emission factors for electricity, district heating and fuel	CO <sub>2</sub> emissions equivalent to energy consumption after project implementation calculated using emission factors for electricity, district heating and fuel	CO <sub>2</sub> emissions equivalent to energy consumption in reference scenario calculated using emission factors for electricity, district heating or fuel

**Buildings – new construction:** We assess annual energy efficiency improvements and the amount of  $CO_2$  emissions avoided in relation to applicable energy efficiency regulation in Finland. The energy efficiency of a building is presented as an E-value. The National Building Code of Finland determines maximum E-values for different building types, which a new building cannot exceed in order to gain a building permit. We use the maximum E-value allowed for a new building as the basis for calculating the energy efficiency of buildings. With the new Ministry of the Environment decree (1010/2017), the limit values for E-value were tightened at the beginning of 2018. In the calculations, we use the E-value limit that is in line with the Finnish regulation mentioned in the building's energy certificate. We primarily refer to the energy certificate drawn up during the building permit phase or, if available, the energy certificate procured by the customer when the building was commissioned. The E-value represents a building's calculated annual consumption of purchased energy per the heated net area (kWh/m²/a) based on the usage default values and of the building's intended use category and weighted by energy source coefficients. In our calculations, solar or wind energy generated on the property is treated as a reduction in the demand for purchased energy.

The estimated emission avoidance impact is calculated by using the emission factors for electricity and district heating production. Different forms of energy are weighted according to how their proportions are presented in the building's energy certificate.

In special cases where no E-value limit has been defined for a building category, energy savings are calculated compared to a theoretical reference building. We have used one of the following two possible methods for this calculation. The first method is based on assessing the environmental impact from using renewable energy sources. An example of this is the ice hockey arena in Äänekoski, which uses its own solar energy and geothermal heat. In such cases, we assume that the reference building has the same energy consumption as the building being examined, but that it only uses purchased energy. The second method is based on the environmental impact of new or unusual energy efficiency technology, which can be, for example, a more energy efficient cooling solution like in the Vuokatti Arena. In such cases, we calculate the  $\mathrm{CO}_2$  emissions avoided by comparing the project building's emissions to those of a reference building that is the same size and otherwise similar, but that does not employ this new or unusual technology.



Project category	Indicator	Energy or CO₂ emissions avoided/reduced compared to reference situation	Methodology	Situation after project implementation	Reference scenario
<b>Transportation</b> Annual CO <sub>2</sub> emissions avoided/ reduced, tCO <sub>2</sub> Avoided or project		Avoided or reduced depending on the project	Public transportation projects: calculations included in project plans	N/A	N/A
	Annual CO <sub>2</sub> emissions avoided/ reduced, tCO <sub>2</sub>	Avoided or reduced depending on the project	Purchase of electric cars: difference in CO2 emissions between electric car and comparable car with internal combustion engine	Standardised electricity consump- tion as specified by manufacturer, with emission factor for electricity accounted for	EU fleet-wide CO2 emission targets (2020-2024) set under Regulations (EC) No 443/2009 and (EU) No 510/2011.
Renewable energy Annual production of renewable energy, N/A MWh		N/A	Project plans and other project information	N/A	N/A
	Annual CO <sub>2</sub> emissions avoided/reduced, tCO <sub>2</sub>	Avoided or reduced depending on the project	CO <sub>2</sub> emissions from generating the same amount of energy calculated using emission factors for electricity and district heating or based on project documentation	N/A	$\text{CO}_2$ emissions from generating the same amount of energy calculated using emission factors for electricity and district heating
	Renewable energy production capacity, MW	N/A	Project plans and other project information	N/A	N/A
Water and waste water management	Annual amount of treated waste water in existing plants immediately after project completion, m <sup>3</sup>	N/A	Current average inflow of waste water before possible expansions or after expansions, if they result in an immediate increase in the amount of water treated. The calculations are based on the actual flow rate when it is available and on the rated value when actual flow rate is not available.	N/A	N/A
	Annual amount of treated waste water with increased capacity in the future, m <sup>3</sup>	N/A	New purification plant The rated value of the average inflow of waste water in the future (review year depends on project plan and may vary between projects)  Expansion of existing purification plant Difference in average inflow after project completion compared to the reference scenario	New purification plant N/A  Expansion of existing purification plant Future rated value of the average flow of waste water after expansion measures (review year depends on the project plan and may vary between projects)	New purification plant N/A  Expansion of existing purification plant Average flow of waste water before expansion. The calculations are based on the actual flow rate when it is available and on the rated value when actual flow rate is not available.
	Annual production of renewable energy, MWh	N/A	Project plans and other project information	N/A	N/A



Nordic reporting recommendations harmonise the green bonds market

MuniFin is one of ten Nordic public sector issuers who have jointly published the Position Paper on Green Bonds Impact Reporting. The position paper was first published in October 2017 and last updated in March 2024.

The reporting recommendations were drawn up by Nordic green bond issuers specialising in the public sector, with MuniFin as the only Finnish issuer in the group. The other signatories from 2024 include Kommunalbanken and Kommuninvest, MuniFin's counterparts in Norway and Sweden, as well as several Swedish public sector entities that have issued bonds.

Over the years, the Norwegian research institute CICERO, the Nordic Investment Bank, SEB, Crédit Agricole CIB and a group of international investors have also taken part in preparing the guidelines. The aim of the Nordic issuers' guide on green bonds impact reporting is to facilitate the work of green finance applicants, lower the threshold for new issuers entering the green bond market and provide international investors with a tool for evaluating green portfolios.

The Nordic guidelines are based on the international Green Bond Principles and the recommendations of multilateral development banks, but they complement these with impact indicators for projects focusing on issues such as public transportation and sustainable buildings.

On this and the following page, we present how we follow the Nordic recommendations. The 2024 updates did not cause significant changes to our reporting.

Issuers are encouraged to disclose whether they comply with the Nordic Position Paper on Green Bonds Impact Reporting 2024 recommendations which are structured on three levels:

- "...should..."
- "...are encouraged to..."
- "... may choose to..."

Issuers which state compliance to the Position Paper should comply with all "should" recommendations and explain any deviations from them. MuniFin has done this mapping on three levels:

- We comply with all the "should" recommendations for this principle
- We partly comply with the "should" recommendations for this principle
- No "should" recommendations to be reported



#### The Nordic reporting recommendations\* in the MuniFin Green Impact Report

Reporting compliance with the Position Paper

We have mapped the "should" recommendations as part of our Green Impact Report, which discloses how we comply with the Position Paper. Possible deviations from the "should" recommendations are explained in the mapping.

Maximize transparency and useability

We provide extensive aggregate information as well as data on individual projects in our reporting. We also provide an executive summary of the key information. In addition to this impact report, we have also compiled the impact data in spreadsheet format. We publish both the report and the green finance spreadsheet in Finnish at www.kuntarahoitus.fi and in English at www.munifin.fi.

Report on bond-by-bond or on portfolio approach to issuance and allocation

We use a portfolio approach in our reporting. Our reporting covers all the projects that are included in our green finance portfolio at the end of the reporting year. More information about our approach is available in the section *Reporting principles of the Green Impact Report*.

Provide both allocation and impact reporting

Our impact report includes both allocation and impact reporting. In 2022, we had our allocation reporting verified by an independent external verifier for the first time.

Provide annual reporting

We use a portfolio approach in our green finance, which means that the contents of our portfolio change annually. We report the status and impact of our portfolio by the calendar year.

Report expected impact, aiming for actual impact

We report both avoided and reduced emissions based on the project category, project type and underlying reference scenario. Our reporting is based on ex-ante evaluation conducted prior to project implementation. We aim to be as transparent as possible regarding our estimates and chosen approach. More information about this is available in the section *Reporting principles*.

Focus on environmental impact

Our selected indicators focus on environmental impact. Information about specific social impacts of our finance activities can be read from our Social Impact Report and annual reports.

Report based on annual impact

As recommended, our impact report describes the annual impact of the reporting year as opposed to lifetime results.

More information about this is available in the section Reporting principles.

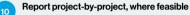
Provide quantitative and qualitative reporting

We have determined quantitative indicators for each project category and report these for each project. More information about our indicators is available in the section *Reporting principles*.

We have also included short project descriptions in this report since 2022. More information about the qualitative impact of the projects is available in the section *Other impacts of our projects*.

\*This information is in line with the 2024 Position Paper on Green Bonds Impact Reporting.





We report the impact of each financed project in the section Green finance projects and impacts and in a separately published spreadsheet.

Report based on the share financed

We calculate the impacts of the financed projects based on our estimated share of the project's total finance. The calculation is based on the estimated total cost of the project and the outstanding amount of the loan on our balance sheet. More information about this is available in the section *Reporting principles*.

Report impact by \$ only when quantifiable and relevant

We report the annual CO<sub>2</sub> emissions avoided/reduced per invested monetary unit for project categories that include direct emission avoidance, emission reductions or energy production. We do not consider it relevant to report the impact of the other indicators in relation to the share of finance. More information about this is available in the section *Executive summary*.

Financing/refinancing

Nordic Position Paper recognises that a distinction between financing and refinancing can be made with various approaches. We apply a portfolio approach and the definition for new projects given in our Green Bond Framework. So far, we have applied two different approaches in our reporting. More information about the allocated shares and approaches is available in the section *Green finance portfolio*.

Look-back period / Allocation period

Our Green Bond Framework does not have a look-back period. We classify a project as a new project if the project has been completed less than 12 months before the date of project's approval by the Green Finance Team. The ambition is that the majority of the eligible green projects in the project portfolio are new. Our projects are active for the duration of the finance agreement and our customers are required to report if there are any significant changes which could affect the project's eligibility for green finance. We assure that that all green bond net proceeds raised under the latest framework will be allocated to projects that follow the relevant eligibility criteria at the time of issuance. Impact assesment is made when the project is approved to the green finance portfolio on an ex-ante basis.

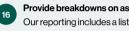
Projects are considered to have a meaningful impact for the full lifetime of the finance agreement. Our intention is to maintain an aggregate outstanding amount of green bonds that is equal to or less than the aggregated outstanding amount of green finance. Due to unanticipated events, there may be periods when the outstanding amount of green bonds exceeds the outstanding amount of green finance. In this case, the green bond proceeds will be placed in liquidity reserves and managed according to MuniFin's Sustainability Policy and Sustainable Investment Framework.



Because our green finance applies a portfolio approach, different projects have been approved under different versions of our Green Bond Framework. We disclose information regarding different framework vintages under the section *Project compatibility under the updated Green Bond Framework*. We disclose project alignment and non-alignment with the current framework and describe the process we use to analyse projects approved under previous frameworks. New projects are included in the portfolio based on the criteria of the latest framework. We assure that all green bond net proceeds raised under the latest framework will be allocated solely to such green finance that is aligned with the eligibility criteria stipulated in the latest framework.

\*This information is in line with the 2024 Position Paper on Green Bonds Impact Reporting.





#### Provide breakdowns on asset type, geography and sector

Our reporting includes a list of the projects that we finance, all of which are investments in tangible assets and located in Finland. The category of the project indicates the sector of the investment.

#### Framework age limit

Until further notice, we follow the recommendations disclosed in the Second Opinion of our Green Bond Framework. In our framework and reporting updates, we follow best market practices adopted by relevant market participants (such as the ICMA and the EU) and monitor the latest developments in the market (regarding for example ambition levels and data availability). These ultimately determine our updates.

#### Communication of sustainability strategy

We disclose our core sustainability strategy and goals as part of our impact report.

#### Process for identification and management of ESG risks

In our impact report, we disclose our approach regarding ESG risks and refer to other relevant reports published by MuniFin for more detailed information.

#### Climate-related risks

We do not have a separate risk management process for green finance. Green finance is subject to the same risk management process that applies to all lending activities and customers.

We refer to the relevant documents regarding our risk management processes in our impact reports.

#### EU Taxonomy approach

We currently disclose in our impact report how our Green Bond Framework criteria align with the EU Green Taxonomy's technical screening criteria for the climate change mitigation objective.

#### SFDR communication

We aim to provide our investors relevant information at all times. For now, we have not had any SFRD-related data requests.

\*This information is in line with the 2024 Position Paper on Green Bonds Impact Reporting.



# The impacts of green finance

Buildings, transportation, renewable energy, water and waste water management











The impacts of green finance

Project category	Number of projects	Outstanding amount on 31 Dec 2024, EUR	Annual energy savings (avoided/ reduced, MWh)	Annual CO2 emissions avoided/reduced (tCO2)	Annual amount of treated waste water in existing plants immediately after project completion (m³)	Annual amount of treated waste water with increased capacity in the future (m³)	Annual production of renewable energy (MWh)	Renewable energy production capacity (MW)
Buildings	523	5,189,029,484	81,008	8,094	-	-	229	0.2
Transportation	30	1,188,930,606	-	8,185	-	-	-	-
Renewable energy	8	36,203,549	-	52,997		-	164,314	48
Water and waste water management	15	403,131,831	47	2	28,198,311	39,659,485	530	-
Entire portfolio	576	6,817,295,469	81,056	69,278	28,198,311	39,659,485	165,073	49





Construction is a necessity in modern society because people need homes, hospitals, schools, workplaces and many other facilities. The built environment has a significant impact on national emissions and the carbon footprint of municipalities and individual people through the use of energy. There is an ongoing effort to better understand emissions, including those generated during construction. The low-carbon roadmaps, the development of national and uniform carbon assessment methods of buildings, the Land Use and Building Act Reform, as well as regulations on the climate assessment and material statement of buildings are all indications of the prominence of sustainable construction. In sustainable construction, environmental impacts are taken into account already in the design stage, for example by carefully choosing between new and repair construction and by leveraging new energy solutions and environmentally friendly, low-carbon building materials, such as wood, low carbon concrete and recycled materials. Projects in this category include both housing and public construction as well as the renovation of existing buildings.

In the property and construction sectors, 2024 was again a challenging year and the affordable social housing production supported by the Housing Finance and Development Centre of Finland (Ara) continued to be instrumental in evening out economic fluctuation in the market. While the private market has been quiet, the public sector has been the force that kept the market rolling. This was reflected in our green buildings category, which continued with strong and steady growth. Energy efficiency appears to have become a matter of pride for many of our customers.

Overall, the Finnish residential real estate market has been in decline for the past couple of years. Globally, the main drivers of this trend have been the increased costs of capital and materials. In Finland, the number of started projects and building permits has been in steep decline since 2022, with completed projects following suit from 2023 onwards (Statistics Finland, rolling annual sum). While 2024 saw a slight increase in the number of started



projects, the trends for completed projects and building permits continued to decline. This highlights the important role of our customers in stimulating the energy-efficient housing and construction markets. All construction activity is predicted to return to growth in 2025 as new construction recovers. More information is available in the Finnish Government's report Construction in 2024–2025 (in Finnish)!

One of the most significant developments for the Finnish construction sector and for our green finance is the implementation of Finland's new Building Act², which entered into force on 1 January 2025. The construction permit processing time guarantee, the calculation of the building's carbon footprint and the building permit in data model format will enter into force as from 1 January 2026. The new Building Act combats climate change, promotes the circular economy, streamlines construction and supports the digitalisation of the built environment. The revised EU Energy Performance of Buildings Directive (EU/2024/1275) will also be implemented into Finland's national regulation and building code within two years.

Entire portfolio		Projects approved in 202	24
Number of projects	523	Number of projects	150
Total committed finance	EUR 6,726,725,035	Annual energy savings (avoided/reduced)	16,151 MWh
Outstanding amount	EUR 5,189,029,484	Annual CO₂ emissions (avoided/reduced)	47 tCO <sub>2</sub>
Annual energy savings (avoided/reduced)	81,008 MWh		
Annual CO₂ emissions (avoided/reduced)	8,094 tCO <sub>2</sub>		
Annual production of renewable energy	229 MWh		
Renewable energy production capacity	0.2 MW		

<sup>&</sup>lt;sup>2</sup>https://ym.fi/en/land-use-and-building-act



<sup>&</sup>lt;sup>1</sup>https://julkaisut.valtioneuvosto.fi/handle/10024/165796

Case: Municipality of Vihti / Nummela's new school centre is an investment for the environment

Case: Municipality of Vihti

### Nummela's new school centre is an investment for the environment

The South Nummela school centre is the largest investment ever made by the municipality of Vihti. The project was undertaken to address overcrowding in existing schools and to ensure sufficient facilities in Nummela, both now and in the future. The new facilities accommodate approximately 600 primary school pupils and 250 children in daycare.

The municipality considered multiple lifecycle impacts: the building uses wood extensively as a building material, and generates its own geothermal and solar energy. Thanks to these environmentally

conscious choices, the school centre received MuniFin's green finance.

The municipality considered multiple lifecycle impacts."

The school centre opened in January 2024, welcoming children, pupils and staff

for the new school semester. The centre has two schools, two day-care centres and a youth centre under one roof, providing education in both Finnish and Swedish. Beyond its educational daytime use, the centre is designed to be easily adaptable for other purposes outside school hours.







Transportation projects reduce traffic emissions and the need for private cars through projects that invest in low-emission public transportation or directly support it. Examples of the past projects include the West Metro Extension in the capital region, the Crown Bridges project of the City of Helsinki and the Tampere tramway. In addition to reducing emissions, modern public transportation solutions often have wide-reaching indirect impacts: for example, they can allow a denser and safer urban environment and thus make the city more welcoming for its residents. Given the scale of these projects, it is essential that they also address and promote environmental considerations. Our portfolio includes excellent examples of such efforts.

One notable project is the Jokeri Light Rail in the Helsinki Metropolitan Area, which we approved in 2022. This project received an award from the Finnish Association of Civil Engineers (RIL)¹ for incorporating several environmental aspects, such as biodiversity and material use. Measures included restoring trout streams, planting endangered vegetation at the depot and using recycled kerbstone for a stretch several kilometres long. The project also received an award from the Confederation of Finnish Construction Industries RT² (CFCI) for its efficient use of concrete.

The Light Rail project from Kalasatama to Pasila (KaPa) is another example of the importance of setting ambitious goals. This project earned a Building Research Establishment Environmental Assessment Method (BREEAM) infrastructure certification, highlighting its commitment to various environmental aspects.

Both projects have published 'value for money' reports<sup>3,4</sup> detailing their key environmental measures and achievements.

Entire portfolio		Projects approved in 2024	
Number of projects	30	Number of projects	2
Total committed finance	EUR 1,188,930,606	Annual CO₂ emissions (avoided/reduced)	8 tCO <sub>2</sub>
Outstanding amount	EUR 1,188,930,606		
Annual CO₂ emissions (avoided/reduced)	8,185 tCO <sub>2</sub>		

<sup>4</sup> https://kaupunkiliikenne.fi/content/uploads/2024/11/Kalasatamasta-Pasilaan-hanke-Arvoa-rahalle-raportti.pdf



<sup>&</sup>lt;sup>1</sup>https://www.yit.fi/ytimessa/raide-jokerin-allianssi-voitti-ril-palkinnon-2023

<sup>2</sup> https://rt.fi/tiedotteet-ja-uutiset/2024/01/vuoden-betonirakenne-2023-voittaja-raide-jokeri/

<sup>&</sup>lt;sup>3</sup>https://kaupunkiliikenne.fi/content/uploads/2024/12/Raide-Jokeri\_Arvoa-rahalle.pdf



Renewable energy production plays a key role in mitigating global climate change. Renewable energy generates zero or close to zero greenhouse gas emissions at the production stage, and it directly cuts down greenhouse gas emissions by reducing fossil fuel use. Moreover, energy can be produced locally, reducing delivery, distribution and transmission losses. This has both environmental and economic implications for society. By financing renewable energy projects, we promote Finland's long-term goal of becoming a carbon neutral society by 2035.

Our renewable energy category includes projects such as the Kangasalan Lämpö Ltd biomass heating plant, which produces thermal energy from forest industry side streams, the Kemi Energy and Water bioheating plant and the Energy Self-Sufficient Lempäälä project. In 2024, we added our first waste energy project into the portfolio. This project is located in Lempäälä. The aim of the project is to renew the cooling production in the Hakkari sports arena and to enable the use of waste heat in the production of district heat. The heat obtained from the cooling process and the electrical energy it uses can be fully utilised in the district heating system.

	Projects approved in 2024	
8	Number of projects	1
EUR 41,203,549	Annual CO <sub>2</sub> emissions (avoided/reduced)	90 tCO <sub>2</sub>
EUR 36,203,549	Annual production of renewable energy	1,089 MWh
52,997 tCO <sub>2</sub>	Renewable energy production capacity	1MW
164,314 MWh		
49 MW		
	EUR 41,203,549  EUR 36,203,549  52,997 tCO <sub>2</sub> 164,314 MWh	8 Number of projects  EUR 41,203,549 Annual CO <sub>2</sub> emissions (avoided/reduced)  EUR 36,203,549 Annual production of renewable energy  52,997 tCO <sub>2</sub> Renewable energy production capacity





# Water and waste water management

Our green finance promotes projects that ensure the availability of safe and clean drinking water and the effective treatment of waste water across Finland. Climate change and migration pose new challenges to water and waste water management, and preparing for them requires substantial investments. Water purification helps to maintain high waste water quality, prevent the eutrophication of waterways and enable the reuse of nutrients, such as phosphorus and nitrogen. In addition, sludge separated from waste water can be composted and utilised in biogas production.

Since 2016, we have financed 15 projects in the water and waste water management category, all of which were part of our portfolio on 31 December 2024. These projects support the water treatment capacity extensions of existing water purification plants, the introduction of more efficient purification technologies and methods, and the construction of new water purification plants. Example projects include the waste water treatment plants of Kalajokilaakso (Vesikolmio Ltd), Blominmäki (Helsinki Region Environmental Services) and Sahanniemi (City of Heinola). In 2024, we accepted one new project in the water and waste water management category. The transfer sewer project in Municipality of Kärkölä replaces the old wastewater treatment plant. As a result of the project, electricity consumption will decrease by 20–30% and the quality of wastewater treatment will improve by 100–200%.

Entire portfolio		Projects approved in 2024	
Number of projects	15	Number of projects	1
Total committed finance	EUR 418,131,831	Annual amount of treated waste water in existing plants immediately after project completion	1,727,986 m <sup>3</sup>
Outstanding amount	EUR 403,131,831	Annual amount of treated waste water with increased capacity in the future	0
Annual amount of treated waste water in existing plants immediately after project completion	28,198,311 m <sup>3</sup>	Annual energy savings (avoided/reduced)	47 MWh
Annual amount of treated waste water with increased capacity in the future	39,659,485 m <sup>3</sup>	Annual production of renewable energy	0 MWh
Annual energy savings (avoided/reduced)	47 MWh	Annual CO <sub>2</sub> emissions (avoided/reduced)	2tCO <sub>2</sub>
Annual production of renewable energy	530 MWh		
Annual CO₂ emissions (avoided/reduced)	2tCO <sub>2</sub>		



# **Green projects promote the following UN Sustainable Development Goals**











6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimising release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally				•
6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity				•
6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes				•
7.2 By 2030, increase substantially the share of renewable energy in the global energy mix			•	
7.3 By 2030, double the global rate of improvement in energy efficiency	•			
9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human wellbeing, with a focus on affordable and equitable access for all	•	•		•
9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities	•	•		•













IABLE CITIES MIMUNITIES	11.1	By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums	•		
	11.2	By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons		•	
	11.3	By 2030, enhance inclusive and sustainable urbanisation and capacity for participatory, integrated and sustainable human settlement planning and management in all countries	•		
	11.6	By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management		•	
	11.7	By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities	•		
ONSIBLE JIMPTION RODUCTION	12.2	By 2030, achieve the sustainable management and efficient use of natural resources	•		
TE 1	13.1	Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries	•	•	
V WATER	14.1	By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution			•
ND	15.5	Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species	•	•	



Other positive impacts of our projects

## Other positive impacts of our projects









Besides the quantitative impacts discussed in this report, our green finance projects also have other wide-ranging benefits. In addition to their environmental benefits, all the projects include various social and economic impacts, both locally and regionally.

Through our finance, we support regional vitality and attractiveness. We enable projects aimed at improving individual wellbeing and promoting the introduction of new, more environmentally friendly technologies and materials. For example, our green portfolio includes several wooden schools, which help tackle indoor air problems.

#### All categories

- · Climate change mitigation and adaptation
- · Regional vitality and attractiveness
- · Support for employment
- Innovations, new environmental technologies and pilot projects
- · Wide-ranging cooperation with stakeholders

#### **Buildings**

- Support for early education and teaching
- · Welcoming green and communal urban spaces
- Flexible multipurpose facilities that serve diverse population groups
- Safe and healthy premises and the renovation of old premises
- Pilot projects for sustainable buildings
- The use of the Green Factor as a tool for land use planning, climate change mitigation and adaptation and promotion of urban biodiversity

#### Transportation

- · More pleasant and welcoming urban environment
- · Accessibility of services and ease of everyday life
- · Denser city structure
- · Reduced noise pollution

#### Renewable energy

- Efforts to pilot and deploy new environmental technologies
- · Improved health through better air quality
- Regional competitiveness
- Finland's energy self-sufficiency and the minimisation of energy distribution and transfer losses

#### Water and waste water management

- Recovery of bioenergy for energy production
- · Improved water quality
- Climate change adaptation



Case: Municipality of Tuusula / Martta Wendelin day-care centre demonstrates environmental consciousness and puts children first

Case: Municipality of Tuusula

## Martta Wendelin day-care centre demonstrates environmental consciousness and puts children first

The Martta Wendelin day-care centre has places for 200 children and is the embodiment of sustainable development. Designed with children's needs in mind, the facility has received the Nordic Swan Ecolabel and won the prestigious Finlandia Prize for Architecture for its distinctive architecture and execution.

The structures of the exterior and interior walls and intermediate floors use CLT massive wood construction that acts as a carbon sink. The spaces are designed to be diverse and flexible to serve multiple purposes.

Energy efficiency and principles of circular economy were considered during construction and in the planning of the building's life cycle."

The centre's yard is designed to promote play and exercise and opens beautifully to the south. Some of the original forest on the plot has been preserved, along with a stormwater puddle where children can jump to their heart's content in rainy weather.

Energy efficiency and principles of circular economy were considered during the construction phase and in the planning of the building's life cycle. Thanks to the significant efforts made in utilising environmentally friendly solutions and climatesmart construction, the project was granted MuniFin's green finance.





Buildings		Number approved: 150	Share of all projects approved in 2024: 97%
Customer	Project	Subcategory	Description
A-Kruunu Oy	Apartment building, As.oy. Härmälänrannan Ernst, Tampere	1.1a Buildings	Apartment building with an E-value of 73 kWhE/m²/year, which is 19% better than the level required by the building permit (90).
A-Kruunu Oy	Apartment building, As.oy. Jyväskylän kauppaneuvo, Rullakuja 3	1.1a Buildings	Apartment building with an E-value of 75 kWhE/m²/year, which is 17% better than the level required by the building permit (90).
A-Kruunu Oy	Apartment buildings, As.oy. Turun Fabriikin Giselle	1.1a Buildings	Two apartment buildings with an E-value of 75 kWhE/m²/year, which is 17% better than the level required by the building permit (90).
A-Kruunu Oy	Apartment building, As.oy. Turun Fabriikin Gunnar	1.1a Buildings	Apartment building with an E-value of 75 kWhE/m²/year, which is 17% better than the level required by the building permit (90).
A-Kruunu Oy	Apartment buildings, As.oy. Vesitornin- rinne 3, Kirkkonummi	1.1a Buildings	Two apartment buildings with an E-value of 75 and 73 kWhE/m²/year, which is 17% and 19% better than the level required by the building permit (90).
A-Kruunu Oy	Apartment building, As.oy.Tampereen Raholanharjun Tiketti	1.1a Buildings	Apartment building with an E-value of 74 kWhE/m²/year, which is 18% better than the level required by the building permit (90).
A-Kruunu Oy	Apartment buildings, Ensi Parvi 5 A-D	1.1a Buildings	$Apartment \ buildings \ with \ E-values \ of \ 74 \ and \ 75 \ kWhE/m^2/year, which \ is \ 17\% \ and \ 18\% \ better \ than \ the \ level \ required \ by \ the \ building \ permit \ (90).$
A-Kruunu Oy	Apartment building, Viulukonsertonku- ja 6B, Järvenpää	1.1a Buildings	Apartment building with an E-value of 75 kWhE/m²/year, which is 17% better than the level required by the building permit (90).
Asoasunnot Yrjä ja Hanna Oy	Apartment building, As.oy. Vantaan Urho, Topaasikuja 10	1.1a Buildings	Apartment building with an E-value of 75 kWhE/m²/year, which is 17% better than the level required by the building permit (90).
Asuntosäätiön Asumisoikeus Oy	Apartment buildings, Aasianpiha 2 and 6	1.1a Buildings	Two apartment buildings with an E-value of 74 and 72 kWhE/m²/year, which is 18% and 20% better than the level required by the building permit (90).
Asuntosäätiön Asumisoikeus Oy	Apartment building, As.oy. Vantaan Kilterinkaari 6	1.1a Buildings	Apartment building with an E-value of 75 kWhE/m²/year, which is 17% better than the level required by the building permit (90).
Asuntosäätiön Asumisoikeus Oy	Apartment buildings, Ensi Parvi 3 A-C	1.1a Buildings	Three apartment buildings with an E-value of 75 kWhE/m²/year, which is 17% better than the level required by the building permit (90).
Asuntosäätiön Asumisoikeus Oy	Apartment building, Finnoonkarta- nonkatu 17 A-C	1.1a Buildings	Apartment building with an E-value of 74 kWhE/m²/year, which is 18% better than the level required by the building permit (90).
Asuntosäätiön Asumisoikeus Oy	Apartment building, Kirjakatu 6, Espoo	1.1a Buildings	Five terraced houses with E-values of 76, 79 and 80 kWhE/ $m^2$ /year, which, when weighted by the building areas, is on average 24% better than the level required by the building permit (105).



Buildings		Number approved: 150	Share of all projects approved in 2024: 97%
Customer	Project	Subcategory	Description
Asuntosäätiön Asumisoikeus Oy	Apartment building, Piilipuuntie 4	1.1a Buildings	$Tree terraced houses with E-values of 75, 78 and 80 kWhE/m^2/year, which, when weighted by the building areas, is on average 27\% better than the level required by the building permit (105).$
Asuntosäätiön Asumisoikeus Oy	Apartment buildings, Raiskionkatu 9	1.1a Buildings	$Two apartment buildings with an E-value of 75 kWhE/m^2/year, which is 17\% better than the level required by the building permit (90).$
Asuntosäätiön Asumisoikeus Oy	Apartment building, Saaristolaivankatu 20	1.1a Buildings	Apartment building with an E-value of 74 kWhE/m²/year, which is 18% better than the level required by the building permit (90).
Asuntosäätiön Asumisoikeus Oy	Apartment building, Viulukonsertonku- ja 6A, Järvenpää	1.1a Buildings	Apartment building with an E-value of 75 kWhE/m²/year, which is 17% better than the level required by the building permit (90).
Avain Asumisoikeus Oy	Apartment building, As.oy. Laukaan Kartturi	1.1a Buildings	Apartment building with an E-value of 75 kWhE/m²/year, which is 17% better than the level required by the building permit (90).
Avain Asumisoikeus Oy	Apartment building, As.oy Nurmijärven Luhtajoentie 12	1.1a Buildings	Apartment building with an E-value of 72 kWhE/m²/year, which is 20% better than the level required by the building permit (90).
Avain Asumisoikeus Oy	Apartment building, As.oy. Kaarinan Jalostusasemankatu 1	1.1a Buildings	Apartment building with an E-value of 65 kWhE/m²/year, which is 28% better than the level required by the building permit (90).
Avain Asumisoikeus Oy	Apartment building, As.oy.Tampereen Lamminpään C2	1.1a Buildings	Apartment building with an E-value of 75 kWhE/m²/year, which is 17% better than the level required by the building permit (90).
Avain Asumisoikeus Oy	Apartment building, Pirtinkaari 4, Kuopio	1.1a Buildings	Apartment building with an E-value of 74 kWhE/ $m^2$ /year, which is 18% better than the level required by the building permit (90) and terraced house with an E-value of 77 kWhE/ $m^2$ /year, which is 27% better than the level required by the building permit (105).
Avain Vuokra10 Oy	Apartment buildings, As.oy. Helsingin Perusyhtiö 9, Radioportti 2 cd	1.1a Buildings	Apartment building with an E-value of 73 kWhE/m²/year, which is 19% better than the level required by the building permit (90).
Avain Vuokra10 Oy	Apartment building, As.oy. Helsingin Ounasvaarantie 4 A-B	1.1a Buildings	Apartment building with an E-value of 74 kWhE/m²/year, which is 18% better than the level required by the building permit (90).
Avain Vuokra10 Oy	Apartment building, As.oy. Helsingin Ounasvaarantie 4 C	1.1a Buildings	Apartment building with an E-value of 74 kWhE/m²/year, which is 18% better than the level required by the building permit (90).
Avain Vuokra10 Oy	Apartment building, As.oy Helsingin Pallaksentie 7	1.1a Buildings	Apartment building with an E-value of 75 kWhE/m²/year, which is 17% better than the level required by the building permit (90).
Avain Vuokra10 Oy	Apartment buildings, As.oy Helsingin Perusyhtiö 14	1.1a Buildings	Two apartment buildings with an E-value of 75 kWhE/m²/year, which is 17% better than the level required by the building permit (90).
Avain Vuokra10 Oy	Apartment building, As.oy. Paperite- htaankatu 15	1.1a Buildings	Apartment building with an E-value of 75 kWhE/m²/year, which is 17% better than the level required by the building permit (90).
Avain Vuokra10 Oy	Apartment building, As.oy. Turun Hovinarri	1.1a Buildings	Apartment building with an E-value of 75 kWhE/m²/year, which is 17% better than the level required by the building permit (90).



Buildings		Number approved: 150	Share of all projects approved in 2024: 97%
Customer	Project	Subcategory	Description
Avain Vuokrakodit Oy	Apartment building, As.oy.Tulistimen- katu 7a	1.1a Buildings	$Apartment\ building\ with\ an\ E-value\ of\ 72\ kWhE/m^2/year, which\ is\ 20\%\ better\ than\ the\ level\ required\ by\ the\ building\ permit\ (90).$
Avain Vuokrakodit Oy	Apartment building, As.oy.Tulistimen- katu 7b	1.1a Buildings	Apartment building with an E-value of 74 kWhE/m²/year, which is 18% better than the level required by the building permit (90).
City of Hamina	Modular building of Uusi-Summa	1.1a Buildings	$New school building with an E-value of 80 kWhE/m^2/year, which is 20\% better than the level required by the building permit (100).$
City of Hyvinkää	Community centre Paavolatalo	1.1a Buildings	New building with an E-value of 59 kWhE/m²/year, which is 41% better than the level required by the building permit (100). The Nordic Ecolabel will be given to the building.
City of Kajaani	Daycare centre Teerenpesä	1.1a Buildings	$Day care centre \ building \ with an E-value \ of 87 \ kWhE/m^2/year, which is 13\% \ better \ than \ the \ level \ required \ by \ the \ building \ permit \ (100).$
City of Kangasala	Commercial and office premises of Timanttikortteli	1.1a Buildings	Building with an E-value of 80 kWhE/m²/year, which is 20% better than the level required by the building permit (100).
City of Kauhava	Middle school of Ylihärmä koulukeskus	1.1a Buildings	New school building with an E-value of 89 kWhE/m²/year, which is 11% better than the level required by the building permit (100).
City of Kotka	School campus of Xamk	1.1a Buildings	New school campus with an E-value of $55  \text{kWhE/m}^2$ /year, which is $45\%$ better than the level required by the building permit (100). The project has the Building Information Foundation (RTS) certification.
City of Kouvola	Sports hall of Eskolanmäki	1.1a Buildings	$New sports hall with an E-value of 88 kWhE/m^2/year, which is 12\% better than the level required by the building permit (100).$
City of Lappeenranta	School building, Sammontalo	1.1a Buildings	$New school building with an E-value of 71 kWhE/m^2/year, which is 29\% better than the level required by the building permit (100).$
City of Lieto	Daycare centre of Keskikaari, Lieto	1.1a Buildings	$Day care centre \ building \ with an E-value \ of 78 \ kWhE/m^2/year, which is 22\% \ better \ than \ the \ level \ required \ by \ the \ building \ permit \ (100).$
City of Nivala	School of Järvikylä-Aittola	1.1a Buildings	$New school building with an E-value of 90  kWhE/m^2/year, which is 10\%  better than the level required by the building permit (100).$
City of Nokia	Sports hall, Nokia	1.1a Buildings	New sports hall with an E-value of 84 kWhE/m²/year, which is 16% better than the level required by the building permit (100).
City of Nokia	Daycare centre of Siuro-Linnavuori	1.1a Buildings	Daycare centre building with an E-value of 84 kWhE/m²/year, which is 14% better than the level required by the building permit (100).
City of Orimattila	Comprehensive school of Orimattila	1.1a Buildings	New school building with an E-value of 80 kWhE/m²/year, which is 20% better than the level required by the building permit (100).
City of Raahe	Community centre Koivuluotoareena	1.1a Buildings	New building with an E-value of 86 kWhE/m²/year, which is 14% better than the level required by the building permit (100).
City of Rovaniemi	Community centre Napsu	1.1a Buildings	New school building with an E-value of 83 kWhE/m²/year, which is 17% better than the level required by the building permit (100).
City of Sastamala	Community centre Pehula	1.1a Buildings	New building with an E-value of 59 kWhE/m²/year, which is 41% better than the level required by the building permit (100).
City of Sastamala	School building, Sylvään taitotalo	1.1a Buildings	New building with an E-value of 66 kWhE/m²/year, which is 34% better than the level required by the building permit (100).
City of Tampere	School of Ahvenisjärvi	1.1a Buildings	New school building with an E-value of 77 kWhE/m²/year, which is 23% better than the level required by the building permit (100).
City of Vantaa	Karhunkierros daycare centre, Lentola daycare centre, Vaskivuori high school and Martensdahl daycare centre.	1.1a Buildings	Construction of four buildings (three daycare centers and one educational building) with an average E-value of 82 kWhE/m²/year, which is 18% better than the level required by the building permit (100).



Buildings		Number approved: 150	Share of all projects approved in 2024: 97%
Customer	Project	Subcategory	Description
City of Vantaa	Daycare centre of Ruusupuu	1.1a Buildings	Daycare centre building with an E-value of 76 kWhE/m²/year, which is 24% better than the level required by the building permit (100).
City of Vantaa	Daycare centre of Suitsikuja päiväko- tipaviljonki	1.1a Buildings	Daycare centre building with an E-value of 84 kWhE/m²/year, which is 14% better than the level required by the building permit (100).
City of Ylivieska	School of Vähäkangas	1.1a Buildings	New school building with an E-value of 88 kWhE/m²/year, which is 12% better than the level required by the building permit (100).
City of Ylöjärvi	Daycare centre of Siltatie	1.1a Buildings	$Day care centre \ building \ with an E-value \ of 70 \ kWhE/m^2/year, which is 30\% \ better \ than \ the \ level \ required \ by \ the \ building \ permit \ (100).$
Elämäni Kodit 40 Oy	Apartment buildings, As.oy. Tampereen Ojalan Ajuri	1.1a Buildings	Nine terraced houses with E-values of 64-70 kWhE/m²/year, which is 33-39% better than the level required by the building permit (105).
ES-Laatuasumisoikeus Oy	Apartment building, Vedenkierto 31	1.1a Buildings	Apartment building with an E-value of 73 kWhE/m²/year, which is 19% better than the level required by the building permit (90).
Espoon Asunnot Oy	Apartment building, As.oy. Espoon Kiisseli, Viilivati 15	1.1a Buildings	Apartment building with an E-value of 75 kWhE/m²/year, which is 17% better than the level required by the building permit (90).
Espoon Asunnot Oy	Apartment buildings, Finnoonkallio 2	1.1a Buildings	Apartment buildings with E-values of 69 and 70 kWhE/m²/year, which is 23% and 22% better than the level required by the building permit (90).
Etukodit Oy	Apartment building, As.oy Helsingin Koruseppä	1.1a Buildings	Apartment building with an E-value of 73 kWhE/m²/year, which is 19% better than the level required by the building permit (90).
Hämeenlinnan Asunnot Oy	Apartment building, Keinukatu 1	1.1a Buildings	$Apartment\ building\ with\ an\ E-value\ of\ 75\ kWhE/m^2/year, which\ is\ 17\%\ better\ than\ the\ level\ required\ by\ the\ building\ permit\ (90).$
Helsingin Asumisoikeus Oy	Apartment buildings, Myllymatkantie 11	1.1a Buildings	$Apartment\ buildings\ with\ E-values\ of\ 69-70\ kWhE/m^2/year, which\ are\ 22-23\%\ better\ than\ the\ level\ required\ by\ the\ building\ permit\ (90).$
Helsingin kaupungin asunnot Oy	Apartment building, Konttisatamankatu 8, Kalasatama	1.1a Buildings	Apartment building with an E-value of 72 kWhE/m²/year, which is 20% better than the level required by the building permit (90).
Helsingin kaupungin asunnot Oy	Apartment building, Melkinlaituri 4	1.1a Buildings	$Apartment\ building\ with\ an\ E-value\ of\ 70\ kWhE/m^2/year, which\ is\ 22\%\ better\ than\ the\ level\ required\ by\ the\ building\ permit\ (90).$
Helsingin kaupungin asunnot Oy	Apartment building, Mestarintie 18	1.1a Buildings	Apartment building with an E-value of 66 kWhE/m²/year, which is 27% better than the level required by the building permit (90).
Helsingin kaupungin asunnot Oy	Apartment building, Smoltinkaari 1	1.1a Buildings	Apartment building with an E-value of 71 kWhE/m²/year, which is 21% better than the level required by the building permit (90).
Helsingin seudun opiskelilija-asuntosäätiö sr	Apartment buildings, Hopeakaivok- sentie 47	1.1a Buildings	Two apartment buildings with an E-value of 75 kWhE/m²/year, which is 17% better than the level required by the building permit (90).
Helsingin seudun opiskelilija-asuntosäätiö sr	Apartment building, Maarinsolmu	1.1a Buildings	Apartment building with an E-value of 73 kWhE/m²/year, which is 19% better than the level required by the building permit (90).
Helsingin seudun opiskelilija-asuntosäätiö sr	Apartment buildings, Riihitontuntie 11	1.1a Buildings	Two apartment buildings with an E-value of 74 kWhE/m²/year, which is 18% better than the level required by the building permit (90).
Helsingin seudun opiskelilija-asuntosäätiö sr	Apartment building, Riihitontuntie 9	1.1a Buildings	Apartment building with an E-value of 73 kWhE/m²/year, which is 19% better than the level required by the building permit (90).



Buildings		Number approved: 150	Share of all projects approved in 2024: 97%
Customer	Project	Subcategory	Description
lin vuokratalot Oy	Apartment building, Ratatie 23	1.1a Buildings	$Terraced houses with an E-value of 70  kWhE/m^2/year, which is 33\%  better than the level required by the building permit (105).$
Jyväskylän sotainvalidien asuntosäätiö sr	Apartment building, As.oy. Väkkärätie 3b	1.1a Buildings	Apartment building with an E-value of 74 kWhE/m²/year, which is 18% better than the level required by the building permit (90).
Jyväskylän Vuokra-asunnot Oy	Apartment building, Väkkärätie 1A	1.1a Buildings	Apartment building with an E-value of 75 kWhE/m²/year, which is 17% better than the level required by the building permit (90).
KAS asunnot Oy	Apartment buildings, Leikinpolku 1 and 3, Ylöjärvi	1.1a Buildings	Apartment building with an E-value of 74 kWhE/m²/year, which is 18% better than the level required by the building permit (90).
Koti Pohjoinen Oy	Apartment buildings, Ojustie 4, Muonio	1.1a Buildings	Terraced houses with an E-value of 72 (buildings B,C) and 73 (buildings A,D) kWhE/m²/year, which is 30% and 31% better than the level required by the building permit (105).
Lahden Asunnot Oy	Apartment buildings, Laatikkotehta- ankatu 5 D and E	1.1a Buildings	Two apartment buildings with an E-value of 71 and 72 kWhE/m²/year, which is 21% and 20% better than the level required by the building permit (90).
Municipality of Kempele	Kirkonkyläntalo	1.1a Buildings	Apartment building with an E-value of 76 kWhE/m²/year, which is 24% better than the level required by the building permit (100).
Municipality of Kempele	Modular school building of Linnankan- gas, Modular school of Ketolanperä and Kempele townhall	1.1a Buildings	Two new school buildings with E-values of 81 and 88 kWhE/m²/year and one office building with an E-value of 80 kWhE/m²/year, which are 19%, 12% and 20% better than the level required by the building permit (100).
Municipality of Lempäälä	School building, Saikantalo	1.1a Buildings	Building with an E-value of 63 kWhE/m²/year, which is 37% better than the level required by the building permit (100).
Municipality of Muonio	Daycare centre and pre-school of Muonio	1.1a Buildings	New daycare center with an E-value of 85 kWhE/m²/year, which is 27% better than the level required by the building permit (100).
Municipality of Pirkkala	Community centre of Pirkkala extension	1.1a Buildings	Building with an E-value of 52 kWhE/m²/year, which is 48% better than the level required by the building permit (100).
Municipality of Tuusula	Rykmentinpuisto multipurpose campus	1.1a Buildings	New school building with an E-value of 61 kWhE/m²/year, which is 39% better than the level required by the building permit (100).
Naantalin Vuokratalot Oy	Apartment building, Presidentinkatu 3	1.1a Buildings	$Apartment\ building\ with\ an\ E-value\ of\ 74\ kWhE/m^2/year, which is\ 18\%\ better\ than\ the\ level\ required\ by\ the\ building\ permit\ (90).$
Niiralan Kulma Oy	Apartment building, Urheilukatu 3	1.1a Buildings	Apartment building with an E-value of 74 kWhE/m²/year, which is 18% better than the level required by the building permit (90).
Oulun Sivakka Oy	Apartment building, Listatie 29F	1.1a Buildings	Terraced house with an E-value of 80 kWhE/m²/year, which is 24% better than the level required by the building permit (105).
Oulun Sivakka Oy	Apartment building, Pateniemenranta	1.1a Buildings	Apartment building with an E-value of 71 kWhE/m²/year, which is 21% better than the level required by the building permit (90).
Seinäjoen koulutuskuntayhtymä	School campus of Ähtäri	1.1a Buildings	New school building with an E-value of 86 kWhE/m²/year, which is 14% better than the level required by the building permit (100).
Setlementtiasunnot Oy	Apartment building, Afrikanpiha 3	1.1a Buildings	Apartment building with an E-value of 71 kWhE/m²/year, which is 21% better than the level required by the building permit (90).
Suomen Ekokodit Oy	Apartment building, As.oy. Raadinkatu 1, Tampere	1.1a Buildings	Apartment building with an E-value of 75 kWhE/m²/year, which is 17% better than the level required by the building permit (90).



Buildings		Number approved: 150	Share of all projects approved in 2024: 97%
Customer	Project	Subcategory	Description
Suomen Kaupunkikodit ARA Oy	Apartment building, As.oy. Vantaan Kalla	1.1a Buildings	Apartment building with an E-value of 75 kWhE/m²/year, which is 17% better than the level required by the building permit (90).
Suomen Kaupunkikodit ARA Oy	Apartment building, As.oy. Vantaan Lootus	1.1a Buildings	Apartment building with an E-value of 74 kWhE/m²/year, which is 18% better than the level required by the building permit (90).
Suomen Keskuskodit Oy	Apartment building, As.oy. Helsingin Verkkosaaren Laudus	1.1a Buildings	Apartment building with an E-value of 73 kWhE/m²/year, which is 19% better than the level required by the building permit (90).
Suomen Keskuskodit oy	Apartment building, Pumppuasemanraitti 5, Tampere	1.1a Buildings	Apartment building with an E-value of 74 kWhE/m²/year, which is 18% better than the level required by the building permit (90).
TA-Asumisoikeus Oy	Apartment buildings, As.oy. Pigmentti- tasku 5 and 7	1.1a Buildings	Two apartment buildings with an E-value of 75 kWhE/m²/year, which is 17% better than the level required by the building permit (90).
TA-Asumisoikeus Oy	Apartment building, Espoon Luoteis- rinne 15	1.1a Buildings	Apartment building with an E-value of 75 kWhE/m²/year, which is 17% better than the level required by the building permit (90).
TA-Asumisoikeus Oy	Apartment building, Haakoninlahden- katu 19	1.1a Buildings	Apartment building with an E-value of 69 kWhE/m²/year, which is 23% better than the level required by the building permit (90).
TA-Asumisoikeus Oy	Apartment buildings, Hoppmanninkatu 1 and 3	1.1a Buildings	Two apartment buildings with an E-value of 75 kWhE/m²/year, which is 17% better than the level required by the building permit (90).
TA-Asumisoikeus Oy	Apartment building, Kangastie 9	1.1a Buildings	Apartment building with an E-value of 74 kWhE/m²/year, which is 18% better than the level required by the building permit (90).
TA-Asumisoikeus Oy	Apartment building, Konalantie 64, Helsinki	1.1a Buildings	Apartment building with an E-value of 75 kWhE/m²/year, which is 17% better than the level required by the building permit (90).
TA-Asumisoikeus Oy	Apartment building, Leppäkertunkatu 2, Raisio	1.1a Buildings	Apartment building with an E-value of 73 kWhE/m²/year, which is 19% better than the level required by the building permit (90).
TA-Asumisoikeus Oy	Apartment building, Sahapiha 8	1.1a Buildings	Apartment building with an E-value of 75 kWhE/m²/year, which is 17% better than the level required by the building permit (90).
TA-Asumisoikeus Oy	Apartment building, Soukonlahden- kaari 25	1.1a Buildings	Apartment building with an E-value of 75 kWhE/m²/year, which is 17% better than the level required by the building permit (90).
TA-Asumisoikeus Oy	Apartment buildings, Turun Akselintie 6A and 6B	1.1a Buildings	Two apartment buildings with an E-value of 70 kWhE/m²/year, which is 22% better than the level required by the building permit (90).
TA-Asumisoikeus Oy	Apartment buildings, Turun Oikotie 11	1.1a Buildings	Apartment building with an E-value of 74 kWhE/m²/year, which is 18% better than the level required by the building permit (90).
TA-Yhtymä Oy	Apartment building, KOY Oulun Purjeranta	1.1a Buildings	Apartment building with an E-value of 72 kWhE/m²/year, which is 20% better than the level required by the building permit (90).
Tampereeen yliopistollisen sairaalan tukisäätiö sr	Apartment building, Tieteenkatu 4	1.1a Buildings	Apartment building with an E-value of 75 kWhE/m²/year, which is 17% better than the level required by the building permit (90).



Buildings		Number approved: 150	Share of all projects approved in 2024: 97%
Customer	Project	Subcategory	Description
Tampereen opiskelija-asuntosäätiö sr	Apartment building, Hippos 5A	1.1a Buildings	Apartment building with an E-value of 75 kWhE/m²/year, which is 17% better than the level required by the building permit (90).
TVT Asunnot Oy	Apartment buildings, Savonkedonkatu 7,Turku	1.1a Buildings	Apartment buildings (A-E) with an E-value of 75 kWhE/m²/year, which is 17% better than the level required by the building permit (90).
ΓVT Asunnot Oy	Apartment buildings, Murkionkatu 12 A-E	1.1a Buildings	Five apartment buildings with an E-value of 75 kWhE/m²/year, which is 17% better than the level required by the building permit (90).
TVT Asunnot Oy	Apartment buildings, Vähäheikkiläntie 13	1.1a Buildings	Two apartment buildings with an E-value of 75 kWhE/m²/year, which is 17% better than the level required by the building permit (90).
Tyvene Oy	Senior home, Tampere Niemenranta	1.1a Buildings	Apartment building with an E-value of 75 kWhE/m²/year, which is 17% better than the level required by the building permit (90).
/arsinais-Suomen Asumisoikeus Oy	Apartment building, Juhana herttuan puistokatu 10	1.1a Buildings	Apartment building with an E-value of 75 kWhE/m²/year, which is 17% better than the level required by the building permit (90).
/arsinais-Suomen Asumisoikeus Oy	Apartment building, Kertunlinna	1.1a Buildings	Apartment building with an E-value of 75 kWhE/m²/year, which is 17% better than the level required by the building permit (90).
arsinais-Suomen Asumisoikeus Oy	Apartment building, Puistonportti	1.1a Buildings	$Apartment\ building\ with\ an\ E-value\ of\ 74\ kWhE/m^2/year, which\ is\ 18\%\ better\ than\ the\ level\ required\ by\ the\ building\ permit\ (90).$
arsinais-Suomen Asumisoikeus Oy	Apartment buildings, Villa Viiri	1.1a Buildings	$Five apartment buildings with an E-value of 80  kWhE/m^2/year, which is 24\%  better than the level required by the building permit (105).$
/arttuneiden asumisoikeusyhdistys Jaso	Apartment building, Harjun Ilona	1.1a Buildings	Apartment building with an E-value of 74 kWhE/m²/year, which is 18% better than the level required by the building permit (90).
/AV Asunnot Oy	Apartment building, Retiisikuja 2	1.1a Buildings	$Apartment\ building\ with\ an\ E-value\ of\ 72\ kWhE/m^2/year, which\ is\ 20\%\ better\ than\ the\ level\ required\ by\ the\ building\ permit\ (90).$
/TK Kiinteistöt Oy	Vocational School Varia, Vehkala	1.1a Buildings	New school building with an E-value of 78 kWhE/m²/year, which is 22% better than the level required by the building permit (100).
/TK Kiinteistöt Oy	Aviapolis high school	1.1a Buildings	New school building with an E-value of 79 kWhE/m²/year, which is 21% better than the level required by the building permit (100).
Vartalo Kodit Oy	Apartment building, Linjurinkatu 9	1.1a Buildings	Apartment building with an E-value of 74 kWhE/m²/year, which is 18% better than the level required by the building permit (90).
/-Säätiö/Kiinteistö Oy M2-Kodit	Apartment building, As.oy. Tampereen Nyöri	1.1a Buildings	Apartment building with an E-value of 75 kWhE/m²/year, which is 17% better than the level required by the building permit (90).
/-Säätiö/Kiinteistö Oy M2-Kodit	Apartment building, As.oy. Kangasalan Taitajakatu 10	1.1a Buildings	Apartment building with an E-value of 73 kWhE/m²/year, which is 19% better than the level required by the building permit (90).
'-Säätiö/Kiinteistö Oy M2-Kodit	Apartment building, As.oy. Pirkkalan Torninjuuri 9b	1.1a Buildings	Apartment building with an E-value of 71 kWhE/m²/year, which is 21% better than the level required by the building permit (90).
'-Säätiö/Kiinteistö Oy M2-Kodit	Apartment building, Hovineidonkatu 2	1.1a Buildings	Apartment building with an E-value of 75 kWhE/m²/year, which is 17% better than the level required by the building permit (90).
'-Säätiö/Kiinteistö Oy M2-Kodit	Apartment buildings, Isoseppälä 10	1.1a Buildings	Two apartment buildings with an E-value of 75 kWhE/m²/year, which is 17% better than the level required by the building permit (90).
/-Säätiö/Kiinteistö Oy M2-Kodit	Apartment buildings, Pasuunakuja 1	1.1a Buildings	Apartment buildings with E-values of 73 and 74 kWhE/m²/year, which are 19% and 18% better than the level required by the building perm (90).



Buildings		Number approved: 150	Share of all projects approved in 2024: 97%
Customer	Project	Subcategory	Description
City of Tampere	Office building of Tampere	1.1a Buildings, 1.2 Renovations	Renovation of a listed office building, improving energy efficiency by 64%.
City of Joensuu	Ice sports center of Mehtimäki	1.2 Renovations	Renovation and extension of an ice hockey hall, improving energy efficiency by 44%.
City of Kouvola	Renovation of swimming hall	1.2 Renovations	Renovation of a swimming hall, improving energy efficiency by 55%.
City of Outokumpu	Renovation of the City Hall, Outo- kumpu	1.2 Renovations	Renovation of a city hall, improving energy efficiency by 39%.
City of Tampere	Renovation of daycare centre of Hatanpää Jukola	1.2 Renovations	Renovation of a day care center, improving energy efficiency by 80%.
City of Tampere	Renovation of school of Härmälä	1.2 Renovations	Renovation of a school building, improving energy efficiency by 39%.
City of Tampere	High school of Kissanmaa and Lyseo, renovation	1.2 Renovations	Renovation of two apartment buildings, improving energy efficiency by 34% and 55%.
Eelan Laajennus Oy	Renovation of the building	1.2 Renovations	Renovation of an apartment building, improving energy efficiency by 32%.
Helsingin kaupungin asunnot Oy	Renovation of apartment building, Juhana Herttuan tie 7 and 11	1.2 Renovations	Renovation of six apartment buildings, improving energy efficiency by 50%.
Helsingin kaupungin asunnot Oy	Apartment buildings, Kontulankaari 24	1.2 Renovations	Renovation of three apartment buildings, improving energy efficiency by 37%.
Helsingin kaupungin asunnot Oy	Apartment buildings, Kurkisuontie 2-6	1.2 Renovations	Renovation of 20 aparment buildings, improving energy efficiency by an average of 47%.
Helsingin kaupungin asunnot Oy	Apartment buildings, Käsityöläisentie 9H, 9I and 14D	1.2 Renovations	Renovation of three apartment buildings, improving energy efficiency by 30%.
Helsingin kaupungin asunnot Oy	Apartment buildings, Palovartijantie 6A-B, Käsityöläisentie 27 ABC and DEF	1.2 Renovations	Renovation of four apartment buildings, improving energy efficiency by an average of 47-51%.
Helsingin kaupungin asunnot Oy	Apartment buildings, Pasilanraitio 4	1.2 Renovations	Renovation of two apartment buildings, improving energy efficiency by an average of 35%.
Helsingin kaupungin asunnot Oy	Apartment buildings, Saniaistie 3	1.2 Renovations	Renovation of seven apartment buildings, improving energy efficiency by 36%.
Helsingin kaupungin asunnot Oy	Apartment buildings, Yläkiventie 2	1.2 Renovations	Renovation of four apartment buildings, improving energy efficiency by 39%.
Helsingin seudun opiskelilija-asuntosäätiö sr	Apartment buildings, Siltakuja 2	1.2 Renovations	Renovation of two apartment buildings, improving energy efficiency by 33-34%.
Lappeenrannan Asuntopalvelu Oy	Apartment building, Suonionkatu 24-28	1.2 Renovations	Renovation of an apartment building, improving energy efficiency by 41%.
Nokian Vuokrakodit Oy	Apartment buildings, Keskisentie 4 A-E	1.2 Renovations	Renovation of five terraced houses, improving energy efficiency by 59-61%.



Buildings		Number approved: 150	Share of all projects approved in 2024: 97%
Customer	Project	Subcategory	Description
Nokian Vuokrakodit Oy	Apartment buildings, Majakatu 10	1.2 Renovations	Renovation of four apartment buildings, improving energy efficiency by an average of 50%.
Oulun Sivakka Oy	Apartment buildings, Järvitie 10 renovation	1.2 Renovations	Renovation of two apartment buildings, improving energy efficiency by 48%.
City of Savonlinna	Solar panels of ice hockey arena	1.4 Renewable energy in buildings	The power of the solar panels to be installed on the roof of the ice rink is 40 kWp. With this power, the estimated solar electricity production is approximately $32,000$ kWh per year.
Kiinteistö Oy Helsingin Toimitilat	Heating system conversion from oil to geothermal	1.4 Renewable energy in buildings	Energy renovation of a rescue station property, as a result of which the property will stop using the fossil heating component, i.e., the oil boiler plant, and acquire a geothermal heating system.
Municipality of Taivalkoski	Apartment building, KOY Siikataival Vaaranrivi	1.4 Renewable energy in buildings	During the renovation, the heating system will be changed from oil heating to geothermal heat.
Renewable energy		Number approved: 1	Share of all projects approved in 2024: 1%
Customer	Project	Sub-category	Description
Lempäälän Lämpö Oy	Waste energy utilization	3.5 Waste-energy	As a result of the project, the waste heat energy generated in refrigeration production will be utilised in district heat production.
Transportation		Number approved: 2	Share of all projects approved in 2024: 1%
Customer	Project	Sub-category	Description
Tampereen Raitiotie Oy	City of Tampere tramway, 3rd phase Pirkkala-Linnainmaa	2.1 Public transportation	The tram projects are considered to bring significant societal benefits in terms of sustainable public transport and the development of dense regional and community structures and to support the carbon neutrality goals of the City of Tampere and the Municipality of Pirkkala.
City of Savonlinna	Fully electric car, VW ID Buzz	2.3 Passenger cars and light commercial vehicles	Leasing of electric car.
Water and waste water management		Number approved: 1	Share of all projects approved in 2024: 1%
Customer	Project	Sub-category	Description
Municipality of Kärkölä	Transfer sewer of Kärkölä	4.2 Existing waste water facilities	A transfer sewer project that replaces the old waste water treatment plant. The project also includes a pretreatment building and a starting pumping station. As a result of the project, electricity consumption will decrease by 20-30% and the quality of wastewater treatment will improve by 100-200%



# **Green finance projects and impacts**

Buildings: New buildings												
Customer	Project	Sub-category	Year of approval	Energy Performance Certificate class	EPC year <sup>1</sup>	E-value <sup>2</sup> (kWh/m <sup>2</sup> / year)	Outstanding amount 31 Dec 2024 (€)	Unwithdrawn credit commitment 31 Dec 2024 (€)	Total committed finance 31 Dec 2024 (€)	MuniFin's estimated share of finance 31 Dec 2024	Annual energy savings (avoided / reduced MWh)	Annual CO <sub>2</sub> emissions (avoided / reduced tCO <sub>2</sub> )
City of Akaa	Comprehensive school of Viiala with Nordic ecolabel	1.1a Buildings	2022	Α	2018	87	27,650,000	-	27,650,000	92%	103	3
A-Kruunu Oy	Apartment building, As.oy. Härmälänrannan Ernst, Tampere	1.1a Buildings	2024	A	2018	73	5,610,000	2,366,200	7,976,200	70%	33	2
A-Kruunu Oy	Apartment building, As.oy. Jyväskylän kauppaneuvo, Rullakuja 3	1.1a Buildings	2024	Α	2018	75	-	11,457,000	11,457,000	0%	-	-
A-Kruunu Oy	Apartment building, As.oy. Tampereen Satamanvartija, Reuharinviitta 4	1.1a Buildings	2023	A	2018	75	3,022,000	2,081,839	5,103,839	59%	14	1
A-Kruunu Oy	Apartment building, As.oy. Tampereen Valonkajo, Reuharinviitta 2	1.1a Buildings	2023	А	2018	75	3,135,000	2,030,772	5,165,772	61%	15	1
A-Kruunu Oy	Apartment buildings, As.oy. Turun Fabriikin Giselle	1.1a Buildings	2024	А	2018	75	2,050,000	6,520,280	8,570,280	24%	11	0
A-Kruunu Oy	Apartment building, As.oy. Turun Fabriikin Gunnar	1.1a Buildings	2024	A	2018	75	1,980,000	6,276,230	8,256,230	24%	10	0
A-Kruunu Oy	Apartment buildings, As.oy. Vesitorninrinne 3, Kirkkonummi	1.1a Buildings	2024	A	2018	73-75	-	11,595,000	11,595,000	0%	-	-
A-Kruunu Oy	Apartment building, As.oy.Tampereen Raholanharjun Tiketti	1.1a Buildings	2024	A	2018	74	2,750,000	5,854,040	8,604,040	32%	15	1
A-Kruunu Oy	Apartment buildings, Ensi Parvi 5 A-D	1.1a Buildings	2024	A	2018	74-75	-	30,386,900	30,386,900	0%	-	-
A-Kruunu Oy	Apartment building, Konttinosturinkuja 4	1.1a Buildings	2023	А	2018	75	9,029,496	-	9,029,496	99%	35	4



<sup>&</sup>lt;sup>1</sup>The new law of 2018 concerning energy performance certificates reduced the coefficients of certain energy types used in the calculation of E-values and made the legal threshold of energy efficiency for new buildings stricter. Using new coefficients, the E-values of the buildings built under the old law of 2013 would decrease, which could enhance their EPC classes

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A-Kruunu Oy	Apartment building, Lavakatu 9b, Helsinki	1.1a Buildings	2022	Α	2018	75	19,000,000	1,673,617	20,673,617	92%	38	4
A-Kruunu Oy	Apartment building, Syvänsalmen- katu 5 b	1.1a Buildings	2020	Α	2018	71	8,638,281	-	8,638,281	98%	61	4
A-Kruunu Oy	Apartment buildings, Verkkosaaren- ranta 18	1.1a Buildings	2022	А	2018	75	17,944,870	756,285	18,701,155	96%	83	9
A-Kruunu Oy	Apartment building, Viulukonser- tonkuja 6B, Järvenpää	1.1a Buildings	2024	Α	2018	75	-	7,004,000	7,004,000	0%	-	-
Asoasunnot Yrjä ja Hanna Oy	Apartment building, As.oy. Vantaan Urho, Topaasikuja 10	1.1a Buildings	2024	Α	2018	75	-	8,918,243	8,918,243	0%	-	-
Asuntosäätiön Asumisoikeus Oy	Apartment building, Finnoonkarta- nonkatu 17 A-C	1.1a Buildings	2024	Α	2018	74	13,400,000	16,325,186	29,725,186	45%	82	5
Asuntosäätiön Asumisoikeus Oy	Apartment buildings, Aasianpiha 2 and 6	1.1a Buildings	2024	Α	2018	72-74	1,400,000	10,301,175	11,701,175	12%	10	1
Asuntosäätiön Asumisoikeus Oy	Apartment building, As.oy. Kangas- rinteen sananjalka	1.1a Buildings	2023	А	2018	75	6,042,625	-	6,042,625	100%	39	2
Asuntosäätiön Asumisoikeus Oy	Apartment building, As.oy. Vantaan Kilterinkaari 6	1.1a Buildings	2024	Α	2018	75	11,400,000	1,157,841	12,557,841	91%	61	7
Asuntosäätiön Asumisoikeus Oy	Apartment buildings, Ensi Parvi 3 A-C	1.1a Buildings	2024	A	2018	75	-	26,985,787	26,985,787	0%	-	-
Asuntosäätiön Asumisoikeus Oy	Apartment building, Helsingin verkkoneula 4	1.1a Buildings	2022	А	2018	74	8,500,000	756,071	9,256,071	92%	42	5
Asuntosäätiön Asumisoikeus Oy	Apartment building with Nordic Ecolabel, Karakalliontie 1	1.1a Buildings	2020	A	2018	75	7,137,406	15,832	7,153,238	97%	44	1
Asuntosäätiön Asumisoikeus Oy	Apartment building, Kirjakatu 6, Espoo	1.1a Buildings	2024	A	2018	79	-	8,477,140	8,477,140	0%	-	-
Asuntosäätiön Asumisoikeus Oy	Apartment building, Klaavuntie 13	1.1a Buildings	2022	A	2018	75	7,693,132	-	7,693,132	100%	111	12
Asuntosäätiön Asumisoikeus Oy	Apartment building, Kuormakatu 6	1.1a Buildings	2022	A	2018	75	19,834,756	-	19,834,756	100%	32	4
Asuntosäätiön Asumisoikeus Oy	Apartment building, Piilipuuntie 4	1.1a Buildings	2024	Α	2018	80	-	7,747,789	7,747,789	0%	-	-
Asuntosäätiön Asumisoikeus Oy	Apartment buildings, Raiskionkatu 9	1.1a Buildings	2024	A	2018	75	5,113,000	2,727,406	7,840,406	65%	38	2

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<sup>&</sup>lt;sup>3</sup> Impacts calculated only for the new construction part of the project

Buildings: New buildings												
Customer	Project	Sub-category	Year of approval	Energy Performance Certificate class	EPC year <sup>1</sup>	E-value <sup>2</sup> (kWh/m²/ year)	Outstanding amount 31 Dec 2024 (€)	Unwithdrawn credit commitment 31 Dec 2024 (€)	Total committed finance 31 Dec 2024 (€)	MuniFin's estimated share of finance 31 Dec 2024	Annual energy savings (avoided / reduced MWh)	Annual CO <sub>2</sub> emissions (avoided / reduced tCO <sub>2</sub>
Asuntosäätiön Asumisoikeus Oy	Apartment building, Saaristo- laivankatu 18	1.1a Buildings	2023	Α	2018	69	10,200,000	4,967,813	15,167,813	67%	81	3
Asuntosäätiön Asumisoikeus Oy	Apartment building, Saaristo- laivankatu 20	1.1a Buildings	2024	Α	2018	74	7,700,000	8,672,836	16,372,836	47%	42	2
Asuntosäätiön Asumisoikeus Oy	Apartment building, Viulukonser- tonkuja 6A, Järvenpää	1.1a Buildings	2024	Α	2018	75	-	5,621,466	5,621,466	0%	-	-
Asuntosäätiön Vuokra-asunnot Oy	Apartment building, Hannuksenkuja 17	1.1a Buildings	2022	Α	2018	71	19,721,944	696,206	20,418,150	97%	135	9
Avain Asumisoikeus Oy	Apartment buildings, As.oy. Hyvinkään Yli-Jurvankatu 5	1.1a Buildings	2021	Α	2018	75	7,870,698	-	7,870,698	98%	46	2
Avain Asumisoikeus Oy	Apartment buildings, As.oy. Jyväs- kylän Timoteiraitti 9-11	1.1a Buildings	2023	А	2018	70-74	6,240,564	1,015,903	7,256,467	86%	57	2
Avain Asumisoikeus Oy	Apartment building, As.oy Järvenpään Kultapiisku	1.1a Buildings	2021	Α	2018	75	14,374,709	-	14,374,709	98%	24	1
Avain Asumisoikeus Oy	Apartment building, As.oy. Kaarinan Jalostusasemankatu 1	1.1a Buildings	2024	Α	2018	65	6,639,043	334,861	6,973,904	95%	75	2
Avain Asumisoikeus Oy	Apartment buildings, As.oy. Keravan Niittäjänkatu 2 ja 4	1.1a Buildings	2021	Α	2018	78-79	5,139,835	-	5,139,835	98%	42	1
Avain Asumisoikeus Oy	Apartment buildings, As.oy. Kirk- konummen Pilvijärventie 15	1.1a Buildings	2023	A	2018	74-80	9,101,628	685,065	9,786,693	93%	31	1
Avain Asumisoikeus Oy	Apartment building, As.oy. Laukaan Kartturi	1.1a Buildings	2024	Α	2018	75	5,430,687	811,479	6,242,166	87%	44	1
Avain Asumisoikeus Oy	Apartment building, As.oy Nurmijärven Luhtajoentie 12	1.1a Buildings	2024	Α	2018	72	7,421,879	1,208,212	8,630,091	86%	64	2
Avain Asumisoikeus Oy	Apartment building, As.oy. Opistokuja 5	1.1a Buildings	2022	A	2018	74	11,715,429	-	11,715,429	99%	76	5
Avain Asumisoikeus Oy	Apartment building, As.oy.Tampereen Lamminpään C2	1.1a Buildings	2024	A	2018	75	2,323,549	2,232,429	4,555,978	51%	15	1
Avain Asumisoikeus Oy	Apartment building, As.oy. Tuusulan Freesia	1.1a Buildings	2022	Α	2018	74	7,749,370	-	7,749,370	99%	45	1

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Buildings: New buildings												
Customer	Project	Sub-category	Year of approval	Energy Performance Certificate class	EPC year <sup>1</sup>	E-value <sup>2</sup> (kWh/m <sup>2</sup> / year)	Outstanding amount 31 Dec 2024 (€)	Unwithdrawn credit commitment 31 Dec 2024 (€)	Total committed finance 31 Dec 2024 (€)	MuniFin's estimated share of finance 31 Dec 2024	Annual energy savings (avoided / reduced MWh)	Annual CO <sub>2</sub> emissions (avoided / reduced tCO <sub>2</sub> )
Avain Asumisoikeus Oy	Apartment building, As.oy. Vantaan Ajoportti	1.1a Buildings	2021	Α	2018	73	22,036,596	-	22,036,596	98%	155	5
Avain Asumisoikeus Oy	Apartment building, As.oy. Tuusulan Pioni	1.1a Buildings	2022	Α	2018	74	5,534,482	-	5,534,482	99%	36	1
Avain Asumisoikeus Oy	Apartment buildings, Kotirinteentie 3	1.1a Buildings	2023	Α	2018	66-68	7,920,136	1,397,671	9,317,807	85%	70	2
Avain Asumisoikeus Oy	Apartment buildings, Pirtinkaari 4, Kuopio	1.1a Buildings	2024	Α	2018	74-77	10,763,462	-	10,763,462	100%	84	3
Avain Vuokra10 Oy	Apartment building, As.oy. Helsingin Asemalaituri, Lautatarhantie 8b	1.1a Buildings	2022	Α	2018	74	17,899,774	439,967	18,339,741	98%	81	9
Avain Vuokra10 Oy	Apartment building, As.oy. Helsingin Ounasvaarantie 4 A-B	1.1a Buildings	2024	Α	2018	74	8,244,134	4,865,597	13,109,731	45%	46	5
Avain Vuokra10 Oy	Apartment building, As.oy. Helsingin Ounasvaarantie 4 C	1.1a Buildings	2024	Α	2018	74	2,239,904	2,981,263	5,221,167	12%	12	1
Avain Vuokra10 Oy	Apartment building, As.oy Helsingin Pallaksentie 7	1.1a Buildings	2024	Α	2018	75	3,634,201	10,748,115	14,382,316	25%	19	2
Avain Vuokra10 Oy	Apartment buildings, As.oy Helsingin Perusyhtiö 14	1.1a Buildings	2024	A	2018	75	5,185,473	14,019,985	19,205,458	27%	28	1
Avain Vuokra10 Oy	Apartment buildings, As.oy. Helsingin Perusyhtiö 9, Radioportti 2 cd	1.1a Buildings	2024	Α	2018	73	-	22,996,251	22,996,251	0%	-	-
Avain Vuokra10 Oy	Apartment buildings, Alhotie 19	1.1a Buildings	2022	A	2018	74-75	22,785,956	-	22,785,956	99%	120	4
Avain Vuokra10 Oy	Apartment building, As.oy. Kuopion Kuikkalampi	1.1a Buildings	2021	A	2018	75	5,031,597	-	5,031,597	97%	37	1
Avain Vuokra10 Oy	Apartment building, As.oy. Paperite- htaankatu 15	1.1a Buildings	2024	Α	2018	75	1,981,261	7,024,468	9,005,729	22%	11	1
Avain Vuokra10 Oy	Apartment building, As.oy. Turun Hovinarri	1.1a Buildings	2024	А	2018	75	3,017,688	5,364,780	8,382,468	36%	14	0
Avain Vuokrakodit Oy	Apartment building, As.oy.Tulistimen- katu 7a	1.1a Buildings	2024	А	2018	72	-	17,285,362	17,285,362	0%	-	-

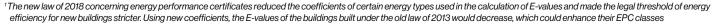


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Avain Vuokrakodit Oy	Apartment building, As.oy.Tulistimen- katu 7b	1.1a Buildings	2024	Α	2018	74	-	15,062,581	15,062,581	0%	-	-
Avain Yhtiöt Oy	Apartment building, As.oy. Sipoon Kalliomäenkaari 5	1.1a Buildings	2023	А	2018	70	4,718,189	196,588	4,914,777	96%	41	1
Avara Vuokrakodit I Ky	Apartment building, As.oy. Helsingin veturitie 18	1.1a Buildings	2023	А	2018	75	20,200,000	15,284,132	35,484,132	57%	89	9
Avara Vuokrakodit Ky/Avara Deka Oy	Apartment building, As.oy. Helsingin Tulistimenkatu	1.1a Buildings	2023	А	2018	73	7,100,000	2,598,497	9,698,497	73%	33	3
EAI Vuokra-asunnot Oy	Apartment buildings, As.oy. Helsingin Vetonaula	1.1a Buildings	2020	Α	2018	68-75	6,708,334	-	6,708,334	96%	65	2
Elämäni Kodit 40 Oy	Apartment buildings, As.oy. Tamper- een Ojalan Ajuri	1.1a Buildings	2024	Α	2018	60-70	5,691,905	3,201,696	8,893,601	64%	79	3
ES-Laatuasumisoikeus Oy	Apartment building, Vedenkierto 31	1.1a Buildings	2024	Α	2018	73	-	8,837,622	8,837,622	0%	-	-
Espoon Asunnot Oy	Apartment building, Anna Sahlsten- inkatu 13	1.1a Buildings	2023	А	2018	68	2,147,460	12,168,940	14,316,400	15%	16	1
Espoon Asunnot Oy	Apartment building, As.oy. Espoon Kiisseli, Viilivati 15	1.1a Buildings	2024	А	2018	75	-	19,042,400	19,042,400	0%	-	-
Espoon Asunnot Oy	Apartment buildings, Finnoonkallio 2	1.1a Buildings	2024	Α	2018	69-70	-	18,903,000	18,903,000	0%	-	-
Espoon Asunnot Oy	Apartment buildings, Riihitontuntie 7	1.1a Buildings	2023	A	2018	70-71	18,965,982	-	18,965,982	99%	140	10
Espoon Asunnot Oy	Apartment building, Syvänsalmen- katu 1	1.1a Buildings	2021	Α	2018	72	15,298,581	-	15,298,581	98%	107	7
Etelä-Suomen Kodit Oy	Apartment building, As.oy. Turun Löytöretkeilijä	1.1a Buildings	2019	Α	2018	74	5,242,159	-	5,242,159	95%	39	1
Etelä-Suomen Kodit Oy	Apartment building, As.oy. Turun Viridi	1.1a Buildings	2020	A	2018	73	5,071,090	-	5,071,090	97%	40	1
Etukodit Oy	Apartment building, As.oy Helsingin Koruseppä	1.1a Buildings	2024	А	2018	73	19,500,000	21,229,217	40,729,217	48%	78	7
City of Forssa	Community centre Akvarelli	1.1a Buildings	2019	Α	2018	73	19,428,380	-	19,428,380	84%	219	6



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City of Haapavesi	Secondary school and high school of Haapavesi	1.1a Buildings	2020	Α	2018	89	14,288,000	-	14,288,000	92%	72	5
City of Hamina	Modular building of Uusi-Summa	1.1a Buildings	2024	Α	2018	85	10,128,274	-	10,128,274	97%	56	2
Municipality of Hausjärvi	Comprehensive school of Oitti	1.1a Buildings	2023	Α	2018	88	5,900,000	-	5,900,000	92%	21	0
City of Heinola	School and daycare centre of Kailaa	1.1a Buildings	2023	Α	2018	75	13,875,000	-	13,875,000	93%	165	5
Municipality of Heinävesi	Middle school of Heinävesi	1.1a Buildings	2020	A	2018	72	7,909,658	-	7,909,658	88%	78	5
Helsingin Asumisoikeus Oy	Apartment building, As.oy. Postitorni, Postiljooninkatu 10	1.1a Buildings	2023	А	2018	73	15,099,691	6,471,265	21,570,956	70%	104	12
Helsingin Asumisoikeus Oy	Apartment buildings, Asetelman- polku 3	1.1a Buildings	2021	А	2018	72	10,298,910	-	10,298,910	99%	75	9
Helsingin Asumisoikeus Oy	Apartment buildings, Atlantinkaari and Länsisatamankatu 37	1.1a Buildings	2020	А	2018	74	42,364,850	-	42,364,850	100%	239	26
Helsingin Asumisoikeus Oy	Apartment buildings, Fannynkallio and Kuninkaankierto 4	1.1a Buildings	2017	В	2013	98-108	15,876,965	-	15,876,965	97%	251	28
Helsingin Asumisoikeus Oy	Apartment buildings, Gunillanpuisto	1.1a Buildings	2022	A	2018	70-71	17,812,031	-	17,812,031	100%	112	4
Helsingin Asumisoikeus Oy	Apartment buildings, Jamaika Haitinkuja 3, Jamaikankatu 1 and Kanariankatu 7	1.1a Buildings	2019	В	2018	79	14,596,774	-	14,596,774	96%	30	3
Helsingin Asumisoikeus Oy	Apartment building, Kettutie 10	1.1a Buildings	2021	A	2018	73	10,625,140	-	10,625,140	98%	70	8
Helsingin Asumisoikeus Oy	Apartment buildings, Koskelantie 66b	1.1a Buildings	2020	В	2018	77-79	30,111,250	-	30,111,250	100%	143	16
Helsingin Asumisoikeus Oy	Apartment building, Maapadontie 9	1.1a Buildings	2023	A	2018	71	14,186,660	6,079,996	20,266,656	70%	107	4
Helsingin Asumisoikeus Oy	Apartment buildings, Myllymatkantie 11	1.1a Buildings	2024	A	2018	69-70	-	16,010,591	16,010,591	0%	-	-
Helsingin Asumisoikeus Oy	Apartment building, Yläkiventie 11	1.1a Buildings	2021	A	2018	75	5,972,914	359,665	6,332,579	92%	36	4
Helsingin Asumisoikeus Oy	Apartment building, Pomeranssi	1.1a Buildings	2023	A	2018	70	6,419,985	14,979,953	21,399,938	30%	41	4
Helsingin Asumisoikeus Oy	Apartment building, Postiljooni Lavakatu 3	1.1a Buildings	2019	Α	2018	75	20,158,202	-	20,158,202	97%	123	12

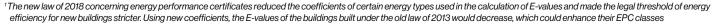
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Buildings: New buildings												
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Helsingin Asumisoikeus Oy	Apartment building, Postimies Lavakatu 3	1.1a Buildings	2019	Α	2018	75	16,593,015	-	16,593,015	96%	99	9
Helsingin Asumisoikeus Oy	Apartment building, Saariseläntie 11	1.1a Buildings	2023	A	2018	73	10,404,689	4,985,076	15,389,765	68%	64	7
Helsingin Asumisoikeus Oy	Apartment building, Samoansaari, Jätkäsaari	1.1a Buildings	2023	А	2018	74	13,067,954	3,266,984	16,334,938	80%	75	8
Helsingin Asumisoikeus Oy	Apartment building, Smoltinkuja 3	1.1a Buildings	2021	A	2018	67	16,155,441	-	16,155,441	99%	102	3
Helsingin Asumisoikeus Oy	Apartment building, Verkkosaari, Kalasatama	1.1a Buildings	2023	Α	2018	75	16,158,544	6,573,323	22,731,867	71%	82	3
Helsingin Asumisoikeus Oy	Apartment building, Lavakatu 12/ Veturitie 58	1.1a Buildings	2020	А	2018	72	18,547,000	-	18,547,000	100%	151	14
Helsingin Asumisoikeus Oy	Apartment building, Yläkivenrinne 2	1.1a Buildings	2021	A	2018	74	7,487,689	-	7,487,689	99%	49	6
Helsingin kaupungin asunnot Oy	Apartment buildings, Asetelmankatu 1	1.1a Buildings	2021	A	2018	73-75	12,174,743	-	12,174,743	99%	72	8
Helsingin kaupungin asunnot Oy	Apartment buildings, Gunillantie 3	1.1a Buildings	2022	Α	2018	65-66	21,021,886	-	21,021,886	100%	158	5
Helsingin kaupungin asunnot Oy	Apartment buildings, Haakoninlahdenkatu 5-7	1.1a Buildings	2019	В	2018	80	24,311,582	-	24,311,582	96%	93	10
Helsingin kaupungin asunnot Oy	Apartment building, Isonnevankuja 1	1.1a Buildings	2019	В	2018	85	7,781,109	-	7,781,109	95%	15	2
Helsingin kaupungin asunnot Oy	Apartment building, Kalasatama Kaljaasi, Fortunankatu 6	1.1a Buildings	2021	Α	2018	67	17,571,950	-	17,571,950	99%	127	10
Helsingin kaupungin asunnot Oy	Apartment building, Konttisata- mankatu 8, Kalasatama	1.1a Buildings	2024	Α	2018	72	6,118,541	14,259,000	20,377,541	30%	38	1
Helsingin kaupungin asunnot Oy	Apartment buildings, Kanariankatu 3	1.1a Buildings	2019	В	2018	79	15,644,265	-	15,644,265	96%	56	6
Helsingin kaupungin asunnot Oy	Apartment building, Kaupinmäen- polku 15	1.1a Buildings	2019	В	2018	80	5,781,018	-	5,781,018	95%	22	3
Helsingin kaupungin asunnot Oy	Apartment buildings, Kettutie 8 a-c	1.1a Buildings	2021	A	2018	73-75	16,862,818	-	16,862,818	98%	98	11
Helsingin kaupungin asunnot Oy	Apartment buildings, Koskelantie 66	1.1a Buildings	2020	В	2018	76-78	28,674,164	-	28,674,164	97%	133	14
Helsingin kaupungin asunnot Oy	Apartment building, Kustinpolku 7	1.1a Buildings	2019	A	2018	75	22,531,872	-	22,531,872	96%	132	12



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Helsingin kaupungin asunnot Oy	Apartment buildings, Kyösti Kallion tie 1a	1.1a Buildings	2019	Α	2018	75-77	8,826,042	397,449	9,223,491	91%	43	5
Helsingin kaupungin asunnot Oy	Apartment building, Käskynhaltijantie 38	1.1a Buildings	2023	А	2018	75	12,947,000	9,726,185	22,673,185	57%	69	8
Helsingin kaupungin asunnot Oy	Apartment buildings, Lavakatu 10	1.1a Buildings	2020	Α	2018	72-75	25,929,304	-	25,929,304	97%	167	16
Helsingin kaupungin asunnot Oy	Apartment building, Maapadontie 2	1.1a Buildings	2023	Α	2018	71	4,979,400	4,979,316	9,958,716	46%	70	2
Helsingin kaupungin asunnot Oy	Apartment buildings, Maunun- nevantie 3	1.1a Buildings	2021	А	2018	70-74	28,519,435	-	28,519,435	99%	181	6
Helsingin kaupungin asunnot Oy	Apartment building, Maustetehta- ankatu 2	1.1a Buildings	2023	А	2018	68	20,363,700	8,726,981	29,090,681	70%	41	4
Helsingin kaupungin asunnot Oy	Apartment building, Melkinlaituri 4	1.1a Buildings	2024	Α	2018	70	3,212,600	12,850,730	16,063,330	20%	25	3
Helsingin kaupungin asunnot Oy	Apartment building, Mestarintie 18	1.1a Buildings	2024	Α	2018	66	-	9,762,985	9,762,985	0%	-	-
Helsingin kaupungin asunnot Oy	Apartment buildings, Pilkkikuja 2	1.1a Buildings	2023	Α	2018	74	9,949,200	6,632,544	16,581,744	60%	49	2
Helsingin kaupungin asunnot Oy	Apartment building, Postiljooninkatu 2	1.1a Buildings	2021	Α	2018	73	38,705,110	-	38,705,110	99%	232	22
Helsingin kaupungin asunnot Oy	Apartment buildings, Pyhätunturintie 2	1.1a Buildings	2019	В	2018	77-88	21,771,282	-	21,771,282	96%	88	10
Helsingin kaupungin asunnot Oy	Apartment buildings, Saariseläntie 1 and 7	1.1a Buildings	2023	Α	2018	70-72	8,612,020	8,825,757	17,437,777	49%	55	6
Helsingin kaupungin asunnot Oy	Apartment buildings, Salavakuja 2	1.1a Buildings	2021	Α	2018	69-70	16,648,628	-	16,648,628	98%	81	3
Helsingin kaupungin asunnot Oy	Apartment buildings, Sienakuja 4	1.1a Buildings	2017	В	2013	95-103	9,287,274	-	9,287,274	96%	140	16
Helsingin kaupungin asunnot Oy	Apartment building, Smoltinkaari 1	1.1a Buildings	2024	Α	2018	71	9,278,000	9,282,193	18,560,193	50%	70	2
Helsingin kaupungin asunnot Oy	Apartment building, Smoltinkaari 6	1.1a Buildings	2021	Α	2018	67	12,819,395	-	12,819,395	99%	95	3
Helsingin kaupungin asunnot Oy	Apartment building, Svanströminkuja 5	1.1a Buildings	2023	А	2018	73	13,714,000	1,096,046	14,810,046	93%	65	2
Helsingin kaupungin asunnot Oy	Apartment buildings, Tahitinkatu 2	1.1a Buildings	2023	A	2018	65-70	15,840,247	3,980,000	19,820,247	80%	110	12
Helsingin kaupungin asunnot Oy	Apartment buildings, Taidemaalar- inkatu 2	1.1a Buildings	2017	В	2013	71-105	13,704,121	-	13,704,121	96%	215	24

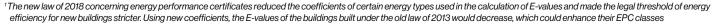
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Buildings: New buildings												
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Helsingin kaupungin asunnot Oy	Apartment building, Tongankuja 1	1.1a Buildings	2023	Α	2018	73	12,490,000	3,123,543	15,613,543	80%	65	7
Helsingin kaupungin asunnot Oy	Apartment buildings, Tullivuorentie 22	1.1a Buildings	2019	В	2018	78-82	12,263,494	-	12,263,494	95%	72	8
Helsingin kaupungin asunnot Oy	Apartment building, Verkkosaaren- katu 6	1.1a Buildings	2023	А	2018	69	16,101,200	10,161,688	26,262,888	61%	109	4
Helsingin kaupungin asunnot Oy	Apartment building, Yläkiventie 14	1.1a Buildings	2021	Α	2018	75	6,417,635	246,475	6,664,110	94%	37	4
Helsingin seudun opiskelilija-asuntosäätiö sr	Apartment building, HOAS Huippu, Höyrykatu 1	1.1a Buildings	2023	А	2018	75	26,200,000	30,243,599	56,443,599	46%	103	11
Helsingin seudun opiskelilija-asuntosäätiö sr	Apartment buildings, Hopeakaivoksentie 47	1.1a Buildings	2024	Α	2018	75	2,400,000	12,303,297	14,703,297	16%	15	2
Helsingin seudun opiskelilija-asuntosäätiö sr	Apartment building, Maarinsolmu	1.1a Buildings	2024	А	2018	73	2,400,000	21,814,410	24,214,410	10%	14	2
Helsingin seudun opiskelilija-asuntosäätiö sr	Apartment buildings, Riihitontuntie 11	1.1a Buildings	2024	А	2018	74	1,300,000	6,347,500	7,647,500	17%	27	3
Helsingin seudun opiskelilija-asuntosäätiö sr	Apartment building, Riihitontuntie 9	1.1a Buildings	2024	А	2018	73	5,300,000	21,609,779	26,909,779	20%	7	0
Municipality of Hollola	School of Heinsuo	1.1a Buildings	2016	В	2013	109	14,211,038	-	14,211,038	83%	420	17
Municipality of Hollola	School of Kalliola	1.1a Buildings	2016	В	2013	116	13,445,822	-	13,445,822	83%	293	12
City of Hyvinkää	Community centre Hangonsiltatalo	1.1a Buildings	2019	В	2018	93	17,500,000	-	17,500,000	70%	53	5
City of Hyvinkää	Community centre Paavolatalo	1.1a Buildings	2024	Α	2018	59	15,000,000	-	15,000,000	100%	137	13
Municipality of Hämeenkyrö	Environmental school of Mahnala	1.1a Buildings	2017	В	2013	95	3,500,005	-	3,500,005	50%	122	4
Hämeenlinnan Asunnot Oy	Apartment building, Keinukatu 1	1.1a Buildings	2024	Α	2018	75	523,760	6,023,240	6,547,000	8%	3	0
City of Hämeenlinna	Comprehensive school and sportshall of Hämeenlinna (The Building Information Foundation (RTS) certfication)	1.1a Buildings	2023	Α	2018	60-75	33,000,000	-	33,000,000	94%	176	7
City of Hämeenlinna	Service centre of Nummi	1.1a Buildings	2016	Α	2013	88	20,934,358	-	20,934,358	84%	685	27
Municipality of li	Daycare centre of Hamina	1.1a Buildings	2021	Α	2018	86	3,000,000	-	3,000,000	75%	15	2
lin vuokratalot Oy	Apartment building, Ratatie 23	1.1a Buildings	2024	Α	2018	70	1,600,000	-	1,600,000	100%	19	1



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City of Imatra	School campus of Mansikkala (LEED certification)	1.1a Buildings	2018	В	2013	102	36,000,002	-	36,000,002	80%	848	16
Municipality of Inari	Ivalo education centre (The Building Information Foundation (RTS) certfication)	1.1a Buildings	2020	A	2018	73	25,234,454	-	25,234,454	93%	217	13
Municipality of Ingå	Kyrkfjärdens School of Ingå	1.1a Buildings	2022	Α	2018	70	8,000,000	-	8,000,000	80%	69	2
Municipality of Janakkala	Janakkala fire department	1.1a Buildings	2016	В	2013	103-109	5,374,404	-	5,374,404	83%	118	4
Municipality of Janakkala	Sportshall, Tervakoski	1.1a Buildings	2019	A	2018	73	2,942,500	-	2,942,500	55%	41	1
Municipality of Janakkala	School and community centre of Turenki, 1st phase	1.1a Buildings	2021	Α	2018	68	19,957,838	-	19,957,838	90%	213	7
City of Joensuu	Daycare centre of Hammaslahti	1.1a Buildings	2018	A	2013	80	2,307,145	-	2,307,145	72%	80	1
City of Joensuu	Middle school of Heinävaara, modular unit	1.1a Buildings	2018	В	2013	107	3,111,419	-	3,111,419	72%	85	3
City of Joensuu	Daycare centre of Hukanhauta	1.1a Buildings	2018	Α	2013	90	3,329,785	-	3,329,785	80%	117	2
City of Joensuu	School of Karhumäki	1.1a Buildings	2016	Α	2013	89	7,302,583	-	7,302,583	77%	292	5
City of Joensuu	Mehtimäki sportshall and School of Karsikko	1.1a Buildings	2020	А	2018	80-87	7,915,792	-	7,915,792	84%	192	4
City of Joensuu	School of Nepenmäki	1.1a Buildings	2016	В	2013	96	17,067,407	-	17,067,407	84%	671	14
City of Joensuu	School of Rantakylä	1.1a Buildings	2018	Α	2013	88	11,247,538	-	11,247,538	81%	448	8
City of Jyväskylä	Daycare centre and school of Korte- pohja, Daycare centre and school of Pohjalampi	1.1a Buildings	2023	A	2018	85	32,600,000	-	32,600,000	100%	42	3
Jyväskylän sotainvalidien asuntosäätiö sr	Apartment building, As.oy. Väkkärätie 3b	1.1a Buildings	2024	Α	2018	74	-	4,712,952	4,712,952	0%	-	-
Jyväskylän Vuokra-asunnot Oy	Apartment building, Väkkärätie 1A	1.1a Buildings	2024	A	2018	75	-	6,478,000	6,478,000	0%	-	-
Jyväskylän Yliopiston Ylioppilaskunta	Apartment building, Kartanonkuja 11	1.1a Buildings	2023	Α	2018	68	5,700,000	1,100,000	6,800,000	84%	68	4

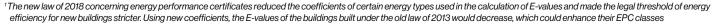


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City of Jämsä	Comprehensive school of Jämsänkoski	1.1a Buildings	2017	В	2013	111	8,153,429	-	8,153,429	83%	214	8
City of Järvenpää	School and daycare centre of Harjula, 1st phase of Jyk building, School and daycare centre of Oinaskatu	1.1a Buildings	2023	A	2018	74-82	41,375,000	-	41,375,000	92%	308	11
Järvenpään Mestari-Asunnot Oy	Apartment buildings, As.oy. Wärtsilänkatu 4, Pajalan Helmi	1.1a Buildings	2023	Α	2018	75	8,567,582	2,855,860	11,423,442	73%	49	2
City of Kaarina	School of Hoviranta	1.1a Buildings	2022	Α	2018	86	13,500,000	-	13,500,000	90%	81	3
City of Kaarina	The main library, Kaarinatalo	1.1a Buildings	2017	Α	2013	90	4,875,000	-	4,875,000	54%	89	3
Municipality of Kaavi	Daycare centre of Kaavi	1.1a Buildings	2023	А	2018	90	2,775,000	-	2,775,000	93%	11	1
City of Kajaani	Daycare centre Teerenpesä	1.1a Buildings	2024	Α	2018	87	3,705,000	-	3,705,000	95%	13	1
City of Kalajoki	Fire station of Kalajoki	1.1a Buildings	2017	В	2013	111	900,000	-	900,000	30%	17	1
City of Kalajoki	School of Merenoja	1.1a Buildings	2019	Α	2018	81	21,247,063	-	21,247,063	85%	164	5
City of Kangasala	Apartment buildings, KOY Talohert- tua, Myllystenpohjantie 2	1.1a Buildings	2023	Α	2018	75	1,308,000	7,412,000	8,720,000	15%	12	1
City of Kangasala	Extension of school building of Kulmalahti	1.1a Buildings	2023	А	2018	87	1,900,000	-	1,900,000	95%	3	0
City of Kangasala	Comprehensive school of Lammin- rahka	1.1a Buildings	2022	A	2018	67	29,250,000	-	29,250,000	84%	287	18
City of Kangasala	School of Ruutana	1.1a Buildings	2023	A	2018	89	15,300,000	-	15,300,000	85%	45	1
City of Kangasala	Commercial and office premises of Timanttikortteli	1.1a Buildings	2024	А	2018	80	19,000,000	11,000,000	30,000,000	63%	68	4
KAS asunnot Oy	Apartment buildings, Leikinpolku 1 and 3, Ylöjärvi	1.1a Buildings	2024	A	2018	74	-	8,906,837	8,906,837	0%	-	-
City of Kauhava	Education centre of Kortesjärvi	1.1a Buildings	2022	А	2018	83	5,200,000	-	5,200,000	87%	50	1
City of Kauhava	Middle school of Ylihärmä koulu- keskus	1.1a Buildings	2024	Α	2018	89	6,000,000	-	6,000,000	100%	34	1



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Municipality of Kempele	Kirkonkyläntalo	1.1a Buildings	2024	Α	2018	76	36,634,196	-	36,634,196	99%	383	19
Municipality of Kempele	Modular school building of Linnankan- gas, Modular school of Ketolanperä and Kempele townhall	1.1a Buildings	2024	A	2018	80-88	16,000,000	-	16,000,000	100%	104	5
Keski-Suomen opiskelija-asuntosäätiö sr	Multi-generation block, Kankaan Ilona, Ailakinkatu 10	1.1a Buildings	2019	В	2018	76	8,369,620	-	8,369,620	96%	131	9
Keski-Suomen opiskelija-asuntosäätiö sr	Apartment building, Tourulan Hahlo 9, Jyväskylä	1.1a Buildings	2023	Α	2018	72	13,024,805	52,683	13,077,488	100%	100	7
Kiinteistö Oy Helsingin Toimitilat	Central health and welfare center	1.1a Buildings	2023	Α	2018	72	23,000,000	-	23,000,000	100%	474	37
Kiinteistö Oy Helsingin Toimitilat	Comprehensive school of Maatulli	1.1a Buildings	2022	Α	2018	62	32,000,000	-	32,000,000	100%	346	17
Kiinteistö Oy Helsingin Toimitilat	STAO Myllypuro Campus	1.1a Buildings	2022	Α	2018	63	21,615,386	-	21,615,386	45%	153	17
Kiinteistö Oy Helsingin Toimitilat	STAO Roihupelto Campus	1.1a Buildings	2022	Α	2018	63	50,000,000	-	50,000,000	28%	448	34
Kiinteistö Oy Kuopion Koulutilat	School of Jynkkä	1.1a Buildings	2016	В	2013	101	9,616,003	-	9,616,003	67%	277	13
Kiinteistö Oy Kuopion Koulutilat	School of Karttula	1.1a Buildings	2016	В	2013	97	9,207,360	-	9,207,360	76%	272	13
Kiinteistö Oy Nikkarinkruunu	Apartment buildings, Myllylenkki 2, Kerava	1.1a Buildings	2023	Α	2018	90	4,700,000	-	4,700,000	100%	75	2
Kiinteistö Oy Sotkanmaa	Apartment building, Konstankuja 2	1.1a Buildings	2023	Α	2018	71	2,648,625	882,875	3,531,500	75%	22	2
Kiinteistö Oy Turun Syvälahden koulu	School of Syvälahti	1.1a Buildings	2017	В	2013	99-204	18,500,000	-	18,500,000	93%	688	22
Municipality of Kirkkonummi	School centre of Gesterby (The Building Information Foundation (RTS) certfication)	1.1a Buildings	2022	A	2018	63	42,477,032	22,522,968	65,000,000	65%	315	22
Kirkkonummen Vuokra-asunnot Oy	Apartment building, Masalan tinapuisto	1.1a Buildings	2020	А	2018	75	13,828,103	-	13,828,103	97%	81	3
City of Kokkola	School of Chydenius (Leed certification)	1.1a Buildings	2018	В	2013	127	10,097,368	-	10,097,368	87%	204	13
City of Kokkola	Community centre of Piispanmäki	1.1a Buildings	2023	A	2018	69	33,065,913	10,934,087	44,000,000	73%	349	13
Municipality of Kolari	Community centre of Kirkonkylä	1.1a Buildings	2023	Α	2018	75	16,253,755	5,246,245	21,500,000	71%	111	17

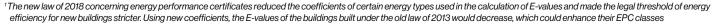
<sup>&</sup>lt;sup>1</sup>The new law of 2018 concerning energy performance certificates reduced the coefficients of certain energy types used in the calculation of E-values and made the legal threshold of energy efficiency for new buildings stricter. Using new coefficients, the E-values of the buildings built under the old law of 2013 would decrease, which could enhance their EPC classes



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Buildings: New buildings												
Customer	Project	Sub-category	Year of approval	Energy Performance Certificate class	EPC year <sup>1</sup>	E-value <sup>2</sup> (kWh/m <sup>2</sup> / year)	Outstanding amount 31 Dec 2024 (€)	Unwithdrawn credit commitment 31 Dec 2024 (€)	Total committed finance 31 Dec 2024 (€)	MuniFin's estimated share of finance 31 Dec 2024	Annual energy savings (avoided / reduced MWh)	Annual CO <sub>2</sub> emissions (avoided / reduced tCO <sub>2</sub>
Municipality of Kontiolahti	School of Lehmo	1.1a Buildings	2022	Α	2018	73-86	11,366,668	-	11,366,668	95%	194	12
Municipality of Mustasaari	School of Smedsby	1.1a Buildings	2023	Α	2018	63	28,428,572	-	28,428,572	92%	98	5
Koti Pohjoinen Oy	Apartment buildings, Ojustie 4, Muonio	1.1a Buildings	2024	А	2018	72-73	500,000	2,587,500	3,087,500	16%	6	0
City of Kotka	School campus of Xamk	1.1a Buildings	2024	Α	2018	55	47,780,000	-	47,780,000	100%	680	28
Kouvolan Asunnot Oy	Apartment building, Halkotorinkuja 4	1.1a Buildings	2023	A	2018	74	9,800,000	-	9,800,000	100%	49	3
City of Kouvola	Sports hall of Eskolanmäki	1.1a Buildings	2024	A	2018	88	4,400,000	-	4,400,000	100%	20	2
City of Kouvola	Community centre of Inkeroinen	1.1a Buildings	2023	Α	2018	73	21,964,642	13,035,358	35,000,000	63%	144	10
City of Kouvola	Daycare centre of Naukio	1.1a Buildings	2021	Α	2018	90	3,298,107	-	3,298,107	94%	12	1
City of Kouvola	Valkeala community centre	1.1a Buildings	2021	A	2018	69	30,490,391	-	30,490,391	98%	228	16
City of Kuhmo	Wooden comprehensive school of Tuupala	1.1a Buildings	2016	В	2013	120	7,200,000	-	7,200,000	60%	166	10
City of Kuopio	Community centre of Riistavesi, Daycare centre of Alava	1.1a Buildings	2022	A	2018	77-88	17,500,004	-	17,500,004	88%	80	6
Kuopion Opiskelija-asunnot Oy	Construction of apartment building for students, Ahkio	1.1a Buildings	2019	А	2018	75	5,211,152	-	5,211,152	94%	39	3
Kuopion Opiskelija-asunnot Oy	Apartment buildings, Kuopas Kampus, Savilahdenranta	1.1a Buildings	2023	Α	2018	70-72	11,215,037	10,992,958	22,207,995	50%	107	8
Kuopion Opiskelija-asunnot Oy	Apartment building, Minari	1.1a Buildings	2019	A	2018	73	3,749,344	-	3,749,344	95%	34	3
Kuopion Opiskelija-asunnot Oy	Construction of apartment building for students, Taivaanpankko	1.1a Buildings	2019	Α	2018	63	6,654,490	-	6,654,490	93%	91	7
Municipality of Kärkölä	Comprehensive school of Kärkölä	1.1a Buildings	2023	Α	2018	87	5,695,000	-	5,695,000	63%	29	2
Lahden Asunnot Oy	Apartment building, As.oy lahden iisakki	1.1a Buildings	2017	В	2013	99	3,400,696	-	3,400,696	97%	52	2
Lahden Asunnot Oy	Apartment building, As.oy lahden valtteri	1.1a Buildings	2017	В	2013	100	5,456,404	-	5,456,404	96%	82	4

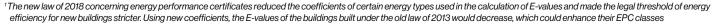


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Buildings: New buildings												
Customer	Project	Sub-category	Year of approval	Energy Performance Certificate class	EPC year <sup>1</sup>	E-value <sup>2</sup> (kWh/m <sup>2</sup> / year)	Outstanding amount 31 Dec 2024 (€)	Unwithdrawn credit commitment 31 Dec 2024 (€)	Total committed finance 31 Dec 2024 (€)	MuniFin's estimated share of finance 31 Dec 2024	Annual energy savings (avoided / reduced MWh)	Annual CO <sub>2</sub> emissions (avoided / reduced tCO <sub>2</sub>
Lahden Asunnot Oy	Apartment buildings, Jaksonkatu 3 and 5	1.1a Buildings	2023	Α	2018	75	14,103,574	-	14,103,574	98%	101	4
Lahden Asunnot Oy	Apartment building, Kivakatu 2	1.1a Buildings	2020	Α	2018	73	8,682,363	-	8,682,363	96%	65	3
Lahden Asunnot Oy	Apartment buildings, Laatikko- tehtaankatu 5 B and C	1.1a Buildings	2019	А	2018	71	11,145,856	-	11,145,856	95%	100	4
Lahden Asunnot Oy	Apartment buildings, Laatikkotehta- ankatu 5 D and E	1.1a Buildings	2024	Α	2018	71-72	-	11,761,226	11,761,226	0%	-	-
Lahden Asunnot Oy	Apartment building, Svinhufvudinkatu 11	1.1a Buildings	2022	А	2018	61	6,094,145	-	6,094,145	98%	73	3
Lahden Asunnot Oy	Building for elderly, Uudenpellonkatu 1	1.1a Buildings	2017	В	2013	98	8,081,440	-	8,081,440	97%	96	4
Lahden Asunnot Oy	Construction of apartment building, Vanhatie 53	1.1a Buildings	2017	В	2013	100	3,342,004	-	3,342,004	96%	60	3
Lahden Asunnot Oy	Construction of apartment building, Vasarantie 2 ja 4	1.1a Buildings	2019	А	2018	68	11,572,571	-	11,572,571	95%	123	5
Lahden Asunnot Oy	Community centre of Renkomäki	1.1a Buildings	2023	Α	2018	60	25,000,000	-	25,000,000	78%	228	10
Lahden vanhusten asuntosäätiö	Senior home, Saimaankatu 29	1.1a Buildings	2019	Α	2018	75	7,210,289	-	7,210,289	95%	49	2
Municipality of Lapinlahti	" Matti and Liisa's school in Lapinlahti"	1.1a Buildings	2020	А	2018	87	3,100,000	-	3,100,000	78%	41	4
Lappeenrannan Asuntopalvelu Oy	Apartment building, Kiviharjunkatu 2	1.1a Buildings	2020	Α	2018	74	4,388,777	-	4,388,777	96%	31	2
City of Lappeenranta	School building, Sammontalo	1.1a Buildings	2024	Α	2018	71	40,000,000	-	40,000,000	100%	333	15
Municipality of Laukaa	School of Lievestuore	1.1a Buildings	2017	В	2013	124	10,309,245	-	10,309,245	82%	258	6
Municipality of Lempäälä	School building, Saikantalo	1.1a Buildings	2024	А	2018	63	23,743,335	-	23,743,335	98%	263	18
City of Lieto	Daycare centre of Keskikaari, Lieto	1.1a Buildings	2024	A	2018	78	3,763,564	-	3,763,564	94%	25	1
Municipality of Liminka	School of Linnukka	1.1a Buildings	2017	В	2013	123	1,500,000	-	1,500,000	30%	84	11
Municipality of Liperi	School of Kirkonkylä <sup>[3]</sup>	1.1a Buildings, 1.2 Renovations	2021	A	2018	99	2,100,000	-	2,100,000	70%	2	0



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Municipality of Liperi	School of Ylämylly	1.1a Buildings	2021	Α	2018	90	4,550,000	-	4,550,000	65%	52	1
Luksia, Länsi-Uudenmaan koulutu- skuntayhtymä	Construction and renovation of Toivonkatu campus	1.1a Buildings	2020	В	2018	95	10,468,086	-	10,468,086	87%	32	1
Mangrove Asumisoikeus Oy	Apartment buildings, Kuurankatu 2 and 4	1.1a Buildings	2022	Α	2018	74	10,630,555	-	10,630,555	100%	78	4
Mangrove Asumisoikeus Oy	Apartment buildings, Asumisoikeus Oy Tampereen Ilokkaanrinne 5-6	1.1a Buildings	2021	Α	2018	28	8,947,963	-	8,947,963	99%	220	7
Mangrove Asumisoikeus Oy	Apartment building, Pasuunakuja 1D	1.1a Buildings	2023	Α	2018	73	3,530,000	2,429,410	5,959,410	59%	44	5
Mangrove Yhtiöt Oy	Apartment building, As.oy. Pirkkalan Torninjuuri 9b	1.1a Buildings	2023	А	2018	72	5,140,000	132,677	5,272,677	97%	37	2
Municipality of Miehikkälä	Daycare centre Pitkäkoski	1.1a Buildings	2023	Α	2018	49	2,500,000	-	2,500,000	100%	20	1
Mikalo Oy	Apartment building, Mannerheimintie 10	1.1a Buildings	2023	А	2018	75	4,183,212	9,311,021	13,494,233	31%	34	1
City of Mikkeli	Daycare centre of Kalevankangas, Mikkeli	1.1a Buildings	2019	Α	2018	88	4,200,000	-	4,200,000	100%	20	1
City of Mikkeli	Southern regional School of Mikkeli	1.1a Buildings	2022	A	2018	77.5	29,000,000	-	29,000,000	100%	254	9
Municipality of Muonio	Daycare centre and pre-school of Muonio	1.1a Buildings	2024	А	2018	85	1,000,000	-	1,000,000	100%	10	1
Municipality of Mäntsälä	School of Ehnroos	1.1a Buildings	2019	Α	2018	87	16,341,564	-	16,341,564	78%	73	5
Municipality of Mäntsälä	Daycare centre Amanda	1.1a Buildings	2022	Α	2018	53	6,301,860	-	6,301,860	91%	79	3
Naantalin Vuokratalot Oy	Apartment building, Presidentinkatu 3	1.1a Buildings	2024	Α	2018	74	880,000	3,648,074	4,528,074	19%	7	0
NAL Asunnot Oy	Apartment building, Gibraltarinaukio 4	1.1a Buildings	2021	Α	2018	74	9,884,321	-	9,884,321	98%	81	8
Nemoy Rakennuttaja Oy	Apartment buildings, As.oy. Tuusulan Oiva	1.1a Buildings	2020	А	2018	75-80	6,246,851	-	6,246,851	96%	53	2
Niiralan Kulma Oy	Apartment building, Hatsalankatu 37	1.1a Buildings	2020	Α	2018	75	6,818,604	-	6,818,604	95%	45	1
Niiralan Kulma Oy	Apartment building, Kaartokatu 3	1.1a Buildings	2023	Α	2018	73	6,063,850	-	6,063,850	98%	52	3
Niiralan Kulma Oy	Apartment building, Keskikaari 48	1.1a Buildings	2020	Α	2018	71	4,535,625	-	4,535,625	97%	41	1

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Niiralan Kulma Oy	Apartment building, Neulastie 6	1.1a Buildings	2023	Α	2018	79	3,652,000	-	3,652,000	100%	20	1
Niiralan Kulma Oy	Apartment building, Raviradantie 8	1.1a Buildings	2020	Α	2018	70	6,077,873	-	6,077,873	95%	60	4
Niiralan Kulma Oy	Apartment building, Kuopio Puijon- laakso	1.1a Buildings	2017	С	2013	107	9,419,065	-	9,419,065	97%	108	9
Niiralan Kulma Oy	Apartment building, Tasavallankatu 18	1.1a Buildings	2023	Α	2018	73	1,992,969	-	1,992,969	98%	26	2
Niiralan Kulma Oy	Apartment building, Urheilukatu 3	1.1a Buildings	2024	Α	2018	74	-	7,078,000	7,078,000	0%	-	-
Niiralan Kulma Oy	Apartment building, Urheilukatu 5	1.1a Buildings	2023	Α	2018	71	7,794,889	-	7,794,889	100%	64	5
City of Nivala	School of Haikara	1.1a Buildings	2023	Α	2018	89	5,300,000	-	5,300,000	100%	23	1
City of Nivala	School of Junttila	1.1a Buildings	2022	Α	2018	87	4,342,105	-	4,342,105	87%	25	1
City of Nivala	School of Järvikylä-Aittola	1.1a Buildings	2024	Α	2018	90	3,200,000	-	3,200,000	100%	11	0
City of Nokia	Welfare centre of Nokia	1.1a Buildings	2021	Α	2018	78	21,950,000	-	21,950,000	77%	181	8
City of Nokia	Sports hall, Nokia	1.1a Buildings	2024	Α	2018	84	12,800,000	-	12,800,000	100%	111	4
City of Nokia	Daycare centre of Siuro-Linnavuori	1.1a Buildings	2024	Α	2018	53	7,200,000	-	7,200,000	100%	86	3
Nokian Vuokrakodit Oy	Apartment building, Poutuntie 8	1.1a Buildings	2023	Α	2018	70	6,591,968	-	6,591,968	100%	55	2
City of Orimattila	Comprehensive school of Orimattila	1.1a Buildings	2024	Α	2018	80	2,000,000	-	2,000,000	100%	84	5
Oulun Moniasunnot Oy	Apartment building, Siirtolantie 6	1.1a Buildings	2021	Α	2018	74	7,125,584	-	7,125,584	98%	44	2
Oulun Sivakka Oy	Apartment building, Hiirihaukantie 12 a	1.1a Buildings	2020	Α	2018	60	6,506,693	-	6,506,693	96%	105	4
Oulun Sivakka Oy	Apartment building, Hiirihaukantie 12 b	1.1a Buildings	2023	Α	2018	67	6,246,115	-	6,246,115	100%	54	2
Oulun Sivakka Oy	Apartment building, Jalohaukantie 5	1.1a Buildings	2020	Α	2018	59	5,582,159	-	5,582,159	95%	85	3
Oulun Sivakka Oy	Apartment building, Kauppiaantie 18	1.1a Buildings	2023	A	2018	70	5,412,115	-	5,412,115	100%	40	2
Oulun Sivakka Oy	Apartment buildings, Kiilankatu 5	1.1a Buildings	2020	Α	2018	66-74	7,898,608	-	7,898,608	96%	86	3
Oulun Sivakka Oy	Apartment building, Listatie 29F	1.1a Buildings	2024	Α	2018	80	6,644,600	-	6,644,600	100%	12	0



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Oulun Sivakka Oy	Apartment building, Menninkäisentie 3 c	1.1a Buildings	2023	Α	2018	70	6,301,972	-	6,301,972	100%	53	2
Oulun Sivakka Oy	Apartment building, Menninkäisentie 3a	1.1a Buildings	2021	А	2018	68	3,852,892	-	3,852,892	98%	41	2
Oulun Sivakka Oy	Apartment building, Myllytullinkatu 5	1.1a Buildings	2021	А	2018	62	7,162,622	-	7,162,622	98%	95	4
Oulun Sivakka Oy	Apartment building, Pateniemenranta	1.1a Buildings	2024	Α	2018	71	1,784,250	4,163,250	5,947,500	30%	15	1
Oulun Sivakka Oy	Apartment buildings, Valmutie 1	1.1a Buildings	2023	Α	2018	78-80	4,746,614	-	4,746,614	100%	47	2
Oulun Sivakka Oy	Apartment buildings, Valmutie 3	1.1a Buildings	2021	Α	2018	79-80	3,426,759	-	3,426,759	98%	32	1
City of Parainen	Creativity and learning centre of Parainen [3]	1.1a Buildings, 1.2 Renovations	2022	А	2018	82	12,000,000	-	12,000,000	71%	48	1
Municipality of Parikkala	Kirjola school, 1st phase	1.1a Buildings	2021	Α	2018	83	6,750,000	-	6,750,000	56%	44	1
City of Parkano	School campus of Parkano	1.1a Buildings	2017	В	2013	102	12,625,736	-	12,625,736	81%	413	59
Municipality of Perho	Sportshall, Perho	1.1a Buildings	2023	Α	2018	87	5,300,000	-	5,300,000	100%	31	2
Municipality of Perho	Daycare centre Perhonkoti	1.1a Buildings	2020	Α	2018	89	2,070,590	-	2,070,590	65%	10	0
Municipality of Pielavesi	Pielakoti (building for elderly and renovation of the central commercial kitchen) [3]	1.1a Buildings, 1.2 Renovations	2017	В	2013	138	4,894,294	-	4,894,294	97%	311	17
Pirkan Opiskelija-asunnot Oy	Apartment building, Hipposkylänkuja 6 (hipposkylä)	1.1a Buildings	2023	А	2018	68	6,980,000	-	6,980,000	100%	87	3
Pirkan Opiskelija-asunnot Oy	Apartment building, Vaahterakuja 3	1.1a Buildings	2019	A	2018	72	6,058,608	-	6,058,608	95%	44	1
Municipality of Pirkkala	Pirkkala campus	1.1a Buildings	2021	A	2018	48	50,658,758	6,341,243	57,000,000	89%	875	39
Municipality of Pirkkala	Community centre of Pirkkala extension	1.1a Buildings	2024	А	2018	52	7,350,000	-	7,350,000	100%	142	10
Pohjois-Suomen opiskelija-asuntosäätiö sr	Apartment building, Välkkylän Tornitalo, Psoas Uno	1.1a Buildings	2022	А	2018	71	14,554,535	-	14,554,535	100%	130	5

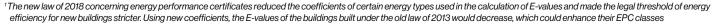


<sup>&</sup>lt;sup>1</sup>The new law of 2018 concerning energy performance certificates reduced the coefficients of certain energy types used in the calculation of E-values and made the legal threshold of energy efficiency for new buildings stricter. Using new coefficients, the E-values of the buildings built under the old law of 2013 would decrease, which could enhance their EPC classes

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Buildings: New buildings												
Customer	Project	Sub-category	Year of approval	Energy Performance Certificate class	EPC year <sup>1</sup>	E-value <sup>2</sup> (kWh/m <sup>2</sup> / year)	Outstanding amount 31 Dec 2024 (€)	Unwithdrawn credit commitment 31 Dec 2024 (€)	Total committed finance 31 Dec 2024 (€)	MuniFin's estimated share of finance 31 Dec 2024	Annual energy savings (avoided / reduced MWh)	Annual CO <sub>2</sub> emissions (avoided / reduced tCO <sub>2</sub> )
City of Pori	Community centre of Northern Pori	1.1a Buildings	2022	Α	2018	76	18,750,000	-	18,750,000	75%	140	3
Porvoon A-Asunnot Oy	Apartment buildings, Vaskenvalajankatu 8b and 8c	1.1a Buildings	2023	Α	2018	65-66	12,534,784	10,213,322	22,748,106	55%	60	2
City of Porvoo	Jokilaakso school, Porvoo	1.1a Buildings	2021	Α	2018	86	2,388,274	-	2,388,274	72%	13	0
Premico Vuokra-asunnot II Oy	Apartment building, As. oy. Vantaan Metsäkissa 2	1.1a Buildings	2020	В	2018	86	12,893,323	-	12,893,323	95%	19	2
City of Raahe	Community centre Koivuluotoareena	1.1a Buildings	2024	Α	2018	86	-	10,250,000	10,250,000	0%	-	-
Municipality of Ranua	Secondary school and high school of Ranua	1.1a Buildings	2023	А	2018	88	7,225,000	-	7,225,000	96%	38	2
City of Rovaniemi	Community centre Napsu	1.1a Buildings	2024	Α	2018	83	31,700,000	-	31,700,000	100%	167	9
City of Rovaniemi	Community centre of Vaaralampi	1.1a Buildings	2023	A	2018	89	17,000,000	-	17,000,000	85%	68	4
City of Saarijärvi	School and culture centre of Saari- järvi, 1st phase	1.1a Buildings	2019	А	2018	78	11,647,717	-	11,647,717	99%	265	39
City of Saarijärvi	School and culture centre of Saari- järvi, 2nd phase	1.1a Buildings	2021	А	2018	78	13,549,510	-	13,549,510	100%	268	39
City of Sastamala	Comprehensive school of Mouhijärvi	1.1a Buildings	2023	A	2018	75	7,200,000	-	7,200,000	90%	72	1
City of Sastamala	Community centre Pehula	1.1a Buildings	2024	A	2018	59	9,000,000	-	9,000,000	100%	122	2
City of Sastamala	School building, Sylvään taitotalo	1.1a Buildings	2024	Α	2018	66	9,000,000	-	9,000,000	100%	100	2
Savon Koulutuskuntayhtymä	Savilahti campus with Nordic ecolabel	1.1a Buildings	2023	A	2018	74-81	8,000,000	-	8,000,000	80%	414	31
Municipality of Savuskoski	School of Savukoski	1.1a Buildings	2019	A	2018	83	3,566,350	-	3,566,350	89%	23	1
City of Seinäjoki	School of Kärki	1.1a Buildings	2023	A	2018	72	15,653,848	-	15,653,848	78%	137	9
Seinäjoen koulutuskuntayhtymä	School of Törnävä	1.1a Buildings	2023	A	2018	85	16,146,345	-	16,146,345	95%	45	3
Setlementtiasunnot Oy	Apartment building, Afrikanpiha 3	1.1a Buildings	2024	Α	2018	71	-	8,501,031	8,501,031	0%	-	-
Siilinjärven Kotipolku Oy	Apartment buildings, Vuorelantie 7a and b	1.1a Buildings	2023	A	2018	75	8,021,202	-	8,021,202	100%	62	1

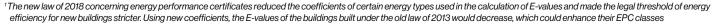


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Buildings: New buildings												
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Municipality od Sipoo	Fire station of Sipoo (office building)	1.1a Buildings	2021	Α	2018	80	8,372,547	-	8,372,547	85%	22	1
Municipality of Sodankylä	Community centre of Sodankylä	1.1a Buildings	2021	Α	2018	72	21,524,229	-	21,524,229	86%	196	13
Municipality of Sotkamo	Middle school of Tenetti	1.1a Buildings	2023	Α	2018	78	9,000,000	-	9,000,000	90%	126	13
Municipality of Sotkamo	Vuokatti-arena, ice hockey arena	1.1b Other buildings	2021	N/A	N/A	N/A	7,039,574	-	7,039,574	87%	453	46
Suomen Ekokodit Oy	Apartment building, As.oy. Raadinkatu 1, Tampere	1.1a Buildings	2024	А	2018	75	300,000	6,593,761	6,893,761	4%	2	0
Suomen Kaupunkikodit ARA Oy	Apartment building, As.oy. Vantaan Kalla	1.1a Buildings	2024	А	2018	75	2,294,355	5,647,701	7,942,056	29%	11	1
Suomen Kaupunkikodit ARA Oy	Apartment building, As.oy. Helsingin Frakki, Kutomotie 14c	1.1a Buildings	2023	А	2018	75	7,739,957	668,657	8,408,614	92%	32	3
Suomen Kaupunkikodit ARA Oy	Apartment building, As.oy. Vantaan Lootus	1.1a Buildings	2024	А	2018	74	2,886,087	7,432,754	10,318,841	28%	14	2
Suomen Kaupunkikodit ARA Oy	Apartment buildings, Hakatie 1	1.1a Buildings	2021	Α	2018	76-77	11,591,320	-	11,591,320	97%	127	4
Suomen Keskuskodit Oy	Apartment building, As.oy. Helsingin Verkkosaaren Laudus	1.1a Buildings	2024	А	2018	73	12,600,000	6,212,175	18,812,175	67%	39	3
Suomen Keskuskodit Oy	Apartment building, Pumppuasemanraitti 5, Tampere	1.1a Buildings	2024	А	2018	74	-	10,790,984	10,790,984	0%	-	-
Taaleri Vuokrakoti ARA III Oy	Apartment building, As.oy. Tampereen Hervantajärven Hilpi	1.1a Buildings	2021	Α	2018	74	6,248,668	-	6,248,668	97%	42	1
TA-Asumisoikeus Oy	Apartment buildings, As.oy. Pigmenttitasku 5 and 7	1.1a Buildings	2024	Α	2018	75	7,237,000	9,011,192	16,248,192	45%	42	1
TA-Asumisoikeus Oy	Apartment building, Espoon Luoteis- rinne 15	1.1a Buildings	2024	A	2018	75	7,600,000	6,784,550	14,384,550	53%	37	2
TA- Asumisoikeus Oy	Apartment buildings, Espoon Peijinkatu 1b-1c buildings A2 and B2	1.1a Buildings	2021	A	2018	70-72	16,016,599	-	16,016,599	99%	130	4
TA-Asumisoikeus Oy	Apartment building, Haakonin- lahdenkatu 19	1.1a Buildings	2024	Α	2018	69	-	15,695,777	15,695,777	0%	-	-
TA-Asumisoikeus Oy	Apartment buildings, Hoppman- ninkatu1and3	1.1a Buildings	2024	A	2018	75	-	13,497,720	13,497,720	0%	-	-



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TA-Asumisoikeus Oy	Apartment building, Kalasatamankatu 29	1.1a Buildings	2023	Α	2018	75	15,950,000	1,708,409	17,658,409	90%	80	9
TA-Asumisoikeus Oy	Apartment building, Konalantie 64, Helsinki	1.1a Buildings	2024	Α	2018	75	-	18,377,442	18,377,442	0%	-	-
TA- Asumisoikeus Oy	Apartment building, KOY Heikinketo/ Kanslerintie 17	1.1a Buildings	2020	А	2018	72	4,430,042	-	4,430,042	97%	43	1
TA-Asumisoikeus Oy	Apartment building, Leppäkertunkatu 2, Raisio	1.1a Buildings	2024	Α	2018	73	1,450,000	5,855,587	7,305,587	20%	11	0
TA-Asumisoikeus Oy	Apartment building, Lohjan Sahapi- ha/Sahapiha 6	1.1a Buildings	2020	A	2018	73	6,122,850	-	6,122,850	96%	46	2
TA- Asumisoikeus Oy	Apartment building, Metsäläntie 10	1.1a Buildings	2022	A	2018	75	18,922,583	-	18,922,583	99%	59	6
TA-Asumisoikeus Oy	Apartment buildings, Metsäläntie 6 b in Pasilan Porttipuisto	1.1a Buildings	2019	А	2018	71-75	14,298,768	-	14,298,768	96%	95	3
TA-Asumisoikeus Oy	Apartment building, Pellonreuna 7	1.1a Buildings	2019	В	2018	84	7,912,240	-	7,912,240	95%	12	1
TA-Asumisoikeus Oy	Apartment building Nordic Ecolabel, Rapukuja 2	1.1a Buildings	2022	Α	2018	75	6,023,440	-	6,023,440	99%	38	1
TA-Asumisoikeus Oy	Apartment building, Sahapiha 8	1.1a Buildings	2024	A	2018	75	2,800,000	3,617,228	6,417,228	44%	15	1
TA-Asumisoikeus Oy	Apartment building, Soukonlahden- kaari 25	1.1a Buildings	2024	Α	2018	75	5,400,000	5,075,190	10,475,190	52%	34	1
TA-Asumisoikeus Oy	Apartment buildings, Turun Akselintie 6A and 6B	1.1a Buildings	2024	Α	2018	70	4,250,000	13,479,782	17,729,782	24%	33	1
TA-Asumisoikeus Oy	Apartment buildings, Turun Oikotie 11	1.1a Buildings	2024	Α	2018	74	2,121,748	4,795,291	6,917,039	31%	13	0
TA-Asumisoikeus Oy	Apartment building, Tuulensuunkatu 27	1.1a Buildings	2021	Α	2018	75	4,136,668	-	4,136,668	97%	37	1
TA-Asumisoikeus Oy	Apartment buildings, Vuoksi 4	1.1a Buildings	2023	A	2018	71-72	8,595,860	-	8,595,860	100%	65	2
Tampereeen yliopistollisen sairaalan tukisäätiö sr	Apartment building, Tieteenkatu 4	1.1a Buildings	2024	А	2018	75	-	7,858,900	7,858,900	0%	-	-
City of Tampere	School of Ahvenisjärvi	1.1a Buildings	2024	Α	2018	77	34,000,000	-	34,000,000	100%	265	16

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City of Tampere	School and daycare centre of Eteläpuisto, daycare centre of Tasanne	1.1a Buildings	2023	Α	2018	79	39,000,000	-	39,000,000	98%	101	7
City of Tampere	School of Sampo, School of South-Hervanta	1.1a Buildings	2023	А	2018	80-81	38,000,000	-	38,000,000	95%	473	28
City of Tampere	Office building of Tampere	1.1a Buildings, 1.2 Renovations	2024	Α	2018	76	34,125,000	-	34,125,000	98%	1,102	76
Tampereen Kotilinnasäätiö sr	Apartment building, As.oy. Niemen- rannan Kotilinna	1.1a Buildings	2023	А	2018	72	5,627,022	-	5,627,022	100%	37	1
Tampereen Kotilinnasäätiö sr	Apartment building, Kourutaltankatu 8	1.1a Buildings	2020	A	2018	75	8,217,694	-	8,217,694	96%	64	2
Tampereen opiskelija-asuntosäätiö sr	Apartment building, Hippos 5A	1.1a Buildings	2024	A	2018	75	2,300,000	11,172,000	13,472,000	17%	8	1
Tampereen opiskelija-asuntosäätiö sr	Apartment buildings, Uimalankatu 1 buildings 1b and 1c	1.1a Buildings	2022	А	2018	75	17,786,000	-	17,786,000	100%	94	6
Tampereen opiskelija-asuntosäätiö sr	Apartment buildings, Uimalankatu 1a and 1d	1.1a Buildings	2023	А	2018	75	13,050,000	4,885,000	17,935,000	73%	63	4
Tampereen opiskelija-asuntosäätiö sr	Apartment buildings, Uimalankatu 3 e and f	1.1a Buildings	2023	А	2018	75	21,733,000	-	21,733,000	100%	79	5
Tampereen Vuokratalosäätiö sr	Apartment buildings, Heittoniityn- kuja 2	1.1a Buildings	2022	А	2018	75	11,996,684	-	11,996,684	99%	76	3
Tampereen Vuokratalosäätiö sr	Apartment building, Rollikankatu 2	1.1a Buildings	2023	A	2018	75	13,869,034	-	13,869,034	99%	86	3
TA-Yhtymä Oy	Apartment building, As.oy. Espoon Karakalliontie 10	1.1a Buildings	2023	А	2018	70	7,132,846	-	7,132,846	100%	51	3
TA-Yhtymä Oy	Apartment building, As.oy. Espoon Luoteisrinne	1.1a Buildings	2022	Α	2018	75	29,128,919	-	29,128,919	99%	117	8
TA-Yhtymä Oy	Apartment building, As.oy. Helsingin Rullakkotori	1.1a Buildings	2023	А	2018	74	13,349,204	-	13,349,204	100%	75	8
TA-Yhtymä Oy	Apartment building, As.oy. Helsingin Vanha Talvitie 29	1.1a Buildings	2023	Α	2018	75	13,583,548	920,612	14,504,160	94%	62	7





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TA-Yhtymä Oy	Apartment building, Kangastie 9	1.1a Buildings	2024	Α	2018	74	1,664,015	13,463,405	15,127,420	11%	15	1
TA-Yhtymä Oy	Apartment building, KOY Haukiputaan Herralankulma	1.1a Buildings	2023	Α	2018	75	3,543,121	-	3,543,121	99%	20	1
TA-Yhtymä Oy	Apartment building, KOY Oulun Purjeranta	1.1a Buildings	2024	А	2018	72	8,486,817	-	8,486,817	100%	52	2
TA-Yhtymä Oy	Apartment building, KOY Oulun Tarve, Paraatikatu 10	1.1a Buildings	2017	В	2013	100	5,713,722	-	5,713,722	97%	90	3
TA-Yhtymä Oy	Apartment buildings, KOY Oulun Tarve, Soikkotie 2	1.1a Buildings	2023	А	2018	80	2,713,504	-	2,713,504	100%	29	1
Municipality of Tohmajärvi	Daycare centre of Tikkala, Tohmajärvi	1.1a Buildings	2018	A	2018	84	1,350,000	-	1,350,000	68%	6	0
Municipality of Tohmajärvi	School centre of Tohmajävi	1.1a Buildings	2022	A	2018	66	11,628,691	-	11,628,691	92%	166	23
Toivo Group Oyj/Elämäni Kodit 10 Oy	Apartment buildings, As.oy. Helsingin Blackstone	1.1a Buildings	2021	А	2018	66-78	11,140,536	-	11,140,536	97%	105	3
Toivo Group Oyj/Elämäni Kodit 10 Oy	Apartment building, As.oy. Nokian Fabriikki	1.1a Buildings	2020	А	2018	75	5,809,460	-	5,809,460	96%	36	1
Toivo Group Oyj/Elämäni Kodit 40 Oy	Apartment building, As. oy kirkko- nummen atlas	1.1a Buildings	2021	А	2018	72	5,151,125	162,760	5,313,885	95%	30	1
Toivo Group Oyj/Elämäni Kodit 40 Oy	Apartment building, As.oy. Vantaan Nahkuri	1.1a Buildings	2022	А	2018	71	15,442,959	1,512,425	16,955,384	90%	86	3
Toivo Group Oyj/Elämäni Kodit 40 Oy	Apartment building, As.oy. Vantaan Nahkuri	1.1a Buildings	2023	Α	2018	72	6,993,179	729,608	7,722,787	90%	36	1
City of Turku	Temporary/movable school facilities for school of Mikael	1.1a Buildings	2022	Α	2018	87	1,872,130	127,870	2,000,000	71%	9	0
City of Turku	School of Pääskyvuori and Sirkkala, community centre of Runosmäki, school and daycare centre of Suikkila ja and daycare centre Tommilankatu <sup>[3]</sup>	1.1a Buildings, 1.2 Renovations	2022	A	2018	75-90	40,000,000	-	40,000,000	100%	293	9
City of Turku	Music Hall Fuuga and School of Wäinö Aaltonen (The Building Information Foundation (RTS) certfication)	1.1a Buildings	2023	А	2018	83-86	90,000,000	-	90,000,000	100%	679	22

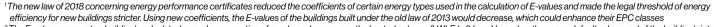
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Municipality of Tuusula	School campus of Kirkonkylä	1.1a Buildings	2023	Α	2018	81	25,000,000	-	25,000,000	86%	126	10
Municipality of Tuusula	Martta Wendelin daycare centre and Kirkonkylä school with Nordic Ecolabel	1.1a Buildings	2020	В	2018	88-94	25,000,000	-	25,000,000	100%	97	6
Municipality of Tuusula	Rykmentinpuisto multipurpose campus	1.1a Buildings	2024	Α	2018	61	15,000,000	-	15,000,000	100%	563	42
TVT Asunnot Oy	Apartment building, As.oy. Turun Hiidenpuoti Ristinpaltankatu 11	1.1a Buildings	2023	А	2018	75	9,190,000	2,122,866	11,312,866	81%	17	1
TVT Asunnot Oy	Apartment buildings, Savon- kedonkatu 7,Turku	1.1a Buildings	2024	А	2018	75	-	22,791,474	22,791,474	0%	-	-
TVT Asunnot Oy	Apartment buildings, Murkionkatu 12 A-E	1.1a Buildings	2024	Α	2018	75	-	30,378,739	30,378,739	0%	-	-
TVT Asunnot Oy	Apartment buildings, Toivolankatu 10 e-g, Mäntymäki	1.1a Buildings	2022	Α	2018	74-75	31,780,000	3,866,494	35,646,494	89%	169	5
TVT Asunnot Oy	Apartment buildings, Vähäheikkiläntie 13	1.1a Buildings	2024	А	2018	75	4,460,000	13,276,648	17,736,648	25%	29	1
Municipality of Tyrnävä	School of Rantarousti	1.1a Buildings	2016	В	2013	101	8,536,592	-	8,536,592	61%	261	33
Tyvene Oy	Senior home, Tampere Niemenranta	1.1a Buildings	2024	Α	2018	75	-	6,432,600	6,432,600	0%	-	-
Vaasan opiskelija-asuntosäätiö sr	Apartment building, Wolffintie 24	1.1a Buildings	2023	Α	2018	75	2,139,627	348,312	2,487,939	86%	10	1
City of Valkeakoski	School of Sorrila	1.1a Buildings	2023	A	2018	64	30,160,000	-	30,160,000	92%	292	10
City of Vantaa	Karhunkierros daycare centre, Lentola daycare centre, Vaskivuori high school and Martensdahl daycare centre.	1.1a Buildings	2024	A	2018	71-88	40,000,000	-	40,000,000	100%	94	9
City of Vantaa	Daycare centre of Kelokuusi, Daycare centre of Korso, Daycare centre of Latopuisto, Daycare centre of Patotie	1.1a Buildings	2023	Α	2018	68-83	30,000,000	-	30,000,000	100%	187	11
City of Vantaa	Daycare centre of Ruusupuu	1.1a Buildings	2024	Α	2018	76	7,438,129	_	7,438,129	98%	40	4



<sup>&</sup>lt;sup>2</sup> The E-value represents a building's calculated annual consumption of purchased energy per the heated net area (kWhE/m2/year) based on the usage default values and of the building's intended use category and weighted by energy source coefficients.



<sup>&</sup>lt;sup>3</sup> Impacts calculated only for the new construction part of the project

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Customer	Project	Sub-category	Year of approval	Energy Performance Certificate class	EPC year <sup>1</sup>	E-value <sup>2</sup> (kWh/m <sup>2</sup> / year)	Outstanding amount 31 Dec 2024 (€)	Unwithdrawn credit commitment 31 Dec 2024 (€)	Total committed finance 31 Dec 2024 (€)	MuniFin's estimated share of finance 31 Dec 2024	Annual energy savings (avoided / reduced MWh)	Annual CO <sub>2</sub> emissions (avoided / reduced tCO <sub>2</sub> )
City of Vantaa	Daycare centre of Suitsikuja päivä- kotipaviljonki	1.1a Buildings	2024	Α	2018	84	327,950	4,572,050	4,900,000	7%	2	0
Varsinais-Suomen Asumisoikeus Oy	Apartment building, Juhana herttuan puistokatu 10	1.1a Buildings	2024	Α	2018	75	-	15,613,200	15,613,200	0%	-	-
Varsinais-Suomen Asumisoikeus Oy	Apartment building, Kertunlinna	1.1a Buildings	2024	Α	2018	75	-	5,357,087	5,357,087	0%	-	-
Varsinais-Suomen Asumisoikeus Oy	Apartment buildings, Kirstinpuisto, Kirstintasku 2	1.1a Buildings	2023	Α	2018	72	7,500,000	4,821,500	12,321,500	61%	58	2
Varsinais-Suomen Asumisoikeus Oy	Apartment building, Puistonportti	1.1a Buildings	2024	A	2018	74	-	9,334,600	9,334,600	0%	-	-
Varsinais-Suomen Asumisoikeus Oy	Apartment buildings, Villa Viiri	1.1a Buildings	2024	Α	2018	80	-	8,292,390	8,292,390	0%	-	-
Varttuneiden asumisoikeusyhdistys Jaso	Apartment building, Harjun Ilona	1.1a Buildings	2024	Α	2018	74	3,140,000	9,422,763	12,562,763	25%	20	1
Varttuneiden asumisoikeusyhdistys Jaso	Multi-generation block, Kankaan Ilona, Ailakinkatu 10	1.1a Buildings	2019	В	2018	76	9,626,095	-	9,626,095	95%	130	9
VAV Asunnot Oy	Apartment buildings with Nordic Ecolabel, Kaskelantie 1	1.1a Buildings	2018	В	2018	77	17,739,120	-	17,739,120	92%	393	44
VAV Asunnot Oy	Apartment buildings, Peltolantie 42	1.1a Buildings	2023	A	2018	75	17,381,764	-	17,381,764	99%	104	11
VAV Asunnot Oy	Apartment building, Perintötie 9	1.1a Buildings	2022	A	2018	75	22,070,466	2,340,000	24,410,466	89%	130	14
VAV Asunnot Oy	Apartment building, Retiisikuja 2	1.1a Buildings	2024	Α	2018	72	10,377,779	-	10,377,779	99%	71	8
VAV Yhtymä Oy	Apartment buildings with Nordic Ecolabel, Veturikuja 8	1.1a Buildings	2019	Α	2018	74-75	17,336,426	-	17,336,426	89%	105	11
Municipality of Vesanto	School campus of Vesanto	1.1a Buildings	2019	A	2018	85	5,542,901	-	5,542,901	91%	30	2
Municipality of Vihti	School and daycare centre of Etelä-Nummela (The building informa- tion foundation (RTS) certification)	1.1a Buildings	2021	A	2018	66	24,000,000	-	24,000,000	80%	224	7
Vilusen Rinne Vuokra-asunnot Oy, Tampere	Apartment buildings, Hikivuorenkatu 20 a and b	1.1a Buildings	2021	A	2018	72	10,964,030	-	10,964,030	98%	53	2
City of Virrat	Comprehensive school of Virrat	1.1a Buildings	2019	Α	2018	73	5,399,463	-	5,399,463	36%	67	5

<sup>&</sup>lt;sup>1</sup>The new law of 2018 concerning energy performance certificates reduced the coefficients of certain energy types used in the calculation of E-values and made the legal threshold of energy efficiency for new buildings stricter. Using new coefficients, the E-values of the buildings built under the old law of 2013 would decrease, which could enhance their EPC classes



<sup>&</sup>lt;sup>2</sup> The E-value represents a building's calculated annual consumption of purchased energy per the heated net area (kWhE/m2/year) based on the usage default values and of the building's intended use category and weighted by energy source coefficients.

<sup>&</sup>lt;sup>3</sup> Impacts calculated only for the new construction part of the project

Buildings: New buildings												
Customer	Project	Sub-category	Year of approval	Energy Performance Certificate class	EPC year <sup>1</sup>	E-value <sup>2</sup> (kWh/m <sup>2</sup> / year)	Outstanding amount 31 Dec 2024 (€)	Unwithdrawn credit commitment 31 Dec 2024 (€)	Total committed finance 31 Dec 2024 (€)	MuniFin's estimated share of finance 31 Dec 2024	Annual energy savings (avoided / reduced MWh)	Annual CO <sub>2</sub> emissions (avoided / reduced tCO <sub>2</sub> )
VTK Kiinteistöt Oy	Vocational School Varia, Vehkala	1.1a Buildings	2024	Α	2018	78	78,333,334	-	78,333,334	98%	515	28
VTK Kiinteistöt Oy	Aviapolis high school	1.1a Buildings	2024	Α	2018	79	60,000,000	-	60,000,000	100%	199	12
Wartalo Kodit Oy	Apartment building, Linjurinkatu 9	1.1a Buildings	2024	Α	2018	74	1,020,664	2,381,549	3,402,213	30%	8	1
City of Ylivieska	School of Taanila	1.1a Buildings	2023	Α	2018	74	12,000,000	-	12,000,000	100%	172	6
City of Ylivieska	School of Vähäkangas	1.1a Buildings	2024	Α	2018	88	5,000,000	-	5,000,000	100%	20	1
City of Ylöjärvi	Daycare centre of Siltatie	1.1a Buildings	2024	Α	2018	70	1,504,186	6,995,814	8,500,000	18%	11	1
City of Ylöjärvi	Comprehensive school of Siltatie	1.1a Buildings	2022	Α	2018	75	8,000,000	-	8,000,000	80%	145	6
City of Ylöjärvi	Daycare centre of Soppeenmäki	1.1a Buildings	2023	Α	2018	65	4,833,420	-	4,833,420	99%	42	3
City of Ylöjärvi	School of Vuorentausta	1.1a Buildings	2023	Α	2018	72	11,070,000	-	11,070,000	90%	52	4
Yrjö ja Hanna Kiinteistöt Oy	Apartment buildings, Kuokkalan Kalon buildings 2, 3 and 4	1.1a Buildings	2022	А	2018	70-71	15,943,874	-	15,943,874	100%	140	5
Yrjö ja Hanna-säätiö/Asoasunnot Uusimaa Oy	Apartment building, Hermannin Rantatie 23, Helsinki	1.1a Buildings	2022	А	2018	75	15,579,003	850,500	16,429,503	95%	152	17
Yrjö ja Hanna-säätiö/Asoasunnot Uusimaa Oy	Apartment building, Kuokkalan kalon, building 1	1.1a Buildings	2022	A	2018	69	3,186,680	-	3,186,680	100%	26	1
Y-Säätiö	Apartment building, KOY järvenpään myllytie 14	1.1a Buildings	2022	А	2018	68	9,240,884	-	9,240,884	99%	70	2
Kiinteistö Oy M2-Kodit	Construction of apartment building KOY Tampereen Jallukka	1.1a Buildings	2020	Α	2018	75	5,931,128	-	5,931,128	96%	39	3
Y-Säätiö/Kiinteistö Oy M2-Kodit	Apartment building, As.oy. Espoon Kokinniityn Poimulehti	1.1a Buildings	2023	Α	2018	75	15,626,950	2,705,546	18,332,496	85%	69	5
Y-Säätiö/Kiinteistö Oy M2-Kodit	Apartment building, As.oy. Kangas- alan Taitajakatu 10	1.1a Buildings	2024	A	2018	73	5,398,800	227,550	5,626,350	96%	37	2
Y-Säätiö/Kiinteistö Oy M2-Kodit	Apartment building, As.oy. Pirkkalan Torninjuuri 9b	1.1a Buildings	2024	A	2018	71	4,651,350	476,123	5,127,473	91%	35	2
Y-Säätiö/Kiinteistö Oy M2-Kodit	Apartment building, As.oy. Tampereen Nvöri	1.1a Buildings	2024	А	2018	75	6,069,202	4,513,500	10,582,702	57%	37	2

<sup>&</sup>lt;sup>1</sup>The new law of 2018 concerning energy performance certificates reduced the coefficients of certain energy types used in the calculation of E-values and made the legal threshold of energy efficiency for new buildings stricter. Using new coefficients, the E-values of the buildings built under the old law of 2013 would decrease, which could enhance their EPC classes



<sup>&</sup>lt;sup>2</sup> The E-value represents a building's calculated annual consumption of purchased energy per the heated net area (kWhE/m2/year) based on the usage default values and of the building's intended use category and weighted by energy source coefficients.

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Buildings: New buildings												
Customer	Project	Sub-category	Year of approval	Energy Performance Certificate class	EPC year <sup>1</sup>	E-value <sup>2</sup> (kWh/m <sup>2</sup> / year)	Outstanding amount 31 Dec 2024 (€)	Unwithdrawn credit commitment 31 Dec 2024 (€)	Total committed finance 31 Dec 2024 (€)	MuniFin's estimated share of finance 31 Dec 2024	Annual energy savings (avoided / reduced MWh)	Annual CO <sub>2</sub> emissions (avoided / reduced tCO <sub>2</sub> )
Y-Säätiö/Kiinteistö Oy M2-Kodit	Apartment building, Hovineidonkatu 2	1.1a Buildings	2024	Α	2018	75	-	10,376,800	10,376,800	0%	-	-
Y-Säätiö/Kiinteistö Oy M2-Kodit	Apartment buildings, Isoseppälä 10	1.1a Buildings	2024	Α	2018	75	9,308,070	-	9,308,070	100%	51	2
Y-Säätiö/Kiinteistö Oy M2-Kodit	Apartment building, Lyyranpyrstö 2	1.1a Buildings	2022	Α	2018	74	13,593,602	-	13,593,602	98%	103	6
Y-Säätiö/Kiinteistö Oy M2-Kodit	Apartment buildings, Nihtisillankuja 2 H and I	1.1a Buildings	2022	Α	2018	74	17,114,901	-	17,114,901	99%	85	3
Y-Säätiö/Kiinteistö Oy M2-Kodit	Apartment buildings, Pasuunakuja 1	1.1a Buildings	2024	Α	2018	73-74	8,763,678	3,755,866	12,519,544	70%	94	10
Y-Säätiö/Kiinteistö Oy M2-Kodit	Apartment building, Postiljooninkatu 1	1.1a Buildings	2020	Α	2018	75	10,515,394	-	10,515,394	96%	55	6
Y-Säätiö/Kiinteistö Oy M2-Kodit	Apartment buildings, Rullakkokuja 14	1.1a Buildings	2022	A	2018	75	19,118,374	-	19,118,374	100%	107	11
City of Ähtäri	Comprehensive school of Ähtäri	1.1a Buildings	2022	A	2018	75	10,200,000	-	10,200,000	89%	98	13
Seinäjoen koulutuskuntayhtymä	School campus of Ähtäri	1.1a Buildings	2024	A	2018	86	8,000,000	-	8,000,000	100%	71	5
City of Äänekoski	School of Koulumäki, Building C	1.1a Buildings	2023	A	2018	68	14,946,968	9,053,032	24,000,000	62%	121	2
City of Äänekoski	Äänekoski Ice hockey arena	1.1b Other buildings	2018	N/A	N/A	N/A	3,506,503	-	3,506,503	78%	1,399	370



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<sup>&</sup>lt;sup>3</sup> Impacts calculated only for the new construction part of the project

Buildings: Renovation projects									
Customer	Project	Subcategory	Year of approval	Outstanding amount 31 Dec 2024 (€)	Unwithdrawn credit commitment 31 Dec 2024 (€)	Total committed finance 31 Dec 2024 (€)	MuniFin's esti- mated share of finance 31 Dec 2024	Annual energy savings (avoided / reduced MWh)	Annual CO <sub>2</sub> emissions (avoided / reduced tCO <sub>2</sub> )
Eelan Laajennus Oy	Renovation of the building	1.2 Renovations	2024	550,000	-	550,000	100%	232	13
Helsingin kaupungin asunnot Oy	Apartment building, Arhotie 20	1.2 Renovations	2023	7,986,004	-	7,986,004	100%	426	64
Helsingin kaupungin asunnot Oy	Apartment building, Hämeentie 122, Toukola	1.2 Renovations	2023	13,863,866	13,863,868	27,727,734	50%	478	88
Helsingin kaupungin asunnot Oy	Apartment buildings, Jakomäentie 10 A,B and C	1.2 Renovations	2022	23,955,760	-	23,955,760	100%	2,328	357
Helsingin kaupungin asunnot Oy	Apartment buildings, Jollaksentie 87	1.2 Renovations	2020	6,950,785	-	6,950,785	97%	682	124
Helsingin kaupungin asunnot Oy	Renovation of apartment building, Juhana Herttuan tie 7 and 11	1.2 Renovations	2024	-	30,823,830	30,823,830	0%	-	-
Helsingin kaupungin asunnot Oy	Apartment building, Kasöörinkatu 3	1.2 Renovations	2023	15,112,404	1,679,156	16,791,560	90%	1,598	170
Helsingin kaupungin asunnot Oy	Apartment buildings, Koivikkotie 5	1.2 Renovations	2021	12,458,923	-	12,458,923	97%	422	14
Helsingin kaupungin asunnot Oy	Apartment buildings, Kontulankaari 24	1.2 Renovations	2024	-	29,281,728	29,281,728	0%	-	-
Helsingin kaupungin asunnot Oy	Apartment buildings, Kurkisuontie 2-6	1.2 Renovations	2024	11,391,125	7,594,084	18,985,209	60%	1,170	176
Helsingin kaupungin asunnot Oy	Apartment buildings, Käsityöläisentie 9H, 9I and 14D	1.2 Renovations	2024	-	14,862,019	14,862,019	0%	-	-
Helsingin kaupungin asunnot Oy	Apartment buildings, Myllypurontie 22	1.2 Renovations	2023	-	34,316,667	34,316,667	0%	-	-
Helsingin kaupungin asunnot Oy	Apartment building, Mäenlaskijantie 4	1.2 Renovations	2023	-	24,166,969	24,166,969	0%	-	-
Helsingin kaupungin asunnot Oy	Apartment buildings, Mäkelänkatu 45	1.2 Renovations	2023	14,057,595	1,561,955	15,619,550	90%	1,061	180
Helsingin kaupungin asunnot Oy	Apartment buildings, Palovartijantie 6A-B, Käsityöläisentie 27 ABC and DEF	1.2 Renovations	2024	7,789,200	11,683,798	19,472,998	40%	687	119
Helsingin kaupungin asunnot Oy	Apartment buildings, Pasilanraitio 4	1.2 Renovations	2024	6,555,510	4,370,339	10,925,849	60%	558	102
Helsingin kaupungin asunnot Oy	Apartment buildings, Perhekunnantie 10	1.2 Renovations	2021	16,179,535	-	16,179,535	98%	838	129
Helsingin kaupungin asunnot Oy	Apartment buildings, Rusthollarintie 10	1.2 Renovations	2020	18,853,095	-	18,853,095	97%	540	66
Helsingin kaupungin asunnot Oy	Apartment buildings, Sakara 2	1.2 Renovations	2023	28,846,360	7,211,590	36,057,950	80%	2,961	517
Helsingin kaupungin asunnot Oy	Apartment buildings, Saniaistie 3	1.2 Renovations	2024	-	20,985,073	20,985,073	0%	-	-
Helsingin kaupungin asunnot Oy	Apartment buildings, Yläkiventie 2	1.2 Renovations	2024	-	38,671,734	38,671,734	0%	-	-
Helsingin seudun opiskelilija-asuntosäätiö sr	Apartment buildings, Siltakuja 2	1.2 Renovations	2024	-	10,620,000	10,620,000	0%	-	-



 $<sup>^4</sup>$  The project involves a fossil fuel component, please see additional details on p. 20.

<sup>&</sup>lt;sup>5</sup> Avoided emissions (CO2) reported as zero. The project saves net energy, but due to the recent strong decarbonisation of district heating in the region, the increase in electricity consumption and the emission coefficients used would cause an increase in the calculated emissions.

Buildings: Renovation projects									
Customer	Project	Subcategory	Year of approval	Outstanding amount 31 Dec 2024 (€)	Unwithdrawn credit commitment 31 Dec 2024 (€)	Total committed finance 31 Dec 2024 (€)	MuniFin's esti- mated share of finance 31 Dec 2024	Annual energy savings (avoided / reduced MWh)	Annual CO <sub>2</sub> emissions (avoided / reduced tCO <sub>2</sub> )
Hyvinkään Vuokra-asunnot Oy	Apartment buildings, Jussilankatu 2	1.2 Renovations	2021	7,847,470	-	7,847,470	97%	1,123	96
Hyvinkään Vuokra-asunnot Oy	Apartment buildings, Jussilankatu 4	1.2 Renovations	2021	7,914,123	-	7,914,123	98%	1,149	98
City of Joensuu	Ice sports center of Mehtimäki	1.2 Renovations	2024	17,950,000	-	17,950,000	100%	1,519	24
Joensuun Kodit Oy	Apartment buildings, Huvimäentie 16 [4]	1.2 Renovations	2021	2,332,896	-	2,332,896	97%	247	78
Joensuun Kodit Oy	Apartment buildings, Latolankatu 23, 2nd phase	1.2 Renovations	2021	5,247,615	-	5,247,615	97%	526	3
Joensuun Kodit Oy	Apartment buildings, Latolankatu 3	1.2 Renovations	2020	2,495,698	-	2,495,698	95%	313	2
Joensuun Kodit Oy	Apartment building, Noljakankaari 10	1.2 Renovations	2021	2,920,804	-	2,920,804	97%	283	4
Joensuun Kodit Oy	Apartment building, Äkkiväärä 10	1.2 Renovations	2020	2,665,814	-	2,665,814	96%	278	2
Jyväskylän Vuokra-asunnot Oy	Apartment building, Kiljaderinkatu 8	1.2 Renovations	2022	4,305,560	-	4,305,560	86%	150	13
Jyväskylän Yliopiston Ylioppilaskunta	Apartment building, Taitoniekantie 9 b	1.2 Renovations	2018	7,353,408	-	7,353,408	94%	225	11
Jyväskylän Yliopiston Ylioppilaskunta	Apartment building, Taitoniekantie 9 c	1.2 Renovations	2019	7,338,990	-	7,338,990	95%	423	36
Jyväskylän Yliopiston Ylioppilaskunta	Apartment building, Taitoniekantie 9 d	1.2 Renovations	2020	8,328,801	-	8,328,801	97%	445	38
Jyväskylän Yliopiston Ylioppilaskunta	Apartment building Taitoniekantie 9 e	1.2 Renovations	2021	7,079,666	-	7,079,666	97%	416	35
KAS asunnot Oy	Apartment building, KOY Rovatalo, Kaartokatu 11d	1.2 Renovations	2023	-	3,860,317	3,860,317	0%	-	-
Keski-Suomen opiskelija-asuntosäätiö sr	Apartment building, Kopparintie 1	1.2 Renovations	2021	3,478,634	-	3,478,634	96%	464	43
Keski-Suomen opiskelija-asuntosäätiö sr	Apartment buildings, Taitoniekantie 2 a and b	1.2 Renovations	2023	2,592,446	-	2,592,446	100%	380	32
Kiinteistö Oy Enontekiön kunnan asunnot	Apartment buildings, Öhmannintie 4, Ounastie 3162, Pulkkatie 19 and Sopulikuja 4	1.2 Renovations	2023	-	400,000	400,000	0%	-	-
Kiinteistö Oy Jämsänmäki	Apartment buildings, Huikkolanraitti 2 and Kanervakatu 5	1.2 Renovations	2023	-	240,000	240,000	0%	-	-
Kiinteistö Oy Nikkarinkruunu	Apartment buildings, Pajukatu 2	1.2 Renovations	2023	166,500	-	166,500	90%	107	101
Kiinteistö Oy Nikkarinkruunu	Apartment buildings, Riimutie 1, Kerava	1.2 Renovations	2023	161,437	33,863	195,300	74%	252	64
Kiinteistö Oy Nikkarinkruunu	Apartment buildings, Sorsakorventie 11-13, Kerava	1.2 Renovations	2023	167,287	35,709	202,996	74%	437	110



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<sup>&</sup>lt;sup>5</sup> Avoided emissions (CO2) reported as zero. The project saves net energy, but due to the recent strong decarbonisation of district heating in the region, the increase in electricity consumption and the emission coefficients used would cause an increase in the calculated emissions.

Buildings: Renovation projects									
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Kiinteistö Oy Nikkarinkruunu	Apartment buildings, Varsatie 2, Kerava	1.2 Renovations	2023	176,687	25,777	202,464	79%	280	71
Kiinteistöosakeyhtiö Keskiväli	Apartment buildings, Koukkutie 9, Mäntyharju	1.2 Renovations	2023	54,000	-	54,000	90%	199	75
Kiinteistöosakeyhtiö Keskiväli	Apartment buildings, Pekonpirtti	1.2 Renovations	2023	54,000	-	54,000	90%	138	52
Kouvolan Asunnot Oy	Apartment building, Viialankatu 5	1.2 Renovations	2022	6,066,668	-	6,066,668	93%	665	61
City of Kouvola	Renovation of swimming hall	1.2 Renovations	2024	7,500,000	-	7,500,000	100%	1,118	98
Lappeenrannan Asuntopalvelu Oy	Apartment buildings, Suonionkatu 24-28	1.2 Renovations	2024	-	3,173,823	3,173,823	0%	-	-
Mikalo Oy	Apartment building, Yrjönkatu 19, Mikkeli	1.2 Renovations	2022	1,969,066	-	1,969,066	99%	54	65
Muuramen Vuokra-asunnot Oy	Apartment buildings, Kinkoriutantie 14-18	1.2 Renovations	2023	61,584	-	61,584	89%	203	66
Muuramen Vuokra-asunnot Oy	Apartment buildings, Männikkötie 6	1.2 Renovations	2023	76,345	-	76,345	89%	169	58
Nokian Vuokrakodit Oy	Apartment buildings, Keskisentie 4 A-E	1.2 Renovations	2024	1,314,213	1,542,772	2,856,985	46%	134	47
Nokian Vuokrakodit Oy	Apartment buildings, Majakatu 10	1.2 Renovations	2024	-	3,447,419	3,447,419	0%	-	-
Oulun Sivakka Oy	Apartment buildings, Järvitie 10 renovation	1.2 Renovations	2024	-	9,073,000	9,073,000	0%	-	-
Oulun Sivakka Oy	Apartment building, Makasiininkatu 6	1.2 Renovations	2020	1,587,600	-	1,587,600	84%	281	13
City of Outokumpu	Renovation of the City Hall, Outokumpu [5]	1.2 Renovations	2024	3,300,000	-	3,300,000	100%	326	-
City of Riihimäki	Riihimäki swimming hall	1.2 Renovations	2023	13,928,572	-	13,928,572	93%	1,238	119
Savonlinnan Vuokratalot Oy	Apartment buildings, Aholahdentie 113 and Aholahdentie 115	1.2 Renovations	2022	156,021	-	156,021	89%	178	59
Savonlinnan Vuokratalot Oy	Apartment buildings, Hilkanhaka 6 and 7	1.2 Renovations	2022	262,122	-	262,122	95%	841	303
Savonlinnan Vuokratalot Oy	Apartment buildings, Kirstintupa and Marintupa	1.2 Renovations	2022	205,222	-	205,222	89%	503	178
Savonlinnan Vuokratalot Oy	Apartment buildings, Repolankaari 2	1.2 Renovations	2022	115,251	-	115,251	89%	246	83
Savonlinnan Vuokratalot Oy	Apartment buildings, Sorvaslahdentie 16	1.2 Renovations	2022	108,402	-	108,402	88%	92	31
Savonlinnan Vuokratalot Oy	Apartment buildings, Sorvaslahdentie 29	1.2 Renovations	2022	116,124	-	116,124	89%	138	46
Savonlinnan Vuokratalot Oy	Apartment buildings, Sorvaslahdentie 8	1.2 Renovations	2022	114,952	-	114,952	88%	156	53



 $<sup>^4</sup>$  The project involves a fossil fuel component, please see additional details on p. 20.

<sup>&</sup>lt;sup>5</sup> Avoided emissions (CO2) reported as zero. The project saves net energy, but due to the recent strong decarbonisation of district heating in the region, the increase in electricity consumption and the emission coefficients used would cause an increase in the calculated emissions.

Buildings: Renovation projects									
Customer	Project	Subcategory	Year of approval	Outstanding amount 31 Dec 2024 (€)	Unwithdrawn credit commitment 31 Dec 2024 (€)	Total committed finance 31 Dec 2024 (€)	MuniFin's esti- mated share of finance 31 Dec 2024	Annual energy savings (avoided / reduced MWh)	Annual CO <sub>2</sub> emissions (avoided / reduced tCO <sub>2</sub> )
Sonkakoti Oy	Apartment buildings, Männikkötie 26 a-c, Särkitie 1 and 3, Sonkajärvi	1.2 Renovations	2023	102,114	-	102,114	90%	214	76
City of Tampere	Renovation of daycare centre of Hatanpää Jukola	1.2 Renovations	2024	10,000,000	-	10,000,000	100%	1,916	151
City of Tampere	Renovation of school of Härmälä	1.2 Renovations	2024	15,000,000	-	15,000,000	100%	567	46
City of Tampere	High school of Kissanmaa and Lyseo, renovation	1.2 Renovations	2024	-	34,000,000	34,000,000	0%	-	-
Tampereen opiskelija-asuntosäätiö sr	Apartment building, Vanha Domus, Väinämöisenkatu 11	1.2 Renovations	2023	3,157,334	-	3,157,334	99%	374	32
TVT Asunnot Oy	Apartment buildings, Kousankuja 4, Turku	1.2 Renovations	2023	-	13,506,621	13,506,621	0%	-	-
TVT Asunnot Oy	Apartment buildings, Raastuvankatu 3 a and b, Turku	1.2 Renovations	2023	-	12,594,176	12,594,176	0%	-	-
Ääneseudun Asunnot Oy	Apartment buildings, Lönnrotinkatu 1	1.2 Renovations	2019	5,165,263	-	5,165,263	93%	251	167

Buildings: Renewable energy in buildings									
Customer	Project	Subcategory	Year of approval	Outstanding amount 31 Dec 2024 (€)	Unwithdrawn credit commitment 31 Dec 2024 (€)	Total committed finance 31 Dec 2024 (€)	MuniFin's esti- mated share of finance 31 Dec 2024	Annual energy savings (avoided / reduced MWh)	Annual CO <sub>2</sub> emissions (avoided / reduced tCO <sub>2</sub> )
City of Savonlinna	Solar panels of ice hockey arena	1.4 Renewable energy in buildings	2024	31,470	-	31,470	98%	-	1
Municipality of Vihti	Solar panels in Vihti	1.4 Renewable energy in buildings	2020	102,670	-	102,670	61%	-	18
Kiinteistö Oy Helsingin Toimitilat	Heating system conversion from oil to geothermal	1.4 Renewable energy in buildings	2024	1,166,667	-	1,166,667	97%	251	66
Nivalan Liikuntakeskus Oy	Solar power plant at the sports hall, Nivala	1.4 Renewable energy in buildings	2023	63,335	-	63,335	92%	69	7
Municipality of Taivalkoski	Apartment building, KOY Siikataival Vaaranrivi	1.4 Renewable energy in buildings	2024	-	107,880	107,880	0%	-	-



 $<sup>^4</sup>$  The project involves a fossil fuel component, please see additional details on p. 20.

<sup>&</sup>lt;sup>5</sup> Avoided emissions (CO2) reported as zero. The project saves net energy, but due to the recent strong decarbonisation of district heating in the region, the increase in electricity consumption and the emission coefficients used would cause an increase in the calculated emissions.

Buildings: Energy saving projects (ESCO)									
Customer	Project	Subcategory	Year of approval	Outstanding amount 31 Dec 2024 (€)	Unwithdrawn credit commitment 31 Dec 2024 (€)	Total committed finance 31 Dec 2024 (€)	MuniFin's esti- mated share of finance 31 Dec 2024	Annual energy savings (avoided / reduced MWh)	Annual CO <sub>2</sub> emissions (avoided / reduced tCO <sub>2</sub> )
Jyväskylän Tilapalvelu (facility services)	Jyväskylä Esco projects [6]	1.5 Energy saving project (Esco)	2018	681,679	-	681,679	62%	2,220	162.6
City of Kotka	Renewal of street lightning in the area of Otsola	1.5 Energy saving project (Esco)	2017	97,954	-	97,954	35%	89	2.9
City of Kotka	Renewal of street lightning in the area of Rauhala	1.5 Energy saving project (Esco)	2018	230,164	-	230,164	45%	131	4.3
City of Kotka	Renewal of street lightning in the area of Ristikallio	1.5 Energy saving project (Esco)	2016	83,318	-	83,318	25%	56	1.9
Municipality of Liperi	Renewal of street lightning in the area of Ruuska	1.5 Energy saving project (Esco)	2021	70,132	-	70,132	62%	11	0.4
City of Pieksämäki	Renewal of lighting along Uhomäki fitness track	1.5 Energy saving project (Esco)	2019	73,318	-	73,318	40%	20	0.7
Municipality of Pielavesi	Renewal of street lightning in Pielavesi	1.5 Energy saving project (Esco)	2018	142,117	857,883	1,000,000	14%	13	0.4
City of Tampere	Tampere Esco-projects [6]	1.5 Energy saving project (Esco)	2017	258,464	1,741,536	2,000,000	13%	425	31.3



Transportation								
Customer	Project Subcategory		Year of approval	Outstanding amount 31 Dec 2024 (€)	Unwithdrawn credit commitment 31 Dec 2024 (€)	Total committed finance 31 Dec 2024 (€)	MuniFin's estimated share of finance 31 Dec 2024	Annual CO <sub>2</sub> emissions (avoided / reduced tCO <sub>2</sub> )
City of Helsinki	Crown Bridges Light Rail (CEEQUAL sustainability assesment)	2.2 Supporting infrastructure for public transportation	2022	108,947,370	-	108,947,370	33%	1,370
The Wellbeing Services County of Kymenlaakso	Fully electric car, Audi Q4 e-tron	2.3 Passenger cars and light commercial vehicles	2023	38,849	-	38,849	76%	1
The Wellbeing Services County of Kymenlaakso	Fully electric car, Volkswagenid. 4 pro	2.3 Passenger cars and light commercial vehicles	2023	35,742	-	35,742	76%	1
Kymsote-Kiinteistöt Oy (social and healthcare services)	Fully electric cars, VW e-up (24 vehicles)	2.3 Passenger cars and light commercial vehicles	2022	263,484	-	263,484	52%	10
Municipality of Luoto	Fully electric cars, Citroen e-Berlingo (2 vehicles)	2.3 Passenger cars and light commercial vehicles	2023	52,654	-	52,654	80%	2
Municipality of Luoto	Fully electric car, Citroen e-Jumpy	2.3 Passenger cars and light commercial vehicles	2023	41,100	-	41,100	77%	-
Länsimetro Oy	Western Metro extension, 1st phase Ruoholahti-Matinkylä	2.1 Public transportation	2016	367,006,554	-	367,006,554	31%	2,105
Länsimetro Oy	Western Metro extension, 2nd phase Matinkylä-Kivenlahti	2.1 Public transportation	2017	158,529,412	-	158,529,412	14%	205
City of Orivesi	Fully electric car, Citroen e-Berlingo	2.3 Passenger cars and light commercial vehicles	2022	13,812	-	13,812	44%	1
Pääkaupunkiseudun Kaupunkiliikenne Oy	Jokeri light Rail	2.1 Public transportation	2022	196,610,170	-	196,610,170	51%	1,991
Pääkaupunkiseudun Kaupunkiliikenne Oy	Depot of Ruskeasuo (Breeam)	2.2 Supporting infrastructure for public transportation	2022	98,305,085	-	98,305,085	57%	237
City of Raasepori	Fully electric car, BYD ETP 3 van	2.3 Passenger cars and light commercial vehicles	2023	25,621	-	25,621	74%	1
City of Savonlinna	Fully electric car, Ford E-Transit	2.3 Passenger cars and light commercial vehicles	2023	44,072	-	44,072	83%	1
City of Savonlinna	Fully electric car, VW ID Buzz	2.3 Passenger cars and light commercial vehicles	2024	42,886	-	42,886	96%	1
City of Seinäjoki	Fully electric cars, Citroen e-Jumpy (4 vehicles)	2.3 Passenger cars and light commercial vehicles	2023	149,257	-	149,257	76%	4



Transportation								
Customer	Project	Subcategory	Year of approval	Outstanding amount 31 Dec 2024 (€)	Unwithdrawn credit commitment 31 Dec 2024 (€)	Total committed finance 31 Dec 2024 (€)	MuniFin's estimated share of finance 31 Dec 2024	Annual CO <sub>2</sub> emissions (avoided / reduced tCO <sub>2</sub>
City of Seinäjoki	Fully electric car, Nissan Van Electric	2.3 Passenger cars and light commercial vehicles	2023	25,886	-	25,886	70%	1
Seinäjoki Joint Municipal Authority for Education	Fully electric car, Skoda Enyaq	2.3 Passenger cars and light commercial vehicles	2022	17,081	-	17,081	49%	-
Tampereen Infra Oy	Fully electric cars, Kia s-Soul (2 vehicles)	2.3 Passenger cars and light commercial vehicles	2022	11,954	-	11,954	42%	0
Tampereen Raitiotie Oy	City of Tampere tramway	2.1 Public transportation	2017	134,134,624	-	134,134,624	43%	163
Tampereen Raitiotie Oy	City of Tampere tramway, 2nd phase	2.1 Public transportation	2022	88,861,586	-	88,861,586	29%	108
Tampereen Raitiotie Oy	City of Tampere tramway, 3rd phase Pirkkala-Linnainmaa	2.1 Public transportation	2024	10,000,000	-	10,000,000	3%	7
City of Turku	Fully electric cars, Citroen e-Jumpy (3 vehicles)	2.3 Passenger cars and light commercial vehicles	2023	104,086	-	104,086	83%	3
City of Turku	Fully electric car, Ford E-Transit	2.3 Passenger cars and light commercial vehicles	2023	38,146	-	38,146	59%	1
City of Turku	Fully electric cars, GOUPIL G4 (3 vehicles)	2.3 Passenger cars and light commercial vehicles	2023	83,427	-	83,427	75%	3
City of Turku	Fully electric car, MB EQE	2.3 Passenger cars and light commercial vehicles	2023	38,168	-	38,168	57%	1
City of Turku	Fully electric cars, Renault Zoe (5 vehicles)	2.3 Passenger cars and light commercial vehicles	2023	126,605	-	126,605	79%	3
City of Turku, Turku Vocational Institute	Fully electric cars, VW e-up (3 vehicles)	2.3 Passenger cars and light commercial vehicles	2022	34,393	-	34,393	58%	1
City of Turku, Procurement Services of the City of Turku	Fully electric cars, Citroen e-Berlingo ( 2 vehicles)	2.3 Passenger cars and light commercial vehicles	2022	36,078	-	36,078	61%	1
City of Turku, Procurement Services of the City of Turku (Social and healthcare services)	Fully electric cars, VW e-up (25 vehicles)	2.3 Passenger cars and light commercial vehicles	2022	312,505	-	312,505	67%	13
City of Vaasa	Kvarken Archipelago car and passenger ferry, M/S Aurora Botnia <sup>[7]</sup>	2.1 Public transportation	2020	25,000,000	-	25,000,000	21%	1,950



Project	Subcategory	Year of approval	Outstanding amount 31 Dec 2023 (€)	Unwithdrawn credit commitment 31 Dec 2023 (€)	Total committed finance 31 Dec 2023 (€)	MuniFin's estimated share of finance 31 Dec 2023	Annual production of renewable energy (MWh)	Renewable energy production capacity (MW)	Annual CO <sub>2</sub> emissions avoided / reduced (tCO <sub>2</sub> )
Bioenergy heating plant	3.3 Bioenergy	2018	3,896,557	-	3,896,557	39%	28,236	5	4,676
Cental bioheating plant	3.3 Bioenergy	2019	6,200,000	-	6,200,000	69%	32,513	12	16,768
Energy self-sufficiency project of Lempäälä <sup>[8]</sup>	3.3 Bioenergy	2017	7,005,560	-	7,005,560	72%	13,046	6	3,258
Viialantie heating plant, fuel storing and unloading concept	3.3 Bioenergy	2017	2,971,432	-	2,971,432	57%	-	-	4,698
Kapernaum 50 mw bioenergy heating plant	3.3 Bioenergy	2021	10,400,000	-	10,400,000	40%	80,138	20	22,800
Kuivaketvele bioenergy heating plant	3.3 Bioenergy	2021	30,000	-	30,000	30%	0	0	86
Waste energy utilization	3.5 Waste-energy	2024	700,000	-	700,000	100%	1,089	1	90
Bioenergy heating plant	3.3 Bioenergy	2023	5,000,000	5,000,000	10,000,000	44%	9,292	4	621
	Bioenergy heating plant  Cental bioheating plant  Energy self-sufficiency project of Lempäälä [8]  Viialantie heating plant, fuel storing and unloading concept  Kapernaum 50 mw bioenergy heating plant  Kuivaketvele bioenergy heating plant  Waste energy utilization	Bioenergy heating plant 3.3 Bioenergy  Cental bioheating plant 3.3 Bioenergy  Energy self-sufficiency project of Lempäälä [8]  Viialantie heating plant, fuel storing and unloading concept  Kapernaum 50 mw bioenergy heating plant  Kuivaketvele bioenergy heating plant 3.3 Bioenergy  Waste energy utilization 3.5 Waste-energy	Bioenergy heating plant 3.3 Bioenergy 2018  Cental bioheating plant 3.3 Bioenergy 2019  Energy self-sufficiency project of Lempäälä [8]  Viialantie heating plant, fuel storing and unloading concept  Kapernaum 50 mw bioenergy heating plant  Kuivaketvele bioenergy heating plant 3.3 Bioenergy 2021  Waste energy utilization 3.5 Waste-energy 2024	Bioenergy heating plant 3.3 Bioenergy 2018 3,896,557  Cental bioheating plant 3.3 Bioenergy 2019 6,200,000  Energy self-sufficiency project of Lempäälä [8] 2017 7,005,560  Viialantie heating plant, fuel storing and unloading concept 3.3 Bioenergy 2017 2,971,432  Kapernaum 50 mw bioenergy 3.3 Bioenergy 2021 10,400,000  Kuivaketvele bioenergy heating plant 3.3 Bioenergy 2021 30,000  Waste energy utilization 3.5 Waste-energy 2024 700,000	Bioenergy heating plant 3.3 Bioenergy 2018 3,896,557 -  Cental bioheating plant 3.3 Bioenergy 2019 6,200,000 -  Energy self-sufficiency project of Lempäälä <sup>[8]</sup> 2017 7,005,560 -  Viialantie heating plant, fuel storing and unloading concept 2017 2,971,432 -  Kapernaum 50 mw bioenergy heating plant 3.3 Bioenergy 2021 10,400,000 -  Kuivaketvele bioenergy heating plant 3.3 Bioenergy 2021 30,000 -  Waste energy utilization 3.5 Waste-energy 2024 700,000 -	Bioenergy heating plant   3.3 Bioenergy   2018   3,896,557   - 3,896,557     Cental bioheating plant   3.3 Bioenergy   2019   6,200,000   - 6,200,000     Energy self-sufficiency project of Lempäälä <sup>[8]</sup>   33 Bioenergy   2017   7,005,560   - 7,005,560     Viialantie heating plant, fuel storing and unloading concept   3.3 Bioenergy   2017   2,971,432   - 2,971,432     Kapernaum 50 mw bioenergy heating plant   3.3 Bioenergy   2021   10,400,000   - 10,400,000     Kuivaketvele bioenergy heating plant   3.3 Bioenergy   2021   30,000   - 30,000     Waste energy utilization   3.5 Waste-energy   2024   700,000   - 700,000	Bioenergy heating plant   3.3 Bioenergy   2018   3.896,557   -   3.896,557   39%	Bioenergy heating plant   3.3 Bioenergy   2018   3,896,557   -   3,896,557   39%   28,236	Bioenergy heating plant   3.3 Bioenergy   2018   3,896,557   -   3,896,557   39%   28,236   5



Customer	Project	Subcategory	Year of	Outstanding	Unwithdrawn	Total committed	MuniFin's	Annual production	Renewable	Annual CO <sub>2</sub>
	110,000	ouboutego. y	approval	amount 31 Dec 2024 (€)	credit commitment 31 Dec 2024 (€)	finance 31 Dec 2024 (€)	estimated share of finance 31 Dec 2024	of renewable energy (MWh)	energy production capacity (MW)	emissions avoided / reduced (tCO <sub>2</sub> )
City of Heinola	Waste water treatment plant of Sahaniemi, Heinola	4.2 Existing waste water facilities	2018	3,200,000	-	3,200,000	40%	927,100	-	-
Helsinki Region Environmental Services HSY	Waste water treatment plant of Blominmäki	4.1 New waste water facilities	2020	143,750,000	-	143,750,000	37%	-	20,180,288	-
Hämeenlinnan Seudun Vesi Oy	Waste water treatment plant of Paroinen	4.2 Existing waste water facilities	2021	11,700,000	-	11,700,000	78%	6,263,400	-	-
City of Imatra	Waste water treatment plant of Meltola	4.2 Existing waste water facilities	2020	17,860,500	-	17,860,500	95%	4,833,484	-	-
Jyväskylän Seudun Puhdistamo Oy	Purification plant centre of Jyväskylä region	4.2 Existing waste water facilities	2016	7,727,280	-	7,727,280	77%	10,499,152	2,025,652	-
City of Jämsä	Central purification plant of Jämsä	4.2 Existing waste water facilities	2020	2,200,000	-	2,200,000	55%	1,034,063	-	-
Municipality of Kärkölä	Transfer sewer of Kärkölä	4.2 Existing waste water facilities	2024	4,800,000	-	4,800,000	70%	1,727,986	-	-
City of Mikkeli	Water and waste water treat- ment plant of Metsä-sairila	4.1 New waste water facilities	2016	17,000,012	-	17,000,012	29%	-	1,656,094	-
Municipality of Pyhäntä	Pretreatment plant, Pyhäntä [9]	4.2 Existing waste water facilities	2023	1,900,000	-	1,900,000	62%	-	-	-
Municipality of Savukoski	Waste water treatment plant of Mukkavaara	4.1 New waste water facilities	2020	1,106,340	-	1,106,340	82%	29,613	-	-
Tampereen Seudun Keskuspudistamo Oy	Waste water treatment plant of Sulkavuori	4.1 New waste water facilities	2023	160,000,000	15,000,000	175,000,000	43%	-	15,741,240	283
Tunturi-Lapin Vesi Oy	Central purification plant of Ylläs	4.1 New waste water facilities	2018	4,448,899	-	4,448,899	86%	219,532	56,210	-
Turun Seudun Puhdistamo Oy	Waste water purification plant of Kakolanmäki	4.2 Existing waste water facilities	2018	22,200,000	-	22,200,000	74%	-	-	-
City of Uusikaupunki	Waste water purification plant of Häpönniemi	4.2 Existing waste water facilities	2018	1,113,800	-	1,113,800	66%	1,838,982	-	-
Vesikolmio Oy	Central purification plant of Kalajokilaakso	4.1 New waste water facilities	2016	4,125,000	-	4,125,000	28%	825,000	-	248



# **External verification**

To the Management of Municipality Finance Plc

We have been engaged by the Management of Municipality Finance Plc (hereinafter also the "Company") to perform a limited assurance engagement on selected information for the reporting period ended 31 December 2024, disclosed in Municipality Finance Plc Green Impact Report 2024 (hereinafter the Selected information).

#### Selected information

The Selected information within the scope of assurance covers:

 The disclosed information on the allocation of the Green Bond proceeds for the reporting period ended 31 December 2024 as disclosed in the Municipality Finance Plc Green Impact Report 2024 under section "Different framework vintages in the green finance portfolio" in table on page 19 in column "Aligned with the criteria" in accordance with the Municipality Finance Plc Green Bond Framework (August 2022).

#### Management's responsibility

The Management of the Company is responsible for preparing the Selected information in accordance with the reporting criteria as set out in the Company's reporting instructions (described in Company's Green Impact Report 2024), Eligibility Criteria set out in the Municipality Finance Plc Green Bond Framework (August 2022). The Management of the Company is also responsible for such internal control as the management determines is necessary to enable the preparation of the Selected information that is free from material misstatement, whether due to fraud or error.

## Practitioner's independence and quality management

We have complied with the independence and other ethical requirements of the International Code of Ethics for Professional Accountants (including International Independence Standards) issued by the International Ethics Standards Board for Accountants (IESBA code), which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

PricewaterhouseCoopers Oy applies International Standard on Quality Management (ISQM) 1, which requires the firm to design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

### Practitioner's responsibility

Our responsibility is to express a limited assurance conclusion on the Selected information based on the procedures we have performed and the evidence we have obtained. We conducted our limited assurance engagement in accordance with the 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 Selected information is free from material misstatement.



External verification

In a limited assurance engagement, the evidence-gathering procedures are more limited than for a reasonable assurance engagement, and therefore less assurance is obtained than in a reasonable assurance engagement. An assurance engagement involves performing procedures to obtain evidence about the amounts and other information in the Selected information. The procedures selected depend on the practitioner's judgment, including an assessment of the risks of material misstatement of the Selected information.

Our work consisted of, amongst others, the following procedures:

- Interviewing employees responsible for collecting and reporting the Selected information.
- Assessing how employees apply the reporting instructions and procedures of the Company with regards to whether the disclosures have been prepared in accordance with the Municipality Finance Plc Green Bond Framework (August 2022).
- Inspecting the documentation of the Green Finance Team
  to confirm that the allocation of Green Bond proceeds to
  eligible green projects had been considered and approved
  according to the process described in the Municipality
  Finance Plc Green Bond Framework (August 2022).

- Performing substantive testing to verify the existence of eligible green projects and accurate allocation of green bond proceeds per eligible green projects in accordance with the Municipality Finance Plc Green Bond Framework (August 2022).
- Considering the disclosure and presentation of the Selected information.

This report, including our conclusions, has been prepared solely for the Management of Municipality Finance Plc and the green bond investors in accordance with the agreement between Municipality Finance Plc and us, to assist the Management of Municipality Finance Plc in reporting on disclosures on the allocations of the green bond proceeds. We permit this report to be disclosed in the Municipality Finance Plc Green Impact Report 2024 in respect of the 2024 reporting year, to assist Municipality Finance Plc in responding to their governance responsibilities by obtaining an independent assurance report in connection with the Selected Information.

#### Limited assurance conclusion

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that Municipality Finance Plc's Selected information for the reporting period ended

31 January 2024 is not properly prepared, in all material respects, in accordance with the Reporting criteria set out in the Municipality Finance Plc Green Bond Framework (August 2022).

When reading our limited assurance report, the inherent limitations to the accuracy and completeness of the Selected information should be taken into consideration.

Our assurance report has been prepared in accordance with the terms of our engagement. We do not accept, or assume responsibility to anyone else, except to Municipality Finance Plc.

Helsinki 4 March 2025

PricewaterhouseCoopers Oy

Tiina Puukkoniemi Partner, Authorised Public Accountant (KHT) Sustainability Reporting & Assurance



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