

# **Second Opinion on KommuneKredit's Green Bond Framework**

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07 April 2017

# Summary

Overall, KommuneKredit's Green Bond Framework provides a clear and sound framework for climate-friendly investments. The framework lists eligible categories of projects that are supportive of the objective of promoting a transition to low-carbon and climate-resilient growth and is supported by a strong governance structure. However, the Green Bond framework would benefit from a clearer requirement of impact reporting against standard indicators and external review or verification. Also, partly due to the mandate and nature of KommuneKredit's activities, the eligible project categories are quite general and it is difficult to ascertain that only best available technologies and solutions will be selected.

All water management and energy efficiency projects are eligible if they follow the relevant Danish regulation. These project categories in addition to district heating are important in the transformation towards a low carbon and climate resilient future. KommuneKredit Green Bond Committee will not, however, undertake additional screenings of these projects. Hence there is a small risk that these investments in maintenance could lock in existing fossil infrastructure. KommuneKredit's Green Bonds will only finance new investments in energy generation that is fossil-free. For none of the project categories are lifecycle considerations built into the selection process.

Based on the overall assessment of the project types that will be financed by the green bond and governance and transparency considerations, KommuneKredit's Green Bond Framework gets a Medium Green shading. A darker shading would have required clearer guarantees that only best available technologies and solution would have been selected under the Green Bond Framework, in addition to strengthened reporting.

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# 1 Introduction and background

As an independent, not-for-profit, research institute, CICERO (Center for International Climate and Environmental Research - Oslo) provides Second Opinions on institutions' framework and guidance for assessing and selecting eligible projects for green bond investments, and assesses the framework's robustness in meeting the institutions' environmental objectives. The Second Opinion is based on documentation of rules and frameworks provided by the institutions themselves (the client) and information gathered during meetings, teleconferences and e-mail correspondence with the client.

CICERO is independent of the entity issuing the bond, its directors, senior management and advisers, and is remunerated in a way that prevents any conflicts of interests arising as a result of the fee structure.

CICERO has established the global Expert Network on Second Opinions (ENSO), a network of independent non-profit research institutions on climate change and other environmental issues, to broaden the technical expertise and regional experience for Second Opinions. CICERO works confidentially with other members in the network to enhance the links to climate and environmental science, building upon the CICERO model for Second Opinions. In addition to CICERO, ENSO members currently include Basque Center for Climate Change (BC3), International Institute for Sustainable Development (IISD), Stockholm Environment Institute (SEI), and Tsinghua University's Institute of Energy, Environment and Economy. A more detailed description of CICERO can be found at the end of this report.

The CICERO-led ENSO provides second opinions on institutions' framework and guidance for assessing and selecting eligible projects for green bond investments, and assesses the framework's robustness in meeting the institutions' environmental objectives. The second opinion is based on documentation of rules and frameworks provided by the institution themselves (the client) and information gathered during meetings, teleconferences and email correspondence with the client. ENSO encourages the client to make this Second Opinion publically available. If any part of the Second Opinion is quoted, the full report must be made available. CICERO's Second Opinions are normally restricted to an evaluation of the mechanisms or framework for selecting eligible projects at a general level. CICERO does not validate or certify the climate effects of single projects, and thus, has no conflict of interest in regard to single projects. CICERO is neither responsible for how the framework or mechanisms are implemented and followed up by the institutions, nor the outcome of investments in eligible projects.

This note provides a Second Opinion of KommuneKredit's Green Bonds Framework and policies for considering the environmental impacts of their projects. The aim is to assess KommuneKredit Green Bonds Framework as to its ability to support KommuneKredit's stated objective of promoting the transition to low-carbon and climate resilient growth.

This Second Opinion is based on the green bond framework presented to CICERO by the issuer. Any amendments or updates to the framework require that CICERO undertake a new assessment. CICERO takes a long-term view on activities that support a low-carbon climate resilient society. In some cases, activities or technologies that reduce near-term emissions result in net emissions or prolonged use of high-emitting infrastructure in the long-run. CICERO strives to avoid locking-in of emissions through careful infrastructure investments, and moving towards low- or zero-emitting infrastructure in the long run. Proceeds from green bonds may be used for financing, including refinancing, new or existing green projects as defined

under the mechanisms or framework. CICERO assesses in this Second Opinion the likelihood that the issuer's categories of projects will meet expectations for a low carbon and climate resilient future.

### **Expressing concerns with Shades of Green**

CICERO Second Opinions are graded dark green, medium green or light green, reflecting the climate and environmental ambitions of the bonds and the robustness of the governance structure of the Green Bond Framework. The grading is based on a broad qualitative assessment of each project type, according to what extent it contributes to building a low-carbon and climate resilient society:

- Dark green for projects and solutions that are realizations today of the long-term vision of a low carbon and climate resilient future. Typically this will entail zero emission solutions and governance structures that integrate environmental concerns into all activities.
- Medium green for projects and solutions that represent steps towards the long-term vision, but are not quite there yet.
- Light green for projects and solutions that are environmentally friendly but do not by themselves represent or is part of the long-term vision (e.g. energy efficiency in fossil based processes).
- Brown for projects that are irrelevant or in opposition to the long-term vision of a low carbon and climate resilient future.

The project types that will be financed by the green bond primarily define the overall grading. However, governance and transparency considerations also factor in, as they can give an indication whether the institution that issues the green bond will be able to fulfil the climate and environmental ambitions of the investment framework.

## 2 Brief description of KommuneKredit's Green Bond Framework and rules and procedures for climate-related activities

KommuneKredit is legally organized as an association (membership organisation) under Danish law. Membership is limited to Danish municipalities and regions. Currently all local governments are members. KommuneKredits clients are in addition to Danish regions and municipalities also semi-public entities guaranteed by regions or municipalities such as water, energy and waste utilities wholly owned by regions and municipalities. KommuneKredit operates as a non-for profit organisation with the objective of providing cost efficient financing to its clients. Cross border lending is not allowed.

*Policies;* KommuneKredit follows Danish laws and regulations that is one of the strictest with regard to environmental performance and use of natural resources. KommuneKredit does not have a separate climate, environmental or sustainability strategy in place.

*Definition;* KommuneKredits green bonds proceeds will finance not only new projects but also existing ones (re-financing). KommuneKredit's ambition is to use the majority of the Green Bonds proceeds to new projects (financed within 15 months before the time of the Green Bond issuance). The actual distribution between new financing and re-financing will be available to investors in the annual investor letter. The main eligible categories are water management, district heating, energy efficiency and clean public transportation. The categories are further defined by the relevant legislation.

*Selection;* Potential Eligible Projects will be studied and considered as Preliminary Eligible projects if the projects meet the criteria listed in KommuneKredit's Green Bond Framework. A Green Bond Committee with environmental expertise will be established with the purpose of finally approving eligible projects. Approval of a Preliminary Eligible Projects requires a consensus approval, i.e. giving each Committee member veto power. The Green Bond Committee will consist of two to five external members and two internal KommuneKredit members. Appointment of the two to five external members of the KommuneKredit Green Bond Committee will be targeted towards, but not restricted to, individuals with relevant expertise of the lending sectors proposed within this Green Bond Framework, e.g. the water management sector, the district heating sector, etc. The Green Bond Committee members shall be appointed by KommuneKredit's Management. The external members shall be employed with or in a similar manner associated to the Danish local government sector and considered by KommuneKredit as an expert within their field with considerable knowledge on the environment and/or climate changes and/or climate adaptation. One of the internal members will be appointed by and represent KommuneKredit's Management and the other internal member will be appointed from the staff in KommuneKredit's Lending department. Selected projects that no longer meet the criteria of the Green Bond Framework will be removed from the pool of eligible projects.

*Management of proceeds;* A separate portfolio will be established in order to track the earmarked proceeds of a green bond issuance. The green bond portfolio will finance the eligible projects. The issuer intend to build up enough projects to match the green bond issued. If however the green bonds portfolio temporarily is larger than the green loan portfolio the proceeds will be invested in accordance with the issuer's general investment policy. According to the issuer this means very liquid and highly rated bonds.

*Reporting and Accountability;* KommuneKredit will provide an annual green bond investor letter that includes latest developments, list of projects financed, distribution between re-financing and new financing and projects examples including impact reporting where information is available from the member municipalities. An internal auditor will assure the implementation of KommuneKredit's green bond framework when it comes to the use of the proceeds. The investor letter, the report of the auditor and Second Opinion will be made available on KommuneKredit's web page: [www.kommunekredit.com](http://www.kommunekredit.com).

The table below lists the documents that formed the basis for this Second Opinion:

Document Number	Document Name	Description
1	KommuneKredit Green Bond Framework, March 27, 2017	
2	KommuneKredit Annual Report, 2015	
3	Danish Climate Change Act	The Climate Change Act establishes an overall strategic framework for national climate policy in order to transform to a low-carbon society by 2050. This act will ensure transparency and openness on the status, direction and momentum for climate change policy in Denmark.
4	Water Management Legislation	The Executive Order on Municipal Lending and Water Sector Reform Act
5	District Heating Legislation	The Executive Order on Municipal Lending, the heat supply act and the Executive Order on the approval of Projects for Heat Supply Plans
6	Energy Saving Legislation	The Executive Order on Municipal Lending and Executive Order on Regional Lending
7	Public Transportation Legislation	Executive Order on Regional Lending

Table 1: Document list

### 3 Assessment of KommuneKredit's Green Bond Framework and environmental policies

Overall, KommuneKredit's green bond framework provides a detailed and sound framework for climate-friendly investments. The framework and procedures for KommuneKredit's green bond investments are assessed and their strengths and weaknesses are discussed in this section. The strengths of an investment framework with respect to environmental impact are areas where it clearly supports low-carbon projects, whereas the weaknesses are typically areas that are unclear or too general. Pitfalls are also raised in this section to note areas where issuers should be aware of potential macro-level impacts of investment projects.

#### Eligible projects under the Green Bond Framework

At the basic level, the selection of eligible project categories is the primary mechanism to ensure that projects deliver environmental benefits. Through selection of project categories with clear environmental benefits, green bonds aim to provide certainty to investors that their investments deliver environmental returns as well as financial returns. The Green Bonds Principles (GBP) state that the "overall environmental profile" of a project should be assessed and that the selection process should be "well defined".

In table 2 below an investment category that includes projects and solutions that are realizations today of the long-term vision of a low carbon and climate resilient future are dark green. Typically, this will entail zero emission solutions and governance structures that integrate environmental concerns into all activities. Medium green covers projects and solutions that represent steps towards the long-term vision, but are not quite there yet. Projects and solutions that are environmentally friendly but do not by themselves represent or is part of the long-term vision (e.g. energy efficiency in fossil based processes) are graded light green

Category	Eligible project types	Green Shading and some concerns <sup>1</sup>
Water management	<ul style="list-style-type: none"> <li>New investment and ongoing maintenance in water collection, treatment, recycling, cleaning, reuse technologies and related infrastructure.</li> </ul>	<b>Medium Green</b> <ul style="list-style-type: none"> <li>Water management projects are important from a climate adaptation and resilience perspective. However, the category is quite broad and not every aspect is necessarily relevant in a climate context. There is a risk that projects could be directly or indirectly linked to existing fossil fuel infrastructure.</li> </ul>
District heating	<ul style="list-style-type: none"> <li>New investments and ongoing maintenance in distribution infrastructure and new investments and maintenance of</li> </ul>	<b>Medium Green</b> <ul style="list-style-type: none"> <li>Be aware of possible rebound effects.</li> </ul>

	non-fossil energy generation <sup>2</sup> and associated technological solutions providing Clients with district heating leading to a reduction in CO <sub>2</sub> -emissions.	<ul style="list-style-type: none"> <li>• Maintenance of district heating infrastructure may be linked to heat created also by generators run on fossil fuel.</li> <li>• The issuer will cautiously consider the net environmental benefits and encourage projects, which lead to a significant reduction in CO<sub>2</sub>-emissions.</li> </ul>
Energy Efficiency	<ul style="list-style-type: none"> <li>• New investments and ongoing maintenance of existing buildings leading to more energy efficient buildings.</li> <li>• New investment or ongoing maintenance of public street lighting leading to a more energy efficient system.</li> </ul>	<b>Medium Green</b> <ul style="list-style-type: none"> <li>• Clients have automatic access to obtain loans that promote energy efficiency.</li> <li>• Be aware of possible rebound effects in buildings.</li> </ul>
Clean Public Transportation	<ul style="list-style-type: none"> <li>• New investment and ongoing maintenance in low energy or emission transportation assets, systems, infrastructure, components and services that facilitate modal shift from private transportation to increased use of public transportation such as trains, underground trams and buses to the extent that these lead to reduction in CO<sub>2</sub> emissions.</li> </ul>	<b>Dark Green</b> <ul style="list-style-type: none"> <li>• Only projects that includes transportation assets run on non-fossil fuel sources such as electricity are eligible.</li> <li>• Potential for emission reduction depends on area planning and degree of urbanization, introduction of new vehicle technologies for passenger and goods transportation, and fuel types.</li> <li>• The issuer will cautiously consider the net environmental benefits and encourage projects that lead to a significant reduction in CO<sub>2</sub> emissions.</li> </ul>

Table 2: Eligible project categories

### Strengths

Overall, KommuneKredit's Green Bond Framework provides a clear and sound framework for climate-friendly investments. The framework lists eligible categories of projects that are supportive of the objective of promoting a transition to low-carbon and climate-resilient growth and is supported by a well-structured governance structure. KommuneKredit as a funder of green projects in Denmark's municipalities and regions has an important formative position. The Green Bond Framework of KommuneKredit is based on the strong Danish legislation when it comes to environmental issues and the use of a competent Green Committee including environmental and/or climate change expertise. KommuneKredit's Green Bonds will only finance new investments in energy generation that is fossil-free.

### Weaknesses

Some of the categories of eligible projects (see Table 2) are quite broad and general. In particular, energy efficiency projects are quite generally described and cannot be seen to include best available technologies. This is understandable considering the nature of KommuneKredit's mandate. To safeguard against environmentally unfavorable impacts from green bond financed projects, the Green Committee is important, as well as maximum

<sup>2</sup> With the exception of start-up and that in cases of emergencies, the district heating may be created by back-up measures, e.g. generators run on fossil fuel.

transparency and good reporting from KommuneKredit's side. KommuneKredit will not itself carry out any impact reporting, but encourages clients to do so.

There are no lifecycle considerations built into the selection process.

### **Pitfalls**

All water management and energy efficiency projects are eligible if they follow the relevant regulation. KommuneKredit Green Bond Committee will not undertake additional screenings of these projects on how well these projects contribute to a low carbon and climate resilient future. Water management projects are important from a climate adaptation and resilience perspective. However, the category is quite broad and not every aspect is necessarily relevant in a climate context.

KommuneKredit has informed us that no data on water supply to fossil fueled power plant and district heating companies are available. According to the issuer only a small fraction of water project investments in the Danish local government sector is related to fossil fueled power plants and district heating companies . KommuneKredit Green Bond Committee will not undertake additional screenings of these projects. Hence, there is a risk that e.g. water management projects to some extent could lock in existing fossil investments. For none of the project categories are lifecycle considerations built into the selection process.

Impact reporting is an important tool to enhance transparency about the projects economic risk from climate change and the environmental effectiveness of the projects. Thus, it is important to verify that projects perform as intended with respect to mitigation of greenhouse gas emissions and enhancing climate change resilience, as well as avoiding significant unwanted external effects.

KommuneKredit will encourage impact reporting and will provide that in the investor letter. The Green Bond framework would benefit from a clearer requirement of impact reporting against standard indicators and external review or verification. The processes for allocation of use of proceeds, tracking and management of funds will be part of KommuneKredit's annual internal control.

### *Impacts beyond the project boundary*

Due to the complexity of how socio-economic activities impact the climate, a specific project is likely to have interactions with the broader community beyond the project borders. These interactions may or may not be climate-friendly, and thus need to be considered with regards to the net impact of climate-related investments.

### *Rebound effects*

Efficiency improvements may lead to rebound effects. When the cost of an activity is reduced, there will be incentives to do more of the same activity. From the project categories in Table 2 an example is improved energy efficiency, which in part may lead to more energy use. KommuneKredit should be aware of such effects and possibly avoid Green Bond funding of projects where the risk of rebound effects is particularly high.

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# Appendix: About CICERO

CICERO Center for International Climate Research is Norway's foremost institute for interdisciplinary climate research. We deliver new insight that helps solve the climate challenge and strengthen international climate cooperation. We collaborate with top researchers from around the world and publish in recognized international journals, reports, books and periodicals. CICERO has garnered particular attention for its work on the effects of manmade emissions on the climate and the formulation of international agreements and has played an active role in the UN's IPCC since 1995.

CICERO is internationally recognized as a leading provider of independent reviews of green bonds, since the market's inception in 2008. CICERO received a Green Bond Award from Climate Bonds Initiative for being the biggest second opinion provider in 2016 and from Environmental Finance for being the best external review provider (2017).

CICERO Second Opinions are graded dark green, medium green and light green to offer investors better insight in the environmental quality of green bonds. The shading, introduced in spring 2015, reflects the climate and environmental ambitions of the bonds in the light of the transition to a low-carbon society.

CICERO works with both international and domestic issuers, drawing on the global expertise of the Expert Network on Second Opinions. Led by CICERO, ENSO is comprised of trusted research institutions and reputable experts on climate change and other environmental issues, including the Basque Center for Climate Change (BC3), the Stockholm Environment Institute, the Institute of Energy, Environment and Economy at Tsinghua University and the International Institute for Sustainable Development (IISD). ENSO operates independently from the financial sector and other stakeholders to preserve the unbiased nature and high quality of second opinions.

[cicero.oslo.no/greenbonds](http://cicero.oslo.no/greenbonds)