

The background image shows a modern interior space with large windows and hanging light bulbs. The windows offer a view of a city with historic buildings and a snow-covered hill in the background. The interior features a metal railing and a polished floor. The lighting is warm and ambient, with several light bulbs hanging at different heights.

KBN

The Norwegian Agency
for Local Governments

2022

Impact Report

Green Loans Financed with Green Bonds

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KBN

Kommunalbanken Norway (KBN) finances important welfare services through providing credit to the local authorities in Norway.

■ ■ KBN's mandate is to provide the local government sector with stable and cost efficient long-term financing. KBN's lending to the local government sector is funded by issuing securities in the international capital markets, maintaining the highest possible credit rating of AAA/Aaa. Measured by total assets, KBN is one of Norway's largest financial institutions with loans to nearly all of the country's municipalities.

■ ■ KBN is a fully owned state company. Our vision is to be a long-term partner for local welfare.

AAA

Standard & Poor's
Moody's

99.4%

of Norwegian
municipalities are
KBN customers

49.7%

of municipal debt
is financed
through KBN

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2022 Highlights

This report presents the environmental impact of KBN's green loan programme as of 31 December 2022. All funds raised by KBN's green bond issuances will be used exclusively to finance green loans in the Norwegian municipal sector.

34.9 bn.
NOK

GREEN BONDS

Funds from green bonds issued in international capital markets ...

41.4 bn.
NOK

GREEN LOANS

... provide green, discounted loans for climate smart projects across the country



Replacement of 550 windows at Grieghallen in Bergen, which will reduce energy consumption by 1.000.000 kWh annually.

OUR GREEN LOAN PROGRAMME HELPS FINANCE

10 307

tonnes of CO₂e reduced and avoided annually¹

516 142

Population equivalents increase in water and wastewater capacity²

92

GWh renewable energy produced annually

42

GWh energy reduced and avoided annually

145 808

tonnes increased waste management capacity

12.6%

Share of total lending³

408

TOTAL NUMBER OF GREEN PROJECTS

68

NEW GREEN PROJECTS IN 2022

¹ We do our best to ensure the quality of the information provided; however, the reader should be aware that there is uncertainty related to estimating climate and environmental impact from investments. Read more about reporting principles on page 17 in this report.

² Population equivalents is an expression that describes the load and capacity of water and wastewater supply.

³ Share of KBN's total lending which is eligible for green bond financing.

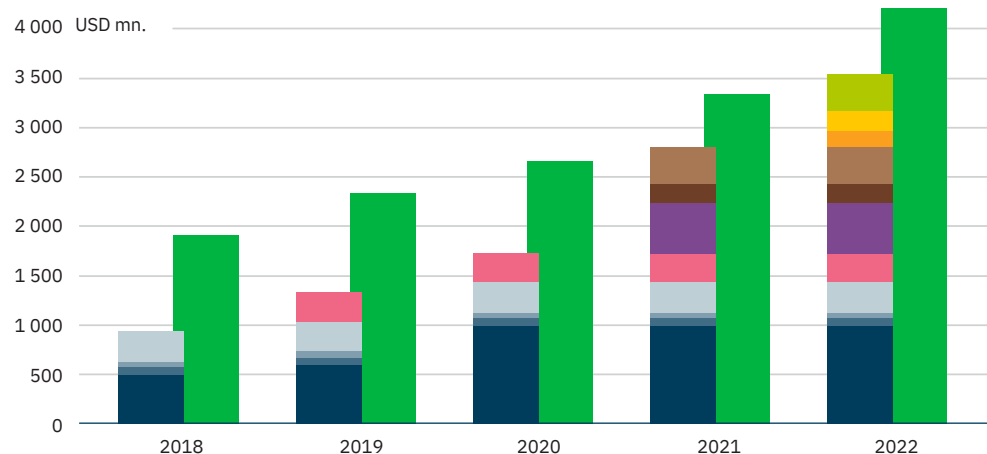


See all the green projects in Impact report 2022 (Excel) at kbn.com.

Executive summary

As of 31 Dec 2022

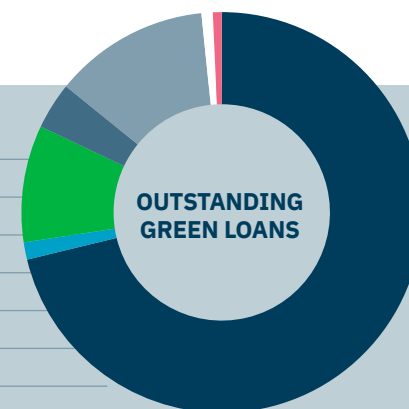
GREEN BONDS ISSUANCE AND PORTFOLIO OF GREEN LENDING



Total outstanding green bonds divided by total outstanding disbursed to projects, as of 31 December 2022 (in NOK)				84% of which
Issue date	Volume	Maturity	ISIN	
11 Feb 2015	USD 1 billion ¹	11 Feb 2025	US50048MBX74 / XS1188118100	24%
29 Nov 2017	NOK 750 million	29 Nov 2027	NO0010811276	2%
29 Nov 2017	NOK 600 million	29 Nov 2032	NO0010811284	1%
05 Sep 2018	AUD 450 million	05 Sep 2023	AU3CB0256162	7%
28 Aug 2019	SEK 3 billion	28 Aug 2026	XS2047497289	7%
21 Apr 2021	USD 500 million	21 Oct 2024	US50048MDA53 / XS2333390164	12%
08 Oct 2021	AUD 300 million	08 Oct 2024	AU3CB0283596	5%
18 Oct 2021	CAD 500 million	18 Oct 2024	US50047JAJ79 / XS2398386776	9%
24 Feb 2022	SEK 1.75 billion	24 Feb 2025	XS2447758025	4%
17 Nov 2022	AUD 300 million	17 Feb 2026	AU3CB0294130	5%
07 Dec 2022	CAD 500 million	07 Dec 2027	XS2564075583 / US50047JAK43	9%
Outstanding green lending				

¹ Originally USD 500 mn., USD 100 mn. tap in 2019 and USD 400 mn. tap in 2020.

Buildings	71%
Renewable energy	1%
Transportation	9%
Waste and circular economy	4%
Water and wastewater management	13%
Land use and area development projects	1%
Climate change adaptation	1%



PROJECT CATEGORIES AND ENVIRONMENTAL IMPACT ¹

Project portfolio	Green loan outstanding (1000 NOK)	Reduced and avoided GHG (tonnes CO ₂ e annually)	Impact tonnes CO ₂ e per million NOK ²
Buildings	29 497 522	577	0.02
Renewable energy	575 106	727	1.26
Transportation	3 913 795	8 978	2.29
Waste and circular economy	1 564 292	25	0.02
Water and wastewater management	5 196 680	n/a	n/a
Land use and area development projects	378 507	n/a	n/a
Climate change adaptation	294 958	n/a	n/a
Total	41 420 859	10 307	3.59
Renewable energy produced annually			92 GWh
Energy reduced/avoided annually			42 GWh

¹ The impact reported corresponds to the share of the project financed by us. A grid factor of 11g CO₂e per kWh electricity is applied throughout when converting electricity to emission. Read more about the choice of grid factor on page 20.

² Tonnes CO₂e reduced or avoided per million NOK of green lending.

BASIC INFORMATION

Current Green Bond Framework:

KBN Green Bond Framework, dated March 2021

Reporting period:

Calendar year 2022. The report summarises projects financed from the start of the green bond and green loan programmes. The project list in this report lists new projects added in 2022. For a complete overview of all projects in the portfolio, an extended version of the report in spreadsheet format can be found at kbn.com

Date of publication:

27 February 2023

Reporting frequency:

Annually

Next report scheduled:

February 2024

Reporting approach:

Portfolio-based and project-by-project reporting

Reporting framework:

Nordic Public Sector Issuers: Position Paper on Green Bonds Impact Reporting

Verification:

Internal audit of compliance of guidelines and routines related to green loans and bonds, as well as allocation. Conducted by KPMG. See page 56.

Comments on KBN's impact reporting



KBN has been one of the leading Norwegian organisations in green finance for a long time. KBN's discounted green loans for ambitious, green investments across Norway are an important tool for achieving Norway's national emissions reduction targets. With this report, KBN provides a transparent and detailed description of the impact of its green loans, which makes it easy for stakeholders to obtain the information they need. It is positive that KBN has taken the lead in relation to climate risk in the local government sector and has been quick to adapt to growing expectations in terms of its management of its own climate risk.



Norwegian Ministry of
Local Government and Regional Development

SIGBJØRN GJELSVIK

Minister of Local Government and Regional Development, Norway



For Altius, the governance structure of green programs, transparency and impact reporting are essential for the integrity of the green bond market. KBN continues to be seen as a leader in these areas, providing exceptional levels of portfolio detail and climate metrics. This detail allows investors to gain a better insight into the impact of their investments.

ALTIUS
ASSET MANAGEMENT

GAVIN GOODHAND

Senior Portfolio Manager, Altius Asset Management



A key pillar of UniSuper's approach is to provide members with investment options that are based on sustainable investment criteria. Our members are extremely engaged with the impact of how their savings are invested. The detail and transparency of KBN's Impact reporting on its green loan program provides us with confidence that we are meeting our members' expectations.

 **UniSuper**

ROBERT HOGG

Head of Fixed Interest and Macro, UniSuper



A portrait of Jannicke Trumpy Granquist, Chief Executive Officer of KBN. She is a woman with long blonde hair, wearing glasses, a red velvet blazer, and a plaid scarf. She is standing with her arms crossed, smiling slightly. The background is a blurred office interior.

Strong green growth and good access to financing despite market turmoil


Russia's attempt to pressure Europe by cutting its gas delivery instead appears to accelerate Europe's fossil fuel detox.

BY JANNICKE TRUMPY GRANQUIST
Chief Executive Officer (CEO), KBN

The aftermath of the pandemic and Russia's war on Ukraine had significant impact on the capital markets in 2022. The market uncertainty in 2022 did not impact KBN's ability to access the international capital markets to any significant extent. KBN carried out three green transactions in three different currencies, totalling NOK 7.5

billion, equivalent to 8% of its total funding for the year.

The bank priced a highly successful CAD 500 million Green Benchmark in November, following its inaugural CAD Green Bond in October 2021. With two successful CAD green bond trades within little over a year KBN is reaping the rewards of a longstanding focus towards Canadian investors. Green bonds are helping KBN access a wider investor universe, achieve more competitive funding levels and



Strong green growth and good access to financing despite market turmoil

continued

diversify order books. Due to the size of the ESG motivated interest in the Canadian dollar deal it's reasonable to assume that it may not have taken place had it not been in a green bond format. In addition to the CAD Green Bond, KBN was active in the Kangaroo market, issuing its third successful green Kangaroo, an AUD 300 million 3.5-year deal, and in the SEK market with a 1.75 billion transaction.

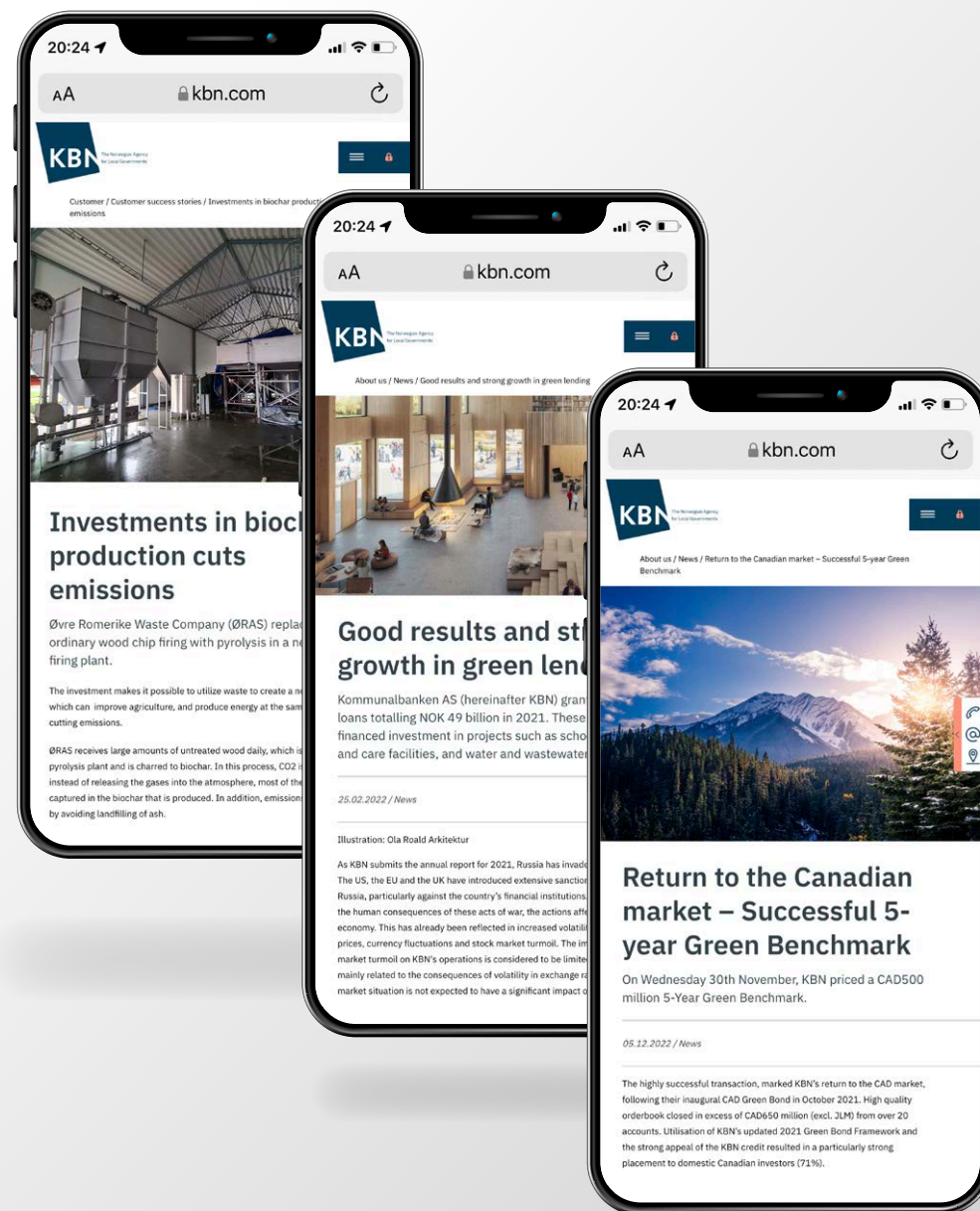
KBN green bonds finance the transition to a low-carbon, climate resilient future in Norwegian local communities. The net proceeds of the green bonds issued by KBN will be used to finance or re-finance eligible projects that have been evaluated and selected by KBN in accordance with its Green Bond Framework.

KBNs green lending totaled NOK 41.4 billion on 31 December 2022, across 408 green projects across Norway, from the smallest municipality of Utsira with its 200 residents, to Oslo with its 700 000 residents. The Norwegian local government sector's projects, for example school buildings and nursing homes, have an economic life of around 30-40 years. The investment decisions made today by KBN's customers' will be with us well into the low and zero-carbon age. KBN is keen to help the sector achieve its green transition and reduce its climate risk by offering lower interest rates to projects that help reduce greenhouse gas emissions, increase energy

efficiency and/or constitute an adaptation to climate change.

Russia's attempt to pressure the EU by cutting supply of natural gas to much of Europe because of its support of Ukraine fortunately looks to backfire. The EU's Green Deal had aimed at making the EU carbon neutral by 2050, but due to Russia's attack on Ukraine going green has also become part of the EU's security agenda. In response to the invasion, the union proposed the REPowerEU package. It aims to cut gas imports from Russia by two-thirds in 2022 and to make Europe independent of Russian fossil fuels before the end of the decade. Going forward this is expected to lead to massive investments in renewable energy and accelerate the de-carbonisation of Europe, increasing the need for green funding.

As for Norway's local government sector, the rise in energy prices as well as the prediction by the Norwegian transmission grid operator that demand for electricity in Norway will continue to outpace supply growth in the coming years, leading to a likely power deficit by 2027, will probably result in increased investments in renewable energy and energy efficiency measures in the sector. KBN will continue our work in international capital markets, securing green funding for the Norwegian local government sector's investments.



KBN strategy

We provide financing to the Norwegian local government sector on attractive terms, and we seek to promote sustainable local communities and contribute to the green transition.

We finance the local communities of tomorrow.



OPEN | RESPONSIBLE | AHEAD

KBN strategy

Our value creation will balance financial, social and environmental factors so that our return over time is generated within sustainable boundaries.

In 2022, KBN carried out a limited strategy process focusing on the areas "leader in green finance" and "a future-oriented organisation". The most significant updates relate to the EU Taxonomy, where KBN will undertake a pilot project for financing taxonomy aligned projects and develop a framework for issuing bonds under the

EU Green Bond Standard, and a project to map KBN's material emissions with the objective of setting science-based targets in line with the Paris Agreement. A full strategy process will be carried out in 2023.



The customer first

KBN will be the most important financing partner for Norwegian municipalities and county authorities.



Strong market participant

Through a strong position in the capital markets, nationally and internationally, KBN will ensure Norwegian municipalities have access to attractive financing.



Leader in green finance

KBN will be among the leading financial institutions on climate risk, green financing solutions, sustainability reporting and insight that contributes to sustainable development.



A digital first choice

Our customers and employees will prefer using KBN's digital solutions because they provide insight, are efficient and provide a good basis for decisions.



A future-oriented organisation

Our culture will be characterised by the fact that we refresh our expertise through learning and knowledge sharing in order to create value for our customers.

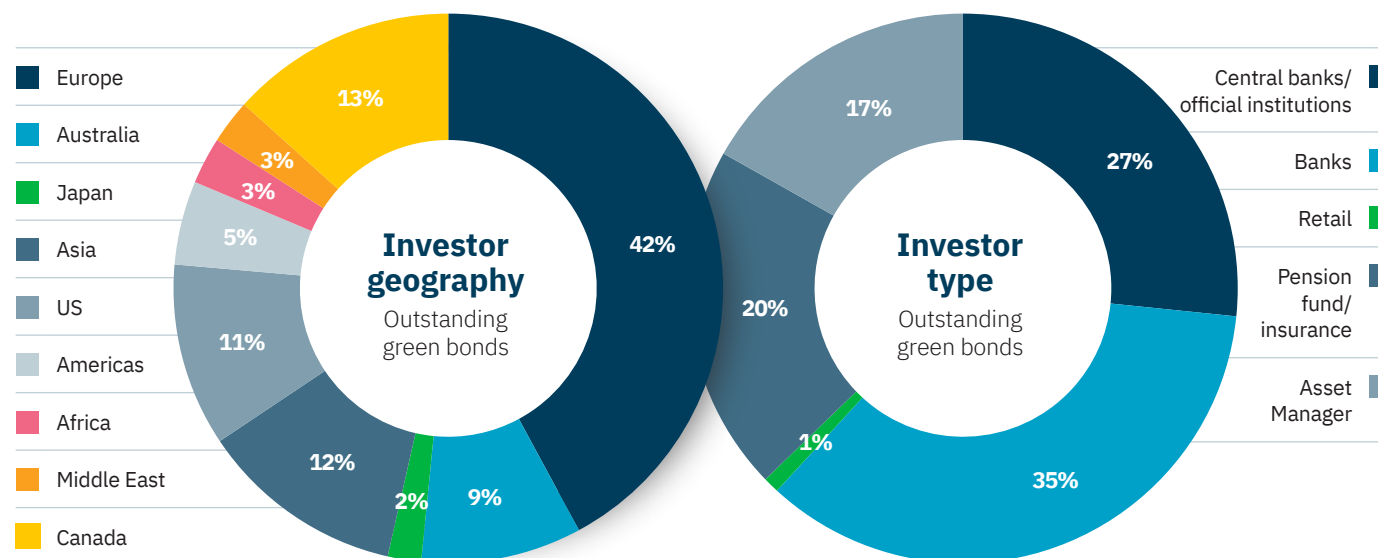


Green bonds

KBN is the Norwegian bond issuer with the longest history of listed green bonds and is also among the most active Norwegian issuers of such bonds.

As of year-end 2022 we have eleven green bonds outstanding in five different currencies, totalling NOK 34.9 billion in green funding.

Unallocated proceeds from green bonds per 31 Dec 2022	0 NOK
Green bonds	34.9 billion NOK
Share of total bonds outstanding	8.0%



CICERO Medium Green Shading with Excellent governance score



In 2021 KBN published its third Green Bond Framework, setting the bar for governance and project quality for any subsequent green funding.

The updated Framework has been

reviewed by CICERO, who concludes on an overall Medium Green shading of the project categories and an Excellent governance score. Read more about KBN's governing documents on page 14.



OUTSTANDING GREEN BONDS

Date	Amount	Maturity	Coupon	ISIN
11 Feb 2015	USD 1 billion ¹	11 Feb 2025	2.125%	US50048MBX74 / XS1188118100
29 Nov 2017	NOK 750 million	29 Nov 2027	2.00%	NO0010811276
29 Nov 2017	NOK 600 million	29 Nov 2032	2.20%	NO0010811284
05 Sept 2018	AUD 450 million	05 Sep 2023	2.70%	AU3CB0256162
28 Aug 2019	SEK 3 billion	28 Aug 2026	0.125%	XS2047497289
21 Apr 2021	USD 500 million	21 Oct 2024	0.50%	US50048MDA53 / XS2333390164
08 Oct 2021	AUD 300 million	08 Oct 2024	0.50%	AU3CB0283596
18 Oct 2021	CAD 500 million	18 Oct 2024	1.00%	US50047JAJ79 / XS2398386776
24 Feb 2022	SEK 1.75 billion	24 Feb 2025	0.765%	XS2447758025
17 Nov 2022	AUD 300 million	17 Nov 2026	4.40%	AU3CB0294130
07 Dec 2022	CAD 500 million	07 Dec 2027	3.80%	XS2564075583 / US50047JAK43

KBN's inaugural green bond issuance, a three-year bond of USD 500 million issued in 2013, expired in 2016.

In addition, a four-year bond of USD 500 million matured in 2020.

¹ Originally USD 500 million, USD 100 million tap in 2019 and USD 400 million tap in 2020.

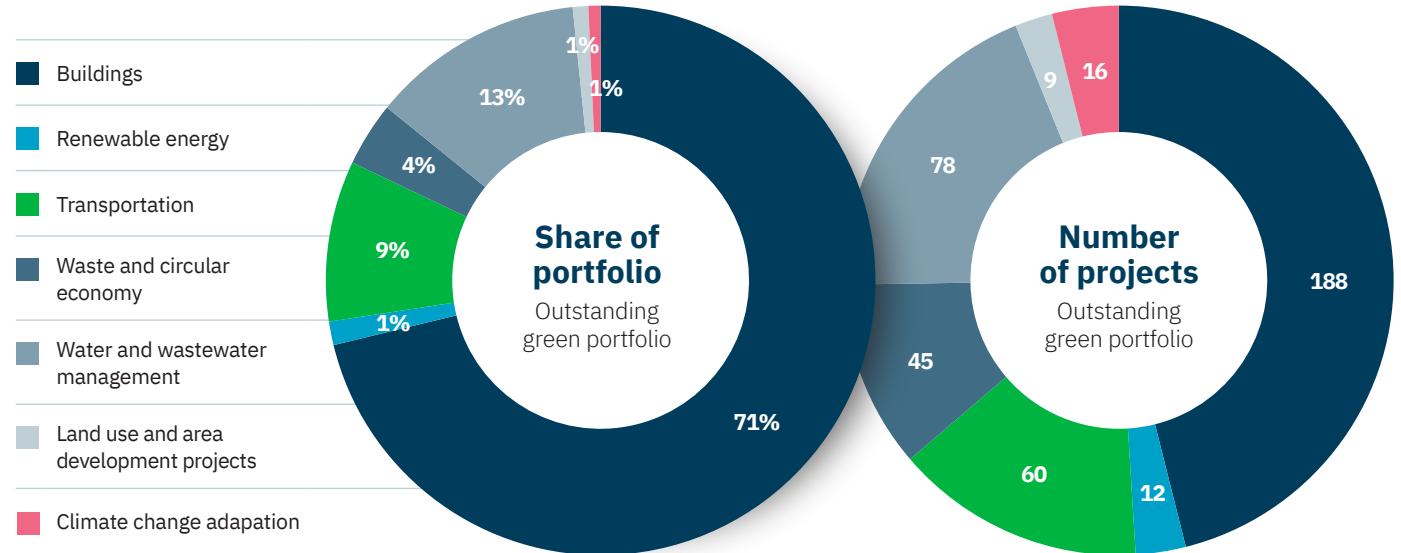
Green loans

KBN offers discounted green loans to climate- and environmentally friendly investments in the Norwegian local government sector. As of 31 December 2022, 84% of outstanding green lending was financed with green bonds.

Green loans	41 billion NOK ¹
Share of total lending	12.6% ²

¹ Amount of outstanding green loans which are eligible for green bond financing. In addition, KBN has a small amount of green loans outstanding which were granted prior to the establishment of the Criteria Document. These are no longer financed with green bonds.

² Share of KBN's total lending which is eligible for green bond financing.



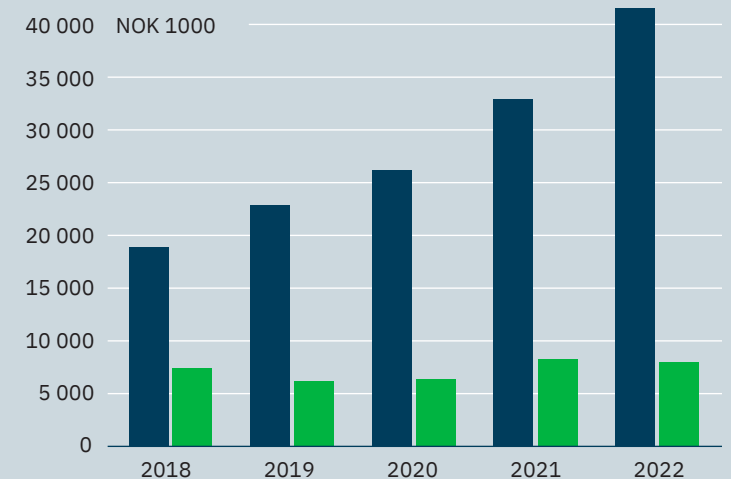
KBN's green loans

Green loans are awarded to projects that contribute to reducing greenhouse gas emissions, improving energy efficiency and/or climate change adaptation. Green loans can be offered on all loan products with a maturity longer than five years. On long-term loans with installments, the interest rate is discounted by 10 bps. In order to receive a green loan, the project must qualify according to KBN's Criteria Document for green loans.



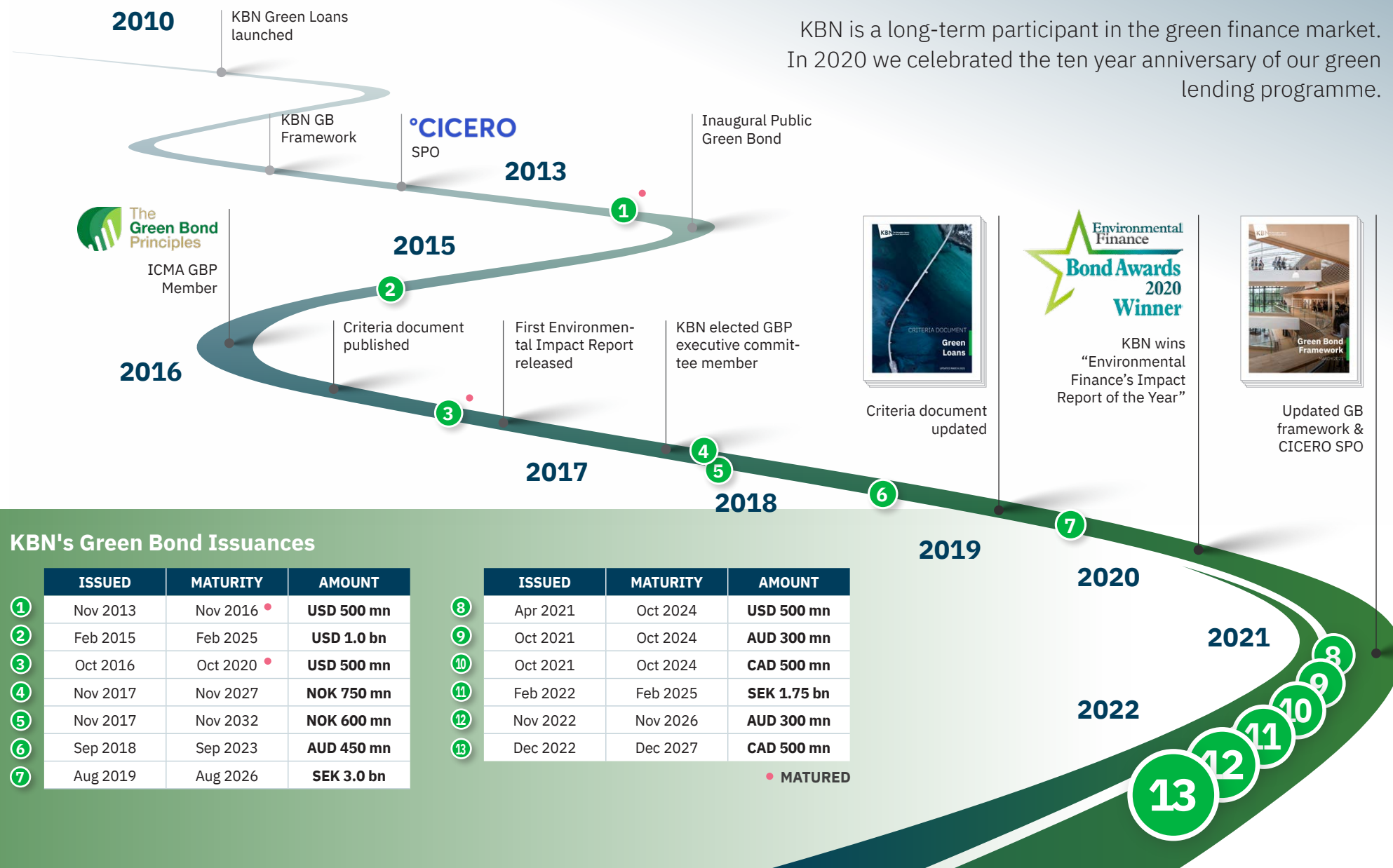
GROWTH IN GREEN LOANS

■ Outstanding amount
■ Disbursed amount



The evolution of KBN's green strategy

KBN is a long-term participant in the green finance market. In 2020 we celebrated the ten year anniversary of our green lending programme.



KBN's Green Bond Issuances

	ISSUED	MATURITY	AMOUNT
1	Nov 2013	Nov 2016 •	USD 500 mn
2	Feb 2015	Feb 2025	USD 1.0 bn
3	Oct 2016	Oct 2020 •	USD 500 mn
4	Nov 2017	Nov 2027	NOK 750 mn
5	Nov 2017	Nov 2032	NOK 600 mn
6	Sep 2018	Sep 2023	AUD 450 mn
7	Aug 2019	Aug 2026	SEK 3.0 bn

	ISSUED	MATURITY	AMOUNT
8	Apr 2021	Oct 2024	USD 500 mn
9	Oct 2021	Oct 2024	AUD 300 mn
10	Oct 2021	Oct 2024	CAD 500 mn
11	Feb 2022	Feb 2025	SEK 1.75 bn
12	Nov 2022	Nov 2026	AUD 300 mn
13	Dec 2022	Dec 2027	CAD 500 mn

• MATURED

KBN and ESG risk



Read more about KBN's work with climate risk in the Annual Report 2022.

KBN is committed to being one of the leading financial institutions in the areas of climate risk, sustainability and green financing solutions.

We are constantly working to analyse and minimise risks, both as a response to increasing regulatory expectations, to have the best basis for making business-related decisions, and as part of our mission to support local governments in their transitions. In

order to achieve this, transparency through reporting is essential.

In our annual report, we present a detailed account on how we approach ESG risks in our operations.

KBN reports according to the following standards:

Task Force on Climate-Related Financial Disclosures (TCFD)

Global Reporting Initiative (GRI)

Carbon Disclosure Project (CDP)



Governance

Green Bond Framework



■ ■ KBN's Green Bond Framework is the governing document for KBN's green bond programme. It defines at the overall level the type of projects and project categories that can qualify for a green loan. It also describes KBN's procedures and processes for granting, evaluating, and reporting on green loans, which are the assets basis for the green bonds, as well as how the funds raised are managed. KBN's framework is aligned with the Green Bond Principles. In March 2021, KBN launched an updated Green Bond Framework which received an Excellent governance score and Medium Green Shading by second opinion provider CICERO.



Download from [kbn.com](#)

Cicero Second Opinion of KBN's Green Project Categories

Buildings	● Medium Green
Renewable energy	● Medium to Dark Green
Transportation	● Medium to Dark Green
Waste and circular economy	● Medium to Dark Green
Water and wastewater management	● Dark Green
Land use and area development projects	● Medium to Dark Green
Climate change adaptation	● Medium Green

KBN's Criteria Document for Green Loans



■ ■ The Green Bond Framework is supplemented by KBN's Criteria Document for Green Loans. The Criteria Document defines the thresholds that must be met for given types of investments to be classified as green, as well as the type of documentation customers need to submit in order to demonstrate that their project meets the criteria, including the relevant thresholds. For some categories, such as energy efficient new buildings, there are specific thresholds – e.g. a new building must use 20% less energy than the limit stipulated in the applicable national building regulations (TEK) – and the customer must document this. For other project categories, such as climate change adaptation, they must describe which climate challenge the investment is tackling and how.

The Criteria Document is revised each year in consultation with KBN's Green Expert Committee, an external body that consists of specialists from relevant sectors. More information on this can be found on the next page. In addition, we have good relationships and are in regular dialogue with our peers in the local government funding agencies in Sweden, Finland and Denmark. This helps harmonise practices and how rules are interpreted at every stage of the loan process – from application to reporting – throughout the Nordic region.



Download from [kbn.com](#)

KBN's Green Expert Committee

KBN has formed a committee including professionals from the climate and energy field in the local government sector and the Norwegian state's administration.

MEMBERS

(As of 31 December 2022)

■ ■ The purpose of the Green Expert Committee is to advise and guide the continuing development of KBN's Criteria Document for Green Loans in order to ensure that the criteria are up-to-date and relevant.

KBN seeks to update the criteria regularly on the basis of technological progress and advances in terms of what is expected of the local government sector's climate and environment efforts.

The Committee meets twice a year to discuss developments and to provide input on changes to KBN's Criteria Document for Green Loans on the basis of its specialist insight and independent judgement.



Kjetil Bjørklund
Climate Specialist,
The Norwegian
Association of
Local and Regional
Authorities (KS)



Tor Brekke
Energy Performance
Certification Scheme
Manager, buildings,
Enova



Kirvil Stoltenberg
Section for Adaption
and Local Measures,
The Norwegian
Environment Agency



Bjørn Nordby
Environmental
advisor, Asker
municipality



Sølve Sundbø
Head of Green
Growth Department,
Climate and Energy
in Vestland County
Council



Lars Strøm Prestvik
Chief Lending Officer
in KBN



Tor Ole Steinsland
Chief of Staff in KBN



Kia Kriens Haavi
Secretary to the
Committee, Head of
Green Loans in
KBN

Project selection and reporting processes

Customer submits application

1 | Customer submits application

The customer submits the application form and documentation.

2 | The application is assessed by KBN

The customer's relationship manager at KBN makes an initial assessment of whether the project is in line with KBN's Criteria document for green loans. Subsequently, an in-house climate adviser prepares a written recommendation where impact, documentation and any potential uncertainty is described. If the project is considered as qualified, the recommendation is forwarded to a climate controller for quality control.

If the climate controller also considers the decision to be well-founded and verifiable, the application is approved.

For projects that are highly innovative using solutions that are not yet well established in the market, the Chief Lending Officer will also need to approve the project. This applies for all applications under the criteria "Other". The project still needs to have a significant climate or environmental impact, but the assessment will be based on an overall evaluation of the documentation provided as there is no suitable criterion to evaluate against.

Registration and verification of environmental impact

3 | The climate adviser registers the information

New projects and their associated impact are registered in a separate database for environmental impact reporting. This impact database is updated every month along with a verification process of outstanding green loans.

4 | Verification of data

The environmental impact of new projects is verified quarterly by a climate adviser. The verification process consists of controlling that the data we have registered matches the information recommended by KBN's climate adviser as the project associated impact, based on submitted documentation.

Impact reporting

5 | Green project list

The green project list is a digital database of projects financed with green loans. The database shows outstanding loan amounts as well as avoided and reduced greenhouse gas emissions. The project list is updated each quarter after the verification process.

6 | Annual impact reporting

The environmental impact report presents projects currently financed and is published alongside the annual report. The project selection and reporting process and the reported allocation of green proceeds is subject to an annual review by KBN's internal auditor. The auditor's attestation can be found on page 56.



Download Criteria Document at kbn.com



See all the green projects in Impact report 2022 (Excel) at kbn.com

Roles

KBN employs three climate and green finance advisers. The advisers can act both as climate advisers and climate controllers, but for each individual application process it is clearly defined which role the individual has.

Key reporting principles

KBN's impact reporting is based on Green Bond Principles' Handbook – Harmonized Framework and Nordic Public Sector Issuers' Position Paper on Green Bonds Impact Reporting. The Position Paper was developed by a group of Nordic public sector issuers, including KBN.

- The reporting include information at the project level, category level and portfolio level.
- The impact reported relates to the proportion of the project financed by KBN. If, for example, KBN provided half the financing for a project, we report half of the project's environmental impact.
- All investments KBN finance with green bonds form part of a combined green portfolio. The table on page 4 shows what proportion of this portfolio each of KBN's green bond issues has financed.
- KBN reports the expected impact of projects (ex ante), but may in the future report actual impact (ex post).
- The reporting is limited to emissions and emissions reductions that fall under Scopes 1 and 2, i.e. direct greenhouse gas emissions and indirect greenhouse gas emissions from the production of energy, as defined in the Greenhouse Gas Protocol.
- From 2022, electricity consumption is converted to greenhouse gas emissions using the grid factor for Norway as calculated by The Norwegian Water Resources and Energy Directorate (NVE). The factor applied is 11 grams of CO₂e per kilowatt hour. Read more about the choice of grid factor on page 20.
- KBN reports which of the UN's Sustainable Development Goals and which of the EU's six environmental objectives the various project categories help to achieve.
- Many projects will have a positive environmental impact for which no tangible impact data is provided in this report. This may be because the impact cannot be measured, and/or because there is no sufficient basis for comparison. A natural consequence of this is that the total impact that we report is probably somewhat lower than the actual impact.

KBN's impact reporting takes into account the guidelines provided in the following documents:



Nordic Public Sector Issuers Position Paper on Green Bond Impact Reporting










The ICMA Handbook on Green Bond Impact Reporting



EU Taxonomy: Final report of the Technical Expert Group on Sustainable Finance

Key reporting principles continued

Calculation methods

Category	Direct quantifiable impact, annually (estimated)	GHG reduced or avoided	Conversion factor	Baseline
 Buildings	kWh avoided kWh produced	Avoided Reduced	1 kWh = 0.011 kg CO ₂ e ¹	Reference building constructed in accordance with the applicable building regulations (currently TEK17) Energy demand prior to renovation
 Renewable energy	kWh produced	Avoided Reduced	1 kWh = 0.011 kg CO ₂ e ¹	Use of electricity from local grid
 Transportation	CO ₂ e avoided Reduction in CO ₂ e	Avoided Reduced	Electric or biogas vehicle Emissions new electric vehicle: 0.2 kWh/km ² * 0.011 kg ¹ CO ₂ /kWh = 0.0022 kg CO ₂ /km Emissions new biogas vehicle: 0 kg CO ₂ /km ³ Emissions alternative diesel vehicle: 0.126 kg CO ₂ /km ⁴	Alternative conventional type of vehicle (e.g. new diesel car)
			Shore-side power or electric ferry 1 kWh = 0.011 kg CO ₂ e ¹ 1 kWh = 0.25 kg marine diesel (MDO) ⁵ 1 kg marine diesel = 3.21 kg CO ₂ /kg diesel ⁶	Use of marine diesel
			Electric construction machinery Emissions new electric construction machinery: “X” kWh/hour * 0.011 kg CO ₂ e ¹ /kWh = “Y” kg CO ₂ e/hour * “Z” hours/year = amount of kg CO ₂ e/year from new electric machinery Emissions existing diesel construction machinery: “X” liter/hour * 2.66 kg CO ₂ ⁷ /liter = “Y” kg CO ₂ /hour * “Z” hours/year = amount of kg CO ₂ /year from existing machinery	Existing diesel construction machinery
 Waste and circular economy	Increase in capacity, tonnes	Avoided	n/a	Situation before improvement
 Water and wastewater management	Increase in capacity, population equivalents	n/a	n/a	Situation before improvement
 Land use and area development projects	Area of the project	n/a	n/a	Situation before improvement
 Climate change adaptation	n/a	n/a	n/a	Situation before improvement

¹ Average GHG emissions from usage of electricity in Norway in 2021 (NVE)² Average energy usage, electric vehicles 2016-2022 (The Norwegian Electric Vehicle Association)³ KBN considers biogas as climate neutral as recommended by the Norwegian Environment Agency.⁴ Average CO₂ emissions from new diesel cars in 2017 (Anskaffelser.no). Note that this is without methane (CH₄) and nitrous oxide (N₂O). The combustion emissions of methane and nitrous oxideare relatively low compared to the CO₂ emissions and give and add between 0,5-1,5 % to the CO₂ emissions when calculated in CO₂e.⁵ Conversion rate of electric shore power distributed to amount of marine diesel avoided, recommended by Plug Port (A Norwegian company that offers shore power in partnership with the ports)⁶ Emission factor recommended by Plug Port⁷ Emission factor for diesel as provided by the Norwegian Environment Agency. Note that this is without methane (CH₄) and nitrous oxide (N₂O). The combustion emissions of methane and nitrous oxide are relatively low compared to the CO₂ emissions and add between 0,5-1,5 % to the CO₂ emissions when calculated in CO₂e.

Refinancing and the age of projects

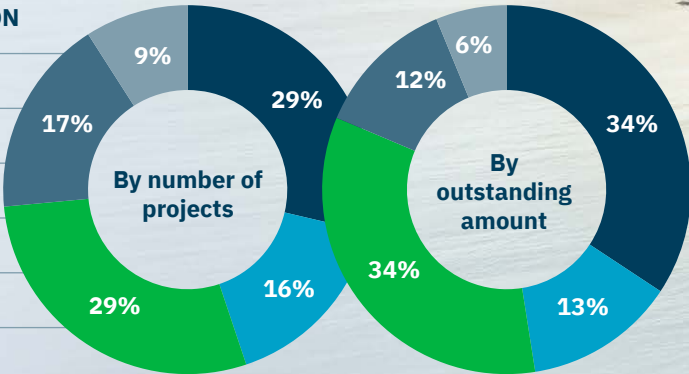
There are multiple definitions of refinancing - the table shows how the portfolio measures against some of these. The chart shows the portfolio broken down by the physical age of the projects.

The purpose of KBN's green loans is financing new green projects, and as a general rule green loans are not awarded to projects that were completed more than twelve months prior to the application date.

When existing green loans mature these can be refinanced within the economic lifetime of the project, but the projects will be reassessed against the latest Criteria Document for green loans.

PROJECTS BY COMPLETION

- 2022 or future date
- 2021
- 2019-2020
- 2017-2018
- 2016 or older



Source	Definition	Share of KBN's green portfolio
EU Green Bond Standard	Share of financing (allocated amount to projects financed after bond issuance)	0%
	Share of refinancing (allocated amount to projects financed before bond issuance) ¹	100%
Nordic Position Paper	Share of total outstanding loans granted during the reporting year	11%
	Share of total outstanding loans granted prior to the reporting year	89%

¹ As described in KBNs Green Bond Framework, bonds are as a general rule issued after a certain amount of green loans has been accumulated and added into the portfolio, so that investors can be assured that the funds raised by green bonds always are disbursed to green projects.

New grid factor applied from 2022

From 2022 KBN applies the grid factor calculated by the Norwegian Water Resources and Energy Directorate (NVE) of 11g CO₂e/kWh.

The NVE grid factor replaces the factor previously used by KBN. KBN has previously applied a grid factor of 315g CO₂e/kWh, corresponding to the European mainland mix. This factor was recommended in «Position Paper on Green Bonds Impact Reporting» (2020), published by the Nordic Public Sector Issuers. KBN contributed to the paper and has reported according to the principles and methodology presented in the Position Paper since 2017, with the aim of ensuring a harmonised approach to impact reporting across issuers in the region.

DEFINITION

What is a grid emission factor?

A grid factor refers to the intensity of CO₂ emissions per unit of electricity generated (gCO₂/kWh). KBN uses a grid factor to calculate the environmental impact of electricity reduced, avoided or produced from the green portfolio.

Impact reporting from green projects is under constant development, and we find it appropriate to make necessary adjustments as reporting methods and calculations advance over time. The last time KBN adjusted the grid factor was in 2020, when the Position Paper revised it downwards from 380g CO₂e/kWh to 315g CO₂e/kWh.

Because all green projects financed by green loans are located in Norway, KBN finds it appropriate to apply the latest [grid factor reflecting the energy mix for electricity as presented by NVE](#). NVE is a directorate under the Ministry of Petroleum and Energy and is responsible for the management of Norway's water and energy resources and calculate emissions from electricity consumed in Norway on a yearly basis.

The grid factor includes calculations of both electricity produced in Norway and in the countries to which we exchange electricity. According to [Statistics Norway](#), approximately 157 TWh electricity was produced in Norway in 2021, while approximately 8 TWh was imported from other European countries.

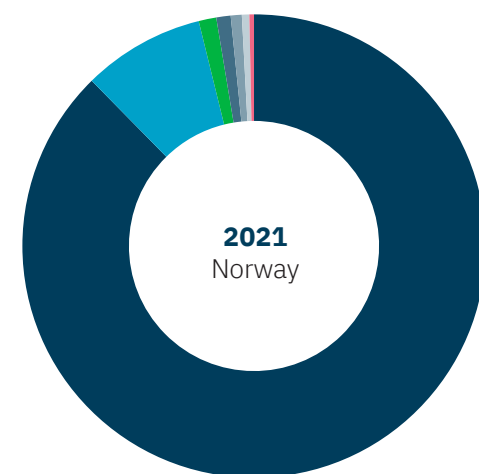
The calculations from NVE show that the electricity consumed in Norway in 2021 mainly came from renewable energy sources. Hydropower, wind power and

other renewables accounted for 97% of electricity consumption, and the calculated CO₂ factor for electricity is 11 g CO₂e/kWh. The calculations reflecting electricity consumption are performed on a yearly basis, which may cause minor changes in applied grid factor going forward.

The change of grid factor in this year's impact report results in lower numbers for avoided and reduced GHG emissions from the green portfolio compared to previous years. The revision will lower the positive impact of energy efficiency projects in buildings and renewable energy production, whilst reducing the negative impact of an increased use of electricity, such as for zero emission transportation.

The ongoing energy crisis, the transition from use of fossil fuels to electricity, and establishment of new industry in Norway will increase the need for electricity in the future. Thus, it is crucial that the local government sector reduces their energy consumption regardless of calculation methods for CO₂ reduction. It is important to keep in mind that positive environmental impact is not only reflected in high numbers of emission reductions.

CLIMATE DECLARATION FOR DELIVERED ELECTRICITY¹



Hydropower	87.65%
Wind power	8.52%
Nuclear power	1.23%
Other fossil energy	1.00%
Other renewable energy	0.77%
Coal	0.52%
Gas	0.32%

¹ Source: nve.no - <https://www.nve.no/energi/energisystem/kraftproduksjon/hvor-kommer-strommen-fra/>

Improved calculation method for electric shore power

In previous years, KBN has reported an environmental impact from our electric shore power projects measured in avoided GHG (tonnes CO₂e) annually. This was based on calculations provided by the customer, but the underlying method was not necessarily identical across the different projects.

This year, we are calculating the estimated impact by using an aligned method. We take the annual distributed electric shore power (kWh/year) as an input - this is provided and documented by our customer for each project in accordance with our Governance scheme.

We then use a conversion factor to calculate what the distributed electric shore power would equal in fossil energy usage (marine diesel). This method is recommended by Plug Port, a Norwegian company that offers shore

power, and proposed by a member of KBN's Green Expert Committee. You can read more about the committee on page 15.

The estimated amount of avoided emissions annually also takes emissions from usage of electric shore power (kilo CO₂/year) into consideration. This method is similar when calculating avoided emissions from other transportation projects, such as electric vehicles or electric construction machinery.

Calculation example: Electric shore power project		
Emission factor electricity	0.011	kilo CO ₂ /kWh
Electric shore power distributed	1 852 000	kWh/year
Emission from electric shore power usage	20 372	kilo CO ₂ /year
Emission factor marine diesel (MDO)	3.21	kilo CO ₂ /kilo diesel
Diesel usage*	463 000	kilo diesel/year
	1 486 230	kilo CO ₂ /year
Estimated avoided emissions	1 465 858	kilo CO ₂ /year
Estimated avoided emissions	1 466	tonnes CO₂/year

* Conversion of electric shore power distributed to amount of marine diesel avoided (1 kWh = 0,25 kilo marine diesel)

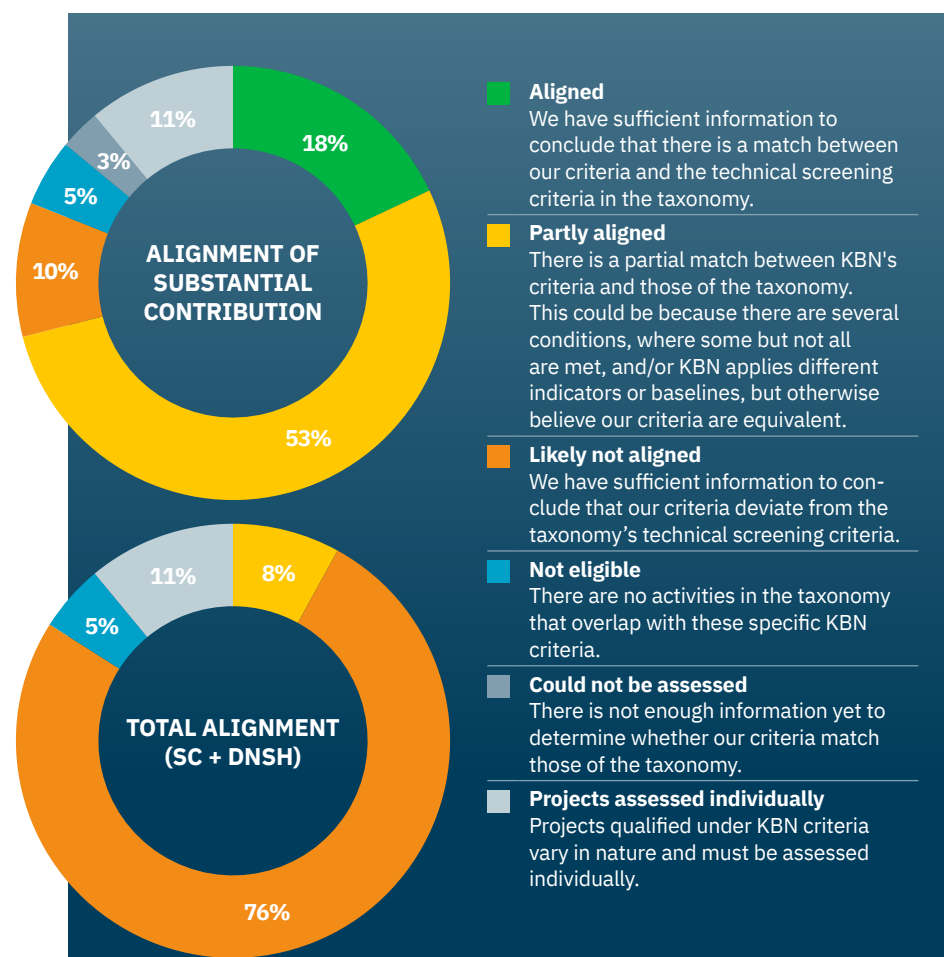


KBN's self-assessment of taxonomy alignment now also covers DNSH

KBN has for several years performed an analysis of how eligibility criteria for green loans align with the EU Taxonomy. Until now the exercise has been limited to the Substantial Contribution-criteria (SC), but the scope has now been expanded to also covering the Do No Significant Harm-criteria (DNSH).

Some key takeaways from this year's assessment:

- 71% of KBNs portfolio are found to be either aligned or likely aligned with the Substantial Contribution criteria of the taxonomy. Project types include measures to improving the energy efficiency of buildings, low-carbon public land and maritime transportation, waste sorting facilities and new low-energy buildings.
- The large share of partly aligned projects is mainly driven by criteria 1.2.1 New low-energy buildings larger than 5.000 m2. The conclusion arrives at "partly aligned" because not all three of the substantial contribution criteria for construction of new buildings are met. We consider the criteria for energy performance and air-tightness to be fulfilled (see comment on energy performance on next page), but do not have enough information to assess if the criteria regarding the life-cycle Global Warming
- Potential (GWP) is fulfilled for all projects larger than 5.000 m2.
- Although we find a number of our criteria to be aligned or likely aligned with the Substantial Contribution criteria, there is a zero degree of full alignment with Substantial Contribution and Do No Significant Harm-criteria. The main reason for this is the fact that extensive risk, water, and biodiversity assessments referred to in most DNSH criteria are not typically undertaken for small-scale projects in the Norwegian local government sector.
- The fact that none of KBN's project types are found to be in full alignment with SC and DNSH criteria is a testament to the complexity of the taxonomy and its documentation requirements. It furthermore confirms that the market for taxonomy-compliant projects is still immature, even in the Nordics where sustainable investments are high on the agenda.



- The lack of high-quality and comparable data of sufficient detail continues to be a bottleneck, and for several criteria it is still unclear what type and level of documentation is needed to confirm taxonomy compliance. For five percent of the portfolio there is insufficient data and information to make an assessment at all. For the remaining 95% we still rely on assumptions and impressions and have not actually screened project by project.
- Several of the project types KBN finances under its green lending programme, and views as important to support climate change mitigation and adaptation, have no obvious match in the taxonomy and are therefore classified as not eligible. Examples include protection against natural disasters, purchasing of warning systems for emergency preparedness and zero-emission heavy machinery and related infrastructure.
- The self-assessment will form the basis for KBN's continued work with the EU Taxonomy. In 2022, KBN carried out a limited strategy process focusing on the areas "leader in green finance" and "a future-oriented organisation". The most significant updates relate to the EU taxonomy, where KBN will undertake a pilot project for financing taxonomy aligned projects and develop a framework

for issuing bonds under the EU Green Bond Standard.

- A description of the method applied and a summary of the assessments made can be found from page 45 onwards. The full analysis in spreadsheet format is available for download on KBN's websites.

Awaited NZEB definition eases assessment

The share of alignment with the SC criteria have increased from 11% in 2021 to 18% in 2022. This increase is mainly driven by a confirmation from Norwegian authorities regarding a Norwegian NZEB (nearly zero-emission building) definition, relevant for the criteria covering construction of new buildings. Our assessment concludes that criterion number 1 regarding energy performance is fulfilled. KBN does not measure the Primary Energy Demand (PED) or delivered energy as of this date but have used a conversion table to compare total net energy demand (kWh/m²/year) against the taxonomy threshold of PED 10% lower than the thresholds set in NZEB for each building category.

This is based on an assumption that net energy demand is normally higher or relative equal to delivered energy (which is the

relevant indicator in the NZEB definition). The exception could be for buildings with district heating and use of direct electricity as energy carriers, but for these projects we assume a loss of efficiency from use of district heating of 0,88 (12%). It is further assumed that heating constitutes around 50% of the total net energy demand, which means that the loss of efficiency from district heating only accounts for about 6% of the possible increase of the amount of delivered energy needed. This leaves a requirement for a minimal threshold of - 6% when comparing KBN's criterion for low energy buildings (minus technical equipment in accordance to Norwegian Standard NS 3031:2014) against the substantial contribution criterion number 1 (NZEB minus 10%), which is fulfilled for all relevant building categories.

Disclaimer:

The mapping is a self-assessment performed by KBN itself on a best effort basis in order to increase transparency. This mapping must not be viewed as an official or complete evaluation of taxonomy compliance.

Water and wastewater management

Measures	Project type (2020 Criteria Document)	Corresponding taxonomy activity and environmental objective (2020)	Environmental objective
5.1 Surface runoff management measures by water charge	5.1.1 Separating wastewater and surface runoff	5.1.1 Production of hot/cold using waste heat (2020)	Climate
5.2 Small-scale energy production measures	5.2.1 Heat recovery	5.2.1 Production of hot/cold using waste heat (2020)	Climate
5.3 Climate-friendly processing facilities	5.3.1 Energy recovery	5.3.1 Production of hot/cold using waste heat (2020)	Climate
5.4 Wastewater treatment	5.4.1 Increase in energy efficiency of at least 20%	5.4.1 Forward of water collection, treatment and reuse systems (2020)	Climate
5.5 Climate change adaptation of existing facilities	5.5.1 Climate change adaptation of existing facilities	5.5.1 Forward of water collection, treatment and reuse systems (2020)	Climate
5.6 Reduce the risk of chemicals or the negative impact on the local environment	5.6.1 Reduce the risk of chemicals or the negative impact on the local environment	5.6.1 Water supply (2020)	Climate
5.7 Wastewater treatment	5.7.1 Increase in energy efficiency of at least 20%	5.7.1 Forward of water collection, treatment and reuse systems (2020)	Climate
5.8 Climate change adaptation of existing facilities	5.8.1 Climate change adaptation of existing facilities	5.8.1 Forward of water collection, treatment and reuse systems (2020)	Climate
5.9 Reduce the risk of chemicals or the negative impact on the local environment	5.9.1 Reduce the risk of chemicals or the negative impact on the local environment	5.9.1 Water supply (2020)	Climate
5.10 Phosphorus recovery	5.10.1 Phosphorus recovery	5.10.1 Phosphorus recovery from waste water (2020)	Climate
5.11 Sludge treatment for biogas production (anaerobic)	5.11.1 Sludge treatment for biogas production (anaerobic)	5.11.1 Anaerobic digestion of sewage sludge (2020)	Climate
5.12 Increase in energy efficiency of at least 20% (regardless of the situation or a newly installed solution)	5.12.1 Increase in energy efficiency of at least 20% (regardless of the situation or a newly installed solution)	5.12.1 Construction, extension and operation of water collection, treatment and reuse systems (2020)	Climate

IMPACT REPORT 2022

23

GREEN LOANS AND THE TAXONOMY

Project categories

Overview of project categories eligible for KBN's green loan financing.
For full criteria in all categories, please consult KBN's Criteria Document for green loans.



Buildings

Climate-smart and/or energy efficient buildings that are adapted to future changes in the climate.

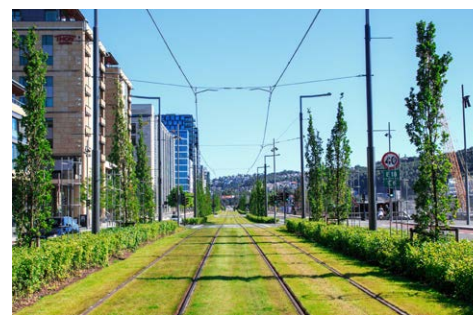
Subcategories	1.1 Measures in new or existing buildings which improve energy efficiency or climate change adaptation. 1.2 New buildings 1.3 Other
SDGs	7.3 and 12.2
The EU Environmental Objectives	1, 2, 4 and 6



Renewable energy

Facilitating the use of renewable energy sources.

Subcategories	2.1 Renewable energy production 2.2 Energy storage 2.3 Energy infrastructure 2.4 Other
SDGs	7.2
The EU Environmental Objectives	1, 2, 5 and 6



Transportation

Transport solutions with minimal or zero emissions.

Subcategories	3.1 Cycling and walking 3.2 Land transport 3.3 Maritime transport 3.4 Heavy machinery 3.5 Infrastructure 3.6 Other
SDGs	9.1, 9.4, 11.2 og 11.6
The EU Environmental Objectives	1,2 and 5



Waste and circular economy

Measures that help minimise waste, increase reuse, recycling or improve energy recovery.

Subcategories	4.1 Waste prevention or reuse 4.2 Waste collection, processing and treatment 4.3 Other
SDGs	11.6, 12.4 and 12.5
The EU Environmental Objectives	1, 2, 4 and 5



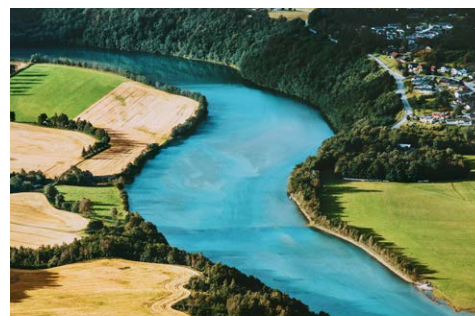
UN Sustainable Development Goals



Water and wastewater management

Investments intended to reduce energy consumption or leakage, or as a response to a climate change adaptation requirement.

Subcategories	5.1 Surface runoff management financed by water charges 5.2 Small scale energy production measures 5.3 Climate-friendly processing facilities 5.4 Climate-friendly construction projects 5.5 Other
SDGs	6.1, 6.3, 6.4 and 14.1
The EU Environmental Objectives	1, 2, 3 and 4



Land use and area development projects

Projects contributing to safe, inclusive and sustainable areas and healthy ecosystems.

Subcategories	6.1 Anti-pollution measures 6.2 Area development and land usage 6.3 Other
SDGs	11.3, 11.7, 14.2 and 15.1
The EU Environmental Objectives	1, 2, 5 and 6



Climate change adaptation

Measures making local communities better equipped to withstand current and future climate change and reduce physical climate risk.

Subcategories	7.1 Surface runoff management 7.2 Climate change adaptation 7.3 Emergency preparedness 7.4 Other
SDGs	3.d, 11.5 and 13.1
The EU Environmental Objectives	2 and 3



The EU Environmental Objectives

1. Climate change mitigation
2. Climate change adaptation
3. The sustainable use and protection of water and marine resources
4. The transition to a circular economy
5. Pollution prevention and control
6. The protection and restoration of biodiversity and ecosystems

Key impact data








The impact reported on this page is the annual effect from all the projects in the green portfolio - both new and older. Only new projects are included in the project list on the following pages.

New projects are defined as projects to which the first disbursement has been made in 2022. The environmental impact from the new projects is thus only part of the total presented in this table. You can

find a complete overview of all projects and their associated environmental impact in the spreadsheet accompanying this report or on KBN's website.



Get a complete overview of the green projects in Impact report 2022 (Excel) or Green project list at kbn.com.

Project categories	New green projects in 2022	Green loan outstanding (1000 NOK)	Production of renewable energy (kWh annually)	Reduced and avoided GHG (tonnes CO ₂ e annually)	Category specific impact
 Buildings	32	29 497 522	10 607 884	577	Estimated energy savings (kWh annually): 41 887 653
 Renewable energy	4	575 106	81 383 618	727	Installed effect (kW): 3 710
 Transportation	12	3 913 795	n/a	8 978	Number of zero-emission cars ^{1, 2} : 257 Other zero emission vehicles (trams, ferries, heavy machinery) ² : 92
 Waste and circular economy	8	1 564 292	145 942	25	Increased capacity (tonnes): 145 808
 Water and wastewater management	11	5 196 680	n/a	n/a	Increased capacity (population equivalents): 516 142
 Land use and area development projects	0	378 507	n/a	n/a	Included area ² (m ²): 458 140
 Climate change adaptation	1	294 958	n/a	n/a	-
Total	68	41 420 859	92 137 443	10 307	

DISCLAIMER

The information presented in this report has been obtained from KBN's customers. The data has been reviewed by KBN but has not been verified by us or a third party. The calculations of environmental impact have been carried out by KBN.

We do our best to assure the quality of the information in this report. However, we ask that investors and other stakeholders take a cautious approach when interpreting this report, as there is significant uncertainty associated with calculations of this type.

¹ Also includes 25 hybrid cars qualified under KBN's 2016 criteria document.

² Absolute figure, not pro-rated to account for KBN share of financing



NEW PROJECTS IN 2022

Buildings

NEW GREEN
PROJECTS IN
2022:**32**TOTAL
NUMBER OF
GREEN PROJECTS:**188**[See all the green projects in
Impact Data 2022 \(Excel\)
at \[kbn.com\]\(https://kbn.com\).](#)

Borrower	Project name	Description	Project period (est.)	Criterion met	Total disbursed (1000 NOK)	Green loan outstanding (1000 NOK)	Total cost (1000 NOK)	KBN share of financing	Heated area (m²)	Estimated impact (KBN share)		
										Energy produced (kWh annually)	Energy avoided (kWh annually)	Corresponds to avoided GHG (tonnes CO ₂ e annually)
Ringsaker municipality	Moelv nursing home	A new 60-person nursing home in Moelv. The building will meet the Norwegian Passive House Standard, have a low energy demand and install geothermal wells that will meet 70% of the building's heating requirements. The geothermal wells will also be used for cooling in summer.	2022-2023	1.2.1 New low-energy buildings	72 720	71 370	380 700	19%	6 200	35 538	50 445	0.9
Bodø municipality	Aspåsen school	Aspåsen school in Bodø will be renovated, which will reduce its energy demand significantly. The building will also be connected to a district heating system. Its gym will also be renovated and adapted so that it also can be used by the Bodø Kulturskole, the local community and for cultural activities.	2021-2021	1.1.2 a) Major renovation projects: Energy efficiency	336 509	325 292	403 000	81%	10 690	-	630 759	6.9
Bodø municipality	Mørkvedbukta school and nursery	A new combined elementary school and nursery, constructed using climate-friendly materials, including extensive use of glulam and mass timber. The building will also have a low energy demand.	2017-2022	1.2.1 New low-energy buildings and 1.2.2 New buildings with climate-friendly materials	62 342	60 264	469 100	13%	7 333	-	36 457	0.4
Averøy municipality	Kårvåg school and sports hall	The construction of an elementary school for years 1-7 with an integrated sports hall and changing rooms. The school will be dimensioned for 280 pupils. The building will have a low energy demand, and the school section will be constructed using mass timber for its outer walls and roof.	2021-2022	1.2.1 New low-energy buildings	90 000	88 846	262 800	34%	5 081	-	66 993	0.7
Kongsvinger municipality	Kongsvinger fire station	Kongsvinger fire station will include an office wing, a garage with space for six fire engines and an area to wash the engines. The building will be built using mass timber.	2021-2022	1.2.2 New buildings with climate-friendly materials	135 000	115 562	135 000	86%	1 430	-	675	0.0
Kongsvinger municipality	Annex for Langeland school	An extension will be added to Langeland school, which will include a classroom, a room for group activities, a gym and changing rooms. The extension will be constructed using mass timber.	2021-2022	1.2.2 New buildings with climate-friendly materials	97 944	78 992	124 276	64%	1 430	-	-	-



Buildings continued

Borrower	Project name	Description	Project period (est.)	Criterion met	Total disbursed (1000 NOK)	Green loan outstanding (1000 NOK)	Total cost (1000 NOK)	KBN share of financing	Heated area (m²)	Estimated impact (KBN share)		
										Energy produced (kWh annually)	Energy avoided (kWh annually)	Corresponds to avoided GHG (tonnes CO ₂ e annually)
Malvik municipality	Vikhammer lower secondary school	A new lower secondary school for approximately 450 pupils featuring a cultural centre, a youth centre and an arts school. The building will have a low energy demand and approximately 1,900 m² of solar panels, and the construction site and bulk transportation vehicles will be fossil-free. The sports pitch will have environmentally friendly artificial grass, and the building will be heated from a local district heating facility. A grant was received from Klimasats for the pre-engineering phase.	2021-2023	1.2.1 New low-energy buildings	325 640	319 127	407 350	78%	7 367	202 942	200 847	4.4
Malvik municipality	Vikhammer nursery	A new nursery with a low energy demand featuring extensive use of mass timber. The requirements set for the building are a combination of the criteria for nZEBs in the Norwegian Agency for Public and Financial Management's Criteria Wizard for Sustainable Public Procurement and in the Futurebuilt programme. Energy will be produced from solar panels and a ground source heat pump.	2022-2023	1.2.1 New low-energy buildings and 1.2.2 New buildings with climate-friendly materials	107 360	105 213	134 200	78%	1 368	43 299	66 817	1.2
Trondheim municipality	Risvollan nursery	The ambition for the new Risvollan nursery in Trondheim is for it to be the municipality's first energy-plus nursery. The building will be certified as BREEAM-NOR 'Very Good', and solar panels are planned for its roof.	2022-2023	1.2.1 New low-energy buildings	39 500	39 500	119 000	33%	2 033	-	44 268	0.5
Sykkylven municipality	New Sykkylven school	A new school and sports hall will be constructed in Bakkeøyane, northeast of central Sykkylven. Extensive use will be made of mass timber and glulam, and the school building and sports hall will also be built as a single building with a shared energy centre, using heat from geothermal wells.	2022-2023	1.2.2 New buildings with climate-friendly materials	198 350	198 350	363 000	55%	7 535	136 605	56 407	2.1
Skaun municipality	New fire station	The fire station in Skaun is being moved to central Børsa, and will be built in climate-friendly materials, using mass timber to support the roof and in the columns of the outer walls.	2021-2022	1.2.2 New buildings with climate-friendly materials	33 000	32 585	49 500	66%	1 315	-	12 119	0.1
Flakstad municipality	New Flakstad school	Flakstad school will be built using mass timber for the load-bearing system, floors and walls. The building will be heated using energy wells, and solar panels will be installed to produce energy locally.	2021-2022	1.2.2 New buildings with climate-friendly materials and 1.2.4 Buildings with locally produced energy	96 000	96 000	124 500	77%	1 685	160 916	8 315	1.9



Borrower	Project name	Description	Project period (est.)	Criterion met	Total disbursed (1000 NOK)	Green loan outstanding (1000 NOK)	Total cost (1000 NOK)	KBN share of financing	Heated area (m²)	Estimated impact (KBN share)		
										Energy produced (kWh annually)	Energy avoided (kWh annually)	Corresponds to avoided GHG (tonnes CO ₂ e annually)
Møre og Romsdal county authority	Agricultural learning center at Gjermundnes high school	Gjermundnes upper secondary school will have a new animal farming teaching facility, consisting of a barn, an office, changing rooms and a technical systems room. The building is designed to have a low energy demand, and will be connected to heat pump heating. 400 m² of solar panels will also produce solar energy.	2023-2023	1.3 Other	5 200	5 200	50 000	10%	1 141	4 309	3 465	0.1
Møre og Romsdal county authority	Spjelkavik Arena	A new sports hall with teaching areas for physical education and practical subjects, as well as an exercise area for various activities. The building will have a low energy demand.	2022-2024	1.2.1 New low-energy buildings	33 900	33 900	270 000	13%	5 763	-	28 219	0.3
Molde municipality	Årølia school	The new Årølia school in Molde for years 1-7 is being built for nearly 400 pupils, with teaching rooms, an auditorium and a gym. The school will be constructed using mass timber load-bearing structures.	2021-2023	1.2.2 New buildings with climate-friendly materials	107 600	106 255	235 500	45%	5 478	-	51 162	0.6
Oslo municipality	Voldsløkka school	The new Voldsløkka school will be Oslo's first energy-plus school. An energy-plus building is a building designed to produce more energy in its lifetime than is used to produce the materials from which it is built and to build, operate and eventually demolish it.	2020-2023	1.2.1 New low-energy buildings and 1.2.4 Buildings with locally produced energy	500 000	500 000	661 500	76%	8 888	379 394	298 954	7.5
Grieghallen IKS	Increased energy efficiency by changing 550 windows	Replacing the Grieg Hall's 550 double-glazed windows, which date from the 1970s, with new triple-glazed windows. The steel frames around the windows will be insulated with Aerolon, making it the first building in Norway to use this technology, and because of this the project has also received support from Enova for the 'Introduction of a new technology for buildings'.	2022-2024	1.1.1 Individual energy efficiency measures	35 000	9 000	39 400	23%	25 000	-	228 426	2.5
Trondheim municipality	Stavne day center	Stavne activity centre in Trondheim is a day centre for people with intellectual developmental disorders and provides appropriate vocational training. The building will have a low energy demand, class A low-carbon concrete will be used, and the construction site will be fossil-free.	2023-2023	1.2.1 New low-energy buildings and 1.2.2 New buildings with climate-friendly materials	36 500	36 500	148 000	25%	2 221	-	25 251	0.3
Ringerike municipality	Residential care center Hov Øst	21 sheltered housing units with apartments, communal areas, staff areas and outside areas. Built in mass timber, with a low energy demand.	2019-2021	1.2.1 New low-energy buildings and 1.2.2 New buildings with climate-friendly materials	66 500	66 500	121 400	55%	2 800	-	60 737	0.7



Buildings continued

Borrower	Project name	Description	Project period (est.)	Criterion met	Total disbursed (1000 NOK)	Green loan outstanding (1000 NOK)	Total cost (1000 NOK)	KBN share of financing	Heated area (m²)	Estimated impact (KBN share)		
										Energy produced (kWh annually)	Energy avoided (kWh annually)	Corresponds to avoided GHG (tonnes CO ₂ e annually)
Ringerike municipality	Emergency medical center and ambulance central (RILA)	Ringerike intermunicipal urgent treatment centre and ambulance station will be built to have a low energy demand, and will produce renewable energy from solar panels.	2019-2021	1.2.1 New low-energy buildings	83 000	83 000	96 000	86%	1 894	41 068	77 782	1.3
Fitjar municipality	New nursery Fitjar	A new nursery in Fitjar municipality built to have a low energy demand. The building will produce renewable energy thanks to geothermal heating and a solar panel system.	2022-2023	1.2.1 New low-energy buildings	25 973	25 973	65 781	39%	813	15 794	17 366	0.4
Oppdal municipality	New Oppdal fire station	The new Oppdal fire station will be built using class A low-carbon concrete for the load-bearing structure, and the administration building will be built to have a low energy demand.	2022-2023	1.2.2 New buildings with climate-friendly materials	26 400	26 400	75 400	35%	1 250	6 653	6 521	0.1
Bærum municipality	Emma Hjorth nursery	The Emma Hjorth elementary school will be extended and a new associated multi-use hall will be added. The structures will be built to have a low energy demand and will be constructed in mass timber.	2022-2024	1.2.1 New low-energy buildings and 1.2.2 New buildings with climate-friendly materials	5 000	5 000	502 000	1%	2 818	-	794	0.0
Bærum municipality	Residential care center Eiksveien 116	12 new sheltered housing units for persons with developmental disorders. The building will be built to have a low energy demand and is a FutureBuilt pilot project using the Passive House standard. The project is part of Culture-E, an EU project in collaboration with SINTEF. Mass timber will also be used.	2017-2021	1.2.1 New low-energy buildings	46 000	46 000	83 855	55%	1 184	10 971	18 316	0.3
Bærum municipality	Bekkestua lower secondary school	Bekkestua elementary school is being extended to address greater population growth in the area. The new building will have a low energy demand, and solar panels will be installed on its roof to supply the school with electricity.	2020-2021	1.2.1 New low-energy buildings	237 000	237 000	297 400	80%	4 090	-	112 447	1.2
Bærum municipality	Eineåsen lower secondary school	Eineåsen elementary school will have six parallel classes in each year. The school will be constructed using climate friendly materials and will have a low energy demand.	2018-2024	1.2.1 New low-energy buildings and 1.2.2 New buildings with climate-friendly materials	5 000	5 000	323 700	2%	5 364	-	2 651	0.0
Bærum municipality	Gullhaugveien residential care center	Bærum municipality is building 12 co-located residential units for individuals with intellectual developmental disorders requiring a 24-hour staffed personnel base. It will be built to have a low energy demand and will also meet the requirements to be a nZEB, with sufficient self-produced energy from solar panels and heat pumps.	2022-2023	1.2.1 New low-energy buildings and 1.2.4 Buildings with locally produced energy	5 000	5 000	86 000	6%	1 163	2 209	2 968	0.1



Buildings continued

Borrower	Project name	Description	Project period (est.)	Criterion met	Total disbursed (1000 NOK)	Green loan outstanding (1000 NOK)	Total cost (1000 NOK)	KBN share of financing	Heated area (m²)	Estimated impact (KBN share)		
										Energy produced (kWh annually)	Energy avoided (kWh annually)	Corresponds to avoided GHG (tonnes CO ₂ e annually)
Bærum municipality	Gullhaug nursery	Bærum municipality is carrying out a full refurbishment of Gullhaug nursery, which will result in it having a lower energy demand. The nursery will have an entirely new layout, new floor surfaces and new technical installations, including ground source heating.	2020-2022	1.1.2 a) Major renovation projects: Energy efficiency	36 000	36 000	50 750	71%	1 073	-	35 774	0.4
Vardø municipality	Improving energy efficiency in Vardøhallen	Replacing and re-insulating the roof of the Vardø sports hall.	2022-2022	1.1.1 Individual energy efficiency measures	2 900	2 900	11 063	26%		-	-	-
Vardø municipality	Renovation of Vardø fire station	Renovating the façade of Vardø fire station to improve the level of insulation.	2022-2022	1.1.1 Individual energy efficiency measures	2 000	2 000	8 500	24%		-	-	-
Overhalla municipality	Hunn school	Renovating and extending the Hunn school. The existing school building will be renovated to lower its energy demand, and the new addition will be built using mass timber and will have a low energy demand. Solar panels will also be installed.	2020-2022	1.1.3 Renovation of existing building stock combined with a new extension building	25 132	25 132	80 000	31%	1 866	5 498	24 855	0.3
Moss municipality	Grindvold residential care center	A co-housing development of 48 residential units for people with dementia in Grindvold in Moss. The main part of the building is being built using mass timber, and a liquid-to-water heat pump connected to geothermal wells will be installed on the site.	2022-2024	1.2.2 New buildings with climate-friendly materials	110 500	110 500	416 000	27%	5 613	-	56 358	0.6



NEW PROJECTS IN 2022

Renewable energy

NEW GREEN
PROJECTS IN
2022:

4

TOTAL
NUMBER OF
GREEN PROJECTS:

12

See all the green projects in
Impact Data 2022 (Excel)
at kbn.com.

Borrower	Project name	Description	Project period (est.)	Criterion met	Total disbursed (1000 NOK)	Green loan outstanding (1000 NOK)	Total cost (1000 NOK)	KBN share of financing	Estimated impact (KBN share)		
									Installed capacity (kW)	Expected energy production (kWh/annually)	Corresponds to avoided GHG (tonnes CO ₂ e annually)
Senja Avfall IKS	New incineration plant	The new incinerator facility will provide greater capacity and will receive waste for energy recovery and district heating. The facility will also produce electrical energy using steam technology, leading to the facility self-sufficiency in electricity.	2022-2024	2.3.2 District heating/cooling and 2.1.1 e) Renewable energy production: Other renewable energy sources	345 000	97 000	431 250	22%	-	15 295 072	-
HIAS IKS	Solar panels	HIAS will install solar panels on its new water treatment plant. All the electricity produced will be used directly at the plant.	2022-2023	2.1.1 c) Renewable energy production: Solar cells or solar thermal collectors	300	190	3 300	6%	-	9 138	0.1
Salangen municipality	Geothermal wells for heating of municipal buildings	Salangen municipality will drill 27 geothermal wells with a depth of 250 m. These will heat Vasshaug nursery and Salangen residential and elderly care centre. The project has received a grant from Enova.	2021-2023	2.1.1 b) Renewable energy production: Geothermal wells	5 000	5 000	8 400	60%	-	475 843	5.2
Movar IKS	Fuglevik wastewater treatment plant	MOVAR IKS has decided to expand the Fuglevik treatment plant to recover energy and resources from sludge and wastewater. In addition to improving the level of wastewater treatment and removing nitrogen to improve the condition of the fjord, the new plant will also produce biogas from wastewater sludge using THP and pyrolysis. In addition, solar panels will be installed on the roof.	2022-2026	2.1.1 a) Renewable energy production: biogas plants and c) Solar cells or solar thermal collectors	235 000	116 250	2 250 000	5%	-	192 200	2.1



NEW PROJECTS IN 2022 Transportation

NEW GREEN
PROJECTS IN
2022:

12

TOTAL
NUMBER OF
GREEN PROJECTS:

60

See all the green projects in
Impact Data 2022 (Excel)
at kbn.com.

Borrower	Project name	Description	Project period (est.)	Criterion met	Total disbursed (1000 NOK)	Green loan outstanding (1000 NOK)	Total cost (1000 NOK)	KBN share of financing	Estimated impact (KBN share)
									Corresponds to avoided GHG (tonnes CO ₂ e annually)
Nordfjord Havn IKS	Shore-side power supply Måløy	Creation of three stations for charging and supplying electricity to ships at Måløy port.	2021-2023	3.5.5 Shore-side power connections and charging points	10 000	9 750	15 598	63%	820.1
Ringsaker municipality	Procurement of electric cars	Ringsaker municipality will purchase electric cars for its child protection service and nursing and care service.	2022-2025	3.2.1 Light or heavy vehicles	1 700	1 672	6 300	27%	3.9
Ringsaker municipality	Charging station for electric cars	Infrastructure for charging electric cars to meet the rapidly growing demand for charging stations for the municipality's and residents' electric cars.	2022-2025	3.5.1 Charging points for vehicles	500	492	2 000	25%	-
Møre og Romsdal county authority	Ytre Sunnmørspakken: shore-side power supply with battery	Upgrading the network and quays for the Årvika – Koparneset ferry crossing to install shore-side power with a battery bank, as well as providing automatic mooring for this crossing.	2021-2022	3.5.5 Shore-side power connections and charging points	23 835	23 835	34 500	69%	1 012.7
Møre og Romsdal county authority	Romsdalspakken: electric ferries and charging station	"Romsdalspakken" comprises three new electric ferries, as well as upgrades to the network and electrical systems on the quay with charging points.	2020-2022	3.3.1 Maritime transport and 3.5.5 Shore-side power connections and charging points	40 320	40 320	116 240	35%	-
Vardø Havn KF	Procurement of new electric van	Vardø Havn KF is replacing its diesel-powered vans with electric vans, which will be used as delivery vehicles.	2022-2022	3.2.1 Light or heavy vehicles	430	430	453	95%	-
Møre og Romsdal county authority	Pedestrian and cycling paths Nordøyvegen	New illuminated footpaths and cycle paths on the Nordøyvegen road.	2019-2022	3.1.2 Facilitating walking and cycling	177 000	177 000	216 000	82%	-
Innlandet county authority	Shore-side power supply for the electric ferry Elrond	Installation of a shore-side power supply at the Tangen ferry terminal to serve Elrond, an electric ferry.	2018-2022	3.5.5 Shore-side power connections and charging points	60 200	60 200	74 600	81%	-
Innlandet county authority	Electric ferry (Elrond)	The Randsfjord ferry is the only ferry in Norway operating year-round, and is an important piece of infrastructure for commuters and school traffic. The old diesel ferry was replaced in January 2022 with an electric ferry, Elrond.	2018-2022	3.3.1 Maritime transport	77 300	77 300	83 200	93%	286.4
Innlandet county authority	Procurement of electric car	Innlandet county authority is procuring an electric car. Its estimated annual mileage is 20,000 km.	2022-2022	3.2.1 Light or heavy vehicles	520	520	520	100%	2.5
Innlandet county authority	Facilitating walking and cycling	Installation of footpaths and cycle paths and other measures to facilitate walking and cycling along several routes in Innlandet county.	2018-2023	3.1.2 Facilitating walking and cycling	89 200	89 200	111 500	80%	-
Bygland municipality	Procurement of electric car	Procurement of an electric passenger car for use by the health and social care service in Bygland municipality.	2022-2022	3.2.1 Light or heavy vehicles	460	460	460	100%	2.5



NEW PROJECTS IN 2022

Waste and circular economy

NEW GREEN
PROJECTS IN
2022:

8

TOTAL
NUMBER OF
GREEN PROJECTS:

45

[See all the green projects in
Impact Data 2022 \(Excel\)
at \[kbn.com\]\(https://kbn.com\).](#)

Borrower	Project name	Description	Project period (est)	Criterion met	Total disbursed (1000 NOK)	Green loan outstanding (1000 NOK)	Total cost (1000 NOK)	KBN share of financing	Estimated impact (KBN share)	
									Total capacity (tonnes)	Increased capacity (tonnes)
Renovasjon i Grenland IKS	New Rødmyr waste facility	The new Rødmyr recycling centre will have increased capacity and be more user-friendly, which will enable greater waste sorting and material recovery. This will help to reduce emissions from waste management. The centre will also facilitate the reception of reusable goods.	2022-2023	4.1.1 Measures to reduce waste and 4.2.1 Measures to increase the waste sorting rate	7 300	7 057	75 000	9%	-	-
Renovasjon i Grenland IKS	Address marking of waste containers	ID-labelling waste containers with address microchips will improve the efficiency of waste collection, as the containers will provide information on which containers need emptying. The scheme will also help improve the rate of waste sorting, as users will be rewarded for reducing their residual waste. This will also make it possible to target information towards areas with a low sorting rate.	2020-2023	4.2.1 Measures to increase the waste sorting rate and 4.2.2 More efficient waste collection	1 500	1 393	12 130	11%	-	-
Renovasjon i Grenland IKS	Increased recycling of food and plastic waste	Waste sorting and recycling rates will be improved by transitioning to separate containers for food waste and larger bags for plastics. In addition, there will be plastic-free organic fertiliser for agriculture from the Greve biogas plant thanks to the phasing out of the use of the previous blue plastic bags, greater collection efficiency thanks to a reduction in the frequency of collections, and less plastic usage due to the transition to new solutions.	2021-2023	4.2.1 Measures to increase the waste sorting rate	22 500	22 180	24 700	90%	-	-
Renovasjon i Grenland IKS	New payment system at the waste facilities	A new payment solution with self-service machines that make it possible to manage payments for residual waste, which will create an incentive to sort waste more effectively. The solution will also free staff from having to take payments, giving them more time to assist customers with waste sorting questions, which has proved to be very effective in terms of improving the sorting rate at the facility.	2022-2023	4.2.1 Measures to increase the waste sorting rate	2 300	2 185	5 750	38%	-	-
Renovasjons-selskapet for Drammensregionen IKS	Mile waste facility	Upgrading and extending the most frequently visited recycling centre in the Drammen area. The project includes a new building for reused goods, a new solution for receiving electronic and hazardous waste, and a teaching room. The improvements will help the facility to adapt to future waste sorting and recycling requirements.	2019-2022	4.2.3 New facilities for sorting waste	80 000	79 000	103 000	77%	15 340	-
IVAR IKS	Reception of hazardous waste Forus	Extending the Forus recycling centre, with a new building for storing and processing hazardous waste. This will enable the centre to process more hazardous waste and to do so more safely. IVAR is also undertaking a pilot project targeting the reuse of hazardous waste.	2021-2022	4.2.6 Measures at existing facilities	15 800	15 800	19 750	80%	-	-
Avfall Sør AS	Recycling facility Sørlandsparken Øst	Sørlandsparken Øst recycling centre will be constructed using timber and low-carbon concrete, and will produce energy from solar panels. Electric waste compressors will replace its diesel-powered wheel loaders, which will help reduce emissions and the need for transport.	2021-2022	4.2.3 New facilities for sorting waste and 4.2.2 More efficient waste collection	65 000	56 667	65 000	87%	12 205	12 205
Romsdalshalvøya Interkomm. Renovasjonsse. IKS	New recycling facility	A new indoor recycling centre in Molde that will have 16 containers for different waste fractions. The project will lead to improved waste quality so that a greater proportion can be recycled or reused.	2022-2023	4.2.3 New facilities for sorting waste	37 000	36 383	46 250	79%	3 147	3 147



NEW PROJECTS IN 2022

Water and wastewater management

NEW GREEN
PROJECTS IN
2022:**11**TOTAL
NUMBER OF
GREEN PROJECTS:**78**See all the green projects in
Impact Data 2022 (Excel)
at kbn.com.

Borrower	Project name	Description	Project period (est.)	Criterion met	Total disbursed (1000 NOK)	Green loan outstanding (1000 NOK)	Total cost (1000 NOK)	KBN share of financing	Estimated impact (KBN share)
									Estimated increase in capacity (PE)
Ringsaker municipality	Upgrading water and wastewater infrastructure	Prioritising pipes with significant leaks based on assessments carried out by the leak detection team. The primary purpose is to reduce leaks (in and out), with the overall aim of reducing leaks from water supply pipes from 47% (2017) to 40% (2030).	2021-2025	5.3.1 c) Measures at existing water facilities: Reduces chemicals or leakages	101 000	98 093	276 300	36%	-
IVAR IKS	Rehabilitation of water pipeline Tronsholen-Tjensvoll	Replacing the main water supply pipe between Tronsholmen and Tjensvoll, which dates from 1959 and has experienced leaks and interruptions. Approximately 8,500 m of the replacement work will be carried out using a no-dig method that involves PE pipes being pulled through the existing pipes.	2021-2023	5.4.2 No-dig projects	58 000	58 000	72 500	80%	-
Karasjok kommune	Upgrading the water and wastewater network	Separating wastewater from surface runoff will help reduce the load on the treatment plant and prevent water from overflowing. The project will also reduce the plant's chemical usage.	2019-2022	5.1.1 Separating wastewater and surface runoff and 5.3.2 c) Measures at existing wastewater facilities: Reduces chemicals or pollution	12 238	12 238	21 129	58%	-
Berlevåg kommune	New water facility in central Berlevåg	New water treatment plant in central Berlevåg that will reduce the use of chemicals.	2021-2023	5.3.5 c) New facilities for water: Reduces chemicals or adverse environmental impact	6 615	6 615	16 589	40%	-
Berlevåg kommune	Separating wastewater and surface runoff Søndregate	The pipe network for Søndregate in Berlevåg will be improved. The current pipe network consists of a water supply pipe and a joint pipe for all wastewater (discharged water and surface runoff). A new water supply pipe and new separate pipes for wastewater and surface runoff will be installed.	2022-2022	5.1.1 Separating wastewater and surface runoff	6 500	6 500	8 269	79%	-
Trondheim kommune	Pipe replacement using no-dig methods	Trondheim municipality will use no-dig methods to rehabilitate water and wastewater pipes where possible.	2022-2025	5.4.2 No-dig projects	34 000	34 000	140 000	24%	-
Trondheim kommune	Pipe replacement and separation	Pipe replacement work on the water and wastewater network. Most projects comprise separating shared surface runoff and wastewater pipes, and are essential to adapt the wastewater system to climate change. Where separate wastewater and surface runoff pipes are installed and digging is required, the water supply pipes will very often be replaced in the same operation.	2022-2025	5.1.1 Separating wastewater and surface runoff	295 000	295 000	1 227 000	24%	-
Fitjar municipality	Sludge separator Fiskaneset	Due to a poor level of purification efficiency and operational problems at Fiskaneset, a new sludge separator and discharge pipe will be installed. The measure will improve the treatment of wastewater, which will have a positive impact on the recipient water body.	2022-2022	5.3.2 c) Measures at existing wastewater facilities: Reduces chemicals or pollution	1 600	1 600	16 000	10%	-



Water and wastewater management continued

Borrower	Project name	Description	Project period (est.)	Criterion met	Total disbursed (1000 NOK)	Green loan outstanding (1000 NOK)	Total cost (1000 NOK)	KBN share of financing	Estimated impact (KBN share)
									Estimated increase in capacity (PE)
Vardø municipality	Water pipeline replacement in Skagveien	New pipes for water and wastewater that will lead to fewer water leaks and a reduction in energy consumption at the pumping station in Vardø.	2021-2022	5.3.1 a) and c) Measures at existing water facilities: energy efficiency and reduces chemicals or leakages	5 300	5 300	6 625	80%	-
Nesodden municipality	Wastewater network Furukollstubben-Utsiktsvei	Houses and cottages in Furukollstubben are connected to the communal wastewater network to reduce their negative impact on the local water environment in the Oslo fjord. New surface runoff pipes will also be installed to ensure the area is better protected against higher levels of precipitation.	2022-2022	5.3.6 b) and c) New facilities for wastewater: Climate change adaptation and reduces chemicals or adverse environmental impact	18 801	18 801	34 000	55%	-
Nesodden municipality	Wastewater network Flaskebekk	Houses and cottages are connected to the municipal pipe network to reduce pollution and discharges. Climate change adaptation measures will be carried out by ensuring the area is better protected against higher precipitation.	2022-2024	5.3.6 b) and c) New facilities for wastewater: Climate change adaptation and reduces chemicals or adverse environmental impact	1 000	1 000	18 500	5%	-



NEW PROJECTS IN 2022

Climate change adaptation

NEW GREEN
PROJECTS IN
2022:

1

TOTAL
NUMBER OF
GREEN PROJECTS:

16

[See all the green projects in
Impact Data 2022 \(Excel\)
at \[kbn.com\]\(https://kbn.com\).](#)

Customer name	Project name	Description	Project period (est.)	Criterion met	Total disbursed (1000 NOK)	Green loan outstanding (1000 NOK)	Total cost (1000 NOK)	KBN share of financing
Ringsaker municipality	Flood protection of Narud water facility and Strandvegen	Protecting Narud water treatment plant against damage from flooding and drifting ice and protecting new and existing buildings in Brumunddal from flood damage.	2021-2023	7.2.1 Protection against natural disasters	15 800	15 457	45 400	34%

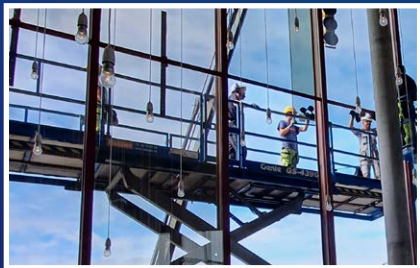
Green project examples

KBN finances green projects in municipalities and counties across Norway. On the following pages you can read more about some of this year's projects.

Electric ferry saves 46 000 litres of diesel annually



Improving energy efficiency by replacing 550 windows



Electric machinery and solar panels reduce emissions at new recycling facility



Separate sewer system reduces overflow and chemical usage



Adaptation measures increase resilience to flooding



New energy efficient facility recovers resources from wastewater





CASE



BUILDINGS

Improving energy efficiency by replacing 550 windows

■ ■ The cultural grand hall in Bergen, Grieghallen, was built in 1978 with a glass facade with uninsulated steel sections. The two-layer windows are more than 45 years old, and causes the building to suffer major heat loss. In order to reduce energy consumption and costs, the windows will be replaced with three-layer windows with Aerolon isolation.

This will result in better isolation, as the U-value will be reduced from 3.5 to 0.7. The investment is estimated to save up to 1 000 000 kWh annually. The old windows will repurposed as isolation for buildings.

Project period: 2022-2024

Grieghallen IKS

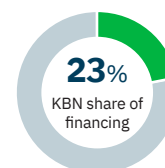
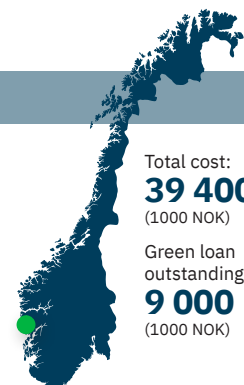




Photo: Stenseth Grimsrud Arkitekter AS

CASE



RENEWABLE ENERGY

New energy efficient facility recovers resources from wastewater

■ ■ MOVAR IKS' ambition for Fuglevik is to create a robust and energy efficient facility. By expanding the existing facility, they aim to increase energy recovery and recycling of resources in the wastewater and sludge.

In addition to improving wastewater treatment and removing nitrogen to protect the fjord, the new facility will produce biogas from sewage sludge through thermal hydrolysis processes (THP) and pyrolysis. Solar panels will be placed on the roof of the facility. The total annual energy production from biogas and solar panels is estimated to 3 720 000 kWh.

Project period: 2022-2026

MOVAR IKS

Total cost:
2 250 000
(1000 NOK)

Green loan
outstanding:
115 250
(1000 NOK)

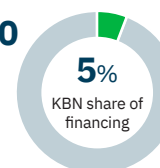




Photo: Innlandet county authority

CASE



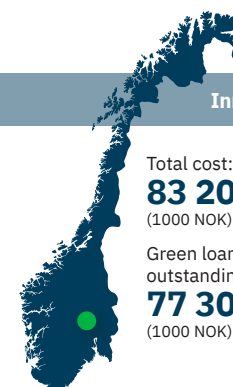
TRANSPORTATION

Electric ferry saves 46 000 litres of diesel annually

■ ■ The Randsfjord ferry has carried passengers and cars between Tangen and Horn for over 40 years, and the ferry connection is important to commuters and students in the local community.

The existing ferry runs on diesel and was built 70 years ago. Although the Randsfjord ferry has undergone regular renovation, it bears the mark of its age and general wear and tear. Thus, Innlandet county decided to replace the existing ferry with the new ferry Elrond.

Elrond runs on electricity and can be charged at the dock at Tangen. The ferry is equipped with a 678 kWh battery pack which contributes to reductions in diesel consumption of approximately 46 000 litres annually.

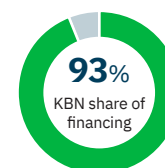


Project period: 2018-2022

Innlandet county authority

Total cost:
83 200
(1000 NOK)

Green loan
outstanding:
77 300
(1000 NOK)





CASE



WASTE AND CIRCULAR ECONOMY

Electric machinery and solar panels reduce emissions at new recycling facility

■ ■ The heavy machinery at the new recycling facility Sørlandsparken Øst will be fossil-free. Machinery used for waste compaction and transportation of waste containers at the existing facility has an annual diesel consumption of approximately 20 000 litres.

By replacing the diesel-powered wheel loaders with electric, stationary rolling compactors, Avfall Sør will reduce their emissions substantially. Solar panels will be installed at the facility and are estimated to produce more than 12 000 kWh energy annually. Used car batteries will be used for energy storage to ensure optimal usage of the locally produced electricity.

The building will be constructed from wood and low-carbon concrete (class A), and recycled steel and asphalt will be used to reduce the carbon footprint of the facility.

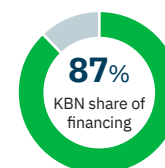
Project period: 2021-2022

Avfall Sør AS



Total cost:
65 000
(1000 NOK)

Green loan
outstanding:
56 667
(1000 NOK)





CASE



WATER AND WASTEWATER MANAGEMENT

Separate sewer system reduces overflow and chemical usage

■ ■ Rainwater and surface runoff in Karasjok municipality is channeled into the wastewater pipe network, which results in reduced capacity of the wastewater network and high pressure on the treatment plant.

Karasjok has decided to create a separate sewer system by separating surface runoff and wastewater into two individual pipe networks. Such upgrades will reduce overflow into the river Karasjohka during periods with heavy precipitation and snowmelt, and reduce the need for using chemicals at the treatment plant.



Project period: 2019 -2022

Karasjok municipality

Total cost:
21 129
(1000 NOK)

Green loan
outstanding:
12 238
(1000 NOK)

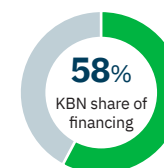




Photo: Jan-Tore Egge, Creative Commons

CASE

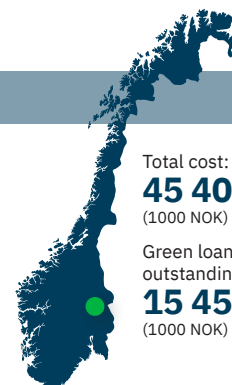


CLIMATE CHANGE ADAPTATION

Adaptation measures increase resilience to flooding

■ ■ The river promenade Strandvegen in Ringsaker municipality is vulnerable to flooding, especially from ice breakup and the nearby river overflowing in periods with heavy precipitation.

By implementing adaptation measures at the new bridge crossing the river Brumunda down to the promenade, Ringsaker aims to make the area more resilient to flooding and secure the walkways to the central areas. Similar measures will also be taken at Narud water facility.

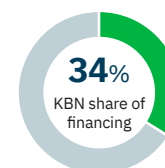


Project period: 2021-2023

Ringsaker municipality

Total cost:
45 400
(1000 NOK)

Green loan
outstanding:
15 457
(1000 NOK)



Mapping against the EU Taxonomy

The following pages present KBN's self-assessment of our green project portfolio against the technical screening criteria in the EU Taxonomy (both “Substantial Contribution” and “Do No Significant Harm”).

The exercise is performed to learn more about the gaps between KBN's criteria and the taxonomy, and the findings are used to guide the development of the green lending programme.

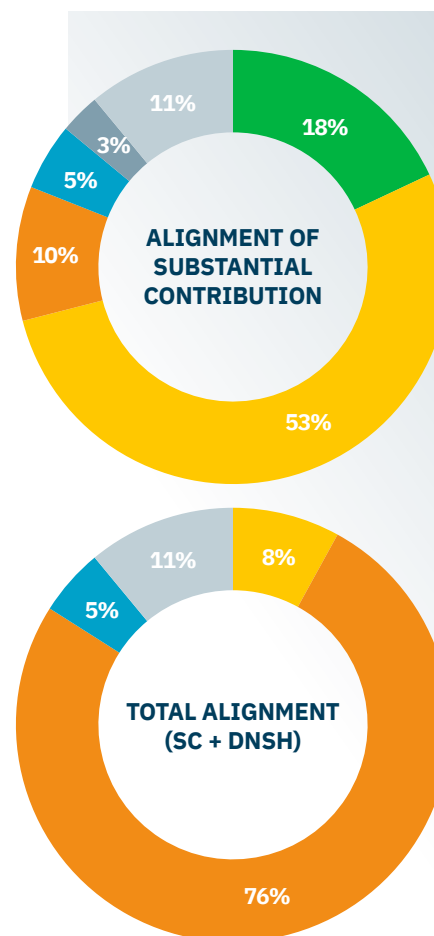
The results are published to offer transparency about the findings. The following pages present a summary, while the full mapping with comments can also be downloaded.

Some notes on methodology:

- The mapping is voluntary, preliminary, and done on a best effort basis. Despite doing our utmost to analyse the taxonomy, it is challenging to achieve the full picture due to insufficient information and/or data.
- The exercise has been performed in-house by KBN's green finance advisers. Where relevant, especially where there is uncertainty, input has been collected from relevant open sources and through dialogue with stakeholders with sectoral expertise. The final opinion is however KBN's own.
- KBN's Criteria Document for green loans (March 2021) has been screened against the latest versions of the taxonomy at the time of publication. Namely, the Delegated Act on the climate objectives (Climate Change Mitigation (Annex I) and Climate Change Adaptation (Annex II)), as published in the Official Journal on 9 December 2021; and the March 2022 report “Technical Working Group Part B – Annex: Technical Screening Criteria”, covering the remaining four environmental objectives.
- The analysis is performed on project category level – i.e., individual projects are not evaluated.
- Although several matches may be possible, each KBN criterion is as a rule mapped to the one taxonomy activity constituting the best match. In some cases, we however deviate from this principle.
- It is assumed that sectoral legislation is respected unless public information or feedback from stakeholders indicate otherwise.
- Compliance with Minimum Safeguards has not been evaluated. On a general basis, labour and human rights are regulated and respected in Norway.



The full mapping can be found in spreadsheet format at kbn.com.



Aligned

We have sufficient information to conclude that there is a match between our criteria and the technical screening criteria in the taxonomy.

Partly aligned

There is a partial match between KBN's criteria and those of the taxonomy. This could be because there are several conditions, where some but not all are met, and/or KBN applies different indicators or baselines, but otherwise believe our criteria are equivalent.

Likely not aligned

We have sufficient information to conclude that our criteria deviate from the taxonomy's technical screening criteria.

Not eligible

There are no activities in the taxonomy that overlap with these specific KBN criteria.

Could not be assessed

There is not enough information yet to determine whether our criteria match those of the taxonomy.

Projects assessed individually

Projects qualified under KBN criteria vary in nature and must be assessed individually.

Buildings

Subcategory (KBN Criteria Document)	Project type (KBN Criteria Document)	Corresponding taxonomy activity and Environmental Objective (EO)	Taxonomy eligibility	Assessment of Substantial Contribution alignment	Assessment of total SC + DNSH alignment	Number of projects	Outstanding volume of green loans (in 1000 NOK)
1.1 Measures for existing building stock	1.1.1 Individual energy efficiency measures	7.3 Installation, maintenance and repair of energy efficiency equipment (EO1)	Eligible	Partly aligned	Partly aligned	10	74 198
		7.5. Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings (EO1)	Eligible	Aligned	Partly aligned	7	64 976
	1.1.2 Major renovation projects						
	a) Energy efficiency increased by 30%	7.2 Renovation of existing buildings (EO1)	Eligible	Partly aligned	Likely not aligned	5	1 140 472
	b) Climate friendly materials	5.1 Construction of new buildings and major renovations of buildings (EO4)	Eligible	Likely not aligned	Likely not aligned	0	-
	c) Certification schemes	n/a (EO1)	Not eligible	Not eligible	Not eligible	0	-
	d) On-site renewable energy production	n/a (EO1)	Not eligible	Not eligible	Not eligible	0	-
	1.1.3 Renovation of existing building stock in conjunction combined with a new extension building	n/a (EO1)	Not eligible	Projects assessed individually	Projects assessed individually	3	937 632
	1.1.4 Adapting existing buildings to climate change	n/a (EO1)	Not eligible	Not eligible	Not eligible	0	-
	1.1.5 Renewable energy in buildings	7.6 Installation, maintenance and repair of renewable energy technologies (EO1)	Eligible	Aligned	Partly aligned	3	8 874
	1.1.6 Energy storage in buildings	7.6 Installation, maintenance and repair of renewable energy technologies (EO1)	Eligible	Aligned	Partly aligned	0	-
	1.1.7 Use of DFØ (The Norwegian Agency for Public and Financial Management)'s Guidelines for sustainable procurement of building renovation	n/a (EO1)	Not eligible	Projects assessed individually	Projects assessed individually	0	-



Buildings continued

1.2 New buildings	1.2.1 New low-energy buildings < 5000sq.m.	7.1 Construction of new buildings (EO1)	Eligible	Aligned	Likely not aligned	50	3 251 517
	1.2.1 New low-energy buildings > 5000sq.m.	7.1 Construction of new buildings (EO1)	Eligible	Partly aligned	Likely not aligned	61	17 673 805
	1.2.2 New buildings with climate-friendly materials	5.1 Construction of new buildings and major renovations of buildings (EO4)	Eligible	Likely not aligned	Likely not aligned	27	2 303 637
	1.2.3 Eco-certified building	n/a (EO1)	Not eligible	Not eligible	Not eligible	1	102 446
	1.2.4 Buildings with locally produced energy	n/a (EO1)	Not eligible	Not eligible	Not eligible	0	-
	1.2.5 Use of DFØ (The Norwegian Agency for Public and Financial Management)'s Criteria Wizard for Sustainable Public Procurement: Energy	n/a (EO1)	Not eligible	Projects assessed individually	Projects assessed individually	0	-
	1.2.6 Use of DFØ (The Norwegian Agency for Public and Financial Management)'s Greenhouse gas calculator for new buildings: Materials	n/a (EO1)	Not eligible	Projects assessed individually	Projects assessed individually	0	-
1.3 Other	1.3 Other	n/a	Not eligible	Projects assessed individually	Projects assessed individually	8	2 819 038
Older	Projects qualified under the KBN 2016 Criteria document	n/a	Eligible	Likely not aligned	Likely not aligned	13	1 120 926

Renewable energy

Subcategory (KBN Criteria Document)	Project type (KBN Criteria Document)	Corresponding taxonomy activity and Environmental Objective (EO)	Taxonomy eligibility	Assessment of Substantial Contribution alignment	Assessment of total SC + DNSH alignment	Number of projects	Outstanding volume of green loans (in 1000 NOK)
2.1 Renewable energy production	2.1.1 Renewable energy production						
	a) Plant for biogas production	4.8 Electricity generation from bioenergy (EO1)	Eligible	Could not be assessed	Likely not aligned	2	443 121
		4.13 Manufacture of biogas and biofuels for use in transport and of bioliquids (EO1)	Eligible	Could not be assessed	Likely not aligned		
	b) Geo-thermal energy production systems (geothermal wells)	4.22 Production of heat/cool from geothermal energy (EO1)	Eligible	Partly aligned	Partly aligned	1	5 000
		4.18 Cogeneration of heat/cool and power from geothermal energy (EO1)	Eligible	Partly aligned	Partly aligned		
	c) Solar energy	4.1 Electricity generation using solar photovoltaic technology (EO1)	Eligible	Aligned	Partly aligned	2	5 706
		4.2 Electricity generation using concentrated solar power (CSP) technology (EO1)	Eligible	Aligned	Partly aligned		
		4.17 Cogeneration of heat/cool and power from solar energy (EO1)	Eligible	Aligned	Partly aligned		
		4.21 Production of heat/cool from solar thermal heating (EO1)	Eligible	Aligned	Partly aligned		
	d) Bio-based heating	4.24 Production of heat/cool from bioenergy (EO1)	Eligible	Could not be assessed	Likely not aligned	2	10 060
		4.20 Cogeneration of heat/cool and power from bioenergy (EO1)	Eligible	Could not be assessed	Likely not aligned		
	e) Other renewable energy production	n/a	Not eligible	Projects assessed individually	Projects assessed individually	0	-
2.2 Energy storage	2.2.1 Energy storage in connection with production plants;						
	a) Electric energy storage, i.a. in batteries	4.10 Storage of electricity (EO1)	Eligible	Aligned	Partly aligned	1	1 496
	b) Thermal energy storage	4.11 Storage of thermal energy (EO1)	Eligible	Aligned	Partly aligned	0	-
	c) Energy storage in hydrogen	4.12 Storage of hydrogen (EO1)	Eligible	Aligned	Partly aligned	0	-



Renewable energy continued

2.3 Energy infrastructure	2.3.1 Network capacity	4.9 Transmission and distribution of electricity (E01)	Eligible	Aligned	Partly aligned	0	-
	2.3.2 District heating/cooling	4.15 District heating/cooling distribution (E01)	Eligible	Partly aligned	Partly aligned	4	109 722
2.4 Other	2.4 Other	n/a	Not eligible	Projects assessed individually	Projects assessed individually	0	-

Transportation

Subcategory (KBN Criteria Document)	Project type (KBN Criteria Document)	Corresponding taxonomy activity and Environmental Objective (EO)	Taxonomy eligibility	Assessment of Substantial Contribution alignment	Assessment of total SC + DNSH alignment	Number of projects	Outstanding volume of green loans (in 1000 NOK)
3.1 Cycling and walking	3.1.1 Bicycles	6.4 Operation of personal mobility devices (EO1)	Eligible	Aligned	Partly aligned	1	1 219
	3.1.2 Facilitating walking and cycling	6.13. Infrastructure for personal mobility, cycle logistics (EO1)	Eligible	Aligned	Partly aligned	9	417 563
3.2 Land transport	3.2.1 Zero-emission vehicles	6.3 Urban, suburban and road passenger transport (EO1)	Eligible	Aligned	Partly aligned	0	-
		6.5 Transport by motorbikes, passenger cars and light commercial vehicles (EO1)	Eligible	Aligned	Partly aligned	13	56 238
	3.2.2 Equipment for rail-based public transport	6.15 Infrastructure enabling low-carbon road transport and public transport (EO1)	Eligible	Aligned	Likely not aligned	1	1 960 000
3.3 Maritime transport	3.3.1 Zero-emission maritime transport	6.11 Sea and coastal passenger water transport (EO1)	Eligible	Aligned	Partly aligned	3	194 879
3.4 Heavy machinery	3.4.1 Zero-emission heavy machinery	n/a (EO1)	Not eligible	Not eligible	Not eligible	3	4 017
	3.4.2 Use of DFØ (The Norwegian Agency for Public and Financial Management)'s Guidelines for sustainable procurement of heavy machinery	n/a (EO1)	Not eligible	Not eligible	Not eligible	0	-
3.5 Infrastructure	3.5.1 Charging points for vehicles	6.15 Infrastructure enabling low-carbon road transport (EO1)	Eligible	Aligned	Likely not aligned	8	6 287
	3.5.2 Filling stations for green hydrogen and biogas	6.15 Infrastructure enabling low-carbon road transport (EO1)	Eligible	Aligned	Likely not aligned	1	7 623
	3.5.3 Operating equipment for public transport	6.14 Infrastructure for rail transport (EO1)	Eligible	Aligned	Likely not aligned	1	1 060 000
		6.15 Infrastructure enabling low-carbon road transport (EO1)	Eligible	Aligned	Likely not aligned	0	-
	3.5.4 Trackway and other infrastructure	6.14 Infrastructure for rail transport (EO1)	Eligible	Aligned	Likely not aligned	0	-
	3.5.5 Shore-side power supplies and charging	6.16 Infrastructure enabling low-carbon water transport (EO1)	Eligible	Aligned	Likely not aligned	10	121 188
	3.5.6 Other port infrastructure	6.16 Infrastructure enabling low-carbon water transport (EO1)	Eligible	Aligned	Likely not aligned	2	30 156
	3.5.7 Infrastructure for zero-emission heavy machinery	n/a (EO1)	Not eligible	Not eligible	Not eligible	0	-
3.6 Other	3.6 Other	n/a	Not eligible	Projects assessed individually	Projects assessed individually	8	54 625



Waste and circular economy

Subcategory (KBN Criteria Document)	Project type (KBN Criteria Document)	Corresponding taxonomy activity and Environmental Objective (EO)	Taxonomy eligibility	Assessment of Substantial Contribution alignment	Assessment of total SC + DNSH alignment	Number of projects	Outstanding volume of green loans (in 1000 NOK)
4.1 Waste prevention and reuse	4.1.1 Measures that contribute to waste prevention or greater reuse	2.11 Preparation for re-use of end-of-life products and product components (EO4)	Eligible	Partly aligned	Likely not aligned	2	9 434
4.2 Waste collection, processing and treatment	4.2.1 Collection measures that increase waste sorting at source	11.1 Collection and transport of non-hazardous and hazardous waste as a means for material recovery (EO4)	Eligible	Partly aligned	Likely not aligned	19	430 887
	4.2.2 More efficient waste collection	n/a (EO1)	Not eligible	Not eligible	Not eligible	6	18 269
	4.2.3 New facilities for sorting waste	11.7 Sorting and material recovery of non-hazardous waste (EO4)	Eligible	Partly aligned	Partly aligned	10	971 326
	4.2.4 New facilities for waste treatment	11.7 Sorting and material recovery of non-hazardous waste (EO4)	Eligible	Partly aligned	Partly aligned	1	39 746
	4.2.5 Sludge treatment for biogas production (bio-waste)	11.4 Recovery of bio-waste by anaerobic digestion and/or composting (EO4)	Eligible	Could not be assessed	Likely not aligned	1	45 104
	4.2.6 Measures at existing facilities	11.7 Sorting and material recovery of non-hazardous waste (EO4)	Eligible	Partly aligned	Partly aligned	1	15 800
	4.2.7 Measures at existing landfill sites	11.5 Remediation of legally non-conforming landfills and abandoned or illegal waste dumps (EO5)	Eligible	Could not be assessed	Likely not aligned	2	4 478
	4.2.8 Carbon capture and storage (CCS) from waste incineration	n/a (EO1)	Not eligible	Not eligible	Not eligible	0	-
4.3 Other		n/a	Not eligible	Projects assessed individually	Projects assessed individually	3	29 249

Water and wastewater management

Subcategory (KBN Criteria Document)	Project type (KBN Criteria Document)	Corresponding taxonomy activity and Environmental Objective (EO)	Taxonomy eligibility	Assessment of Substantial Contribution alignment	Assessment of total SC + DNSH alignment	Number of projects	Outstanding volume of green loans (in 1000 NOK)
5.1 Surface runoff management financed by water charges	5.1.1 Separating wastewater and surface runoff	10.1 Urban Wastewater Treatment (EO3)	Eligible	Partly aligned	Partly aligned	17	856 999
5.2 Small scale energy production measures	5.2.1 Heat recovery	4.25 Production of heat/cool using waste heat (EO1)	Eligible	Aligned	Partly aligned	0	0
	5.2.2 Energy recovery	n/a (EO1)	Not eligible	Not eligible	Not eligible	0	0
5.3 Climate-friendly processing facilities	5.3.1 Measures at existing water facilities						
	a) Increase in energy efficiency of at least 20%	5.2 Renewal of water collection, treatment and supply systems (EO1)	Eligible	Aligned	Partly aligned	3	265 728
	b) Climate change adaptation of existing facilities	5.2 Renewal of water collection, treatment and supply systems (EO2)	Eligible	Likely not aligned	Likely not aligned	2	57 657
	c) Reduces the use of chemicals or the negative impact on the local environment	9.1 Water supply (EO3)	Eligible	Could not be assessed	Likely not aligned	3	570 229
	5.3.2 Measures at existing wastewater facilities						
	a) Increase in energy efficiency of at least 20%	5.4 Renewal of waste water collection and treatment (EO1)	Eligible	Aligned	Partly aligned	1	80 920
	b) Climate change adaptation of existing facilities	5.4 Renewal of waste water collection and treatment (EO2)	Eligible	Likely not aligned	Likely not aligned	0	0
	c) Reduces the use of chemicals or reduces local pollution	n/a (EO5)	Not eligible	Not eligible	Not eligible	9	345 067
	5.3.3 Phosphorous recovery	10.2 Phosphorus recovery from waste water (EO4)	Eligible	Could not be assessed	Likely not aligned	0	0
	5.3.4 Sludge treatment for biogas production (wastewater)	5.6 Anaerobic digestion of sewage sludge (EO1)	Eligible	Partly aligned	Likely not aligned	2	596 768
	5.3.5 New energy efficient water processing facilities						
	a) Increase in energy efficiency of at least 20% compared to pre-situation or a likely alternative solution	5.1 Construction, extension and operation of water collection, treatment and supply systems (EO1)	Eligible	Could not be assessed	Likely not aligned	0	0



Water and wastewater management continued

	b) Facility constructed as a response to a climate change adaptation need	5.1 Construction, extension and operation of water collection, treatment and supply systems (EO2)	Eligible	Likely not aligned	Likely not aligned	5	458 798
	c) Reduces the use of chemicals or the negative impact on the local environment	n/a (EO5)	Not eligible	Not eligible	Not eligible	6	383 706
	5.3.6 New energy efficient waste water treatment facilities						
	a) Increase in energy efficiency of at least 20% compared to pre-situation or a likely alternative solution	5.3 Construction, extension and operation of waste water collection and treatment (EO1)	Eligible	Likely not aligned	Likely not aligned	0	0
	b) Facility constructed as a response to a climate change adaptation need	5.3 Construction, extension and operation of waste water collection and treatment (EO2)	Eligible	Likely not aligned	Likely not aligned	3	25 066
	c) Reduces the use of chemicals or the negative impact on the local environment	n/a (EO5)	Not eligible	Not eligible	Not eligible	10	662 935
5.4 Climate-friendly construction projects	5.4.1 Fossil-fuel-free or zero-emission excavation works/ construction sites	n/a (EO1)	Not eligible	Not eligible	Not eligible	0	0
	5.4.2 No-dig projects	n/a (EO1)	Not eligible	Not eligible	Not eligible	2	92 000
5.5 Other	5.5 Other	n/a	Not eligible	Projects assessed individually	Projects assessed individually	6	400 429
Older	Projects qualified under the KBN 2016 Criteria document	n/a	Not eligible	Projects assessed individually	Projects assessed individually	9	400 378



Land use and area development projects

Subcategory (KBN Criteria Document)	Project type (KBN Criteria Document)	Corresponding taxonomy activity and Environmental Objective (EO)	Taxonomy eligibility	Assessment of Substantial Contribution alignment	Assessment of total SC + DNSH alignment	Number of projects	Outstanding volume of green loans (in 1000 NOK)
6.1 Anti-pollution measures	6.1.1 Measures against pollution on land	8.4.3 Remediation activities for pollution prevention and control (EO5)	Eligible	Likely not aligned	Likely not aligned	2	11 791
	6.1.2 Measures against water pollution (ports, seas, rivers, watercourses etc.)	8.4.3 Remediation activities for pollution prevention and control (EO5)	Eligible	Likely not aligned	Likely not aligned	2	43 078
6.2 Area development and land usage	6.2.1 Sustainable area development	n/a (EO1)	Not eligible	Not eligible	Not eligible	5	323 638
	6.2.2 Nature restoration	8.2 Restoration of biodiversity and ecosystems (EO6)	Eligible	Likely not aligned	Likely not aligned	0	-
6.3 Other	6.3 Other	n/a	Not eligible	Projects assessed individually	Projects assessed individually	0	-



Climate change adaptation

Subcategory (KBN Criteria Document)	Project type (KBN Criteria Document)	Corresponding taxonomy activity and Environmental Objective (EO)	Taxonomy eligibility	Assessment of Substantial Contribution alignment	Assessment of total SC + DNSH alignment	Number of projects	Outstanding volume of green loans (in 1000 NOK)
7.1 Surface runoff management	7.1.1 Surface runoff management	10.4 Sustainable urban drainage systems (SUDs) (EO3)	Eligible	Partly aligned	Partly aligned	4	71 413
7.2 Climate change adaptation	7.2.1 Protection against natural disasters	n/a (EO2)	Not eligible	Not eligible	Not eligible	9	194 752
	7.2.2 Infrastructure relocation	n/a (EO2)	Not eligible	Not eligible	Not eligible	1	15 423
7.3 Emergency preparedness	7.3.1 Warning systems and emergency preparedness	n/a (EO2)	Not eligible	Not eligible	Not eligible	1	1 706
7.4 Other	7.4 Other	n/a	Not eligible	Projects assessed individually	Projects assessed individually	1	11 663

Internal auditor's report



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Board of Directors, by Chair Brit Kristin Sæbø Rugland

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Independent review of compliance with KBN's Green Bond Framework and the allocation of green bond proceeds 2022

On behalf of the Board of Directors of Kommunalbanken AS (KBN), Internal Audit has conducted an independent review of compliance with KBN's Green Bond Framework 2021, including control of reporting on the allocation of green bond proceeds in Impact Report 2022

KBN's responsibility
KBN's management is responsible for the implementation of processes and reporting in accordance with the applicable criteria, explained in KBN's Green Bond Framework 2021 (available on <https://www.kbn.com/globalassets/dokumenter/funding/green-bond-documents/kbn-green-bond-framework-21.pdf>) as well as the calculation principles that the company has developed itself. This responsibility also includes internal control relevant for granting loans, management and preparation of the reporting.

Internal audit actions performed
Internal Audit has reviewed the processes and procedures established to ensure compliance with the Green Bond Framework 2021 in the following areas:

- Evaluation and selection of projects for allocation (lending) of funds from green bonds
- Management of loans
- Reporting, including review of Impact Report 2022 and control of reporting on allocation of green bond proceeds

Internal Audits actions are agreed with KBN and are based on the criteria defined by KBN's management.

The actions carried out will not provide an absolute certainty that the reporting in Impact Report 2022 is without significant errors. If additional review procedures had been performed, other matters may have been observed and come to our attention that would have been reported.

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Kommunalbanken AS

Conclusions

- Internal Audit considers that processes and procedures have been established that provide a satisfactory basis for implementing the KBN Green Bond Framework. Our control actions have not revealed factors indicating that KBN's lending, loan management and reporting as of December 31, 2022 as described in internal procedures and in impact report 2022, have not been carried out in accordance with the criteria set out in the Green Bond Framework.
- Internal Audit has reviewed KBN's reporting on the allocation of green bond proceeds in Impact Report 2022 and has noted that the reporting has been carried out in accordance with the Green Bond Framework 2021. Furthermore we have not found any discrepancies in the rendering of information in the Impact Report 2022 compared to data we have collected about KBN's lending.

Oslo, February 16th 2023
KPMG AS

Kine Kjærnet
Partner/
Head of Internal Audit

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