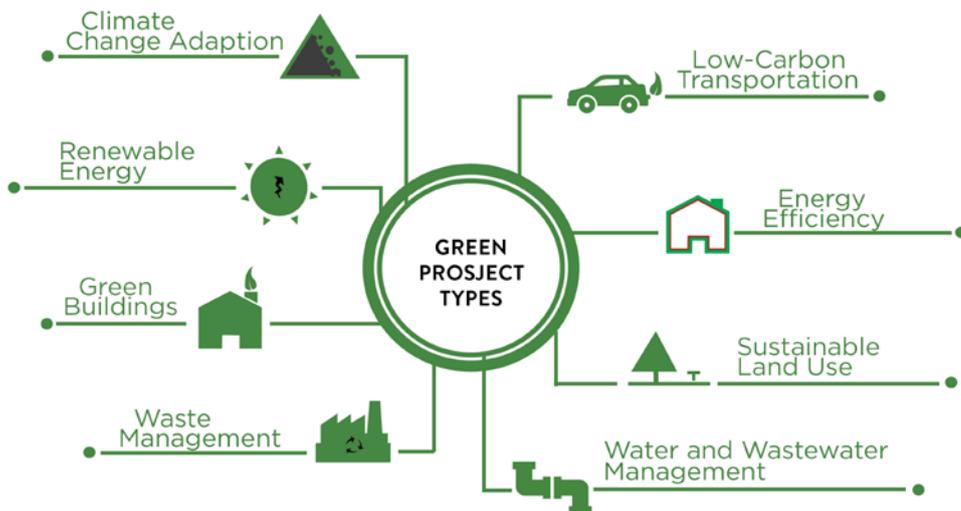


# GREEN LENDING PROGRAM – CRITERIA DOCUMENT

(KBN GREEN BONDS: SUPPLEMENTARY GUIDELINES FOR  
PROJECT SELECTION, DOCUMENTATION AND REPORTING)



# INTRODUCTION

KBN's green interest rate is intended to be a tool for driving forward ambitious climate and environmental projects in the local government sector. We can provide a reduced interest rate linked to Nibor or KBN's current floating rate for projects that provide a documentable reduction in energy consumption or greenhouse gas emissions, or that strengthen the level of local adaptation to challenges posed by climate change. The projects must target requirements higher than the minimum requirements in the relevant legislation and must have an explicit climate or environmental ambition. They should have regional climate and energy plans as their foundation, or should form in some other way part of a customer's systematic work on climate change and the environment. Chapter 1 of this document sets out the application and selection process for green loans.

The purpose of this document is to set objective and easy-to-understand criteria for granting borrowers a green interest rate. We offer a green rate for eight different categories of investment, with the criteria and documentation requirements depending on the category into which the project falls. Chapter 2 of this document therefore has a different section for each category. Each of these sections sets out the criteria for projects in the category in question and also provides an overview of the information we need to be able to verify that the project is in line with the criteria. The sets of criteria are revised regularly by the KBN Green Committee, which is the consultative body at KBN responsible for questions related to energy and climate change.

KBN borrows the money it uses for its green loans by issuing green bonds in the international capital markets. We have a separate framework for issuing green bonds, the KBN Green Bond Framework, which defines our obligations to investors who purchase these bonds. In short, the document describes how we grant green loans and report the environmental and climate impact of these loans back to our investors. We are starting to see the outline of an industry standard for impact reporting for green bonds, and KBN strives to report in a way that is in line with leading participants internationally. Our reporting is based on the *Harmonized Framework for Impact Reporting*, an initiative to develop a common reporting standard backed by large issuers such as the World Bank and the IFC. Chapter 3 of this document addresses how we use the information sent to us by our customers in our impact reporting.

The final section of this document, Chapter 4, looks at the calculation methods we wish our customers to use when calculating values for energy savings, emission reductions etc. for their applications.

If you have any questions or comments on this document, we ask that you get in touch with your usual contact person at KBN.

# 1 APPLICATION PROCESS

All municipalities, county authorities, municipal entities and inter-municipal companies, as well as other organisations that have a municipal guarantee, are eligible to apply for a loan at KBN's green interest rate. Applications for green loans will be subject to a separate assessment process based on the criteria set out in Chapter 2 of this document in conjunction with the normal process to assess a borrower's creditworthiness.

## 1.1 APPLICATION FORM

The application process is started by filling out the green loan application form, which can be found on our web pages. There is a separate form for each category of project and, if a loan is to finance projects in more than one category, a separate application form needs to be completed for each category. Our aim has been to ensure the application forms are easy to complete and that the information requested is easily available from applications for Enova support, proposals from contractors etc. Attachments should be provided to document the figures and information provided as far as possible. For example, we expect the energy needs calculated for new builds and the expected reductions resulting from energy efficiency measures to be documented by an energy report from a contractor, a letter of intent from Enova, BREEAM NOR pre-analysis forms or similar. For other types of investment, impact calculations in the proposals submitted by contractors, project descriptions or similar can be used as documentation.

All the information we ask for is *ex ante*, which is to say energy consumption, emission reductions, car kilometres saved or other indicators *as calculated in advance*. We need three working days to assess applications, so we ask that applicants send us the completed forms and necessary attachments in good time before you need an offer of a loan. If you need assistance with filling out the form, your contact person at KBN will be happy to assist.

## 1.2 ASSESSMENT OF APPLICATIONS

Once we have received an application and the necessary attachments, we will then assess it against the criteria for the relevant project category. We will normally be able to clarify whether the project qualifies for a green interest rate or not in the course of three working days. If we need more information to decide whether the project qualifies, the process may take more time. Applications are in the first instance assessed by KBN's customer and marketing managers for the region relevant to the application, before a final recommendation is made by our Green Committee.

## 1.3 LOAN OFFERS

Projects that satisfy our green interest rate criteria can be offered financing at a rate linked to Nibor and/or KBN's current floating rate. If you would like to apply in addition for financing with other interest rate products, you need to send a normal loan request to your contact person at KBN. Projects that do not satisfy KBN's green interest rate criteria will be offered a normal loan on our usual low interest rate terms.

By accepting the offer of a green interest rate loan you agree to the information you have given us about the project being used in our impact reporting. You can find more information on how we use this information in Chapter 3.

## 1.4 COMMENTS

If a project changes during the construction or use phase such that it is probable that it will no longer satisfy the criteria set out in this document, you are required to notify your contact person at KBN. It may be appropriate to change the borrowing terms to a rate linked to KBN's ordinary floating rate or to Nibor, following further agreement with the customer and marketing manager for your region. At present the international reporting standard with which we comply, the *Harmonized Framework for Impact Reporting*, only requires ex ante information to be reported. If KBN at a subsequent point in time should require more information on an investment in order to comply with its reporting obligations, customers will be required to make such information available as far as possible.

# 2 CATEGORIES & CRITERIA

## 2.1 ABOUT THIS CHAPTER

This chapter sets out the criteria a project must meet in order for it to be financed using KBN's green interest rate products. We offer a green interest rate for a wide range of projects across eight project categories. The criteria a project has to satisfy in order to qualify for a green interest rate are set out in the sections of this chapter, each of which addresses a specific project category. Each of the sections also includes the purpose of each project type, example projects, and documentation requirements and conditions specific to each category. We recognise that not all the points in the 'Documentation that must be provided' sections will be relevant or viable for every project. Please contact us if you would like to apply for a green interest rate for an investment that is not covered by any of the categories below.

## 2.2 GENERAL CRITERIA

All projects that qualify for KBN's green interest rate must:

- Promote the transition to a low-carbon society that is resilient to climate change.
- Lead to verifiable reductions in greenhouse gas emissions (accumulated impact where possible) or energy consumption, or to adaptations required due to climate change or adaptations that are in some other way related to Norway's national energy, climate and environment targets.
- Form part of the municipality or county authority's systematic work on climate change and the environment, and have relevant plans and strategies as their foundation.

**Projects awarded funds by Enova or the Norwegian Environment Agency's Klimasats scheme automatically qualify for KBN's green interest rate. Applicants who have a letter of intent from Enova or Klimasats must still complete the green rate application form.**

In addition to the category-specific documentation, all applications must provide information on:

- The estimated total cost of the project.
- The date on which construction work is expected to start.
- The expected completion date.
- The expected lifetime of the investment.

## 2.3 RENEWABLE ENERGY

### 2.3.1 Purpose

Investments in this category are intended to exploit the energy potential of the sun, the wind, the ground, the sea, biomaterials and other renewable energy carriers, and thereby to replace energy produced from fossil fuels and other energy sources that produce greenhouse gases.

### 2.3.2 Example projects

Solar farms, geothermal wells, wind farms, wave power plants, fossil-fuel-free district heating plants.

### 2.3.3 Conditions

The energy production plant must only use non-fossil, renewable energy sources during both base and peak load periods. Waste incineration and excess heat from other processes can be used for district heating plants. The use of mineral-fuel-based back-up in, for example, local and district heating systems may be approved for clearly defined back-up situations.

### 2.3.4 Documentation that must be provided

- Output to be installed, measured in kW (as well as  $W_p$  for solar farms)
- Estimate of the renewable energy to be produced each year, measured in kWh or other appropriate unit.
- Estimate of the annual reduction in greenhouse gas emissions, measured in tonnes of CO<sub>2</sub><sup>e</sup>, if the facility is to replace energy from fossil fuels.

## 2.4 ENERGY EFFICIENCY

### 2.4.1 Purpose

Investments in this category are intended to reduce the energy requirements of existing buildings and to phase out their use of fossil energy sources.

### 2.4.2 Example projects

Energy-conservation measures such as fitting additional insulation, replacing windows, installing hot-water heating, heat pumps, and central operational control systems. Renovating buildings to improve their energy efficiency. Replacing oil and gas boilers. This list is not exhaustive.

### 2.4.3 Conditions

Applicants must be able to demonstrate that the investment will generate an estimated reduction in annual energy consumption of 25%, or must be able to demonstrate receipt of a grant from Enova for the project. For comprehensive renovation projects, applicants must be able to demonstrate that the building is expected to use 35% less energy per square meter or will satisfy the requirements for newly constructed buildings as set out in the Regulations on technical requirements for building works (TEK10).

### 2.4.4 Documentation that must be provided

- Heated surface area included in the project, in square metres.
- Estimate of the reduction in annual energy requirements, measured in kWh.
- For projects to phase out fossil fuel heating sources: An estimate of the annual reduction in greenhouse gas emissions, measured in tonnes of CO<sub>2</sub><sup>e</sup>.

## 2.5 GREEN BUILDINGS

### 2.5.1 Purpose

The purpose of investments in this category is the construction of new buildings that are climate-smart and energy efficient.

### 2.5.2 Example projects

Buildings that satisfy the relevant industry norms to qualify as energy-plus buildings or as near-zero-energy buildings, or that are graded as 'Excellent' or 'Outstanding' on the BREEAM-NOR classification system. Such buildings will be low-heat-loss buildings that make good use of local energy resources, e.g. solar heating.

### 2.5.3 Conditions

Applications must be able to demonstrate that the building's energy consumption is estimated to be 20% lower than the requirement set by the applicable building regulations as in force at the time, or satisfies industry norms to qualify as an energy-plus building or another relevant, verifiable definition of highly efficient energy use. Mass timber buildings will be considered regardless of energy standards. We assume that all new builds that are entitled to Enova grants qualify for KBN's green interest rate. In situations where existing energy standards or norms are regarded to be irrelevant or unachievable for a specific project, exceptions can be made if the applicant can demonstrate that they have made significant efforts to reduce the building's energy consumption and greenhouse gas emissions.

### 2.5.4 Documentation that must be provided

- Estimate of the annual energy consumption per square metre of heated area, in accordance with NS 3031.
- Estimate of the annual energy saving in comparison with an equivalent building that complies with the applicable building regulations (TEK10), in kWh.
- Information on planned use of bio-based / renewable materials, materials with a high proportion of recycled content, low-carbon concrete and other climate-friendly construction materials.

## 2.6 WASTE MANAGEMENT

### 2.6.1 Purpose

Investments in this category are intended to ensure sustainable, energy efficient and resource-saving waste management.

### 2.6.2 Example projects

Upgrading old or building new waste management facilities, building biogas plants, central automated vacuum waste collection systems that minimise transport requirements, garbage trucks that run on renewable fuels, carbon capture plants. This list is not exhaustive.

### 2.6.3 Conditions

The investment must improve the waste management chain, for example by increasing the recovery rate, or by reducing the use of incineration, CO<sub>2</sub> emissions or transport requirements, or by improving resource use. The investment must contribute to the applicant complying with relevant guidelines such as applicable EU directives. Investment to maintain or replace facilities or equipment without any clear environmental benefit will *not* qualify for a green interest rate.

### 2.6.4 Documentation that must be provided

- Number of tonnes of waste expected to be processed by the facility each year.
- Number of households whose waste will go to the facility.
- Estimate of the reduction in greenhouse gas emissions/the amount of greenhouse gas emissions that will be avoided as a result of the investment, measured in tonnes of CO<sub>2</sub><sup>e</sup>.
- If possible: An estimate of the annual energy saving attributable to the investment, measured in kWh.
- Expected improvement in material recovery rate or other target for improved resource use.
- Applicable to the construction of biogas plants: Expected annual production volume.

## 2.7 SUSTAINABLE LAND USE

### 2.7.1 Purpose

Investments in this category are intended to ensure sustainable land use.

### 2.7.2 Example projects

Converting land from a car park into a recreation area, facilitating walking, cycling and public transport solutions, development of areas for car sharing, planting new forests. This list is not exhaustive.

### 2.7.3 Conditions

The project must clearly be green in nature and have an explicitly formulated climate/environmental objective.

### 2.7.4 Documentation that must be provided

- Surface area of the land converted, measured in square meters or square kilometres.
- If possible: Annual energy saving and/or reduction in greenhouse gas emissions or other emissions achieved as a result of the investment.
- Qualitative indicators/targets in terms of environmental impact.

## 2.8 LOW-CARBON TRANSPORTATION

### 2.8.1 Purpose

Investments in this category are intended to create transport solutions that produce minimal or zero emissions, with no fossil fuels used.

### 2.8.2 Example projects

Public transport development, footpaths and cycle paths, bicycle parks, replacing fleets of vehicles that run on fossil fuels with fleets that run on renewable energy, creating charging/fuelling points for renewable fuels.

### 2.8.3 Conditions

The project must be a low-emission or preferably zero-emission option for transporting people or goods. No fossil fuels can be used. We assume that all transportation projects that are entitled to an Enova grant also qualify for KBN's green interest rate.

### 2.8.4 Documentation that must be provided

- The number of people the project will affect each year.
- Estimate of the number of cars/road kilometres the project will replace.
- If possible: Annual energy saving, reduction in greenhouse gas emissions and/or local emissions, or amount of greenhouse gas emissions and/or local emissions that will be avoided as a result of the investment.

## 2.9 WATER AND WASTEWATER MANAGEMENT

### 2.9.1 Purpose

Investments in this category are intended to deliver future-oriented water and wastewater systems that are dimensioned to accommodate population growth and higher precipitation levels, and that use innovative technologies to make good use of the resources contained in wastewater.

### 2.9.2 Example projects

Significant upgrades to water and wastewater networks, water treatment plants, treatment of discharges to watercourses, construction of biogas plants, and investment in energy and heat recovery from water and wastewater networks. This list is not exhaustive.

### 2.9.3 Conditions

The investment must significantly and innovatively upgrade or upscale the infrastructure for water and wastewater, and must play a clear role in the municipality's work to adapt to climate change. Investment to carry out routine maintenance to or to replace or construct water and wastewater pipes without clear environmental ambition does *not* qualify for a green interest rate.

### 2.9.4 Documentation that must be provided

- Number of metres of piping/conduit laid, upgraded or replaced.
- Number of person equivalents (PE) of water or wastewater the plant processes, identifying any increase that can be attributed to the investment.
- Qualitative indicators/targets for adaptation to climate change (managing urban runoff etc.), with a description of weather-related or climate-related problems that will be mitigated by the investment.
- Where relevant, amount of electricity, biogas or other energy carrier expected to be produced each year.

## 2.10 CLIMATE CHANGE ADAPTATION

### 2.10.1 Purpose

Investments in this category are intended to ensure local communities are adapting to climate change.

### 2.10.2 Example projects

Facilities and installations to manage urban runoff, floods, landslides, avalanches, rising sea levels etc. This list is not comprehensive.

### 2.10.3 Conditions

The project must clearly constitute an adaptation to climate change.

### 2.10.4 Documentation that must be provided

- Qualitative targets/indicators relevant to the adaptation to climate change with a description of the weather-related and climate-related problems that will be mitigated by the investment.

## 2.11 PROJECTS NOT COVERED BY THESE CATEGORIES

The green project categories specified in this document are based on the Climate Bonds Initiative's 'Climate Bonds Taxonomy' as at January 2016. We recognise that there can be rapid developments in these areas and that we may receive financing requests for genuinely climate-friendly projects not covered by any of the existing categories. In such instances KBN will assess requests on a case-by-case basis. Such requests must contain documentation that demonstrates that the project will be of clear environmental benefit and complies with all the other requirements set out in this document.

# 3 REPORTING

## 3.1 WHY SO MUCH DOCUMENTATION?

KBN finances its green loans by issuing green bonds in the international capital markets. Green bonds are financial instruments that are specifically used to finance projects that reduce greenhouse gas emissions or promote adaptation to climate change. When KBN issues green bonds, it contributes to growth and stability in the allocation of capital to environmentally-friendly projects. Investors that provide money for green projects want to see evidence that their capital is being used in accordance

with the norms applicable to green bonds. It is therefore essential that we gather documentation on the individual projects we finance with green loans. There is at present no universal industry standard for impact reporting for green bonds, but the large international investment and development banks are working towards agreeing a reporting standard. The International Capital Market Association's (ICMA) Green Bond Principles reflect this development, as does the Harmonized Framework for Impact Reporting initiative. KBN wishes its reporting to be in line with these, and our reporting will therefore follow the progress made by the large, international organisations.

### 3.2 PROCESSING AND DISCLOSURE OF DOCUMENTATION

All the information on an investment that applicants send to KBN will be processed such that it can be entered on KBN's own reporting templates. This may, for example, involve converting between different energy and emission units. We reserve the right to use any information provided about a project as part of our ongoing reporting activities, which may include:

- 'Green Bond Stories' on KBN's website.
- Featuring in *KBN Dialog*, the magazine produced by KBN.
- Featuring in KBN's annual reports and investor letters.
- Featuring in presentations on our green lending products.
- Projects where the agreed amount is over NOK 25 million will also be included on a list of green loans that will be available via KBN's website.

KBN hopes that building up an overview of the projects financed using its green interest rate products will not only satisfy investors' expectations in terms of reporting, but will also motivate municipalities and county authorities make highly sustainable investments projects. We regard sharing expertise as a central part of our commitment to being green.

## 4 CALCULATION METHODS

The impact of our green loans can be calculated either by reference to the reduction in energy consumption or greenhouse gas emissions achieved or the contribution made to strengthening local adaptation to climate change. Section 4.1 addresses general methodological choices related to the categories covered by the concept of 'greenhouse gas mitigation investments', which is to say the categories included in sections 2.3 to 2.8 of this document, while section 4.2 offers guidelines on calculating the impact of investments covered by the concept of climate change adaptation.

### 4.1 METHODOLOGICAL CHOICES FOR GREENHOUSE GAS MITIGATION INVESTMENTS

This section addresses the method of calculating the impact of greenhouse gas mitigation investments as defined in sections 2.3 to 2.8 above. Investments in these categories lead to direct reductions in greenhouse gas emissions or reduce energy consumption and thereby indirectly reduce greenhouse gas emissions. The impact of the first type of investment is measured in CO<sub>2</sub> equivalent (CO<sub>2</sub><sup>e</sup>) savings, while the impact of the second type of investment is measured in kWh of energy saved. The impact of an investment or part-investment must be measured either in CO<sub>2</sub><sup>e</sup> or kWh of energy, with no double counting permitted. We report the impact of investments on an ex ante basis, which is to say on the basis of estimates.

#### 4.1.1 Starting point

To calculate the climate and environmental impact of a greenhouse gas mitigation investment, the completed project has to be compared with an alternative scenario. In some cases, it will be appropriate to consider the investment in relation to a base scenario – a reference scenario in which the investment does not exist. This applies, for example, to transport projects: the reduction in greenhouse gas emissions that can be attributed to a public transport project is calculated on the basis of the emissions that the transport sector would have produced if the project had not happened. Also, where an investment involves improving existing facilities, for example measures to improve the energy efficiency of a building or measures to improve a waste processing plant, a base scenario will be a natural starting point for calculating the investment's impact. In such cases the calculation will be as follows:

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$$\text{Annual climate impact} = (\text{emissions produced by or energy consumption of the sector or unit in the base scenario}) - (\text{emissions produced by or energy consumption of the sector or unit after investment completed})$$


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In other cases, for example where the investment in question is a new building, the approach will naturally be to assume that the building will be built regardless but that the borrower could have chosen to adhere to less strict climate standards. In such instances the climate impact is calculated on the basis of an alternative scenario in which the investment meets the minimum requirements contained in the applicable building regulations. The calculation would thus be as follows:

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$$\text{Annual climate impact} = (\text{emissions produced by or energy consumption of equivalent investment if minimum standards were followed}) - (\text{emissions produced by or energy consumption of actual investment})$$


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#### 4.1.2 Units and conversion

Investments included in KBN's green lending portfolio can generate many types of emission and emission savings. In order to be able to compare the impact of projects in different categories we convert all emission figures to CO<sub>2</sub> equivalents (CO<sub>2</sub><sup>e</sup>). Values for making such conversions are taken from the Greenhouse Gas Protocol's matrix<sup>1</sup> for Global Warming Potentials (GWP) over a 100-year time horizon, which were calculated using the IPCC Fifth Assessment Report. For example, we take methane as having 28 times the global warming potential of carbon dioxide, meaning that one unit of methane represents 28 CO<sub>2</sub><sup>e</sup> units.

#### 4.1.3 Time

Time is an important parameter when calculating the climate impact of a project. Advanced lifetime models take into account that materials and structures deteriorate with age, and the fact that the impact of an investment will therefore decrease at a certain rate. KBN does not have the resources to carry out such analysis in relation to each individual project we finance, and we similarly do not expect our customers to carry out such accounting for all investments. We therefore calculate the climate impact of investments in a simplified fashion as follows:

<sup>1</sup> "Global Warming Potential Values", Greenhouse Gas Protocol (URL: <http://ghgprotocol.org/sites/default/files/ghgp/Global-Warming-Potential-Values%20%28Feb%2016%202016%29.pdf>)

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$$\text{Climate impact over investment's lifetime} = (\text{annual climate impact}) \times (\text{expected lifetime of investment})$$


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## 4.2 METHODOLOGICAL CHOICES FOR INVESTMENT IN CLIMATE CHANGE ADAPTATIONS

This next section addresses the method of calculating the impact of climate adaptation investments, which is to say investments covered by the categories set out in sections 2.9 and 2.10 of this document. The impact of investment in climate change adaptation measures is frequently more difficult to quantify than the impact of investment in greenhouse gas mitigation measures. We therefore accept that in the case of climate change adaptation investments the methodology applied may need to be adapted to individual projects to a somewhat greater extent. Qualitative descriptions of a project's purpose and its expected results can supplement or replace quantitative indicators where this creates a better picture of the impact of the investment.

### 4.2.1 Starting point

The impact of investments in climate change adaptation measures will as a general rule be calculated using a base scenario as described above.

### 4.2.2 Units

The measurement units used to quantify the impact of climate change adaptation measures are more complicated than for greenhouse gas mitigation investments. Recommended units are set out for each project category.

## 4.3 GENERAL METHODOLOGICAL CHOICES

### 4.3.1 Climate impact 'accounting'

Investments included in KBN's green portfolio are not necessarily financed in their entirety by loans from us. In order for us to be able to quantify the impact of the funds we allocate to climate-friendly investments, we need to know what proportion of each investment we are financing:

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$$\text{Our proportion of a green investment} = \frac{(\text{amount lent at green interest rate})}{(\text{total cost})}$$


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In the aggregate report on KBN's portfolio of green loans 'our' proportion of the climate impact of an investment over its lifetime is recognised in the year the investment is financed. If the loan is drawn down in several instalments, the climate impact is recognised in the respective years in the same proportion as the loan instalments.

An investment remains in KBN's aggregate impact report for the duration of the loan. In other terms, the climate impact of a project will be removed from the total when the loan is paid back in its entirety or is for other reasons removed from KBN's portfolio of green loans.

## 5 APPENDIX

### 5.1 ENERGY BUDGETS FOR BUILDINGS AS SET OUT IN THE REGULATIONS ON TECHNICAL REQUIREMENTS FOR BUILDING WORKS (TEK10) – VALID TO 01 JANUARY 2017

For buildings designed before 1 January 2017, the energy standards given in the previous version of the Regulations on technical requirements for building works – net energy needs per square metre of usable floor space heated - must not be exceeded. Buildings designed after 1 January 2017 must comply with the current TEK10, see Appendix 5.2.

<i>Building category</i>	<i>Total net energy needs [kWh/m<sup>2</sup> of heated usable floor space per year]</i>
Individual houses and leisure homes with more than 150m <sup>2</sup> of heated usable floor space	120 + 1600/m <sup>2</sup> of heated usable floor space
Block of flats	115
Nursery school	140
Office building	150
School building	120
University/university college	160
Hospital	300 (335)
Nursing home	215 (250)
Hotel	220
Sports building	170
Business building	210
Cultural building	165
Light industry/workshops	175 (190)

## 5.2 ENERGY BUDGETS FOR BUILDINGS IN TEK10 AS AT 1 JANUARY 2016

Buildings designed after 1 January 2016 must not have net energy needs per square metre of heated usable floor space in excess of the following:

<i>Building category</i>	<i>Total net energy needs [kWh/m<sup>2</sup> of heated usable floor space per year]</i>
Individual houses and leisure homes with more than 150 m <sup>2</sup> of heated usable floor space	100 + 1600/m <sup>2</sup> of heated usable floor space
Block of flats	95
Nursery school	135
Office building	115
School building	110
University/university college	125
Hospital	225 (265)
Nursing home	195 (230)
Hotel building	170
Sports building	145
Business building	180
Cultural building	130
Light industry/workshops	140 (160)

*The requirements stated in parentheses apply to floor spaces in which heat recovery from ventilation air poses a risk of spreading pollutants/contagions.*