OP Mortgage Bank
Green Covered Bond Journey
5th EEMI Bauhaus Event April 2021
OP Financial Group in Brief
Co-operative OP Financial Group

TOTAL ASSETS
€160 bn

SOLID CAPITAL POSITION
18.9% 21.7% 7.8%
CET1 ratio Capital adequacy ratio Leverage ratio

LEADING MARKET SHARES
35% 39% 34% 18%
In Loans (June 2020) In Deposits (June 2020) In Non-life Insurance (YE2019) In Life Insurance (YE2019)

EARNINGS BEFORE TAX
(excl. group eliminations)

Retail banking 14%
Corporate banking 43%
Insurance 43%

JOINT LIABILITY
Central institution, OP Cooperative, and the member credit institutions (incl. both issuing entities) of the amalgamation are jointly liable for each others’ debts and commitments, by virtue of the Finnish law.

FINNISH RISK EXPOSURE

HIGH CREDIT RATINGS
Moody’s Aa3 S&P AA−
OP Corporate Bank plc

Moody’s Aaa S&P AAA
OP Mortgage Bank’s covered bonds
OP Mortgage Bank (OPMB)

OPMB in brief

- 100% owned subsidiary of OP Cooperative
- Covered bond issuing entity of OP Financial Group
- Special-purpose bank and a funding vehicle for the OP member cooperative banks
- Covered bond ratings: AAA (S&P), Aaa (Moody’s)
- EMTCN programme of €20 bn qualifies for the ECBC Covered Bond Label

OPMB & Joint liability

- OPMB fully benefits from the joint liability among OP Cooperative and the member credit institutions, based on the Act on the Amalgamation of Deposit Banks
- However, since assets in OPMB’s Cover Asset Pool are ring-fenced, the noteholders have the right to receive what is due to them before all other creditors
Main Features of OPMB Cover Asset Pool as of YE2020

- Collateralized by Finnish mortgages
- Current balance €15.7 billion
- Weighted Average indexed LTV of 47%
- Average loan size of approximately €53,232
- No loans over 60 days in arrears ongoing
- Variable interest rates: over 98% of all loans
- Hedging agreements in place in order to mitigate interest rate risk
- Total amount of covered bonds issued €13.665 billion

Geographical distribution

1. Southern Finland 47%
   - Helsinki 20%*
2. Western Finland 33%
   - Tampere 7%
   - Turku 5%
   - Jyvaskyla 4%
3. Eastern Finland 9%
4. Oulu region 9%
   - Oulu 5%
5. Lapland 2%
6. Åland 0%

*City-specific figures are percentages of the whole of Finland
OPMB Cover Asset Pool

Loans by LTV

- Total assets €15.72 billion
- Eligible Cover Pool assets €15.70 billion
- Weighted average indexed LTV of 47%
- Over-collateralization 14.9% Eligible only

Loans by origination year

Loans by maturity

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OP Financial Group’s CR
EU aims for climate neutrality* by 2050.
Finland aims for carbon neutrality** by 2035.
OP aims for carbon neutrality*** by 2025.

Emissions from OP's own operations have fallen by approximately 49% from 2011.

*Includes all GHGs; water vapour (H2O), carbon dioxide (CO2), nitrous oxide (N2O), methane (CH4) and ozone (O3) being the primary ones in the Earth's atmosphere
**Includes CO2 emissions
***Meaning zero emissions from the energy and fuels that OP uses (Scope 1 and Scope 2) and also helping customers reduce their emissions

Finland's Integrated Energy And Climate Plan [http://julkaisut.valtioneuvosto.fi/handle/10024/161977](http://julkaisut.valtioneuvosto.fi/handle/10024/161977)
OP Financial Group’s Corporate Responsibility Programme

We improve financial literacy in Finland.

We promote the management of personal finances and prosperity in all age groups.

We foster a sustainable economy.

We support sustainable development and mitigating climate change and help adapt to it.

We support local vitality and communities.

We create jobs, promote physical activity, provide security and help build wellbeing in Finland. We promote local economic vitality.

We use our information capital responsibly.

We use customer data and AI transparently, in the best interest of our customers. Accessibility and having the best customer experience across all channels are at the core of developing our services.
OP is highly committed to Corporate Responsibility

International ESG commitments

UN Environment Programme Finance Initiative (UNEP FI), Principles for Responsible Banking – signed in 2019
Commitment to align portfolios to reflect and finance low-carbon, climate-resilient economy required to limit global warming to well-below 2, striving for 1.5 degrees Celsius, in accordance with the Paris Agreement

Collective Commitment to Climate Action – signed in 2019
Commitment to monitor lending in accordance with the principles on sustainable and low-carbon economy, stated in Paris Agreement

Equator Principles – signed in 2016
Project financing that manages risks related to environmental issues and social responsibility

Montréal Carbon Pledge – signed in 2015
Measuring the carbon footprint of funds and complying with CDP’s climate change, water and deforestation initiatives

UN Global Compact initiative – signed in 2011
10 principles on human rights, labour standards, environment and anti-corruption

UN Principles for Responsible Investment (UNPRI) – signed in 2009
Commitment by OP Asset Management Ltd, OP Fund Management Company Ltd and OP Real Estate Asset Management Ltd

OECD Guidelines for Multinational Enterprises
Incl. voluntary CR principles and standards

ESG participation & cooperation

• Finland’s Sustainable Investment Forum (FINSIF)
• Climate Leadership Coalition (CLC)
• Global Compact Network Finland
• International Capital Markets Association’s (ICMA) Green and Social Bond Principles
• Partnership agreement with Climate Bonds Initiative (CBI)
• CR network of the Finnish Business & Society association (FIBS)
• CR Working Group of the European Association of Co-operative Banks (EACB)
• CR Working Group of Finance Finland
• EEMI (Energy efficiency Mortgages Initiative)
• Pohjola Insurance Ltd & Hope Finland cooperation
• OP Asset Management Ltd; official supporter of The Task Force on Climate-related Financial Disclosures (TCFD)

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**ESG Ratings - OP is among the top performers in the banking sector**

<table>
<thead>
<tr>
<th>Rating Agency</th>
<th>Rating</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSCI</td>
<td>A</td>
<td>CCC to AAA</td>
</tr>
<tr>
<td>SUSTAINALYTICS</td>
<td>16.0 (low risk)</td>
<td>100 to 0 (severe to negligible risk)</td>
</tr>
<tr>
<td>ISS ESG</td>
<td>C-</td>
<td>D- to A+</td>
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<tr>
<td>CDP</td>
<td>A-</td>
<td>D- to A</td>
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<tr>
<td>vigeo eiris</td>
<td>53</td>
<td>0 to 100</td>
</tr>
<tr>
<td>imug (OP Mortgage Bank)</td>
<td>B</td>
<td>D to AAA</td>
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</tbody>
</table>
OP’s CR measures during recent years

2003
CSR reporting begins

2011
We commit to the UN Global Compact initiative

2015
Carbon footprints measured for mutual funds

2017
CR programme: Integration of SDG targets

2018
Ethical principles of AI

2019
We launched new sustainable corporate financing products on the market

2020
OP Mortgage Bank published its Green Covered Bond Framework

2002
Sustainability-themed fund
OP-Sustainable Development

2009
Signing of the UN Principles for Responsible Investment

2012
Code of Business Ethics

2016
Exclusion of carbon investments

2017
We set the goal: Carbon positive handprint in 2025

2019
We launch the first Green Bond

2019
Founding signatory of UNEP FI Principles for Responsible Banking

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Examples of OP’s actions to promote sustainability in 2020

The value of sustainability-linked loans, green loans and limits granted to corporate customers: €1,523 million.

OP Mortgage Bank published a Green Covered Bond Framework.

OP Finnfund Global Impact Fund I raised a total of €135 million in commitments in the first two rounds of funding in 2020.

OP Corporate Bank acted as an issuing bank in three out of four green bonds issued by companies in Finland. The three bond issuers were Tornator (€350 million), SATO (€350 million) and Stora Enso (€500 million).

OP Real Estate Asset Management signed the Net Zero Carbon Buildings commitment and seeks to achieve zero carbon emissions for its real estate portfolio by 2030. In 2020, OP Real Asset Management installed 12 new solar power stations for its properties and switched to renewable electricity.
Green covered bonds support OP’s mission

Responsibility

• Strengthening OP’s responsible role in the Finnish society
• Promoting one of the 4 key themes and commitments of OP’s CR programme – Fostering sustainable economy

Retail banking

• Conducting business in a responsible manner: understanding mortgage customers’ ESG risks better, while integrating sustainable policies into retail lending
• Providing customers with services that enable sustainable choices

Funding

• Diversifying the funding sources
• Expanding the investor base
• Responding to markets’ green bond demand

OP’s values

“ Our mission is to promote the sustainable prosperity, security and wellbeing of our owner-customers and operating region, and this is embedded into everything we do.
Green Covered Bond Framework
Green Covered Bond Framework published in 2020

- Aligned with ICMA Green Bond Principles and complies with the EU Green Bond Standard on a best effort basis
  - Complies with the disclosure requirements of the EU Green Bond Standard
  - Contributes to the EU Environmental objective “Climate Change Mitigation”
  - Criteria: EU Taxonomy’s Construction and real estate activities criteria and CBI Residential Buildings criteria
  - Takes into consideration the Do No Significant Harm and Minimum Safeguards requirements
- Eligible sector for use of proceeds: Green Buildings

Documents available at https://www.op.fi/op-financial-group/debt-investors/green-bonds

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Green Covered Bond Framework overview

Use of proceeds
- Green buildings

Project evaluation and selection
- To identify eligible mortgages, data from various sources is utilized (e.g. ARA)
- The energy performance certificates (EPCs) are used to assess eligibility
- If EPCs are not available, the secondary approach is energy efficiency statistical modeling

Management of proceeds
- Cover Pool is reviewed as a part of the pooling process on a regular basis
- Quarterly internal reporting to Green Bond Committee

Reporting: Annual Green Covered Bond Report
- Amount of proceeds allocated to green covered bonds
- Origination timeframe and maturity profile of mortgages
- Number of eligible mortgages
- Estimated environmental impacts of the mortgages

External review & verification
- Second Party Opinion by Sustainalytics
- Limited assurance report by an external auditor
OPMB entered the Green Covered Bond market in March 2021

**Green Covered Bond in brief**

<table>
<thead>
<tr>
<th>Issuer</th>
<th>OP Mortgage Bank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issuer ratings</td>
<td>Aaa (stable) by Moody’s, AAA (stable) by S&amp;P</td>
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<tr>
<td>ISIN</td>
<td>XS2324321368</td>
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<tr>
<td>EMTCN series number</td>
<td>26</td>
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<tr>
<td>Nominal amount</td>
<td>EUR 750 million</td>
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<tr>
<td>Issue type</td>
<td>Covered Bond (under the OPMB Green Covered Bond Framework)</td>
</tr>
<tr>
<td>Use of Proceeds</td>
<td>Green buildings</td>
</tr>
<tr>
<td>Pricing date</td>
<td>18.3.2021</td>
</tr>
<tr>
<td>Issue date</td>
<td>25.3.2021</td>
</tr>
<tr>
<td>Maturity date</td>
<td>25.3.2031</td>
</tr>
<tr>
<td>Coupon (annual)</td>
<td>0.05%</td>
</tr>
<tr>
<td>Listing</td>
<td>Euronext Dublin</td>
</tr>
<tr>
<td>Second Party Opinion</td>
<td>Sustainalytics</td>
</tr>
</tbody>
</table>

The transaction was successful Green distribution (allocation)

- The €750 mn bond was over-subscribed by more than twice. Over 50 investor accounts were involved.

**Investors by geography**

- Germany, Austria & Switzerland 43%
- Nords 29%
- France 12%
- BeNeLux 10%
- Other 6%

**Investors by type**

- Central Banks / Official Institutions 55%
- Banks 32%
- Fund Managers 13%
- Conventional 47%
- Dark Green 29%
- Light Green 24%

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OPMB Green Covered Bonds Eligible Use of Proceeds

Green Buildings: Eligible Economic Activities

1. Acquisition and ownership
For buildings built before 2021: energy performance must be among top 15% of similar stock (in terms of number of buildings) which corresponds to EPCs A or B (if issued under 2018 legislation) or equivalent (if issued under 2013 legislation). For buildings built after 2021: primary energy demand 20% lower than NZEB (Nearly Zero Energy Buildings) requirements*.

2. Construction of new buildings
Primary energy demand* 20% lower than NZEB requirements. (For buildings built from 2021 onwards, for buildings built before YE2020 the top 15% criteria is applied).

3. Building renovation
Complies with relevant local “major renovation” regulations (based on the Energy Performance of Buildings Directive, EPBD) or delivers 30% energy savings.

4. Individual measures and professional services
List of eligible measures and services with individual criteria as outlined in the Taxonomy**.

*In Finland EPCs and NZEB definition are based on “E-value” which is used to assess the energy efficiency of buildings
**The eligible measures and services with individual criteria are listed in the Technical annex to the TEG final report on the EU Taxonomy

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Process for Project Evaluation and Selection

Identification of eligible collaterals

1. Energy Performance Certificates (EPCs)
   - There are about 37,000 residential building EPCs publicly available in Finland (YE2020)
   - EPCs for all buildings securing the mortgages in the cover pool are used as a primary method for identifying eligible collaterals

2. Statistical Modeling
   - If an EPC is not available for a collateral, the secondary method is statistical modeling of the eligibility
   - Data from various sources (e.g. Digital and Population Data Service Agency) is used to model eligibility for recently built buildings

Buildings that have fossil fuels identified as their main heating source are automatically excluded.
Eligible green mortgages amount to €2.1 bn (March 2021)

- EPCs A and B amount to approximately 10% in Finland

*presented as equivalent to 2018 Finnish EPC legislation

In Finland, 85% of electricity production was CO₂-neutral and 54% of district heating was produced from renewable energy sources and waste heat in 2020.

Source: Finnish Energy (ET)
Management of Proceeds

• OPMB’s aim is that the size of the eligible mortgage portfolio will always exceed the total balance of all outstanding Green Covered Bonds.

• In case there are periods where there is an insufficient aggregate amount of Green Covered Bond Assets, OPMB will hold or invest any unallocated green covered bonds net proceeds in accordance with OP’s conventional liquidity management policy and in alignment with the Finnish Covered Bond Act that is in effect.

• OPMB manages the net proceeds and reviews the cover pool as a part of the pooling process on a regular basis in order to ensure that the eligibility criteria are met at all times. The summary of green mortgages in OPMB’s cover pool against the eligibility criteria is reported to the Green Bond Committee quarterly.
Reporting and External Review

Annual Green Covered Bond Report

• Includes:
  • the (aggregated) amount of net proceeds allocated to mortgages within the Eligible Sector mentioned in the Framework
  • the origination timeframe and maturity profile of the mortgages
  • the number of eligible mortgages
  • the estimated environmental impacts of the mortgages within the Eligible Sector
• Impact metrics (aligned with ICMA):
  • Annual energy reduced/avoided in MWh or GWh
  • Annual GHG emissions reduced/avoided in tonnes of CO₂ equivalent

Second Party Opinion

• Sustainalytics provided a Second Party Opinion on OPMB’s Green Covered Bond Framework

Verification

• OPMB will request on an annual basis, starting one year after issuance and until maturity, a limited assurance report of the allocation of the Green Covered Bond proceeds to Eligible Assets
Impact metrics: preliminary estimates

- Preliminary estimate for energy savings of eligible green mortgages: 65 000 MWh/a
- Preliminary estimate for emission savings of eligible green mortgages: 14 500 tCO₂/a

METHODOLOGY AND ASSUMPTIONS

- Preliminary estimates for collaterals’ specific energy demand are calculated from EPCs (if available for a collateral) and modeled for the rest of the collaterals (given data availability)
- Specific energy demand for an average residential building in Finland is calculated based on data from Statistics Finland
- In emission calculations all savings in energy demand are assumed to derive from heating
- Specific emissions used in estimates:
  - Electricity (marginal): 315 gCO₂/kWh, Source: NPSI Position Paper on Green Bonds Impact Reporting, 2020
  - District heating: 154 gCO₂/kWh as of March 2021. Source: Motiva (in Finnish)
- Specific (marginal) emissions from heating for an average residential building in Finland (based on the main heating source distribution published by Statistics Finland): 189 gCO₂/kWh
- The share of impacts of green collateral(s) allocated to eligible green mortgages is calculated as follows: loan balance divided by the value of green collateral(s) as of the reporting day
- The methodology will be further developed for the Green Covered Bond Report which will be published within a year from the date of issuance
Thank you!