



Re-assessment of the Sustainability Quality of the Green Bond issued in 2015 by ING Bank NV

2 May 18

Aim and Scope of this Second Party Opinion

In 2015, ING Bank NV commissioned oekom research¹ to assist with the issuance of its Green Bond by assessing and confirming the sustainable added value of this bond using the criteria and indicators of the oekom Green Bond KPIs².

Additionally, ING Bank NV commissioned oekom research to carry out a re-assessment in order to provide investors with assurance with assurance that the asset selection still complies with the eliqibility criteria and that new projects are selected accordingly.

oekom research's mandate included the following services:

- Assessment of compliance of newly added projects with the oekom Green Bond KPIs.
- Review and classification of ING Bank NV sustainability performance on the basis of the oekom Corporate Rating.

Overall Re-evaluation of the Green Bond

oekom's overall evaluation of the Sustainability Bond issued by ING Bank NV remains positive:

- The overall sustainability quality of the bond and the sustainability performance of the funded assets in terms of sustainability benefits and risk avoidance and minimisation remain good (Part II of this assessment).
- ING Grope NV shows a sustainability performance above average (according to the oekom Corporate Rating, Part III of this Second Party Opinion). However, the rating shows a very severe controversy in the area of "Controversial Environmental Practices".

There are some aspects for which more specific selection or performance criteria would be recommended as it could still add to the overall quality of the Green Bond: Regarding public transport, social criteria like health and safety of passengers could be taken into account. Furthermore, working conditions in the supply chain of solar panels are an issue that future Green Bonds could address better.

¹ On March 15, 2018, oekom research joined Institutional Shareholder Services Inc. ("ISS"). oekom research will be renamed ISS-oekom.

² In the initial Second Party Opinion, the oekom Green Bond KPI was referred to as "Green Bond Verification Framework".



Part I – Green Bond Principles

ING has provided oekom research with detailed information describing eligibility criteria for the assets to be included in its Green Bond, the processes of selecting eligible assets, the management of proceeds and the future reporting to investors. Details can be found in the initial Second Party Opinion from 2015.

1) Use of Proceeds

The proceeds of this Green Bond are used exclusively to finance and refinance projects falling under a global Green Bond Framework developed by ING. This global framework covers six project categories (comprising of subcategories) of the bank's sustainable finance programme.

For the allocation of proceeds of this Green Bond issuance, projects from five categories of the Green Bond Framework have been chosen. All projects within the chosen five categories are assets ING seeks to refinance with the proceeds of the Green Bond.

Proje Greer	ct Categories ING global n Bond Framework	Project include Green portfol	ed in Bond	Number of projects initially included in 2015	Number of projects added in 2016	Number of projects added in 2018	% of total asset pool
1.	Renewable energy	✓	Yes	7	6	12	63.5%
1.1	Wind power (onshore and offshore)	✓	Yes	5	3	11	46.4%
1.2	Solar power	✓	Yes	2	3	1	17.1%
1.3	Hydro Power (small run- of-river)	×	No	0	0	0	0%
1.4	Geothermal power	×	No	0	0	0	0%
2.	Green building (commercial real estate)	✓	Yes	4	1	2	20.8%
3.	Public transport	✓	Yes	2	1	0	7.8%
3.1	Public transport vehicle production	✓	Yes	1	0	0	6.9%
3.2	Public transport infrastructure	✓	Yes	1	1	0	0.9%
4	Waste	✓	Yes	1	0	0	5.8%
4.1	Recycling	×	No	0	0	0	0%
4.2	Reuse of waste (gases)	✓	Yes	1	0	0	5.8%



Projec Green	ct Categories ING global Bond Framework	Project include Green portfol	ed in Bond	Number of projects initially included in 2015	Number of projects added in 2016	Number of projects added in 2018	% of total asset pool
5.	Water	✓	Yes	1	0	0	2.2%
5.1	Wastewater treatment	✓	Yes	1	0	0	2.2%
5.2	Water recycling	×	No	0	0	0	0%
5.3	Flood prevention (no dams)	×	No	0	0	0	0%
6.	Energy efficiency	×	No	0	0	0	0%

From a sustainability point of view, oekom research considers all project categories to be positive.

Additionally, oekom's analysis in 2015, 2016, and 2018, has shown that the majority of chosen projects meet specific high environmental and social standards (see part II of this document). These criteria are clearly defined, using quantitative indicators. The criteria aim at ensuring that positive impacts of the projects are not impaired by adverse impacts and effects in other areas (e.g. environmental impacts, impacts on local communities).

Part II - Sustainability Quality of the Green Bond

1) oekom Green Bond KPIs

Details of the individual criteria and indicators can be found in Annex 1 "oekom Green Bond KPIs".

2) Assessment of Newly Added Projects Financed by the Green Bond

Methods

oekom research has assessed whether the projects newly added to the asset pool of the Green Bond match the project categories and criteria listed in the oekom Green Bond KPIs. The assessment was carried out using information and documents provided to oekom research, partly on a confidential basis, by ING (e.g. ING's lending guidelines, project-related due diligence reports).



Findings

All findings refer to the total assets within that category

Renewable Energy: Wind power (onshore and offshore)

Sustainability Risks and Benefits of the Project Category

The environmental benefits of wind power comprise climate protection and the transition towards a low carbon economy. Further benefits are less environmental intervention (e.g. resource extraction, releases of waste streams to water or soil) and less need for cooling water in comparison to fossil fuel or nuclear power plants. From a social perspective, the transition from fossil fuels to wind power lowers negative human rights impacts of oil, gas and coal production (e.g. land-use conflicts, resettlement). In addition – different from fossil fuels combustion - wind power does not impact air quality.

However, the construction and operation of wind power plants can result in negative environmental impacts at construction sites (e.g. biodiversity, noise) and impacts on local communities. Further risks include potentially poor working conditions during construction and maintenance of power plants (especially with respect to worker safety) as well as in the production processes of wind power plants. As the construction of these plants requires large amounts of raw materials and equipment, life cycle aspects are an important factor when assessing the overall environmental footprint of related projects.

All projects selected for the Green Bond are located in highly-regulated and developed countries.

Project Type	Inclusion in asset pool	Percentage of volume in this project category
Onshore wind power plant	2015/2016	7%
Onshore wind power plant	2015/2016	8%
Onshore wind power plant	2018	5%
Onshore wind power plant	2018	3%
Onshore wind power plant	2015/2016	4%
Onshore wind power plant	2015/2016	2%
Onshore wind power plant	2015/2016	3%
Onshore wind power plant	2015/2016	4%



Onshore wind power plant	2015/2016	6%
Onshore wind power plant	2018	5%
Onshore wind power plant	2015/2016	3%
Onshore wind power plant	2015/2016	1%
Onshore wind power plant	2018	7%
Near-shore wind power plant	2018	10%
Offshore wind farm	2015/2016	7%
Offshore wind farm	2015/2016	14%
Offshore wind farm	2018	4%
Offshore wind farm	2018	7%

- 1. Consideration of environmental aspects during planning and operation
 - ✓ For 14 projects, accounting for 85% of the loans' volume, environmental impact assessments have been conducted (i.e. assessments including the consideration of all relevant natural goods). For the remaining 4 projects, accounting for 15% of the loans' volume, no or limited environmental assessments have been conducted.
 - ✓ None of the projects are located in key biodiversity areas such as Ramsar sites, UNESCO Natural World Heritage Sites or IUCN protected areas I or II. For projects located in IUCN protected area categories III to VI, ING conducts due diligence in accordance with the Equator Principles and takes mitigation measures to avoid possible negative environmental impacts.
 - ✓ For 13 of the projects, accounting for 80% of the respective loans' volume, good environmental standards are applied during the construction phase (e.g. specific construction periods, noise limits). No such information is available on the remaining 5 projects, accounting for 20% of the respective loans' volume.
 - ✓ For 16 projects, accounting for 93% of the loans' volume, at least adequate measures are in place to protect habitat and wildlife during operation of the plants (e.g. continuous monitoring of birds and bats, turbine turn-off times). No such information is available on the 2 remaining projects, accounting for 7% of the loans' volume.
- 2. Environmental aspects of wind power plants
 - ✓ For 15 projects, accounting for 87% of the loans' volume, the manufacturer carried out lifecycle assessments of the wind power plants and/or its components. No such information is available on the 3 remaining projects, accountingfor 13% of the loans' volume.
- 3. Community dialogue (onshore wind power projects only)
 - ✓ For 12 onshore and near-shore projects, accounting for 87% of the respective loans' volume, the active involvement of local residents is ensured, e.g. through official public dialogue. No such information is available for the 2 remaining projects, accounting for 13% of the respective loans' volume. For the other 4 wind projects community dialogue is not applicable.



- 4. Working conditions during construction and maintenance work
 - ✓ For 100% of the projects, high labour standards regarding e.g. the ILO core conventions (in accordance with national legislation).
 - ✓ For 100% of the projects, high standards regarding health and safety for both own employees and contractors are in place during construction and maintenance work (provided for by national legislation or the company's own policies and management systems).
- 5. Social standards in the supply chain
 - ✓ For 15 projects, accounting for 87% of the loans' volume, wind power plants are manufactured by companies that show a good performance regarding working conditions of own employees and contractors (according to respective grades in the companies' oekom Corporate Rating). For 3 projects, accounting for 13% of the loans' volume, the manufacturers show a poor or medium performance.
 - ✓ For 13 projects, accounting for 79% of the loans' volume, wind power plant manufacturers require high social standards from their suppliers (e.g. regarding the prohibition of forced and child labour, payment, working hours, and health and safety). For the 5 remaining projects, accounting for 21 % of the loans' volume, no information on the manufacturer's supplier standard is available.

Controversy assessment

 A controversy assessment on the included projects did not reveal any controversial activities or practices that could be attributed to ING.



Renewable Energy: Solar power

Sustainability risks and benefits of the project category

The environmental benefits of solar power comprise climate protection and the transition towards a low carbon economy. Further benefits are less environmental intervention (e.g. resource extraction, releases of waste streams to water or soil) and less need for cooling water in comparison to fossil fuel or nuclear power plants. From a social perspective, the transition from fossil fuels to solar power lowers negative human rights impacts of oil, gas and coal production (e.g. land-use conflicts, resettlement). In addition – different from fossil fuels combustion - solar power does not impact air quality.

With respect to potential risks, the manufacturing of solar panels in developing countries such as China can have negative social and environmental impacts. As the production of solar panels requires scarce raw materials and as the panels contain hazardous substances, aspects such as recyclability, management of hazardous substances and conversion efficiency are relevant to evaluate the overall environmental performance of related projects. However, in comparison with other renewable energy sources, social and environmental risks related to solar power are deemed to be low.

All projects selected for the Green Bond are located in highly-regulated and developed countries.

Project Type	Inclusion in asset pool	Percentage of volume in this project category	
Newly constructed solar field	2015/2016	17%	
Acquisition of solar field	2015/2016	12%	
PV roof system	2015/2016	41%	
PV roof systems	2018	4%	
Acquisition of solar field	2015/2016	26%	

- 1. Consideration of environmental aspects during planning and construction (not applicable for PV roof systems)
 - For the only newly constructed solar field project, no environmental impact assessment has not been conducted (i.e. assessments including the consideration of all relevant natural goods). For the other 4 solar projects, an environmental impact assessment is not applicable.
 - ✓ None of the projects are located in key biodiversity areas such as Ramsar sites, UNESCO Natural World Heritage Sites or IUCN protected areas I to IV.



- No information is available on environmental standards during the construction phase above legal requirements.
- 2. Environmental aspects of solar power plants
 - ✓ 3 projects, accounting for 62% of the loans' volume, have a performance ratio of at least 80%. One further project, accounting for 12% of the loans' volume, has a guaranteed performance ratio between 76.7 and 81.5%. It is unclear whether the last project, accounting for 26% of the loans' volume, achieves this ratio.
 - O For 1 project, accounting for 41% of the loans' volume, the conversion efficiency of solar panels is at least 15%. For 2 further projects, accounting for 21% of the loans' volume, the conversion efficiency of solar panels is between 14 and 15%. No information is available on the conversion efficiency of the remaining 2 projects, accounting for 38% of the loans' volume.
 - ✓ For 100% of the projects, take-back options for used solar panels are available (in accordance with European WEEE-legislation, US-regulations or in the context of the photovoltaic waste management initiative PV Cycle).
 - O No information is available on the percentage of loans allocated to projects that voluntarily fulfil the requirements of the European Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS Directive).
- 3. Community dialogue (not applicable for PV roof systems)
 - O No information is available for the only solar field construction project regarding involvement of local residents, e.g. through official public dialogue, in the construction process. The other 4 projects are not applicable.
- 4. Working conditions during construction and maintenance work
 - ✓ For 100% of the projects, high labour standards regarding e.g. the ILO core conventions (in accordance with national legislation).
 - ✓ For 100% of the projects, high standards regarding health and safety for both own employees and contractors are in place during construction and maintenance work (provided for by national legislation or the company's own policies and management systems).
- 5. Social standards in the supply chain of solar modules
 - O Like the majority of solar panel manufacturers, the suppliers selected for the projects do not show a good performance regarding working conditions (according to their oekom Corporate Rating) or do not report on their labour standards at all (e.g. regarding health and safety, freedom of association, working hours, minimum wages).
 - O It is unclear whether the projects' solar module manufacturers require high social standards from their suppliers (e.g. regarding the prohibition of forced and child labour, minimum wages, working hours, health and safety).

Controversy assessment

 A controversy assessment on the included projects did not reveal any controversial activities or practices that could be attributed to ING.



Green building (commercial real estate)

Sustainability Risks and Benefits of the Project Category

Green buildings are beneficial from an environmental point of view as they contribute to climate protection through optimised energy efficiency and air quality. Further, green buildings help to conserve natural resources and reduce environmental impact through the reduction of waste and wastewater. From a social point of view, green buildings can improve occupant health and comfort.

At the same time, there are possible sustainability risks that need to be taken into account. Possible social risks stem from working conditions at construction sites, the integration of new buildings into the social context and the safety of building users. Environmental risks stem from impacts on biodiversity at the planning stage, as well as from poor resource efficiency during construction phase and at the use stage.

All projects selected for the Green Bond are located in highly-regulated and developed countries.

Project Type	Green building label	Inclusion in asset pool	Percentage of volume in this project category
Newly constructed building	BREEAM excellent	2018	22%
Acquisition of existing building	BREEAM excellent	2015/2016	19%
Acquisition of existing building	LEED Gold	2015/2016	4%
Acquisition of existing building	BREEAM excellent	2015/2016	27%
Acquisition of existing building	BREEAM very good	2018	21%
Acquisition of existing building	LEED Gold	2015/2016	7%

- 1. Involvement of local residents at the planning stage (only applicable for new builds)
 - Regarding the newly constructed building in the asset pool, no information is available on the involvement of local residents at the planning stage.
- 2. Environmental standards for site selection (only applicable for new builds)
 - ✓ The building projects are all inside metropolitan areas.
 - For the newly constructed building, information is available regarding the development on brownfield sites.



3. Access to public transport

- ✓ 100% of loans are allocated to building projects that are located within a maximum of 1 km from one or more modalities of public transport.
- 4. Social standards for construction (only applicable for new builds)
 - ✓ 100% of loans are allocated to building projects located in countries where high labour standards are in place for both employees and contractors (e.g. ILO core conventions).
 - ✓ For 100% of the projects, high standards regarding health and safety for both own employees and contractors are in place (provided for by national legislation).
- 5. Environmental standards for construction (only applicable for new builds)
 - Regarding the one newly constructed building in this project category, no information is available on measures for water reduction, and adequate waste management streams at construction sites. For the 5 remaining projects, the indicator is not applicable.
- 6. Sustainable building materials (only applicable for new builds)
 - Regarding the one newly constructed building in this project category, no information is available on whether sustainable procurement measures regarding building materials are in place (e.g. recycled materials, third-party certification of wood based materials). For the 5 remaining projects, the indicator is not applicable.
- 7. Safety of building users
 - ✓ For 3 projects, accounting for 53% of the loans' volume, operational safety is ensured by constructional measures (e.g. fire safety, exit routes, CCTV). For the other 3 projects, accounting for 47% of the loans' volume, no detailed information on safety is available.
- 8. Water use minimisation in buildings
 - ✓ For 4 projects, accounting for 57% of the loans' volume, adequate measures to reduce water use are in place (e.g. greywater recycling, efficient applications). For the remaining 2 projects, accounting for 43% of the loans' volume, no adequate measures are in place.
- 9. Energy efficiency in buildings
 - √ 4 projects, accounting for 51% of the loans' volume, achieved good scores in the relevant sections of the respective building certificates and/or energy certificates. For the remaining 2 projects, accounting for 49% of the loans' volume, no detailed information on energy efficiency is available for oekom to assess this aspect.
- 10. Labels / certificates
 - ✓ 100% of building projects achieved good scores in green building certificates, i.e. minimum BREEAM "Very Good", LEED "Gold" or DGNB "Silver".
- 11. Sustainable use / purpose of buildings
 - ✓ For 100% of building projects, production facilities of armaments, pesticides, tobacco and generation facilities for environmentally controversial energy forms such as nuclear power or fossil fuelled power can be excluded.

Controversy assessment

 A controversy assessment on the included projects did not reveal any controversial activities or practices that could be attributed to ING.



Public transport: Public transport vehicle production

Sustainability Risks and Benefits of the Project Category

The production of electric trains is positive from an environmental point of view as electric trains help to foster climate protection through lower carbon emissions. From a social point of view, passenger train transport helps to reduce injuries and fatalities caused by car accidents.

At the same time, when evaluating the production of electric trains, certain risks have to be taken into account. Major risks from an environmental point of view stem from the negligence of environmental impacts throughout the whole life-cycle (i.e. all impacts from cradle to grave). Social risks stem from safety of both workers at production sites and potential train operators and passengers.

All projects selected for the Green Bond are in highly-regulated and developed countries.

Project type	Inclusion in asset pool	Percentage of volume in this project category
Acquisition of electric trains	2015/2016	100%

- 1. Consideration of environmental aspects at manufacturing sites
 - ✓ For 1 project, accounting for 100% of the loans' volume, trains are produced at manufacturing sites with an environmental management system in place that is certified to the ISO 14001 standard.
 - For 1 project, accounting for 100% of the loans' volume, trains are produced by a manufacturer that provides a commitment on the improvement of resource efficiency.
 - No information is available on site-specific action plans to reduce greenhouse gas emissions.
 - ✓ For 1 project, accounting for 100% of the loans' volume, trains are produced by a manufacturer that has measures in place to manage the use of substances of concern in production processes.
 - ✓ For 1 project, accounting for 100% of the loans' volume, trains are produced by a manufacturer that adequately manages hazardous and non-hazardous waste streams.
- 2. Working conditions at manufacturing sites
 - ✓ For 1 project, accounting for 100% of the loans' volume, trains are produced at manufacturing sites with a health and safety management system in place that is certified to the OHSAS 18001 standard
 - ✓ For 1 project, accounting for 100% of the loans' volume, trains are produced in countries where high labour standards are in place for both employees and contractors (e.g. ILO core conventions).



- 3. Environmental aspects of trains (locomotives and wagons)
 - No detailed information on comprehensive life-cycle assessments is available.
 - ✓ For 1 project, accounting for 100% of the loans' volume, the trains' material efficiency is considered during product design (e.g. through reduced weight).
 - No information is available on recycled material and guidelines regarding the recyclability of new products.
 - ✓ For 1 project, accounting for 100% of the loans' volume, energy efficiency of trains during operation is optimised (e.g. through reduced train weight, improved aerodynamics, driver advisory system).
- 4. Social aspects of trains
 - O No detailed information is available on health and safety measures for both passengers and operators (e.g. fire detection, vigilance control, video surveillance, access for passengers with reduced mobility).
- 5. Social standards in the supply chain
 - ✓ For 1 project, accounting for 100% of the loans' volume, trains are produced by a manufacturer that requires high labour and health and safety standards in its supply chain (e.g. ILO core conventions).

Controversy assessment

 A controversy assessment on the included projects did not reveal any controversial activities or practices that could be attributed to ING.



Public transport: Public transport infrastructure

Sustainability Risks and Benefits of the Project Category

The operation of electric passenger trains is positive from an environmental point of view as it helps to foster climate protection through lower carbon emissions and optimised transport efficiency. From a social point of view, operation of electric passenger trains is positive as it helps to minimize strain on transport infrastructure.

At the same time, when evaluating public transport projects, certain risks have to be taken into account. From an environmental point of view, risks arise from noise emissions and energy-intensive rail systems. Social risks concern the health and safety of both passengers and operators.

All projects selected for the Green Bond are in highly-regulated and developed countries.

Project Type	Inclusion in asset pool	Percentage of volume in this project category
Construction of passenger train network (incl. station infrastructure)	2015/2016	100%

- 1. Consideration of environmental impacts during planning (only applicable for infrastructure construction and large-scale infrastructure operation)
 - ✓ An environmental impact assessment has been conducted (i.e. assessments including the consideration of all relevant natural goods) for the financed project.
 - No information is available on environmental standards during the construction phase above legal requirements.
 - 2. Community dialogue (only applicable for infrastructure construction and large-scale infrastructure operation)
 - Only basic information is available on the involvement of local residents at the planning stage.
- 3. Working conditions during construction, operation and maintenance
 - ✓ High labour standards regarding e.g. the ILO core conventions of association and collective bargaining are in place in the financed project (provided for by national legislation or the company's own policies and management systems).
 - ✓ High standards regarding health and safety for both own employees and contractors are in place in the financed project (provided for by national legislation or the company's own policies and management systems).



- 4. Transport safety
 - ✓ 100% of loans are allocated to a project that has a comprehensive safety management system in place (including e.g. risk assessments, training, audits).
 - Measures to avoid fatigue of train operators are not applicable to this project.
- 5. Social aspects of train services
 - √ 100% of loans are allocated to a project for which the accessibility for all costumer groups is ensured (e.g. through barrier-free access to trains, transport of personal assistance free of charge).
- 6. Environmental aspects of public transport infrastructure
 - ✓ 100% of loans are allocated to a project that operates energy efficient locomotives and wagons (ensured through e.g. lightweight design, energy recovery systems).
 - ✓ 100% of loans are allocated to a project for which measures to optimise energy efficiency of train and network operation are in place (e.g. through computer aided traffic control and driving of trains).
 - O No information is available on specific measures to reduce transport-related noise emissions (e.g. low noise tracks).
 - No information is available on whether the environmentally friendly disposal of the fleet is guaranteed by the operators.
- 7. Social standards in the supply chain (only applicable for infrastructure construction)
 - No information is available on whether high labour and health and safety standards are applied by the manufacturers (e.g. ILO core conventions).

Controversy assessment

 A controversy assessment on the included projects did not reveal any controversial activities or practices that could be attributed to ING.



Waste: Reuse of waste (gases/landfill gas-to-energy)

Sustainability Risks and Benefits of the Project Category

Landfill gas-to-energy projects are considered beneficial from a sustainability point of view: Landfill gas (LFG) is a threat to human health and contributes to global warming. Thus, using it for energy generation reduces health impacts by destroying the majority of hazardous air pollutants through combustion. Further, landfill gas-to-energy projects reduce the climate change impacts of landfill gas.

Still, when evaluating landfill gas-to-energy projects, certain social and environmental risks need to be taken into account. Social risks are mainly posed by working conditions, especially regarding workers' health and safety. Safety aspects of LFG power plants could result in negative impacts on human health as well as on the environment.

All projects selected for the Green Bond are located in highly-regulated and developed countries.

Project Type	Inclusion in asset pool	Percentage of volume in this project category
Operation of 17 LFG power plants and service contracts for 7 LFG power plants	2015	100%

- 1. Consideration of environmental aspects during planning and construction
 - Not applicable as LFG power plants are built next to existing landfill sites.
- 2. Environmental aspects of LFG power plants
 - No information on the conversion efficiency of LFG power plants is available.
- 3. Safety aspects of LFG power plants
 - ✓ 100% of loans are allocated to projects that are in line with national legislation ensuring safety of LFG power plants (e.g. controls on the migration of LFG, limits of methane levels, wastewater treatment).
- 4. Community dialogue
 - Not applicable as LFG power plants are built next to existing landfill sites.
- 5. Working conditions during construction and operation
 - ✓ 100% of loans are allocated to projects are located in a country where high labour standards are in place for both employees and contractors (e.g. ILO core conventions).
 - ✓ 100% of loans are allocated to projects have a health and safety management system in place.



- 6. Social standards in the supply chain
 - No information is available on whether high labour and health and safety standards are applied by the manufacturers of the plants' equipment (e.g. ILO core conventions).

Controversy assessment

 A controversy assessment on the included projects did not reveal any controversial activities or practices that could be attributed to ING.



Water: Wastewater treatment

Sustainability Risks and Benefits of the Project Category

From a sustainability point of view, wastewater treatment is beneficial as it helps to maintain clean water for reuse, to optimise resource recovery and provide a solution to water shortages. Furthermore, wastewater treatment can safeguard water sources and the ground from contamination through wastewater, which is harmful to people as well as flora and fauna. Properly treated wastewater contains fewer nutrients, which would otherwise stimulate growth of algae and reduce the availability of oxygen, therefore contributing to the protection of aquatic life.

At the same time, the construction and operation of wastewater treatment facilities can present social as well as environmental risks. Social risks mainly stem from workers' health and safety and from nuisance of local residents. Environmental risks stem from possible environmental impacts of wastewater treatment processes, i.e. leakage of sewage or poor management of sewage sludge disposal (e.g. disposal into waterways). Also, quality standards for treated water need to be taken into account when evaluating wastewater treatment projects.

All projects selected for the Green Bond are located in highly-regulated and developed countries.

Project Type	Inclusion in asset pool	Percentage of volume in this project category
Operation of 8 wastewater treatment plants and 3 water links and service contracts for maintenance and supply of several wastewater and water facilities	2015	100%

- 1. Consideration of environmental aspects during planning and construction
 - Not applicable as all assets are already in place.
- 2. Environmental impacts of wastewater treatment plants
 - ✓ For 1 project, accounting for 53% of the cash flows³, measures to prevent leakages are in place (e.g. data loggers, monitoring). The project is mainly active in operation and maintenance of wastewater treatment plants and water links. For 2 projects, accounting for 47% of the cash flows, no information on measures to prevent leakages is available. These 2 projects are mainly active in wastewater treatment.

³ Percentages refer to forecasted cash flows as the loan is to be repaid from cash flows generated by a portfolio of projects.



- ✓ For 1 project, accounting for 77% of the relevant cash flows (i.e. cash flows linked to the operation of wastewater treatment plants), some measures to reduce the environmental impact of sewerage sludge disposal are in place (e.g. transport of leachate to treatment plants, energy generation). For 1 project, accounting for 23% of the relevant cash flows, basic information on measures to reduce the impact of sewerage sludge disposal is available.
- O For 1 project, accounting for 23% of the relevant cash flows (i.e. cash flows linked to the operation of wastewater treatment plants), high standards regarding the quality of treated wastewater are in place (i.e. quality exceeds European legal requirements). For 1 project, accounting for 77% of the relevant cash flows, quality of treated water complies with the European Water Framework Directive and no further information is available.
- For the wastewater treatment project that runs combined heat and power and biomass plants (77% of relevant cash flows, i.e. cash flows linked to the operation of wastewater treatment plants), no information on the conversion efficiency for power generation is available.
- 3. Community dialogue
 - Not applicable as the project holder is contracted to operate the plants for another (public) water and sewage services provider.
- 4. Working conditions during construction and operation
 - ✓ 100% of projects are located in a country where high labour standards are in place for both employees and contractors (i.e. e.g. ILO core conventions).
 - ✓ 100% of projects have a health and safety management system in place.

Controversy assessment

 A controversy assessment on the included projects did not reveal any controversial activities or practices that could be attributed to ING.



Part III - Assessment of ING's Sustainability Performance

In the oekom Corporate Rating with a rating scale from A+ (excellent) to D- (poor), ING Groep NV was awarded a score of C-, one level below the oekom Prime threshold. ING's rating result means that the company performed well in terms of sustainability, both compared against others in the industry and in terms of the industry-specific requirements defined by oekom research. In oekom research's view, the securities issued by the company thus all meet the basic requirements for sustainable investments.

As at 2 May 2018, this rating puts ING in place39 out of 249 companies rated by oekom research in the Financials/Commercial Banks and Capital Markets sector.

In this sector, oekom research has identified the following issues as the key challenges facing companies in term of sustainability management:

- Sustainability impacts of lending and other financial services/products
- Customer and product responsibility
- Sustainable investment criteria
- Employee relations and work environment
- Business ethics

In four key issues, ING Groep NV achieved a rating that was above the average for the sector. A significant outperformance was achieved in "Sustainable investment criteria" and "Business ethics".

The company is involved in a very severe controversy in the field "Controversial Environmental Practices". Overall, the company has a "moderate" controversy level compared to a level of "significant" in the industry's average.

Details on the rating of the issuer can be found in Annex 2 "Issuer rating results".

oekom research AG

Munich, 2 May 2018



Disclaimer

- 1. oekom research AG uses a scientifically based rating concept to analyse and evaluate the environmental and social performance of companies and countries. In doing so, we adhere to the highest quality standards which are customary in responsibility research worldwide. In addition we create a Second Party Opinion (SPO) on bonds based on data from the issuer.
- 2. We would, however, point out that we do not warrant that the information presented in this SPO is complete, accurate or up to date. Any liability on the part of oekom research AG in connection with the use of these SPO, the information provided in them and the use thereof shall be excluded. In particular, we point out that the verification of the compliance with the selection criteria is based solely on random samples and documents submitted by the issuer.
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About oekom research

oekom research is one of the world's leading rating agencies in the field of sustainable investment. The agency analyses companies and countries with regard to their environmental and social performance. oekom research has extensive experience as a partner to institutional investors and financial service providers, identifying issuers of securities and bonds which are distinguished by their responsible management of social and environmental issues. More than 100 asset managers and asset owners routinely draw on the rating agency's research in their investment decision making. oekom research's analyses therefore currently influence the management of assets valued at over 600 billion euros.

As part of our Green Bond Services, we provide support for companies and institutions issuing sustainable bonds, advise them on the selection of categories of projects to be financed and help them to define ambitious criteria. We verify the compliance with the criteria in the selection of projects and draw up an independent second party opinion so that investors are as well informed as possible about the quality of the loan from a sustainability point of view.

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Annex

- Annex 1: oekom Green Bond KPIs
- Annex 2: oekom Corporate Rating of ING Groep NV



Annex 1: oekom Green Bond KPIs

oekom Green Bond KPIs

The oekom Green Bond KPIs serve as a structure for evaluating the sustainability quality – i.e. the social and environmental added value – of the Green Bond asset pool. It comprises firstly the definition of the use of proceeds category offering added social and/or environmental value and secondly the specific sustainability criteria by means of which this added value and therefore the sustainability performance of the Eligible Green Project Portfolio can be clearly identified and described.

The sustainability criteria are complemented by specific indicators, which enable quantitative measurement of the sustainability performance of the Green Bond and which can also be used for reporting.

Use of Proceeds

The proceeds of this Green Bond issued by ING Bank NV will be exclusively used for the following project categories:

- 1. Renewable energy
 - 1.1 Wind power (onshore and offshore)
 - 1.2 Solar power
 - 1.3 Hydro power (small run-of-river)
 - 1.4 Geothermal power
- 2. Green buildings (commercial real estate)
- 3. Public transport
 - 3.1. Public transport vehicle production
 - 3.2. Public transport infrastructure
- 4. Waste
 - 4.1. Recycling
 - 4.2. Reuse of waste (gases)
- 5. Water



- 5.1. Wastewater treatment
- 5.2. Water recycling
- 5.3. Flood prevention (no dams)
- 6. Energy efficiency

Sustainability Criteria and Quantitative Indicators for Use of Proceeds

In order to ensure that the environmental and social risks linked to the underlying assets are prevented and the opportunities clearly fostered, a set of sustainability criteria has been established for the project category.

Project category 1: Renewable energy

Project category 1.1: Renewable energy – Wind power (onshore and offshore)

- 1. Consideration of environmental aspects during planning and operation
- Percentage of loans allocated to projects that underwent environmental impact assessments at the planning stage.
- Percentage of loans allocated to projects for which the location in key biodiversity areas can be excluded (e.g. exclusion of Ramsar sites, UNESCO Natural Word Heritage, IUCN protected areas I-IV).
- Percentage of loans allocated to projects that meet high environmental standards and requirements during the construction phase (e.g. noise mitigation, minimisation of environmental impact during construction work).
- Percentage of loans allocated to projects for which measures to protect habitat and wildlife are in place (e.g. measures to protect birds and bats during operation of the power plant, environmentally friendly anti-rust protection).
- 2. Environmental aspects of wind power plants
- Percentage of loans allocated to projects for which life-cycle assessments of the wind power plants have been carried out.
- 3. Community dialogue
- Percentage of loans allocated to projects that feature community dialogue as an integral part of the planning process and the operational phase (e.g. sound information of communities, community advisory panels and committees, surveys and dialogue platforms, grievance mechanisms and compensation schemes).
- 4. Working conditions during construction and maintenance work
- Percentage of loans allocated to projects with high labour and health and safety standards for construction and maintenance work conducted by own employees and contractors (e.g. ILO core conventions).
- 5. Social standards in the supply chain



• Percentage of loans allocated to projects for which high labour and health and safety standards are applied in the supply chain (e.g. ILO core conventions).

Controversies

• Description of controversial projects (e.g. due to labour rights violations, environmental accidents, adverse biodiversity impacts).

Possible impact indicators: Energy production and avoidance of CO2 emissions

- Total annual energy production by the wind power projects (in kWh).
- Total annual avoidance of CO2 emissions through the wind power projects (in t), based on the carbon intensity of the relevant country's / region's energy mix.

Project category 1.2: Renewable energy - Solar power

- 1. Consideration of environmental aspects during planning and construction
- Percentage of loans allocated to projects that underwent environmental impact assessments at the planning stage.
- Percentage of loans allocated to projects for which the location in key biodiversity areas can be excluded (e.g. exclusion of Ramsar sites, UNESCO Natural Word Heritage, IUCN protected areas I-IV).
- Percentage of loans allocated to projects that meet high environmental standards and requirements during the construction phase (e.g. noise mitigation, minimisation of environmental impact during construction work).
- 2. Environmental aspects of solar power plants
- Percentage of loans allocated to projects for which the performance ratio of solar power plants is at least 80%.
- Percentage of loans allocated to projects for which conversion efficiency is at least 15%.
- Percentage of projects that meet high environmental standards regarding take-back and recycling
 of solar modules at end-of-life stage.
- Percentage of loans allocated to projects for which the thresholds defined by the European Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS Directive) are voluntarily fulfilled.
- 3. Community dialogue (not applicable for PV roof systems)
- Percentage of loans allocated to projects that feature community dialogue as an integral part of the planning process and construction phase (e.g. sound information of communities, community advisory panels and committees, surveys and dialogue platforms, grievance mechanisms and compensation schemes).
- 4. Working conditions during construction and maintenance work
- Percentage of loans allocated to projects with high labour and health and safety standards for construction and maintenance work conducted by own employees and contractors (e.g. ILO core conventions).



5. Social standards in the supply chain

• Percentage of loans allocated to projects for which high labour and health and safety standards are applied in the supply chain (e.g. ILO core conventions).

Controversies

 Description of controversial projects (e.g. due to labour rights violations, environmental accidents, adverse biodiversity impacts).

Possible impact indicators: Energy production and avoidance of CO2 emissions

- Total annual energy production by the solar power projects (in kWh).
- Total annual avoidance of CO2 emissions through the solar power projects (in t); based on the carbon intensity of the relevant country's / region's energy mix.

Project category 1.3: Renewable energy – Hydro power (small run-of-river)

- 1. Consideration of environmental aspects during planning and construction
- Percentage of funds allocated to projects that underwent environmental impact assessments at the planning stage.
- Percentage of funds allocated to projects for which the location in key biodiversity areas can be excluded (e.g. exclusion of Ramsar sites, UNESCO Natural Word Heritage, IUCN protected areas I-IV).
- Percentage of funds allocated to projects that meet high environmental standards and requirements during the construction phase (e.g. noise mitigation, minimisation of environmental impact during construction work).
- Percentage of funds allocated to projects for which measures to protect habitat and wildlife are in place (e.g. provision of fish passes, fish-friendly turbines, provision for sediment transport, management of erosion risks).

2. Community dialogue

- Percentage of funds allocated to projects that feature community dialogue as an integral part of the planning process and construction phase (e.g. sound information of communities, community advisory panels and committees, surveys and dialogue platforms, grievance mechanisms and compensation schemes).
- 3. Working conditions during construction and maintenance work
- Percentage of funds allocated to projects for which high labour and health and safety standards are applied for both own employees and contractors (e.g. ILO core conventions).
- 4. Social standards in the supply chain
- Percentage of funds allocated to projects for which high labour and health and safety standards are applied in the supply chain (e.g. ILO core conventions).

Controversies

 Description of controversial projects (e.g. due to labour rights violations, environmental accidents, adverse biodiversity impacts).

Possible impact indicators: Avoidance of CO2 emissions

Total annual energy production by the hydro power projects (in kWh).



• Total annual avoidance of CO2 emissions by the hydro power projects (in t); based on the carbon intensity of the relevant (e.g. country) energy mix.

Project category 1.4: Renewable energy – Geothermal power

- 1. Consideration of environmental aspects during planning and construction
- Percentage of loans allocated to projects that underwent environmental impact assessments at the planning stage.
- Percentage of loans allocated to projects for which major fault lines are considered in the planning process and siting in an appropriate distance from major fault lines is guaranteed.
- Percentage of loans allocated to projects for which the location in key biodiversity areas can be excluded (e.g. exclusion of Ramsar sites, UNESCO Natural Word Heritage, IUCN protected areas I-IV).
- Percentage of loans allocated to projects that meet high environmental standards and requirements during the construction phase (e.g. noise mitigation, minimisation of environmental impact during construction work).

2. Environmental aspects of geothermal power plants

- Percentage of loans allocated to projects for which measures to avoid contamination of soil and groundwater are in place (e.g. well casing, monitoring of wells during drill activities, management of waste streams).
- Percentage of loans allocated to projects for which appropriate measures for the disposal of flowback and production water are in place (e.g. exclusion of introduction into waterways or normal wastewater treatment plants, exclusion of impoundments, treatment and reuse of flowback and production water, safe storage).
- Percentage of loans allocated to projects for which measures to manage gaseous emissions are in place (e.g. closed-loop systems).
- Percentage of loans allocated to projects for which seismic monitoring is in place.

3. Community dialogue

 Percentage of loans allocated to projects that feature community dialogue as an integral part of the planning process and construction phase (e.g. sound information of communities, community advisory panels and committees, surveys and dialogue platforms, grievance mechanisms and compensation schemes).

4. Working conditions during construction and operation

- Percentage of loans allocated to projects with high labour and health and safety standards for construction work conducted by own employees and contractors (e.g. ILO core conventions).
- Percentage of loans allocated to projects with high labour and health and safety standards for operational tasks conducted by own employees and contractors (e.g. ILO core conventions).

5. Social standards in the supply chain

 Percentage of funds allocated to projects for which high labour and health and safety standards are applied in the supply chain (e.g. ILO core conventions).



Controversies

• Description of controversial projects (e.g. due to labour rights violations, environmental accidents, adverse biodiversity impacts).

Possible impact indicators: Energy production and avoidance of CO2 emissions

- Total annual energy production by the geothermal power projects (in kWh).
- Total annual avoidance of CO2 emissions through the geothermal power projects (in t). The CO2 avoidance is based on the net reduction of CO2 (CO2 emissions avoided minus CO2 equivalents emitted during geothermal activities) and on the carbon intensity of the relevant country's / region's energy mix.

Project category 2: Green buildings (commercial real estate)

- 1. Involvement of local residents at the planning stage (only applicable for new builds)
- Percentage of loans allocated to building projects for which residents are involved at the planning stage (e.g. information of residents, dialogue platforms).
- 2. Environmental standards for site selection (only applicable for new builds)
- Percentage of loans allocated to large-scale building projects (> 5,000 m2) outside metropolitan areas for which an environmental impact assessment is carried out.
- Percentage of loans allocated to building projects that are developed on brownfield sites.
- 3. Access to public transport (only applicable for new builds)
- Percentage of loans allocated to building projects that are located within a maximum of 1 km from one or more modalities of public transport.
- 4. Social standards for construction
- Percentage of loans allocated to building projects with high labour and health and safety standards for construction work conducted by own employees and contractors (e.g. ILO core conventions).
- 5. Environmental standards for construction
- Percentage of loans allocated to building projects for which resource efficiency (e.g. water, energy) and adequate management of waste is guaranteed by the implementing construction companies.
- 6. Sustainable building materials
- Percentage of loans allocated to building projects for which sustainable procurement measures regarding building materials are in place (e.g. recycled materials, third-party certification of wood based materials).
- 7. Safety of building users
- Percentage of loans allocated to building projects for which the operational safety is ensured by constructional measures (e.g. fire safety, elevator safety).
- 8. Water use minimisation in buildings
- Percentage of loans allocated to building projects for which measures to reduce water use are in place (e.g. water metering, high-efficiency fixtures and fittings, rainwater harvesting).
- 9. Energy efficiency of buildings



 Percentage of loans allocated to building projects that received good scores in the energy efficiency ratings of the respective buildings certificates (BREEAM, LEED) or that are proven to be part of the top 15% of the local market in terms of energy efficiency.

10. Labels / Certificates

- Percentage of loans allocated to building projects that obtained a BREEAM "Very Good", DGNB "Silver / Gold"⁴, LEED "Gold" certificate or HQE "excellent" or better certification.
- 11. Sustainable use / purpose of buildings (if already determined)
- Percentage of building projects for which production facilities of armaments, pesticides, tobacco and generation facilities for environmentally controversial energy forms such as nuclear power or fossil fuelled power can be excluded.

Controversies

• Description of controversial projects (e.g. due to labour rights violations, environmental accidents, adverse biodiversity impacts).

Possible impact indicators: Energy consumption and avoidance of CO2 emissions

- Average primary energy consumption (in kWh/m2).
- Annual CO2 emissions (in kg/m2) compared to the local average.

Project category 3: Public transport

Project category 3.1: Public transport – Public transport vehicle production

- 1. Consideration of environmental aspects at manufacturing sites (only applicable for newly produced vehicles)
- Percentage of loans allocated to vehicles produced at manufacturing sites that have a comprehensive environmental management system in place.
- Percentage of loans allocated to vehicles produced at manufacturing sites where material efficiency is an integral part of production processes.
- Percentage of loans allocated to vehicles produced at manufacturing sites that properly manage direct and indirect carbon emissions (through e.g. inventories, targets and action plans).
- Percentage of loans allocated to vehicles produced at manufacturing sites where substances of concern are strictly limited in production processes.
- Percentage of loans allocated to vehicles produced at manufacturing sites where hazardous and non-hazardous waste streams are properly managed.
- 2. Working conditions at manufacturing sites (only applicable for newly produced vehicles)
- Percentage of loans allocated to vehicles produced at manufacturing sites that have a comprehensive health and safety management system in place.

⁴ With effect from 1 July 2015, DGNB updated its certification scheme, now ranging from "Bronze" to "Platinum": The "Bronze" certificate will be replaced by "Silver", "Silver" by "Gold" and "Gold" by "Platinum" for new certifications with immediate effect. "Bronze" will only be used for existing buildings in the future. The evaluation system and the assessment methodology remain unchanged.



 Percentage of loans allocated to vehicles produced at manufacturing sites where high labour standards are guaranteed (e.g. ILO core conventions).

3. Environmental aspects of vehicles

- Percentage of loans allocated to vehicles for which comprehensive life-cycle-assessments have been conducted.
- Percentage of loans allocated to vehicles for which material efficiency is considered during product design.
- Percentage of loans allocated to vehicles for which a significant proportion of recycled material is used (e.g. steel, plastics).
- Percentage of loans allocated to vehicles for which recyclability at end-of-life stage has been considered during design and construction.
- Percentage of loans allocated to vehicles for which energy efficiency during operation is optimised (e.g. through energy recovery systems).
- Percentage of loans allocated to vehicles that fulfil high international standards regarding air emissions (e.g. NOx, SOx, dust) (not applicable for electric vehicles).

4. Social aspects of vehicles

- Percentage of loans allocated to vehicles which ensure health and safety for both passengers and operators (e.g. vigilance control, minimisation of noise exposure).
- 5. Social standards in the supply chain (only applicable for newly produced vehicles)
- Percentage of loans allocated to vehicle manufacturers that require high labour and health and safety standards in their supply chain (e.g. ILO core conventions).

Controversies

• Description of controversial projects (e.g. due to labour rights violations, environmental accidents, adverse biodiversity impacts).

3.2 Public transport – Public transport infrastructure

- 1. Consideration of environmental impacts during planning (only applicable for infrastructure construction and large-scale infrastructure operation)
- Percentage of funds allocated to projects that underwent environmental impact assessments at the planning stage.
- Percentage of funds allocated to projects that meet high environmental standards and requirements during the construction phase (e.g. minimisation of environmental impact during construction work).
- 2. Community dialogue (only applicable for infrastructure construction and large-scale infrastructure operation)
- Percentage of loans allocated to projects that feature community dialogue as an integral part of the planning process and construction phase (e.g. sound information of communities, community advisory panels and committees, surveys and dialogue platforms, grievance mechanisms and compensation schemes).



- 3. Working conditions during construction, operation and maintenance
- Percentage of loans allocated to projects with high labour and health and safety standards for operation of trains conducted by own employees and contractors (e.g. ILO core conventions).
- Percentage of loans allocated to projects with high labour and health and safety standards for maintenance work conducted by own employees and contractors (e.g. ILO core conventions).

4. Transport safety

- Percentage of loans allocated to projects that have a safety management system in place (i.e. policies, responsibilities, risk assessments and monitoring, training, emergency management).
- Percentage of loans allocated to projects for which measures to avoid fatigue of train operators are in place (e.g. maximum shift duration, monitoring levels of fatigue).

5. Social aspects of public transport infrastructure

• Percentage of loans allocated to projects for which the accessibility for all costumer groups is ensured (e.g. through assistance services, barrier-free access to trains and platforms).

6. Environmental aspects of public transport infrastructure

- Percentage of loans allocated to projects for which measures to reduce transport-related air emissions are in place (not applicable for electric services).
- Percentage of loans allocated to projects that operate energy efficient vehicles (e.g. trains equipped with energy recovery systems, lightweight design).
- Percentage of loans allocated to projects for which measures to optimise energy efficiency are in place for both vehicle and network operation (e.g. computer aided train operation, passenger load factor monitoring, energy efficient lighting at train stations).
- Percentage of loans allocated to projects for which measures to reduce transport-related noise emissions are in place (e.g. low-noise tracks).
- Percentage of loans allocated to projects for which the environmentally friendly disposal of the fleet is guaranteed by the operator.

7. Social standards in the supply chain (only applicable for infrastructure construction)

 Percentage of loans allocated to projects for which high labour and health and safety standards are applied in their supply chain (e.g. ILO core conventions).

Controversies

• Description of controversial projects (e.g. due to labour rights violations, environmental accidents, adverse biodiversity impacts).



Project category 4: Waste

Project category 4.1: Waste - Recycling

- 1. Consideration of environmental aspects during planning and construction
- Percentage of loans allocated to projects that underwent environmental impact assessments at the planning stage.
- Percentage of loans allocated to projects for which the location in key biodiversity areas can be excluded (e.g. exclusion of Ramsar sites, UNESCO Natural Word Heritage, IUCN protected areas I-IV).
- Percentage of loans allocated to projects that meet high environmental standards and requirements during the construction phase (e.g. noise mitigation, minimisation of environmental impact during construction work).

2. Working conditions during construction and operation

- Percentage of loans allocated to projects with high labour and health and safety standards for construction work conducted by own employees and contractors (e.g. ILO core conventions).
- Percentage of loans allocated to projects with high labour and health and safety standards for operational tasks conducted by own employees and contractors (e.g. ILO core conventions).
- Percentage of loans allocated to projects for which safe handling of materials is ensured (e.g. counselling and training of staff regarding material-specific health and safety issues, comprehensive safety information).

4. Environmental aspects of recycling

- Percentage of loans allocated to projects that have a comprehensive environmental management system in place.
- Percentage of loans allocated to projects for which hazardous substances management is in place (e.g. treatment, storage and disposal of hazardous substances).

5. Community dialogue

 Percentage of loans allocated to projects that feature community dialogue as an integral part of the planning process and construction phase (e.g. sound information of communities, community advisory panels and committees, surveys and dialogue platforms, grievance mechanisms and compensation schemes).

6. Social standards in the supply chain

 Percentage of loans allocated to vehicle manufacturers that require high labour and health and safety standards in their supply chain (e.g. ILO core conventions).



Controversies

• Description of controversial projects (e.g. due to labour rights violations, environmental accidents, adverse biodiversity impacts).

Possible impact indicators: Materials recycled

- Materials recycled (in m³) by the recycling projects per year.
- Total annual avoidance of resource use by the recycling projects (in m³); based on the material intensity of the relevant (e.g. country, industry) material use.

Project category 4.2: Waste – Reuse of waste (gases)

- 1. Consideration of environmental aspects during planning and construction
- Percentage of projects that underwent environmental impact assessments at the planning stage.
- Percentage of projects for which the location in key biodiversity areas can be excluded (e.g. exclusion of Ramsar sites, UNESCO Natural Word Heritage, IUCN protected areas I-IV).
- Percentage of projects that meet high environmental standards and requirements during the construction phase (e.g. noise mitigation, minimisation of environmental impact during construction work).
- 2. Environmental aspects of LFG power plants
- Percentage of loans allocated to projects for which the conversion efficiency is at least 25%.
- 3. Safety aspects of LFG power plants
- Percentage of loans allocated to projects that ensure safety at LFG power plants (e.g. employee protection from explosion through security, alarm and monitoring systems).
- 4. Community dialogue
- Percentage of loans allocated to projects that feature community dialogue as an integral part of the planning process and construction phase (e.g. sound information of communities, community advisory panels and committees, surveys and dialogue platforms, grievance mechanisms and compensation schemes).
- 5. Working conditions during construction and operation
- Percentage of loans allocated to projects with high labour and health and safety standards for construction work conducted by own employees and contractors (e.g. ILO core conventions).
- Percentage of loans allocated to projects with high labour and health and safety standards for operational tasks conducted by own employees and contractors (e.g. ILO core conventions).
- 6. Social standards in the supply chain
- Percentage of loans allocated to projects for which high labour and health and safety standards are applied in the supply chain (e.g. ILO core conventions).

Controversies

 Description of controversial projects (e.g. due to labour rights violations, environmental accidents, adverse biodiversity impacts).

Possible impact indicators:

Total annual energy production by the LFG power projects (in kWh).



• Total annual avoidance of CO2e emissions through the LFG power projects (in t); based on the carbon intensity of the relevant country's / region's energy mix.

Project category 5: Water

Project category 5.1: Water - Wastewater treatment

- 1. Consideration of environmental aspects during planning and construction
- Percentage of loans allocated to projects that underwent environmental impact assessments at the planning stage.
- Percentage of loans allocated to projects for which the location in key biodiversity areas can be excluded (e.g. exclusion of Ramsar sites, UNESCO Natural Word Heritage, IUCN protected areas I-IV).
- Percentage of loans allocated to projects that meet high environmental standards and requirements during the construction phase (e.g. noise mitigation, minimisation of environmental impact during construction work).

2. Environmental impacts of wastewater treatment plants

- Percentage of loans allocated to projects for which measures to prevent leakage of sewerage systems are in place (e.g. monitoring systems, adequate maintenance and repair).
- Percentage of loans allocated to projects for which measures to reduce the environmental impacts
 of sewage sludge disposal are in place (e.g. exclusion of introduction into waterways and landfill,
 exclusion or standards for agricultural use, utilisation of energy).
- Percentage of loans allocated to projects that apply high standards regarding the quality of the treated water.
- Percentage of loans allocated to projects for which conversion efficiency is at least 80% for cogeneration or for which the conversion efficiency for power generation is at least 30%.

3. Community dialogue

- Percentage of loans allocated to projects that feature community dialogue as an integral part of the planning process and construction phase (e.g. sound information of communities, community advisory panels and committees, surveys and dialogue platforms, grievance mechanisms and compensation schemes).
- 4. Working conditions during construction and operation
- Percentage of loans allocated to projects with high labour and health and safety standards for construction work conducted by own employees and contractors (e.g. ILO core conventions).
- Percentage of loans allocated to projects with high labour and health and safety standards for operational tasks conducted by own employees and contractors (e.g. ILO core conventions).

Controversies

 Description of controversial projects (e.g. due to labour rights violations, environmental accidents, adverse biodiversity impacts).



Project category 5.2: Water - Water recycling

- 1. Consideration of environmental aspects during planning and construction
- Percentage of loans allocated to projects that underwent environmental impact assessments at the planning stage.
- Percentage of loans allocated to projects that meet high environmental standards and requirements during the construction phase (e.g. noise mitigation, minimisation of environmental impact during construction work).

2. Working conditions during construction and operation

- Percentage of loans allocated to projects with high labour and health and safety standards for construction work conducted by own employees and contractors (e.g. ILO core conventions).
- Percentage of loans allocated to projects with high labour and health and safety standards for operational tasks conducted by own employees and contractors (e.g. ILO core conventions).

3. Environmental impacts of water treatment

- Percentage of loans allocated to projects for which measures to prevent leakage of sewerage systems are in place (e.g. monitoring systems, adequate maintenance and repair).
- Percentage of loans allocated to projects for which measures to reduce the environmental impacts
 of sewage sludge disposal are in place (e.g. exclusion of introduction into waterways and landfill,
 exclusion or standards for agricultural use, utilisation of energy).
- Percentage of loans allocated to projects that apply high standards regarding the quality of the treated water.

4. Community dialogue

 Percentage of loans allocated to projects that feature community dialogue as an integral part of the planning process and construction phase (e.g. sound information of communities, community advisory panels and committees, surveys and dialogue platforms, grievance mechanisms and compensation schemes).

5. Social standards in the supply chain

 Percentage of loans allocated to projects for which high labour and health and safety standards are applied in the supply chain (e.g. ILO core conventions).

Controversies

 Description of controversial projects (e.g. due to labour rights violations, environmental accidents, adverse biodiversity impacts).

Possible impact indicators: Water recycled

- Water recycled (in m³) by the water recycling projects per year.
- Total annual avoidance of fresh water use by the water recycling projects (in m³); based on the water intensity of the relevant (e.g. industry) water use.



Project Category 5.3: Water – Flood prevention (no dams)

- 1. Consideration of environmental aspects during planning and construction
- Percentage of loans allocated to projects that underwent environmental impact assessments at the planning stage.
- Percentage of loans allocated to projects that meet high environmental standards and requirements during the construction phase (e.g. noise mitigation, minimisation of environmental impact during construction work).

2. Working conditions during construction and operation

- Percentage of loans allocated to projects with high labour and health and safety standards for construction work conducted by own employees and contractors (e.g. ILO core conventions).
- Percentage of loans allocated to projects with high labour and health and safety standards for operational tasks conducted by own employees and contractors (e.g. ILO core conventions).
- 3. Modelling on natural state of water bodies, scientific monitoring, structural quality mapping
- Percentage of loans allocated to projects for which the relevant plans are scientifically monitored and are modelled on the natural state of the water body.

4. Community dialogue

 Percentage of loans allocated to projects that feature community dialogue as an integral part of the planning process and construction phase (e.g. sound information of communities, community advisory panels and committees, surveys and dialogue platforms, grievance mechanisms and compensation schemes).

5. Social standards in the supply chain

• Percentage of loans allocated to projects for which high labour and health and safety standards are applied in the supply chain (e.g. ILO core conventions).

Controversies

• Description of controversial projects (e.g. due to labour rights violations, environmental accidents, adverse biodiversity impacts).

Project Category 6: Energy efficiency

- 1. Percentage improvement of energy and resource efficiency
- Percentage of loans allocated to projects for which the percentage improvement reaches or exceeds 20% for energy efficiency and / or 10% for resource efficiency.

2. Exclusion of controversial business areas

- Percentage of loans allocated to projects which are not involved in any controversial business areas, such as for example armaments, crude oil, coal, nuclear power, pesticides and / or tobacco.
- 3. Consideration of environmental aspects during planning and construction
- Percentage of loans allocated to projects that underwent environmental impact assessments at the planning stage.



 Percentage of loans allocated to projects that meet high environmental standards and requirements during the construction phase (e.g. noise mitigation, minimisation of environmental impact during construction work).

4. Working conditions during construction and operation

- Percentage of loans allocated to projects with high labour and health and safety standards for construction work conducted by own employees and contractors (e.g. ILO core conventions).
- Percentage of loans allocated to projects with high labour and health and safety standards for operational tasks conducted by own employees and contractors (e.g. ILO core conventions).

5. Community dialogue

 Percentage of loans allocated to projects that feature community dialogue as an integral part of the planning process and construction phase (e.g. sound information of communities, community advisory panels and committees, surveys and dialogue platforms, grievance mechanisms and compensation schemes).

6. Social standards in the supply chain

 Percentage of loans allocated to projects for which high labour and health and safety standards are applied in the supply chain (e.g. ILO core conventions).

Controversies

 Description of controversial projects (e.g. due to labour rights violations, environmental accidents, adverse biodiversity impacts).

Possible Impact Indicators: Avoidance of CO2 emissions

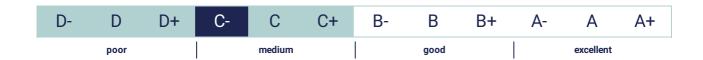
- Total annual avoidance of CO2 emissions by the energy efficiency projects (in t); based on the carbon intensity of the relevant (e.g. country) energy mix.
- Total annual avoidance of resource use by the energy efficiency projects (in t); based on the resource intensity of the relevant (e.g. industry) resource use.



oekom Corporate Rating

ING Groep N.V.

Industry	Financials/Commercial Banks & Capital Markets	Status	Not Prime
Country	Netherlands	Rating	C-
ISIN	NL0011821202	Prime Threshold	С



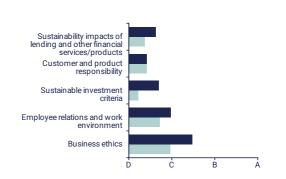
Industry Leaders

Company name Country Grade (in alphabetical order) KI C+ ABN AMRO Group N.V. NL C+ NIBC Bank N.V. NL C+ Raiffeisen Bank International AG AT C



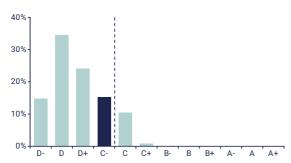
Key Issue Performance

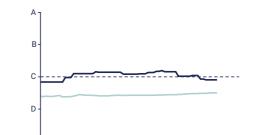
Rating History



Distribution of Ratings

249 companies in the industry





2016

2017

2018

2015

Controversy Monitor

Company				Industry			
Controversy Score		-8	Maximum Controversy Score		-46		
Controversy Level		Moderate	Controversy Risk		Significant		
Minor	Moderate	Significant	Severe	Minor	Moderate	Significant	Severe



ING Groep N.V.

Annex

Information Sources - Company Sources

Publicly available company documentation, such as annual reports, social and environmental reports and sustainability reports, as well as company web pages. In addition, internal documents or other company information (e.g. obtained through interviews with company representatives), if provided.

Information Sources - External Sources (examples only)

Amazon Watch Amnesty International Asahi Shimbun BankTrack

Business & Human Rights Resource Centre

CDP Responses

BBC

Centre for Research on Multinational Corporations (SOMO)

China Labour Watch

Competition Authorities (e.g. US Federal Trade Commission)

CorpWatch ECA Watch

Electoral Commissions (e.g. UK Electoral Commission)

Environmental Agencies (e.g. European Environment Agency)

Environmental Defense Fund Equator Principles Erklärung von Bern

European Restructuring Monitor

European Union institutions (e.g. European Commission)

Facing Finance Fair Labor Association **Financial Times** Freedom House Friends of the Earth GlassLewis

Greenpeace Handelsblatt **Human Rights Watch**

Institute for Global Labour and Human Rights International Labor Organization (ILO)

International Rivers

International Trade Union Confederation (ITUC)

Organisation for Economic Co-operation and Development (OECD)

Oxfam

Principles for Responsible Investment

Responsible Investor

Reuters S&P Capital IQ Taipei Times The Economist The Guardian The Washington Post

Transparency International **UK Financial Conduct Authority**

UN Global Compact UNEP Financial Initiative

urgewald

US Consumer Financial Protection Bureau

US Department of Justice

US Equal Employment Opportunity Commission US Securities and Exchange Commission

Wall Street Journal World Health Organization World Wildlife Fund (WWF)

Participation in Rating Process

The rating report based on publicly available company documentation and external sources such as NGOs, authorities, trade unions and the media was submitted to the company for consideration and feedback. The company actively participated in the rating process and provided additional information

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