

# **Inventory of greenhouse gas emissions**

ING Bank Śląski S.A. Group  
2019



## INFORMATION REQUIRED

Have any establishments, operations and/or sources been excluded from the list? If so, they should be indicated.
Not really.
Reporting period to which the list relates
from 01.01.2019 to 31.12.2019

### ORGANISATIONAL BOUNDARIES

What method of consolidation has been chosen.		
Share in capital <input type="checkbox"/>	Financial control <input type="checkbox"/>	Operational control √

### OPERATIONAL LIMITS

Are Scope 3 emissions included in the list?
yes <input checked="" type="checkbox"/> no <input type="checkbox"/>
If yes, what types of activities are included in Scope 3?
For Scope 3 GHG emissions, the company's employee business travel (rail, air, taxi and coach), water consumption, paper use and waste were analysed.

### INFORMATION ON ISSUES

The table below refers to emissions independent of any GHG transactions i.e. sale, purchase, transfer or deposit of allowances.

EMISSIONS	TOTAL (tCO <sub>2</sub> e)	CO <sub>2</sub> (t)	CH <sub>4</sub> (t)	N <sub>2</sub> O (t)	HFCs (t)	PFCs (t)	SF <sub>6</sub> (t)
SCOPE 1	5271.27	4638.55	0.0002	0.00004	0.247	0	0
SCOPE 2	6025.03	6025.03	0	0	0	0	0
SCOPE 3	746.72	689.32	0.07	0.21	0	0	0

Direct CO <sub>2</sub> emissions from biogenic combustion (tCO <sub>2</sub> )
0 t CO <sub>2</sub>

### BASE YEAR

Year chosen as the base year																																
2019																																
Explanation of the company's policy for recalculating base year emissions																																
N/A 2019 is the first year in which the calculation of greenhouse gas emissions in the ING Bank Śląski S.A. Group was carried out.																																
Context of any significant emission changes that trigger recalculations of base year emissions																																
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# INFORMATION REQUIRED

## METHODOLOGIES AND EMISSION FACTORS

### Methodologies used to calculate or measure emissions other than those under the GHG Protocol

The calculation of greenhouse gas emissions, which include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O), is based on the global standard Greenhouse Gas Protocol methodology developed by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD).

The calculations of greenhouse gas emissions were based on the consumption of individual energy carriers used by the ING Capital Group, i.e. liquid fuels by the car fleet (petrol, diesel), electricity, district heating, natural gas, fuel oil and coal consumed for the operation of the buildings. In addition, emissions associated with refrigerant loss from refrigeration equipment were analysed. For Scope 3 GHG emissions, the business travel of the company's employees (rail, air travel, taxi, coaches), water and paper consumption and waste were analysed. Greenhouse gas emissions were converted to carbon dioxide equivalent according to the GWP value. Global Warming Potential), which measures the potential of individual gases in terms of carbon dioxide equivalent, according to the Intergovernmental Panel on Climate Change (IPCC) report, "Climate Change 2013: IPCC Fifth Assessment Report (AR5).", where the GWP for methane is 28 and for nitrous oxide is 265. Emissions of carbon dioxide, methane and nitrous oxide have been converted into carbon dioxide equivalent emissions according to the formula:

$$W_{eCO_2} = W_{CO_2} + W_{CH_4} \cdot GWP_{CH_4} + W_{N_2O} \cdot GWP_{N_2O}$$

where:

$W_{eCO_2}$  - carbon dioxide equivalent emission factor,

$W_{CO_2}$  - carbon dioxide emission factor,

$W_{CH_4}$  - methane emission factor,

$GWP_{CH_4}$  - GWP (Global Warming Potential) of methane,

$W_{N_2O}$  - nitrous oxide emission factor,

$GWP_{N_2O}$  - GWP (Global Warming Potential) of nitrous oxide.

A market-based approach was adopted to calculate Scope 2 emissions.

## ESTIMATES USED FOR THE CALCULATIONS

Electricity consumption was known for the majority of the Bank's branches (367) as indicated by the meter, based on electricity billing invoices. In facilities for which consumption was not known (10), average electricity consumption per area was assumed. In order to determine the average index, an average was calculated for a minimum of 4 facilities of similar surface area that were located in a building with a similar function, additionally taking into account the use of an electric hot water preparation system and the type of lighting. Electricity consumption was not known for the small spaces occupied in shopping centres where branches of small service points are located (62). The energy consumption of the stands was determined on the basis of the electrical appliances used.

Network heat consumption was known for 21 facilities occupied by the company. For these buildings, the average district heating consumption rate per unit area in the company was determined for the office and other buildings, which are 94.01 kWh/m<sup>2</sup> and 118.05 kWh/m<sup>2</sup> respectively. These indicators were used to estimate the consumption of district heating in the remaining facilities (198), where the heating source is a thermal centre and where the consumption was not known. For the spaces occupied by small service points, zero consumption of district heating was assumed (14 points), as these spaces are located in common spaces and would be heated in the facilities regardless of whether there is a stall there.

Natural gas consumption was known for 36 facilities occupied by the company. The estimate of natural gas consumption was split between the two heating sources used in the facilities – a gas boiler and a room gas furnace. For facilities using a gas boiler, an average natural gas consumption rate per unit area in the company was determined, which was 84.68 kWh/m<sup>2</sup> in 2019. This indicator was used to estimate natural gas consumption in the

## INFORMATION REQUIRED

remaining facilities where the heating source is a gas boiler and where consumption was unknown.

For facilities using room gas cookers, the average natural gas consumption rate per unit area in the company was similarly determined, which was 101.83 kWh/m<sup>2</sup> in 2019. This indicator was used to estimate natural gas consumption in a facility where the heating source is a room gas cooker, where consumption was unknown.

Fuel oil consumption was known for 2 facilities occupied by the company. An average heating oil consumption rate per unit area in the company was determined for these facilities, which was 89.43 kWh/m<sup>2</sup> in 2019. This indicator was used to estimate fuel oil consumption in the remaining 3 facilities where the heating source is an oil boiler.

A coal boiler as a heating source was used in 2019 in one branch of the company. As coal consumption was not known, it was estimated analogously to previous energy carriers. An average heating energy consumption rate per unit area for all sources was determined, which was 104.60 kWh/m<sup>2</sup> in 2019.

In the event of loss of mains power, generators were installed at some of the sites, for which the amount of electricity generated was known. For the three generators, only the operating time was known, without the amount of energy generated. In this case, the amount of energy produced was calculated using the average power load of the gensets for which the energy produced was known and the operating time of the gensets. To calculate the amount of fuel used to generate a given amount of electricity, the technical characteristics of the individual generators were used. The average fuel consumption (l/h) was read from the technical specifications, and the amount of oil used in the genset was obtained by multiplying this value by the percentage of the genset load and the operating time.

The amount of energy consumed by motor vehicles was calculated on the basis of the reported fuel consumption statement of the vehicles used in the Group.

## Optional information

### ORGANISATIONAL BOUNDARIES

List of all legal entities or establishments in which the reporting organisation has an ownership interest or exercises financial or operational control	Share in the capital of the legal entity (%)	Does the reporting organisation have financial control (Yes/No)	Does the reporting organisation have operational control (Yes/No)
ING Bank Śląski S.A.	100% (group parent company)	Yes	Yes
ING Lease (Polska) Sp. z o.o.*	100.00%	Yes	Yes
ING Bank Hipoteczny S.A.	100.00%	Yes	Yes
Nowe Usługi S.A.	100.00%	Yes	Yes
ING Commercial Finance Polska S.A.*	100.00%	Yes	Yes
ING Usługi dla Biznesu S.A.	100.00%	Yes	Yes

\*Indirect participation through ING Investment Holding (Polska) S.A.

If the parent company of the reporting entity does not report the issue, attach an organisation chart that clearly identifies the relationship between the reporting subsidiary and other subsidiaries
N/A

### INFORMATION ON ISSUES

Emissions by source (in t CO <sub>2</sub> e)	
Scope 1: Direct emissions from owned/controlled operations	
a. Direct emissions from stationary combustion	740.92
b. Direct emissions from mobile combustion	3860.62
c. Direct emissions from process sources	37.02
d. Direct emissions from fugitive sources	632.71
e. Direct emissions from agricultural sources	0
Scope 2: Indirect emissions from the use of purchased electricity, process steam, heat and cooling	
a. Indirect emissions from purchased/acquired electricity	812.82
b. Indirect emissions from purchased/acquired process steam	0.00
c. Indirect emissions from purchased/acquired thermal energy	5,212.20
d. Indirect emissions from purchased/acquired cold	0.00

Emissions by plant (recommended for individual plants with stationary exhaust emissions above 10,000 tCO <sub>2</sub> e)	
Plant	Scope 1 emissions
N/A	N/A

Emissions by country (in MgCO <sub>2</sub> e)	
Country	Emissions
N/A	N/A

Emissions related to the own generation of electricity, heat or process steam which are sold or transferred to another organisation
N/A

Emissions related to the own generation of electricity, heat or process steam which are purchased for resale to intermediate customers
N/A

Emissions from greenhouse gases not included in the Kyoto Protocol (e.g., CFCs, NO <sub>x</sub> ,)
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## Optional information

Pollutants	
	[kg]
Total dust	40.56
PM10 dust	8.97
PM2.5 dust	8.71
Carbon monoxide (CO)	9,248.60
Nitrogen oxides (NO <sub>x</sub> /NO <sub>2</sub> )	6,761.90
Sulphur oxides (SO <sub>x</sub> /SO <sub>2</sub> )	679.49
Benzo(a)pyrene	0.00123
Non-methane volatile organic compounds (NMVOC)	939.25
Ammonia (NH <sub>3</sub> )	182.89
Lead (Pb)	0.48

Information on the reasons for emissions changes that did not result in emissions recalculations in the base year (e.g. process changes, efficiency improvements, plant closures).

N/A

GHG emissions data for all years between baseline and reporting year (including details and reasons for recalculations, if any)

N/A

### ADDITIONAL INFORMATION

Information on inventory quality (e.g. information on the causes and magnitude of uncertainties in emission estimates) and an outline of existing policies to improve inventory quality

As a result of the calculations performed and the assumptions made for the calculation of GHG emissions (market-based approach), a data confidence indicator was calculated (understood as the percentage share of data acquired from sources in the total data used for calculations, consisting of data acquired from sources and estimated data).

The data confidence index was:

- 86.88% – for the calculation of the certainty indicator based on energy data, according to the “GHG Protocol guidance on uncertainty assessment in GHG inventories and calculating statistical parameter uncertainty” the indicator is “good”. Data quality can be improved by detailed metering of the consumption of each energy carrier.
- 73.68% – for the calculation of the certainty factor based on emission data, according to the “GHG Protocol guidance on uncertainty assessment in GHG inventories and calculating statistical parameter uncertainty” the factor is “fair”. The lower ratio is mainly due to the purchase of a large volume of green electricity.