



Green Bond Impact Report

Impact statement at
year-end 2022



Executive summary

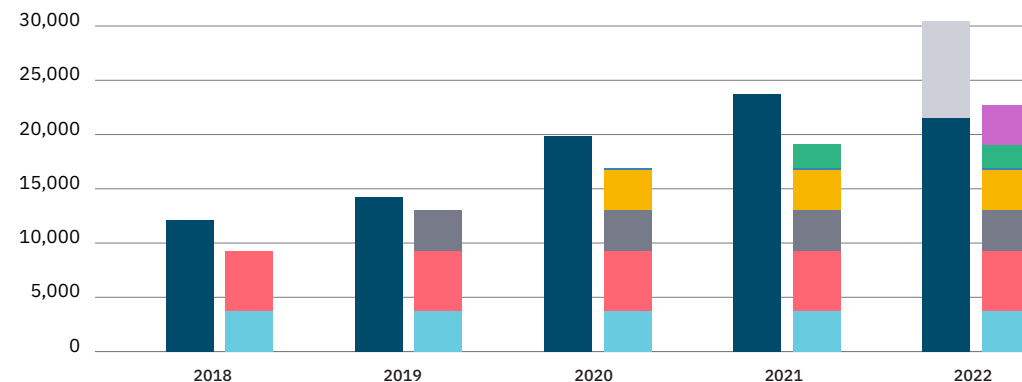
As of year-end 2022

Key facts

- This Green Bond Impact Report includes allocation as well as impact reporting.
- The report covers KommuneKredit's 2017 and 2022 green loan portfolios.
- The green loans of these portfolios finance eligible green investments in Danish municipalities and regions.
- Each green loan is selected according to KommuneKredit's [Green Bond Framework 2022](#) (GBF 2022), see p. 9 or [Green Bond Framework 2017](#) (GBF 2017).
- The reported environmental impact of the green loans is based on our customers' ex ante impact estimates to the extent data is available.
- The loan portfolio consists entirely of green loans granted to Danish municipalities and regions or entities backed by a municipal guarantee.
- KommuneKredit reports on a portfolio basis in Danish kroner (DKK). Green bond issues in other currencies are converted to DKK as per 31 December 2022.
- KommuneKredit reports in accordance with recommendations outlined in the Nordic Public Sector Issuers: [Position Paper on Green Bond Impact Reporting 2020](#).
- Impacts are based on outstanding nominal value of loans.
- Separate reporting is provided for the Green Bond Framework 2017 and Green Bond Framework 2022, respectively, with an emphasis on the latter throughout the report.

Green loans and green bonds

DKK million



Green loans

- Outstanding Green Loans (GBF 2017)
- Outstanding Green Loans (GBF 2022)

Green bonds

- EUR 500 million green bond, XS1622415674 (6/2017)
- EUR 750 million green bond, XS1851226891 (7/2018)
- EUR 500 million green bond, XS2081058096 (11/2019)
- EUR 500 million green bond, XS2226280084 (9/2020)
- AUD 40 million green bond, XS2240514336 (10/2020)
- GBP 250 million green bond, XS2400352949 (10/2021)
- EUR 500 million green bond, XS2489343793 (6/2022)

Basic information

Green bond frameworks applied	Green Bond Frameworks dated February 2022 and March 2017.
Related green bond ISIN(s)	XS1622415674; XS1851226891; XS2081058096; XS2226280084; XS2240514336; XS2400352949; XS2489343793.
Reporting approach	Portfolio-based and anonymised project-by-project reporting.
Reporting period	1 January 2022 to 31 December 2022. The report comprises all eligible loans financed from the start of our green bond programme in 2017 until year-end 2022.
External verifier of allocation report	Deloitte Statsautoriseret Revisionspartnerselskab
Publication date	March 9, 2023
Reporting frequency	Annual
Next report due	March, 2024

Executive summary

Green Bond Framework 2022

CO₂e impact and green indicators

Green loan category	CO ₂ e emissions reduced/avoided (tonnes p.a.)	Outstanding green loans (DKK million)	Impact (tonnes CO ₂ e per DKK million)
Clean transportation	N/A	242	N/A
Green buildings	106	360	0.3
Sustainable water and wastewater management	213	2,220	0.1
Pollution prevention and control	3,870	417	9
Energy	62,151	5,486	11
Climate change adaptation	N/A	194	N/A
Total	66,340	8,918	
Outstanding green loans with reported CO₂e impact		3,418	
Impact, tonnes CO₂e per DKK million			19
Annual renewable energy generated, MWh p.a.			588,192
Annual energy reduced/avoided, MWh p.a.			5,600

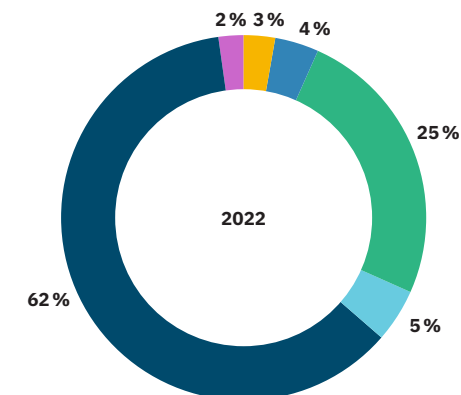
The table presents the calculated impact in terms of CO₂e reduced or avoided. Aggregated data reported represent our customers' ex-ante impact estimates. Our reporting methodology is presented on page 21. The complete project-by-project reporting is disclosed in an anonymised [List of Green Loans 2022](#) of all loans financed under our frameworks as of 31 December 2022.

Impact attributable to green bond investors

- green bond EUR 500 million, maturing 16 May 2029, XS2489343793 **42%**

Total amount of outstanding green bond divided by total outstanding green loan portfolio 2022 (in DKK).

Green loan portfolio distribution



Green loan categories – Green Bond Framework 2022*

- Clean transportation
- Green buildings
- Sustainable water and wastewater management
- Pollution prevention and control
- Energy
- Climate change adaptation

*Due to rounding, the numbers may not sum to exactly 100%.

Executive summary

Green Bond Framework 2017

CO₂e impact and green indicators

Green loan category	CO ₂ e emissions reduced/avoided (tonnes p.a.)	Outstanding green loans (DKK million)	Impact (tonnes CO ₂ e per DKK million)
Clean public transportation	2,412	1,432	2
Energy efficiency	2,583	263	9
Water management	76	8,627	0
District heating	1,078,613	11,184	117
Total	1,338,844	21,505	62*

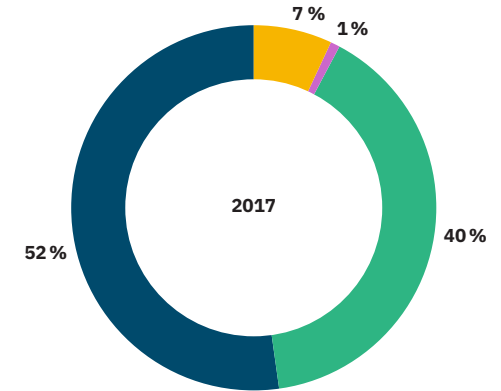
*Note that the impact of the 2017 green loan portfolio is significantly higher than that of the 2022 green loan portfolio. This is particularly attributable to differences in impact calculation, see [Impact Reporting Methodology](#). In relation to the 2022 green loan portfolio, impact calculations are based on primary physical activity data provided by customers. A conservative approach is applied in calculating the CO₂e. For the 2017 portfolio, the CO₂e is reported directly by customers.

The table presents the calculated impact in terms of CO₂e reduced or avoided. Aggregated data reported represents ex-ante estimates. The reporting methodology is presented on page 21. The complete project-by-project reporting is disclosed in an anonymised [List of Green Loans 2022](#) of all loans financed under our frameworks as of 31 December 2022.

Impact attributable to green bond investors	88%*
Green bond EUR 500 million, maturing 18 May 2027, XS1622415674	17%
Green bond EUR 750 million, maturing 5 July 2028, XS1851226891	26%
Green bond EUR 500 million, maturing 21 November 2039, XS2081058096	17%
Green bond EUR 500 million, maturing 26 September 2040, XS2226280084	17%
Green bond AUD 40 million, maturing 1 October 2032, XS2240514336	1%
Green bond GBP 250 million, maturing 15 August 2024, XS2400352949	10%

*Total amount of outstanding green bonds divided by total outstanding green loan portfolio 2017 (in DKK).

Green loan portfolio distribution



Green loan categories – Green Bond Framework 2017

- Clean public transportation
- Energy efficiency
- Water management
- District heating

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Case:

Clean transportation

A green loan from KommuneKredit helps to finance the upcoming metro station Ny Ellebjerg.

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About this report

This Green Bond Impact Report includes allocation and impact reporting on KommuneKredit's green bonds including examples of green loan cases. The report presents our Green Bond Framework 2022 in detail and summarises our green bond approach under KommuneKredit's two Green Bond Frameworks dated February 2022 and March 2017 up until year-end 2022. In the report, the term "green loans" refers to an amount equal to the net proceeds of green bonds that finance or refinance, through loans or finance leases, in whole or in part, investments undertaken by the customer that promote the transition towards a low-carbon, climate resilient and environmentally sustainable society – in each case as determined by KommuneKredit and KommuneKredit's Green Bond Committee in accordance with the green loan categories defined in the Green Bond Framework 2022.

We strive to align our reporting with the Nordic Public Sector Issuers: [Position Paper on Green Bonds Impact Reporting, 2020](#). We apply a portfolio-based approach, reporting on impact on an aggregated level as well as an anonymised [List of Green Loans 2022](#) of all loans financed under our frameworks as of 31 December 2022. Our annual reporting suite includes KommuneKredit's [Annual Report 2022](#) and [Sustainability Report 2022](#), which is supplemented by this Green Bond Impact Report 2022. The Green Bond Impact Report 2022 has been approved by the Management Board and was published on 9 March 2023.



About KommuneKredit

KommuneKredit is established by law and organized as an association. We disbursed our first loan in 1899.

Our mission is to contribute to financial latitude in Danish municipalities and regions by providing funding and financial advice at the lowest possible cost.

We are domiciled in Copenhagen, the capital of Denmark, and we do not have branches or subsidiaries.

KommuneKredit is exempt from EU's banking directive and is supervised by the Ministry of Industry, Business and Financial Affairs.

Get in touch

We welcome any comments, suggestions, or questions you may have regarding this report or our performance. Please send an email to bf@kommunekredit.dk.

Stay up to date on the most recent developments at kommunekredit.com and follow KommuneKredit on [LinkedIn](#).

Introductory remarks

Once again, Denmark ranked at the top of the Climate Change Performance Index 2023 (CCPI), which aims to enable transparency in national and international climate politics. Despite Denmark's strong ranking, the CCPI showed that Denmark's performance is not yet aligned with the 1.5°C target of the Paris Agreement on Climate Change. Locally in Denmark, there is very strong support for meeting the high climate ambitions. This is, for example, demonstrated by the Danish climate initiative DK2020, in which 95 out of 98 municipalities have committed to developing climate action plans in line with the objectives of the Paris Agreement.

As the prime credit provider for Danish municipalities and regions, we see it as part of our role and responsibility to contribute to a strong green capital market and to ensure that the financing required for local green transition is available to our customers at the lowest possible cost. In 2022, green loans constituted 31 per cent of all KommuneKredit's new fixed term loans, and 290 outstanding eligible green loans of DKK 8.9 billion were included in the green loan portfolio.

The estimated impact attributable to these green loans are an annual carbon emission reduction or avoidance of more than 66,000 tonnes of CO₂e per year.

We provide our customers with green loans and build our portfolio of green loans prior to issuing green bonds. We have done so since 2017 and by year-end 2022, we had issued a total of DKK 22.7 billion in green bonds. All in all, we had 854 outstanding green loans by year-end and green loans made up 21 per cent of our total loan portfolio. Our customers' demand for green loans constitutes the foundation for new green bond issues, and we aspire to maintain a broad and diversified investor base and accommodate the growing demand for both green and social assets from our investors going forward.

Sustainable finance is a key priority in our Strategy 2025 and in 2022, we intensified our ESG efforts on several fronts. This included setting ESG targets that address the climate challenge and focus on increasing the proportion of sustainable loans (by nominal value) in our overall portfolio across all years

to at least 25 per cent by 2025. This points to a further progression of our role as a green bond issuer. In June 2022, we issued a EUR 500 million green bond, which was well received in the market.

By closely following new regulatory requirements and market developments within sustainable finance, our dedicated employees will continue to provide financing to support municipalities and regions across Denmark in their sustainability efforts thereby contributing to reaching local, regional, and national climate and sustainability goals.



Henrik Andersen

Managing Director, Member of the Management Board and Chairman of KommuneKredit's Green Bond Committee

Strong ESG focus

Our Strategy 2025 is set to future-proof KommuneKredit as a well-run, accessible, and sustainable financial institution. Introduced in 2020, one of the priorities of the strategy is the integration of sustainability into our business model. Our aim is to continue the work of anchoring a strong ESG profile throughout the organisation and to play a key role in the green transition of Danish society by providing funding at the lowest possible cost.

As a special-purpose credit association, our main contribution to sustainable development comes from our core business – our lending activities. To date, we have focused our attention on identifying green investments and offering green loans on the back of which we issue green bonds. We also consider offering other types of sustainable

finance. Moreover, we aim to estimate the climate footprint of our total loan portfolio.

In 2022, we continued integrating sustainability into our core business and our daily operations through an intensified ESG focus. This included a set of quantitative and qualitative ESG targets with a key emphasis on reducing our climate impact and increasing the share of sustainable loans as part of our ESG products and services. We also established an internal ESG committee to oversee that ESG issues are duly considered in our managerial, operational, and business development efforts.

More information

For more details on strategy, ESG focus and targets, please see our [Sustainability Report 2022](#).



ESG target

Increase the share of sustainable loans in our lending portfolio to at least

25%

by 2025.

2022 status

By year-end, the share of green loans in our total loan portfolio was

21%

against our 2025-target. A key lever supporting the target was the launch and successful implementation of our Green Bond Framework 2022. Green loans constituted 31 per cent of all new KommuneKredit loans in 2022.

Our commitments to sustainability

Our [Policy for Corporate Social Responsibility \(CSR\) and Sustainability](#) builds on KommuneKredit's support for frameworks on corporate governance and sustainability and comprises a number of principles providing a guideline for our activities on:

- Green and sustainable financing
- Environmental and climate considerations
- Diversity and job satisfaction
- Good business ethics
- Openness and communication

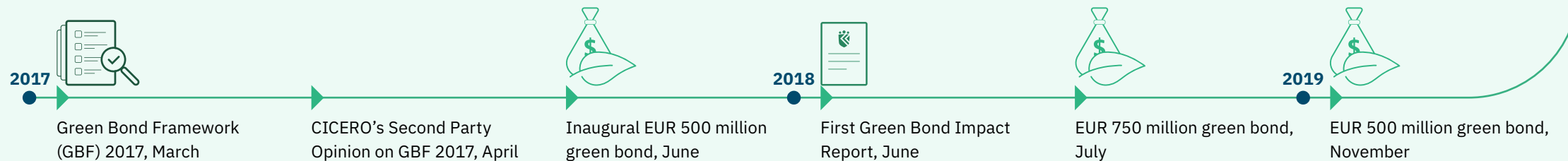


Our green finance history

KommuneKredit acknowledges the financial sector's important role in the green transition of the Danish society, and we have been active in the green bond market since 2017. During that period, we have consistently maintained our commitment by supporting the development of the market and by financing our customers' green loan investments in the transition to a low-carbon and climate resilient future.



KommuneKredit's green finance timeline



Our Green Bond Framework

In February 2022, KommuneKredit launched an updated and strengthened green bond framework aligned with the new market standards.

The [Green Bond Framework 2022](#) allows for both green loans and green financial leases and it includes sharpened eligibility criteria and additional categories enabling a broader range of eligible loans for our green financing of the local green transition in Denmark.

We have strengthened The Green Bond Framework by:

- Expanding from four to six green loan categories that also encompass green leasing.
- Sharpening the green loan eligibility criteria.
- Improving the impact reporting methodology.
- Mapping the Sustainable Development Goals to our six green loan categories.
- Committing to an external post-issuance review of the annual allocation reporting.
- Conducting an EU Taxonomy mapping of the framework.

The Green Bond Framework 2022 includes certain changes in methodology compared to the Green Bond Framework 2017. For example, we now report the outstanding nominal value, rather than the principal value. This implies that we disclose aggregated totals for our green finance in nominal value covering both frameworks. We calculate the CO₂e impact of the green investments based on primary physical activity data (e.g., MWh of produced district heating) from customers to ensure a consistent calculation methodology. Moreover, we treat impact reporting for the 2022 and 2017 framework separately in the executive summary, see pp. 3 and 4, due to differences between the two frameworks. Overall, the focus of this report is on the Green Bond Framework 2022.

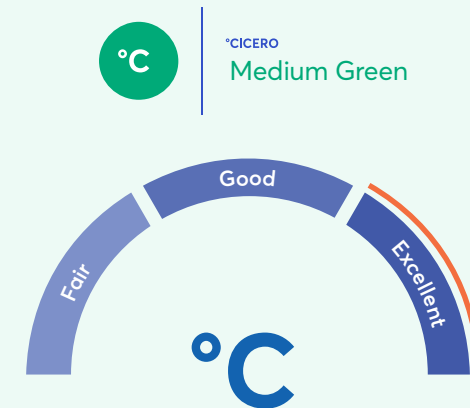
More information

For more details, please see our [video introduction to the framework](#) or our [launch presentation](#).



Cicero Shades of Green

The [second party opinion](#) conducted by Cicero Shades of Green, now a part of S&P Global, provided our framework with an overall Medium Green shading and an Excellent Governance score – the best available governance rating. The grading by Cicero Shades of Green aims to provide transparency to investors and reflects a broad, qualitative review of the climate and environmental risks and ambitions. Investments in all shades of green projects are necessary in order to successfully implement the ambition of the Paris Agreement on Climate Change.



The framework aligns with the four core components of International Capital Markets Association's (ICMA) Green Bond Principles (GBP) 2021, as verified by CICERO Shades of Green, including use of proceeds, process for project evaluation and selection, management of proceeds and reporting.

Green bonds

Since 2017, we have issued green bonds annually. Following the GBF 2022, we returned to the EUR green bond market in June 2022, issuing a new 7-year benchmark. The transaction was broadly diversified in terms of both geographies and investor types.

Total green bonds

22.7

DKK billion



Green bond ratio

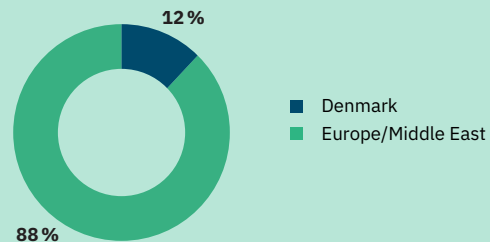
10%

Share of total funding

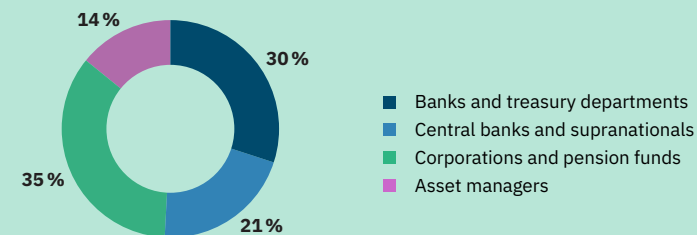
Investor distribution

EUR 500 million green bond issued on 8 June 2022, ISIN: XS2489343793

Investor geography



Investor type



Outstanding green bonds

ISIN	Size (million)	Issue date	Maturity	Coupon (%)	GBF
XS1622415674	EUR 500	1 June 2017	18 May 2027	0.75	GBF 2017
XS1851226891	EUR 750	5 July 2018	5 July 2028	0.75	GBF 2017
XS2081058096	EUR 500	19 November 2019	21 November 2039	0.625	GBF 2017
XS2226280084	EUR 500	3 September 2020	26 September 2040	0.125	GBF 2017
XS2240514336	AUD 40	2 October 2020	1 October 2032	1.336	GBF 2017
XS2400352949	GBP 250	20 October 2021	15 August 2024	0.75	GBF 2017
XS2489343793	EUR 500	08 June 2022	16 May 2029	1.5	GBF 2022

Green loans

Demand for green loans continues to increase and in 2022, green loans constituted 31 per cent of all KommuneKredit's new fixed-term loans. By year-end 2022, we had 854 outstanding green loans. 290 eligible green loans with a total value of DKK 8.9 billion were included in the green loan portfolio.

Total green loans

30.4

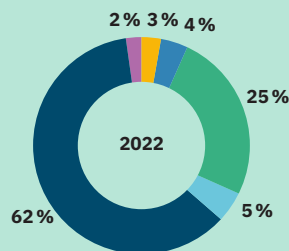
DKK billion

Green loan ratio

21%

Share of total lending

Green loan portfolio distribution



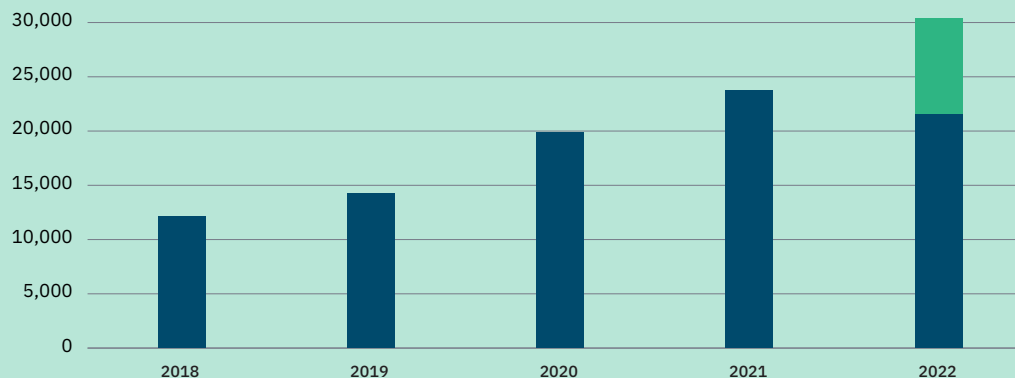
Green loan categories – Green Bond Framework 2022*

- Clean transportation
- Green buildings
- Sustainable water and wastewater management
- Pollution prevention and control
- Energy
- Climate change adaptation

*Due to rounding, the numbers may not sum to exactly 100%.

Outstanding green loans 2018-2022

DKK million



- Outstanding green loans – Green Bond Framework 2017
- Outstanding green loans – Green Bond Framework 2022



Financing and refinancing of green loans

KommuneKredit uses the net proceeds from green bonds to finance both new and existing green loans within our six green loan categories. The green loans form part of our green loan portfolio, which is used as the basis for our green bond issuance. KommuneKredit pre-finances green loans until the total disbursed green loan volume enables a green bond issue and as such deploys a bottom-up approach to green financing.

We report on the share of new financing and refinancing by aligning to the Nordic Position Paper approach, which is to report according to both the EU Green Bond Standard and that of the Nordic Position Paper. Below, we thus disclose our 2022 figures in accordance with both approaches.



Green loans

290

outstanding green loans of DKK 8.9 billion approved in 2022. Of these loans, 79 were transferred from the green loan portfolio 2017 to the green loan portfolio 2022*.

854

outstanding green loans of DKK 30.4 billion in total by year-end 2022.

21%

green loan ratio.



Green bonds

1

green bond issue of EUR 500 million in line with the Green Bond Framework 2022.

6

green bonds and 1 green private placement totalling DKK 22.7 billion in total by year-end 2022.

10%

green bond ratio.

*We transferred 79 eligible loans from the green loan portfolio 2017 to the green loan portfolio 2022. We did so to increase the utility value as well as reduce the surplus between the balance due on the green loans and the issued green bonds under the Green Bond Framework 2017 while maintaining a suitable buffer to absorb unexpected redemptions.



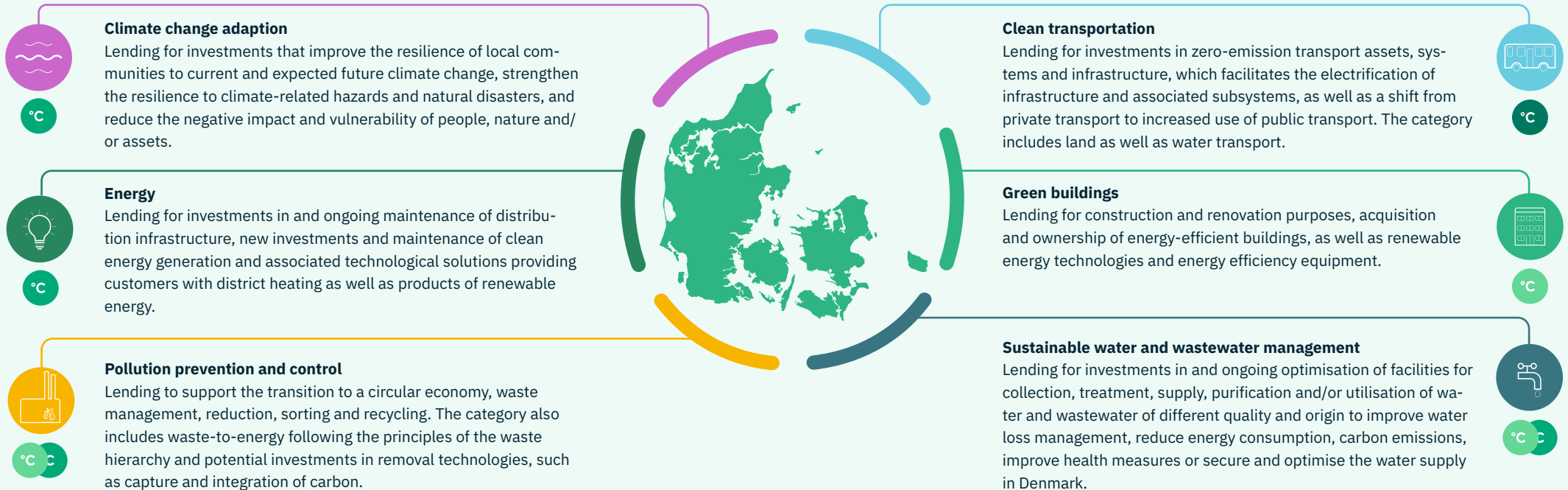
KommuneKredit's green loan portfolio 2022 measures of new finance and refinance

Approach	Nordic Position Paper	
Definition	<i>Financing:</i> Committed volume of green loans during the reporting year.	<i>Refinancing:</i> Committed volume of green loans prior to the reporting year.
Share of our green loan portfolio	43%	57%

Approach	EU Green Bond Standard	
Definition	<i>Financing:</i> Allocated amount to loans financed after bond issuance.	<i>Refinancing:</i> Allocated amount to projects financed before bond issuance.
Share of our green loan portfolio	0%	100%

Green loan categories

Our Green Bond Framework 2022 has an overall Medium Green shading, and includes green loans across six eligible categories that range from Dark to Light Green shadings according to our provider, CICERO Shades of Green, as illustrated below.



Cicero Shades of Green

Cicero's Shades of Green are intended to communicate the following:



Dark Green corresponds to the long-term vision of a low carbon and climate resilient future.























Medium Green represents steps towards the long-term vision but are not quite there yet.



Light Green is climate friendly but does not represent or contribute to the long-term vision.



Green loan portfolio summary

Green loan category	Sustainable Development Goals	EU environmental objectives	Total number of loans	Outstanding green loans, DKK million ¹	Renewable energy production (MWh/year)	Energy reduced/avoided (MWh/year)	CO ₂ e emissions reduced/avoided (tonnes p.a.)	Impact (tonnes CO ₂ e per DKK million)
Clean transportation	  	Climate change mitigation	2	242	N/A	N/A	N/A	N/A
Green buildings	   	Climate change mitigation	23	360	0	324	106	0.3
Sustainable water and wastewater management	   	Sustainable use and protection of water and marine resources	92	2,220	3,222	30	213	0.1
Pollution prevention and control	 	Transition to a circular economy, pollution prevention and control	20	417	0	0	3,870	9
Energy	   	Climate change mitigation	145	5,486	584,970	5,246	62,151	11
Climate change adaptation	  	Climate change adaptation	8	194	N/A	N/A	N/A	N/A
Total			290	8,918	588,192	5,600	66,340	
Outstanding green loans with quantified CO ₂ e impact, DKK million								3,418
Share of outstanding green loans with quantified CO ₂ e impact								38% ²

The table presents a summary of the green loan portfolio under the Green Bond Framework 2022 at year-end 2022.

¹ This allocation reporting has been subject to limited assurance. See Independent Auditor's Assurance Report on page 22.

² A large share of the green loans within the category Sustainable water and wastewater management are not currently quantified in terms of CO₂e impact.

Assessment against the EU Taxonomy

We seek to accommodate emerging regulations from the EU Sustainable Finance Action Plan, including the EU Taxonomy, which reflects the economic activities in the sectors that are most relevant for achieving climate neutrality and delivering on climate change adaptation in a European context.

As part of the Green Bond Framework 2022, we engaged with an external technical consultant in order to assess our green loan categories and criteria against the Technical Screening Criteria (TSC) of the climate change mitigation objective and the Do No Significant Harm (DNSH) criteria as outlined by the taxon-

omy. Additionally, Cicero conducted a taxonomy assessment of the Framework as part of the [second-party opinion](#) focusing on the TSC of the climate change mitigation objective.

Across our green loan portfolio 2022, 71 per cent is likely aligned with the TSC for substantial contribution to the climate change mitigation objective, and the Danish regulation generally aligns with the applicable DNSH criteria. However, some of our green sub-loan categories are not reflected in the taxonomy, although important in a Danish context, and some loan categories have slight deviations relating to lack of data, discrepancy of indicators and/or specific contextual national conditions.

Our EU Taxonomy assessment is done for transparency purposes and on a voluntary, preliminary and best effort basis.

» Across our green loan portfolio 2022, 71 per cent is likely aligned with the TSC for substantial contribution to the climate change mitigation objective.”

Alignment	Outstanding green loan portfolio 2022 (DKK million)	Share
Likely aligned	6,343	71%
Likely partially aligned	161	2%
Likely not aligned	1,746	20%
Not covered	669	7%
Total	8,918	100%

The table shows green loan portfolio 2022 alignment against the TSC of the climate change mitigation objective in the EU Taxonomy by year-end 2022.



CASE

Climate change adaption

Frederiksberg is a municipality within the Danish capital and the most densely populated municipality in Denmark. To improve the city's resilience towards climate change, the municipal authorities are conducting storm water projects that by 2036 collectively will be able to handle 254,000 m³ of rainwater. The ambition is that at least 30 per cent of rain falls must be diverted from the sewer system within a 30-year period. The projects include greenification of streets, reservoirs for rainwater overflow and runoff solutions to ensure controlled drainage of water from cloudbursts. One example is a retention reservoir at the school, Lindevang, which can also be used to teach the pupils about water resources and water cycles.

KommuneKredit disbursed a DKK 154.5 million green loan for the project in 2021



Photo: Frederiksberg Kommune

for various storm water projects, which amounted to 88 per cent of the total estimated costs of DKK 175 million.

Expected environmental impact

- Protection of aquatic ecosystems.
- Protection of groundwater resources.
- Expansion of green urban areas.



CASE

Energy

Utility company Fjernvarme Horsens A/S supplies stable, green and affordable district heating to more than 20,000 households in the municipality of Horsens in eastern Jutland. As part of a large-scale plan for conversion from natural gas to district heating for the Horsens area, Fjernvarme Horsens is expanding the district heating network and the production facilities from covering around 8,500 households in 2016 to 24,500 households in 2025. According to estimates, households that convert from natural gas to district heating can reduce their carbon emissions by 85 per cent.

Financing for the district heating project amounted to DKK 574 million disbursed in 2020, 2021 and 2022 across three green loans from KommuneKredit. The amount covered 44 per cent of the projected cost of DKK 1.3 billion.



Photo: Fjernvarme Horsens

Expected environmental impact

- Supply of green, secure, and flexible heating.
- Displacement of 235,000 MWh fossil fuels corresponding to an annual CO₂e saving of around 43,000 tonnes.
- Improvement of air quality.



CASE

Pollution prevention and control

Utility company FFV Renovation A/S operates five recycling centres and collects household waste and waste for recycling throughout the Municipality of Faaborg-Midtfyn on the island of Funen. To further promote the circular economy, FFV Renovation in 2020-2021 established two new recycling centres to replace two out-of-date centres. The new centres have a user-friendly design. Containers for heavy fractions are sunk into the ground, many containers have a kind of canopy structure to provide shelter for users in inclement weather, and garden waste can be disposed of any time. The centres also have space reserved for direct recycling, where citizens can drop off or pick up unwanted items for free, such as furniture, books and building materials. FFV Renovation expects to collect about 12,000 tonnes of waste annually at each new recycling centre.

In 2021, KommuneKredit disbursed DKK 39 million as a green loan for the new



recycling centres. The amount covered 100 per cent of the projected costs.

Expected environmental impact

- An increase in recycling and to reduce consumption of resources to a minimum.
- A reduction of carbon emissions from waste incineration.
- To improve waste sorting and reduce environmental pollution from harmful substances.



CASE

Clean transportation

Copenhagen Metro I/S is a partnership owned jointly by the Municipality of Copenhagen, the Danish Government and the Municipality of Frederiksberg. The Copenhagen Metro is responsible for operating the metro, which had more than 100 million passengers in 2022 alone and is now expanding the metro system with a new metro line to the districts of Sydhavn and Valby, which will open in 2024. The underground station Ny Ellebjerg is one of five upcoming metro stations. The metro runs on electricity, has a high utilization and is designed to last for at least 100 years. The climate impact from propulsion is approximately 95 per cent less than that of a fossil car. When accounting for the climate impact from infrastructure and the production of means of transport, the metro also performs significantly better than electric cars.

KommuneKredit disbursed DKK 77 million in 2020 as a green loan for the Ny Ellebjerg



station. The amount covers 100 per cent of the Municipality of Frederiksberg's share of the total estimated project costs by 2013 of DKK 615 million.

Expected environmental impact

- Reduction of traffic congestion and support of greener behaviour.
- Reduction of carbon emissions and improvement of air quality.
- Increase of accessibility and a contribution to urban development.





CASE

Green buildings

As part of its climate plan, the Municipality of Vallensbæk on the island of Zealand gives high priority to carbon emission savings in its building portfolio. The projects include energy renovation of Mejsebo day care center and Pilekvisten after-school care in 2020. In both projects, new LED lighting and new energy efficient windows and doors were installed, and Mejsebo also had a new ventilation system with heat recovery and roof insulation installed.

In 2020, KommuneKredit disbursed DKK 4.5 million across two green loans for energy renovation at Mejsebo and Pilekvisten. The amount covered 28 per cent of the projected costs of DKK 16.2 million.



Photo: Vallensbæk Kommune, Kommunikationsafdelingen

Expected environmental impact

- Reduction in water and energy consumption.
- Reduction in carbon emissions.
- Improvement of the indoor climate.



CASE

Sustainable water and wastewater management

Assens Forsyning A/S is a utility company operating water supply, waste systems and wastewater systems in the Municipality of Assens on the island of Funen. Assens Forsyning is building a new water treatment plant with an adjoining biogas plant, which will replace eight smaller treatment plants. The new plant has an optimized cleaning process based on biological wastewater treatment technology, which enables the plant to be run in large-scale energy-neutral operations. In 2022, the wastewater load was approximately 80,000 Person Equivalent (PE). The new plant is designed to handle 100,000 PE and will be in operation in 2023.

Financing for the new water treatment plant amounted to DKK 100 million in a green loan from KommuneKredit disbursed in 2022. The amount covers 34 per cent of the projected cost of DKK 290 million.



Photo: Assens Forsyning, Gitte Hegelund

Expected environmental impact

- Reduction of organic material, nitrogen and phosphorus in wastewater discharge.
- Reduction of CO₂e emissions by around 400 tonnes based on annual biogas production of around 3000 MWh.
- Supply of renewable energy.



Green financing governance

KommuneKredit's Green Bond Committee, see p. 20, upholds the governance of our Green Bond Framework 2022, and the committee is responsible for decisions to approve loans or finance leases as green (hereafter "green loans") and pursuant to the green loan criteria of our Green Bond Framework. In 2022, 305 loans were in scope as potential green loans. Of these, 14 loans were rejected in the evaluation process, either by internal checks or by the Committee. One of the approved loans has subsequently been repaid. In sum, 290 outstanding eligible green loans formed part of the green loan portfolio 2022.

Management of proceeds

We build our portfolio of green loans prior to issuing green bonds. The net proceeds of our green bonds are earmarked to a separate portfolio – our green bond portfolio 2022. The green bond portfolio is used to finance

KommuneKredit's green loan portfolio, see p. 11. For the avoidance of doubt, green loans financed under our Green Bond Framework 2017 constitute a separate portfolio – our green loan portfolio 2017, see p. 4.

An independent external party conducts an annual review of the allocation reporting in line with the Green Bond Framework 2022, see p. 9.

Governance rating

As noted, CICERO Shades of Green assessed our Green Bond Framework 2022 and provided it with a [second party opinion](#) in February 2022. CICERO found the framework to be aligned with the Green Bond Principles of ICMA and acknowledged it with an overall Medium Green shading and an Excellent Governance score – the best available governance rating.



1

Potential green loan

Customers contact KommuneKredit with a request for a loan or lease proposal. Our Lending and Leasing Department will, in their review, consider if the customer application could potentially meet the criteria of a green loan. If so, it is given an internal status as a potential green loan.



2

Green loan form

Customers with a potential green loan are notified by our Lending and Leasing Department and asked to submit a standardised green loan form for the relevant green loan category. If further information is required, our Sustainable Finance team will contact the customer to obtain the necessary information.



3

Preliminary green loan

Our Sustainable Finance team evaluates whether the potential green loan complies with the green loan categories presented in our Green Bond Framework. If a loan is considered to be in accordance with the eligibility criteria, the loan receives a new internal status as a preliminary green loan.



4

Eligible green loans

A list of the preliminary green loans is presented to our Green Bond Committee, which meets two to four times a year or as considered necessary. It requires a consensus decision by the committee to include a green loan in the portfolio and make it available for green bond funding, i.e., giving each committee member a right of veto.

Green Bond Committee

KommuneKredit's Green Bond Committee is mandated to approve or reject the preliminary green loans presented to them in line with the Green Bond Framework 2022.

The committee has five members, three of whom are external experts. Furthermore, we have two alternate internal members. The external members are employed in, or in a sector relevant to, the Danish local government sector. They have expert knowledge of the sectors proposed to be eligible for lending under the new framework, including extensive knowledge of environmental matters, climate change and/or climate adaptation.

In 2022, the committee convened five times to discuss preliminary green loans and approved 291 green loans pursuant to our

framework, one of which was subsequently repaid during the year, as noted earlier. Of the 290 outstanding loans, 79 were transferred from the green loan portfolio 2017 to the green loan portfolio 2022. More than 80 per cent of the loans approved in 2022 were within the energy and the sustainable water and wastewater management category in terms of both lending volume and number of loans. We expect the Green Bond Committee to approve the first green leasing agreement in 2023.

More information

For more details on our green loans, please see the anonymised [List of green loans 2022](#).



Members of our Green Bond Committee

External voting members



Carl Hellmers
CEO, Fredericia Utility



Hans-Martin Friis Møller
CEO, Kalundborg Utility



Trine Lindegaard Holmberg
CEO, ARGO

Internal voting members



Henrik Andersen, Chairman
Managing Director



Guri Weihe
Head of Sustainable Finance

Green Bond Committee secretariat

Coordinator



Louise Rosentoft
Senior Funding & IR Manager

Internal alternate members



Lasse Pinderup Nygaard
Sustainable Finance Manager



Helle Winther
Sustainable Finance Manager

Reporting methodology

To enable investors and other stakeholders to follow our developments, to monitor the performance and to provide insights into prioritised areas of the green loans funded by green bonds, KommuneKredit is committed to provide transparent reporting annually and until maturity of the green bonds issued.

In alignment with our Green Bond Framework 2022, our reporting for the 2022 green loan portfolio includes both allocation and impact reporting for the purpose of demonstrating the expected environmental impact of green loans financed through the issuance of green bonds. Allocation reporting is based on the entire green loan portfolio while the relative share of each issued green bond can be found on pp. 4 and 10. The impact indicators applied are selected based on an analysis of relevance to our green bond investors.

More information

For more details, please see our Green Bond Framework 2022 [▶ Impact reporting methodology paper](#).

Allocation reporting includes:

- A summary of our green bond developments.
- The outstanding amount of green bonds issued, presented per type of green loan category.
- The distribution between new financing and refinancing.
- The total aggregated proportion of green bond net proceeds used per green loan category.
- Mapping of the contribution to the EU environmental objectives by loan categories.

Impact reporting includes:

- A list of green loans, including allocated amounts and brief project descriptions.
- A selection of project examples financed under the green bond framework.
- The associated environmental impact of the green loans based on KommuneKredit's share as well as which environmental objectives the green loans will support.
- Aggregated reporting, to some extent, as we can finance a large number of small green loans in the same green loan category.



Key reporting principles

We follow the impact reporting principles of the Nordic Public Sector Issuers Position Paper on Green Bond Impact Reporting, 2020.

- We calculate CO₂e emissions using scope 1 and scope 2 as defined by the Greenhouse Gas Protocol.
- We apply a conservative approach to the selection and calculation of emission baselines.
- We report on the impact share that is attributable to KommuneKredit's financing.
- We apply a portfolio approach.
- We provide an impact assessment with the reservations that not all related data can be obtained and that the reported impact is reliant on our customers' ex ante estimate of physical activity data.

Management statement

The Green Bond Impact Report 2022 has been prepared in accordance with the KommuneKredit Green Bond Framework 2022, issued 28 February 2022 (the "Green Bond Framework").

In our opinion, Green Bond Impact Report 2022, including the allocation of green loans provides a true and fair view of the use of proceeds for the year ended 31 December 2022. Further, in our view, the use of proceeds as reflected in the Outstanding green loans, DKK million as presented in the Green loan portfolio summary on page 14, was allocated, in all material respects, in accordance with the Green Loan Eligibility Criteria as outlined in section 4 and the process for Project Evaluation and Selection as outlined in section 5 of the Green Bond Framework.



Independent Auditor's Assurance Report

We have performed a limited assurance engagement on green bond allocation reporting for 2022 included in the Green Bond Impact Report (the 'Report') for the green bonds issued by KommuneKredit. The Report was prepared on the basis of the Green Loan Portfolio in 2022, in accordance with the Green Loan Eligibility Criteria and the Process for Project Evaluation and Selection as set out in the KommuneKredit Green Bond Framework 2022, issued 28 February 2022 (the 'Green Bond Framework'). Our assurance engagement was limited to assessing the accuracy of the allocation of Outstanding green loans, DKK million (the 'Outstanding green loans'), in accordance with the Process for Project Evaluation and Selection. The Outstanding green loans are included in the Green loan portfolio summary on page 14 in the Report. We express a conclusion providing limited assurance. The Report was

prepared to report on the allocation of green loans in accordance with the Green Bond Framework. Our report may not be suitable for another purpose.

Management's responsibility

The Management of KommuneKredit is responsible for preparing the Report in accordance with the Green Bond Framework. The responsibilities include designing, implementing and maintaining internal control over information relevant to the preparation of the Report that is free from material misstatement, whether due to fraud or error. In addition, KommuneKredit is responsible for establishing objective criteria for preparing the Report as described in the Green Bond Framework and also measuring and reporting the allocation of Outstanding green loans based on the Green Bond Framework.

Auditor's responsibility

Our responsibility is to express a conclusion about the allocation of Outstanding green loans, based on our work performed within our limited assurance engagement.

We conducted our examinations in accordance with ISAE 3000, Assurance Engagements Other than Audits or Reviews of Historical Financial Information, and additional requirements under Danish audit regulation to obtain limited assurance about our conclusion.

Deloitte Statsautoriseret Revisionspartnerselskab applies International Standard on Quality Management 1, ISQM1, which requires the firm to design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, pro-

fessional standards and applicable legal and regulatory requirements.

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

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



been obtained had a reasonable assurance engagement been performed. The choice of assurance work is subject to the practitioner's professional judgment.

Work performed

Within the scope of our limited assurance engagement, we performed the following work:

- Interviews of relevant employees of KommuneKredit in relation to the process, to assess the use of the proceeds, the reporting process and the internal controls to the extent relevant for forming our assurance opinion;
- Assessed the accuracy of the allocation of Outstanding green loans against the Process for Project Evaluation and Selection as set out in the Green Bond Framework;
- Assessed the presentation of information on Outstanding green loans included in the Report for internal consistency of overall presentation, structure, and content; and
- evaluated the evidence obtained.

Our conclusion

Based on our work performed, nothing has come to our attention that causes us to believe that the allocation of Outstanding green loans has not been prepared, in all material aspects, in accordance with the Process for Project Evaluation and Selection as set out in the Green Bond Framework.

Copenhagen, 9 March 2023

Deloitte

Statsautoriseret Revisionspartnerselskab
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Anders Oldau Gjelstrup
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Design and production: **Noted**

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