

# OP Mortgage Bank Green Covered Bond Report

March 2022



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Independent Limited Assurance Report by KPMG Oy Ab

# 1 Introduction

Strong of its 120-year history in supporting development of the Finnish society, OP Financial Group's (OP) aim is to be a forerunner in responsibility and sustainability in the Finnish financial sector. The Group's mission and values bind it to take care of the operating region – both locally and nationwide. One of OP's core values is Responsibility, which is also embedded into OP's strategy as Responsible Business became a strategic priority in 2021. Thus, corporate responsibility is an integral part of OP's business, encompassing economic, social, and environmental responsibility.

OP supports sustainable development and is committed to mitigating climate change. The Group's climate targets are aligned with the Paris Agreement. OP aims to be carbon neutral in 2025 by having zero emissions from the used energy and fuels (Scope 1 and Scope 2), and by helping the supply chain to reduce its emissions.

OP has signed several international commitments that guide the Group's operations. In 2011 OP signed the UN Global Compact initiative and undertook to comply with the ten principles in the areas of human rights, labour, the environment, and anti-corruption. OP is also a Founding Signatory of the United Nations Environment Programme Finance Initiative's (UNEP FI) Principles for Responsible Banking – a single framework for a sustainable banking industry. Furthermore, OP is a part of the working group of the European Association of Co-operative Banks (EACB) and Finance Finland.

OP Mortgage Bank (OPMB) is part of OP and its role is to raise, together with OP Corporate Bank plc, funding for OP from money and capital markets. OPMB supports OP's value-based strategy implementation and contributes to its mission by issuing green covered bonds under the Green Covered Bond Framework (2020)<sup>1</sup>. OPMB contributes to sustainable economy also by playing an active role in The Energy Efficient Financial Institutions Group (EEFIG) and European Covered Bonds Council's (ECBC) Energy Efficient Mortgages Initiative (EEMI).

OPMB issued the first Green Covered Bond in Finland in March 2021. The proceeds of the €750 million bond are allocated to OP Financial Group's mortgages that finance energy efficient residential buildings. The Green Covered Bond Framework enables green issuances also in the future.



## 2 Project Evaluation

The Green Projects refer to energy efficient buildings and apartments ("Green Buildings") that serve as collaterals for mortgages in Finland and meet the criteria of the Green Covered Bond Framework. To identify eligible Green Projects, OPMB utilizes data from various sources. The primary method to determine the eligible Green Projects is using the energy performance certificates (EPCs) of buildings securing the mortgages in the cover pool. In case the EPC is not available or cannot be linked to the collateral, the secondary approach is to utilize statistical modeling.

Buildings that are identified to use fossil fuels as their main heating source are automatically excluded.

OPMB manages the mortgages that are used to finance Green Projects and serve as collaterals for the Green Covered Bonds by tagging the eligible Green Collaterals in the existing cover pool. OPMB is responsible for selecting the eligible collaterals, keeping track of them, and reviewing the pool regularly as a part of regular pooling process and managing the net proceeds.

<sup>1</sup> [OPMB Green Covered Bond Framework 2020](#)

# 3 OP Mortgage Bank's Green Covered Bonds

OP Mortgage Bank issued its first Green Covered Bond in March 2021.

## Green Covered Bond 2021 in brief

Issuer	OP Mortgage Bank
Issuer Ratings	Aaa (stable) by Moody's, AAA (stable) by S&P
ISIN	XS2324321368
EMTN Series Number	26
Nominal Amount	EUR 750 million
Issue Type	Covered Bond, under the OPMB Green Covered Bond Framework 2020
Use of Proceeds	Green buildings
Pricing Date	18.3.2021
Issue Date	25.3.2021
Maturity Date	25.3.2031
Coupon (Annual)	0.05%
Listing	Euronext Dublin
Second Party Opinion (SPO)	Sustainalytics

# 4 Use of Proceeds

All OPMB's Green Projects fall under the eligible sector "Green Buildings" as identified in the Green Covered Bond Framework (2020) and contribute to the SDGs 7 and 11.

For further information on eligible use of proceeds, process for project evaluation, and selection and management of proceeds, please see the [Green Covered Bond Framework](#).



## Assets Tagged as Green in the Cover Pool

As of 31<sup>st</sup> December 2021, the following number of mortgages were tagged as green in OPMB's cover pool based on their collaterals' greenness. All mortgages have been identified using 'Acquisition and ownership' criteria of the Framework.

Green Building Portfolio	Total loan balance	Number of mortgages	Green LTV <sup>2</sup>	Eligibility for green bonds	Allocated amount	Building area
Cover pool	€2,566,671,397.97	22,435	55%	100%	€750,000,000	2.4 million m <sup>2</sup>

Average time from loan origination, time until maturity and total portfolio lifetime are presented in the following table. All numbers have been weighted by loan balances.

Time from origination	Time until maturity	Portfolio lifetime
3.8 years	18.0 years	21.8 years

<sup>2</sup> Weighted average indexed loan-to-value as of 31<sup>st</sup> Dec 2021. Loan-to-value is calculated by dividing the loan balances by the sum of the values of loans' all Green Collaterals.

# 5 Estimated Environmental Impacts

The impacts are reported in accordance with the Green Covered Bond Framework where impact metrics for Green Buildings based on The International Capital Market Association (ICMA) Guidelines have been identified. The impact metrics are avoided consumption and emissions. Impacts have been calculated mortgage-by-mortgage using national EPC register<sup>3</sup> data and statistical modelling. Reporting is however on aggregated level.

It should be noted that the calculated avoided energy consumption and emissions are sensitive to the calculation methodology and used assumptions concerning data. All reported impacts are calculated for full calendar year regardless of how long they have been in the cover pool.



## Benchmark Energy Consumption

Benchmark specific energy consumption (kWh/m<sup>2</sup>) is the average specific energy consumption of Finnish residential building stock. Energy consumption data is retrieved from Statistics Finland<sup>4</sup>. The data is as of 2020, as this is the most recent data available at the time of impact calculations. In Finland however the average temperature of the year affects considerably the energy consumption of buildings. Therefore, space heating energy consumption must be normalized for the average temperature of the year to be representative of average year. This is done by using heating degree days retrieved from Finnish Meteorological Institute<sup>5</sup> and formulas presented by Motiva Oy<sup>6</sup>. Finally, residential building area is retrieved from Statistics Finland<sup>7</sup> to calculate specific energy consumption of residential building stock in Finland. The average specific energy consumption of residential buildings stock in Finland is calculated to be 222 kWh/m<sup>2</sup> per year.

## Energy Consumption of Collaterals

Specific energy consumption of a collateral is calculated from data of Finnish EPC register if the EPC can be linked to the collateral. In case the EPC does not exist, or it cannot be linked to the collateral, OPMB utilizes statistical modelling of specific energy consumption.

<sup>3</sup> Finnish EPC register, <https://www.energiatodistusrekisteri.fi/> (in Finnish)

<sup>4</sup> Statistics Finland, [https://pxnet2.stat.fi/PXWeb/pxweb/en/StatFin/StatFin\\_ene\\_asen/statfin\\_ene\\_asen\\_pxt\\_11zs.px/](https://pxnet2.stat.fi/PXWeb/pxweb/en/StatFin/StatFin_ene_asen/statfin_ene_asen_pxt_11zs.px/)

<sup>5</sup> Finnish Meteorological Institute, <https://www.ilmatieteenlaitos.fi/lammitystarveluvut> (in Finnish)

<sup>6</sup> Motiva, [https://www.motiva.fi/julkinen\\_sektori/kiinteiston\\_energian\\_kaytto/kulutuksen\\_normitus/laskukaavat\\_lammitysenergian\\_kulutus](https://www.motiva.fi/julkinen_sektori/kiinteiston_energian kaytto/kulutuksen_normitus/laskukaavat_lammitysenergian kulutus) (in Finnish)

<sup>7</sup> Statistics Finland, [https://pxnet2.stat.fi/PXWeb/pxweb/en/StatFin/StatFin\\_asu\\_rakke/statfin\\_rakke\\_pxt\\_116h.px/](https://pxnet2.stat.fi/PXWeb/pxweb/en/StatFin/StatFin_asu_rakke/statfin_rakke_pxt_116h.px/)

## Avoided Energy Consumption

Avoided energy consumption of a Green Collateral is calculated as follows:

$$\text{Avoided\_Consumption}_{\text{Collateral}} = (\text{Specific\_Consumption}_{\text{Benchmark}} - \text{Specific\_Consumption}_{\text{Collateral}}) * \text{Area}$$

And avoided energy consumption of a Green Mortgage is calculated from all Green Collaterals of the mortgage in proportion to OP Financial Group's share of financing as follows:

$$\text{Avoided\_Consumption}_{\text{Mortgage}} = \sum_{\text{Collateral}} (\text{Avoided\_Consumption}_{\text{Collateral}}) * \frac{\text{Loan\_Balance}_{\text{Mortgage}}}{\sum_{\text{Collateral}} (\text{Current\_Value}_{\text{Collateral}})}$$

Current\_Value is considered only for those Green Collaterals for which Avoided\_Consumption<sub>Collateral</sub> is available. Loan balances and current values of collaterals are as of 31<sup>st</sup> December 2021.

The reported avoided energy consumption of the Green Covered Bond eligible portfolio is the sum of avoided energy consumptions of individual Green Mortgages in the portfolio. The avoided energy consumption can be calculated using the aforementioned methodology for 99.7% of the eligible mortgages in the portfolio due to data availability. Therefore, the mortgages for which it can be calculated are assumed to be representative sample of whole portfolio, and for the rest the same avoided energy consumption – loan balance -ratio is applied.



## Avoided CO<sub>2</sub>-emissions

Average CO<sub>2</sub>-emission per energy consumed (gCO<sub>2</sub>/kWh) is calculated using emission factors of different energy sources and their shares of total normalized energy consumption of residential buildings in Finland as follows:

Energy source	Share of normalized energy consumption	CO <sub>2</sub> -emission factor (gCO <sub>2</sub> /kWh) <sup>8</sup>
Electricity	35%	315
District heat	28%	123
Biofuels	22%	0
Heat pumps, ambient energy	10%	0
Light fuel oil	4%	255
Natural gas	1%	199
Peat	0.1%	349
Heavy fuel oil	0.01%	274
Weighted total		156

The average CO<sub>2</sub>-emissions per energy consumed in Finnish residential buildings is thus 156 gCO<sub>2</sub>/kWh. Avoided CO<sub>2</sub>-emissions of the portfolio are calculated using this number as follows:

$$\text{Avoided\_Emissions}_{\text{portfolio}} = \text{Avoided\_Consumption}_{\text{portfolio}} * \text{Emission\_Factor}$$

## Environmental Indicators of Eligible Green Mortgages

	Final energy use			Carbon reductions
	kWh/m <sup>2</sup> p.a. <sup>9</sup>	% of energy use avoided <sup>10</sup>	avoided energy use p.a. (MWh)	tonnes of CO <sub>2</sub> equiv. avoided p.a.
Eligible green mortgages in portfolio, OP's financing share	121	45%	90,000	14,000
Outstanding green covered bonds (€750 million)			26,000	4,100
Per €1 million invested in OPMB green covered bonds			35	5.5

<sup>8</sup> Sources of data for CO<sub>2</sub>-emission factors:

Peat, oil, gas: Statistics Finland, [https://www.stat.fi/static/media/uploads/tup/khkinv/khkaasut\\_polttoaineluokitus\\_2021.xlsx](https://www.stat.fi/static/media/uploads/tup/khkinv/khkaasut_polttoaineluokitus_2021.xlsx)

District heat: Finnish Energy, [https://energia.fi/files/5650/Kaukolampovuosi\\_2021\\_v1.4\\_FINAL.pdf](https://energia.fi/files/5650/Kaukolampovuosi_2021_v1.4_FINAL.pdf) (in Finnish)

Electricity: Nordic Public Sector Issuers, [https://www.kuntarahoitus.fi/app/uploads/sites/2/2020/02/NPSI\\_Position\\_paper\\_2020\\_final.pdf](https://www.kuntarahoitus.fi/app/uploads/sites/2/2020/02/NPSI_Position_paper_2020_final.pdf)

CO<sub>2</sub>-emission factor for renewable energy sources is assumed to be 0 gCO<sub>2</sub>/kWh.

<sup>9</sup> Average specific energy consumption of green collaterals weighted by loan balances

<sup>10</sup> Benchmark is average specific energy consumption of residential buildings in Finland, 222 kWh/m<sup>2</sup>



## 6 External Review and Verification

OP Mortgage Bank engaged KPMG Oy Ab to issue an independent limited assurance on its Green Covered Bond Report. The scope of this limited assurance was the use of proceeds of the Green Covered Bond. Please see the end of the report for the limited assurance report.

## 7 Second Party Opinion Annual Review

OP Mortgage Bank engaged Sustainalytics to issue an Annual Review following its Second Party Opinion initially published in 2020, which includes assessment of OP's Green Bond Report, including impact reporting. The Second Party Opinions issued by Sustainalytics are available on [OP's debt investor relations website](#).

# Contacts



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## Independent Assurance Report to the Management of OP Mortgage Bank

We have been engaged by the Management of OP Mortgage Bank to provide limited assurance on the use of proceeds and eligibility in OP Mortgage Bank Green Covered Bond Report dated March 2022 (hereafter “Report”).

### *Management's responsibilities*

The Management of OP Mortgage Bank is responsible for the preparation and presentation of the Report in accordance with the reporting criteria, i.e. OP Mortgage Bank’s *Green Covered Bond Framework*. The Management is also responsible for producing a Report that is free from material misstatement.

### *Our responsibilities*

Our responsibility is to carry out a limited assurance engagement and to express a conclusion based on the work performed. The scope of our assignment is the use of proceeds and eligibility in the Green Covered Bond Report. Our assignment is limited to the historical information presented in the Report and does not encompass earlier periods or future-oriented tasks. We conducted our assurance engagement on the Report in accordance with International Standard on Assurance Engagements (ISAE) 3000 (Revised), *Assurance Engagements other than Audits or Reviews of Historical Financial Information*, issued by the International Auditing and Assurance Standards Board IAASB. This Standard requires that we plan and perform the engagement to obtain limited assurance about whether the Report is free from material misstatement.

KPMG Oy Ab applies International Standard on Quality Control ISQC 1 and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

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

### *Procedures performed*

A limited assurance engagement on the Report consists of making inquiries, primarily of persons responsible for the preparation of information presented in the Report, and applying analytical and other evidence gathering procedures, as appropriate. In the engagement, we have performed the following procedures, among others:

- Interviewed relevant staff responsible for providing the Report;
- Assessed the application of OP Mortgage Bank’s *Green Covered Bond Framework* reporting principles in the presentation of the Report;





- Assessed data management processes, information systems and working methods used to gather and consolidate the Report;
- Reviewed the presented Report and assessed its quality and reporting boundary definitions and;
- Assessed the Report's data accuracy and completeness through a review of the original documents and systems on a sample basis.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

#### *Inherent limitations*

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

#### *Conclusion*

Our conclusion has been formed on the basis of, and is subject to, the matters outlined in this report.

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

Based on the procedures performed and the evidence obtained, as described above, nothing has come to our attention that causes us to believe that the information subject to the assurance engagement is not prepared, in all material respects, in accordance with OP Mortgage Bank's *Green Covered Bond Framework*.

Helsinki, 23 March 2022

KPMG Oy Ab

Tiia Kataja  
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