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ASSESSMENT
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TABLE OF CONTENTS

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SpareBank 1 Boligkreditt AS - Mortgage Covered Bonds

Green Bond Assessment - January 2018 issuance

Summary analysis

Summary opinion

A GB1 (Excellent) Green Bond Assessment (GBA) assigned to the €1 billion January 2018 issuance of green mortgage covered bonds by SpareBank 1 Boligkreditt AS (SpaBol, Aaa stable) primarily reflects the following considerations:

» Strong organization around green bond issuance and project selection, supported by engagement from senior internal representatives and reliance on external experts

» Proceeds fully allocated to financing mortgages for the top 15% most efficient buildings in Norway, consistent with the Green Bond Principles and Climate Bonds Standard

» Clear description of use of proceeds, with robust calculation methods employed to measure the environmental benefits of the financed assets

» Reconciliation process employed to ensure that the amount of green mortgages exceeds the amount of green bonds outstanding

» Inability to update impact report published after initial full allocation of green assets; Additional allocation reporting will occur on a quarterly basis over the life of the bond covering the amount of green assets vs. outstanding green bonds

Factor	Factor Weights	Score	Weighted Score
Organization	15%	1	0.15
Use of Proceeds	40%	1	0.40
Disclosure on the Use of Proceeds	10%	1	0.10
Management of Proceeds	15%	1	0.15
Ongoing Reporting and Disclosure	20%	3	0.60
Weighted Score			1.40

The transaction's weighted score, using the green bond scorecard, is 1.40. This, in turn, corresponds to a GB1 grade.

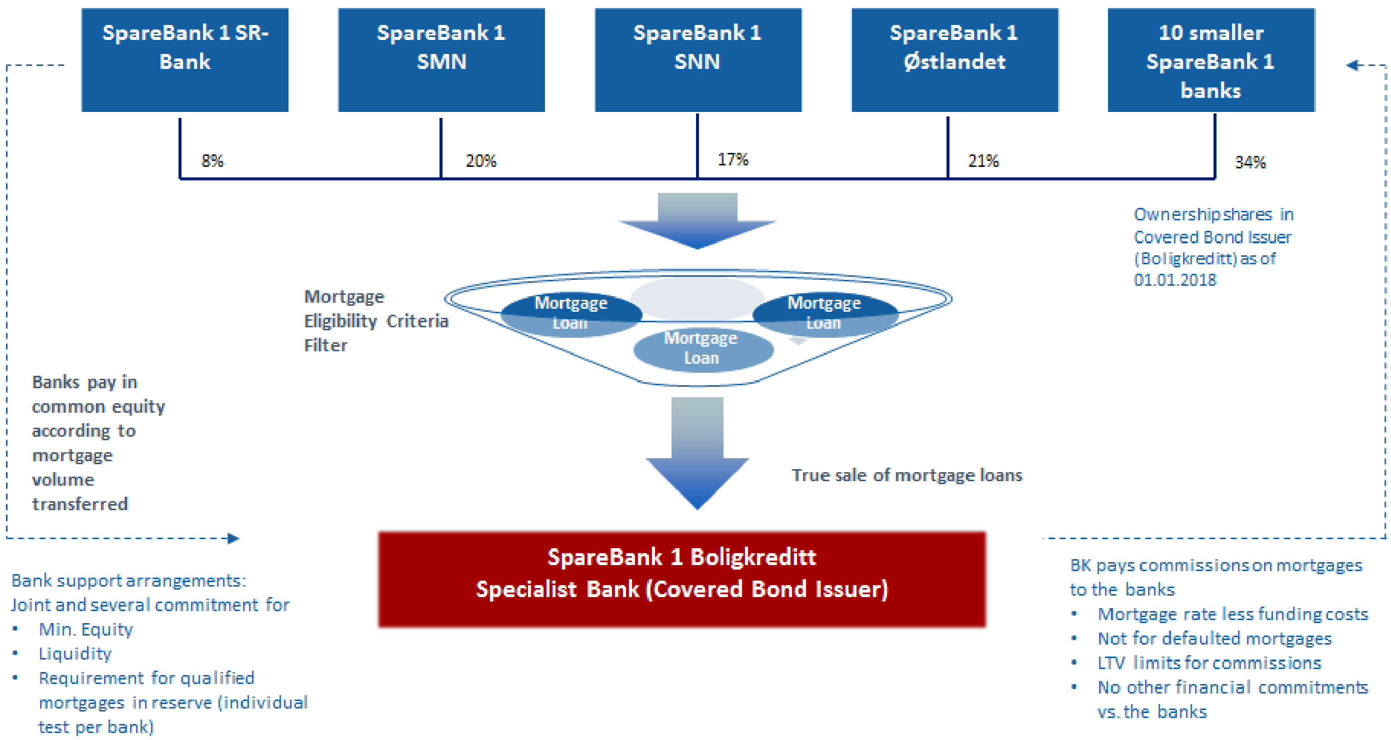
Profile

SpareBank 1 Boligkreditt AS (SpaBol), the issuer, is a separate legal entity wholly owned by certain savings banks (the shareholder banks) belonging to the SpareBank 1 Alliance, a Norwegian bank and banking product collaboration. The identity and shareholdings of the shareholder banks may vary from time to time and the issuer is not itself a member of the SpareBank 1 Alliance.

SpaBol is considered to be a core part of the SpareBank 1 Alliance's strategy. The shareholder banks' goal for the issuer is to attain stable, long-term and favorable funding. The issuer's objective is to acquire or purchase residential mortgages, and to finance these lending operations mainly by issuing covered bonds. Please see Exhibit 1 for a schematic describing the SpaBol organizational structure and operational focus.

Exhibit 1

SpaBol is the covered bond issuing entity of the SpareBank 1 banks



Source: SpaBol

As discussed in our September 2016 credit opinion, the Aaa rating and stable outlook on the SpareBank 1 Boligkreditt AS Mortgage Covered Bond Programme reflects, among other factors, the credit strength of the issuer; the credit quality of the cover pool, which is reflected in the collateral score of 5.0% (2.6% excluding systemic risk); and the support provided by the Norwegian legal framework for covered bonds.

The green covered bond market

We expect the market for green covered bonds to continue growing in line with the broader green bond market, and perhaps even at a faster pace. Green covered bonds have the credit benefits of recourse both to the issuer and to collateral, so they may diversify green bond portfolios typically weighted towards unsecured bonds. Moreover, now that the European Central Bank is gradually reducing its purchases of covered bonds, there is more scope to broaden the investor base for covered bonds to include investors with green and sustainable mandates. From an issuer's perspective, green covered bonds can be issued off an existing covered bond platform, reducing the operational and administrative burden and potentially making investment in green bond credentials more cost efficient. Five new green covered bonds were issued in Europe in the first half of 2018, compared with just two in all of 2017.

Transaction summary

We have assigned our GBA to the €1 billion January 2018 issuance of green mortgage covered bonds by SpaBol. These Series 2018-1 covered bonds, due January 2025, were issued under the issuer's €25 billion Global Medium Term Covered Note Programme. The transaction closed on January 30, 2018 and was listed on the Luxembourg Stock Exchange.

Strengths and weaknesses

Strengths	Weaknesses
Strong organizational oversight of the green bond issuance process with engagement from senior leaders in the various banks comprising the SpareBank 1 Alliance	Inability to update estimated impact reports over time due to the nature of the investments, limiting ongoing reporting and disclosure
Net proceeds fully allocated to financing mortgages for green buildings among the top 15% most efficient buildings throughout Norway	
Good disclosure on the use of green bond proceeds including methods for identifying eligible green buildings and calculating associated environmental benefits, supported by work from an external consultant	
Reconciliation process employed to ensure that the amount of green mortgages exceeds the amount of green bonds outstanding	

Organization

SpaBol's approach to issuing green bonds is codified in a detailed green bond framework developed in conjunction with the issuance of its first green bond in January 2018. Along with its other green bond documents, SpaBol publishes the framework on its website and will update it in the future should there be any material changes to its green bond approach. The framework describes the issuer's approach to key areas aligned with the recommendations under the Green Bond Principles, including (i) use of proceeds, (ii) process for project evaluation and selection, (iii) management of proceeds, (iv) reporting and (v) external reviews. Furthermore, SpaBol also secured the Climate Bonds Certification under the Low Carbon Buildings criteria of the Climate Bonds Standard Version 2.1.

A dedicated green bond committee, originally established to create the green bond framework, oversees green bond project evaluation and selection. The committee is comprised of certain members of the SpaBol board, including CFOs of the SpareBank 1 Alliance members banks, as well as other members of SpaBol management.

In conjunction with Multiconsult ASA, an external green real estate consultant with extensive experience in the residential building sector in Norway, the green bond committee established the eligibility criteria for loans to be financed with green bond proceeds, and it will monitor and potentially update or expand these criteria over time. Execution of the eligibility criteria, including assuring that individual loans meet the criteria, is performed by SpaBol's management team. The engagement of senior management, as well as an external consultant with environmental assessment expertise, are positives that bolster the governance and organization around the green bond issuance process.

SpaBol's first green bond issuance supports the SpareBank 1 Alliance's broader strategy to enhance sustainability in its overall operations. The major member alliance banks, representing approximately 80% of total alliance assets, have all signed the United Nations Global Compact, which encourages the banks to integrate sustainability aspects into their business operations in the areas of human rights, labor, anti-corruption and the environment. The member banks also have minimum environmental and social requirements for all lending operations.

Beyond the sustainability efforts of the individual members banks, the SpareBank 1 Alliance is a sponsor of the Global Opportunity Explorer, an initiative to integrate the UN Sustainable Development Goals into practical solutions for cities and business opportunities for companies. Additionally, the banks' jointly owned asset manager, Odin, is a signatory to the UN's Principles for Responsible Investment.

Factor 1: Organization (15%)	Yes	No
Environmental governance and organization structure appear to be effective	●	
Policies and procedures enable rigorous review and decision making process	●	
Qualified and experienced personnel and/or reliance on qualified third parties	●	
Explicit and comprehensive criteria for investment selection, including measurable impact results	●	
External evaluations for decision making in line with project characteristics	●	
Factor Score	1	

Use of proceeds

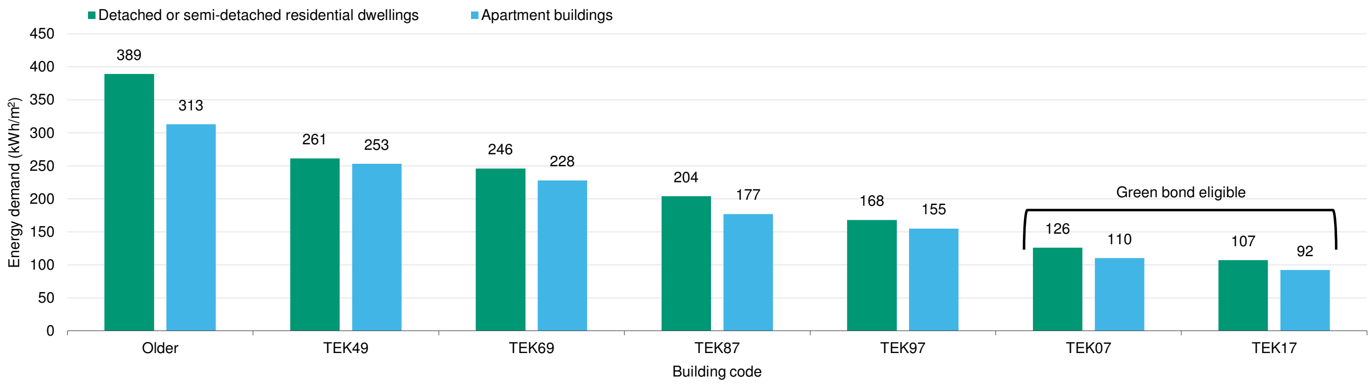
In accordance with its green bond framework, SpaBol allocated 100% of the net green bond proceeds to a loan portfolio of new and existing mortgages for energy efficient residential buildings throughout Norway. With Multiconsult's help, SpaBol utilized a series of proxies to identify the top 15% most sustainable residential buildings in Norway, a metric consistent with the eligibility criteria in the Climate Bonds Initiative's Climate Bonds Standard. The investments are also consistent with the taxonomy articulated in the Green Bond Principles, primarily through the energy efficiency and green buildings categories.

As highlighted in a Multiconsult report published on 11 January 2018, there are three eligibility categories for loans to be financed with green bond proceeds. The first category includes new or existing Norwegian residential buildings that comply with the Norwegian building codes of 2007 (TEK07), 2010 (TEK10) or 2017 (TEK17). These buildings, which account for approximately 8% of the total residential building stock in Norway, have significantly lower energy usage than older buildings. As seen in Exhibit 2, energy demand has been decreasing over time as buildings become more efficient with each new iteration of the building codes.

Exhibit 2

SpaBol green bond proceeds financing the most energy efficient buildings in Norway

Specific calculated energy demand (kWh/m^2) by building code year



Note: There was no change between TEK07 and TEK10 in energy efficiency. As such, TEK10 is excluded from this exhibit.
Source: Multiconsult

The second eligibility category for green loans consists of Norwegian residential buildings constructed using building codes older than TEK07 with Energy Performance Certificate (EPC) labels of A, B or C. These buildings account for an additional 4.2% of residential buildings in Norway, according to Multiconsult. The EPC system, which became operative in 2010, ranks buildings based on calculated delivered energy, including the efficiencies of the building's energy system (power, heat pump, district energy, solar energy, etc.). Given that EPC data labels are not currently available in the public domain, however, SpaBol has yet to allocate green bond proceeds based on this eligibility category.

The third and final eligibility category consists of refurbished Norwegian residential buildings with an improvement in energy efficiency of 30% or greater, measured in specific energy (kWh/m^2), compared to the calculated demand based on the building code in the year of construction. Using the EPC database to identify buildings with the potential to have such upgrades, Multiconsult has estimated that another 2% of buildings in Norway have the potential for an upgrade in energy efficiency of this magnitude, assuming at least a two-step improvement in EPC label. To date, SpaBol has not allocated any green bond proceeds to eligible loans in this category.

Taking together the buildings eligible for green bond funding under the three eligibility categories, we believe it is likely that SpaBol will only be financing or refinancing loans for residential buildings in the top 15% most efficient in Norway. As the composition of the building stock in Norway changes over time and the average buildings become more efficient, management may need to change the eligibility criteria so that it is only identifying the top 15% of buildings at the current time. The green bond committee, working together with Multiconsult, will therefore periodically review and revise the green bond framework as necessary.

Residential buildings in Norway are predominantly heated with renewable energy, and residential buildings' energy consumption is predominantly driven by electricity, adding to the green credentials of the use of proceeds. According to the Multiconsult report, 79% of Norwegian residential building energy demand was from electricity in 2013, followed by bioenergy (16%) and oil and gas (4%). In 2016, Norwegian power production was 98% renewable, meaning that much of the electricity supporting residential building energy demand is coming from renewable sources.

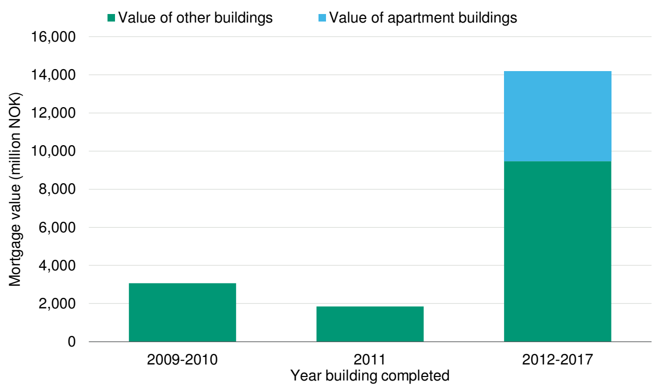
Factor 2: Use of Proceeds	Yes	No
>95% - 100% of proceeds allocated to eligible project categories that are determined based on the issuer's adopted policies and the categories established under the Green Bond Principles that will be further informed by one or more robust and widely recognized green bond frameworks or taxonomies that qualify eligible projects, including any applicable regulatory guidelines.	●	
Factor Score	1	

Disclosure on the use of proceeds

SpaBol has very strong disclosure on the use of green bond proceeds, supported by clear descriptions of the various eligibility criteria, as discussed above. In addition to these criteria descriptions, SpaBol has provided a summary of the portfolio of eligible assets, broken down by building value and residential area (see Exhibits 3 and 4). Per the portfolio summary, the aggregate value of the assets is roughly twice the size of the €1 billion green bond. SpaBol has also provided us with a list of all loans that have been tagged as green and included in the green asset pool, demonstrating clear internal tracking mechanisms for the green asset pool.

Exhibit 3

Total green mortgage value by building type (million NOK)

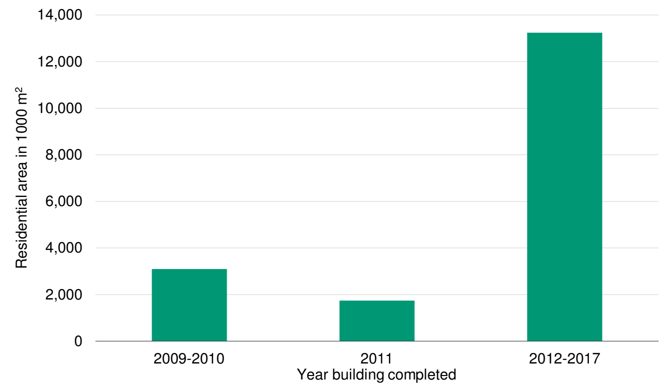


Includes eligible residential buildings in the SpaBol portfolio

Sources: SpaBol, Multiconsult

Exhibit 4

Total residential area of green portfolio (thousand square meters)



Includes eligible residential buildings in the SpaBol portfolio

Sources: SpaBol, Multiconsult

SpaBol has secured a number of additional external reviews on its green bond framework and its initial green bond offering. DNV GL, for example, provided a second opinion on the green bond framework. The offering has also received the Climate Bond Certification, with Multiconsult providing a post-issuance assurance in May 2018 that the bond meets the post-issuance requirements under the Climate Bonds Standard. Multiconsult's overall work supports our belief that the transaction has robust quantitative and qualitative methods, criteria and descriptions for identifying and calculating the environmental benefits of the financed green assets.

Factor 3: Disclosure on the Use of Proceeds	Yes	No
Description of green projects, including portfolio level descriptions, actual or intended	●	
Adequacy of funding and/or strategies to complete projects	●	
Quantitative and/or qualitative descriptions for targeted environmental results	●	
Methods and criteria, both quantitative and qualitative, for calculating performance against targeted environmental results	●	
Issuer relies on external assurances: Second Party reviews, audits and/or third party certfications	●	
Factor Score	1	

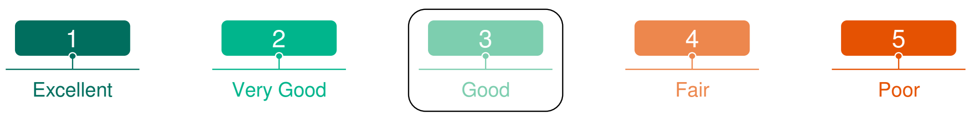
Management of proceeds

SpaBol green bond proceeds will be managed in a portfolio approach, whereby the current green bond proceeds will be added to any future green bond proceeds and compared against the total value of the identified green assets. At least annually, SpaBol's auditor will provide a limited assurance verifying that SpaBol has the green assets as described in its disclosures. According to the issuer, the auditor will likely provide this validation opinion in the form of a standalone report.

Management has committed to designate sufficient eligible loans in the green asset pool to ensure that the value of green assets always exceeds the value of green bonds outstanding. As discussed above, the value of green assets is roughly two times the value of the initial green bond currently, providing a strong cushion against potential decreases in the value of the green asset pool. This strong cushion, as well as a robust earmarking process for green assets, mitigate the lack of a formal dedicated account or sub-account for the green assets. In the highly unlikely event that there are unallocated proceeds at any given time, SpaBol has committed to invest these proceeds solely in highly liquid money market instruments in accordance with its normal liquidity management policy.

Factor 4: Management of Proceeds	Yes	No
Bond proceeds are segregated and separately tracked on an accounting basis or via a method by which proceeds are earmarked	●	
Application of proceeds is tracked by environmental category and project type	●	
Robust process for reconciling planned investments against actual allocations	●	
Clear eligibility rules for investment of cash balances	●	
Audit by external organization or independent internal audit unit	●	
Factor Score	1	

Ongoing reporting and disclosure



As articulated in its green bond framework, SpaBol has committed to provide post-issuance reporting on both the allocation of green bond proceeds and the environmental impacts of the financed assets. Post-issuance reporting will be provided on an aggregate basis for all green bonds outstanding at the time of the report, and management will seek to align the impact reporting with the best practices documents related to the Green Bond Principles.

Allocation reporting will provide, on a portfolio basis, indicators such as the total amount of proceeds allocated to eligible loans, the number of eligible loans, and the balance of unallocated proceeds or the amount or percentage of new financing and refinancing. Impact reporting will be conducted with the assistance of Multiconsult and will provide, on a portfolio basis, indicators such as the estimated ex-ante annual energy consumption in KWh/m^2 or energy savings in MWh, and the estimated annual greenhouse gas (GHG) emissions reduced/avoided in tons of CO_2 equivalent.

SpaBol has already published its first post-issuance report, which includes both allocation reporting and impact reporting, based on the portfolio as of 31 March 2018. As seen in Exhibit 5, the allocation reporting component of the report detailed the total value of green assets, broken down by new residential buildings or refurbished buildings, as well as the green bond amount allocated. Per this reporting, the value of the green asset pool well exceeded the value of the green bond, leaving roughly 48% of the green asset pool yet to be allocated to green bond net proceeds. The report also covered the impact of the portfolio, disclosing estimated annual site energy savings and estimated annual CO_2 emission avoidance, per Multiconsult calculations.

Exhibit 5

SpaBol post-issuance disclosure covers both allocation reporting and estimated impact reporting

Green asset portfolio as of 31 March 2018

Eligible green loan portfolio	Amount (million NOK)	Annual site energy savings (MWh)	Annual CO_2 emission avoidance (tCO_2)	Allocation of green funding	Amount (million NOK)
New residential buildings in Norway: ● Apartments completed after 1 Jan 2012 (from TEK 10) ● Houses completed after 1 Jan 2009 (from TEK07)	18,443	168,655	21,251	Allocated to green covered bond	9,640
Refurbished residential buildings in Norway with an improved energy efficiency of 30%	0	0	0	Unallocated amount of eligible sustainability project portfolio	8,803
Total eligible green loan portfolio	18,443	168,655	21,251	Maximum green funding	18,443

Site energy savings calculated using the difference between the top 8% of buildings and the national building stock benchmarks

Sources: SpaBol, Multiconsult

We note a slight weakness in the impact reporting around SpaBol's inability to provide actual environmental benefits being realized by the financed assets. With the very large number of loans and associated buildings, actual reporting on energy usage and associated energy savings and CO_2 emissions avoided is not possible.

Given this limitation, SpaBol will not issue additional energy and CO_2 impact post-issuance reports unless there are significant changes in the composition of the green asset pool, such as through the issuance of additional green bonds or the allocation of proceeds to assets in other eligibility categories. A mitigating factor to this potential lack of additional impact reporting comes in the form of the quarterly publication of covered bond pool reports, which detail the amount and size of the identified eligible green loans for green bond funding, as well as other descriptions of the overall covered bond pool. These quarterly reports will extend over the life of the green bond.

Factor 5: Ongoing Reporting and Disclosure	Yes	No
Reporting and disclosure post issuance provides/to be provided detailed and timely status updates on projects	●	
Ongoing annual reporting is expected over the life of the bond	●	
Disclosures provide granular detail on the nature of the investments and their expected environmental impacts	●	
Reporting provides/to be provided a quantiative and/or qualitative assessment of the environmental impacts actually realized to-date		●
Reporting includes/to include quantitative and/or qualitative explanation of how the realized environmental impacts compare to projections at the time the bonds were sold		●
Factor Score	3	

Moody's Green Bond Assessment (GBA)

Moody's GBA represents a forward-looking, transaction-oriented opinion on the relative effectiveness of the issuer's approach to managing, administering, allocating proceeds to and reporting on environmental projects financed with green bond proceeds. GBAs are expressed using a five-point relative scale, ranging from GB1 (Excellent) to GB5 (Poor). A GBA does not constitute a credit rating.

Moody's related publications

Methodology:

» Green Bonds Assessment (GBA), March 30, 2016

Issuer Research:

» Performance Overview - SpareBank 1 Boligkreditt AS - Mortgage Covered Bonds, August 7, 2018

» New Issue Report - SpareBank 1 Boligkreditt AS Mortgage Covered Bond Programme: Norwegian Covered Bonds, September 9, 2016

Green Bond Research:

» Green Bonds - Global: Second-quarter issuance rebounds but full-year 2018 growth likely to moderate, July 31, 2018

» Green Bonds – Sovereign: Sovereign green bond market on course for critical mass, but challenges remain, July 9, 2018

» Green Bonds – Global: Modest Q1 2018 issuance a speed bump on the road to market growth, April 30, 2018

» Green Bonds - Global: Global municipal green bond issuance will continue to rise, March 19, 2018

» Green Bonds - Global: Global green bond issuance set to eclipse $250 billion in 2018, January 31, 2018

» Cross-sector - Global: FAQ: The green bond market and Moody's Green Bonds Assessment, November 29, 2017

» Green Bond Assessments - Global: Issuers exhibit strong organizational frameworks but differ on disclosure, September 19, 2017

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

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