

24 June 2020
Covered Bonds

Sustainable covered bonds

The sustainability frameworks from A to Z

Countries

- Austria
- France
- Germany
- Luxembourg
- Norway
- Korea
- Spain



Since the European Commission published its sustainable action plan in 2018, developments in the field of sustainability have only accelerated. In December last year a political agreement was reached on the taxonomy regulation, with the Technical Expert Group (TEG) finalising its taxonomy and green bond standard proposals in March this year. Meanwhile, the European Commission outlined its plans for a green deal at the end of last year, while more recently the ECB and EBA provided banks with further guidance on how they should integrate ESG issues in their policies and procedures. These are just a few out of many examples supporting the further sustainability efforts of banks, including in the field of green/social bond issues.

This report offers a guide to the existing green, social and sustainability frameworks supporting the sustainable € covered bond market. Our most recent fresh dive into all the framework details led to several **insights**:

- With little over €20bn outstanding, the sustainable covered bond market remains modest in size compared to the sustainable bank senior market. Nonetheless, in terms of product diversity the covered bond market is far from inferior. Since our previous update **multiple new bonds have been issued making the sustainable covered bond market only more colourful**. These include the first renewable energy covered bond under a dedicated green covered bond legislation and the first social covered bond financing Covid-19 related hospital loans. 2019 also featured the first blue social covered bond funding public supply in the field of water and waste management. All three are innovative examples, ranging from the strongest possible form of green covered bond issuance under a dedicated legal framework, to a social bond issue where the line between social and green proceeds use seems to be blurring. The first Covid-19 social covered bond offers a further good example of the sustainable bond market's prompt response to the Covid-19 crisis and its challenges.
- Issuers continue to take **different sustainable bond framework approaches**. Some banks have frameworks only dedicated to either green or social covered bonds. Others use the same green or social bond framework for the issuance of covered bonds and senior unsecured bonds, or may even include commercial paper or bonds further down the capital structure. There are also examples with just one basic sustainability bond framework at group level for green and social purposes and facilitating the use of multiple sustainable funding instruments.

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Separate spin-off methodology notes may or may not be used in such cases, in support of specific asset classes (such as green buildings), or for covered bond issuance purposes alone. Whichever approach is adopted, it remains relevant, in our view, that clarity is provided on the amount of sustainable loans in the cover pool versus the sustainable covered bonds issued (ie, on proceed allocations to loans actually in the cover pool).

Green bond frameworks yet have to be updated for the TEG's March 2020 technical criteria

- Various green bond frameworks promote their alignment with the EU taxonomy's climate mitigation objective and the Technical Expert Group's (TEG) **technical screening** proposals of June 2019. This conformation with the draft technical screening criteria has, in many ways, become obsolete with the TEG's final taxonomy technical report of March 2020. For example, for newly constructed buildings, the primary energy demand (PED) has to be 20% lower than the PED resulting from the 'nearly zero-energy building' (NZEB) requirements, which will become mandatory for all new buildings across the EU member states as of 2021. Hence, a minimum top 15% ambition will no longer be of relevance to new buildings built from 2021. A best-in-class approach (top 15% of the local existing stock in terms of operational primary energy demand) is still applied for the acquisition of buildings built before 31 December 2020 and certification schemes such as EPCs can still be used as evidence for eligibility. However, instead of specifying minimum EPC thresholds, the TEG underscores that more work needs to be done to define absolute thresholds corresponding to the top 15%, including on EPC distributions and thresholds. This may leave issuers with a bit of vacuum regarding their fresh green bond framework and asset eligibility updates, given the 2021 NZEB and EPC threshold unknowns.

Green bonds and green lending are more and more seen in connection to each other

- The **issuance of green (covered) bonds** on the liability side and the **origination of dedicated green loan products** on the asset side are increasingly seen by banks as an integrated package of their sustainability efforts. Where the issuance of green, social and sustainability bonds first started from the selection of an existing subset of loans on a bank's balance sheet, meeting certain environmental and/or social criteria, banks are increasingly establishing dedicated lending products that meet minimum environmental targets. The EU taxonomy, but also other developments such as the ECB's guide on climate-related and environmental risks or the EBA's recently published loan origination standards, will see banks focusing on the establishment of minimum ESG related standards in their risk policies and lending procedures. Dedicated green loan products, in our view, may be a natural consequence of this trend, growing the asset base for green bond issuance.

Despite impact reporting harmonization, realized impacts remain far from comparable

- The **impact reporting** addressed by the different sustainability frameworks is **broadly aligned with** the ICMA's **harmonised framework for impact reporting**. Nonetheless, the comparability of the impacts reported is still far from perfect. Even with reference to the sustainable asset class "green buildings", the reporting standards continue to differ widely due to data availability differences across banks and jurisdictions. Besides, for green buildings, impacts in terms energy savings are typically measured against national benchmarks. Comparing issuers from country to country could result in some green portfolio impacts looking less impressive, whilst this is simply for reasons that the portfolio benchmarks were greener to begin with, reflecting relative national differences in the energy mix. Some banks also make impact comparisons versus a European benchmark.

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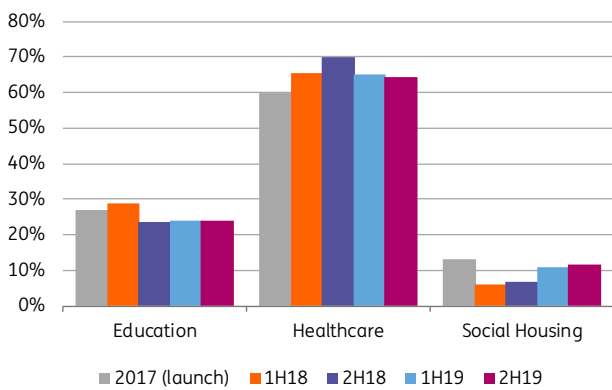
Austria

Kommunalkredit Austria

Kommunalkredit Austria issued a social covered bond under its public sector programme

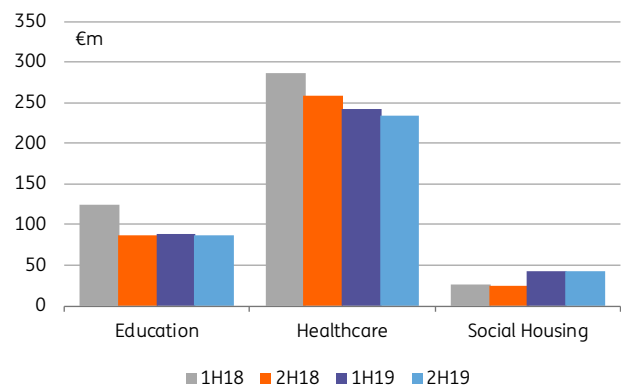
Kommunalkredit Austria issued its first €0.3bn sub-benchmark sized social public sector covered bond (Fundierte Bankschuldverschreibung) in July 2017 under its €800m debt programme for the issuance of unsubordinated (senior) notes and covered bonds. The **issuance proceeds are used to finance or refinance social infrastructure projects** in the areas of education, healthcare and social housing (Figures 1 and 2).

Fig 1 Healthcare assets remain dominant...



Source: Kommunalkredit Austria, ING

Fig 2 ...but do continue to decline



Source: Kommunalkredit Austria, ING

30-50% of the assets that mature before the social bond matures will be replaced

The refinanced assets are located in the core markets of Kommunalkredit Austria, ie, Austria, Germany, Switzerland, France, the Netherlands, Belgium and the United Kingdom, while new assets may be located in Western, Southern or Eastern Europe.

Kommunalkredit Austria **reports annually** on the use of proceeds from the issuance of its social covered bond per 30 June. The bank also reports on the social asset portfolio in its bi-annual financial report. At the end of 2019 the pool of social assets was €363m (comprising 71 loans), versus €371m (62 loans) on 30 June 2019, and down from €436m (comprising of 80 loans) on 30 June 2018. The €22.5m in new social infrastructure projects financed in 2019 and attributed to the social asset pool, only compensated in part for the loan repayments. Particularly the healthcare assets continue to see a decline (Figure 2). Nonetheless, the social asset portfolio is still in excess of the €300m size of the social covered bond with the bond maturing in July 2021.

Kommunalkredit Austria's social covered bond framework states that 30-50% of the existing eligible assets that mature before the social bond matures will be replaced with new assets that meet the eligibility criteria. This differs from the general market practice where issuers commit to maintain a sustainable asset portfolio that is at all times at least equal to the amount of sustainable bonds outstanding.

The social covered bond framework does **not** express **an explicit requirement that the social assets** financed by the social covered bond **are also part of the cover pool** securing the outstanding covered bonds. At the end of 2019, the total public sector cover pool was €1,131m securing €1,001m public sector covered bonds issued by Kommunalkredit Austria. The cover pool comprised of 94.8% of loans in Austria, 1.6% in Germany and 3.5% in Portugal.

Fig 3 Kommunalkredit Austria – Social Covered Bond Framework

Pillar	Details
1. Use of Proceeds	<p>Asset eligibility is based on three criteria:</p> <ol style="list-style-type: none"> 1) Thematic criteria: proceeds should finance/refinance projects in the following areas: <ul style="list-style-type: none"> – Education: financing the construction, maintenance or renovation of among others public schools (kindergartens, primary and secondary schools) and universities; – Healthcare: existing or new projects to develop public healthcare facilities in KA's EU markets, including public hospitals, nursing homes, rehabilitation centres, psychosomatic centres, homecare for the handicapped; – Social housing: existing or new projects to develop social housing to vulnerable populations, including subsidized housing projects, or homes for elderly care. 2) Exclusionary criteria: these apply to all projects of the bank and exclude lending: a) against law or ethical principles, b) for the construction of nuclear power plants, c) for the production of weapons, d) to finance a belligerent state, e) to finance customers that provide insufficient creditworthiness information, f) lending business is unclear/not reasonable, g) customer has an unclear shareholder structure, h) business aims to evade national/international legal regulations, i) the business involves potential money laundering. 3) Sustainability criteria: Projects will be evaluated against economic (ie, impact on underdeveloped regions, the unemployment rate, education, productivity or economic efficiency), ecological (impact on emission of fine dusts or CO₂, on biodiversity, land and water and on energy consumption) and social criteria (social added value, opportunities for minorities, gender equality, cultural preservation).
2. Project Evaluation & Selection Process	<p>Projects are evaluated against the aforementioned three criteria. Kommunalkredit's sustainability team defines the sustainability criteria. Project approval is the responsibility of account managers of the sales division. The treasury division and sales division will screen all approved projects and make a selection for the use of proceeds.</p>
3. Management of Proceeds	<p>Immediate allocation post issuance was to refinance existing projects in the social asset portfolio. 30-50% of existing eligible assets that mature before the social bond will be replaced with new social assets that meet the eligibility criteria. The treasury division ensures adequate funding is made available at any time for new eligible assets replacing existing social assets that mature before the social bond matures. The sales division manages the social asset portfolio.</p>
4. Reporting	<p>Allocation reporting: annually a) on the amount and number of eligible assets within the social asset portfolio, b) a breakdown by thematic eligibility criteria, c) new projects that receive allocation. Impact reporting: yearly updates on the social impact of the projects funded. Reporting is intended to include KPI's for education, healthcare and social housing.</p>
5. External review	<p>Kommunalkredit's external auditor will annually verify the amount of eligible social assets funded by the social covered bond. Sustainalytics provides the second party opinion.</p>

Source: Kommunalkredit Austria, Sustainalytics, ING

Hypo Vorarlberg Bank on the other hand issued a green senior unsecured bond

Kommunalkredit Austria's €0.3bn social covered bond is the only Austrian social covered bond outstanding. **Hypo Vorarlberg Bank**, which also issues public sector and mortgage covered bonds, issued a €0.3bn green **senior unsecured bond** in 2017. For this particular issuer bond proceeds are allocated to **green projects**, loans and investments in the field of energy efficiency (such as in new and refurbished buildings) or in green buildings that meet regional, national or internationally recognized standards. The bank does not rule out, however, that the buildings financed or refinanced by the issue proceeds are also included in the cover pool as collateral for its mortgage and municipal bonds. As such covered bondholders may ultimately obtain a preferential claim to these green loans, while the issuance proceeds of the covered bonds they invested in would be used for general corporate finance purposes. **Raiffeisen Bank International** has also issued **green (preferred) senior unsecured bonds** of which two euro denominated bonds in June 2018 and September 2019, with proceeds allocated to renewable energy, green buildings, energy efficiency, clean transportation, water management and waste water management. Raiffeisen Bank International has a public sector and a mortgage covered bond programme in place but has up until today only issued one (non-green) EUR benchmark mortgage covered bond in November 2019. Senior unsecured and covered bonds are issued under the same €25bn debt issuance programme. The bank's green bond programme makes no explicit reference however to any potential link between the financing of green assets and covered bond funding or covered bond collateral pools.



France

Groupe BPCE

Groupe BPCE has a sustainable development bond programme from which it can issue green and social bonds

Groupe BPCE published its first **sustainable development bond programme** in July 2018 and revised it in April 2020. The latter programme is valid for one year from 29 April 2020 onwards. This period will be extended by one year unless the programme is updated. Both green and social bonds can be issued under the programme, either as senior preferred and non-preferred bonds, covered bonds, securitizations or capital instruments. The bonds can be issued publicly or privately.

BPCE aims to broaden its investor base via the issuance of green and social bonds and intends to align its sustainable development bond framework with the EU green bond standard, to the extent feasible. **Green or social covered bonds** will be issued either via BPCE SFH or via Compagnie de Financement Foncier (CFF). Judging by the sustainable development bond framework, it does not seem to be the group's intention to print green or social covered bonds as private placements.

Groupe BPCE has developed **three types of bond programmes** that are issued under its sustainable development bond framework:

- **Green bonds**, which address environmental sustainability. Loans refinanced should contribute positively to the reduction of climate change effects (CO₂ emissions) or other environmental challenges (sustainable agriculture, biodiversity, waste, water) through clean energy production, energy savings, or other type of actions.
- **Social bonds - human development**, which address social sustainability challenges through contributions to economic systems key to human development (education, healthcare, social inclusion, social housing) and that could benefit people who live and work in economically and/or socially disadvantaged areas or communities.
- **Social bonds - local economic development**, which support regional and community development and resilience through the financing of SMEs, local authorities and non-profit organizations that seek to benefit people who live and work in economically and/or socially disadvantaged areas or communities.

Green and social bonds will be used to finance and refinance eligible loan categories

Green bonds and social bonds will be used to **finance or refinance**, in whole or in part, loans that fall into the **eligible loan categories** of one or more of the following entities within Groupe BPCE: the group's regional banks (Banques Populaires, Caisse d'Épargnes), listed entity (Natixis) and branches (Palatine, Lease, Factor, CFF).

A separate methodology note is published for each eligible category of loans

For each eligible category of loans, a separate methodology note defines the specific eligibility criteria, including the ESG selection criteria and reporting indicators. A Sustainable Development Bond Governance Committee and an Operational Committee oversee the methodologies and the actual implementation of the framework and methodology notes. The framework and methodology notes, including any substantial changes to these, will be subject to the prior review by a second party opinion provider.

The net bond proceeds will be granted to Groupe BPCE's regional banks or subsidiaries, by way of inter-company loans. Pending the allocation or reallocation of the proceeds, any **unused proceeds will be invested in cash or equivalents**. Green and social bond proceeds will not be fungible with any other source of wholesale funding. Besides, at least once a year, the earmarked eligible assets within the pool will be updated and screened for potential changes in their eligibility status.

Fig 4 Groupe BPCE – Sustainable Development Bond Programme

Pillar	Details
1. Use of Proceeds	<p>Exclusions: Mining (including coal), oil & gas, defence, tobacco and nuclear activities are excluded. Loans or assets are also partially or totally excluded if any material and critical controversies emerge in relation to a specific asset, or if they have been pledged for other funding sources such as European Investment Bank, Council of Europe Development Bank or Caisse des Dépôts et Consignations.</p> <p>Green bonds: 1. Loans in the renewable energy sector and for the development, construction, operation and maintenance of renewable energy projects, including but not limited to solar and wind projects. 2. Loans for the development, construction, operation and maintenance of energy efficiency projects. 3. Loans or investments for the construction and retrofit of new, existing or refurbished green buildings. 4. Loans for the development, construction, operation and maintenance of sustainable water management projects. 5. Loans for clean transport vehicles, equipment and infrastructure. 6. Loans for the development, construction, operation and maintenance of sustainable waste management projects including public and private transportation projects. 7. Loans for the development, construction, operation and maintenance of sustainable agriculture and fishery projects. 8. Refinancing of loans for the development, construction, operation and maintenance of biodiversity conservation projects.</p> <p>Social bonds – human development: 1. Loans to customers with sectoral activity codes related to healthcare, with potential geo-scoring, including but not limited to hospitals and healthcare facilities. 2. Loans to customers or projects with sectoral activity codes related to education, with potential geoscore, including but not limited to primary and secondary education, adult learning and continuing education. 3. Loans to customers or projects with sectoral activity codes related to social housing and loans promoting social ownership. 4. Loans to customers or projects with sectoral activity codes related to social inclusion (activities with a social purpose but excluding healthcare, education and social housing), with potential geo-scoring including, but not limited to, loans to customers or projects with sectoral activity codes related to sport (coaching, teaching) or financing sport infrastructures providing social inclusion benefits.</p> <p>Social bonds – local economic development: 1. Loans to customers or projects with geo-scoring of areas with high unemployment/low income/low job creation, with potential targeting of specific sectoral activity codes (employment conservation and creation). 2. Loans to customers or projects aiming at the improvement of community infrastructure, such as public transportation, etc. (affordable basic infrastructure).</p>
2. Project Evaluation & Selection Process	<p>A sustainable development bond governance committee that meets quarterly oversees the governance of the sustainable development programme. This committee is under joint sponsorship of Groupe BPCE's CFO and head of environmental, social and governance (ESG), with participation from ESG, business development and finance team of the group's regional banks and Natixis, head of MLT funding and investor relations, head of asset and liability management, head of portfolio management & financial engineering and external ESG experts. It is in charge of 1. Definition and supervision of the sustainable development bond issuance policy, 2. Innovation, 3. Stakeholders' dialogue and engagement, 4. Definition and update of the framework and methodology notes, 5. Eligible asset pool identification, selection & allocation, monitoring, data collection and report, respect of selection criteria and exclusions, 6. mandate and coordination of external reviews (SPO and audit), 7. Coordination internal stakeholders.</p> <p>Green bond process for loan evaluation and selection: eligible green loans are loans originated by entities within Groupe BPCE that meet the selection criteria defined for a specific green bond issue and the ad-hoc methodology notes approved by an independent SPO provider, and have been selected according to the governance and process for loan evaluation and selection for that green bond.</p> <p>Social bond – human development process for loan evaluation and selection: A dedicated eligibility IT engine defines the selection of a virtual asset pool by using official codes of sectors of economic activity, with potential geo-scoring. The loans in the asset pool are granted to customers with activities dedicated to education, healthcare, social housing and social inclusion.</p> <p>Social bond – local economic development process for loan evaluation and selection: A dedicated sustainable development eligibility IT engine defines the selection of a virtual pool of loans by using INSEE as external open data sources, supplemented by Groupe BPCE's internal data.</p>
3. Management of Proceeds	<p>The funds are managed within the central treasury function of BPCE in a dedicated way without fungibility with other sources of wholesale funding, with special arrangements for i.a. covered bonds. Amounts equal to the net proceeds of the green/social bond issues, will be granted to entities within Groupe BPCE by way of intra-group loans in the currency of the eligible loans, to be earmarked to eligible loans. The look-back period for refinancing eligible loans is specified in the methodology note. Pending allocation (max 2yr after issuance) or reallocation to eligible loans (due to early repayment), any unallocated amounts will be invested in cash or cash equivalents.</p> <p>The selection and replenishment of initial assets in the virtual pool will occur within Groupe BPCE's core banking system, according to the initial criteria for the life of the bonds. At least once a year, the virtual pool of eligible and earmarked eligible assets will be updated for repayments as well as sectoral or any other exclusions. Eligible assets from the updated virtual pool will be added to the pool of earmarked eligible assets if needed.</p>

Source: Groupe BPCE, Vigeo Eiris, ING

Fig 4 Groupe BPCE – Sustainable Development Bond Programme (continued...)

Pillar	Details
4. Reporting	<p>Key performance indicators will be established on a case by case basis in line with the methodology note specific to each eligible project category. BPCE will publish these key performance indicators at a defined frequency for each eligible loan category. The monitoring and reporting process and methodology of calculation will be described in the methodology note of each bond issue.</p> <p>Once a year, for as long as the green or social bonds are outstanding, Groupe BPCE will report for each methodology note with its outstanding green or social bonds: 1. the allocations by eligible project category; 2. the share of proceeds allocated to financing or refinancing; 3. the yet to be allocated amount of cash or cash equivalents and 4. the relevant environmental and/or social key performance indicators (outputs and/or impacts).</p>
5. External review	<p>Second party opinion: Vigeo Eiris provides the second party opinion on Groupe BPCE's sustainable development bond framework. A second party opinion will be provided also for every new methodology note targeting a new eligible loan category or in case of a substantial change in the use of proceeds for an existing eligible loan category.</p> <p>External verification: Groupe BPCE's reporting will be verified by an external auditor yearly and in case of any material changes to the allocation. The auditor will verify 1. the compliance of eligible loans (re)financed under each methodology note with the eligibility criteria defined in the use of proceeds section of each relevant methodology note; 2. the allocated amount related to the eligible loans (re)financed by green or social bonds and 3. the management of proceeds and unallocated amount.</p>

Source: Groupe BPCE, Vigeo Eiris, ING

Once a year, as long as green or social bonds are outstanding, BPCE will publish reports on: (1) the allocations by eligible project category and for each bond issue some examples of loans refinanced; (2) the yet to be allocated amount; (3) relevant environmental and/or social key performance indicators (outputs/impacts); and (4) assurance report provided by BPCE auditor on the compliance of: (i) the eligible loans with the selection criteria; and (ii) the pending cash allocation.

The group's first covered bond financing green building loans was issued in May 2020 via BPCE SFH

Groupe BPCE published a separate **methodology note for green bonds**, with **green buildings** as eligible loans category in March 2020 and issued its debut green covered bond under this methodology note in May 2020 via BPCE SFH. The group's green bond framework is aligned with the green bond principles defined by ICMA in terms of use of proceeds. Eligible loans financed or refinanced under the methodology note for green buildings should constitute a positive contribution to climate change mitigation through energy savings and stock renewal in the building sector.

Eligible loans are originated from 2017 onwards and belong to the top 15% most carbon efficient buildings in France

Residential and non-residential loans granted for the development of new buildings, the acquisition of existing buildings, or for renovation purposes are eligible. Eligible **green building residential mortgage loans** include single and multi-family housing buildings located in France (excluding second homes), belonging to the top 15% of the most carbon efficient buildings in France. When selecting its green building loans, Groupe BPCE will apply a look-back period of 36 months. As such the eligible portfolio only includes loans originated from 2017 onwards, which automatically means the loans belong to the top 15% most carbon-efficient eligible assets in France.

The French building code RT 2012 requires a primary energy consumption for residential buildings of less than 50 kWh/m²/year. This ceiling of 50 kWh/m²/year is subject to adjustments, based on volumes of greenhouse gas emitted, the purposes for which the buildings are used and their characteristics and geographical locations. It varies from 40kWh/m²/year to 65 kWh/m²/year. This means all new buildings since 2013 achieve a French energy performance certificate (EPC) level of A or B. Besides, the French government considers that its near zero emission building (NZEB) definition matches the present regulation RT 2012, meaning that all new constructions in France since January 2013 are NZEBs. RT 2012 buildings are anticipated to remain in the top 15% most carbon efficient French residential assets until at least 2027. This is based upon annual new construction estimates and CBI estimates that at 1 January 2019 the RT 2012 construction permits represented roughly 7.1% of the French total residential stock.

Fig 5 Groupe BPCE – Green Bond methodology note

Pillar	Details
1. Use of Proceeds	<p>Development & acquisition of buildings:</p> <ul style="list-style-type: none"> Buildings belonging to the top 15% of the most carbon efficient buildings in their respective region. Buildings aligned with European Nearly-Zero-Energy Buildings (NZEB) low consumption building standards corresponding to buildings with a very high energy performance. Buildings with design, post-construction or in-use environmental certification such as LEED: minimum level of “Gold”, BREEAM: minimum level of “Very Good”, HQE: minimum level of “Excellent” Buildings with French energy efficiency labels such as BEPOS Effinergie 2017 (“Bâtiment à énergie positive”), BBC Effinergie 2017 (“Bâtiment Basse Consommation), E+/C- (“Energie Positive & Réduction Carbone”), BBCA (“Bâtiment Bas Carbone”). Buildings achieving a medium or dark green rating as per Natixis green weighting factor methodology. <p>Renovation of existing buildings:</p> <ul style="list-style-type: none"> Loans to support dedicated energy efficiency works (including ECO-PTZ*) such as: HVAC systems renovation and improvement; geothermal energy systems; insulation retrofitting; LED relamping; solar panels installation; heat recovery systems; motion detectors roll-out. Loans dedicated to major renovation or restructuring of existing buildings as per near zero-energy buildings (NZEB) standard or demonstrating at least 30% of energy consumption savings. Loans dedicated to heavy refurbishment aiming at obtaining one or more of the “In-Use” environmental certification or energy efficiency/low-carbon labels listed above. Loans dedicated to energy efficiency retrofits achieving a medium or dark green rating as per Natixis green weighting factor methodology
2. Project Evaluation & Selection Process	<p>Look-back period: Loans granted no more than 36 months prior to a green bond issuance</p> <p>Exclusion: 1. dedicated financings backed by dedicated resources, 2. buildings dedicated to industrial activities with net negative environmental impact, 3. residential buildings outside of primary housing.</p> <p>Eligibility criteria: 1. Loans dedicated to <u>eligible assets</u>: development of new buildings or acquisition of existing buildings, or renovation or dedicated energy efficiency improvement of existing buildings. 2. Loans dedicated to <u>eligible asset types</u>: residential & non-residential. 3. Loans achieving at least one of the dedicated <u>environmental eligibility criteria</u>.</p> <p>Do no harm sustainability objective: <u>Environmental regulation</u> applicable to building construction & refurbishment including: Environmental impact mitigation: biodiversity, local disturbances from construction and exploitation phases, landscape. <u>Client risk assessment</u> (based on KYC and LAB internal processes) including: Business practices’ review: money laundering, corruption, conflict of interest, over-indebtedness. <u>ESG controversies check</u> (sector, client, project) at project approval and / or legal authorization including: a) Local impact mitigation & Stakeholders’ engagement and consultation, b) ESG due diligence process and c) Labour and human rights conformity and social requirements.</p>
3. Management of Proceeds	<p>A committee (via the portfolio management & financial engineering function) ensures the adequate monitoring of the evolution of the green portfolio on a quarterly basis. It also ensures that the issued amount remains significantly lower than the nominal amount of the green portfolio.</p> <p>Green building eligible assets are flagged in the IT systems and matched with the ISIN code of the green building bond. Green bonds can be issued via BPCE, Natixis, SPVs, BPCE SFH or CFF.</p> <p>The treasury collects the net proceeds (re)financing the green assets, which are allocated to existing, ongoing or future eligible assets. To this purpose, the treasury department advances intragroup loans, equal to the amount issued, to the originating entities pro-rata to the eligible assets provided.</p>
4. Reporting	<p>Allocation reporting: Number and amount of loans granted, asset types (%), geography (%), share of financing vs refinancing (%), development & acquisition vs refurbishment of existing buildings (%), rear of construction or last refurbishment (%), average LTV (%) by asset type, environmental certification or energy efficiency label achieved/targeted & year of obtention. For residential assets only: single housing vs multi family (%), number of housing built or refurbished.</p> <p>Impact reporting: Impact indicators will be provided on a case by case basis depending on data availability and statistical analysis will be implemented to assess ex-ante environmental impact if necessary. They include, the estimated annual energy savings (in kWh per sqm/year) and the estimated annual avoided/saved GHG emissions (in tCO₂ equivalent per sqm/year).</p>
5. External review	<p>Vigeo Eiris provides the second party opinion on the green buildings methodology note.</p> <p>PWC will be appointed as external auditor to annually verify the allocation of funds, the compliance in all material aspects, of eligible loans (re)financed with (i) the eligibility criteria, (ii) the allocated amount and (iii) the pending cash allocation under the green buildings methodology.</p>

Source: Groupe BPCE, Vigeo Eiris, ING

Groupe BPCE has €6bn eligible home loans for BPCE SFH against which €1.25bn was issued

A dedicated group committee will ensure the monitoring of the green portfolio on a quarterly basis. It also ensures that the amount issued remains significantly lower than the amount of the green portfolio. Green building eligible assets pledged in favour of BPCE SFH are flagged in the IT systems and matched with the ISIN code of the green building bond. In the past three years, Groupe BPCE has granted €128bn in residential mortgage loans based on end of 1Q20 statistics, of which €11bn are eligible green building loans. Of these loans, €6bn are eligible residential home loans for BPCE SFH. BPCE SFH has issued €1.25bn in green covered bonds against these loans thus far.

Groupe BPCE will report once a year on allocations and impact

Groupe BPCE will **report once a year**, for as long as the green bonds are outstanding on (1) the **allocations** by eligible project category, (2) the share of proceeds allocated to financing or refinancing, (3) the yet to be allocated amount of cash or cash equivalents and (4) the relevant environmental and/or social key performance indicators (**impacts**).

More specifically, the **allocation report** will detail the number and amount of loans granted, the asset types (%), geography (%), share of financing vs refinancing (%), development & acquisition vs refurbishment of existing buildings (%), year of construction or last refurbishment (%), average LTV (%) by asset type, and the environmental certification or energy efficiency label achieved or targeted. For residential assets information will also be provided on single housing vs multifamily assets (%) and on the number of housing built or refurbished. The **outputs and impact report** provides impact indicators on a case-by-case basis depending on data availability. A statistical analysis will be implemented to assess the ex-ante environmental impact if necessary. These include the estimated annual energy savings and the estimated annual GHG emissions avoided.

Vigeo Eiris is the second party opinion provider

Vigeo Eiris, as the **second party opinion** provider on the green buildings methodology note, has confirmed that the green bonds are issued conform Groupe BPCE's sustainable development bond programme and methodology note for green buildings. Vigeo Eiris is also of the opinion that the bonds are aligned with the four core components of the green bond principles (2018). An **external auditor** annually verifies the allocation of funds and the compliance of the eligible loans (re)financed with: (i) the eligibility criteria; (ii) the allocated amount; and (iii) the pending cash allocation under the green buildings methodology note.

Caisse Française de Financement Local (CAFFIL) Social Covered Bonds

CAFFIL issued its first social covered bond in February 2019 and the first Covid-19 bond in April 2020

The SFIL Group issued its first social covered bond in February 2019 via Caisse Française de Financement Local (CAFFIL), SFIL Group's subsidiary responsible for the issuance of covered bonds secured by public sector loans. It was the first sustainable bond issued from France in covered bond format and also the first social bond in Europe fully dedicated to financing public hospitals.

In April this year, CAFFIL had another primer, by issuing the first sustainable covered bond, with proceeds used to finance Covid-19 related hospital loans, which the group anticipates will make up a large share of its lending to the public sector in 2020. The bond was issued under SFIL Group's existing social bond framework, and underscores the group's intentions to make the regular issuance of social and green bonds an integral part of its funding programme.

SFIL Group can issue social covered bonds via CAFFIL or social unsecured bonds via SFIL

SFIL Group's social note framework provides for the possibility to issue social bonds either in covered bond format via CAFFIL (social covered bond), or as direct, unconditional, unsecured and unsubordinated obligations of SFIL (social bond). The net proceeds of the social bonds will be used to refinance or finance the eligible health loan portfolio on the balance sheet of CAFFIL. As such, if the social bonds are issued in senior format by SFIL, the funding would be passed on to CAFFIL.

The eligible social loan portfolio consists of public hospital loans

The health loan portfolio consists of all **public hospital loans** financed by SFIL Group since 2013 in accordance with the French public hospital policy as defined by the French law in the Code de la Santé Publique. The loans contribute to public hospital sector responsibilities, including the provision of public health services to the whole population, research to continually improve care and develop new treatments and to the training of doctors, midwives, pharmacists, dentists, healthcare executives, nurses, etc.

Fig 6 Caisse Française de Financement Local – Social Covered Bond Framework

Pillar	Details
1. Use of Proceeds	<p>The net proceeds of the social bond issues will be used to finance and/or refinance in whole or in part the eligible health loan portfolio. This portfolio consists of all existing and future public hospital loans originated by SFIL Group since 2013 in accordance with the French public hospital policy as defined the French Law in the Code de la Santé Publique and contributing to the public hospital sector responsibilities, including:</p> <ul style="list-style-type: none"> • Provisions of public health services for the whole population, regardless of the income, social or financial status, at any time, for all medical and surgical specialties, all diagnostic and therapeutic possibilities, including rare diseases or extremely expensive, complex and long-term treatments; • Research to continually improve care and develop new treatments; • Training of doctors, midwives, pharmacists, dentists, healthcare executives, nurses, etc. <p>French law specifically requires public hospitals to provide support to vulnerable populations. Public hospitals are a key tool of French health care policy which has as a key objective to reduce social inequalities, gender inequality and regional inequalities. Public hospitals also have the mission to make necessary medical treatment available to each and every person on a continuous basis. People in situation of hardship have full access to medical services, even free of charge if they are not insured. Healthcare has to be provided across all territories in France, including the most isolated regions.</p>
2. Project Evaluation & Selection Process	<p>Before the French public hospital loan is approved for transfer to SFIL, the credit risk department performs a two-step credit analysis: (1) the financial analysis of the public hospital, (2) the extra-financial analysis of the public hospital.</p> <p>The credit risk department performs the extra-financial analysis to assess the healthcare added value (HAV) of the public hospitals, estimated as the quality of medical coverage provided to all populations in all areas in France. To this purpose an internal propriety scoring methodology was developed that allows to calculate a HAV in four medical specialties: (1) medicine, surgery and obstetrics (MCO), (2) psychiatrics (PSY), (3) follow up and rehabilitation care (SSR) and (4) elderly care (PPA). There is no minimum HAV threshold, but the volumes of credit made available to any French public hospital will be higher for hospitals with high HAV scores.</p> <p>The credit risk committee, comprised of the CEO, CFO, CRO and internal audit, will take the important loan decisions and will also review all credit risk procedures and methodologies relating to public hospitals. The head of investor relations coordinates and maintains the report on the health loan portfolio (identification of public hospitals, HAV score, lending outstanding). Senior management of the SFIL Group treasury & financial markets department (TMF) is fully involved in the process.</p>
3. Management of Proceeds	<p>SFIL Group has internal systems to track the use of proceeds of the social bond and a register to monitor the health loan portfolio.</p> <p>The total amount of social bonds should always be lower than the size of the health loan portfolio.</p> <p>Unallocated social bond proceeds will be invested in money market products per SFIL's treasury policy.</p>
4. Reporting	<p>Allocation reporting: available within one year from the date of each social bond issuance and annually thereafter until the net proceeds have been fully allocated a) on the total amount of proceeds allocated to the health loan portfolio, b) the number of loans in the health loan portfolio and c) the average lifetime of the loans.</p> <p>Impact reporting: annually, on a best effort basis and until full allocation, on social impact indicators of the health loan portfolio. Information will be presented in generic terms or on an aggregate portfolio basis (eg, percentage allocated on a regional basis).</p> <p>The following indicative reporting indicators may be used: (a) number of places (medical treatments of less than one day) and beds (hospitalization for more than one day), (b) number of hospital stays (number of visits in the hospital within one day or over several days). SFIL may also provide examples of French public hospital investments financed (in part) by the social bond.</p> <p>The allocation and impact report are made available via the website of SFIL. There will be one single annual reporting for all social bond issuances under the social note framework.</p>
5. External review	<p>Second party opinion: Sustainability assesses the sustainability, transparency and governance of the social note framework and its compliance with the ICMA social bond principles 2018.</p> <p>External verification: SFIL Group's auditors will verify the allocation of the social bond net proceeds to the health loan portfolio on an annual basis, starting within one year after issuance until full allocation.</p>

Source: SFIL, Sustainability, ING

Project evaluation and selection takes place via a **two-step process** to assure financing is directed to where it provides high additional value.

- Under the first step, the **regional healthcare agencies** are responsible for the coordination of the different investment plans of public hospitals and for the allocation of the related budget to the different public healthcare organisations. These regional health agencies review and validate the hospital's yearly budget and

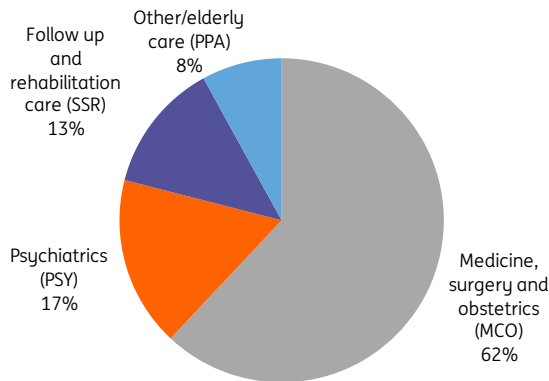
long-term financing plan. After the financing decision was taken at the regional healthcare agencies' level, SFIL may refinance the loans to public hospitals.

- As a second step, before the French public hospital loan is approved for transfer to SFIL, the **credit risk department performs a two-step credit analysis**: (1) a financial analysis of the public hospital; and (2) the extra-financial analysis of the public hospital in order to assess the healthcare added value (HAV) of the hospital. The credit committee decides on the loan applications based upon this analysis.

The amount of social bonds outstanding should be lower than the health loan portfolio

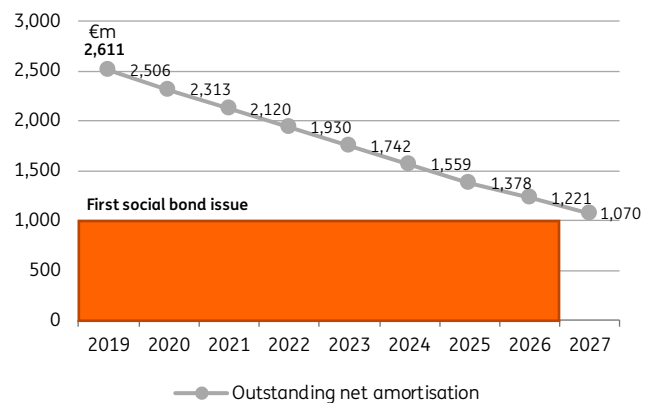
SFIL Group will manage the social bonds with a **portfolio approach**, making sure that the total amount of social bonds outstanding is always lower than the size of the health loan portfolio. Pending the full allocation of the net proceeds to the health loan portfolio, SFIL Group will keep record of the remaining balance of unallocated social bond proceeds and will invest the unallocated amounts in money market products per the group's treasury policy. Internal systems track the use of proceeds of the social notes, while a register was established to monitor the health loan portfolio.

Fig 7 Scope health loan portfolio: 171,479 beds & places



Source: SFIL allocation and impact reporting February 2020, ING

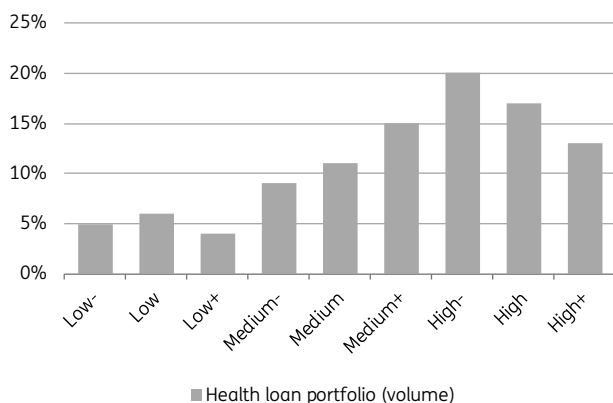
Fig 8 Estimated amortization health portfolio June 2019



Source: SFIL allocation and impact reporting February 2020, ING

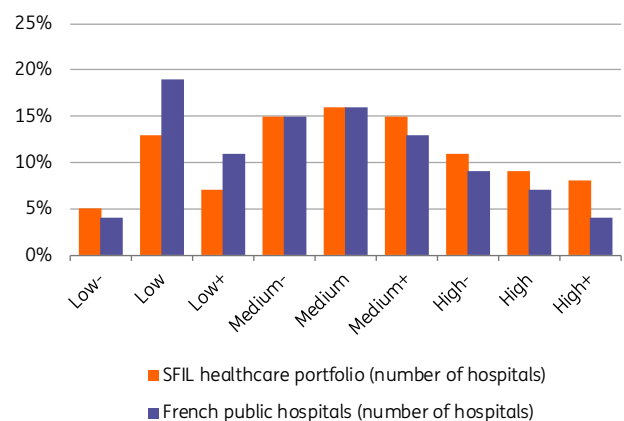
The SFIL Group will make the **allocation report available within one year** from the date of each social bond issuance and annually thereafter until the net proceeds have been fully allocated. The allocation report will contain information on: (a) the total amount of proceeds allocated to the health loan portfolio; (b) the number of loans in the health loan portfolio; and (c) the average lifetime of the loans. The SFIL Group also intends, on a best effort basis, to report annually and until full allocation on **social impact indicators** of the health loan portfolio, such as the number of places and beds and the number of hospital stays. Both reports will be made available via the SFIL website.

Fig 9 Distribution health loan portfolio by HAV score



Source: SFIL allocation and impact reporting February 2020, ING

Fig 10 HAV comparison versus French public hospitals



Source: SFIL allocation and impact reporting February 2020, ING

The first allocation and impact report for the group's social bond programme was published in February 2020. Per 30 June 2019, the health loan portfolio was €2.6bn in size against, at that time, €1bn in social covered bonds issued. The bond proceeds were fully allocated, financing 254 public hospitals. The public hospitals financing covers 171,479 beds and places and over 9,045,883 hospital stays across all French regions and 91 departments. Of the total health loan portfolio volume, 50% has a 'high' healthcare added value (HAV) score against 15% a 'low' score. Besides 28% of the hospitals in SFIL Group's healthcare portfolio has a 'high' HAV score against 20% for the whole French public hospital sector.

Green Covered Bonds

SFIL Group established its green bond framework in 2019

The SFIL Group established its **green bond framework** in October 2019 with a main purpose to finance green investments by French local authorities via the regular issuance of green bonds. At the same time, the green issuance would provide investors with the opportunity to contribute to the financing of green investments. The green bond framework was established in line with the ICMA's green bond principles (2018), with the objective to align the framework with future updates to the green bond principles and the EU taxonomy and green bond standard on a best effort basis.

CAFFIL issued its first green public sector covered bond in November 2019

The green bond framework defines green bonds as: (a) green covered bonds (obligations foncières) issued by CAFFIL; or (b) green senior bonds issued by SFIL, with SFIL in turn providing funding to CAFFIL. CAFFIL issued its **first green public sector covered bond** with a 10yr maturity in November 2019. The issuer had the ambition to use the debut green bond's proceeds to finance at least one third of new lending to green projects and to refinance a maximum of two thirds of existing green loans.

Proceeds are used to (re)finance five different loan categories

The bond proceeds are allocated to eligible loans that stretch well beyond the traditional green building loans common for green mortgage covered bonds. Namely, the proceeds are used to finance or refinance eligible **green loans in five categories**, which match some of the key areas of green investments by local authorities in France in social infrastructure and environmental protection:

- Territorial mobility and soft urban transport;
- Sustainable water and sanitation and climate change adaptation;
- Waste management and valuation;
- Energy efficiency of construction and urban development;
- Renewable energy.

For some of its eligible loan categories (ie, second and third) the SFIL Group has chosen a twofold approach where proceeds are used: (a) to finance **specific projects** that meet the eligibility criteria; or (b) to finance **"pure player" French local authorities** for whom the relevant activities fit the green bond framework's accepted green activities (such as French water authorities).

The eligible green loans contribute to **five of the six sustainability objectives identified in the taxonomy** proposals adopted by the European Parliament in March this year, ie, (1) climate change mitigation, (2) climate change adaptation, (3) sustainable use and protection of water and marine resources, (4) transition to a circular economy, waste prevention and recycling, and (5) pollution prevention and control. Only (6) pollution of healthy ecosystems, is not addressed by the framework.

Besides, the green bond framework targets **six** of the United Nations **Sustainable Development Goals** (SDGs), including SDG 6 – Clean water and sanitation, SDG 7 – Affordable and clean energy, SDG 9 – Industry, innovation and infrastructure, SDG 11 – Sustainable cities and communities, SDG 12 – Responsible consumption and production and SDG 13 – Climate action.

Fig 11 Caisse Française de Financement Local – Green Covered Bond Framework

Pillar	Details
1. Use of Proceeds	<p>The net bond proceeds will be used to (re)finance eligible green loans in the following categories:</p> <ol style="list-style-type: none"> Territorial mobility and soft urban transport: Individual transportation: a) individual transportation vehicles (light duty and heavy good 100% electric vehicles, related charging stations, and electric and conventional bikes), b) schemes for public access to bicycles and electric cars, c) bicycle paths. Mass transportation: a) public transportation infrastructures (subway stations and rails, tramway lines, electric trains and busses, etc.), b) maintenance/refurbishment of mass transportation infrastructures (rail networks, stations modernization, etc.) and c) support to public transit infrastructures. Sustainable water and sanitation and climate change adaptation: a) financing of investment expenses of French water authorities (agencies 100% dedicated to water resources and infrastructures management), b) projects supporting water quality, efficiency and conservation (water supply network, water treatment infrastructure and plants, transport and cleaning of wastewater, sanitation and dredging of waterbeds, reduction in water losses in water transfers or distributions), and c) improving coastal resilience against climate change effects (flood protection/defences). Waste management and valuation: a) financing of investment expenses for waste management (i.a. public 100% waste management companies) and b) projects supporting sustainable waste management (waste prevention and recycling, collection of municipal waste and energy recovery). Energy efficiency of construction and urban development: Green buildings: i. New construction of buildings that comply with the following eligibility criteria: a) compliance with the NZEB standard for France or belonging to the top 15% of most energy efficient buildings in the corresponding local market, b) with at least one of the following environmental certificates/labels: LEED Gold or above, HQE Excellent or above, BREEAM Very Good or above; BePOS, E+/C-, BBC Effinergie +, BBCA, HPE, THPE. ii. Major renovation or restructuring of existing buildings that comply with the following eligibility criteria: a) heavy refurbishment as per NZEB standard for France, or demonstrating at least 30% energy consumption savings, b) heavy refurbishment aiming at obtaining one or more of the aforementioned environmental certification/labels. Energy efficiency: Investments in energy efficiency works demonstrating at least 20% energy consumption savings or in the objective to obtain at least one of the above-mentioned environmental certification/labels (HVAC system renovation and improvement, geothermal energy systems, insulation retrofitting, solar panels, heat recovery systems, LED lamping). Renewable energy: Acquisition, development, operation and maintenance of new and ongoing renewable energy activities (onshore/offshore wind projects, solar projects, geothermal power plants with direct emissions <100g CO₂e/kWh, hydropower plants, biomass plants). <p>Exclusionary criteria: a) thermal or hybrid engines for individual vehicles or mass transportation; b) nuclear power plants, c) fossil fuel based heating systems, d) fossil fuel projects (incl. natural gas projects or energy efficiency in fossil-based projects), e) large-scale hydropower plants (over 20MW generation capacity), f) industrial and non-conventional waste (chemicals, nuclear, toxic waste), g) landfills and/or waste incineration without energy recovery mechanism.</p>
2. Project Evaluation & Selection Process	<p>The green loans to French local authorities are originated via the network of La Banque Postale and transferred to SFIL. La Banque Postale offers the green loans for the financing of environmental projects to French local authorities. Loans are flagged in the information system based on the eligibility criteria. The back office verifies at first whether the information is sufficient for classification as green loan. SFIL verifies and validates the classification as eligible green loan at the time of transfer.</p> <p>A green bond committee of SFIL Group's head of markets activities, head of funding & treasury, head of investor relations and head of local public sector loan middle office, will monitor the project selection and evaluation process according to the eligibility criteria. The committee meets at least twice a year.</p>
3. Management of Proceeds	<p>An internal system will track the use of proceeds, while eligible green loans will be monitored by a register established by SFIL Group. The green bonds will be managed with a transaction by transaction approach (each transaction is allocated to a dedicated set of green loans).</p> <p>SFIL Group will maintain a record of unallocated green bond proceeds which will be invested as per SFIL's treasury policy. If a loan ceases to fulfil the eligibility criteria SFIL Group will make its best efforts to remove the loan from the register and replace it when necessary as soon as possible.</p>
4. Reporting	<p>Allocation reporting: Available within one year after each green bond issue and annually thereafter until the net proceeds have been fully allocated, and timely in the case of material developments.</p> <p>The report will provide: a) the total amount of proceeds allocated to each green bond by the eligible green loan category, b) the number of eligible green loans, c) the average lifetime of the loans, d) the financing/refinancing split, e) the pending proceeds allocations, and f) geographical split of loans.</p> <p>Impact reporting: Annually and until full allocation, on a best effort basis, on the environment impact of the eligible green loans (generic or on an aggregated project category basis).</p> <p>Impact reporting metrics may include i.a. a) tons of CO₂e avoided, b) increase wastewater treatment capacity, c) increase in household waste used for recycling and energy generation, d) reduction of energy consumption (kWh/year), or e) renewable energy production.</p>
5. External review	<p>Sustainalytics is selected as second party opinion provider, to assess the sustainability, transparency and governance of the green bond framework and its alignment with the ICMA's green bond principles (2018). Sustainalytics will also review any material changes to the green bond framework.</p> <p>Within one year after issuance and until full allocation of the proceeds, an independent third party will annually verify a) the net proceed allocation to the green loan portfolio, and b) the loan compliance with the eligibility criteria, the management of proceeds and unallocated proceeds amount.</p>

The framework also identifies a sub-set of exclusionary criteria

The framework also identifies a sub-set of **exclusionary criteria**. These include thermal or hybrid engines for individual vehicles or mass transportation, fossil fuel based heating systems, fossil fuel based projects, large-scale hydropower plants, industrial and non-conventional waste and landfills without energy recovery mechanism and/or waste incineration without energy recovery mechanism.

Each eligible green loan is linked to one specific green bond to which it remains associated

SFIL Group manages the green bonds with a transaction by transaction approach, ensuring that each transaction is allocated to a dedicated set of eligible green loans. Each eligible green loan is flagged to a specific green bond and will remain associated with this specific issue until maturity. Pending the full allocation of the net proceeds, a record is kept by SFIL Group of the remaining balance of unallocated proceeds. These unallocated proceeds are invested in money market products per SFIL's treasury policy.

An allocation and impact reporting will be made available within a year of the date of each green bond issuance and annually thereafter until the net proceeds have been fully allocated. The **allocation report** will provide information on the total proceeds allocated to green bonds by eligible project category. It will also give insight into the number of eligible loans associated with each green bond, the average lifetime of the loans, the split between financing and refinancing, the proceeds that have not been allocated yet and the related type of temporary investments on a best effort basis. Regarding the annual **impact report**, SFIL will try to harmonize its reporting information with the ICMA's recommendations and the EU green bond standard.

Crédit Agricole

Crédit Agricole can issue green senior and covered bonds under its green bond framework

Crédit Agricole's **green bond framework** dates from November 2018 and allows for the issuance of green bonds via all the group's entities, including Crédit Agricole S.A., the Crédit Agricole regional banks, and their subsidiaries and refinancing vehicles. Green bonds can be issued in public or private placement format, as senior unsecured bonds (non-preferred and preferred) or as secured bonds (covered bonds, ABS and RMBS).

The proceeds of the green bonds will be used to finance and re-finance, in whole or in part, loans and investments that provide clear environmental benefits in line with the group's climate finance strategy and sector policies. In principle, Crédit Agricole S.A. will allocate the bond proceeds to assets on its own balance sheet or on the balance sheet of other group entities, whereas other group issuers will allocate the proceeds solely to eligible green assets booked on their own balance sheet. As such, for the group entities issuing covered bonds, such as Crédit Agricole Home Loan SFH and Crédit Agricole SCF, the eligible green assets may also be included in the cover pool.

The green portfolio should always exceed the outstanding green bonds

The eligible green asset portfolio comprises all the eligible green assets earmarked by each group entity and is consolidated at group level. The green portfolio should always exceed the amount of outstanding green bonds issued by all entities. The green bond proceeds can be allocated to the following eligible categories:

- Renewable energy;
- Green buildings;
- Energy efficiency;
- Clean transportation;
- Waste and water management;
- Sustainable agriculture and forest management.

These categories each contribute to one or more of the six sustainability objectives defined by the EU taxonomy:

- Climate change mitigation (category 1-6);
- Climate change adaptation (category 5);
- Sustainable use and protection of water and marine sources;
- Transition to a circular economy;
- Pollution prevention and control (category 5);
- Protection and restoration of biodiversity and ecosystems (category 6).

Fig 12 Crédit Agricole – Green Bond Framework

Pillar	Details
1. Use of Proceeds	<p>Green bond proceeds are earmarked to the following eligible categories:</p> <ol style="list-style-type: none"> Renewable energy: Loans to finance equipment, development, manufacturing, construction, operation, distribution and maintenance of renewable energy generation sources, ie, onshore and offshore wind energy, solar energy, geothermal energy (direct emissions $\leq 100\text{g CO}_2\text{e/kWh}$), biomass energy (direct emissions $\leq 100\text{g CO}_2\text{e/kWh}$), and waste-to-energy (methanation unit). Green buildings: a) Residential: Loans or investments to finance new or existing residential buildings aligned with current environmental regulation and belonging to the top 15% of the most carbon efficient buildings ($\text{kg CO}_2\text{e/m}^2$) in their respective countries. b) Commercial: Loans to finance new or recently constructed buildings belonging to the top 15% of the most carbon efficient buildings ($\text{kg CO}_2\text{e/m}^2$) in their respective countries or that have obtained the following green building certifications (or equivalent): LEED \geq "Gold", BREEAM \geq "Very Good", HQE \geq "Very Good". Energy efficiency: a) Improving building energy efficiency: loans to finance energy efficiency works, ie, central heating systems renovation, hydraulic pumps, solar panels, etc. b) Electricity consumption optimisation: loans to finance equipment, development, acquisition and maintenance of electric equipment fleet. c) Energy efficiency in distribution: loans to finance energy distribution networks, exclusively required for connecting or supporting the integration of renewable energy (smart grids, district heating networks (i.a. geothermal heating pumps) and energy storage systems). Clean transportation: a) Clean vehicles: loans to finance light or heavy private electric vehicles, clean maritime transport vehicles, rolling stock (electric trains), excluding those used for fossil fuels transport. b) Public transportation: loans to finance public transportation and maintenance of transport infrastructure and network. c) Transport infrastructures: loans to finance infrastructure dedicated to low carbon transport (charging infrastructure electric vehicles, railway extensions, low carbon dedicated IT infrastructure and signalling, communication tools). Waste and water management: Loans to finance water and waste management projects, ie, water recycling and waste water treatment facilities, water distribution systems with improved efficiency/quality, urban drainage systems, flood mitigation infrastructure and water storage facilities. Sustainable agriculture and forest management: Loans to finance sustainable management of natural resources, ie, certified forests (FSC, PEFC or eq.), certified organic agriculture (EU, bio) and investments in protected areas (regional natural parks).
2. Project Evaluation & Selection Process	<p>Green eligible assets comply with the group's standard credit process, including any regulatory environmental and social requirements. A dedicated ESG analysis is performed at each business entity. A green bond committee manages the project evaluation and selection. It meets at least quarterly and includes the heads of Crédit Agricole Group CSR, Group Treasurer and medium/ long-term funding team, and senior manager from the regional banks and entities contributing to the green portfolio.</p> <p>A green project group, under supervision of the green bond committee, identifies the potential eligible green assets, and meets on a regular basis and upon request of any relevant group entity. It advises the group entities on identification of eligible green assets in the internal information system. The relevant group entities pre-select potential eligible green assets, to be submitted to the green bond committee. The green bond committee verifies the eligibility of the assets and selects the green portfolio. The group entities CSR teams monitors the ESG controversies on an ongoing basis.</p>
3. Management of Proceeds	<p>Crédit Agricole's treasury and medium/long term funding team monitors the allocation of the proceeds to the eligible green assets and manages the green portfolio. The allocation of green bond proceeds is tracked until maturity via an internal information system. The green bond committee ensures quarterly that the funds raised via green bonds, together with third party green funding, is lower than the eligible assets in the green portfolio. The amount of the green portfolio will always exceed the green bonds issued by 30%, meaning that redeemed assets are replaced.</p> <p>Pending the full allocation of proceeds or in the case of insufficient eligible green assets, Crédit Agricole commits to hold the funds in the group's treasury in accordance with the group's internal policy, and to the extent possible invest them in green bonds.</p>
4. Reporting	<p>Allocation reporting: Crédit Agricole will publish an annual report on the use of the net green bond proceeds until maturity. This report will detail a) the total amount of green bonds issued at group level and by each relevant entity, b) the net green bond proceeds allocated to the green portfolio, c) a breakdown of the green portfolio by eligible assets, geographical location, and by group entity, d) the potential amount of unallocated proceeds. Crédit Agricole intends to communicate the average origination timeframe of the eligible green assets for each entity. The allocation reporting of the group entities will also be integrated in the Crédit Agricole S.A. allocation reporting.</p> <p>Impact reporting: Annual on the environmental impact of the green portfolio via indicators aggregated by category/entity, ie, for residential green buildings the energy performance level ($\text{kWh/m}^2\text{/year}$), the energy savings ($\text{MWh/year}$) and the GHG emissions avoided ($\text{tCO}_2\text{e/year}$).</p>
5. External review	<p>Second party opinion: Vigeo Eiris provides the second party opinion on the green bond framework.</p> <p>External verification: Crédit Agricole S.A. will request a limited assurance report on the main features of its green bond reporting by an external auditor in the context occasion of the group's annual report.</p>

Source: Crédit Agricole, Sustainalytics, ING

Crédit Agricole Home Loan SFH issued its debut green covered bond in November 2019

In November 2019, Crédit Agricole Home Loan SFH issued its **debut green covered bond**, after further detailing the eligibility criteria for the green residential real estate assets for its green covered bonds in a separate appendix to the group’s green bond framework.

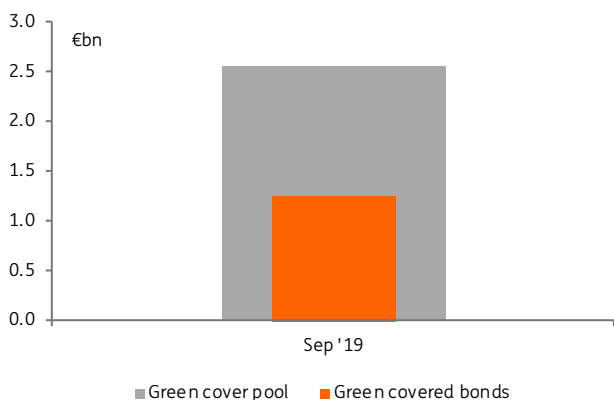
The green real estate assets are defined as loans or investments to finance new or existing residential buildings aligned with the current environmental regulation and belonging to **the top 15%** of the most carbon efficient buildings. Home loans financing newly built residential buildings with first drawings after 1 January 2017 are eligible for the SFH green cover pool. The January 2017 cut-off date assures that the proceeds of the green covered bonds are allocated to home loans that finance buildings compliant with the RT 2012 energy performance regulation for new construction starting 2013. Buildings that meet the RT 2012 are EPC class A-B and belong to the top 15% efficient buildings. Crédit Agricole estimates that A-B class buildings have a share below 12%.

Eligible green real estate assets include EPC class A-B residential buildings newly built since 2017

The four-year timespan accounts for the maximum potential lag of four years between the building permit delivery and the grant date of the home loan, to be certain that the building has actually been built in line with RT 2012 standards. The eligibility criteria explain that building permits delivered until 1 January 2016 had a validity period of two years which could be extended twice for an additional year. This approach is slightly different to the positive impact covered bond of Société Générale SFH issued in July. This particular issuer also selects loans compliant with the RT 2012, but applies a two-year time lag to ensure the properties selected are compliant with RT 2012, ie, loans first drawn after 1 January 2015 are selected.

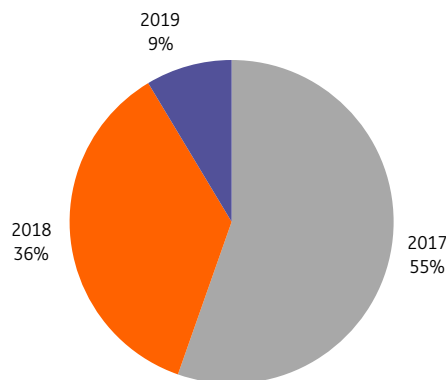
Crédit Agricole’s **green bond committee** is responsible for the evaluation and selection of the eligible assets. The committee ensures on a quarterly basis that the total amount of funds raised via green bonds, together with dedicated third-party green funding, is lower than the amount of eligible assets in the green portfolio. The issuer furthermore commits to maintaining a 30% buffer between the green portfolio and the green bonds issued, meaning that amortised or redeemed assets are replaced by new eligible assets. **Unallocated proceeds** will be held by Crédit Agricole within the group’s treasury in accordance with the group’s internal general policy. To the extent possible these proceeds will be invested in green bonds.

Fig 13 Green cover pool exceeds green covered bonds 2x



Source: Crédit Agricole green covered bond investor presentation, ING

Fig 14 Breakdown green cover pool by year of drawing



Source: Crédit Agricole green covered bond investor presentation, ING

Crédit Agricole will publish an annual report on the use of the net green bond proceeds until maturity. It also publishes an **impact report**. The **allocation reporting** of Crédit Agricole Home Loan SFH will be integrated in Crédit Agricole S.A.’s allocation reporting. In November 2019, Vigeo Eiris provided a second party opinion dedicated to the SFH Home Loan assets, expressing the opinion that the green covered bonds of Crédit Agricole Home Loan SFH are aligned with the four core components of the GBP guidelines. Crédit Agricole will also request a limited assurance report on the main features of its green bond reporting by an external auditor in the context of the group’s annual report.

At the end of September 2019, ie, ahead of the inaugural green covered bond issue, Crédit Agricole's Home Loan SFH had a green cover was €2.5bn in size to which the proceeds from the €1.25bn green covered bond could be allocated (Figure 13). The pool was for 55% comprised of loans originated in 2017, 36% in 2018 and 9% in 2019 (Figure 14). Of these loans 68% represents loans for houses and 32% for apartments.

Société Générale

Société Générale SFH issued its first positive impact covered bond in 2019

In June 2019, Société Générale SFH published its positive impact covered bond framework, subsequently launching its first positive impact covered bond in July of that year. It was the first covered bond printed by a French issuer in green format. The net proceeds from the positive impact covered bonds issued under this framework are used to (re)finance green residential mortgage loans.

Green residential mortgage loans are originated against dwellings constructed since 2015

External green real estate consultant Wild Trees has defined the eligibility criteria for residential buildings in France for Société Générale. Green residential mortgages are defined as those belonging to the top 15% low carbon buildings in the region. Due to their better energy performance, new dwellings constructed under the French RT 2012 requirements are seen as the most efficient French buildings in terms of energy use (top 15%). Eligible mortgages are located on the French mainland. Offshore territories (DOM TOM) are excluded because their energy performance data cannot be compared with the French mainland due to climate differences. Only owner-occupied dwellings are eligible as secondary residences often have a less favourable energy usage. The look-back period for the eligible loans under the RT 2012 standards will incorporate loans with an initial drawdown starting after 1 January 2015. This is a bit less stringent than market practices that apply a look-back period of maximum 36 months.

Eligible loans should offer a positive contribution to one of the sustainable development pillars

The eligible loans should offer a positive contribution to one of the three sustainable development pillars: (1) economic convergence; (2) populations' basic needs; and (3) the environment. Only loans with a positive impact on climate change that at the same time sufficiently manage potential negative environmental and social externalities (ie, negative impacts on the three development pillars) are considered as eligible.

The positive impact covered bonds are anticipated to contribute to one of the six environmental objectives identified in the EU taxonomy, namely climate change mitigation. They also contribute to two of the United Nations sustainable development goals, namely SDG 7 - Affordable and clean energy and SDG 13 - Climate action.¹

A positive impact covered bond committee has been created to ensure compliance with the framework and to oversee the issuance process. Société Générale SFH promised to reach, at issuance, a total portfolio of eligible loans that at least matches the net proceeds from the positive impact covered bonds. If during the life of the covered bonds loans are removed from the pool of eligible loans, for instance due to amortisations or redemptions of the loans, Société Générale SFH also commits, on a best effort basis, to reallocate immediately the equivalent amount of proceeds to other eligible loans.

Changes to the positive impact framework will not impact outstanding covered bonds

New positive impact covered bonds will be aligned with the most recent positive impact framework. Changes made to the positive impact covered bond framework after issuance will not apply to outstanding positive impact covered bonds (**grandfathering**). As such eligible loans should meet the eligibility criteria applicable at the time they are selected and don't lose their eligibility if they do not meet subsequent criteria updates.

¹ In 2015 the United Nations adopted 17 sustainable development goals (effective as per 1 January 2016) for its 2030 agenda for sustainable development. These goals include: 1) no poverty, 2) zero hunger, 3) good health and well-being, 4) quality education, 5) gender equality, 6) clean water and sanitation, 7) affordable and clean energy, 8) decent work and economic growth, 9) industry, innovation and infrastructure, 10) reduced inequalities, 11) sustainable cities and communities, 12) responsible consumption and production, 13) climate action, 14) life below water, 15) life on land, 16) peace, justice and strong institutions, 17) partnerships for the goals.

Fig 15 Société Générale – Positive Impact Covered Bond Framework

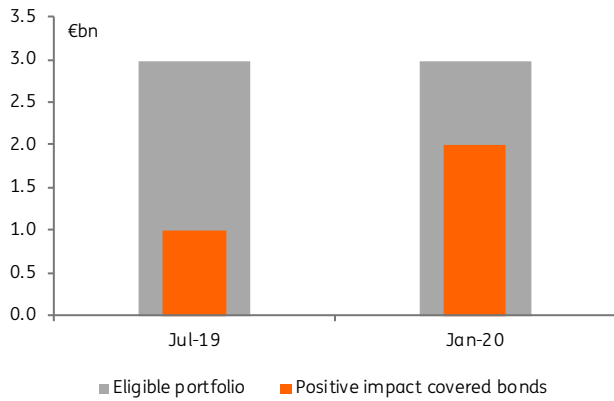
Pillar	Details
1. Use of Proceeds	<p>The net proceeds of the positive impact covered bond will be used to finance or refinance green residential mortgages, based upon the following eligibility criteria:</p> <p>Green residential mortgages, include new residential buildings belonging to the top 15% low carbon buildings in their region. Eligible green residential mortgages (single and multi-family dwellings) are located in metropolitan (ie, mainland) France, owner occupied and compliant with the thermal regulation RT 2012. Secondary residences, or residences at offshore territories are excluded due to their unfavourable energy usage or lack of comparability due to climate differences respectively. There is alignment with the Climate Bond Initiative Standards for low carbon residential properties.</p>
2. Project Evaluation & Selection Process	<p>A positive impact covered bond committee has been created to ensure compliance with the framework and to oversee the issuance process. The committee is composed of representatives from Société Générale Group treasury (incl. the SG SFH team), corporate and social responsibility, internal environmental and social experts, loan originators. The SG SFH team within the group treasury is in charge of identifying the eligible green loans. Once the portfolio of eligible loans is duly selected, it is validated by the positive impact covered bond committee.</p> <p>The positive impact assessment process follows a three step approach: 1) identification: a first level of positive impact of an investment or of client activities is established via the identification of potential negative impacts on the three sustainable development pillars and of positive impacts at least on climate; 2) evaluation: a positive impact evaluation confirms or invalidates the first qualification of positive impact finance loans, by assessing negative and positive environmental and social impacts and assessing how negative impacts are addressed (only loans with well-managed negative impacts combined with positive ones are determined as positive impact), and 3) action: the positive impact on the climate change is estimated based on a methodology developed with the support of Wild Trees, which takes into consideration the management of potential negative externalities:</p>
3. Management of Proceeds	<p>The net bond proceeds will be managed by SG SFH's team within Société Générale Group's treasury. Subsequent changes to the positive impact covered bond framework will not apply to outstanding positive impact covered bonds (grandfathering). Eligible loans must meet the eligibility criteria at the time they are flagged as eligible loans and don't lose their eligibility if they do not meet the new criteria. New positive impact covered bonds will be aligned with the most recent positive impact framework.</p> <p>SG SFH commits to reach at issuance a total amount of loans and investments related to the eligible loans that matches or exceeds the balance of net proceeds from the outstanding positive impact covered bonds. During the life of the bonds, eligible loans will be added or removed from the pool to the extent required. In the case of loan removals, SG SFH commits on a best effort basis, to reallocate immediately the equivalent amount of proceeds to other eligible loans.</p>
4. Reporting	<p>An allocation and impact reporting will be produced annually and until the maturity of the bonds, and is intended to be updated upon any material event that would affect the portfolio of eligible loans. The report will be presented on a portfolio basis and intends to include climate impact metrics such as the estimated ex-ante annual energy saving (MWh) and GHG emissions in tons of CO₂ equivalent saved.</p>
5. External review	<p>Second party opinion: Vigeo Eiris conducts an external review of the positive impact covered bond framework and issues a second party opinion on the framework's environmental credentials and its alignment with the principles for positive impact finance and the green bond principles.</p> <p>External verification: A limited or reasonable assurance report is provided by an external auditor or any other appointed independent third party, where the allocated and unallocated proceeds, the compliance of the eligible loans with the defined eligibility criteria and, the review of the impact reporting is verified.</p>

Source: Société Générale, Sustainalytics, ING

An **allocation and impact report** will be made available on an annual basis until the maturity of the bonds. The reporting will be on a portfolio basis and is intended to include climate impact metrics such as the ex-ante annual energy savings in MWh and the annual GHG emissions in tons of CO₂ equivalent saved. Related to its first positive impact covered bond, Société Générale SFH published a positive impact covered bond report on the portfolio of eligible loans at Société Générale SFH at 31 May 2019. At that time the issuer had almost €3bn eligible loans of which 44% was originated in 2015 and 2016, and 56% thereafter until the portfolio cut of day (Figures 16 and 17). These dwellings avoid 15,926 GHG emissions and provide for an annual energy saving of 90,696 MWh per year. Meanwhile, Société Générale SFH has issued €2bn in positive impact covered bonds against its eligible loan portfolio.

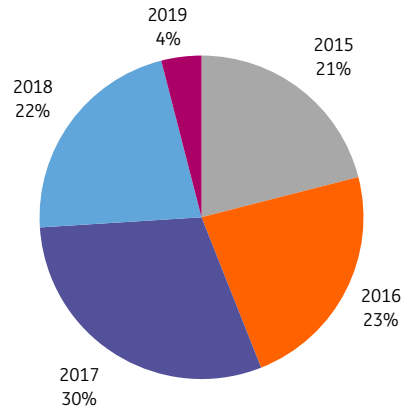
Vigeo Eiris (**second party opinion (SPO)** provider) has confirmed the alignment of the positive impact covered bond framework with a) the principles for positive impact finance and b) green bond principles. A limited or reasonable assurance report will be provided by an external auditor or other independent third party (verification).

Fig 16 Eligible portfolio versus PI covered bonds



Source: Société Générale SFH (May '19 allocation report), ING

Fig 17 Breakdown eligible cover pool by year of drawing



Source: Société Générale SFH (May '19 allocation report), ING



Germany

Berlin Hyp

Berlin Hyp can issue both senior and covered bonds under its green framework

Berlin Hyp has up until today been one of the most regular issuers of green (covered) bonds, which underscores the importance of the sustainability theme for the bank. Issuing green bonds is for the bank a logical consequence of its efforts to further strengthen its green building lending. Green bonds furthermore give the bank to opportunity to diversify its investor base and products, while at the same time providing environmental investors the opportunity to invest in the bank's liabilities. Berlin Hyp can issue **green bonds either as preferred or bail-in senior unsecured (green senior) or covered bonds (green Pfandbriefe)** under its green bond framework.

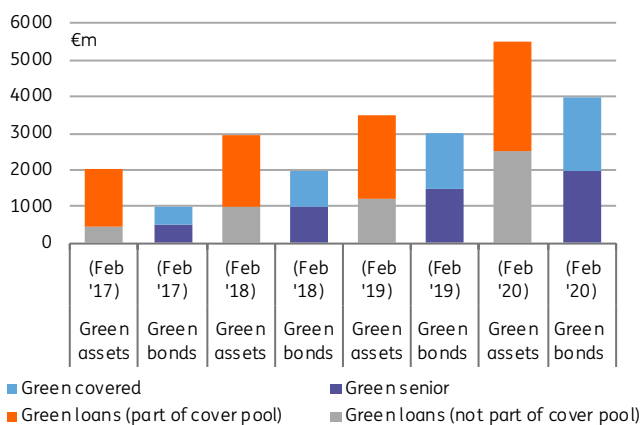
The bank has issued €4bn in green bonds thus far after printing its first green covered bond in 2015, of which €2bn in (bail-in/non-preferred) senior unsecured and €2bn in covered bond format. In 2017, Berlin Hyp made it one of its strategic goals to have a leading position in green finance. As part of this ambition, the bank targeted a loan portfolio that consists of 20% of loans for green energy efficient buildings by the end of 2020. This target was already met by the end of 2019, when Berlin Hyp had a mortgage loan portfolio of €21.8bn of which €5.4bn were eligible green building loans (25%).

At the end of February 2020, the bank had roughly €5.5bn of assets meeting the bank's green bond framework eligibility criteria and labelled as green building loans in its loan monitoring system. This is up €2bn compared to the green finance portfolio at the end of February 2019. Berlin Hyp increased its green loan amount: (a) by generating €1.3bn new assets; and (b) via retrospectively identifying €0.7bn loans as eligible by asking existing borrowers for sustainability and/or energy performance certificates (EPCs).

Eligible green building loans should exceed the outstanding green bonds by at least 10%

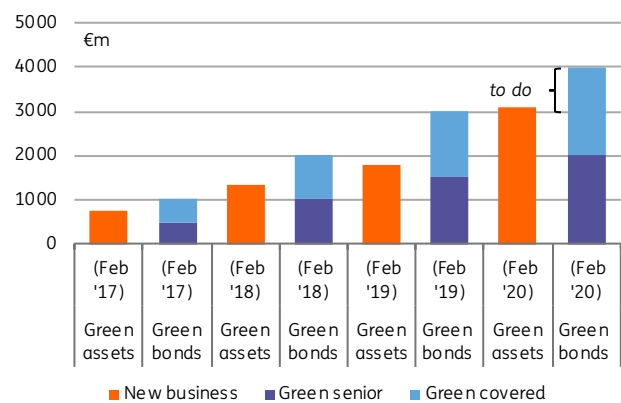
Berlin Hyp primarily focuses on **the refinancing of existing green building loans**. As such the bank can only issue new green bonds if there are sufficient green building loans on its balance sheet that have not been used for previous green bonds, meaning that there cannot be any unallocated proceeds from any green bond issuance. In addition, Berlin Hyp ensures that upon issuance of a new green bond, the aggregated nominal amount of **eligible assets** is **at least 110% of the nominal value of the outstanding green bonds**, including the new green bond. The bank's €5.5bn in eligible assets at the end of February 2020, exceeded the green bonds outstanding by 37% (Figure 18).

Fig 18 BHH's green assets vs senior and covered funding



Source: Berlin Hyp, ING

Fig 19 Proceed allocations to new green assets



Source: Berlin Hyp, ING

Green covered bonds can only be issued against eligible green assets in the cover pool

Of the eligible building loans €3bn were part of the issuer's cover pool while €2.5bn of the loans were not, or not yet. Berlin Hyp had €2bn in green covered bonds outstanding and €2bn in green senior unsecured bonds per February 2020. Berlin Hyp commits that **the amount of green covered bonds outstanding should not exceed the eligible assets in the bank's mortgage cover pool** at any time. Furthermore, assets in the cover pool have to meet the regulatory requirements of the German Pfandbriefe Act.

Green covered bonds rank pari-passu with grey covered bonds

Green covered bondholders rank pari-passu with other mortgage covered bondholders in terms of preferential claim to the full cover pool. Berlin Hyp applies the cover principles from the German Covered Bond Act separately to its green covered bonds. As such green covered bonds can only be issued if there are sufficient eligible assets in the pool that have not already been allocated to another green bond.

Fig 20 Berlin Hyp – Green Bond Framework (senior and covered)

Pillar	Details
1. Use of Proceeds	<p>The proceeds will be used to refinance eligible assets, including loans for the acquisition, construction or refurbishment of energy efficient commercial real estate buildings meeting the following criteria:</p> <ul style="list-style-type: none"> The energy demand or consumption in kWh/(m²*a) is capped at reference values from EnEV: residential properties (60 kWh/(m²*a) heating and total); logistics buildings (30 kWh/(m²*a) heating plus 35 kWh/(m²*a) electricity is 65 kWh/(m²*a) total); retail (60 kWh/(m²*a) heating plus 75 kWh/(m²*a) electricity is 135 kWh/(m²*a) total), hotels (95 kWh/(m²*a) heating plus 60 kWh/(m²*a) electricity is 155 kWh/(m²*a) total), office buildings (80 kWh/(m²*a) heating plus 60 kWh/(m²*a) electricity is 140 kWh/(m²*a) total), light industrial (105 kWh/(m²*a) heating plus 65 kWh/(m²*a) electricity is 170 kWh/(m²*a) total). The energy demand eligibility criteria for heating and electricity as separate categories have to be met additively (ie, with reference to the sum of both). However, the maximum value per energy demand category may not exceed the respective category's threshold by more than 20% (excluding for residential). Alternatively, the following external sustainability certifications are part of the eligibility criteria: LEED (gold or above), BREEAM (very good or above), DGNB (gold or above), HQE (high level or above). Buildings financed after 27 April 2015 have to score at least 50% in the energy efficiency component of the green building certificate if the building does not qualify by its energy demand/ consumption. <p>If the eligible assets are used for green covered bonds, the loans have to be eligible for and included in or to be included in the bank's mortgage cover pool.</p> <p>Exclusionary criteria (other environmental/social criteria): eligible assets should not be used for the production of arms, pesticides, tobacco, pornography, nuclear power, coal, oil or fossil fuels.</p>
2. Project Evaluation & Selection Process	<p>A Green Building Commission (GBC) verifies that the eligibility criteria are still in line with the market best practices of Green Building definition, and proposes possible changes to strengthen them if not. Borrowers provide documents regarding the eligibility for Berlin Hyp's green finance portfolio (EPCs and sustainability certificates). Energy demand calculations are used in case of property developments. The bank's Appraisal division assesses the qualification as green building. The credit staff subsequently documents the green building eligibility the bank's loan monitoring system. After documentation, the Treasury division determines the asset's compliance with the green finance portfolio eligibility criteria and whether it should be included in the green finance portfolio. If the document proving a green building's eligibility expires, the borrower has to provide a new EPC or sustainability certificate. If the borrower does not provide this document within the one-year grace period, or if the new EPC or sustainability certificate does not meet the eligibility criteria, the asset is removed as eligible asset.</p>
3. Management of Proceeds	<p>As Berlin Hyp issues green bonds in order to refinance eligible assets that are already on its balance sheet, there cannot be any unallocated proceeds from any green bond issuance. Eligible assets are flagged in the bank's legal loan monitoring system, but not booked in a separate portfolio. They form a sub-portfolio of Berlin Hyp's overall loan book.</p>
4. Reporting	<p>Reporting on an annual basis on: (1) The development of eligible assets on Berlin Hyp's balance sheet and its mortgage cover pool on a stratified basis. (2) New business in eligible assets since the last report and assignment of eligible assets to bonds issued on a loan-by-loan basis. (3) Carbon emissions avoidance (impact reporting) evaluated versus one or more appropriate baselines.</p>
5. External review	<p>ISS ESG provides the second party opinion. ISS ESG also verifies compliance with the green bond criteria on an annual basis. These reports include an assessment of the sustainability performance of the programme.</p>

Source: Berlin Hyp, ISS ESG, ING

Eligible building loans outside the cover pool have to be financed by green senior bonds

Green covered bond proceeds will only be used to refinance eligible assets in the mortgage cover pool. As a consequence **green building loans outside the cover pool**, which do or do not meet the cover asset eligibility criteria stipulated in the German Covered Bond Act, **may only be financed by green senior unsecured bonds**. Apart from

that there does not exist a specific link between green building loans and green senior unsecured bonds. This means that green building loans that have been financed by green senior unsecured bonds, but meet the cover pool eligibility criteria, may still be registered as cover assets securing the bank’s covered bonds.

Berlin Hyp’s covered bondholders will obtain the preferential claim to these green loans, not the senior unsecured bondholders that refinanced the loans. To the extent that green mortgage loans tend to have a better performance track record than non-mortgage assets, this is favourable of Berlin Hyp’s covered bondholders albeit less favourable for the claim of senior bondholders to the remaining assets of the bank in the event of issuer insolvency. That said, green assets that have been allocated to a Berlin Hyp green bond before, can in any event not be used anymore as eligible green assets for a new green bond (senior or covered).

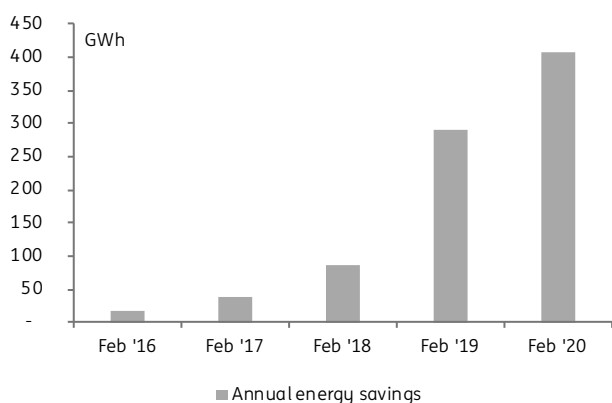
Berlin Hyp commits on a best efforts basis to originate new eligible assets against the net proceeds of a green bond

Berlin Hyp will replace eligible green assets that are redeemed before the maturity of a green bond by other eligible assets. Furthermore, the bank commits to making its best efforts to invest an amount equivalent to the net proceeds of each green bond in **new eligible assets**. At the end of February 2020 Berlin Hyp had an accumulated amount of €3,078m invested in new green loans (Figure 19). Hence a further €1bn of new green assets have to be originated to meet the bank’s commitment to fully allocate the €4bn proceeds of the green bonds issued to new green assets during the term of the bonds.

The eligibility criteria for the new assets must meet, as a minimum, the standards applicable to the assets already on the bank’s balance sheet upon issuance. If the bank decides to enhance its eligibility criteria, these new criteria do not have to be applied retroactively to the existing eligible assets. Existing eligible assets will not become ineligible as green building loans if they do not meet the new criteria. In its 2020 framework update, Berlin Hyp strengthened the energy demand criteria for office buildings from maximum 100 kWh/(m²*a) for heating plus 80 kWh/(m²*a) for electricity, making 180 kWh/(m²*a) in total, to 80 kWh/(m²*a) for heating plus 60 kWh/(m²*a) for electricity, and a maximum of 140 kWh/(m²*a) in total energy demand. Only new office building assets since the framework update should meet this criterion.

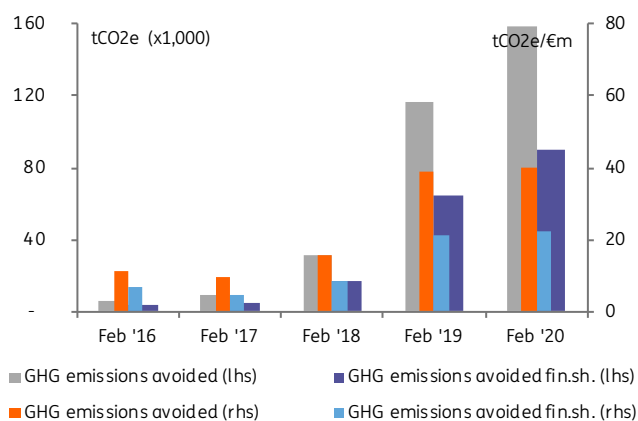
Figures 21 and 22 illustrate that over the past few years the annual energy savings and GHG emissions avoided with the green building loans financed by Berlin Hyp’s green bonds have risen. Also, the CO₂ savings per €m invested have increased compared to the previous years, reflecting the improved energy efficiency of the green buildings in Berlin Hyp’s green loan portfolio.

Fig 21 Annual energy savings



Source: Berlin Hyp, ING

Fig 22 GHG emissions avoided incl. for financing share*



Source: Berlin Hyp, ING*) versus EnEV standards, where: (a) 100% of the carbon impact of each asset is allocated to Berlin Hyp financing, and (b) the carbon impact is allocated proportionally to Berlin Hyp’s initial share in financing

Deutsche Hypo can issue senior unsecured and covered bonds under its green framework

Deutsche Hypothekenbank

Deutsche Hypothekenbank issued its first green covered bond in November 2017. The bank can issue **preferred and non-preferred senior unsecured bonds as well as covered bonds** under its green bond framework (as bearer bonds or registered bonds). Funds can also be raised via loans (Schuldscheindarlehen). Covered bonds have to meet the requirements of the German Pfandbrief Act. Deutsche Hypothekenbank issued its last benchmark size green covered bond in 2018. In 1Q20 €1bn in green covered bonds were outstanding, along with €75m in privately placed green senior debt and €7m in green Schuldscheindarlehen. Both the issuer's green covered bonds and green senior unsecured bonds rank pari-passu with the bank's vanilla covered bond and senior unsecured alternatives of the same asset class.

Deutsche Hypo has identified **five sustainability fields** of action it gives strategic priority to: (1) governance; (2) customers; (3) employees; (4) society; and (5) environment. As part of its environmental goals the bank's primary aim is to build the business model for commercial real estate financing on an environmentally sustainable basis. The financing of energy-efficient buildings is the core element in the commercial real estate finance business area. By issuing green bonds, the bank furthermore aims to meet the growing investor demand for investments in environmentally sustainable projects.

Fig 23 Deutsche Hypo – Green Bond Framework (senior and covered)

Pillar	Details
1. Use of Proceeds	Finance energy efficient real estate (new and existing). Financing is geared towards construction, project development, acquisition or energy-efficient renovation of buildings, with the exact used in the final terms of the bond issue.
2. Project Evaluation & Selection Process	The Green Building Commission defines the green bond minimum standards (GBMS) and verifies that these standards are complied with. The current GBMS require an energy pass with a maximum final energy demand or consumption in kWh/(m ² *a) by asset class: residential properties (60 kWh/(m ² *a)), logistics buildings (30 kWh/(m ² *a)), retail buildings such as shopping malls (70 kWh/(m ² *a)), other retail buildings (95 kWh/(m ² *a)), hotels up to 3 stars (95 kWh/(m ² *a)), hotels 4-5 stars (105 kWh/(m ² *a)), production and storage buildings (110 kWh/(m ² *a)), office buildings without airco (110 kWh/(m ² *a)), office buildings with airco (135 kWh/(m ² *a)). Dutch buildings that are characterized by an energy consumption level of "A" can be categorised as green buildings. Otherwise a green building certificate is available: LEED (Gold or above), BREEAM (Very Good or above), DGNB (Gold or above), HQE (Performant). Since the April 2019 green framework update, a green building classification without an energy performance certificate is also possible for: (1) project developments, if the aspired energy demand or sustainability specification is in line with the current green bond mindeststandards; or (2) financed buildings without EPC or sustainability certificate, which can be compared to green buildings which are just part of the green bond asset pool, subject to the requirement of a detailed statement with an energy demand calculation by a real estate valuer. Furthermore, the financed real estate is only leased to uncontroversial business customers, and also to uncontroversial main tenants (ie, those contributing >10% to the rental incomes). The Credit Management department records all the necessary data of the financing in the bank's IT system. Treasury will review whether the financed real estate is suitable for green bond issuance.
3. Management of Proceeds	The suitability of green assets is reviewed regularly by the Treasury department and flagged in Deutsche Hypo's portfolio management system. Suitable real estate must correspond to the volume of the green bonds. If it is not possible to directly use the proceeds of a green bond, these must be invested in a credit institution with a sufficiently positive rating at a recognized sustainability rating agency (ie, at least Prime status at ISS ESG) Unsuitable financings and assets are replaced. Financing are unsuitable if a main tenant is involved in controversial business or if the energy pass or sustainability certificate expires.
4. Reporting	Annual green bond reporting, containing the following information: <ul style="list-style-type: none"> • Current volume of the green building portfolio • CO₂ reduction of all green buildings compared to the relevant average • Features of the green buildings according to the property certifications, location, sustainability, etc.
5. External review	ISS ESG as independent rating agency reviews the implementation of the green bond principles and the sustainability quality of the green bond programme (second party opinion).

Source: Deutsche Hypothekenbank, ISS ESG, ING

The bank aims to promote construction on brownfield sites

Deutsche Hypo screens green buildings on **a number of criteria**. These include energy consumption, distance to public transport and the use of previously empty land for new construction (greenfield sites). The bank aims to promote construction on brownfield sites that have been used for industrial or commercial purposes before and therefore

have already seen ecosystem intervention. These sites also tend to have better access to existing infrastructure and offer better transportation links and utilities. The green bond framework also specifies that financed real estate can only be leased to uncontroversial main tenants. Tenants are seen as main tenants if they contribute to more than 10% of the rental incomes.

Certain green buildings without an EPC are allowed

Dutch buildings characterised by an energy consumption level of “A” can also be included as eligible green buildings. Furthermore, a **green building classification without an energy performance certificate** is also possible for: (1) project developments, if the aspired energy demand or sustainability specification is in line with the current Green Bond Mindeststandards; or (2) financed buildings without EPC or sustainability certificate, which can be compared to green buildings that are just part of the green bond asset pool, subject to the requirement of a detailed statement with an energy demand calculation by a real estate valuer.

The most recent green bond framework update of August 2019 provided for some further strengthening of some of the property selection criteria. For instance, all residential properties are subject to a maximum final energy demand or consumption of 60 kWh/(m²*a). Under the previous green bond framework, this criterion was split in residential properties subject to maximum 50 kWh/(m²*a) in energy demand, and 75 kWh/(m²*a) in energy demand for old residential properties. Furthermore, minimum green buildings certificates were also lifted to LEED (Gold or above) (from Silver or above), BREEAM (Very Good or above) (from Good or above), DNGB (Gold or above) (from Silver or above) and for HQE (Performant) (from Basic or above).

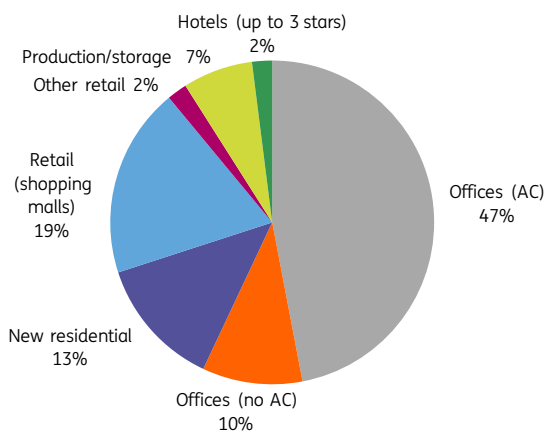
Green real estate assets must at least have a volume equal to the green bonds

The funds raised via the issue of green bonds are used exclusively to finance energy-efficient real estate, both in new and existing business. The **real estate suitable for green bond financing** must at least have a **volume equal to the green bonds** issued or to be issued. If it is not directly possible to (re)finance eligible energy-efficient real estate with the proceeds of the bonds, the unused proceeds must immediately, on an interim basis, be invested with a credit institution with a sufficiently positive rating granted by a recognized sustainability rating agency (ie, at least a Prime Status at ISS ESG).

Deutsche Hypo's framework is less explicit on the inclusion of green assets in the cover pool

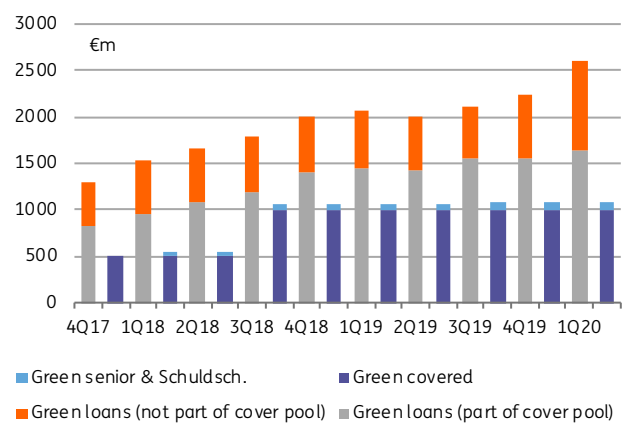
Deutsche Hypo's green bond framework is less explicit than Berlin Hyp's framework regarding the relationship between green assets that are part or no part of the covered bond collateral pool versus the issuance of green covered bonds or senior unsecured bonds. However, Deutsche Hypo's green bond reporting of March 2020 shows that of the **€2.6bn green portfolio**, €1,635m is part of the covered bond cover pool, whereas €968m is uncovered. Of the €1,163m in green bonds outstanding, €1bn has been issued in covered bond format. As such the green portfolio allocated to the mortgage cover pool exceeds the green covered bonds issued by 66% (see Figure 25).

Fig 24 Deutsche Hypo green assets breakdown (1Q20)



Source: Deutsche Hypo, ING

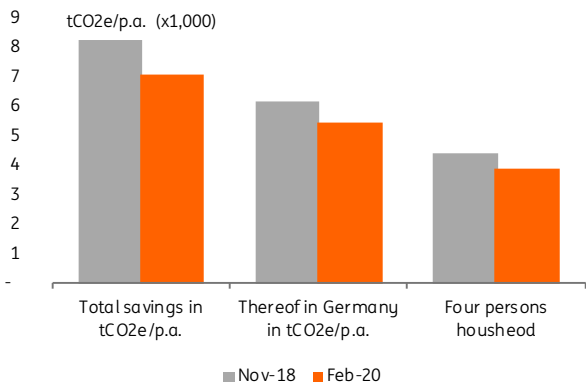
Fig 25 Deutsche Hypo green assets versus bonds



Source: Deutsche Hypo, ING

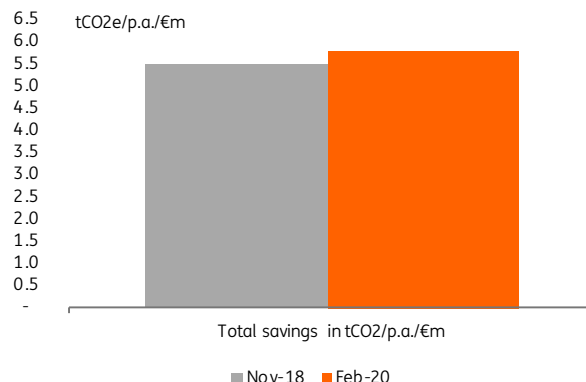
Besides these features, energy savings offered by the green buildings are calculated both in kilowatt-hours and in terms of carbon emissions and published in the bank's **impact report**. Only green buildings with energy performance certificates for final energy consumption (heat) are included in this analysis. Two benchmarks are used: (1) the current German Energy Savings Ordinance (EnEV) figures for heat consumption; and (2) the European average, based upon the national average consumption in Deutsche Hypo's target markets (Germany, Netherlands, Poland, France, Spain and the UK).

Fig 26 Deutsche Hypo carbon savings per year



Source: Deutsche Hypo, ING

Fig 27 Deutsche Hypo carbon savings per €m



Source: Deutsche Hypo, ING

To provide energy efficient mortgage finance, Deutsche Hypo also grants green loans

In addition to the issuance of green bonds, Deutsche Hypo also wishes to grant **green loans** to support the essential sustainability aspects in the bank's business activity on the asset side. The focus is on objectives such as the improvement of the portfolio quality, the completion of the sustainability concept and to develop a green value chain. In line with the eligibility criteria for green bonds, controversial tenants are excluded. The green building classification criteria are based on energy construction, year of construction, certification, distance to public transport, soil-sealing character (ie, greenfield versus brownfield) and building stock.

Deutsche Kreditbank

Deutsche Kreditbank only issues green bonds in senior format

Deutsche Kreditbank (DKB) has both green and social bond programmes in place. The bank issued two **green senior unsecured bonds** of €0.5bn, each under its own distinct green bond framework in 2016 and 2017, with the 2017 framework allowing for further issuance under the same programme. The proceeds of these green bonds were used exclusively to refinance a selected portfolio of renewable energy loans. Deutsche Kreditbank's green bond frameworks explicitly rule out eligibility of these renewable energy loans for inclusion in the covered bond collateral pools.

The bank issued its first social covered bond in 2018 and a blue social covered bond in 2019

Deutsche Kreditbank established its social bond programme in 2018 as a reflection of its core lending business and anticipates social bonds to become a permanent source of funding. The rationale for social covered bond issuance is related to the fact that the loans in the social pool are often municipal secured and as such eligible for the (public sector) cover pool. The bank issued the first social covered bond under its **social bond programme** in September 2018. Deutsche Kreditbank returned to the sustainable bond market one year later in October 2019 with a blue social covered bond, to finance public supply, including in the field of water and waste management.

The social bond pool had an initial volume of almost €1.5bn distributed over five eligible asset categories, such as social housing, public supply, health care, education and research, and inclusion (see Figure 30). Together, these asset categories contribute positively to 11 out of the 17 different United Nation's **sustainable development goals**:

- **Social housing:** 1. No poverty, 11. Sustainable cities and communities;
- **Public supply:** 3. Good health, 6. Clean water and sanitation, 9. Innovation and infrastructure, 10. Reduced inequalities, 11. Sustainable cities and communities, 16. Peace, justice, and strong institutions, 17. Partnership for the goals;

- **Health and care:** 3. Good health, 17. Partnership for the goals;
- **Education and research:** 4. Quality education, 10. Reduced inequalities, 17. Partnership for the goals;
- **Inclusion:** 8. Good jobs and economic growth, 10. Reduced inequalities, 11. Sustainable cities and communities, 12. Responsible consumption and production, 17. partnership for the goals.

Fig 28 Deutsche Kreditbank – Social Bond Framework

Pillar	Details
1. Use of Proceeds	The proceeds of the social bond issuance are used to refinance loans with social added value in the field of: (a) social housing, (b) public supply, (c) education & research, (d) inclusion and (e) health & care.
2. Project Evaluation & Selection Process	<p>As part of the selection process certain loans are assigned to these individual topics/categories based upon quantitative and qualitative factors</p> <p>The qualitative selection process assigns assets to the different topics/categories by means of a selection of the client type (the type of client or lending business, which provides information on the use of funds) and additional economic sector criterion for some categories (provides additional information on the intended use of the loan).</p> <p>The quantitative, financial criteria apply to all loans and refer to the loan type, minimum loan amount, minimum ratings, minimum residual term of the loans, or the exclusion of other refinancing sources.</p> <p>Furthermore, as an indicator to the customer group housing and to assess which regions in Germany are at risk of marginalization and which not, DKB uses the observations of the Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR) within the Federal Office for Building and Regional Planning (BBR) on the location and living conditions in Germany and Europe.</p> <p>DKB's client segments (housing, local authorities and social infrastructure, energy and public supply) and DKB's sustainability management and treasury department are involved in the selection process.</p>
3. Management of Proceeds	<p>When a social bond is issued, funds are appropriately allocated in the full amount of the respective issue volume immediately after the transaction is executed. The allocated loans are given a specific marker in the bank's core system.</p> <p>The social bond pool is reviewed at least once a year on their compliance with the defined selection criteria. If loans no longer meet these criteria they are removed from the social bond pool and will be replaced by other loans that meet the selection criteria.</p> <p>A social bond pool is maintained at all times, at least in the amount of outstanding social bonds.</p>
4. Reporting	<p>DKB will publish once a year a report on the outstanding social bonds and related social aspects.</p> <p>The report will contain qualitative and quantitative data, including portfolio-based statements on the categories, allocation information (a.o. loan regions) and certain KPIs for the individual sub-categories.</p>
5. External review	<p>An external provider will yearly verify the sustainable quality of the social bond pool and compliance with the selection criteria (third-party assurance).</p> <p>ISS ESG provides the second party opinion. ISS ESG has defined a specific set of key performance indicators (KPIs) for different categories (a) social housing and housing cooperatives, (b) water, wastewater treatment, (c) public transportation, (d) public administration, (e) medical/care facilities and nursing homes, (f) education and (g) inclusion. ISS ESG also checks the loans for controversies.</p>

Source: Deutsche Kreditbank, ISS ESG, ING

Selection takes place by client type and additional economic sector criterion

The selection process under the social bond framework assigns loans to the five individual topics/categories based upon quantitative and qualitative factors. The qualitative selection process earmarks the assets to the different topics/categories by means of a selection of the **client type** and **additional economic sector criterion**.

Client types (and economic sectors) by category:

- **Social housing:**
 1. Housing – municipal company,
 2. Housing – cooperative association
- **Public supply:**
 1. Water/waste water (operation of main sewer system, sewage treatment plants),
 2. Transport (transport of persons in commuter traffic, or in overland transport),
 3. Municipal clients (public private partnerships, PPPs).

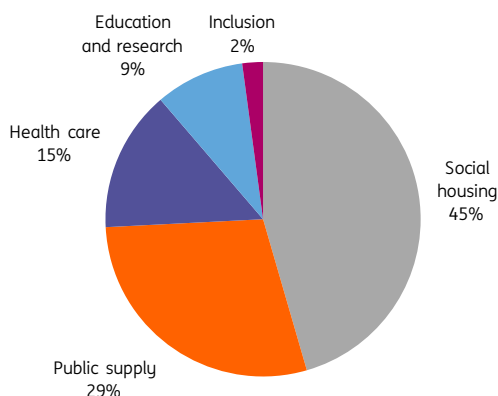
- **Health and care:**
 1. Outpatient care (outpatient social services),
 2. Inpatient care (nursing homes),
 3. Hospitals (hospitals and university clinics),
 4. Inpatient, outpatient rehabilitation facilities (prevention and rehabilitation clinics),
 5. Healthcare property segment (retirement homes, residential institutions for the elderly and disabled, social welfare/youth welfare organisations),
 6. Municipal clients (PPPs).
- **Education and research:**
 1. Schools,
 2. Day-care centres for children,
 3. Universities,
 4. Further education,
 5. Research,
 6. Student services,
 7. Municipal clients (PPPs).
- **Inclusion:**
 1. Foundations,
 2. Workshops for disabled persons,
 3. Child/youth welfare services,
 4. Sport associations and clubs,
 5. Municipal clients (PPPs) – refugee homes.

The social bond pool is at all times at least the amount of social bonds outstanding

When a social bond is issued, the proceeds are fully allocated to the selected eligible portfolio immediately after the transaction is executed. The allocated loans are given a specific marker in the bank’s core system. The social bond pool is reviewed at least once a year on its compliance with the selection criteria. If a loan no longer meets these criteria, it will be removed from the social bond pool and replaced by a loan that does meet the selection criteria. Deutsche Kreditbank ensures that the social bond pool is at all times at least the amount of the social bonds outstanding.

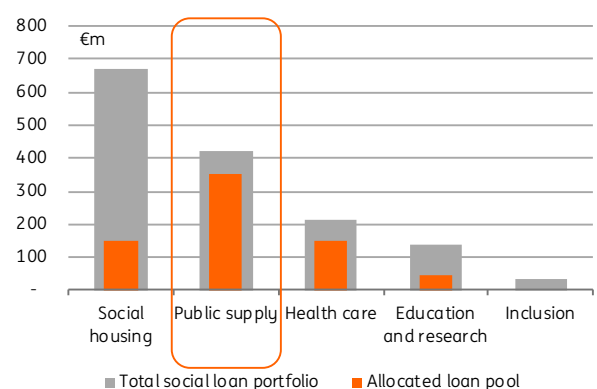
Deutsche Kreditbank’s first social covered bond had a 10yr maturity and a no grow €0.5bn size which was more than matched by €696m in eligible social assets in the public sector cover pool at the time of issuance. Unfortunately, at the time of writing there is not a more recent impact report available than Deutsche Kreditbank’s 2018 report to give completer insight in the proceed allocations of the bank’s blue social covered bond printed in 2019. These bond proceeds were intended to be allocated to public supply, including water and waste management. This bucket only had €72m in unallocated proceeds left at the end of 2018 (Figure 30). According to Deutsche Kreditbank’s impact report, of the €352m public supply in the allocated portfolio, €122m was allocated to the water/wastewater bucket (17.5% of the total allocated pool). This suggests that that the total social portfolio has expanded from the initial c.€1.5bn.

Fig 29 The €1.5bn social asset pool distribution



Source: Deutsche Kreditbank (2018 impact reporting), ING

Fig 30 Public supply incl. wastewater well present in pool



Source: Deutsche Kreditbank (2018 impact reporting), ING

Landesbank Baden Wuerttemberg

LBBW has up until now only issued sustainable covered bonds in green format

In less than three years, Landesbank Baden Wuerttemberg (LBBW) has grown to become the largest issuer of sustainable bonds in Europe. The bank first established a green bond framework in 2017 for the issuance of green senior unsecured and/or covered bonds, to expand its sustainable issuance activities with the establishment of a social bond framework in 2019. The bank has up until today only issued sustainable covered bonds in green bond format, of which one €0.5bn EUR covered bond in June 2018 and one US\$0.75bn USD covered bond in June 2019.

LBBW aims to align its green bond framework with the EU taxonomy and green bond standard. The bank considers green bonds an effective tool to channel investments to assets that have climate benefits and thereby contribute to the achievement of the United Nations sustainable development goals (SDG), particularly SDG 11 – Sustainable cities and communities, SDG 13 Climate action and SDG 7 – Affordable and clean energy.

Green buildings and renewable energy projects are eligible under the green bond framework

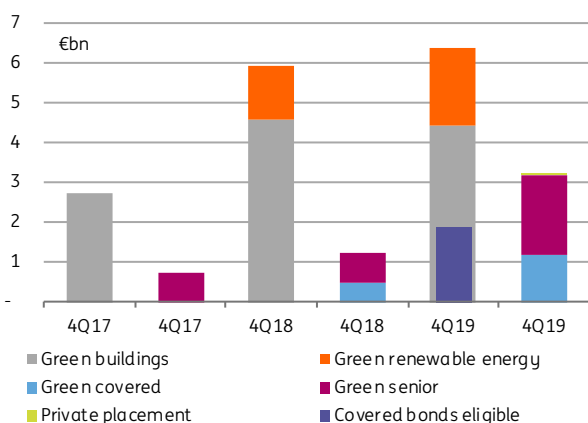
The net proceeds of green bond issuances are used exclusively to finance or refinance the eligible green loan portfolio which is comprised of eligible green loans in the categories: (1) new, existing and refurbished **green commercial and residential buildings**; or (2) **renewable energy projects**. At the end of 2019 LBBW's green loan portfolio was €6.4bn, of which €4.4bn were green buildings and €2bn renewable energy projects. Of the green building loans, the large majority were commercial real estate assets. The green portfolio was allocated for 50% (€3.2bn) to green bonds, of which €2bn green senior and €1.2bn green covered bonds (€0.5bn in EUR and €0.7bn equivalent in USD).

For each **new green bond**, additional eligible green loans will be added to the eligible green loan portfolio if necessary, to provide a sufficient and timely allocation of the additional net proceeds. If a loan no longer meets the eligibility criteria, LBBW will use its best efforts to remove the loan from the eligible green loan portfolio and replace it when necessary as soon as possible. Any green bond **net proceeds** that have **not** been **allocated** to eligible loans yet, will be held and/or invested at LBBW's own discretion in the bank's treasury liquidity portfolio, in cash or other short-term and liquid instruments.

LBBW has €1.9bn in covered bond eligible assets in its €6.4bn eligible green loan portfolio

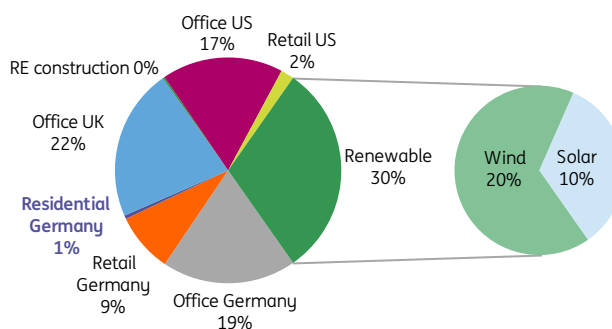
The German covered bond legislation requires assets financed by a covered bond to be allocated to the cover pool. Nonetheless, LBBW's green bond framework gives no details on the treatment of green covered bonds and senior unsecured bonds versus eligible green assets that also meet the mortgage cover pool eligibility criteria. LBBW's green bond allocation reporting for December 2019 showed however that of the €6.4bn eligible green loan portfolio, only **€1.9bn** were **covered bonds eligible assets**, exceeding the green covered bonds by €728m (ie, 1.6x the outstanding green covered bonds).

Fig 31 Eligible assets exceed the green bonds 2x



Source: LBBW (green bond allocation and impact reporting), ING

Fig 32 Residential buildings have a negligible share



Source: LBBW (green framework and portfolio Dec'19), ING

LBBW's green bond proceeds will be managed in a **portfolio approach**. Within one year of issuance, LBBW intends to allocate the green bond proceeds to an eligible green loan portfolio that meets the use of proceeds eligibility criteria in line with the green bond framework's project evaluation and selection process.

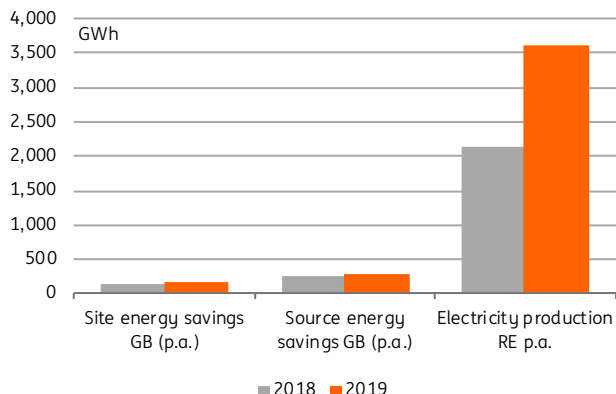
Fig 33 LBBW –Green Bond Framework

Pillar	Details
1. Use of Proceeds	<p>Net proceeds of green bond issuances will be used exclusively to finance or refinance in whole or in part an eligible green loan portfolio comprised of 1)) new, existing and refurbished green commercial and residential buildings which meet regionally, nationally or internationally recognized regulations, standards or certifications as amended from time to time or 2) renewable energy projects financing.</p> <p>Green residential buildings: German residential buildings should meet i) the Energieeinsparverordnung (EnEV) 2009 regulation or later, ii) KfW efficiency standard for new construction of KfW-55 or better, or for existing property of KfW-115 or better, iii) have a site energy consumption available and CO₂ emissions of less than 20kgCO₂/m²a, and iv) site energy demand that is less than 100kWh/m²a.</p> <p>Green commercial buildings: that meet the regional, national or internationally recognized regulations, standards or certifications in either:</p> <p>(i) New or existing commercial buildings belonging to the top 15% low carbon buildings in Germany based upon the following criteria: a) German office and retail buildings from 2007 with an energy performance certificate under the EnEV 2007 regulation or later, or b) German office buildings from 1995 with a maximum site energy consumption of 120 kWh/m²a and German retail buildings from 1983, or c) KfW efficiency standard of KfW – 70 or better for new construction or KfW 115 or better for existing property, or d) German retail buildings with site energy consumption available and CO₂ emissions of less than 123kgCO₂/m²a and German office buildings of less than 30kgCO₂/m²a.</p> <p>(ii) Refurbished buildings resulting in more than 30% energy savings.</p> <p>(iii) New, existing or refurbished buildings with at least the following classifications/certifications: LEED – Gold/Platin, DGNB – Silver/Gold, BREAAAM – Very Good/Excellent/Outstanding, ENERGY STAR ≥70, or an equivalent or higher certification. The certified buildings must also have a good energy performance.</p> <p>UK buildings: a BER rating of less than 35.3kgCO₂/M²/year.</p> <p>Renewable energy projects: financing/investments in/expenditures for the acquisition, conception, construction, development and installation of renewable energy production units, as well as the connection of renewable energy production units to the electricity grid and the transportation through the network. These projects include: (a) on- and offshore wind energy; and (b) solar energy.</p>
2. Project Evaluation & Selection Process	<p>The green bond committee oversees the entire green bond process, including the evaluation and selection of the eligible loans originated across the relevant business lines. This committee consists of representatives of the treasury, risk department, real estate department and sustainability department.</p> <p>All selected eligible assets should comply with official national and international environmental and social standards and local laws and regulations on a best efforts basis. All the banks activities should also comply with internal environmental and social directives. LBBW has minimum social and environmental requirements in place for all lending business, including for green loans. These eligibility criteria are continuously developed and renewed in the internal and external policy frameworks.</p>
3. Management of Proceeds	<p>The green bond proceeds will be managed in a portfolio approach. LBBW intends to allocate the green bond proceeds to an eligible green loan portfolio that meets the use of proceeds eligibility criteria and in line with the green bond framework's project evaluation and selection process.</p> <p>LBBW strives to achieve a level of allocation for the eligible green loan portfolio that matches or exceeds the balance of net proceeds from the outstanding green bonds. Eligible green loans will be added to or removed from LBBW's eligible green loan portfolio to the extent required.</p> <p>Green bond net proceeds not yet allocated to eligible loans, will be held and/or invested at LBBW's own discretion in the bank's treasury liquidity portfolio, in cash or other short-term and liquid instruments.</p>
4. Reporting	<p>Allocation reporting will be available to investors within one year from the date of each green bond transaction, renewed annually thereafter until the proceeds have been fully allocated. The report will provide for each eligible category information on: (a) the total amount of proceeds allocated to eligible loans, (b) the number of eligible loans, (c) the balance of unallocated amounts, (d) the amount or percentage of new financing and refinancing. When appropriate and subject to confidentiality obligations, LBBW may also provide concrete examples of eligible green assets refinanced. LBBW commits on a best effort basis to report yearly and until full allocation on climate benefits associated to the eligible loans (impact reporting). This includes for eligible green building loans, (i) the estimate ex-ante annual energy savings in MWh, (ii) the estimated annual source energy savings and iii) the estimated annual GHG emissions reduced/avoided in tons of CO₂ equivalent. For renewable energy loans the reporting will be on (i) avoided GHG based on actual/p50 production and (ii) the annual GHG emissions reduction in tons of CO₂ equivalent. For eligible green buildings, LBBW relied upon a specialized consultant to develop the methodology for the estimation and calculation of the impact. LBBW strives to deliver impact estimates in an investor presentation alongside the issuance of each green bond.</p>
5. External review	<p>ISS ESG provides the second party opinion (SPO).</p> <p>ISS ESG has also been appointed to perform in the three years following the first issuance, an annual update of its SPO on the green bond framework. ISS ESG will verify the sustainability soundness of the assets that have been added to the eligible green loan portfolio since first issuance. At the end of this mission, ISS ESG will also provide an update of its SPO (verification post issuance).</p>

LBBW intends to report within one year after each green bond transaction on allocation

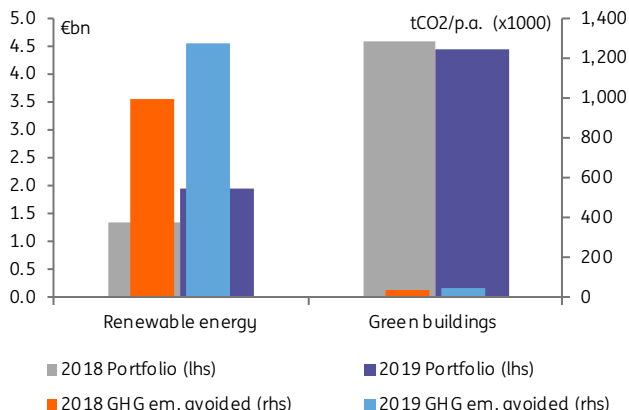
LBBW aims to make **the allocation reporting** available to investors within one year from the date of each green bond transaction and annually thereafter until the proceeds have been fully allocated. LBBW also commits on a best effort basis to report yearly and until full allocation on climate benefits related to the eligible loans (**impact reporting**).

Fig 34 Eligible assets exceed the green bonds



Source: LBBW, ING *) GB=green building, RE=renewable energy

Fig 35 Renewable energy dominates GHG avoidance



Source: LBBW, ING

Muenchener Hypothekenbank issues ecological ESG covered bonds its green bond framework

Muenchener Hypothekenbank

Muenchener Hypothekenbank was the first bank to issue a sustainable covered bond in 2014. The proceeds of this sub-benchmark sized €0.3bn **ESG mortgage covered bond**, which expired end of last year, were used to refinance loans to German housing cooperatives. Muenchener Hypothekenbank did not issue a second ESG covered bond until four years after the first one. This **ecological ESG covered bond** was issued under a separate **green bond framework** with the purpose of further sharpening the bank’s sustainability profile. This green bond framework was at first fully dedicated to the issuance of ecological ESG covered bonds. However, the bank expanded the framework in the summer of 2019 to include senior bonds (preferred and non-preferred), commercial paper and customer’s money as sustainable funding products.

Muenchener Hypothekenbank has expressed its ambitions in the past to be a regular issuer of green and social bonds, with the sustainable funding on the one hand and the sustainable lending business on the other hand being essential parts of the bank’s cycle of sustainability management activities in relation to its core business. For instance, on the asset side Muenchener Hypothekenbank has launched two sustainable loan products to private customers in the past few years that address both environmental and social aspects: the **MuenchenerHyp green loan** (November 2015) and the **MuenchenerHyp family loan** (January 2018). The bank’s green loans to retail customers in combination with commercial loans with a sustainability certificate that meet the bank’s ecological criteria were intended to be financed with **ecological bonds**, while the bank’s family loans to retail customers in combination with loans to housing cooperatives could serve as eligible portfolio to the potential issuance of **social bonds**.

Fig 36 Muenchener Hyp – Green Bond Framework

Pillar	Details
1. Use of Proceeds	<p>Proceeds will be used to refinance loans to new and existing lending through MuenchenerHyp's green mortgage loan programme or certified loans for commercial mortgages.</p> <p>The assets for the ecological ESG Pfandbrief have to meet the following criteria:</p> <p>1) Green loans (residential mortgage lending): a) residential buildings in Germany with a maximum annual energy demand of 70kWh/ m², or maximum 55kWh/ m² from 2020 onwards, or b) residential buildings that obtained an energy performance certificate with a minimum energy performance labelled B (on a scale from H to A+). Grandfathering for green loans granted since November 2015.</p> <p>2) Certified environmental loans (commercial mortgage lending):</p> <ul style="list-style-type: none"> loans with a green building certificate of (a) DGNB – minimum Gold or Platinum, (b) BREEAM – minimum Very Good, Excellent or Outstanding, (c) LEED – minimum Gold or Platinum, (d) HQE – minimum Excellent or Exceptional, (e) BREEAM NL – minimum 40% or better, or (f) EPC – minimum level A or better. loans within the top 15% of the national building stock by energy performance
2. Project Evaluation & Selection Process	<p>The internal project and evaluation process will be led by a subgroup of MuenchenerHyp's sustainability committee, ie, the green bond working group (GBWG). The GBWG consists of members of the treasury, sustainability and controlling/ risk management departments and is chaired by the bank's head of treasury or a treasury colleague. The GBWG verifies the eligibility and data quality of the existing loans for the potential issuance of a green bond and reviews at least annually the allocation of proceeds to the eligible portfolio and approves loans as eligible green loans. The GBWG is also responsible for future changes to the green bond framework or criteria.</p> <p>The loan department quarterly checks the data quality of sustainable retail and commercial loans. Data will be verified by (a) information from an energy certificate (maximum annual energy demand of 70kWh/ m², or maximum 55kWh/ m² from 2020 onwards), (b) confirmation the building meets the conditions from the applicable KfW programme, or (c) the year of construction of the new buildings (the minimum energy performance criteria for new buildings according to German regulation (EnEV) have to be met). Commercial loans will only qualify as certified environmental loans if there is an energy performance certificate or documentation of green building certification that meets the minimum requirements.</p> <p>The quarterly process shows the balance between the proceeds of the sustainable funding products and the bank's green lending book. The sustainability manager receives the data from the transaction management and informs the sustainability committee.</p> <p>The risk controlling department and transaction management will conduct a regular quality check of the loan data to verify that the green loans are compliant with the green bond framework.</p>
3. Management of Proceeds	<p>Sustainable funding product proceeds will be allocated to eligible green loans and certified environment commercial loans, which will fall into a cover pool for residential and commercial real estate, as the German Pfandbrief Act does not permit a separation of green loans outside the legal cover pool.</p> <ul style="list-style-type: none"> Loans in the internal product group "green loans for retail mortgage lending" are checked on a quarterly basis whether there is proof of their eligibility. If evidence is missing within the next quarterly control, the loan will lose its eligibility. Energy efficient loans are identified via newly programmed modules. Certified commercial loans are also tracked via new modules programmed in the legal system, that identify where qualifying certificates match the criteria of the green bond framework. Quarterly quality checks are performed and where certificates are missing, the loan will be derecognized from the sustainable portfolio within the cover pool. <p>Non-cover pool eligible parts remain on the bank's balance sheet and will be disclosed separately.</p> <p>The GBWG decides on the allocation of eligible assets to the proceeds of the bond. Green loan granting and the issuance of sustainable funding products is seen as a permanent business cycle. If loans are repaid, amortised, sold or otherwise become ineligible they will be replaced by new eligible loans. In the unlikely event of a shortfall in the green loan cover pool section, appropriate investments in sustainable assets will be made until the volume of green loans is sufficient again. Quarterly reporting will disclose the volume of green and sustainable loans within the cover pool and the non-cover pool eligible part versus the volume of sustainable funding products issued.</p> <p>The management of proceeds is government by the treasury department as part of the daily steering of liquidity ratios and all legal regulations involved. Pending allocation, the proceeds of each sustainable funding product will be subject to the bank's normal liquidity policy.</p>
4. Reporting	<p>The annual sustainability report gives details about the bank's corporate responsibility strategy and includes global reporting initiative (GRI) disclosures.</p> <p>Allocation reporting: Quarterly information will be provided on the allocation of the net proceeds of the sustainable funding products, until all net proceeds have been allocated and beyond. The information will contain a) details of the green loans financed through sustainable funding products, separated into retail and commercial lending in the cover pool, b) the remaining balance of unallocated proceeds and c) the volume of loans inside and outside the cover pool versus the volume of all sustainable funding products outstanding. Regarding the sustainable funding of loans not yet in the cover pool or its non-cover pool eligible part, treasury will use the quarterly reporting as a guidance.</p> <p>The impact reporting will be on a portfolio basis using the metrics recommended in the ICMA's harmonized framework for impact reporting, ie, for certified green buildings and green private real estate: (1) <i>CO₂-emissions avoided</i>; and (2) <i>average energy demand</i>.</p>
5. External review	ISS ESG provides the second party opinion , confirming the alignment of the green bond framework with the green bond principles.

Source: Muenchener Hypothekenbank, ISS ESG, ING

The proceeds of the sustainable funding products will be used to refinance **new and existing lending** through MuenchenerHyp's **green mortgage loan programme or certified loans for commercial mortgages**. With its 2019 green framework update, MuenchenerHyp also introduced stricter criteria for green loans per 2020, in anticipation to the requirements of the EU taxonomy. More specifically, the assets for the sustainable funding products now have to meet the following **criteria**, :

Bond proceeds (re)finance green residential and certified environmental commercial mortgage loans

- **Green loans** (residential mortgage lending):
 - a) Residential buildings in Germany with a maximum annual primary energy demand of 70kWh/m², or 55kWh/ m² from 2020 onwards, or b) Residential buildings that obtained an energy performance certificate with a minimum energy performance labelled B (on a scale from H to A+). There is a grandfathering for green loans granted since November 2015.
- **Certified environmental loans** (commercial mortgage lending):
 - a) Loans with a **green building certificate** of i) DGNB – minimum Gold or Platinum, ii) BREEAM – minimum Very Good, Excellent or Outstanding, iii) LEED – minimum Gold or Platinum, iv) HQE – minimum Excellent or Exceptional, v) BREEAM NL – min. 40% or better, or vi) energy performance certificate (EPC) – min level A or better. b) Loans within the top 15% of the national building stock by energy performance.

The use of proceeds contribute to the EU environmental objective of climate change mitigation and the achievement of the United Nation's sustainable development goals SDG 7 - Affordable and clean energy and SDG 11 – Sustainable cities and communities.

The selection process is led by the **green bond working group (GBWG)**, which is a subgroup of the bank's sustainability committee consisting of members from the bank's treasury, sustainability and risk management departments. The GBWG verifies the eligibility and data quality of existing loans with respect to the potential issuance of a green benchmark. The GBWG is also responsible for future changes to the green bond framework or the loan criteria. These amended green bond frameworks would only be applicable for issuance after the changes were made.

All eligible green loans to which the proceeds are allocated fall within the cover pool

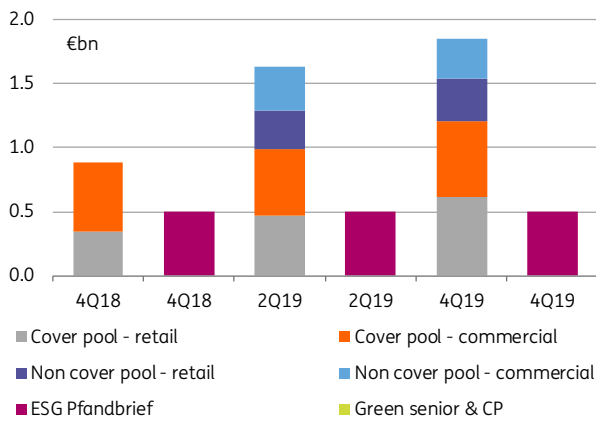
The German covered bond legislation does not allow for a separation of green loans securing a green covered bond outside the collateral pool. Hence **the green loans and certified environmental commercial loans** to which the proceeds of sustainable funding products are allocated **are part of the** (residential and commercial) **mortgage cover pool**. Only the ecological ESG covered bond investors have a preferential claim on the total collateral pool, including the green assets, on a pari-passu basis with investors in the non-ecological mortgage covered bonds issued by the bank. Non-cover pool eligible green loans also remain on the bank's balance sheet and are disclosed separately.

Loan repayments are replaced by other eligible assets

In the event that green loans are prepaid, amortised, sold or otherwise become ineligible Muenchener Hypothekbank **commits to replace these assets** with other eligible loans. In the, according to the bank, unlikely event of a shortfall in the green loan cover pool, the unallocated proceeds will be invested in sustainable assets until the volume of green loans is sufficient again. Pending allocation, the proceeds of each sustainable funding product will be subject to the bank's normal liquidity policy.

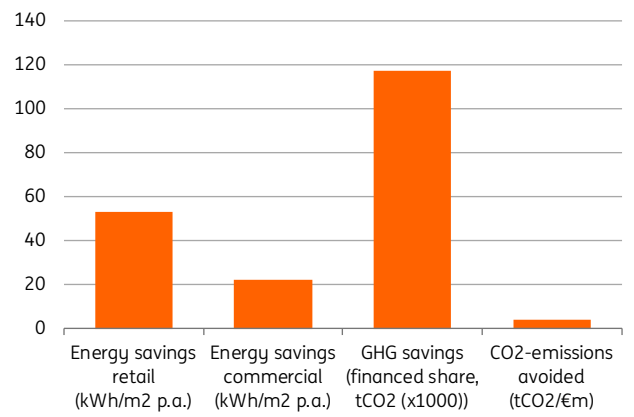
At the end of 2019, the available green portfolio was €1.349bn, of which €611m were energy efficient residential buildings in the cover pool, €593m certified environmental commercial buildings in the cover pool, while €335m were retail loans outside the cover pool and €310m commercial loans outside the cover pool (Figure 37). According to Muenchener Hyp's impact reporting, the green portfolio saves more than 3.8 tCO₂ emissions per year per €1m invested (Figure 38).

Fig 37 Green cover pool covers ESG covered bonds 2.4x



Source: Muenchener Hypothekenbank (Dec 2019), ING

Fig 38 Impact of the green portfolio



Source: Muenchener Hypothekenbank (June 2019), ING



Luxembourg

Nord/LB Luxembourg

Earlier this year, Nord/LB Covered Bond Bank Luxembourg issued its debut sub-benchmark size €0.3bn green covered bond. It was the long-awaited first legislative renewable energy covered bond issued after Luxembourg amended its covered bond law in 2018 to allow for the dedicated issuance of covered bonds against renewable energy loans (lettres de gage énergies renouvelables, LdG RE).

Green covered bond issuance is in line with Nord/LB's sustainability ambitions

Nord/LB considers the issuance of green covered bonds essential to the implementation of its sustainability strategy. The use of renewable energy covered bonds as a source of funding, offers the bank with an opportunity to make a contribution to the climate targets set by the German government, and to contribute to the transition to a more sustainable economy. Besides, Nord/LB CBB wishes to support the development of the sustainable bond market as it helps to provide the necessary resources to fight climate change. Meanwhile green covered bond issuance also enhances the diversification of the bank's investor base. Nord/LB's lending activity in the renewable energy sector furthermore is well aligned with the United Nations Sustainable Development Goals SDG 7 – Affordable and clean energy and SDG 13 – Climate change action.

The net proceeds will (re)finance renewable energy projects

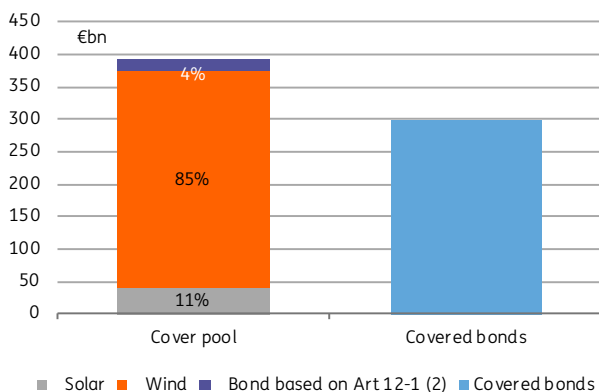
The net proceeds of the green bonds will be used to finance or refinance **renewable energy projects** (new/existing), such as for on- and offshore wind power and solar power energy generation, that also meet the LdG RE eligibility criteria for renewable energy assets. Eligible projects also include financing transmission and storage equipment that is used for more than 50% of its activity in relation to renewable energy.

Unallocated proceeds will be invested in other green bonds

Under the Luxembourg covered bond legislation, the renewable energy assets will form a separate cover pool, independent from the other assets of the bank. If the renewable energy cover assets no longer meet the legal cover asset eligibility requirements, they have to be replaced by other eligible assets. Nord/LB CBB ensures that the eligible assets exceed the outstanding green covered bonds at all times, and will replace those projects that no longer satisfy the eligibility criteria.

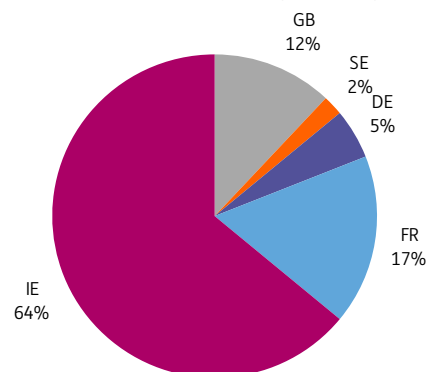
If the bond **proceeds are not fully allocated** to renewable energy projects, green bonds can be used as investments up to maximum 20% of the cover pool, where at least 50% of these green bonds' net proceeds are financing renewable energy assets. In addition, quality substitute assets can be used up to maximum 20% of the outstanding green covered bonds. These assets do not need to be green.

Fig 39 The majority of the loans are wind energy



Source: NordLB Luxembourg (31 March 2020), ING

Fig 40 Distribution of cover pool by country



Source: NordLB Luxembourg (31 March 2020), ING

Nord/LB CBB will report quarterly on the cover pool and at least annually on impact

Nord/LB CBB will provide a **quarterly cover pool report** in line with the requirements of the Luxembourg covered bond legislation. Besides, a portfolio based **allocation report** and an **impact report** will be published on a regular basis, but at least once every year. The cover pool report and the allocation report will provide details on the allocation of the proceeds to eligible assets, providing a breakdown by technology, country, currency, ratings, and financing/refinancing. The impact report may include information on impact indicators such as the avoided CO₂ emissions, the energy production or the capacity of the renewable energy plants financed.

Fig 41 NordLB Luxembourg – Green Bond Framework

Pillar	Details
1. Use of Proceeds	<p>The net green covered bond proceeds will be used to exclusively finance and/or refinance projects within the renewable energy sector. Eligible assets are renewable energy projects in the EU, EEA, OECD and countries with a high quality rating, of the following two categories:</p> <ol style="list-style-type: none"> 1. Financing of the purchase, design, construction, development and/or installation of the generation of renewable energy from on- and offshore wind power and solar power energy sources. 2. Financing for the connection, transmission, transformation and storage of renewable energy. Under the Luxembourg covered bond framework, storage and transmission equipment has to be used for more than 50% of its effective activity in connection with renewable energy.
2. Project Evaluation & Selection Process	<p>All project finance transactions comply with the internal sustainability guidelines and the ESG risk assessment of Nord/LB group. Upon the adoption of its green bond framework and at least annually thereafter Nord/LB CBB will identify all existing and new of eligible wind and solar energy assets in its core banking systems. Loans funded by third parties and non-performing loans are excluded.</p> <p>Nord/LB CBB green bond committee checks the compliance with the selection criteria at least on an annual basis until the maturity of the bond. The green bond committee is composed of the head of financial markets and loans, a representative of the treasury department, the head of finance or representative of the trustee service and the sustainability officer of Nord/LB CBB. The green bond committee meets as required and at least on an annual basis. Besides checking the compliance with the use of proceeds and management of proceeds provisions, the green bond committee also decided on any necessary changes or adjustments to the present green bond framework.</p>
3. Management of Proceeds	<p>The green bond proceeds are managed via a portfolio approach. Nord/LB CBB ensures that the eligible assets exceed the outstanding volume of green covered bonds and will replace projects that no longer satisfy the eligibility criteria. Renewable energy assets form a separate cover pool, independent from the other assets of the bank. If the renewable energy cover assets no longer meet the legal cover asset eligibility requirements, they will be replaced by other eligible assets.</p> <p>If the bond proceeds are not fully allocated to renewable energy project categories, bonds can be used as investments up to maximum 20% of the cover pool. These bonds will be green bonds. At least 50% of their net proceeds are financing renewable energy assets. In addition, quality substitute assets can be used up to maximum 20% of the outstanding green covered bonds which do not need to be green.</p> <p>Nord/LB CBB intends to make sure the bond proceeds will always refinance eligible green assets.</p> <p>Nord/LB CBB green bond committee will decide on the allocation of net proceeds issued under the green covered bonds to the pool of eligible assets at least on an annual basis.</p>
4. Reporting	<p>Nord/LB CBB will prepare regular reports on the outstanding volume of the green covered bonds and their environmental impact. In addition, the issuer publishes an annual group sustainability report, with key information on ecological, social and managerial aspects in line with the reporting standards.</p> <p>Allocation reporting: The cover pool reporting is made available on a quarterly basis in line with the legal requirements of Luxembourg's covered bond legislation. In addition, Nord/LB CBB will inform investors quarterly on a portfolio-based reporting about: the total renewable assets financed, share of proceeds used for direct financing versus refinancing, current volume and financing share, breakdown by wind and solar projects, breakdown by country and currency, breakdown by credit rating, maturities, loan-to-value ratio and LTV utilisation, and outstanding amount of green bonds.</p> <p>Impact reporting: Investors are informed annually about the environmental impact of the assets financed with the green covered bonds. The green bond impact report is intended to contain aggregated information on the total installed capacity of renewable energy (MW), annual expected production of renewable energy (MWh), total capacity of renewable energy facilitated through connection, transmission, transformation and storage, avoided greenhouse gas emissions (CO₂ eq.). The first impact report follows within 12 months of issuance.</p>
5. External review	<p>Second party opinion: Sustainalytics reviews the green bond framework and its alignment with the green bond principles and assesses the sustainability of the entire green covered bond programme.</p> <p>Third party verification: A suitable independent third party will review on an annual basis the existence of the funded eligible assets and the allocation of the green covered bond proceeds to the portfolio of eligible assets. The purpose is to document a clear quantitative allocation of the proceeds.</p>

Source: NordLB Luxembourg, Sustainalytics, ING

At the end of March 2020, Nord/LB CBB had €546m in total renewable energy assets on its balance sheet of which €391m was included in the cover pool. The cover pool volume is made up for €374m of renewable energy loans while the remaining €17m are investments in green bonds. All the renewable energy covered bond proceeds were fully allocated to these loans. The proceed allocations are for 37% refinancing of existing projects and for 63% new financing. The bulk of the assets, ie, 89%, represent wind energy assets, of which 77% operational and 12% under construction. The remaining 11% are solar energy projects.

Moody's has assigned a TPI of "Improbable" to the renewable energy covered bonds

We note that Nord/LB CBB's renewable energy covered bonds are rated Aa2 at Moody's, similar to Nord/LB CBB's public sector covered bonds. Moody's assigns a Timely Payment Indicator (TPI) of "Improbable" to Nord/LB CBB's renewable energy covered bonds whereas the TPI for the issuer's public sector covered bonds is "High". Moody's considers it TPI negative that Nord/LB CBBs renewable energy covered bond programme is the first covered bond programme backed by renewable energy loans. In Moody's view, it will not be possible to transfer the cover pool and the outstanding covered bonds to another issuer in case of issuer default, which the rating agency considers to be an option for established covered bond markets with a larger number of active issuers. As such, Nord/LB CBB's renewable energy covered bonds have a TPI Leeway of one notch at their current Aa2 ratings, while the bank's public sector covered bonds have a TPI Leeway of three notches. Moody's does not expect that the issuer will hold overcollateralization levels consistent with a higher rating than Aa2 for these two programmes.



Norway

DNB Boligkreditt

DNB Boligkreditt issued its first green covered bond in 2018

DNB Boligkreditt was the second Norwegian covered bond issuer to establish a dedicated green covered bond framework in 2018. DNB Boligkreditt is a specialised Norwegian covered bond issuer 100% owned by DNB Bank, which issues covered bonds secured by residential mortgage loans that are originated via DNB Bank's distribution network. The green bond framework was established at the level of the covered bond issuer and provides solely for the option to issue green covered bonds. In its current shape, the framework does not offer the possibility to issue green senior bonds via DNB Bank. DNB Boligkreditt printed its first green covered bond in June 2018.

The green covered bonds are obligations of DNB Boligkreditt ranking **pari-passu with the issuer's vanilla covered bonds**. Hence the eligible green mortgage loans included in the cover pool also have to meet the covered bond asset eligibility criteria. Investors in green covered bonds have a preferential claim to the entire cover pool on a pari-passu basis with vanilla covered bond investors. They do not have a preferential claim to the green mortgage loans ahead of other covered bond investors.

Fig 42 DNB Boligkreditt – Green Covered Bond Framework

Pillar	Details
1. Use of Proceeds	<p>New and existing mortgage loans for energy efficient residential buildings in Norway (eligible residential green buildings) that meet the following eligibility criteria (top 15% best in class):</p> <ul style="list-style-type: none"> Residential buildings completed in 2012 or later that comply with building codes TEK10 or TEK17. When (or if) the database for energy performance certificates (EPC) for Norwegian buildings become available, residential buildings with EPC-labels A, B and C (top 15% energy efficient) may be considered.
2. Project Evaluation & Selection Process	<p>Eligible green mortgage loans are tracked and selected based on information from the official Land Register, received from Eiendomsverdi. Information regarding building year for all mortgage loans in DNB Boligkreditt's cover pool are used to determine the eligible residential green buildings. Loans secured by mortgages on these eligible residential green buildings are selected as eligible loans.</p> <p>DNB Boligkreditt is responsible for the identification and record keeping of eligible mortgages. A green mortgage register of eligible green loans is kept by DNB Boligkreditt and eligible green loans are selected from the register available for green covered bond issuance.</p> <p>A green bond committee meets at least annually and reviews the ongoing compliance of the selected mortgage loans with the eligibility criteria.</p> <p>DNB Boligkreditt assures that the selected eligible green loans comply with official national and social standards and regulations. As part of the general transaction approval process within DNB all activities comply with internal environmental and social standards.</p>
3. Management of Proceeds	<p>DNB Boligkreditt intends to allocate the green bond proceeds to a portfolio of eligible green loans. The size of the eligible green loan portfolio always exceeds the green bonds outstanding. When necessary, additional eligible loans will be added to the green loan portfolio to ensure the sufficient and timely allocation of the incremental net proceeds.</p> <p>Loans that no longer meet the eligibility criteria will be removed and replaced.</p> <p>Unallocated net green covered bond proceeds will be invested in money market instruments.</p>
4. Reporting	<p>DNB Boligkreditt committed to report at the latest one year after the first green bond transaction and at its own discretion annually thereafter until the proceeds have all been fully allocated.</p> <p>The allocation report informs on 1) the size of the eligible green loan portfolio, 2) the amount of proceeds allocated to eligible green loans, 3) unallocated proceeds and 4) the amount or percentage of new financing and refinancing. It has thus far been published on a quarterly basis.</p> <p>A specialized green real estate consultant (Multiconsult ASA) developed a methodology for the impact estimation and calculation (impact reporting). The impact report will report details on a) the estimated annual energy consumption or energy savings, or b) the estimated GHG emissions avoided.</p>
5. External review	<p>Second party opinion from Sustainalytics on the validity of the green bond framework.</p> <p>DNB Boligkreditt may annually request, a limited assurance report by the external auditor on the allocation of the bond proceeds to eligible assets, starting one year after issuance until maturity.</p>

Source: DNB Boligkreditt, Sustainalytics, ING

The net proceeds are allocated to new and existing energy efficient mortgages in Norway

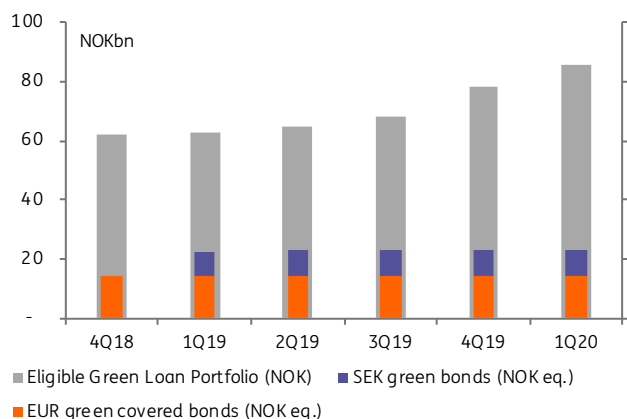
The net proceeds from the green covered bonds are allocated to a portfolio of **new and existing mortgages** for energy efficient residential buildings in Norway. Eligible green buildings are residential buildings completed in 2012 or later, that comply with the Norwegian building codes of 2010 (TEK10) and 2017 (TEK17). This is a tad stricter than for other Norwegian green bond frameworks, where some residential buildings (non-apartment) built after 2009 that meet the building code of 2007 (TEK07) are also eligible. Energy Performance Certificates (EPC) for Norwegian residential buildings have been publicly available since last year. DNB Boligkreditt's green bond committee may also consider including residential buildings with EPC labels A, B or C to the extent the data is considered reliable. Any future changes to the eligibility criteria will not be applicable for the green covered bonds that have been issued before the date of the criteria changes.

The green assets should always exceed the green liabilities

Eligible green assets should **exceed the outstanding green liabilities at all times**. If green assets become ineligible for the eligible green loan portfolio, they will no longer count and will be replaced with new eligible assets where necessary. To the extent that green covered bond proceeds remain unallocated, they will be invested upon DNB Boligkreditt's discretion in its liquidity portfolio of money market instruments.

At the time of publication of its green bond framework in 2018, DNB Boligkreditt expressed the intention to report on the allocation of proceeds within one year after the first green covered bond transaction and, at its own discretion, annually thereafter until the proceeds have been fully allocated. The **allocation report** informs investors on the size of the green portfolio, the amount of proceeds allocated and the percentage of new financing and refinancing. The issuer has thus far published its allocation reports on a quarterly basis. Multiconsult has developed the **impact reporting** methodology for DNB Boligkreditt, which includes details on the estimated energy consumption and savings and information on the estimated savings of CO₂ emissions. The 2019 impact report provides this information per portfolio date August 2019.

Fig 43 The green pool covers the green bonds over 3.5x

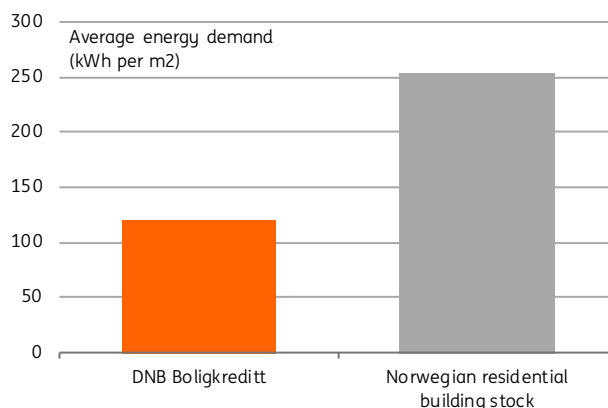


Source: DNB Boligkreditt (allocation reports), ING

DNB Boligkreditt had a NOK85bn eligible green loan portfolio at the end of 1Q20...

According to DNB Boligkreditt's green covered bond allocation report for 1Q20 the issuer's **eligible green loan portfolio** has grown to **NOK85.4bn**, up from NOK62.4bn the year before. The amount of green covered bonds outstanding has been NOK23.2bn since 1Q19, representing among others the €1.5bn green EUR benchmark covered bond issued in June 2018. The proceeds of this green covered bond were **allocated in full upon issuance** to the portfolio of eligible green assets. Last year, DNB Boligkreditt also issued a SEK3bn green covered bond in January, which has been increased via three subsequent tap issues to reach a size of SEK9.7bn in June 2019. 100% of the bond proceeds were used to refinance existing loans. The 1Q20 green cover pool was 3.7 times as high as the green covered bonds issued (Figure 43).

Fig 44 Eligible portfolio consumes energy 48% of avg.



Source: DNB Boligkreditt (investor presentation), Multiconsult, ING

...that provided for an energy reduction of 5.4 GWh/year per NOK1m green bond investment

Multiconsult has estimated that the eligible green loan portfolio of DNB Boligkreditt consumes 48% energy of the Norwegian average. At the August 2019 impact report portfolio date, the green residential portfolio had an estimated energy reduction of 369GWh per year (5.4GWh per NOK1m invested in the green covered bonds) and provided for 45,247 tons in reduced CO₂ emissions (0.66 tons per NOK1m investment).

SpareBank 1 Boligkreditt

SpareBank 1 Boligkreditt's green covered bond proceeds are solely allocated to energy efficient residential assets

SpareBank 1 Boligkreditt issued its first **green covered bond** in January 2018. It was the first covered bond where the issuance proceeds were **solely used for the financing of the energy efficient residential mortgage assets**. For the purpose of issuing the green covered bonds, SpareBank 1 Boligkreditt obtained the eligible green residential mortgage loans from its 14 alliance member banks in the SpareBank 1 Group.

SpareBank 1 Boligkreditt assures that all selected eligible assets comply with official national and social standards and local laws and regulations on a best efforts basis. All individual alliance banks make sure that their activities meet the internal environmental and social standards. Furthermore, most member alliance banks have signed up for the United Nations Global Compact, ensuring that all 10 principles of sustainability are integrated in the day-to-day operations.

Fig 45 SpareBank 1 Boligkreditt – Green Bond Framework

Pillar	Details
1. Use of Proceeds	<p>New and existing mortgage loans for energy efficient residential buildings in Norway (Residential Green Buildings) that meet the following eligibility criteria:</p> <ul style="list-style-type: none"> • New or existing residential buildings – completed from 2012 (apartments) or 2009 (other dwellings) that comply with the Norwegian building codes TEK7, TEK10 or TEK17 (top 15% most energy efficient). • Buildings built before 2012 (apartment buildings) or 2009 (other dwellings) with EPC-labels A, B and C (top 15% energy efficient). These may be identified in data from the EPC database. • Improved buildings with 30% energy improvement or 2-steps in energy label
2. Project Evaluation & Selection Process	<p>A green bond committee oversees the evaluation and selection of assets. It consists of certain members of the SpareBank 1 Boligkreditt Board and management.</p> <p>SpareBank1 Boligkreditt assures that the assets comply with official national and social standards and local laws and regulations on a best efforts basis.</p> <p>Alliance member banks meet internal environmental and social standards.</p>
3. Management of Proceeds	<p>SpareBank1 Boligkreditt intends to allocate all green bond proceeds to eligible green loans within one year of the green bond issuance.</p> <p>Sufficient loans are designated to the green loan portfolio to assure that the outstanding eligible green loans always exceed the green bonds outstanding.</p> <p>Loans that no longer meet the eligibility criteria will be removed and replaced.</p> <p>Unallocated proceeds will be invested in money market instruments.</p>
4. Reporting	<p>SpareBank1 Boligkreditt intended to report one year after the date of a green bond transaction and annually thereafter if there are changes to report on.</p> <p>The allocation report informs on 1) proceed allocations to eligible assets, 2) number of eligible loans, 3) unallocated proceeds or new financing and refinancing, and 4) geographical distribution.</p> <p>The impact report may provide a description of the green projects by nature of what is financed. Specialized green real estate consultant Multiconsult ASA has developed a methodology for the environmental impact metrics to be reported on a portfolio basis in the impact report. These may include a) ex-ante annual energy consumption (kWh/m²) or energy savings (MWh), b) annual GHG emissions reduced or avoided in tons of CO₂ equivalent), c) breakdown of green loans per EPC label, d) percentage of eligible loans for green buildings that are more energy efficient than the TEK building codes required at the time of construction, and e) percentage of new versus refurbished buildings.</p>
5. External review	<p>Second party opinion: Sustainability has provided an independent verification on the validity of the SpareBank1 Boligkreditt green bond framework (second party opinion). The issuer will also obtain Climate Bond Initiative certification for each green bond issued.</p> <p>Verification: Limited assurance report may be requested on an annual basis by the external auditor on the allocation of the bond proceeds to eligible assets, starting one year after issuance until maturity.</p>

Source: Sparebank 1 Boligkreditt, Sustainability, ING

Eligible green mortgage loans are acquired from the SpareBank 1 Alliance banks

The green covered bonds are obligations of SpareBank 1 Boligkreditt on a **pari-passu basis with vanilla covered bonds**. SpareBank 1 Boligkreditt is a specialised credit institution and covered bond issuer that acquires the eligible residential mortgage loans securing the covered bonds from its alliance member banks. Covered bondholders have no direct recourse to the individual alliance member banks, in line with the Norwegian covered bond legislation. The alliance member banks have joint contractual obligations though, to provide equity contributions and liquidity support to SpareBank 1 Boligkreditt.

Bond proceeds are allocated to new and existing loans

The proceeds from the green covered bonds are allocated to a portfolio of **new and existing energy efficient residential mortgage loans** meeting the eligibility criteria of SpareBank 1 Boligkreditt's green bond framework. The selection criteria are based upon the Norwegian system of residential Energy Performance Certificates (EPC). EPC labels have been publicly available since 2019 as of which date SpareBank 1 Boligkreditt also have the option to use EPC energy labels A, B and C. As of that moment, refurbished residential buildings that show a large improvement in their energy efficiency of 30% or more, comparable to a two-step EPC label improvement, would also become a selection criteria for the eligible green assets portfolio (as detailed in the 2019 green bond framework update). The selection criteria ensure that only the most efficient buildings in Norway will be considered for use of proceeds purposes, ie, those within the top 15% of the total housing stock in line with the Climate Bond Initiative standard.

Eligible green loans in the cover pool should exceed the green covered bonds outstanding

The covered bond issuer in principle designates sufficient eligible loans to the green portfolio to ensure that **the balance of outstanding eligible green loans always exceeds the balance of all outstanding green bonds**. For each new green bond additional eligible loans will be added to the green loan portfolio. If a loan ceases to meet the eligibility criteria it will be removed from the eligible green loan portfolio and replaced as soon as practicable. Typically, the green mortgage loans will already be transferred to the cover pool in anticipation of new green bond issuance. To the extent that green bond proceeds have not been allocated to eligible loans, SpareBank 1 Boligkreditt will hold or invest these proceeds in its liquidity portfolio of money market instruments. Green mortgage loans are included in the cover pool along with other mortgage loans that meet the covered bond eligibility criteria. Investors in green covered bonds have a preferential claim to the entire cover pool on a pari-passu basis with vanilla covered bond investors. They do not have a preferential claim to the green mortgage loans ahead of other covered bond investors.

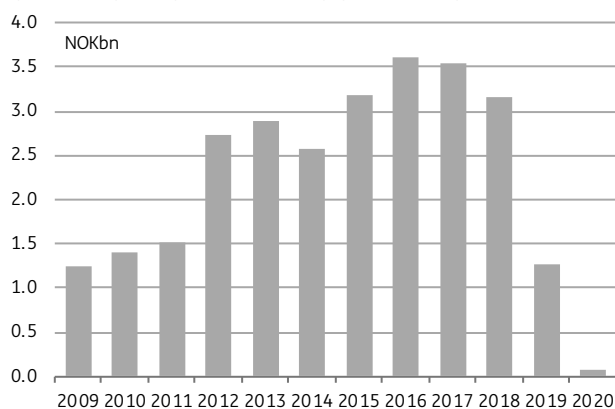
The 2019 framework update meets the TEG's taxonomy recommendations of June 2019

SpareBank 1 Boligkreditt's green bond framework is aligned with the **ICMA's green bond principles**. The eligibility criteria included in the 2019 green bond framework update also comply with the recommendation of the Technical Expert Group (TEG) report on the EU **taxonomy** published at the end of June 2019, and complies with the taxonomy's environmental objective of climate mitigation. The issuer aims to contribute to the development of the green bond market and to the growth of impact investing linked to the **UN sustainable development goals** (SDGs). The eligible green project categories are in line with certain SDGs, including SDG 7 - Affordable and clean energy, SDG 9 - Industry, innovation and infrastructure and SDG 11 - Sustainable cities and communities.

On a best effort basis, **reporting** will be aligned with the portfolio approach described in the ICMA's report: "Green Bonds - working towards a Harmonized Framework for Impact Reporting (June 2019)". SpareBank 1 Boligkreditt also aims to align its green bond reporting with the TEG's recommendation on the EU Green Bond Standards, published in June 2019 and any further updates of this report. SpareBank 1 Boligkreditt intends to report to investors within a year of the date of a green bond transaction and annually thereafter if there are changes to report. In practice, the issuer will refresh its reporting at each new planned green bond issuance and if assumptions and calculations change. SpareBank 1 Boligkreditt reports on a quarterly basis on the size of its eligible green loan portfolio in its cover pool reports. The issuer's latest impact report dates from June 2019.

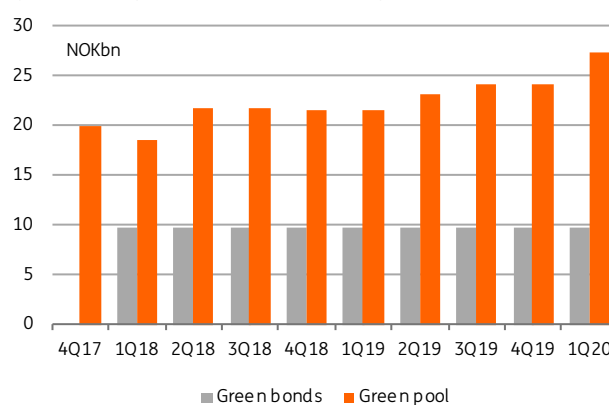
SpareBank 1 Boligkreditt reported NOK27.2bn (c.€2.5bn equivalent) of eligible loans for green bonds in its 1Q20 cover pool report, mostly originated in 2012 to 2018 (Figure 46). This is almost three times the €1bn (NOK9.64bn equivalent) amount of green covered bond outstanding (Figure 47). The eligible loan portfolio is 100% made up of new residential buildings in Norway built since 2009. There are no residential buildings built before 2009 or refurbished residential buildings based upon EPC labels in the portfolio. At the end of June 2019, the green residential portfolio had an estimated energy reduction of 206GWh per year (8.9GWh per NOK1m invested in the green covered bonds) and provided for 25,121 tons in reduced CO₂ emissions (1.1 tons per NOK1m investment).

Fig 46 Eligible green loans by year of origination



Source: SpareBank 1 Boligkreditt (1Q20), ING

Fig 47 The green pool covers the green bonds 2.8x



Source: SpareBank 1 Boligkreditt, ING

SR-Bank established its green bond framework in 2019, with the first green covered bond issued in that same year

SR-Bank can issue covered bonds and senior bonds under its green bond framework

SR-Bank considers general corporate loans to pure-play green companies eligible

Green covered bond proceeds are solely used to (re)finance green residential buildings

SR-Boligkreditt

SR-Bank published its green bond framework in September 2019 and printed its first green covered bond in the same month via SR-Boligkreditt. The bank considers green bonds an effective tool to finance projects with clear environmental or climate benefits and contribute to the achievement of the UN sustainable development goals (SDGs). SR-Bank also intends to align its funding strategy with its mission, sustainability strategy and objectives via the issuance of green bonds. Furthermore, by issuing green bonds, the bank aims to contribute to the development of the green bond market and to the growth of socially responsible investing. Green bonds will also broaden the discussions with investors in SR-Bank's view.

SR-Bank can issue **two types of bonds** under its green bond framework:

- **Green covered bonds** (SR-Boligkreditt), where the bond proceeds are used to finance or re-finance, in part or in full, new and/or existing residential green buildings.
- **Green unsecured bonds** (SR-Bank), where the bond proceeds will be used to finance or re-finance, in part or in full, new and/or existing residential and commercial green buildings, renewable energy loans and loans for clean transportation.

This contrast with the green bond frameworks of DNB Boligkreditt and Sparebanken 1 Boligkreditt that are dedicated solely to the issuance of green covered bonds.

SR-Bank intends to allocate the net proceeds of the green bonds to a loan portfolio of new and existing mortgages for energy efficient residential buildings in Norway (residential green buildings), loans to energy efficient commercial properties (commercial green buildings) and loans to renewable energy or clean transportation. Also, general corporate purpose loans to "pure play" green companies, that derive over 90% of their revenue from the eligible green loan categories, can be funded with net green bond proceeds. More specifically, eligible loan categories are:

- **Green buildings:** new **residential** and **commercial** buildings belonging to the top 15% most energy-efficient buildings of the local building stock and refurbished buildings which achieved energy savings of at least 30% vs the baseline before renovation.

- **Renewable energy:** Loans to (re)finance equipment, development, manufacturing, construction, operation, distribution and maintenance of renewable energy generation sources from hydro power in Norway (emissions <100g CO₂e/kWh).
- **Clean Transportation:** Loans to finance/refinance production, establishment, acquisition, expansion, upgrades, maintenance and operation of low carbon vehicles (emissions <50g CO₂e/pkm) and related infrastructures.

The eligibility criteria are aligned with the EU Taxonomy's environmental objectives

The eligibility criteria comply with the recommendations of the Technical Expert Group (TEG) on the **EU Taxonomy**. The criteria for green buildings, renewable energy and clean transportation are all aligned with the EU Taxonomy's first environmental objective of climate change mitigation. They also target several UN sustainable development goals, such as SDG 7 - Affordable and clean energy, SDG 9 - Industry, innovation and infrastructure, and SDG 11 - Sustainable cities and communities for the green buildings in the eligible portfolio.

For green covered bonds there will be enough eligible green mortgages in the cover pool

The green bond proceeds will be managed in a **portfolio approach**, with the proceeds allocated to a portfolio of loans that meet the eligibility criteria. SR-Bank strives to achieve a level of allocation for the eligible green loan portfolio that matches or exceeds the balance of net proceeds from its outstanding green bonds. Net proceeds that remain unallocated, will be held and/or invested at SR-Bank's own discretion in its treasury liquidity portfolio. For green covered bonds, SR-Boligkreditt will ensure that there are enough eligible green mortgages within the cover pool relative to green covered bonds.

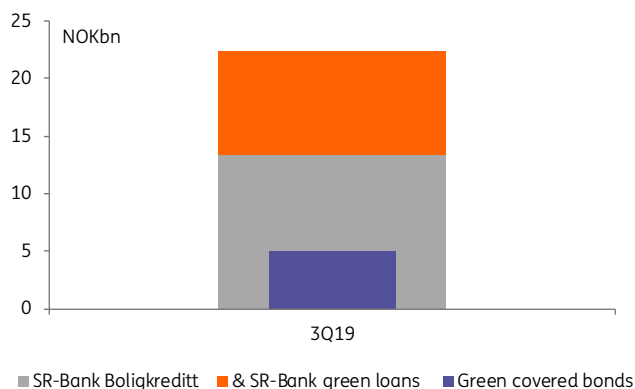
Reporting is aligned with the TEG's green bond standard reporting recommendations

SR-Bank intends to make its **green bond reporting** available a one year after issuance. This report will be renewed annually until full allocation. The **allocation and impact** of the green bond proceeds will at least be shown at the category level and on an aggregated basis for all green bonds and other green funding. The bank intends to align its green bond reporting with the recommendation of the TEG on the EU Green Bond Standard, published in June 2019 and updates thereafter.

At the end of 3Q19 SR-Bank had a green residential buildings portfolio of NOK22.4bn of which NOK14.4bn are green loans held by SR-Bank Boligkreditt and NOK9bn by SR-Bank. The proceeds of the NOK5bn equivalent in green covered bonds have been fully allocated to the eligible green loan portfolio, using only 22.2% of the total green assets. This leaves NOK17.4bn in unallocated eligible loans in the total green portfolio, or NOK8.4bn on the level of SR-Bank Boligkreditt. The green portfolio represents NOK5.4bn in loans for apartments and NOK16.9bn for other residential buildings.

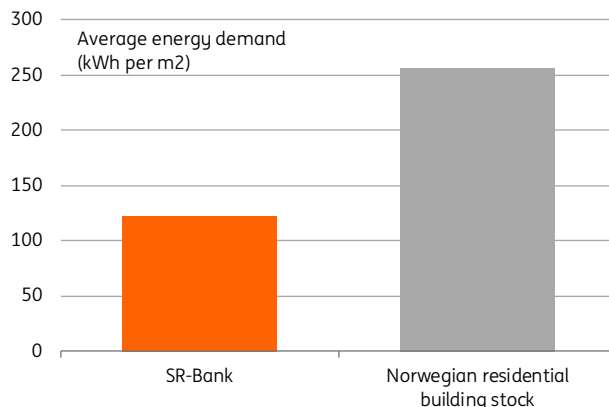
According to SR-Bank's September 2019 investor presentation, the eligible portfolio has an estimated average **energy consumption of less than 50 per cent of the Norwegian average** (Figure 49). The green covered bond pre-issuance impact report highlights that the NOK22.4bn in green residential buildings in the eligible portfolio realise a reduced energy consumption of 142GWh and 17,400 tons of reduced CO₂ emissions per year.

Fig 48 The green cover pool covers green bonds 2.7x



Source: SR-Bank (post-issuance green bond allocation report), ING

Fig 49 Eligible portfolio consumes energy 48% of avg.



Source: SR-Bank (green bond investor presentation), Multiconsult, ING

Fig 50 SR-Boligkreditt – Green Bond Framework

Pillar	Details
1. Use of Proceeds	<p>Residential green buildings: New buildings belonging to the top 15% most energy efficient buildings and refurbished buildings achieving energy savings of at least 30%. 1. New residential buildings in Norway: (i) New or existing Norwegian apartments that comply with the Norwegian building codes of 2010 (TEK10) or 2017 (TEK17), hence built after 2012. (ii) New or existing other residential dwellings that comply with the Norwegian building codes of 2007 (TEK07), 2010 (TEK10) or 2017 (TEK17), hence built after 2009. 2. Residential buildings in Norway built before 2009 (older building codes than TEK10 for apartments and TEK07 for other dwellings), with EPC-labels A, B and C as identified in data from the Energy Performance Certificate (EPC) database. 3. Refurbished residential buildings in Norway that have achieved a 30% improvement in energy efficiency, based upon one of the following two criteria: (i) the refurbished residential buildings with at least a two-step improvement in energy label compared to the calculated label based on the building code in the year of construction, or (ii) the refurbished residential buildings have achieved at least a 30% improvement in energy efficiency (kWh/M²) compared to the calculated label based on the building code in the year of construction.</p> <p>Commercial green buildings: 1. New or existing commercial buildings in the top 15% low carbon buildings in Norway: (i) New or existing Norwegian hotel and restaurant buildings that comply with the Norwegian building code TEK07, TEK10, TEK17 and later building codes, hence, built after 2011. (ii) New or existing Norwegian office, retail and industrial buildings and warehouses that comply with the Norwegian building TEK07, TEK10, TEK17 and later building codes, hence, built after 2010. 2. New, existing or refurbished commercial buildings with a certification equivalent to or higher than LEED “Gold”, BREEAM or BREEAM-NOR “Excellent”, or having the Nordic Swan Ecolabel. 3. Refurbished commercial buildings in Norway with a 30% improvement in energy efficiency, ie, those that achieved, (i) at least a two-step improvement in energy label compared to the calculated label based on the building code in the year of construction, or (ii) at least a 30% improvement in energy efficiency (kWh/m²) versus the calculated energy efficiency based on the building code in the construction year.</p> <p>Renewable energy: Loans to finance or refinance equipment, development, manufacturing, construction, operation, distribution and maintenance of renewable energy generation sources from: (i) Hydro power in Norway (limited direct emissions of less than 100g CO₂e/kWh), including run-of-river, small scale hydro power plants (max generation capacity < 20MW) and refurbishment or refinancing of existing medium or large hydropower plants. (ii) Wind energy projects. (iii) Solar projects.</p> <p>Clean transportation: Loans to finance or refinance production, establishment, acquisition, expansion, upgrades, maintenance and operation of low carbon vehicles and related infrastructures, including i. low carbon vehicles, such fully electrified, hybrid (direct emissions ≤50 gCO₂e/pkm) or hydrogen passenger vehicles (cars), or fully electrified or hydrogen freight vehicles (ferries or vessels). ii. low carbon transportation infrastructure, such as charging stations for electric vehicles.</p>
2. Project Evaluation & Selection Process	<p>A dedicated green bond committee was established to create the green bond framework and will manage any future updates to the framework and oversee its implementation. The committee consists of members of the corporate division, communication and social responsibility and senior officials within SR-Bank’s funding team. It will oversee the process of evaluation and selection of loans.</p> <p>SR-Bank takes care that all selected eligible assets comply with official national and social standards and local laws and regulations on a best effort basis, and that all activities comply with internal environmental and social standards, including those financed with the proceeds of the green bonds.</p>
3. Management of Proceeds	<p>The green bonds proceeds will be managed by SR-Bank in a portfolio approach. SR-Bank strives, over time, to achieve a level of allocation for the eligible green loan portfolio that matches/exceeds the net proceeds from the outstanding green bonds. Loans will be added/removed from the eligible green loan portfolio to the extent required. Unallocated net green bond proceeds will be invested, at the bank’s own discretion, in its treasury liquidity portfolio, in cash or other short term and liquid instruments.</p>
4. Reporting	<p>SR-Bank intends to make available a green bond reporting one year after issuance, to be renewed annually until full allocation. The allocation and impact of the green bond proceeds will at least be shown at the category level and on an aggregated basis for all green bonds and other green funding.</p> <p>Allocation reporting: The allocation report will provide information on a portfolio basis on indicators such as a) the total amount of proceeds allocated to eligible loans, b) the number of eligible loans, c) the balance of unallocated proceeds, d) the amount/percentage of new financing and refinancing, and e) the geographical distribution of the assets.</p> <p>Impact reporting: The impact report may provide a description of the green projects, the breakdown of green projects by nature of what is being financed, and metrics regarding projects’ environmental impacts, such as: (i) green buildings: the estimated ex-ante annual energy consumption (kWh/m²) or energy savings (MWh), (ii) renewable energy: total installed capacity (MWh) and estimated annual avoided emissions (tons of CO₂ equivalent), and (iii) clean transportation: number of low carbon vehicles, number of EVs for low carbon infrastructure, and estimated ex-ante annual GHG emissions reduced/avoided (tons of CO₂ eq.) vs fuel-based powertrain vehicles.</p>
5. External review	<p>Second party opinion: SR-Bank obtained an independent verification assessment from Sustainalytics to confirm the validity of the green bond framework.</p> <p>Verification: SR-Bank may, on an annual basis, starting one year after issuance until maturity or full allocation, request a limited assurance report from its external auditor on the proceed allocation. The bank intends to obtain accreditation of the CBI certificate for green bonds issues.</p>

Source: SR-Boligkreditt, Sustainalytics, ING

Sparebanken Sør can issue green and sustainability bonds under its 2019 framework

Sparebanken Sør Boligkreditt

Sparebanken Sør established its green and sustainability bond framework in 2019. The framework allows for the issuance of green and/or sustainable bonds to finance or refinance, in full or in part, projects promoting environmental and social progress. Via the issuance of green and sustainability bonds, the bank intends to contribute to the development of the green bond market, while highlighting its sustainability strategy to market participants. In addition, green and sustainable bonds will help to diversify the bank's investor base and broaden its dialogue with existing investors.

Under the green and sustainability bond framework, Sparebanken Sør and its wholly owned subsidiary Sparebanken Sør Boligkreditt can issue two types of bonds:

- **Green covered bonds** (Sparebanken Sør Boligkreditt), where the proceeds are used to finance or refinance in full or in part new and existing green residential buildings.
- **Sustainability senior bonds** (Sparebanken Sør), where the proceeds will be used to finance or refinance, in full or in part, new and/or existing social projects.

Green covered bonds (re)finance mortgage loans for low carbon residential buildings in Norway

The net proceeds of green covered bonds are allocated to a portfolio of new and existing mortgage loans for low carbon **residential green buildings** in Norway, while the net proceeds of sustainability senior bonds are allocated to a portfolio of loans to low carbon **commercial green buildings** and loans granting **access to essential social services**.

The eligible residential green buildings for green covered bonds include **new residential buildings** in Norway belonging to the top 15% most energy-efficient buildings of the local building stock, and **refurbished residential buildings** which realised energy savings of at least 30% compared to the baseline performance of the building before renovation.

- The **top 15% most energy efficient new residential buildings**, include Norwegian apartments that comply with the Norwegian building codes of 2010 (TEK10) or 2017 (TEK17), and new or existing other residential dwellings that comply with the Norwegian building codes of 2007 (TEK07), 2010 (TEK10) or 2017 (TEK17). This in practice means the apartments should have been built from 2012 onwards, and the other residential dwellings from 2009 onwards, taking into account a two-year lag between the building code and the buildings built under that code. The 15% most energy efficient residential buildings also include buildings in Norway built before 2009, under older building codes, with EPC-labels in the A, B and C categories.

Fig 51 Sparebanken Sør Boligkreditt – Green and Sustainability Bond Framework

Pillar	Details
1. Use of Proceeds	<p>An amount equal to at least the incremental proceeds from the green covered bonds and/or sustainability senior bonds is allocated to finance or refinance in whole or in part a portfolio of eligible loans in the respective use of proceeds categories in the eligible green or sustainability loan portfolios.</p> <p>Green covered bonds - Sparebanken Sør Boligkreditt</p> <p>Residential green buildings: 1. New residential buildings in Norway belonging to the top 15% most energy-efficient buildings of the local building stock: i. New or existing Norwegian apartments that comply with the Norwegian building codes of 2010 (TEK10) or 2017 (TEK17), which in practice means apartments built from 2012 onwards, taking into account two year lag between the building code and the buildings built under that code. ii. New or existing other residential dwellings that comply with the Norwegian building codes of 2007 (TEK07), 2010 (TEK10) or 2017 (TEK17), which in practice means other residential dwellings built from 2009 onwards. 2. Residential buildings in Norway built before 2009 (older building codes than TEK10 for apartments and TEK07 for other dwellings), with EPC-labels A, B and C as derived from data from the Energy Performance Certificate (EPC) database. 3. Refurbished residential buildings in Norway that have achieved a 30% improvement in energy efficiency, based upon meeting one of the following two criteria: i. the refurbished residential buildings must have achieved at least a two-step improvement in energy label compared to the calculated label based on the building code in the year of construction, or ii. the refurbished residential buildings have achieved at least a 30% improvement in energy efficiency (kWh/m²) compared to the calculated label based on the building code in the year of construction. Where EPC labels are available to select eligible assets under this criterion, only labels of D or better will be considered.</p>

Source: Sparebanken Sør Boligkreditt, Sustainalytics, ING

Fig 58 Sparebanken Sør Boligkreditt – Green and Sustainability Bond Framework (continued...)

Pillar	Details
1. Use of Proceeds	<p>Sustainability senior bonds - Sparebanken Sør</p> <p>Commercial green buildings: 1. New or existing commercial buildings in the top 15% low carbon buildings in Norway. 2. New, existing or refurbished commercial buildings with a certification equivalent to or higher than LEED “Gold”, BREEAM or BREEAM-NOR “Excellent”, or was accredited the Nordic Swan Ecolabel. 3. Refurbished commercial buildings in Norway that achieved a 30% improvement in energy efficiency, ie, those that achieved i. at least a two-step improvement in energy label compared to the calculated label based on the building code in the year of construction, or ii. at least a 30% improvement in energy efficiency (kWh/m²) compared to the calculated energy efficiency based on the building code in the year of construction.</p> <p>Access to essential services: loans for activities that support healthcare, social care, education and vocational training in Norway and in emerging countries located in South America, Africa and Asia.</p> <p>1. Healthcare and social care: Loans for activities that support public/free/subsidised health and social care, in Norway and in emerging countries (construction and equipment hospitals, clinics and healthcare centres for the provision of public/subsidised healthcare services, etc.). Eligible projects will service all citizens, including vulnerable population groups such as the elderly, physically or mentally dependent persons and populations with limited access to essential services in emerging countries.</p> <p>2. Education and vocational training: Loans for activities that expand access to free/subsidised primary, secondary, adult and vocational education in Norway and emerging countries (schools, university campus buildings, etc.). Eligible projects include all populations, incl. minority groups.</p>
2. Project Evaluation & Selection Process	<p>The green and sustainability bond committee manages the future updates to the framework and monitors the eligible loan portfolio, including any extension to the list of eligible categories and changes in market developments (such as the introduction of the EU Green Bond Standards). The committee meets at least on an annual basis, or more frequently under specific circumstances.</p> <p>The committee includes the CEO, co-director and head of corporate market, director of retail market, CEO of Sparebanken Sør Boligkreditt, chief of staff, head of treasury, and finance manager.</p> <p>Sparebanken Sør keeps a register of eligible loans from which loans available for green covered bond/sustainability senior bond funding will be selected. For green covered bonds, Sparebanken Sør will select eligible loans based on information from the official Land Register, obtained via Eiendomsverdi.</p> <p>Sparebanken Sør aims to ensure on a best-effort basis that all selected eligible assets comply with local laws and regulations as well as official national and social standards.</p> <p>Exclusionary criteria: The bank is careful not to extend credit to customers that develop or sell products with negative impacts on the environment or people. As such the bank does not desire to extend credit to gambling companies, companies that produce/distribute pornographic material, weapons and ammunition producers/suppliers without government approval, or tobacco companies. This also excludes extending credit for properties rented to these categories of companies. Eligible loans should also not relate in any way to fossil fuel energy generation and nuclear energy generation.</p>
3. Management of Proceeds	<p>A portfolio approach is used to manage the proceeds of the green covered bonds/sustainability senior bonds. Sparebanken Sør aims to designate sufficient eligible loans to ensure that the balance of eligible loans always exceeds the outstanding green covered bonds and sustainability senior bonds. For each new issuance, additional eligible loans will be added to the eligible loan portfolio where necessary, to ensure sufficient and timely allocation of the additional net proceeds. Sparebanken Sør will remove loans that no longer meet the eligibility criteria from the eligible loan portfolio and replace it, when necessary, to restore the balance as soon as possible. Unused/unallocated proceeds will at the Sparebanken Sør’s own discretion be invested in its liquidity portfolio of money market instruments.</p>
4. Reporting	<p>Sparebanken Sør provides allocation and impact reports. On a best-effort basis, the issuer will align its reporting with the ICMA’s harmonized framework for impact reporting for green bonds (June ‘19) and social bonds (June 18). Reporting for all green covered/sustainability senior bonds is based on the eligible loan portfolio, aggregated for all green covered bonds/sustainability senior bonds outstanding.</p> <p>Allocation reporting: The allocation report provides indicators on a portfolio basis on a) the total amount of proceeds allocated to eligible loans, b) the number of eligible loans, c) the balance of unallocated proceeds, d) the amount and percentage of new financing/refinancing, and e) the geographical distribution of the assets. Allocation reports will be made available one year after the issuance of the green covered bonds/sustainable senior bonds, to be renewed annually thereafter until full allocation of the green covered bonds/sustainability senior bonds net proceeds.</p> <p>Impact reporting: The impact report may provide for a) a description of eligible projects, b) the breakdown of green projects by nature of what is being financed, and c) impact reporting indicators such as for green buildings: i. the estimated ex-ante annual energy consumption (kWh/m²) or energy savings (MWh) and ii. the estimated annual GHG emissions reduced/avoided (tonnes of CO₂ eq.). For access to essential services these include: i. the number of hospitals, nursing homes, rehabilitation centres, patients or beds, population of regions where hospital projects are located per country or geographical area, and ii. the number of public education schools supported, and/or the number of individuals benefiting from these schools per country/geographical area</p>
5. External review	<p>Second party opinion: Sustainability confirms the validity of the green and sustainability bond framework. Sparebanken Sør may obtain independent verification for each green/sustainability bond.</p> <p>Verification: Sparebanken Sør may, on an annual basis, starting one year after issuance until maturity or full allocation, request a limited assurance report from its external auditor on the proceed allocation. The bank obtained a CBI certificate for the inaugural green covered bonds.</p>

Source: Sparebanken Sør Boligkreditt, Sustainability, ING

- **Refurbished residential buildings** in Norway that have achieved a **30% energy efficiency improvements** include refurbished residential buildings that have achieved at least a two-step improvement in energy label, or at least a 30% improvement in energy efficiency (kWh/M²). Where EPC labels are available to select eligible assets under this criterion, only labels of D or better will be considered.

These green eligibility criteria comply with the recommendations of the Technical Expert Group (TEG) on the EU Taxonomy as published in its report of June 2019.

Sparebanken Sør will not extend credit with negative social and environmental impacts

Sparebanken Sør keeps a **register of eligible loans** from which loans will be selected for the green or sustainable bond funding. For green covered bonds, the bank will select eligible loans based on information from the official Land Register, obtained via Eiendomsverdi. Sparebanken Sør wishes to ensure that all selected eligible assets comply with local laws and regulations as well as official national and social standards. The bank is also careful not to extend credit to customers that develop or sell products with negative environmental or social impacts, such as gambling companies, certain weapons and ammunition producers or tobacco companies. Eligible loans should also not be related to fossil fuel energy generation and nuclear energy generation.

Unused proceeds will be invested in money market instruments

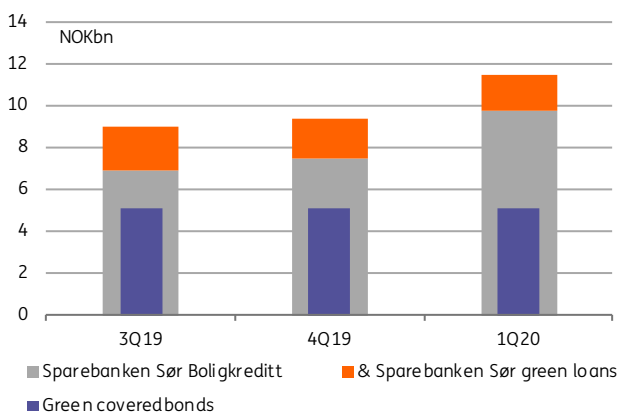
Sparebanken Sør uses a **portfolio approach** to manage the proceeds of the green covered bonds or sustainability senior bonds. The bank strives to keep a balance of eligible loans that always exceeds the outstanding green covered bonds and sustainability senior bonds. For each new bond issued, additional eligible loans will be added to the eligible loan portfolio if necessary, to ensure the sufficient and timely allocation of the additional net proceeds. Loans that no longer meet the eligibility criteria will be removed from the eligible loan portfolio and replaced if necessary. **Unused proceeds** will be invested in Sparebanken Sør’s liquidity portfolio of money market instruments at the bank’s own discretion.

The green bond reporting is aligned with the TEG’s GBS recommendations

Sparebanken Sør intends to align its green and sustainability bond reporting with the recommendations of the TEG on the EU Green Bond Standards (GBS), published in June 2019 and further updates, on a best efforts basis. The bank will provide allocation and impact reports, to be made available one year after the issuance of the green covered bonds or sustainable senior bonds, and renewed annually thereafter until full allocation of the net proceeds. Since the first green covered bond was issued, Sparebanken Sør has published quarterly on its **proceed allocations**. At the end of 1Q20 the green residential buildings portfolio was NOK11.5bn, of which NOK9.7bn at Sparebanken Sør Boligkreditt.

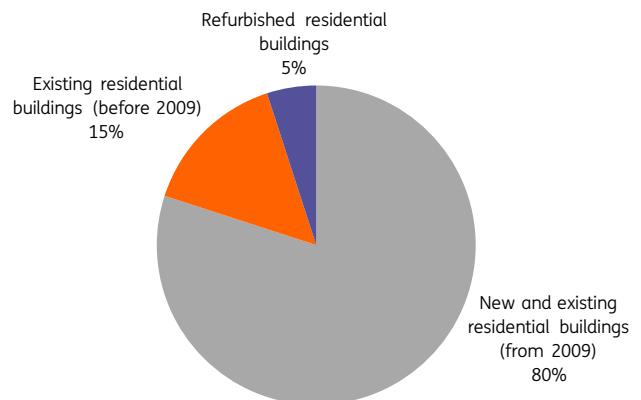
The **pre-issuance impact report** for 2019 highlights that the green residential buildings in the eligible portfolio realise a reduced energy consumption of 118GWh and 14,400 tons of reduced CO₂ emissions per year.

Fig 52 The green cover pool covers green bonds 1.9x



Source: Sparebanken Sør (1Q20 green bond allocation report), ING

Fig 53 NOK11bn green residential loan book distribution



Source: Sparebanken Sør (green bond investor presentation), ING



Korea

Korea Housing Finance Corporation (KHFC)

The (social) covered bonds of KHFC have been issued under the KHFC Act

Korea Housing Finance Corporation (KHFC) is a 100% government owned entity established under the **KHFC Act** in 2004 with the purpose of promoting welfare in Korea by facilitating the long-term and stable supply of housing finance. Although KHFC is allowed to issue covered bonds under the Korean Covered Bond Act, KHFC has chosen to continue to issue mortgage covered bonds under the KHFC Act.

The covered bonds issued by KHFC under the KHFC Act, including the social covered bonds, are secured by standalone dynamic pools of Korean residential mortgage loans, originated by one or more of the six participating banks (Figure 54). The covered bondholders are given a statutory priority right over the cover pool and have dual recourse to both KHFC and the cover pool. Covered bondholders furthermore rank *pari passu* with KHFC's other senior debt.

Although the covered bonds issued by KHFC are not directly government guaranteed, Art 51 of the KHFC Act does ensure that any losses on a prospective liquidation of KHFC will ultimately be covered by the government. Furthermore, under Art 53 of the KHFC Act, KHFC is permitted to borrow from the government and financial institutions. The covered bonds issued by KHFC are secured by fixed rate amortizing mortgage loans.

Fig 54 Originating banks per collateral pool (%)

	KHFC 2020 (Social €1bn)	KHFC 2019 (Social €0.5bn)	KHFC 2018 (Social €0.5bn)
Industrial Bank of Korea		0.0	
KB Kookmin Bank	62.9	26.3	42.9
KEB Hana Bank	26.7	46.6	44.9
Shinhan Bank		0.2	
Standard Chartered Bank Korea		26.9	
Woori Bank	10.4		12.2

Source: KHFC investor reports, ING

KHFC has already issued multiple social covered bonds

KHFC has thus far issued three € social covered bonds under its social bond framework as part of its mission to contribute to the welfare of the Korean population and the development of the Korean economy by facilitating stable and long-term supply of housing finance in South Korea. KHFC's social covered bond net proceeds will be allocated to mortgage assets supporting affordable housing.

All KHFC's mortgage loans are designed to ensure that each mortgage product serves the intended social objectives that are in line with the government's housing welfare policy. The loans are intended to reduce the repayment burden of borrowers by offering long-term fixed rate amortizing loan products. The social bond proceeds will refinance two types of KHFC mortgage loans: (1) *Bogeumjari* loans; and (2) *Conforming* loans

- **Bogeumjari loans** are long-term, fixed rate instalment mortgage loan products granted mainly to moderate and low income households. The loans are only available to families who do not own more than one property with a maximum household annual income of KRW70m (€52k). The value of the property should not exceed KRW600m (€442k). More restrictive LTV/DTI rules apply for properties in speculation zones.

In 2014 KHFC introduced a new *Bogeumjari* loan product (**Didimdol loans**) which combined KHFC's prime rate *Bogeumjari* loan with the National Housing Fund's working class housing loan and first home buyer loan into a new product. The loans are designed for low income households that do not own a property, with a maximum annual income of KRW60m (€44k). The value of the property should not exceed KRW500m (€368k) and the property should not be larger than 85m².

Fig 55 KHFC – Social Bond Framework

Pillar	Details
1. Use of Proceeds	<p>KHFC social covered bond proceeds will be allocated to mortgages supporting affordable housing. The net proceeds will be used exclusively to purchase KHFC mortgage loans originated by partner banks in order to facilitate the supply of housing finance on a long-term sustainable basis. Each mortgage product serves the intended social objectives that are in line with the government's housing welfare policy. KHFC mortgage loans are intended to reduce the repayment burden of borrowers, by offering long-term fixed rate amortized loan products.</p> <p>The currently available KHFC mortgage loans that will be (re)financed with the proceeds of the social covered bonds are: (1) Bogeumjari loans (long-term fixed rate instalment mortgage loans designed for moderate and low income households) or Didimdol loans (designed for low income households that do not own a property), and (2) Conforming loans (designed for new borrowers or borrowers with short-term, floating rate loans subject to lump-sum payments at maturity with commercial banks with the purpose of further promoting the origination of long-term amortized fixed rate mortgage products)</p>
2. Project Evaluation & Selection Process	<p>All KHFC's mortgage loans are designed to address a specific social agenda from the Korean government and have clear defined eligibility criteria in terms of borrower and residential property.</p> <p>(1) Launching of mortgage loan products: the eligibility criteria of the mortgage loan products as suggested by KHFC reflect the government's policy and market situation and are reviewed and agreed by the relevant government agencies (including the financial services commission (FSC) and ministry of land, infrastructure and transportation (MOLIT). The KHFC public mortgage department creates detailed guidelines on eligibility, underwriting and required documentation. This is reviewed by the risk management committee chaired by KHFC's vice president and approved by the managing director of the securitization business group.</p> <p>(2) Loan disbursement: the partner banks review each mortgage loan application strictly based upon the guidelines. Borrowers provide written proof for all eligibility criteria as part of the underwriting process and KHFC will pre-screen a majority of the mortgage loan applications to confirm eligibility. Records will be kept in the systems of both the partner banks and KHFC. If a borrower no longer meets the eligibility requirements, the originating partner bank will be required to buy back the mortgage loan immediately.</p> <p>(3) Covered bond issuance: the securitization department will only select KHFC mortgage loans to create a cover pool securing the social covered bond.</p> <p>(4) The KHFC securitization working group meets quarterly to review pre-issued MBS and covered bonds and to discuss the strategy and planning on future issuance. The working group consists of members from the financial management department, housing finance research centre, public mortgage department and securitization department. It acts as a <i>social covered bond work group</i>, reviewing the issued social cover pools and KHFC's annual reports.</p>
3. Management of Proceeds	<p>The net social covered bond proceeds will be used to purchase predetermined pools of KHFC mortgage loans from its partner banks. The purchased mortgage loans are physically separated from KHFC's other assets per Art 30 of the KHFC Act and separately managed according to a securitization plan. The documentation relating to the purchased mortgage loans will be held separately from KHFC's other mortgage loans and the cash collections and liquidation proceeds will be held in designated accounts. KHFC is required to clearly designate the assets in the cover pool and to identify the records of the mortgage loans in each cover pool and to maintain a listing of such mortgage loan under each social covered bond administration agreement.</p> <p>KHFC determines on a monthly basis that the adjusted aggregate balance of the cover pool is at least equal to the KRW equivalent of the social bond outstanding. KHFC is also required to maintain a minimum amount of committed overcollateralization under the monthly asset coverage test for each social covered bond. KHFC may add additional KHFC mortgage loans to the pool to ensure that the asset coverage test is satisfied. Any unallocated proceeds will be invested in cash or cash equivalents in line with KHFC's liquidity management policy.</p>
4. Reporting	<p>Following the first anniversary of the social covered bond issuance, and on an annual basis until the maturity of the covered bonds, KHFC will inform investors on the use of proceeds of the social covered bonds as well as on the expected social impact of the loans financed.</p> <p>The allocation report aims to provide updated information the mortgage loans purchases by the social covered bond proceeds and may provide information on: a) the total eligible mortgage loan balance, b) the number of eligible mortgage loans, c) the split of mortgage loans by type (Bogeumiari, Didimdol and Conforming loans), and d) the balance of unallocated proceeds.</p> <p>The impact report may, where feasible, include qualitative and quantitative social performance indicators, such as for example: a) the number of households benefiting from eligible mortgage loans, b) the average eligible loan balance per person, c) the average house value and d) the average household income of the borrowers.</p>
5. External review	<p>KHFC conducts due diligence with a third-party auditor on all the mortgage loans to be purchased by the partner banks in order to test compliance with the required underwriting standards. A third party auditor will conduct an annual review of the cover pool securing the social covered bonds.</p> <p>Sustainalytics provides the second party opinion.</p>

Some Bogeumjari loans that are originated by KHFC directly are also serviced by KHFC (KHFC Serviced Mortgage Loans or u-Bogeumjari loans).

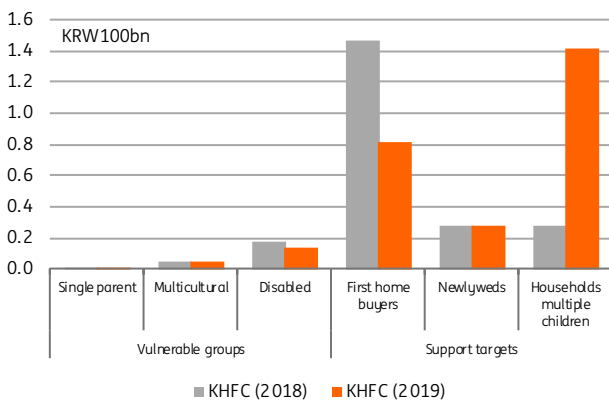
- **Conforming loans** were introduced by KHFC in partnership with the participating lenders in 2012 for the purpose of further promoting the origination of long-term fixed rate mortgage loan products in Korea. The loans are designed for new borrowers or borrowers with short term, floating rate loans subject to lump-sum payments at maturity with commercial banks.

The loans are available for properties with a value that do not exceed KRW900m (€663k) and the maximum loan amount is KRW500m (€368k). The conforming loans intend to encourage banks to change existing short-term, floating rate interest only loans into long-term, fixed rate amortising loans which are deemed to be less risky for households in a rising rate environment. This helps households manage their mortgage payment burden in line with the Korean government's three-year plan.

The social bond proceeds are partly allocated to households in vulnerable or support groups

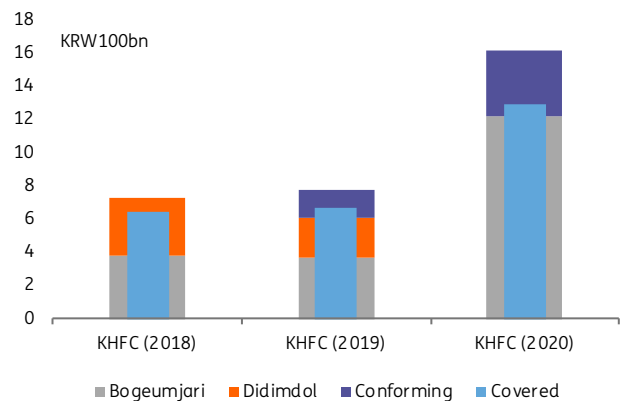
According to KHFC's social covered bond reporting for 2019, the proceeds for the social covered bonds outstanding at the reporting date have been 100% allocated to the sustainable housing finance for low-to-moderate income households, including those within different vulnerable groups and support targets. The three € social covered bonds issued by KHFC finance all the different loan products of KHFC, albeit that KHFC (2018) proceeds were only allocated to Didimdol and Bogeumjari loans, while the KHFC (2020) cover pool only includes Bogeumjari and conforming loans.

Fig 56 Loans to vulnerable groups and support targets



Source: KHFC (social covered bond 2019 annual reporting), ING

Fig 57 Social loan amounts versus € covered bonds



Source: KHFC (social covered bond reportings), ING



Spain

CRN has issued sustainable bonds and loans since its inaugural covered bond in 2016

Caja Rural de Navarra

Caja Rural de Navarra issued its first €0.5bn **sustainable covered bond** in 2016. Since then, the cooperative bank has issued two other publicly placed bonds in sustainable format, including a €100m FRN sustainable senior bond launched in 2017 and the bank's second €0.5bn sustainable covered bond printed in 2018. In 2018 and 2019 the bank also attracted three loans via the European Investment Bank for a total amount of €90m to fund lending to SMEs for climate change purposes.

Caja Rural de Navarra's sustainability framework was most recently updated in March 2020. The bank established its sustainability bond framework with the aim to issue green, social and/or sustainability bonds. Caja Rural de Navarra directs the proceeds of its sustainable bonds towards the (re) financing projects and activities in **nine different categories** that meet the eligibility criteria of its sustainable bond framework.

Fig 58 Caja Rural de Navarra's sustainability categories

Green or sustainable framework	Social or sustainable framework
1. Sustainable agriculture	1. Social housing
2. Renewable energy	2. Education
3. Energy efficiency	3. Energy efficiency
4. Sustainable forest management	4. Economic inclusion
5. Waste management	5. Social inclusion

Source: Caja Rural de Navarra, ING

Proceeds are directed towards projects aligned with nine sustainability criteria

These nine categories were initially classified in three different sustainable development goals (SDGs) as identified by the United Nations, SDG 7 – Affordable and clean energy, SDG 11 – Sustainable cities and communities and SDG 12 – Responsible consumption and production. However, in its 2019 impact report, Caja Rural de Navarra reorganised the nine categories to a broader range of SDGs as promoted by the bank in its March 2020 updated sustainability framework:

- **SDG 4: Quality education:**
 - Education;
- **SDG 7: Affordable and clean energy:**
 - Renewable energy;
 - Energy efficiency;
- **SDG 8: Decent work and economic growth:**
 - Economic inclusion;
- **SDG 10: Reduced inequalities:**
 - Social inclusion;
- **SDG 11: Sustainable cities and communities:**
 - Social housing;
- **SDG 12: responsible consumption and production:**
 - Sustainable agriculture;
 - Waste management.
- **SDG 15: Life on land:**
 - Sustainable forest management.

Caja Rural de Navarra strives to align the definitions of its sustainability framework with market practices such as the ICMA's criteria (i.a. green and social bond principles), the UN's sustainable development goals and the EU taxonomy.

Fig 59 Caja Rural de Navarra – Sustainability Bond Framework

Pillar	Details
1. Use of Proceeds	<p>Projects and the general purpose loans to business or projects that derive 90% or more revenues from eligible activities can be (re)financed by the net proceeds if they take place in Spain and meet one or more of the following eligibility criteria:</p> <ul style="list-style-type: none"> • Sustainable agriculture: a) reduction of methane and green-house gas emissions (GHG) resulting from agriculture; b) support the adoption of management practices that increase the efficiency in the use of resources or decrease GHG emissions of core agricultural inputs and processes, such as irrigation, warehousing, transportation, crop protection etc., as defined by the EU Taxonomy and/or the UN's Food and Agriculture Organisation (FAO) "climate smart agriculture" criteria; • Renewable energy: a) generation of electricity via renewable sources (geothermal projects limited at 100gCO₂/kWh), b) production of bio-based fuels that achieve at least 50% reduction in GHG emissions compared to fossil fuels, c) development of infrastructure that facilitate the inclusion of renewable energy into the grid, support the distribution of bio-fuels, are whole dedicated to energy from renewable sources, or improve existing systems to facilitate the integration of energy from renewable sources into the grid, and d) manufacture components used in renewable energy technologies; • Energy efficiency: a) develop products that reduce energy consumption, b) manufacture components used in energy efficiency products, or c) acquisition of buildings/equipment that increases resource use efficiency or reduces GHG emissions, d) buildings energy efficiency (evaluated through energy performance certificates (EPC) as required since 1 June 2013): ie, (i) construction or acquisition of top energy efficiency performing residential units within the A and B categories, which are well below the 15% best performing threshold, (ii) retrofitting of residential units that after renovation have achieved at least 30% improvement in energy performance; • Sustainable forest management: companies should present the endorsement of an official forest certification (i.a. programme for the endorsement of forest certification (PEFC)): a) certified forest operations for working forest, b) conservation projects to improve the forested land; • Waste management: a) develop or use technology/equipment that increases resource use efficiency or reduce waste or waste production, b) projects that generate inputs from used materials (recycling); • Affordable housing: provide social housing mortgages to disadvantaged populations meeting the requirements set by the regional government (income level, number of family members, number of aged/disabled, immigrant background, violence experienced by women and single family housing); • Social inclusion: a) construct cultural facilities for socially marginalized groups such as mentally disabled, b) provide job training programmes for youth, unemployed, disabled or socially marginalised groups, c) improve teaching and use of languages, including minority regional, immigrant or Spanish languages, d) provide affordable housing/elderly care via old age residences/daycare centres; • Education: a) construct buildings or lab facilities in school, or b) construct university campus buildings; • Economic inclusion: a) provide microfinance loans, b) micro enterprise financing, or c) financing and lending to SMEs. <p>Exclusionary criteria are: a) large scale hydro projects, b) technology and equipment for large scale hydro projects, c) transmission infrastructure and systems where 25% or more of electricity transmitted is fossil-fuel generated, d) fossil-fuel power generation, e) agricultural or afforestation operations on land designated as primary forest, high conservation value areas, or legally preserved areas, f) landfilling or incineration as waste management practices, g) payday loans and predatory lending activities, h) micro enterprises or SMEs that manufacture alcohol or are wholesalers of alcoholic beverages, i) SMEs that manufacture tobacco products or are wholesalers of tobacco products, j) enterprises that own or operate gambling activities, k) SMEs involved in manufacturing or sale or distribution of weapons or small arms, or that of products supporting the sale or manufacturing of weapons and small arms, l) SMEs involved in the extraction, refining or transportation of fossil fuels, and m) SMEs that produce or refine palm-oil.</p>
2. Project Evaluation & Selection Process	<p>Financial viability of the loans is evaluated by the Credit Risk department and alignment with the eligibility criteria with the Sustainability Committee, which consists of representatives from the primary departments involved in lending activity.</p>
3. Management of Proceeds	<p>Proceeds are allocated directly to existing or new loans.</p> <p>Any potential unallocated funds will be managed within the bank's liquidity book in line with the standard processes of the Treasury department which include internal ESG guidelines.</p> <p>Liquidity and unallocated funds will mainly be invested in OECD sovereigns or sub-sovereigns.</p> <p>Caja Rural de Navarra runs a sustainability committee in which several key areas of the organization are involved, which established an internal process to manage the allocation of net proceeds. The bank has an internal system that classifies loans as green, social and sustainable by the nature of the client or the purpose of the loan.</p>
4. Reporting	<p>Allocation reporting: annually on the allocation of proceeds, by disclosing information on: (i) the amount of its loan book, by eligible categories; (ii) the number of loans, by eligible categories; and (iii) number of borrowers (individuals and enterprises), by eligible categories.</p> <p>Impact reporting: where feasible there will be reporting on KPIs per eligible category. In the energy efficiency category, this includes the number of houses complying with the minimum energy efficiency requirements, and the reduction achieved in CO₂ consumption.</p>
5. External review	<p>CRN's audited annual report includes reporting on the sustainable bond.</p> <p>Sustainalytics provides the second party opinion.</p>

Source: Caja Rural de Navarra (March 2020 update), Sustainalytics, ING

New and existing sustainable projects can be (re)financed

The proceeds of the sustainable bonds will be allocated to finance or refinance **existing or new loans**. Where a business or project derives 90% or more of its revenues from activities that align with the eligibility criteria, financing can also be considered as eligible for the green, social or sustainability bonds (general purpose loans).

Caja Rural de Navarra has expanded its sustainability framework for green buildings

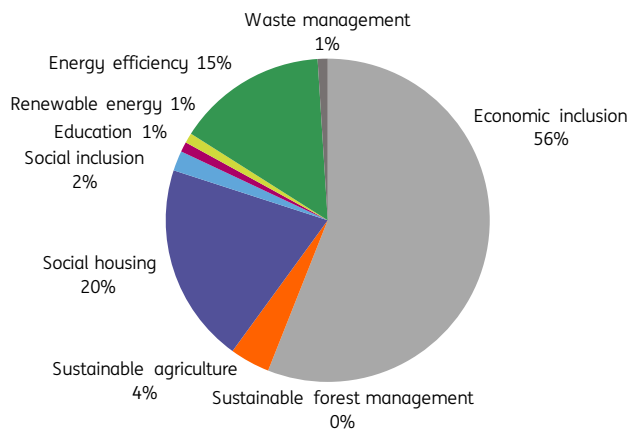
Caja Rural de Navarra added **building energy efficiency** as a new criterion to the energy efficiency category in its sustainability bond framework update of November 2017. The most current March 2020 sustainability framework update details that Caja Rural de Navarra will assess energy performance certificates (EPC) which are required in Spain since 1 June 2013. The focus will be on either the financing of new buildings that are among the most energy efficient, or the financing of appropriate upgrades in the efficiency of the existing building stock. This includes only loans financing: (a) the construction or acquisition of residential units within the A and B EPC categories, which are well within the 15% best performing threshold, or (b) the renovation of residential units that result in at least a 30% improvement in energy performance.

Spanish covered bondholders have a preferential claim on the full mortgage book of the issuer

The bank's sustainable mortgage covered bonds are furthermore issued under, and protected by, the Spanish covered bond legislation, similar to its non-sustainable covered bonds. Spanish covered bonds have **a preferential claim to the full mortgage book of the issuing bank** with the mortgage loans eligible to collateralise the covered bonds subject to the criteria stipulated under the Spanish covered bond legislation. The sustainable covered bonds rank pari-passu with the non-sustainable covered bonds of the bank with regards to their preferential claim against the mortgage assets.

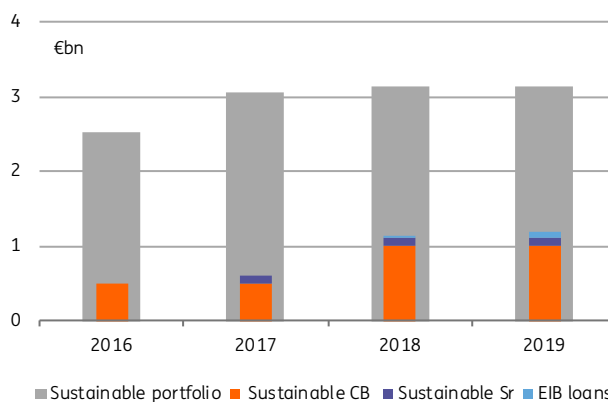
Due to the broadly defined range of projects and activities eligible for use of proceeds purposes it remains difficult to assess the direct link between the sustainable covered bonds issued and the assets securing them. Reportedly, there were **sufficient sustainable mortgage loans in the pool to secure all existing sustainable covered bonds** at the time that Caja Rural de Navarra issued its second sustainable covered bond in 2018.² Of the over €3bn in eligible sustainable loans, €314m are energy efficient mortgages, €629m loans for social housing purposes, and €1.3bn loans to SMEs under the economic inclusion criteria, which may also in part be mortgage loans.

Fig 60 Caja Rural de Navarra's sustainability portfolio



Source: Caja Rural de Navarra (Impact report 2019), ING

Fig 61 The unassigned portfolio is almost €2bn



Source: Caja Rural de Navarra, ING

Caja Rural de Navarra would generally expect to have a **sufficient amount of existing eligible loans for 100% proceeds allocation at the time of issue**. Any potential unallocated funds will be managed within the liquidity book of the bank, in line with the standard process of the Treasury department which includes internal ESG guidelines. Liquidity funds will mainly be invested in OECD sovereigns or sub-sovereigns.

² The Covered Bond Report, CRN tees up 2nd sustainable EeMAP, SDG influence, 24 April 2018

Most sustainable loans are in the eligible portfolio based upon the economic inclusion criteria

Caja Rural de Navarra's loan impact report for 2019 confirms that **56% of the €3.1bn in available eligible loans** under the sustainability bond framework **met the bank's criteria for economic inclusion**, a further 20% of the loans were eligible based upon the social housing criteria, while 15% met the bank's energy efficiency standards (Figure 60). At the end of 2019 the bank had **€1.2bn in sustainable debt outstanding**, leaving almost €2bn of the eligible portfolio unassigned to sustainable funding (Figure 61).

Kutxabank's social covered bond allocates proceeds to the Basque country's VPO programme

Kutxabank

Kutxabank was the first Spanish financial institution to issue a **socially responsible covered bond** in 2015. The 10yr covered bond had a large €1bn size. The social bond is a regular Spanish mortgage covered bond (Cédulas Hipotecarias), offering bondholders a preferential claim to the entire cover pool of Kutxabank on a pari-passu basis with other holders of mortgage covered bonds issued by the bank.

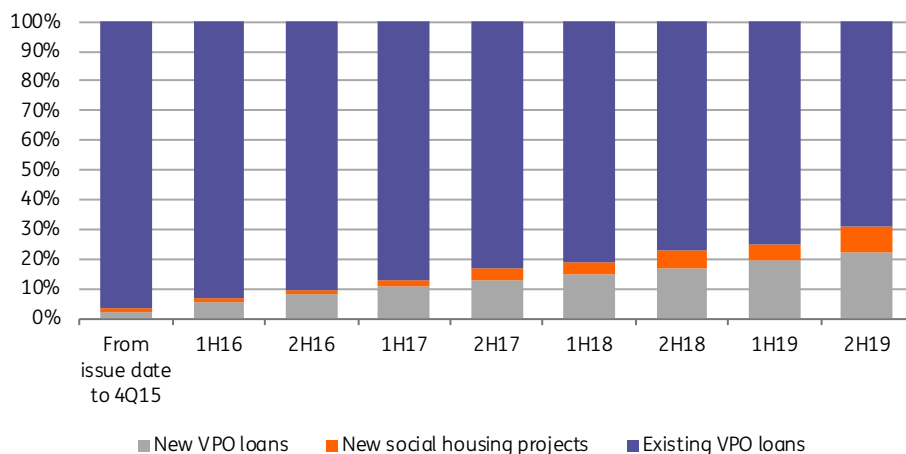
During the term of the social covered bond, proceeds will be allocated to new loans

The proceeds of the covered bonds are used to **finance existing and new social housing loans** made under the Basque government's **Viviendas de Protección Oficial (VPO) programme**. This programme is part of the Basque government's ambitions to reduce social inequality in the Basque region. During the life of the covered bond, Kutxabank intends to **allocate the €1bn proceeds to new loans** made under the VPO programme and to the construction and financing of new VPO-social housing developments. The remaining amount not covered will be allocated to the refinancing of existing loans made under the programme. Kutxabank reported to have an original amount of €1.5bn of good quality existing VPO loans in its cover pool.

31% of the proceeds have already been allocated to new loans granted since launch

At the end of 2019, the cumulative amount of new VPO loans granted since the launch of Kutxabank's social covered bond was c.€221m. The cumulative amount of new social housing projects was c.€87m (Figure 62). As such, in the four years post launch, **31% of the bond proceeds have been allocated to new loans**, somewhat lagging the ambition to allocate the full €1bn bond proceeds to new loans in ten years' time.

Fig 62 Degree of process new VPO social housing loans



Source: Kutxabank (update on use of proceeds), ING

Eligible loans are granted to low income residents of the Basque country under the VPO programme

While Kutxabank participates in VPO programmes across Spain, social bond proceeds will only be allocated to VPO loans in the Basque country. Under the use of proceeds, mortgages must be granted to permanent residents in the Basque country that qualify as low income, or have special needs such as reduced mobility, a mental handicap, are separated or divorced, 70 years of age or older, or female victims of gender violence (Figure 63). At the time of issuance Kutxabank's mortgage cover pool included c.€2.4bn in loans for VPO-social house purchasing, of which c.€1.5bn were located in the Basque country. Kutxabank commits to an **allocation reporting at least on an annual basis**, but has thus far reported twice a year on the allocation of the social bond proceeds.

Kutxabank discloses the total amount of loans provided using the social bond proceeds, the number of loans granted and the number of individuals to whom the bank granted a loan under the VPO programme. In the same way, the bank discloses the number of housing units constructed using social bond proceeds. To verify the management of proceeds, Kutxabank's external auditor will review the amount of proceeds allocated to mortgages and construction finance of houses under the VPO programme and the balance of unallocated funds. Kutxabank will also disclose the management of proceeds in its audited annual financial statement.

Fig 63 Kutxabank – Social Covered Bond Framework

Pillar	Details
1. Use of Proceeds	<p>Proceeds are allocated to loans granted under the Viviendas de Protección Oficial (VPO) programme. Mortgages must be issued to individuals/families that meet the following eligibility criteria:</p> <ul style="list-style-type: none"> a) Permanent residents of the Basque country; b) Qualify as low income under the VPO programme's definition: (i) income between €3,000 and €39,000 for applicant intending to rent, (ii) €9,000-50,000 for applicants intending to purchase, or (iii) not having owned property in two years prior to the mortgage application; c) Having special needs such as: (i) reduced mobility or a mental handicap, (ii) separated/divorced, (iii) 70 years of age or older, (iv) female victims of gender-based violence.
2. Project Evaluation & Selection Process	Loans granted under the VPO programme are tracked and identified via Kutxabank's internal system. The eligibility criteria of the VDO programme determine eligibility. Kutxabank's internal standards provide for an additional credit check.
3. Management of Proceeds	<p>Proceeds are managed by the Treasury department</p> <p>Proceeds are allocated to Kutxabank's existing VPO loans, for a third to new loans under the VPO programme and to construction finance for housing projects to be used for the VPO programme.</p>
4. Reporting	Allocation reporting: annually on the loans provided using social bond proceeds, the number of loans granted and the number of individuals with a mortgage loan of Kutxabank under the VPO programme. Annually on the number of housing units constructed using social bond proceeds.
5. External review	<p>Kutxabank's external auditor reviews the funds allocated to mortgages and construction finance of houses under the VPO programme and the balance of unallocated funds.</p> <p>Sustainalytics provides the second party opinion.</p>

Source: Kutxabank, Sustainalytics, ING

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