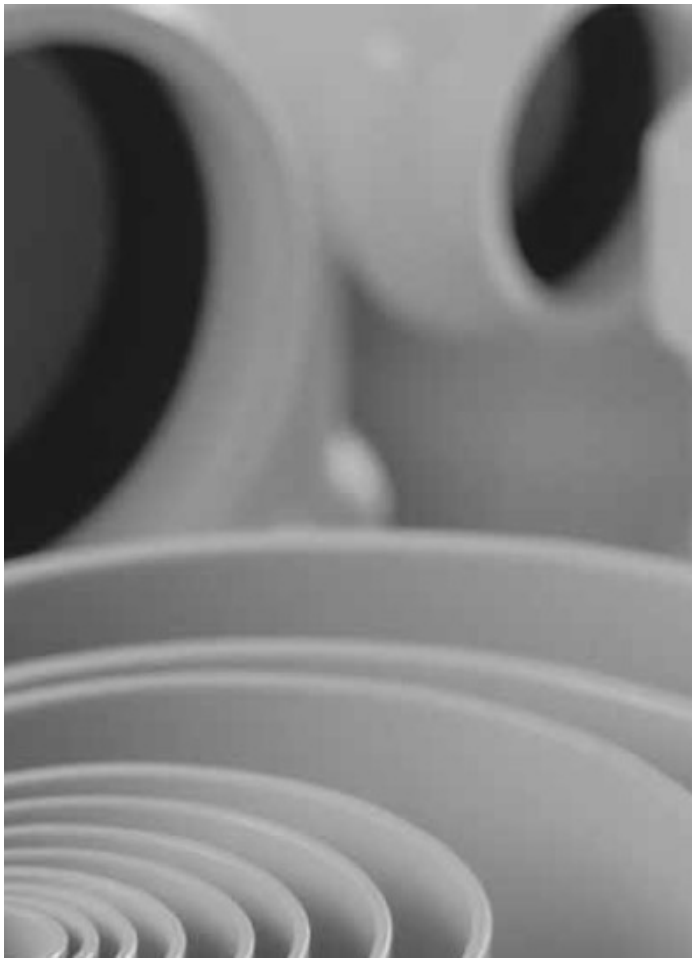
YEAR 13, NR. 2

16 JUNE 2022
REF.NR.: 23.R.0602

Carbon Footprint Analysis Year 2022

PIPELIFE

Contents



Aart Jan van der Meijden
Managing Director Pipelife Nederland B.V.

Management statement

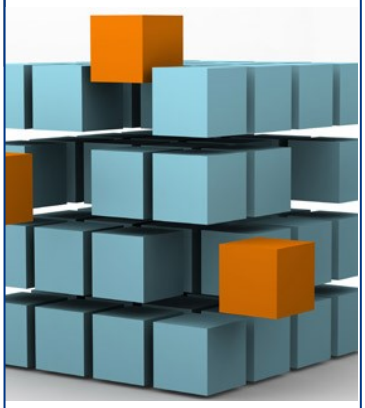
In the last years it has become clear that energy resources are not inexhaustible and that the usage affects our environment. We see it as our duty to deal with our environment in a sustainable way. In addition to creating good and sustainable products, we also take into account our environment and our employees, while a motivated organization is the key to sustainable success.

We are convinced that we find the right balance between People, Planet and Profit with a good CSR policy. Therefore we are working for many years according to this policy. For example, we have established our Carbon Footprint and we are busy to realize our reduction targets in the area of energy consumption and CO_2 emissions. We are also very active in recycling and reducing the material consumption in our products. Also by an active Health, Safety, Environmental and Energy policy we are improving our work environment.

Sustainability is a joint effort of our employees, customers, business partners, suppliers and other stakeholders. Together with these partners, we are convinced that we can shape our policy in the future and continuing to play a leading role within our industry.

Aart Jan van der Meijden

Managing Director
Pipelife Nederland B.V.



ISO 14064 statement

With this, Pipelife Nederland B.V. states that this report for the "CO_2-bewust" certificate is prepared in accordance with the guidelines of NEN-ISO 14064, version May 2018.

Verification statement

With this, Pipelife Nederland B.V. states that this report has not yet been verified but at request of interested parties can be verified by approved bodies and further states:

- the inventory had been designed according to the needs and requirements from the ISO 14064-1, the GHG Protocol, the CO_2-prestatieladder Manual 3.1
- said CO_2 inventory has no material misstatements, derogatory to the materiality requirement of 5%.

Organization

Reporting organization

Pipelife Nederland B.V. is located in Enkhuizen. Pipelife Nederland B.V. is part of Pipelife International GmbH, an international manufacturer of plastic piping systems and fittings and one of the market leaders in Europe. Pipelife was established in 1947, today one of the oldest plastic pipe producers worldwide. Products include sewage, inhouse: electro, water, gas, drainage, cable pipes and eco systems.

Pipelife Nederland has approximately 310 employees spread over seven locations: headquarters, production sites and wharehouses.

Pipelife International GmbH was taken over by Wienerberger in 2012 (ceramic industry) and is now a 100% company of the Wienerberger Group. Pipelife International GmbH is located in 24 countries, with headquarters in Vienna, Austria. 3,756 employees worldwide are working on 28 production sites.

Summary of the activities:

- Development, production and sales of plastic pipe systems.

Responsible person

The person statutorily responsible for the reporting organization is mr. A.J. van der Meijden, Managing Director Pipelife Nederland B.V.

Organizational boundaries

The organizational boundaries of Pipelife Nederland B.V. are determined in the context of CO_2 (carbon dioxide)-consciousness in accordance with the principle of the operational sphere of influence of the certifying company.

Within the GHG protocol, this is described as the 'operational boundary'. In practice, this means that when activities are executed under the auspices of Pipelife Nederland B.V., the accountability for the CO_2-production is taken: the own organization has control of this.

Based on the lateral purchase analysis of the CO_2 -performance ladder, it is determined that Pipelife Deutschland GmbH & CO. KG and Preflexibel NV are added within the organizational boundary of Pipelife Nederland B.V.

The organizational boundaries for this inventory includes:

- Pipelife Nederland B.V.;
- Pipelife Deutschland GmbH & CO. KG.
- Preflexibel NV

The rationale for this boundary is listed in the boundary report **(doc. nr 18.R.0304-5).**

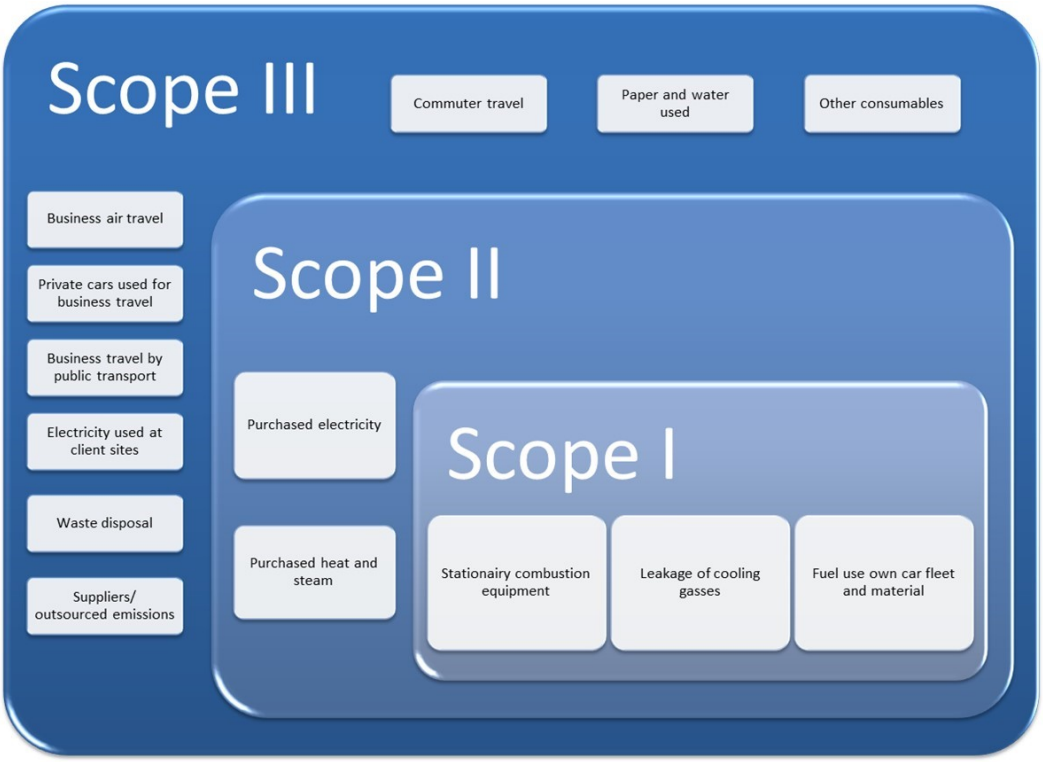
Carbon Footprint Analysis

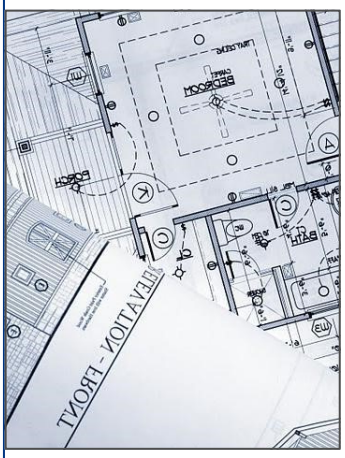
Basis of analysis

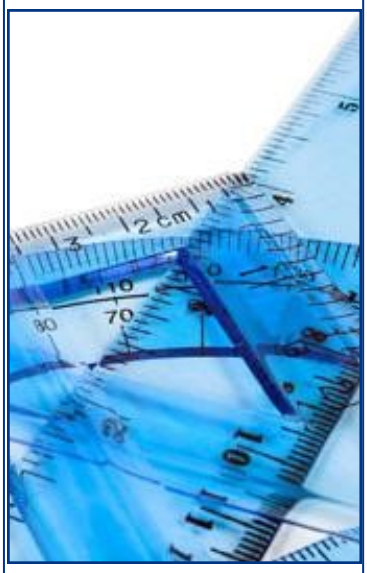
CO_2-emissions and absorptions by activities of the organization have been identified based on the established operational limits. At the identification of emissions a distinction has been made between three sources of emission (known as scopes) into two categories: direct emissions and indirect emissions. This is in line with the Greenhouse Gas (GHG) Protocol.

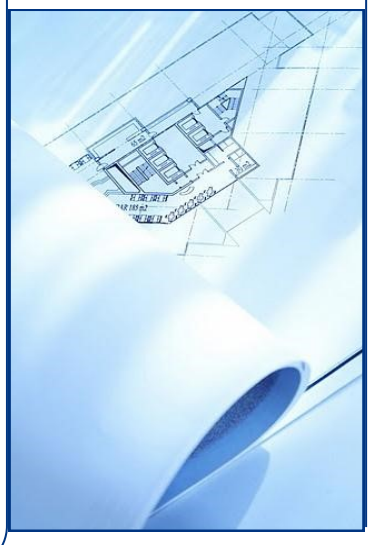
- Scope 1 covers direct emissions under control, and controlled by, the organization. Examples include the combustion of fuels in machinery, business transport with vehicles owned by the reporting organization and emissions of refrigeration and air conditioning systems;
- Scope 2 includes indirect emissions from purchased electricity, steam or heat;
- Scope 3 includes other indirect emissions from sources such as business travel with privately owned vehicles or public transport and business travel by plane, commuter travel, production of purchased materials and outsourced activities such as freight.

This carbon footprint analysis includes the CO_2-emissions (one of the six greenhouse gases) of Pipelife Nederland BV, in scope 1, 2 and 3 of the year 2022. The CO_2 emission is analyzed in accordance with the "CO_2 performance ladder", manual 3.1 22 June 2020.









Measurement results and explanation

Reported period

Pipelife Nederland B.V. has synchronized its carbon footprint reporting period with its fiscal year. The fiscal year for Pipelife Nederland B.V. runs from January 1 to December 31. The reported period is the year 2022.

Scope 1: Direct CO_2-emissions

THE DIRECT CO_2 EMISSION IS MEASURED AND CALCULATED AS 1,172.2 TONNES CO_2

Stationairy combustion equipment

In 2022 312,590 m^3 were used of natural gas. The consumption caused 651.8 tonnes of CO_2 emission (57% of the total direct emission). The natural gas is used for heating of the locations. 233,614 m^3 was used in stationary combustion equipment in Enkhuizen (about 72% of the total consumption).

Gasses

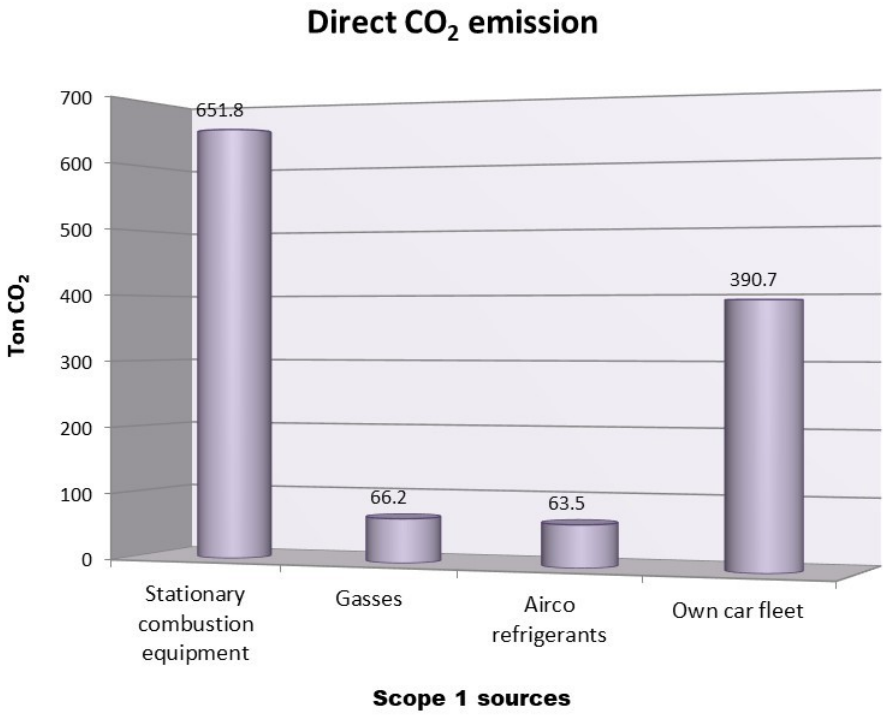
In 2022 66.2 tonnes of CO_2 emission is caused by the usage of the gasses and CO_2 gasses for the production processes in the Netherlands, Belgium and Germany.

Usage of refrigerant

In 2022 there was no consumption of refrigerants in the production processes in Germany and the Netherlands, but due to malfunction of the cooling and freezing systems in Belgium 33 kg of refrigerant was lost. The systems for storage and transportable air conditioning-units are regarded as a closed system. Therefore only CO_2-causing emissions of consumption are calculated, in this period 63,5 tonnes of CO_2 emission.

Fuel use own car fleet (business car travel)

In 2022 390.7 tonnes of the CO_2 emissions is assigned to the fuel consumption of the fleet with leased cars. In 2022 the leasing company has reported an usage of 94,913 litres diesel, 27,313 litres of petrol and 1,931 kg of CNG.

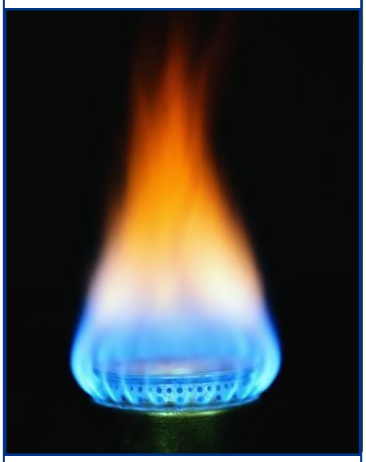


Statement of CO_2 sources and sinks omitted

All identified sources and sinks of CO_2 are included in the report. Storage of CO_2 does not occur; there are no sinks.

CO_2-emissions from burning biomass

The combustion of biomass did not occur at Pipelife Nederland B.V., Pipelife Germany GmbH or Preflexibel NV in Belgium.



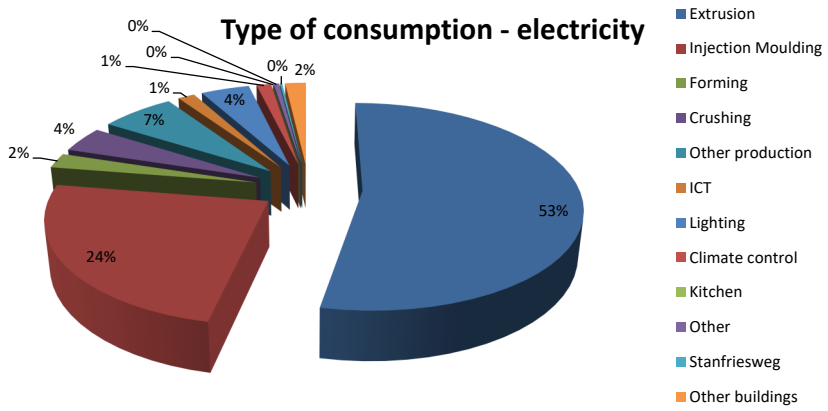
Scope 2: Indirect CO_2-emissions

INDIRECT CO_2-EMISSIONS MEASURED AND CALCULATED ARE 8,079.9 TONNES CO_2

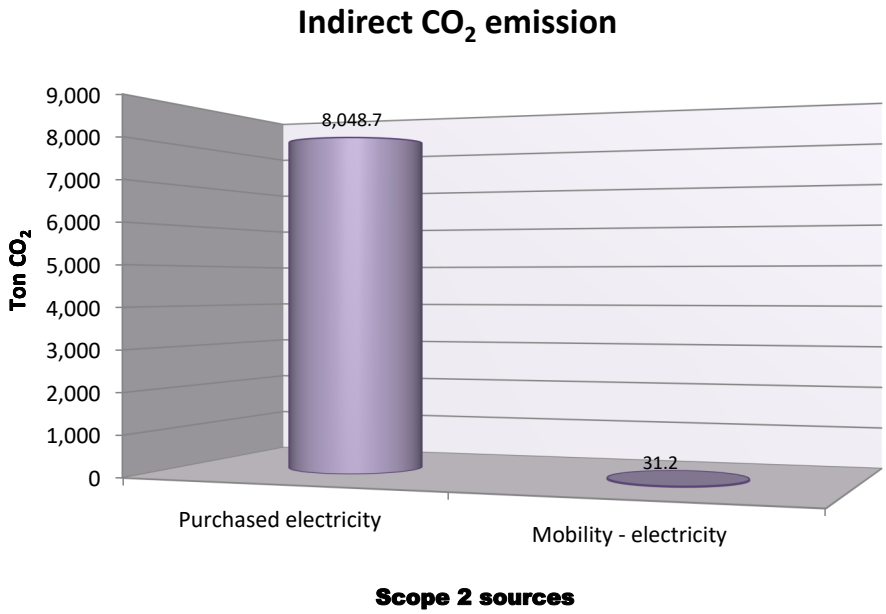
Electricity purchased

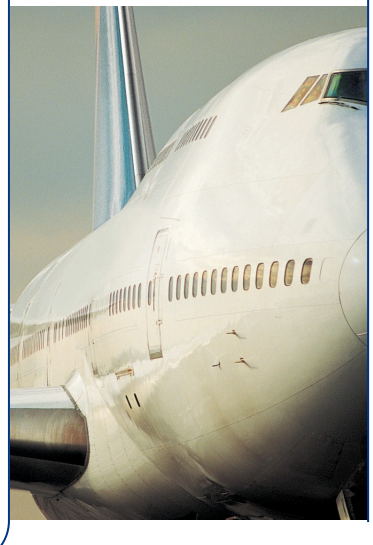
100,0% of the indirect CO_2 emission is caused by consumption of the repurchased electricity. In the reported period, the electricity consumption for buildings and production was in total 20,996,299 kWh. 500 MWh was generated by solar panels at our own locations. The repurchased electricity consumption caused 8,079.9 ton CO_2 emission. For mobility 59,615 kWh was consumed by electric cars, which caused 31.2 ton CO_2 emission.

In 2022 Pipelife purchased 5,100 MWh green power with Netherland wind and solar power as its source, the other source is grey power. Under the terms of the CO_2–performance ladder, the purchased electricity is registered and calculated with a green and grey label performance, see information Influence of measurement inaccuracies and uncertainties on page 8.



Based on the latest information of the energy managementsystem of Pipelife Nederland the extrusion processes caused 53% of the consumption of electricity, second Injection Molding caused 24% and the other production processes 13% of the usage.





Scope 3: Other Indirect CO_2-emissions

OTHER CO_2-EMISSIONS MEASURED AND CALCULATED ARE 1,470.5 TONNES CO_2

Other indirect CO_2-emissions

The most important other indirect CO_2 emissions are measured and calculated in this report. Due to the requirements in CO_2 performance ladder manual version 3.1, the Carbon Footprint report is calculated according to the Green House Gas Protocol and the ISO 14064:2018. The energy sources for business transport are also examined every six months.

Business transport consists of the following three energy sources:

- Business traffic with private cars
- Air travel for business purposes
- Business public transport

The other emission categories Purchase of goods and services, end of treatment life products and Transport and distribution are yearly published in the overall report Analysis Scope 3 CO_2 emissions Pipelife Netherlands B.V. - CO_2 Performance Ladder due to the lack of reliable data on a half-year basis.

Personal cars for business travel

In 2022 several employees used their private car for business purposes and declared the mileage. The total mileage declarations by private car were 104,697 km in the reported period. This leaded to 20.2 ton CO_2, 0.3% of the other indirectly CO_2 emissions.

Business air travel

In 2022 employees made 564,851 flight kilometres for business purposes. 7% of the flights concerned flight distances between 0 – 700 km, 33% of the flights concerned flight distances between 700 – 2500 km and 60% of the flights concerned flight distances more than 2500 km. The air travel caused 93.4 ton CO_2, 1.2% of the other indirectly CO_2 emissions.

Business travel by public transport

In 2022 some employees used public transport for business purposes and declared the travel expenses. The total mileage declarations by public transport were 28,956 km in the reported period. This leaded to 0.4 ton CO_2.

Commuter travel

Commuter travel with transportation is not owned by the company. In 2022 employees in the Netherlands and Germany travelled with own transportation to our factories and declared the mileage. The total mileage declarations for commuter travel were 3,410,289 km in the reported period. This leaded to 618.20 ton CO_2, 42% of the other indirectly CO_2 emissions.

Waste disposal

As a result of the Pipelife activities in the Netherlands and Germany, a total of 1,179.5 tonnes of waste was transported to the waste processors in 2022. Analysis shows that 8% of the waste streams are paper and cardboard, 34% is plastics waste, 16% is wood, 36% is unsorted waste, 2% is Hazardous waste streams en 3% is other waste streams. The unsorted and hazardous waste is incinerated with electricity generation, the other waste streams consisting of paper, plastics, construction and wood were recycled. The recycling percentage is therefore approximately 60% of the total waste stream. The CO_2 emission as a result of the waste disposal caused 738.3 tonnes of CO_2 (50%) of the other indirectly emissions.

Influence of measurement inaccuracies and uncertainties in scope 1- 2- 3

The foregoing information shows that the vast majority of CO_2 emission is caused by use of fuel in the stationary equipments (718.0 ton of CO_2, scope 1), the electricity consumption (8,198.3 ton of CO_2, scope 2) and waste disposal (738.3 ton of CO_2, scope 3). Therefore, it is important to accurately capture these emissions.

SCOPE 1:
The fuel data of stationary combustion equipment for heating is provided by the energy suppliers of the locations and controlled with the internal measurements. For the location Flevolaan Pipelife has a joint natural gas grid connection with the neighbour company Renolit. Renolit has specified the information for natural gas on the location Flevolaan. The data of gasses are provided by the suppliers. The location in Belgium has no natural gas consumption. These information is best practice and deemed as sufficiently reliable.

The fleet management data is provided by the fuel suppliers of the leasing companies who manage the fuel passes linked to the vehicles and by declarations of the fuel in fleet cars by employees. Because the mileage registration is less accurate, since not every employee carefully keeps track of the mileage by registering the mileage at the gas station, the CO_2 emission is based on the fuel data if present.

SCOPE 2:
The consumption data of the electricity is registered from billing information received from the energy suppliers of the different locations and the consumption data of electricity supplied by the leasing companies. Renolit has specified the information for electricity on the location Flevolaan. This information is considered as sufficiently reliable. It should be noted that most of the energy is used in the production processes. Since 2021 Pipelife purchased a new energy contract green power for all Pipelife companies. Further analysis showed that European wind energy had been purchased. In 2022 could additionality of green power by the supplier be demonstrated for 5,100 MWh electricity, therefore Pipelife can calculate with Netherlands solar and wind power according to the conditions of the CO_2 performance ladder and for electricity produced on its own roof. The CO_2 emission for electricity is calculated with the conversion factor of green and grey electricity for this period.

SCOPE 3:
The registration for declared kilometres has changed from 2021 due to tax legislation. The exact division between private cars or public transport for business purpose and commuter travel by private cars is changed and supplied by the administration.

The emission data of travel by private cars for business purpose is collected by employee declarations. The fuel type and engine classification of the applicable private cars are not registered. The data for public transport for business purpose is collected by information by employee declarations and calculated to distance according to fixed price per kilometre (source MKB Servicedesk and http://www.dieeinsparinfos.de/guenstige-mobilitaet/bahn/kosten/.

The emission data of commuter travel by private cars for business purpose were collected on the basis of the kilometre calculation for the place of residence - business location, based on calculations par employee and in Germany by an average kilometre calculation par employee. The fuel type and engine classification of the applicable private cars are not registered. The method used is considered sufficiently reliable. The data for public transport is collected by information by employee declarations and calculated to distance according to fixed price per kilometre (source NS and http://www.dieeinsparinfos.de/guenstige-mobilitaet/bahn/kosten).

The emission data of waste disposal were collected on the basis of the invoices from waste processors that are used by Pipelife in the Netherlands, Germany and Belgium. The type of waste is registered according to national law. The method used is considered sufficiently reliable.

CO_2-compensation

Most resources are used to make improvements within the production processes in the framework of the CO_2-emission. The emissions of green gas are partly compensated but not calculated in the report.

Progress against reference year

Historical base year

The initial measurements in the context of the ISO 14064 standard have been done by Pipelife Nederland B.V. for the calendar year 2010. This year therefore serves as base year against which an increase or decrease in CO_2 emissions is established.

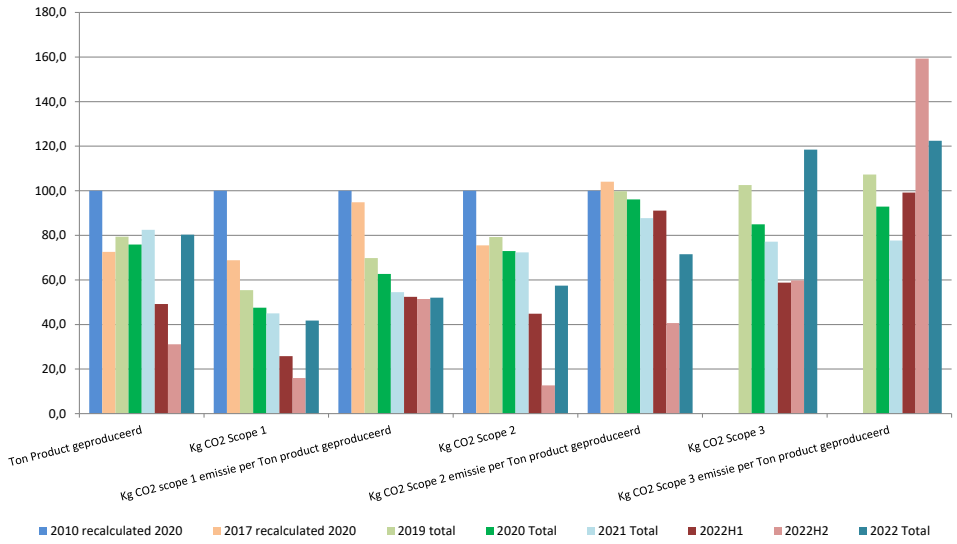
Adjustments to historical year

Since the report of the 2020 there were adjustments to the base year. Because of the publication of the version 3.1 of the CO_2 performance ladder manual in 2020 the scope classification has been changed and the CO_2 emission factors are changed again in January 2020, 2021 and 2022. In December 2017 the emission factor for grey electricity was also changed again significantly. Therefore, the publication of base year 2010 is now updated in 2016, 2017 H2 and 2021 and the reference year 2016 because of the latest reduction goals period 2017-2022.

Normalization measurements

The size of the CO_2 emissions has a clear correlation with the scale of the activities carried out by the organization. For the comparison of the emissions in the reference year and future reported periods, standards are determined to normalize measurement results. For Pipelife, Kg product produced is the standard to scale the business activities. Based on the kg product produced the reported measurement results will be normalized.

Note: since June 2020 the manual CO_2 performance ladder version 3.1 is published. Also because of the publication of changed CO_2 emission factors in 2015, December 2017 and January 2020 the base year 2010 and reference year 2016 and 2017 are recalculated and the information in the graph before 2015 is visible in the previous reports. The scope 3 emissions are published since 2018. This report includes Preflexible NV in Belgium for the 1st time. The trend data before 2022 are therefore not fully comparable with the results for the 1st period of 2022.



In scope 1 the CO_2 emissions par kg product produced decreased again in 2022 compared to the same period in 2021. Compared to the period 2017 the CO_2 emissions for scope 1 in 2022 are almost 47% lower.

The usage of stationary combustion equipment showed again a decrease in 2022 because of the warmer weather, after correction of degree days the total usage compared to the same period in 2017 is already 24% reduced. The usage of refrigerant was in 2022 increased due to the incident in Belgium. The usage of CO_2 gasses increased due to changes in the productmix, but consumption still significantly lower than the same period in 2017. The litres of fuel for the own car fleet

increased in 2022 despite campaigns for more electric cars. More kilometres were driven, the covid-19 effects are ended. Compared to 2017 the annual estimated reduction is still more than 20.000 litres and shows a reduction of almost 60 tonnes CO_2, despite the increased emission factors for fossil fuels and addition of Preflexibel NV to the boundary.

The absolute CO_2 emissions for scope 2 in 2022 compared to the 2017 period were significantly lower despite the addition of Preflexibel NV. Energy reduction measures, own energy generation, e.g. solar panels at the Enkhuize site and purchasing of green electricity reduced emissions due to the total electricity consumption.

The scope 3 emissions par ton product produced were more than 13% higher in 2022 compared to the baseyear 2018, due to the addition of Preflexibel NV, increase in mobility and air traffic due to the termination of the covid19 period and the increase in commuting, but the emissions are still about 35% lower than the periods for covid19 in 2022. For the calculation of all the scope 3 emissions see our Pipelife Netherlands - Scope 3 inventory CO_2 emissions which is updated yearly.

In 2022 the actions continues as described in our Energy Efficiency plan (EEP) plan for the latest MJA 3 program. Pipelife has implementing the Energy Efficiency plan and reduction targets for the period till 2022, the measures are implemented as planned in this EEP. Because of the implementation and certification of level 5 of the CO_2 performance ladder our reduction targets were actualised till 2022 and expanded with scope 3 targets. Our reduction goals par ton product in scope 1-2-3 in 2022 were more than achieved. Over the period, emissions from electricity consumption were reduced by 8%, our CO_2 emissions par Ton product produced were reduced by 23,8%. New targets for the next period are currently being developed.

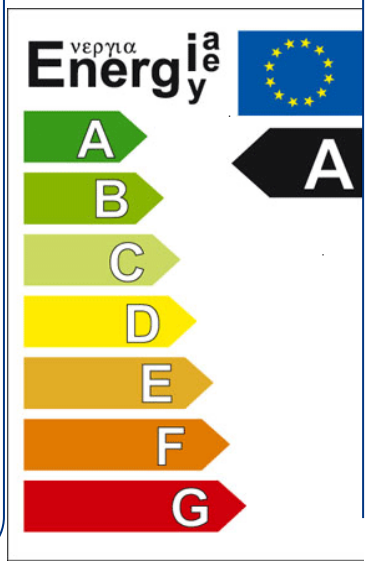
Projects with award advantage

Project Supply of plastic pipes and fittings for drinking water pipes

At the end of 2017 Pipelife Nederland B.V. won his second tender with CO_2 performance ladder advantage. This tender concerns the supply of pipe and fittings for drinking water to a few drinking water companies

The project is still in execution. The project-specific reductions within the project are based on the reduction targets and measures that are part of the EEP of the MJA3. Pipelife's CO_2 reduction plan also applies to this project; the same measures are applied in the implementation.

This project represents about 0.5% of its yearly production volume for Pipelife in the Netherlands. Indexed to the total CO_2 emission, the project therefore causes an emission of approx. 193 tonnes CO_2 during the current contracted period. The expected reductions for this project are therefore estimated at 7 tonnes of CO_2.



Calculation models

Quantification methods

The quantification of raw materials to CO_2 emissions is always calculated by registered volume units of the fuels used if present. The conversion of volume to emission values is straightforward and provides the most reliable comparison. In those situations where no volume units of fuel were available, the most reliable information available was used.

Electricity consumption is either taken based on calibrated meters and/or based on the invoices of the energy company. By applicable law, this is the most reliable source of information that is available.

Explanation for changes in the quantification methods

The measurement over 2022 is the twenty-fourth measurement in the framework of the ISO 14064 standard. No adjustments in the quantitative methods are made against to the historical year.

Reduction targets

Based on this Carbon Footprint and the Energy Management System Pipelife defined measures to reduce its CO_2 emissions for the period 2017-2022 for scope 1, 2 and 3.

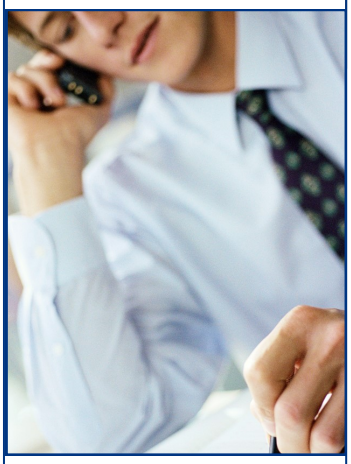
The first target is to reduce the direct emissions per Kg product produced by improvements to the roof of the factory in Enkhuizen and change our forklifts from diesel to electric. Next to these reduction targets several investigations in the Netherlands and Germany are in progress to gain knowledge for better understanding of the current energy consumption. Examples of investigations are isolation improvements in production, improvement of heating in the Netherlands and lighting in buildings. These investigations are an ongoing process.

Reduction of the indirect emissions (scope 2) will be carried out by reducing the Electricity usage in the production, replacement of lighting to LED, replacements of production infrastructure and implementation of an energy management system for the production facilities.

Reductions of the other indirect emissions (scope 3) are also planned in the Energy Efficiency plan for the period 2017-2022.

Based on the current results and the quantitative information Pipelife wants to reduce its CO_2-emissions for the period 2017 till 2022 with 5.2% per Kg product produced. The Kg product produced, by equal productmix, is the standardization factor to make comparison possible between the reference period and the progress reports. The reduction objectives for this period are subdivided per scope; scope 1: 0.11%, scope 2: 6.8% and scope 3: 5.1%.

Nr.	Reduction target CO_2	Total reduction 2017-2022	CO_2-emission 2022	
		(%)	Reduction (Tonnes CO_2)	(par ton product produced)
	Implementation Energy Efficiency Plan scope 1 measures	0,11%	2,3	61,9
	Index CO_2-emission scope 1	**0,1%**	**2,3**	**99,9**
	Implementation Energy Efficiency Plan scope 2 measures	6,8%	960,3	389,8
	Index CO_2-emission scope 2	**6,8%**	**960,3**	**93,2**
	Implementation Energy Efficiency Plan scope 3 measures	5,1%	4.318,0	2.351,8
	Index CO_2-emission scope 3	**5,1%**	**4.318,0**	**94,9**
	Index CO_2-emission scope 1 and 2	**5,9%**	**962,6**	**94,1**
	Index CO_2-emission scope 1, 2 en 3	**5,2%**	**5.280,6**	**-5,2**



PIPELIFE

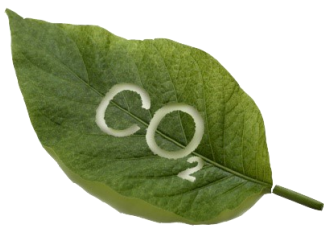
Annex 1 CO_2-emissions 2022 scope 1 and 2

	CO_2-emission factor[1]		2022 total		
	emission factor	Unit	Quantity	Unit	CO_2-emission [metric ton]
Scope 1: Direct emissions					**1,172.2**
Stationary combustion equipment					**718.0**
- Natural gas	2,085	g CO2 / Nm3	312,590	Nm^3	651.8
- Butane[2]	3,143	g CO2 / kg	-	kg	-
- Propane	1,725	g CO2 / litre	-	litre	-
- CO2 gasses[2]	1,000	g CO2 / kg	66,217	kg	66.2
- Acetylene[2]	3,385	g CO2 / kg	8	kg	0.0
- Protegon20[12]	217	g CO2 / Nm3	8	m3	0.0
- Arcal 21[2]	57	g CO2 / Nm3	11	m3	
- Sagox 18[2]	195	g CO2 / Nm3	-	m3	-
Airco refrigerants					63.5
- Refrigerant - R22	1,760	kg CO2 / kg	-	kg	-
- Refrigerant - R404a	3,943	kg CO2 / kg	-	kg	-
- Refrigerant - R407c	1,624	kg CO2 / kg	-	kg	-
- R-449A[3]	1,282	gwp	-	gwp	-
- Refrigerant - R410a	1,924	kg CO2 / kg	33.0	kg	63.5
Own car fleet, fuel use					**390.7**
- Petrol	2,784	g CO2 / litre	27,313	liter	76.0
- Diesel	3,262	g CO2 / litre	94,913	liter	309.6
- CNG (natural gas) (NL)	2,633	g CO2 / kg	1,931	kg	5.1
	CO_2-emission factor[1]		2022 total		
	emission factor	Unit	Quantity	Unit	CO_2-emission [metric ton]
Scope 2: Indirect emissions					**8,079.9**
Purchased electricity					**8,079.9**
Total used electricity building and production			20,996,299	kWh	
own generated solar electricity			500,000	kWh	-
- Grey electricity: 2010 and later	523	g CO2 / kWh	15,389,551	kWh	8,048.7
- Solar energy	0	g CO2 / kWh	5,100,000	kWh	-
- Heat STEG	35,970	g CO2 / GJ	-	kWh	-
- Mobility -Grey electricity: 2010 and later	523	g CO2 / kWh	59,615	kWh	31.2

References

1: Source: website CO2emissiefactoren.nl

2: Source: StenVi conversion calculations 2010 and 2023



Scope 1	Ton CO_2	%
Stationary combustion equipment	651.8	55.6%
Gasses	66.2	5.7%
Airco refrigerants	63.5	5.4%
Own car fleet	390.7	33.3%
Tot	1,172.2	

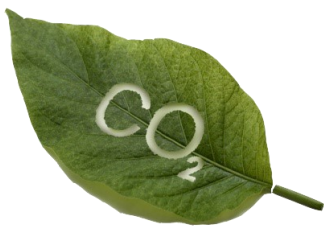
Scope 2	Ton CO_2	%
Purchased electricity	8,048.7	99.6%
Mobility - electricity	31.2	0.4%
Tot	8,079.9	

PIPELIFE

Annex 1 CO_2-emissions 2022 scope 3

	CO_2-emission factor[1]		2022 total		
	emission factor	Unit	Quantity	Unit	CO_2-emission [metric ton]
Scope 3: Other indirect emissions					**1,470.5**
Business travel					**114.1**
Personal cars for business travel					**20.2**
- Passenger car, unknown fuel type and weight	193	g CO2 / vehicle km	104,697	km	20.2
Business air travel					**93.4**
- Distance < 700 km	234	g CO2 /travellers km	26,517	travellers km	6.2
- Distance 700 - 2.500 km	172	g CO2 /travellers km	179,155	travellers km	30.8
- Distance > 2.500 km	157	g CO2 /travellers km	359,179	travellers km	56.4
Business travel by public transport					**0.4**
- Public transport unknown category	15	g CO2 /travellers km	28,956	travellers km	0.4
Commuter travel with transportation not owned by the compa					**618.2**
private cars					*617.8*
- Passenger car, unknown fuel type and weight	193	g CO2 / vehicle km	3,200,838	vehicle km	617.8
Commuter travel with public transport					0.4
- Train unknown category	2	g CO2 /travellers km	209,451	travellers km	0.4
- High speed train	26	g CO2 /travellers km	-	travellers km	0.0
Waste disposal[2]					**738.3**
- Paper and paperboard	676	g CO_2 / kg	95,742	kg	64.7
- Plastic	120	g CO_2 / kg	406,678	kg	48.8
- Wood	-	g CO_2 / kg	194,240	kg	0.0
- Metal	1,060	g CO_2 / kg	6,088	kg	6.5
- Hazardous substances	1,308	g CO_2 / kg	26,406	kg	34.5
- Unsorted waste	1,308	g CO_2 / kg	426,380	kg	557.7
waste	434	g CO_2 / kg	6,040	kg	2.6
- PMD	1,308	g CO2 / kg	770	kg	1.0
- Other Waste	1,308	g CO_2 / kg	17,140	kg	22.4

References
1: Source: website CO2emissiefactoren.nl
2: Source: Chain analyses Pipelife and Siemens Netherland / CE Delft/ KEMA



Scope 3	Ton CO_2	%
Personal cars for business travel	20.2	0.3%
Business air travel	93.4	1.2%
Personal cars for business travel	0.4	0.0%
Commuter travel with transportation not owned by the company	618.2	42.0%
Waste disposal	738.3	50.2%
Tot	1,470.5	