



# Carbon Footprint Report 2021

Greenhouse gas emissions resulting  
from EIB Group internal operations



European  
Investment  
Bank

*The EIB bank*



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Greenhouse gas emissions resulting  
from EIB Group internal operations



## **Carbon Footprint Report 2021**

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## ABOUT THIS REPORT

This report provides a detailed and comprehensive breakdown of EIB Group greenhouse gas emissions arising in 2021 from the EIB Group's head office operations in the Kirchberg district of Luxembourg city. It also provides a comparative analysis of performance in relation to the previous years' data and to the updated baseline year of 2018.

It has been prepared following a review of internal and external documentation, interviews with key EIB Group personnel and interrogation of source data and data collection systems. All data collected and analysed within this report follow the World Resources Institute GHG Protocol principles of relevance, completeness, consistency, transparency and accuracy. These data further consider the impacts arising from the COVID-19 pandemic and cover greenhouse gas (GHG) emissions resulting from staff working from home.

In line with reporting best practice, two emissions totals are disclosed — gross emissions and net emissions. The reporting primarily focuses on “net” emissions, classifying consumption from renewable energy as zero emissions and considering directly offset purchased services as carbon-neutral. In reporting “gross” emissions, the report aims to compare performance for items considered as zero emissions in the EIB Group's “net” emission totals, such as electricity and heat in buildings, plus data centres. To calculate “gross” emissions, national average conversion factors — an approach that better enables benchmarking — are used.



## THE EIB GROUP

The EIB Group is the European Union's long-term financing institution. It provides finance and technical assistance to achieve sustainable and inclusive development through two complementary entities, the European Investment Bank (EIB or Bank) and the European Investment Fund (EIF).

The **European Investment Bank (EIB)** — the EU bank — is owned by the EU Member States. The EIB is the world's largest multilateral borrower and lender. The finance and assistance the EIB provides support the European Union's values and objectives laid down in the EU policies. The EIB also operates globally as a multilateral development bank following the establishment in 2022 of a dedicated arm called EIB Global<sup>1</sup>.

The **European Investment Fund (EIF)** is dedicated to achieving EU objectives, notably with the aim of providing better access to finance to small and medium-sized enterprises (SMEs) and mid-caps, through the design, promotion and implementation of risk capital and risk sharing instruments, including support for entrepreneurship, growth, innovation, research and employment.

## EIB GROUP'S ENVIRONMENTAL MANAGEMENT SYSTEM AND CLIMATE PROGRAMME

The EIB Group aims to lead by example in managing its environmental performance and disclosing the impact of its internal operations. The EIB Group implements an Environmental Management System in accordance with the European Union's Eco-Management and Audit Scheme (EMAS) Regulation<sup>2</sup>. EMAS provides all EIB Group services responsible for internal operations with a robust structured framework to implement programmes and initiatives, but also to monitor, evaluate, report and continually improve its internal environmental performance in a holistic manner.

As the EU climate bank, the EIB Group endorsed in 2020 the Climate Bank Roadmap 2025<sup>3</sup>. While setting ambitious Paris-alignment requirements and eligibility criteria towards its projects and counterparties, the EIB Group also confirmed the need to walk the talk and lead with its internal operations<sup>4</sup> as an example. Therefore, the corporate Climate Programme aims to support the objectives of the Climate Bank Roadmap resulting from the European Union's increased ambition of reducing greenhouse gas emissions to at least 55% below 1990 levels by 2030. Its targets and action plan also align with the goals and principles of the Paris Agreement by defining a carbon emissions abatement pathway using science-based methodology to guarantee the long-term alignment of its internal operations within a global temperature rise limit of 1.5°C. The corporate Climate Programme's action plan to reduce the EIB Group's internal environmental and carbon footprint is structured around three key areas of intervention:

- The way we travel
- The way we work
- The way we do business

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<sup>1</sup> [EIB Global](#)

<sup>2</sup> Regulation (EU) 1221/2009 updated by Regulations (EU) 2017/1505 and (EU) 2018/2026

<sup>3</sup> [EIB Group's Climate Bank Roadmap](#)

<sup>4</sup> Internal operations are all activities related to the way the EIB Group is structured to facilitate the carrying out of various business activities, for instance workspace availability, security and safety services, business travel, IT, data management, etc. The objective can be found in the CBR 2025 on pages 61 and 62

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# 1. EXECUTIVE SUMMARY

The EIB Group has been calculating and reporting on its carbon footprint since 2007. Having surpassed the European Union's target of 20-30% carbon emission reduction by 2020 from the baseline in 2007, the EIB Group has defined a new target for greenhouse gas emissions in line with the goals of the EIB Group Climate Bank Roadmap 2021-2025, and in line with the temperature goals of the Paris Agreement. Using the science-based Paris reduction pathway shown below and in line with the EU 2050 decarbonisation strategy, the EIB Group will reduce absolute carbon emissions by 30% by 2025, compared to a business-as-usual (BAU) scenario base year of 2018. This corresponds to an absolute reduction of greenhouse gas emissions of 12.4% by 2025 compared to 2018.



Figure 1: Science-based emission reduction pathway

"Since the 2018 baseline, the EIB Group has reduced its emissions intensity per employee by over 82%"

	Net emissions tCO <sub>2</sub> e	Total employees	Intensity per employee tCO <sub>2</sub> e
	4 356	4 412	0.99
vs. 2020	-26.9%	+7.8%	-32.4%
vs. baseline	-80.6%	+13.2%	-82.8%

Over the past year, the EIB Group has seen carbon reductions in almost all areas owing to the effects of the global COVID-19 pandemic. This resulted in a 26.9% decrease in total net emissions in 2021, and an 80.6% decrease as compared to the baseline.

While the EIB Group has far exceeded the corporate Climate Programme targets due to exceptional external circumstances, these decreases do not affect the Bank's commitment to permanently reducing its environmental and carbon footprint.

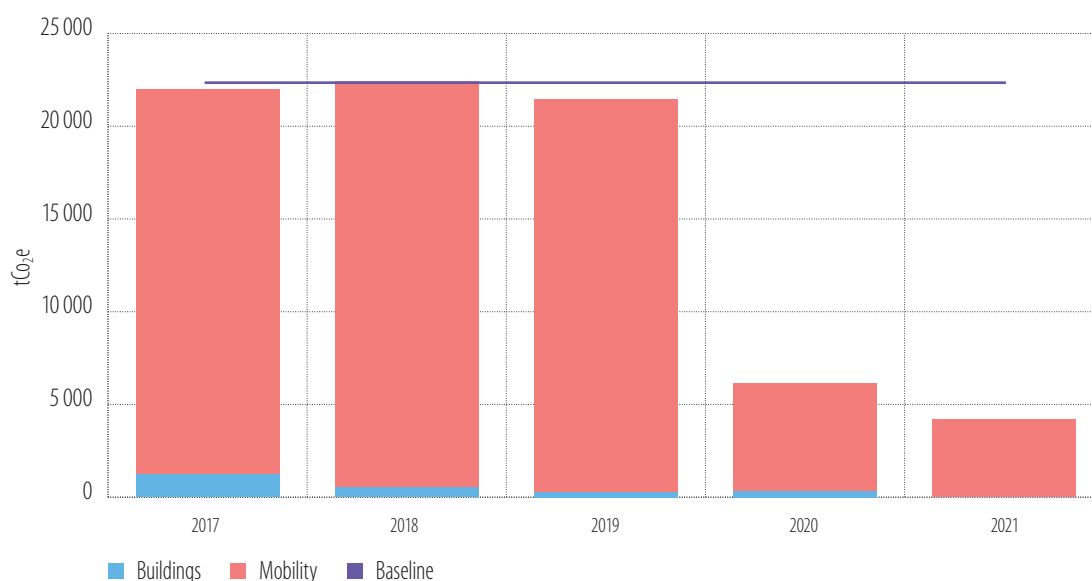






Figure 2: EIB Group net emissions performance and trends

## 1.1. EIB GROUP ACTIONS AND INITIATIVES

The EIB Group has been reporting on its environmental impact since 2007, and in 2022 rebase-lined to 2018. During this time, numerous actions and initiatives to improve disclosure and performance have been implemented.

Selected initiatives include:

Buildings-related energy consumption	
	<b>BREEAM-IN-USE<sup>5</sup>:</b> excellent certification obtained
	New building design and construction — finalisation of BREEAM excellent design certificate
	Completion of the design phase for the circular design of the WKI building's refurbishment with sustainability and circularity as key principles for its renovation
	Replace legacy data centre with modern energy-efficient equipment
	Review high-quality purchased Guarantees of Origin
Technology	
	Include the energy-efficiency performance of IT devices as a high-priority decision factor in the procurement process
	Deploy mobile applications and make it easier to connect and work remotely, and work from home with Windows Hello
	Improvement of teleconferencing tools to help alleviate travelling where possible
	Decommissioning of landline phones
	Force duplex and black and white printing across the whole organisation by default
	Ensure all electricity for third-party data centres is sourced from renewable energy

<sup>5</sup> For more information on BREEAM-IN-USE please see: [BREEAM In-use — BRE Group](#)

#### Reducing consumption and waste



Donation of 1 000+ computers every year to schools and charities to ensure technology has a secondary life and to reduce both waste and production of more IT



Recycle electronic equipment wherever possible, or destroy and dispose responsibly under waste and waste electrical and electronic equipment (WEEE) regulations



Centralised bins for paper, food waste and recyclable packaging

Implementation of a "foodsharing app" called Phenix for cafeteria leftovers

Single use plastics completely forced out

Ecobox reusable packaging replaced with deposit glass jars

#### Staff mobility



Travel policy: clear guidelines to decide whether travel is necessary or can be avoided, and provide alternatives

Improved bicycle parking facilities, installing and expanding repair stations

Encourage people to travel more efficiently by creating awareness, giving insight on personal, division-wide and directorate-wide footprint, and alternatives/guidelines on how to voluntarily reduce the footprint

Shuttle service from Luxembourg to Brussels together with the other EU institutions

## 1.2. 2021 PERFORMANCE — KEY HIGHLIGHTS AND DRIVERS:

"Due mainly to the impacts of the COVID-19 pandemic, total net emissions fell by 26.9%"

### DRIVERS FOR THE REDUCTION OF GREENHOUSE GAS EMISSIONS

The global COVID-19 pandemic has continued to significantly disrupt the daily lives and practices of people as well as business operations in organisations all over the world. This was no different for us at the EIB Group, and since February 2020 the Crisis Management Committee has implemented emergency measures to protect staff and prevent the spread of the virus while maintaining business operations.

Since the pandemic began in 2020, the calculation of greenhouse gas emissions has presented a number of challenges due to the many variable factors that have had to be taken into account. Complexities to reflect actual greenhouse gas emissions have been taken into consideration, including the homeworking emissions as a result of the teleworking arrangements implemented during the pandemic.

The main feature of these adjustments to the way we work was to allow staff to work from home where possible. From one day to the next, the majority of staff had to adjust to a new way of working from home. Interactions between colleagues moved online and the Bank's IT infrastructure had to become more robust as it adjusted to the new circumstances. The impact on business travel due to national and international travel restrictions and the drop in commuting as a result of staff working from home meant that there was a sharp drop in mobility emissions.

Furthermore, adjustments were required to operations at the EIB Group's campus buildings, many of which were closed due to staff homeworking arrangements. The main campus buildings (WKI and EKI) remained open for maintenance, security and essential staff only. The decrease in energy usage of the buildings that remained open was not as drastic as one would expect. Although working spaces needed less lighting, the ventilation requirements due to occupational health and safety measures required the buildings to increase the flow of clean air through the buildings. Furthermore, fresh air entering the buildings, particularly during the winter months, had to be heated to ambient temperatures, requiring a further increase in energy usage.

## REDUCTION IN BOTH GROSS AND NET EMISSIONS

2021 saw continued growth in EIB Group headcount, which rose by 7.8% to 4 412 employees, up from 4 092 in 2020. As a significant proportion of carbon footprint is linked to employee numbers, an increase in headcount is often correlated with higher emissions from most sources within the reporting boundary. However, on this occasion both gross and net emissions decreased, due mainly to the impacts of the COVID-19 pandemic.

## INCREASE IN ENERGY CONSUMPTION IN EIB BUILDINGS AND DATA CENTRES

In 2021, buildings-related electricity consumption increased by 1.1% compared to 2020. This can be attributed to the impacts of the pandemic but also to the partial return to the office that occurred during the year. The use of thermal energy increased by 17.8% compared to 2020. This is due to additional fresh air requirements applicable to the use of buildings to reduce the risk of SARS-CoV-2 transmission. Additional heating of this air was required to bring it up to acceptable office temperatures and additional heating was needed to counter the impact of increased fresh air ventilation, particularly during the winter months.

Overall Scope 2 emissions increased by 14% to 91 tonnes of CO<sub>2</sub>e, compared to 80 tonnes of CO<sub>2</sub>e in 2020. Electricity emissions decreased by 11.8%; however, the impact of these reduced emissions is only seen in gross rather than net emissions totals because all of the EIB Group's buildings are supplied by 100% zero-carbon electricity.

Emissions from the use of third-party data centres increased from 152 tCO<sub>2</sub>e<sup>6</sup> to 177 tCO<sub>2</sub>e following the introduction of a new data centre in October 2021. Data centre electricity is 100% sourced from hydroelectricity, so this is accounted for as zero in the EIB Group's net Scope 3 emissions.

## REDUCTION IN FLIGHTS AND COMMUTING

All emissions related to travel, excluding the minibus service, decreased once more compared to the previous year primarily due to ongoing COVID-19 travel restrictions in 2021. Emissions related to mobility fell by an average of 27%, with emissions related to air travel down by 1 769 tCO<sub>2</sub>e, train travel down by 2 tCO<sub>2</sub>e and commuting down by 141 tCO<sub>2</sub>e.

## WORKING FROM HOME

From the start of the pandemic in March 2020, EIB Group staff were required to work from home and in 2021 the COVID-19 pandemic continued to prevent the full return of staff to the office. This was the first year that homeworking emissions were included in the carbon footprint calculations of the EIB Group. For the second year running, the impacts of EIB Group staff working from home were estimated using an emissions calculation model developed by EcoAct. Working from home was estimated to generate 2 204 tCO<sub>2</sub>e, increasing from 1 876 tCO<sub>2</sub>e in 2020.

## REDUCING EMISSIONS INTENSITY

The EIB Group's emissions intensity fell by more than 80% since the 2018 baseline year. The reporting scope expanded to include additional emissions sources, the incorporation of new real estate and refinements to the reporting methodology<sup>7</sup>.

<sup>6</sup> tCO<sub>2</sub>e: tonnes of carbon dioxide equivalent.

<sup>7</sup> Further information regarding the impact of methodological changes can be found in Appendix II: Methodology.

### **1.3 COMPENSATION OF RESIDUAL EMISSIONS**

Although the EIB Group has been measuring and managing its carbon emissions for over a decade and has successfully reduced its net impact per employee by over 90% since 2007, and by over 80% since the 2018 baseline, there is still scope to do more; although as a growing organisation the EIB Group will continue to use energy and travel for business purposes.

Between 2014 and 2020, the EIB Group compensated its residual emissions annually by purchasing high quality Voluntary Emissions Reductions (VERs) credits (carbon offset credits) generated by the Kasigau Corridor REDD+ project, which prevents deforestation and forest degradation, helping to protect wildlife and promote biodiversity in 500 000 acres of highly endangered Kenyan forest.

The EIB Group remains committed to offsetting yearly its residual greenhouse gas emissions in 2021 and going forward. However, in the rapidly evolving voluntary carbon credit market and in view of the upcoming European rules on certifying carbon removals, the EIB is reviewing its internal process to ensure its practices remain both agile and best-in-class. In practice this means that EIB will offset its 2021 residual greenhouse gas emissions as soon as practically possible, probably together with residual greenhouse gas emissions of 2022.

## 2. CARBON FOOTPRINT

### 2.1. 2021 PERFORMANCE SUMMARY

	Net emissions tCO <sub>2</sub> e	Total employees	Intensity per employee tCO <sub>2</sub> e
	4 356	4 412	0.99
<b>vs. 2020</b>	-26.9%	+7.8%	-32.4%
<b>vs. baseline</b>	-80.6%	+13.2%	-82.8%

Due to the COVID-19 pandemic and the resulting travel restrictions and lower building occupancy, operational consumption and emissions have decreased. These decreases do not impact the Bank's commitment to permanently reducing its environmental footprint.

Due to the pandemic, the EIB Group achieved a further reduction in its emissions intensity, which fell by 32.4% to 0.99 tCO<sub>2</sub>e per employee. Although EIB Group employee numbers have increased by 13% since the baseline year of 2018, emissions intensity has decreased significantly, by 83%, in the same period and the continued reduction in the emissions intensity of operations means the EIB Group is well ahead of its target to reduce relative emissions by 30% by 2025 (equivalent to an absolute reduction of 12.4% compared to baseline emissions in 2018).

In 2021, the number of EIB Group staff increased by 7.8% from 2020 while its total net emissions decreased by 26.9% to 4 356 tCO<sub>2</sub>e. This reduction is mostly driven by a decrease in greenhouse gas emissions because of the impacts of the COVID-19 pandemic, particularly in air and rental car travel and office water consumption.

	2017	2018	2019	2020	2021	VS. 2020	VS. BASELINE 2018
<b>Total net emissions</b>	21 993	22 415	21 434	5 958	4 356	-26.9%	-80.6%
<b>Employees</b>	3 682	3 896	3 964	4 092	4 412	+7.8%	+ 13.2%
<b>Net emissions per employee</b>	5.97	5.75	5.41	1.46	0.99	-32.4%	-82.8%

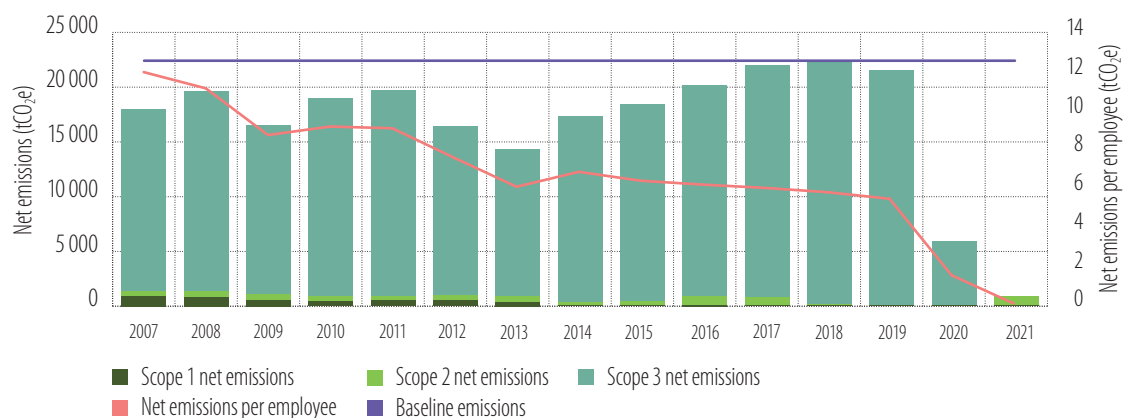


Figure 3: EIB Group net emissions over time (tCO<sub>2</sub>e): Total emissions and relative emissions per employee

Buildings-related energy consumption is the largest source of emissions on a gross basis; however, all EIB Group-purchased electricity is covered by green Guarantees of Origin. Therefore, purchased electricity is reported as zero-net emissions.

On a gross basis, buildings-related energy consumption accounts for 45% of overall emissions. However, on a net basis, emissions relating to buildings usage account for just 4% of the overall carbon footprint, with business travel the largest contributor to total emissions on both a net and gross basis.

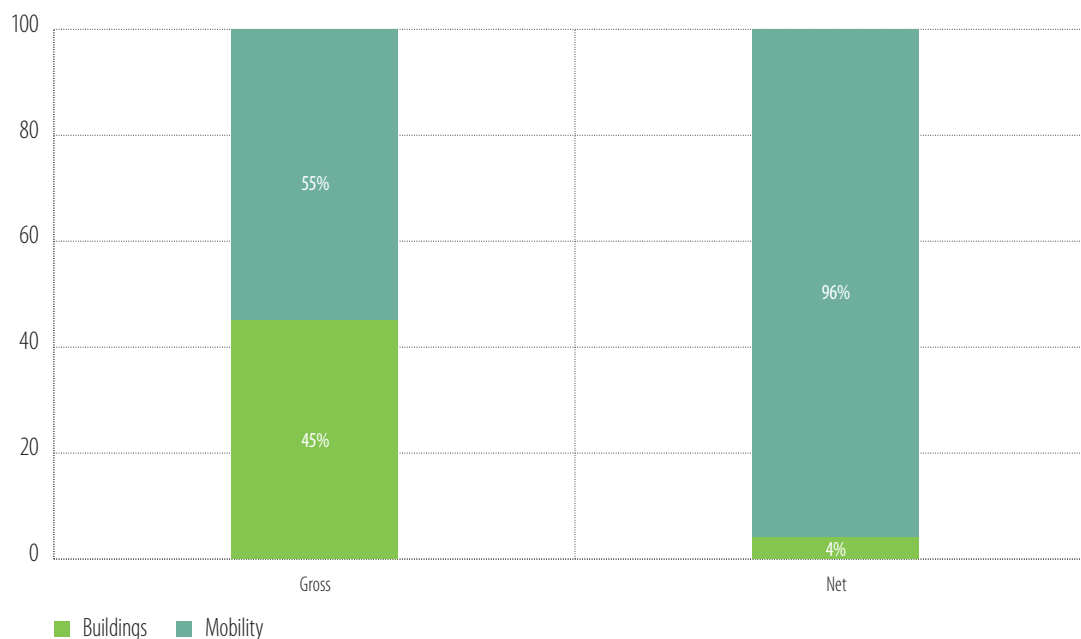


Figure 4: Percentage breakdown of net and gross emissions (tCO<sub>2</sub>e)

## 2.2. MOBILITY EMISSIONS

	Distance travelled (thousand km)	vs. 2020	Net emissions tCO <sub>2</sub> e	vs. 2020
<b>Mobility</b>	8 265	-35.5%	4 199	-27.4%

Given the EIB Group's role as a global financier, business travel is an unavoidable part of its business. This is why mobility emissions account for 96% of total net emissions and 55% of gross emissions.

Business travel (flights and rail) accounts for a large proportion of total gross and net mobility emissions at 31% and 31.3% respectively. Commuting emissions account for 15% of total gross mobility emissions.

**In 2021, for the second year, the EIB Group has estimated the impacts of EIB Group staff working from home during the pandemic, using an emissions estimation calculation model developed by EcoAct. Working from home is categorised as "commuting" under the GHG Protocol Scope 3 methodology, so it is included in this section on mobility. This model estimates that working from home accounted for 52.1% of total gross mobility emissions.**

Company car travel accounts for just 0.7% of gross mobility emissions. Remaining mobility emissions sources are not significant, with rental car travel and minibus emissions combined accounting for just 0.8% of gross mobility emissions. Emissions from couriered shipments contribute just 0.8% of emissions on a gross basis but, as these emissions are offset by the courier company, they are treated as zero emissions on a net basis.

The EIB Group already has policies in place regarding travel classes to minimise emissions. This policy requires the consideration of alternatives to travel, including teleconferencing and videoconferencing whenever compatible with business interest. Staff are also encouraged to use sustainable means of transport in their daily commute through awareness-raising initiatives.

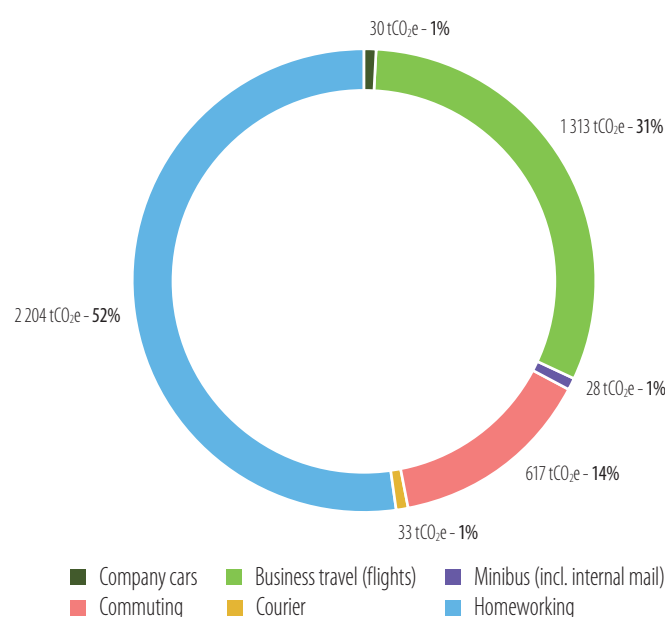


Figure 5: Breakdown of 2021 mobility gross emissions by source

## 2.2.1. AIR TRAVEL

	Distance travelled (thousand km)	vs. 2020	Net emissions tCO <sub>2</sub> e	vs. 2020
Air travel	3 753	-57.2%	1 313	-57.4%

Air travel figures fell significantly in 2021, with 3.8 million kilometres travelled by EIB Group staff (down 57.2% from 2020). Associated emissions from air travel decreased by 57.4%. Most of this decrease is related to the pandemic which limited travel during 2021.

Most air travel emissions (82.9%) are attributable to longer-distance business class flights, with a smaller proportion (13.9%) arising from shorter-distance flights. By contrast, premium economy accounts for just 3.2% of air travel emissions, and first-class flights account for 0.03% of said emissions.



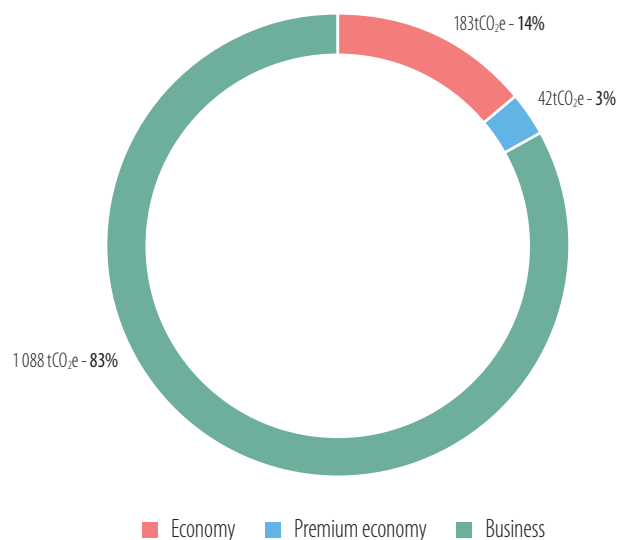


Figure 6: Air travel emissions by travel class

### 2.2.2. WORKING FROM HOME

	% of workforce (average, 2021)	vs. 2020	Net emissions	vs. 2020
<b>Working from home</b>	<b>75%</b>	<b>+0.42%</b>	<b>2 204 tCO<sub>2</sub>e</b>	<b>+17.5%</b>

Please note: since the beginning of the COVID-19 pandemic, some EIB Group buildings have been closed for longer periods during lockdowns.

In 2021, 75% of all EIB Group staff were working from home. The emissions calculation model used estimates that this generated 2 204 tCO<sub>2</sub>e in 2021. These emissions are modelled using the percentage of EIB Group staff working at home each month, during the entirety of the reporting year.

We applied the average energy consumption estimations produced by Luxembourg's Ministry of the Environment to produce as accurate a calculation as possible. The EIB Group will further refine its calculations for the duration of the pandemic and beyond, in line with future teleworking policies as appropriate. Further details of the working-from-home calculation methodology can be found in Appendix II.

### 2.2.3. CAR TRAVEL

	Distance travelled	vs. 2020	Net emissions	vs. 2020
<b>Commuting by car</b>	<b>4 129</b>	<b>+20.4%</b>	<b>708 tCO<sub>2</sub>e</b>	<b>+20.4%</b>
<b>Company cars</b>	<b>286</b>	<b>+30.6%</b>	<b>30 tCO<sub>2</sub>e</b>	<b>-6.3%</b>
<b>Rental cars</b>	<b>29</b>	<b>-49.1%</b>	<b>6 tCO<sub>2</sub>e</b>	<b>-53.8%</b>

Due to the COVID-19 pandemic and the resulting travel restrictions and lower building occupancy, operational consumption and emissions may have decreased. These decreases do not impact the Bank's commitment to permanently reducing its environmental footprint.

Car travel across commuting, company cars and rental cars is the third most significant source of mobility emissions after behind flights and homeworking. Vehicles of this type account for 15% of the EIB Group's total gross mobility emissions and 16% of its total net emissions, most of which relate to employee commuting. **Commuting emissions increased by 20% in 2021 with most of this increase related to the partial return to the office in some periods of 2021.**

The EIB Group strives to expand the coverage and transparency of its disclosure wherever possible. 2021 is the sixth year where we have included emissions from rental cars used for business travel. Although they account for a small proportion of overall net emissions, the inclusion of rental car emissions provides a more complete disclosure of emissions from car travel. The EIB Group continues to work with its suppliers to improve the quality of data received and we record distance travelled in both diesel and petrol cars rather than spend data alone.

## 2.2.4. OTHER MOBILITY EMISSIONS

	Consumption	vs. 2020	Net emissions	vs. 2020
<b>Courier<sup>8</sup></b>	6 849 shipments	-10.4%	33 tCO <sub>2</sub> e	-10.8%
<b>Minibus</b>	57 thousand km	+62.9%	28 tCO <sub>2</sub> e	+64.7%
<b>Train</b>	10 thousand km	-96.7%	0 tCO <sub>2</sub> e	-100%

Other mobility emissions (minibus and rail travel) account for just 0.7% of gross emissions and net mobility emissions. Rail travel fell significantly in 2021 with 10 000 kilometres being travelled by EIB Group staff (down 96.7% from 2020), with emissions related to this decreasing by 96.7%, from 1.5 tCO<sub>2</sub>e in 2020 to 0.05 tCO<sub>2</sub>e in 2021. However, minibus travel increased by 62.9% in 2021 to 57 000 kilometres, with related emissions increasing by 64.7%. Courier shipments decreased in 2021 compared to 2020, albeit these shipments are offset and are treated as zero emissions on a net basis.

## 2.2.5. HOTEL STAYS

	Consumption	vs. 2020	Gross emissions	vs. 2020
<b>Hotel stays<sup>9</sup></b>	3 117	-14.9%	90 tCO <sub>2</sub> e	-62.8%

In 2019 the EIB Group started calculating and reporting hotel stays internally and continued to do this in 2020 and 2021 as the impacts of the pandemic became apparent. However, emissions and night stays have been excluded from the carbon footprint totals for 2020 and 2021 but may be incorporated going forward as we consider the reporting boundary of the footprint and new emissions targets from 2022.

## 2.2.6. CHANGES TO COMMUTING CALCULATIONS

During 2020, ways in which emissions calculation methodologies could be improved were reviewed for most material emissions sources. In 2020, the methodology was changed to use a commuting emissions calculation tool developed by EcoAct, which continued to be used in 2021, as the count using the number of parking spaces was significantly impacted by the pandemic.

<sup>8</sup> Couriers shipments are offset and are treated as zero emissions on a net basis.

<sup>9</sup> Hotel stays are not included in EIB's total carbon footprint, but are reported for transparency.

The commuting emissions estimation tool uses the number of EIB Group FTEs (full-time equivalent units) to calculate the annual distance travelled by employees by different modes of transport. Assumptions were made on the proportion of car, bus, rail and tram/metro journeys taken based on transport data from the European Commission. The appropriate emissions factor for each mode of transport was then applied in order to calculate total emissions.

### 2.2.7. INCLUSION OF HOMEWORKING EMISSIONS

During 2020, ways in which emissions calculation methodologies could be improved was reviewed for most material emissions sources. In 2020, the methodology was changed to use a commuting emissions calculation tool developed by EcoAct, which continued to be used in 2021, as the count using the number of parking spaces was significantly impacted by the pandemic.

The pandemic necessitated teleworking arrangements for a majority of 2020 and 2021. As a result of this change in working arrangements, the importance of calculating working-from-home emissions was acknowledged. Therefore, for the second time, homeworking emissions were calculated and included in the EIB Group's 2021 greenhouse gas emissions. We used the methodology described in a whitepaper that was produced by EcoAct in partnership with Lloyds Banking Group and NatWest Group. Further details of the calculation methodology and a link to the whitepaper can be found in Appendix II.

## 2.3. BUILDINGS EMISSIONS

**"All EIB Group buildings' electricity supplies are procured from 100% renewable sources"**

Close to half (45.1%) of EIB Group gross emissions relate to buildings-related energy usage, with electricity consumption (68.2%) and purchased steam (24.8%) responsible for most of the buildings-related gross emissions. Since 2009, all EIB Group-purchased electricity is from renewable sources covered by green Guarantees of Origin and is therefore reported as zero emissions on a net basis.

Buildings-related electricity consumption is the EIB Group's largest source of emissions and represents its single greatest area of influence. Other sources of buildings-related consumption including steam, natural gas, paper, water, waste and data centre emissions are comparatively modest, accounting for just 14.3% of total gross emissions.

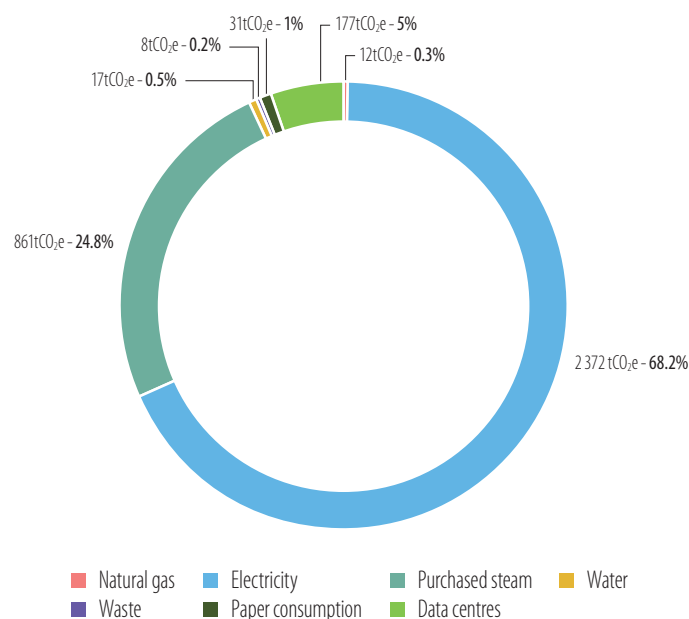


Figure 7: Breakdown of buildings-related gross emissions by source (tCO<sub>2</sub>e)

### 2.3.1. ELECTRICITY IN OFFICES

	Consumption	vs. 2020	Gross emissions	vs. 2020
<b>Electricity</b>	17 126 MWh	+1.1%	2 372 tCO <sub>2</sub> e	-11.8%

Electricity consumption in office buildings rose by 1.1% in 2021, primarily due to increases across the IAK, LHO and EKI buildings.

Building	2020	2021	Variance
WKI	7 189	6 610	-8.1%
EKI	4 178	4 639	+11.0%
IAK	1 659	2 047	+23.4%
PKI	1 497	1 550	+3.5%
BLB	1 027	972	-5.4%
LHO	1 150	1 284	+11.7%
BKI	185	4	-97.6%
Crèche	51	19	-62.0%
SKI	0	0	0%
<b>Total<sup>10</sup></b>	<b>16 935</b>	<b>17 126</b>	<b>+1.1%</b>

Table 1: Electricity consumption by building (MWh)

Since the beginning of the COVID-19 pandemic, some EIB Group buildings have been closed for longer periods during lockdowns. When open, the buildings have operated under 100% fresh air intake, with the ventilation system (AHU) working 24/7 and recovery wheels out of service. This mode of operation has had a significant impact on overall energy consumption, skewing the trend in energy consumption reduction. The decreases do not impact the Bank's commitment to permanently reducing its environmental footprint.

### 2.3.2. PURCHASED STEAM

	Consumption	vs. 2020	Gross emissions	vs. 2020
<b>Purchased steam</b>	19 278 MWh	+17.9%	861 tCO <sub>2</sub> e	+17.8%

Purchased steam used for heating is the second-largest buildings-related emissions source, contributing 861 tCO<sub>2</sub>e or 25% of gross buildings-related emissions in 2021.

### 2.3.3. OTHER BUILDINGS-RELATED EMISSIONS

	Consumption	vs. 2020	Net emissions	vs. 2020
<b>Paper</b>	39 tonnes	-17.0%	31 tCO <sub>2</sub> e	-16.2%
<b>Water</b>	39 308 Ml <sup>11</sup>	-8.5%	17 tCO <sub>2</sub> e	-62.2%
<b>Natural gas</b>	63 MWh	+10.5%	12 tCO <sub>2</sub> e	+20.0%
<b>Waste</b>	539 tonnes	+38.9%	8 tCO <sub>2</sub> e	+33.3%

<sup>10</sup> Totals differ from the sum of each building's consumption due to rounding.

<sup>11</sup> Since 2020, the way "water use" is reported has changed from m<sup>3</sup> to Ml to align with the reporting units required by the Global Reporting Initiative.

Paper represents the largest other buildings-related emissions source on a net basis at 45%, with waste, water and natural gas combined accounting for the remaining 55%. The EIB Group continues to identify initiatives to improve disclosure and reduce consumption.

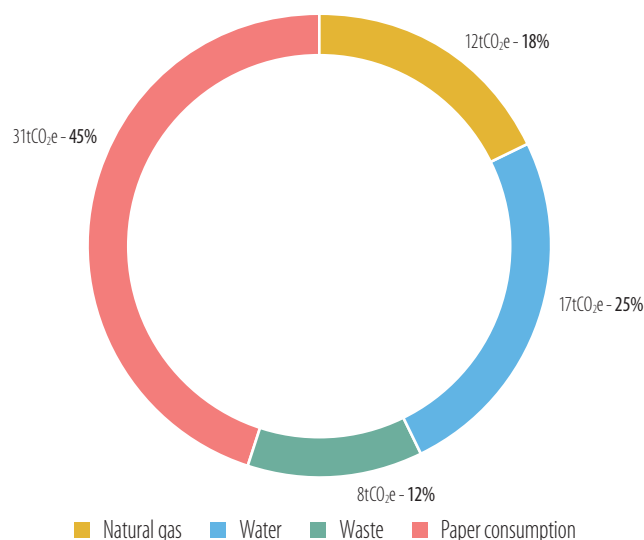


Figure 8: Breakdown of net other buildings-related emissions by source

## 2.3.4. DATA CENTRES

Emissions from data centres fall within Scope 3 emissions as the data centres are not owned or operated by the EIB Group, but they hold data associated with Group activities. This year, total data centre electricity consumption increased by 16.5% and gross emissions increased by 16.4%. The increase in consumption is attributed to the inclusion of a new, larger data centre at the end of 2020.

The EIB Group's data centre energy is sourced from 100% hydroelectricity, so the emissions associated with the use of data centres are deducted and reported as zero in the net Scope 3 emissions.

## 2.3.5. PAPER

The EIB Group has undertaken several measures to reduce paper consumption in recent years: the Group has not had local printers for the past five years, uses "follow-me" printing where users can print to a shared print queue/device, and jobs are automatically deleted if not released within 24 hours. Although the split of printing is simplex (67%) and duplex (33%), we are pleased to report a 17% reduction in overall paper consumption in 2021 resulting in a 16% decrease in related emissions.

## 2.3.6. WATER

Overall water consumption across office locations decreased by 3.6 thousand m<sup>3</sup> (3.6 Mega litres, MI) (down 8.5% from 2020). The main reason why usage was comparatively low in 2021 is mainly due to the fact that for most of the year EIB Group staff were working from home. Additionally, there was a significant decrease in the applied emission factor for water, due to the responsible body using updated underlying data in the emission factor calculation process.

## 2.3.7. NATURAL GAS

Only one site across the campus reports a small amount of natural gas consumption linked to gas boilers, at the crèche facility. This year saw a slight increase in consumption from 57 164 kWh to 63 241 kWh although the building was unoccupied. However, minimum heating was maintained in the building for duty of care.

### 2.3.8. WASTE

In 2018, waste data were improved so that they could be collected and reported for each individual campus building, rather than simply reporting total volumes across the campus.

The total volume of waste, including hazardous and waste electrical and electronic equipment, disposed of in 2021 increased by 39%.

Type	Treatment	Volume (tonnes)	tCO <sub>2</sub> e
Mixed	Incineration	179.5	3.8
Organic	Compost	136.5	1.2
Paper	Recycled	70.6	1.4
Glass	Recycled	23.8	0.5
Plastic	Recycled	6.2	0.1
Metal	Recycled	8	0
Wood	Recycled	43.4	0.9
<b>Total</b>		<b>467.9</b>	<b>8</b>
<i>Hazardous, waste electrical, electronic equipment and construction waste</i>		<i>70.8</i>	<i>n/a</i>

Table 2: Waste emissions and activity data

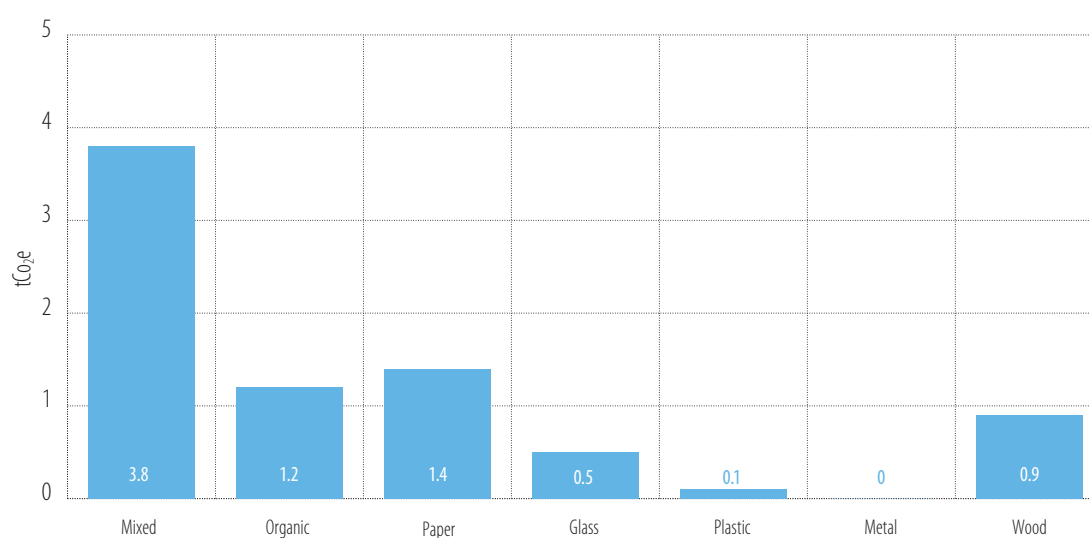


Figure 9: Total emissions by waste type (tCO<sub>2</sub>e)

## CASE STUDY: Stepping up recycling at the EIB Group

Recycling is part of our everyday lives. Through our new internal Climate Programme, we aim to do more, by implementing innovative solutions that promote circularity (through the efficient (re)use of resources, materials and products). Our aim: changing our focus from waste management to resources management and eco-design. How? By systematically reducing our waste, stepping up our recycling efforts and encouraging re-use! As a first step, we are introducing three new initiatives:

### Giving a second life to our hand paper towels

Do you know how many hand paper towels we use on an annual basis at the EIB premises? The answer is: more than 11 million, resulting in an impressive 27.3 tonnes of waste. As part of our search for state-of-the-art solutions to promote recycling and circularity, we are pleased to introduce a new initiative called Tork PaperCircle®, that will enable us to **reduce our overall residual waste by up to 12%**. In doing so, we will be the first organisation in Luxembourg to introduce this innovative solution.

#### How does it work?

For you as users of our sanitary facilities, the changes will be limited. New hand paper towels will replace the existing ones, without any change in terms of quality, and all hand paper towels should from now on be disposed of in dedicated bins located in the sanitary facilities. The dedicated bins will then be collected by our cleaning agents and sent to one of the Essity paper factories in Germany or the Netherlands for recycling to begin a second life as a new paper product.

### Introducing collective bins for all

In an effort to reduce our waste and improve how we sort our office waste, collective bins replaced individual office bins for all staff by the end of 2021.

#### Why are we implementing this change?

By installing dedicated collective waste recycling bins in the Bank's common areas (such as coffee corners), sorting of waste will be easier. The bins have a distinct colour that indicates the waste concerned: yellow for recyclable items, grey for residual waste, blue for paper, and purple for used batteries. For organic waste and glass, you can use the trolleys in the coffee corners or the dedicated bins in the cafeterias. Signage on all floors guide you to the closest collective bins.

### Welcome to the MéGO project

Cigarette butts are one of the hidden polluters in our environment, as they require up to 15 years to be biodegradable. If they come into contact with a water source in the meantime, they will end up polluting 500 litres of water. Just imagine that over 40% of the waste in the Mediterranean Sea is currently composed of cigarette butts!

We have launched the MéGO project via SODEXO with [SHIME](#), a Luxembourg company specialised in the field of sustainable development, to improve the collection of cigarette butts from the smoking areas managed directly by the EIB and to implement a new waste stream by moving towards a circular approach.

#### How does it work?

New ashtrays with the distinct MéGO logo have been placed in four smoking areas to collect cigarette butts. Once a month, cigarette butts will be collected to start their recycling journey. The first step is to safely remove all polluting particles, such as nicotine, heavy metals and other chemicals. The next step is to recycle all plastic elements, particularly the cellulose acetate that makes up the cigarette filters. One day you may even come across a piece of furniture in a public space composed of some cigarette butts collected at the EIB, as the recycled plastic is sent to a factory in Brittany (France) to produce this type of furniture!

# 3. ENVIRONMENTAL INDICATORS

## 3.1. EMISSIONS BY SCOPE (TCO<sub>2</sub>E)

	Emissions source	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Scope 1	Natural gas	12	10	20	24	28	28	24	0	297	399	433	329	464	743	833
	Company cars	30	32	58	51	62	70	58	69	75	96	103	112	107	99	100
Scope 2	Electricity	2 372	2 689	3 495	4 226	5 344	5 245	5 717	5 693	6 765	6 876	7 061	7 111	7 367	7 454	6 085
	Purchased steam	861	731	653	660	743	798	421	354	485	459	390	502	490	374	249
	Cold supply														29	32
Scope 3	Business travel (flights and rail)	1 313	3 084	18 228	18 905	17 736	15 972	14 724	13 677	11 163	9 168	12 131	11 413	10 858	13 489	12 407
	Minibus (including internal mail)	28	17	54	60	46	38	32	27	56	52	141	130	130	270	270
	Commuting	617	758	2 755	2 838	2 874	2 735	2 638	2 701	2 042	6 190	6 369	6 369	4 407	4 363	3 749
	Courier	33	37	61	62	72	74	70	70	70						
	Rental cars	6	13	58	52	45	92									
	Water	17	45	69	70	62	58	50	47	50						
	Waste	8	6	15	17	10	11	11	13	10	-6	-2	-4	0	-1	0
	Paper consumption	31	37	98	130	109	107	105	73	106	83	115	146	120	227	200
	Data centres	177	152	139	189	277	290	405	422							
	Homeworking	2 204	1 876													
Totals	Total Scope 1	41	42	78	75	91	98	82	69	372	495	536	441	570	842	933
	Total Scope 2	3 232	3 420	4 148	4 886	6 087	6 042	6 137	6 047	7 249	7 335	7 451	7 613	7 857	7 857	6 366
	Total Scope 3	4 434	6 025	21 476	22 319	21 231	19 375	18 035	17 030	13 496	15 488	18 755	18 055	15 515	18 348	16 626
	Total gross emissions	7 708	9 487	25 702	27 280	27 408	25 515	24 254	23 146	21 118	23 317	26 741	26 109	23 943	27 047	23 926
	Electricity (green tariff)	-2 549	-2 841	-3 634	-4 226	-5 344	-5 245	-5 717	-5 693	-6 765	-6 876	-7 061	-7 111	-7 367	-7 392	-5 993
	Purchased steam (biomass)	-770	-651	-574	-577											
	Courier	-33	-37	-61	-62	-72	-74	-70	-70	-70	0	0	0	0	0	0
	Total net emissions	4 356	5 958	21 434	22 415	21 993	20 197	18 468	17 383	14 283	16 441	19 681	18 998	16 576	19 656	17 932
	Annual change	-27%	-72.2%	-4.4%	1.9%	8.9%	9.4%	6.2%	21.7%	-13.1%	-16.5%	3.6%	14.6%	-15.7%	9.6%	
Intensity	Employees	4 412	4 092	3 964	3 896	3 682	3 290	2 913	2 556	2 369	2 185	2 175	2 079	1 906	1 769	1 501
	Net emissions per employee	0.99	1.46	5.41	5.75	5.97	6.14	6.34	6.8	6.03	7.52	9.05	9.14	8.7	11.11	11.95

Table 3: EIB Group historic emissions by scope



## 3.2. NET EMISSIONS BY TYPE

To provide further visibility of the EIB Group's carbon impacts, a series of emissions intensities is reported to illustrate emissions per employee so as to demonstrate that while the EIB Group's carbon footprint has increased in absolute terms, this is to be expected given the substantial growth in business over the last ten years. However, by looking at emissions intensity per employee, the EIB Group's relative impact has reduced considerably, compared to both 2007 and the baseline year of 2018, and it remains significantly ahead of the stated target to achieve a 30% reduction in relative emissions by 2025 against a 2018 baseline.

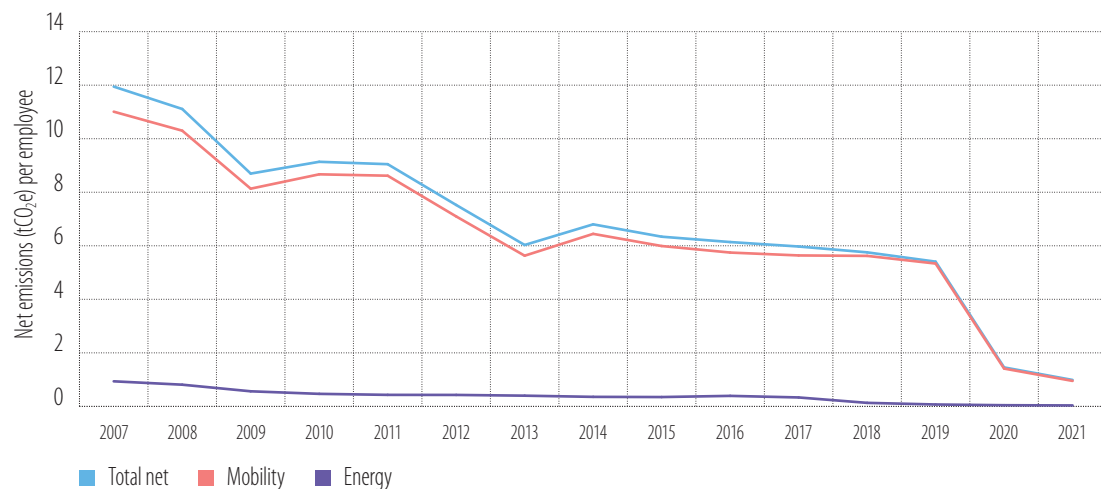


Figure 10: Net emissions intensities (tCO<sub>2</sub>e) per employee: Mobility and energy

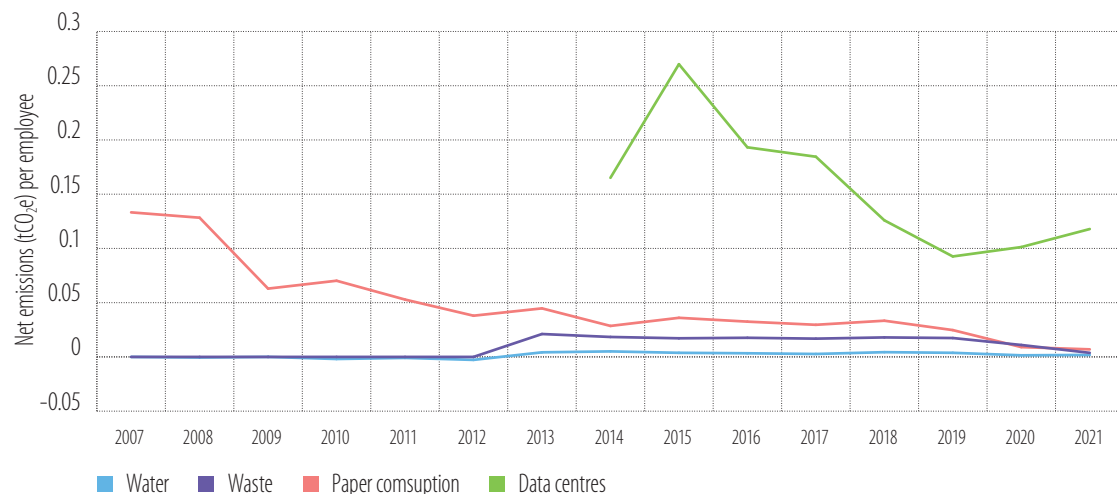


Figure 11: Net emissions intensities (tCO<sub>2</sub>e) per employee: Other buildings-related emissions sources

As for similar financial and professional services organisations, the EIB Group's buildings-related emissions are restricted to office-based consumption and the principal determinant of its overall footprint is its mobility emissions. In subsequent reporting years, the EIB Group intends to explore alternative means of contextualising its carbon footprint to better gauge its performance. The EIB Group will seek to introduce additional metrics that can be used to assess its environmental performance and focus its efforts on delivering initiatives that will avoid, mitigate or reduce the impacts associated with its business.

# APPENDIX I: ORGANISATIONAL AND OPERATIONAL BOUNDARY

## ORGANISATIONAL BOUNDARY

The organisational boundary defines the businesses and operations that constitute the company for the purpose of accounting and reporting greenhouse gas emissions. Companies can choose to report either the emissions from operations over which they have financial or operational control (the control approach) or from operations according to their share of equity in the operation (the equity share approach).

The EIB Group defines its carbon footprint using the operational control approach. As such, it includes the Group's head office operations in the Kirchberg district of Luxembourg city, where several office facilities and the crèche facility are located. External offices are not included because of their small size. It is assumed that the impact of these offices is likely to be non-material, although further efforts will be made in subsequent reporting years to measure the environmental impact of international subsidiary offices.

## OPERATIONAL BOUNDARY

Defining the operational boundary involves identifying emissions associated with its operations, categorising them as either direct or indirect emissions. Companies choose the scope of accounting and reporting for indirect emissions.

The following definitions are used:

### Direct greenhouse gas emissions

- **Scope 1:** Emissions released straight into the atmosphere from sources owned or controlled by the reporting entity.

### Indirect greenhouse gas emissions

Indirect emissions result from an organisation's activities involving sources owned or controlled by another entity. These are classified as:

- **Scope 2:** Indirect greenhouse gas emissions from the consumption of purchased electricity, heat, steam or cooling.
- **Scope 3:** Indirect greenhouse gas emissions from other activities. A detailed standard sets out the rules for 15 categories of Scope 3 emissions<sup>12</sup>.

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<sup>12</sup> For more details, see Figure 12 — EIB Group organisational and operational boundary, below.

The operational boundary for the EIB's carbon footprint report includes the following:

- **Scope 1:** Natural gas combusted in boilers to heat EIB Group buildings and used in the co-generation plant to generate heat and power, and transport fuel used to run vehicles owned by the Group. There are no relevant fugitive emissions because air conditioning systems use ammonia.
- **Scope 2:** Purchased grid electricity (from green tariffs) and steam used for power in the Group's properties (lighting, air conditioning, small power, elevators, etc.).
- **Scope 3:** Transport fuel and power used by air and rail transport operators for EIB Group business travel, by the outsourced minibus service that operates between the Luxembourg sites and by employee-owned vehicles for commuting to and from work; emissions from waste management operations due to incineration or recycling of waste generated by the Group; emissions from energy consumption in external data centres that store the Group's data; and emissions generated in the production of office paper purchased by the EIB Group.

In pursuit of continual improvement, the EIB Group reviews its footprint boundary annually and regularly looks for opportunities to expand its scope of reporting, especially in the area of scope 3 emissions.

In 2021, the EIB Group continued to report internally on a quarterly basis. Looking forward, the EIB Group will continue to explore opportunities where possible, to expand its reporting scope. This could include emissions from catering, external offices in Europe, events, business travel such as conferences, and indirect emissions from recruitment drives. Emissions from external offices outside the EIB's main offices in Luxembourg may also be included, where appropriate.

## REPORTING PERIOD COVERED

The reporting period is 1 January to 31 December 2021.

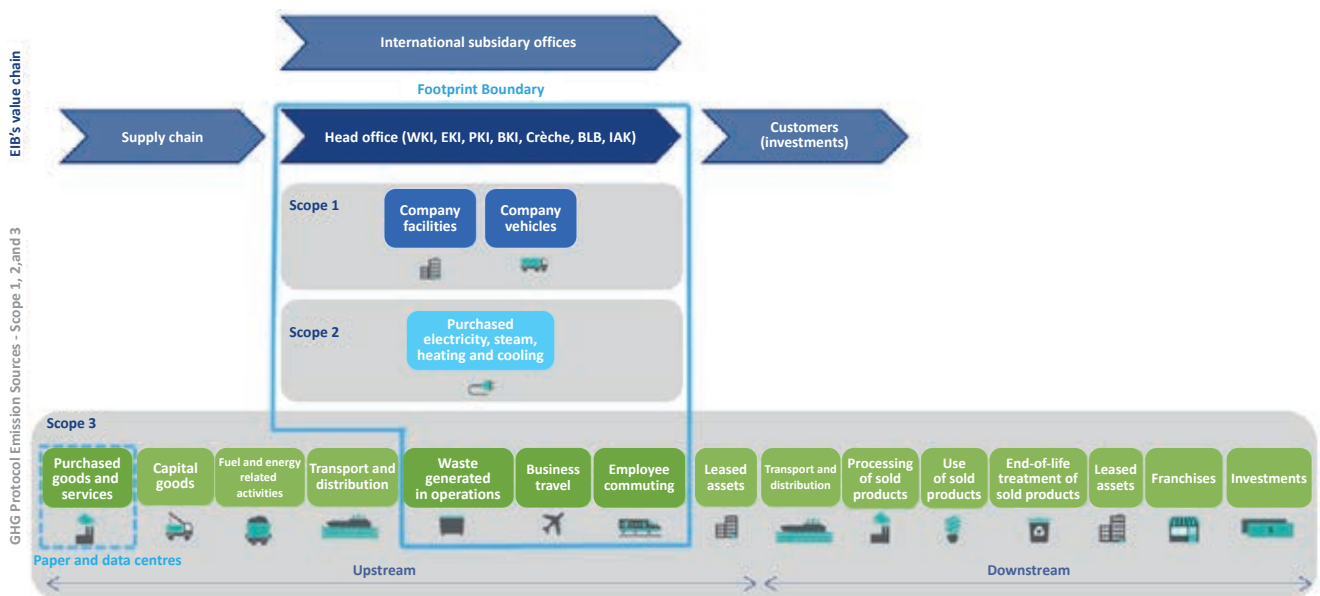


Figure 12: EIB Group organisational and operational boundary

# APPENDIX II: METHODOLOGY

EIB Group carbon footprint analysis in 2021 follows the World Resources Institute GHG Protocol, consistent with the approach adopted in 2018. The GHG Protocol is recognised as the most widely used international accounting tool for government and business leaders to understand, quantify and manage greenhouse gas emissions. It is an international standard used by a broad range of public and private sector organisations, including many in the banking sector, and it is widely accepted as best practice.

To calculate the greenhouse gas emissions inventory, we identified all relevant greenhouse gas emissions sources, collected activity data from the relevant Group services and applied the emissions factors, calculating emissions from each source. These data were then aggregated to create the EIB Group's total carbon footprint. The following sections set out the details of the process followed.

## EMISSIONS SOURCES AND ACTIVITY DATA

Activity data are a quantitative measure of activity that results in greenhouse gas emissions. The table below shows the activity data provided by the EIB Group for each emissions source. These are mainly primary data, such as the amount of natural gas used for heating or the distance travelled by air; however, commuting and homeworking data were calculated using an estimation model developed by EcoAct. The activity data are also used as environmental impact indicators, as required by the GRI (Global Reporting Initiative) reporting framework.

Scope	Emissions source	Units	Resolution
<b>Scope 1</b>	Natural gas for heating	kWh	Monthly by site
	Owned vehicles	Km	Monthly by vehicle
<b>Scope 2</b>	Purchased electricity	kWh	Monthly by site
	Purchased steam	kWh	Monthly by site
<b>Scope 3</b>	Business travel — Air	Passenger km	Quarterly by journey, including class and distance
	Business travel — Rail	Passenger km	Quarterly by journey, including class and distance
	Outsourced minibus	Litres	Quarterly distance and fuel consumption
	Employee commuting	FTEs <sup>13</sup>	Estimation model developed by EcoAct
	Couriers	Shipments	Quarterly figure
	Water	MI	Monthly by site
	Waste	Kg	Monthly by site, type and disposal method
	Paper consumption	Quantity <sup>14</sup>	Monthly by paper size and type
	Data centres	kWh	Monthly by site
	Rental cars (since 2016)	Km	Biannual distance and expenditure by supplier
	Working from home	FTEs	Estimation model developed by EcoAct

Table 4: EIB Group activity data

<sup>13</sup> The model based its calculation on the proportion of FTEs at the EIB Group. Please see methodology below for further information.

<sup>14</sup> The quantity is measured via two methods: number of printed paper sheets (from EIB Group printers) and total kilograms of paper (ordered by the EIB). More information can be found in the "Emissions factors" section.

## EMISSIONS FACTORS

Emissions factors are calculated ratios relating greenhouse gas emissions to a measure of activity at an emissions source. They are used to convert activity data to carbon emissions. Consistent with prior years, the emissions factors represent carbon dioxide equivalent (CO<sub>2</sub>e) wherever possible. They convert the impact of each of the six greenhouse gases covered by the Kyoto Protocol — carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulphur hexafluoride (SF<sub>6</sub>) — into a common unit of tonnes of CO<sub>2</sub>e based on their global warming potential (GWP). The GWP is a measure of how much heat the respective gas retains in the atmosphere over a given time horizon, based on the Intergovernmental Panel on Climate Change (IPCC)'s 100-year GWP coefficients. For all Scope 3 fuel emissions factors, the emissions factors include emissions from direct combustion as well as upstream emissions of producing fuels (mining, excavation and transportation).

Emissions from paper use are calculated from the weight of paper used. Local printer data show the number of pages printed or copied by paper size — these data are split into simplex and duplex volumes in order to derive associated paper weights. Copy centre paper data are provided in total number of sheets and paper size, from which paper weight can be readily calculated. The sum of all paper weights is multiplied by an emissions factor to derive total greenhouse gas emissions.

Emissions source	2021 emissions factor	Change vs. 2020	Data source
Natural gas	<b>0.183</b> kgCO <sub>2</sub> e/kWh	-0.55%	EIB Group
Owned vehicles	<b>0.030 to 0.182</b> kgCO <sub>2</sub> e/km	-31% <sup>15</sup>	EIB Group
Electricity	<b>0.1385</b> kgCO <sub>2</sub> e/kWh	-13%	International Energy Agency (IEA) <sup>16</sup>
Purchased steam	<b>0.043</b> kgCO <sub>2</sub> e/kWh (non-BLB gross) <b>0.066</b> kgCO <sub>2</sub> e/kWh (BLB)	-	Ville de Luxembourg
Business travel – Air <sup>17</sup>	<b>0.141 to 0.591</b> kgCO <sub>2</sub> e/passenger km	-0.55%	UK government conversion factors for company reporting 2021
Business travel – Rail	<b>0.0355</b> kgCO <sub>2</sub> e/passenger km (national) <b>0.0045</b> kgCO <sub>2</sub> e/passenger km (international)	-4% (nat.) -9% (int.)	UK government conversion factors for company reporting 2021
Outsourced minibus	<b>2.78</b> kgCO <sub>2</sub> e/litre	+5%	EIB Group
Employee commuting	<b>0.1715</b> kgCO <sub>2</sub> e/km (car) <b>0.1023</b> kgCO <sub>2</sub> e/km (bus) <b>0.0355</b> kgCO <sub>2</sub> e/km (national rail) <b>0.0281</b> kgCO <sub>2</sub> e/km (light rail & tram)	-0.05% (car)	UK government conversion factors for company reporting 2021
Courier services	<b>4.830</b> kgCO <sub>2</sub> e/shipment	-	DHL
Water	<b>0.421</b> kgCO <sub>2</sub> e/m <sup>3</sup>	-60%	UK government conversion factors for company reporting 2021
Waste	<b>21.29</b> kgCO <sub>2</sub> e/tonne <b>8.95</b> kgCO <sub>2</sub> e/tonne (Organic recycled) <b>0.989</b> kgCO <sub>2</sub> e/tonne (Metal recycled)	-0.1% -12% -2%	UK government conversion factors for company reporting 2021
Paper Consumption	<b>794.2</b> kgCO <sub>2</sub> e/tonne	-	UK government conversion factors for company reporting 2021

Table 5: Annual variance of emissions factors by source

<sup>15</sup> Average emissions factor for all owned vehicle types.

<sup>16</sup> International electricity emissions factors are no longer publicly available via Defra (UK Department for Environment, Food and Rural Affairs) and are now sourced directly from the International Energy Agency (IEA). This work is partially based on the country-specific CO<sub>2</sub> emissions factors developed by the International Energy Agency, © OECD/IEA 2019, but the resulting work has been prepared by the EIB and does not necessarily reflect the views of the IEA.

<sup>17</sup> Since 2015, Defra has published emissions factors for international flights, not to/from the United Kingdom. Previously, all EIB Group flights were reported as short-haul/long-haul flights to/from the United Kingdom regardless of destination. Since 2017, all non-UK flights have used correct international flights emissions factors enabling more granular reporting by travel class. 'Change vs. 2020' is an average of all flight emission factors.

## EMISSIONS INVENTORY CALCULATION

An inventory of greenhouse gas emissions by source was calculated by applying the emissions factors to relevant activity data and aggregating the results to calculate the EIB Group's absolute carbon footprint. A relative footprint was also calculated using employee numbers. Since 2014, the methodology for calculating numbers of employees has changed from a full-time equivalent (FTE) basis to the total number of contracted employees. Since 2019, in addition to presenting aggregated results by scope in accordance with the GHG Protocol, we also distinguished between "mobility" and "buildings-related" emissions to support communication of their comparative materiality within total emissions.

## HOMEWORKING METHODOLOGY

A brief description of the methodology is explained below. For an in-depth description of the methodology see the [whitepaper](#)<sup>18</sup>.

To calculate homeworking emissions, all energy use from office equipment (equipment provided by the EIB Group for use while teleworking) and home heating/cooling that would not have been required in an office-working scenario needs to be accounted for. This is referred to as incremental energy. For all elements considered, the base case calculation method was used. The base case for office equipment calculations accounts for 100% of colleagues known to be working from home through the stated estimation methodology. The base case for heating (natural gas, electricity or other combustion fuel) and cooling (air conditioning, where regionally appropriate) accounts for a typical home's heating and cooling energy requirements as noted within the country of operation.

In calculating homeworking emissions, it is also necessary to determine the hours during which incremental energy must be calculated. A five-day, 40-hour week (eight hours/day) was assumed. From this base calculation of working hours, an expected 28 days (four weeks) of annual leave entitlement was deducted.

### Equipment provided by the Bank that is used at home: Emissions — base case

The equipment considered for this methodology was typical office equipment provided by the Bank for use at home by employees. When calculating the base case of office equipment emissions, the power consumption of laptops, secondary screens, printers and lighting needs to be accounted for. However, the power consumed by these different types of devices tends to be quite variable. For workstation power consumption, we used an average "in use" power load per desk of 140 Watts, following the Chartered Institution of Building Services Engineers' Guide F: Energy efficiency in buildings (2012). For the use of lighting in home offices, we assumed an allowance of 10 Watts for the year. These assumptions are then used to determine the total electrical energy used for office equipment using the equations below.

[A]  $140W * \# \text{ Homeworking FTE} * WHpm / 1\,000 = \text{Workstation kWh}$

[B]  $10W * \# \text{ Homeworking FTE} * WHpm / 1\,000 = \text{Lighting kWh}$

[A] + [B] = Total office electricity

After thus calculating total electrical energy consumed, this was multiplied by appropriately sourced emissions factors to represent the corresponding country's grid average factors, in line with location-based methodology in order to calculate the emissions.

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<sup>18</sup> Link to whitepaper: [Homeworking emissions whitepaper | 2020 \(eco-act.com\)](#).

## Heating energy emissions — base case

When calculating the base case for heating energy emissions, the homeworking tool assumes that heating cannot generally be restricted to a small working area and that time spent at home during the heating season requires the whole heating system to be active.

Using the typical domestic consumption values of OFGEM<sup>19</sup> (updated in 2020), we adopted a reliable “medium” expectation of 12 000 kWh per year for domestic gas usage, of which 77% is attributable to heating. We also assumed an average of ten hours of heating per day, as suggested by UK energy suppliers. The calculation of heating demand is restricted to the widely recognised northern hemisphere heating season of October to March (six months/182 days). To calculate heating demand, we used a monthly calculation approach:

$$182 \text{ days} * 10 \text{ hours heating} = 1\,820 \text{ hours}$$

$$(12\,000 \text{ kWh} * 77\%) / 1\,820 \text{ hours} = \text{c.}5 \text{ kWh per hour}$$

Using 5 kWh as a base, we are able to calculate incremental heating energy using the following formula:  
 $160 \text{ WHpcm} * 5 \text{ kWh} = 800 \text{ kWh of incremental heating consumption per homeworking FTE per heating month}$   
 $800 \text{ kWh} * (\text{FTE} * \text{homeworking \%}) = \text{total incremental gas consumption per heating month}$

Once total heating energy has been calculated, it is possible to determine emissions by multiplying appropriately sourced emissions factors in line with typical heating energy usage.

## DATA QUALITY AND COMPLETENESS

Scope	Emissions source	Activity data	Assumptions applied
<b>Scope 1</b>	Natural gas	Primary data	-
	Owned vehicles	Primary data	Fuel efficiency conversion based on manufacturer's data
<b>Scope 2</b>	Purchased electricity	Primary data	-
	Purchased steam	Primary data	-
<b>Scope 3</b>	Business travel — Air	Primary data	-
	Business travel — Rail	Primary data	-
	Outsourced minibus	Primary data	Fuel efficiency conversion based on manufacturer's data
	Employee commuting	Modelled using EcoAct homeworking and commuting tools	Average daily distance = 35 km * 220 days per year
	Couriers	Primary data	-
	Water	Primary data	-
	Waste	Primary data	All general waste is incinerated with heat recovery
	Paper consumption	Primary data	Local printer data show number of pages printed rather than number of sheets. Since 2019, the percentage of simplex and duplex volumes are also shown
	Data centres	Primary data	-
	Rental cars (new)	Primary data	Data quality differs by provider

■ **Satisfactory:** Could be improved ■ **Good:** No change required

Table 6: Data quality and assumptions by source

<sup>19</sup> OFGEM: Office of Gas and Electricity Markets (UK government regulator).

## IMPACT OF METHODOLOGICAL CHANGES

Methodological changes since emissions were first reported in 2007 have resulted in minor variations<sup>20</sup>.

Scope	Emissions source	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Scope 1	Natural gas															
	Company cars															
Scope 2	Electricity <sup>21</sup>															
	Purchased steam															
Scope 3	Air travel <sup>22</sup>															
	Train travel															
	Minibus <sup>23</sup>															
	Commuting <sup>24</sup>															
	Courier <sup>25</sup> (since 2013)															
	Rental cars <sup>26</sup> (since 2016)															
	Water <sup>27</sup> (since 2013)															
	Waste															
	Paper <sup>28</sup>															
	Data centres (since 2014) <sup>29</sup>															

■ Satisfactory: Gross emissions reduced ■ Good: Gross emissions increased

Table 7: Impact of EIB Group methodological changes on gross emissions by source

<sup>20</sup> There were no methodological changes in the 2021 reporting year.

<sup>21</sup> The 2016 IEA electricity emissions factor of 0.304 kgCO<sub>2</sub>e is 22.3% less than the Defra factor of 0.391 kgCO<sub>2</sub>e used in 2015. Had IEA factors been used in 2015, reported gross emissions would have been 1 238 tCO<sub>2</sub>e lower than the 5 717 tCO<sub>2</sub>e gross emissions reported. This methodological change had no impact on EIB Group net emissions.

<sup>22</sup> The use of Defra international flights emissions factors in 2016 resulted in a slight increase in reported emissions that year. In 2017, the methodology was further refined to ensure the correct apportionment of flights emissions factors linked to origin and destination, either to or from the United Kingdom, or international.

<sup>23</sup> Minor increase due to the addition of vehicle emissions for internal mail distribution. Since late 2018, old diesel vehicles have been replaced with electric vehicles and will therefore be "zero emissions" on a net basis.

<sup>24</sup> Emissions from commuting include from private and public transport and from EIB Group staff working from home due to the COVID-19 pandemic; however, the overall impact is a reduction in commuting emissions despite an increase in those emissions related to working from home.

<sup>25</sup> The inclusion of courier shipments has increased EIB Group gross emissions by approximately 70 tCO<sub>2</sub>e per annum since 2013, though these are offset and therefore considered zero on a net basis.

<sup>26</sup> Rental car emissions were first reported in 2016, increasing EIB Group net emissions by 92 tCO<sub>2</sub>e (0.5% of the overall net footprint). The data quality was improved in 2017 by using distance travelled rather than spend data.

<sup>27</sup> The introduction of water emissions in 2013 has increased EIB Group net emissions by approximately 50 tCO<sub>2</sub>e per annum over and above baseline emissions.

<sup>28</sup> The inclusion of paper types and sizes in 2016 has required restatement across the years. Furthermore, greater understanding of single and double-sided printing has allowed us to improve the methodology for paper reported from 2016 to 2019, which was holistically updated in 2019.

<sup>29</sup> As for electricity, if data centre emissions in 2015 had been calculated using IEA factors directly rather than sourcing via Defra, they would have been 88 tCO<sub>2</sub>e lower than the 405 tCO<sub>2</sub>e reported.



## EXCLUSIONS

For EIB Group external offices, only air travel (booked via the central system) is included within the scope of reporting. All other emissions sources for these offices are currently excluded because the required data are not available. Further efforts will be made in subsequent reporting years to measure the environmental impact of international subsidiary offices. Hazardous waste, construction waste and waste electrical and electronic equipment are also excluded due to these waste streams being measured in volume (m<sup>3</sup>) or units rather than weight (kg), which is needed to calculate emissions. Again, emissions from these waste streams are likely to be very small since total waste contributes only 0.2% of the total net carbon footprint. The EIB Group is committed to continually improving the data quality of reported data, wherever possible, and continuing to fine-tune its methodology to improve the coverage and transparency of its disclosure.

# APPENDIX III: GRI STANDARD INDICATORS

## GRI 302-4: REDUCTION OF ENERGY CONSUMPTION

Energy savings due to conservation and efficiency improvements have resulted in an 8.1% decrease of the fuel and energy purchased by the EIB per employee since 2018 as shown in the following table.

Energy source	2021	2018	Variance	% change
Natural gas (MWh)	63	130	-67	-51.1%
Electricity (MWh)	17 126	20 240	-3 114	-15.4%
Steam (MWh)	19 278	14 673	+4 605	+31.4%
<b>Total (MWh)</b>	<b>36 467</b>	<b>35 044</b>	<b>+1 423</b>	<b>+4.1%</b>
Number of employees	4 412	3 896	+516	+13.2%
<b>Energy per employee (kWh)</b>	<b>8 265</b>	<b>8 995</b>	<b>-730</b>	<b>-8.1%</b>

Table 8: Energy consumption per employee

Within existing buildings, the EIB Group continues to conduct various technical optimisations to minimise energy wastage. These optimisations include:

- Regulation and distribution of heating and cooling systems (adapting consumption to demand in real time);
- Lighting management;
- Ventilation systems management;
- Maintenance of the Quality Label from SuperDrecksKëscht® fir Betriber for the EKI and WKI buildings (since 2007);
- Incorporation of carbon-reduction initiatives ("Green IT") across the Group's data centres.

## GRI 305: REDUCTION OF GHG EMISSIONS

In addition to the energy-saving measures described in the preceding section, the EIB Group has continued to maintain existing initiatives to further reduce its greenhouse gas emissions.

Aiming at carbon neutrality for its energy supplies, the EIB Group has been buying 100% renewable electricity (hydropower and wind) from its electricity supplier LEO SA.

## GRI 306: WASTE BY TYPE AND DISPOSAL METHOD

The EIB Group disposes of waste through the Luxembourg municipal authorities. Waste is sorted in-house to the extent possible so that it can ultimately be recycled. All unsorted waste is incinerated via energy recovery. Details of the quantities of waste by the official categorisation are shown in the table below.

The Luxembourg SuperDrecksKëscht® fir Betriber green label was first awarded to the Bank for its internal waste recycling practices in 2007 and has been renewed annually to date for the EKI and WKI buildings in Kirchberg. The criteria for obtaining the label are as follows:

- Motivation of all participants;
- Transposition of all measures for waste prevention;
- Visible and accessible collection sites;
- Safe and environmentally correct storage;
- Waste collection according to type;
- High-quality and transparent waste recycling and disposal;
- Environmentally correct management.

The SuperDrecksKëscht® fir Betriber label is certified in accordance with the internationally accepted ISO 14024:2000 standard. This certificate comprises, among other things, the control procedures and requirements the inspectors must satisfy. Thus, waste management in the certified businesses fully meets ISO 14024 requirements.

The table below discloses the 2021 EIB Group's waste broken down in accordance with the European Waste Catalogue pursuant to European Commission Decision 2000/532/EC of 3 May 2000.

CED code	Official description of waste	Unit	2021	2020	2019	2018	2017	2016	2015	2014	2013
04 02 22	Wastes from processed textile fibres	kg	758	125	98	0					
07 01 04*	Other organic solvents, washing liquids and mother liquors	kg	0	0	0	0					
08 01 11*	Waste paint and varnish containing organic solvents or other hazardous substances	kg	383	632	606	499	162	-	-	203	n/a
08 03 17*	Waste printing toner containing hazardous substances	kg	582	1 775	12 517	818	12 270	6 569	-	4 800	5 700
11 01 07*	Pickling bases	kg	50	0	20	0					
13 02 08*	Other engine, gear and lubricating oils	kg	0	0	0	116	-	19	-	29	61
13 05 07*	Oily water from oil/water separators	kg	0	5 080	0	2 660	0	0	0	0	

CED code	Official description of waste	Unit	2021	2020	2019	2018	2017	2016	2015	2014	2013
14 06 03*	Other solvents and solvent mixtures	kg	0	0	253	52	0	0	0	0	
15 01 01	Paper and cardboard packaging	kg	11 078	10 809	27 469	45 312	44 849	33 115	23 740	22 847	80 076
15 01 02	Plastic packaging	kg	2 023	1 996	4 087	5 462	4 194	2 573	1 358	1 721	1 335
15 01 02	Plastic packaging										
15 01 04	Metallic packaging	kg	3 185	4 084	13 174	13 319	9 586	9 077	9 376	7 880	n/a
15 01 05	Composite packaging										
15 01 03	Wooden packaging	kg	1 295	1 458	1 580	1 577	2 405	-	-	-	-
15 01 06	Mixed packaging	kg	-	0	0	0	-	-	322	233	5 967
15 01 07	Glass packaging	kg	5 239	4 830	16 120	15 035	14 765	18 812	26 875	62 250	38 897
15 01 10*	Packaging containing residues of or contaminated by hazardous substances	kg	446	385	934	1 212	926	542	-	532	917
15 02 02*	Absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by hazardous substances	kg	954	1 013	1 042	1 030	1 030	34	-	96	1 363
15 02 03	Absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02	kg	1 734	1 714	1 064	191	395	218	-	404	n/a
16 01 14*	Antifreeze fluids containing dangerous substances	kg	-		0	0	-	-	-	-	-
16 01 18	Non-ferrous metal	kg	667	0	0	114	0	0	0	0	
16 01 20	Glass	kg	-	0	0	1	0	9	527	67	
16 02 14	Discarded equipment other than that mentioned in 16 02 09 to 16 02 13	kg	321	0	88	0	19	652	728	-	215
16 02 15*	Hazardous components removed from discarded equipment	kg	-	0	0	0	0	0	0	80	

CED code	Official description of waste	Unit	2021	2020	2019	2018	2017	2016	2015	2014	2013
16 02 16	Components removed from discarded equipment other than in 16 02 15	kg	-	0	30	208	140	-	-	-	-
16 05 04*	Gases in pressure containers (including halons) containing dangerous substances	kg	48	72	335	174	141	-	-	-	-
16 05 06*	Laboratory chemicals consisting of or containing dangerous substances including mixtures of laboratory chemicals	kg	216	14	433	66	0	0	0	0	
16 06 01*	Lead batteries	kg	115	790	0	0	-	459	63	55	145
16 06 02*	NiCd batteries	kg	-	0	0	30	-	52	-	60	n/a
17 01 07	Mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06	kg	3 187	3 446	4 349	3 161	1 602	-	-	-	-
17 02 01	Wood	kg	40 232	758	977	8 082	42	-	-	-	-
17 02 03	Plastic	kg	262	79	43	78	38	-	-	-	-
17 04 05	Iron and steel	kg	-	0	0	0	-	529	-	1 510	8 m3
17 04 07	Mixed metals	kg	-	0	0	0	47	-	-	-	-
17 04 11	Cables other than those mentioned in 17 04 10	kg	335	18	32	90	34	25	37	21	-
17 05 04	Soil and stones other than those mentioned in 17 05 03	kg	-	0	0	0	20	1 212	-	-	9
17 06 04	Insulation materials other than those mentioned in 17 06 01 or 17 06 03	kg	560	233	536	94	57	1 813	2 886	3 168	1 891
17 06 05*	Construction materials containing asbestos	kg	1 200	0	0	0	0	6	0	0	
17 08 02	Gypsum-based construction materials other than those mentioned in 17 08 01	kg	-	0	0	36	23	-	-	-	-
17 09 03*	Other construction and demolition wastes (including mixed wastes) containing dangerous substances	kg	-	0	0	0	-	-	-	-	-

CED code	Official description of waste	Unit	2021	2020	2019	2018	2017	2016	2015	2014	2013
17 09 04	Mixed construction and demolition wastes other than those mentioned in 17 09 01 17 09 02 and 17 09 03	kg	57 401	26 260	58 720	65 140	9 020	13 723	3 379	1 659	5 097
18 01 03*	Waste whose collection and disposal is subject to special requirements in order to prevent infection	kg	-	18	0	0	50	50	-	5	n/a
19 08 09	Grease and oil mixture from oil/water separation containing only edible oil and fats	kg	16 040	23 000	104 000	97 120	0	0	0	0	
19 09 06	Solutions and sludges from regeneration of ion exchangers	kg	-	0	72	0					
19 12 01	Paper and cardboard	kg	-	0	0	0	32	-	-	-	-
19 12 04	Plastic and rubber	kg	-	0	0	0	20	-	-	-	-
20 01 01	Paper and cardboard	kg	56 291	51 608	92 055	252 868	153 312	212 683	145 505	96 950	84 165
20 01 08	Biodegradable kitchen and canteen waste	kg	79 048	115 883	441 016	414 657	314 860	246 830	283 750	232 400	181 700
20 01 13*	Solvents	kg	-	0	0	0	-	8	-	24	n/a
20 01 14*	Acids	kg	-	0	0	0	0	21	0	0	
20 01 15*	Alkalines	kg	-	0	0	0	0	35	30	0	
20 01 19*	Pesticides	kg	-	0	0	0	-	-	-	-	-
20 01 21*	Fluorescent tubes and other mercury-containing waste	kg	222	207	213	117	206	-	-	-	-
20 01 23*	Discarded equipment containing chlorofluorocarbons	kg	-	0	0	32	0	0	0	0	
20 01 25	Edible oil and fat	kg	1 417	659	3 191	4 726	1 870	345	2 390	2 040	2 170
20 01 28	Paint, inks, adhesives and resins other than those mentioned in 20 01 27	kg	-	0	0	0	0	114	74	49	
20 01 33*	Batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing said batteries	kg	1 238	398	521	265	1 310	197	-	407	437

CED code	Official description of waste	Unit	2021	2020	2019	2018	2017	2016	2015	2014	2013
20 01 34	Batteries and accumulators other than those mentioned in 20 01 33	kg	-	0	0	0	0	0	119	0	
20 01 35*	Discarded electrical and electronic equipment other than that mentioned in 20 01 21 and 20 01 23 containing hazardous components (commercial)	kg	5 990	42	89	38	-	156	396	516	n/a
20 01 36	Discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35	kg	2 004	314	0	800	200	-	-	-	-
20 01 37*	Wood containing hazardous substances	kg	1 872	1 364	2 166	4 788	260	-	70	180	n/a
20 01 38	Wood other than that mentioned in 20 01 37	kg	-	0	0	300	519	-	-	-	-
20 01 39	Plastics	kg	3 892	2 169	2 652	4 839	3 574	2 920	2 164	2 408	1 554
20 01 40	Metals	kg	7 300	1 863	2 486	2 488	1 563	2 259	2 103	2 118	1 893
20 01 99	Other fractions not otherwise specified	kg	4 320	3 577	9 030	8 657	6 145	-	-	-	-
20 02 01	Biodegradable waste	kg	56 000	28 000	19 000	0	16 380	23 200	50	100	n/a
20 03 01	Mixed municipal waste	kg	135 915	80 349	194 957	208 004	153 808	169 183	214 331	331 900	137 550
20 03 07	Bulky waste	kg	6 745	1 470	2 071	0					
Other	Due to changes in waste volumes through restatements at the end of the year, minor deviations exist between the final GRI categories and footprint waste values, represented by this category	kg	34 422	11 970	125 850	-67 288	0	-15 670			

Table 9: EIB Group waste in each category of the European Waste Catalogue, 2013-2021

Any waste marked with an asterisk (\*) in the list of wastes shall be considered as hazardous waste pursuant to Directive 2008/98/EC, unless Article 20 of that Directive applies.

# APPENDIX IV: GLOSSARY OF EIB GROUP BUILDINGS

**EKI** — East Building

**WKI** — West Building

**PKI** — President Building

**BKI** — BHK Building

**LKI** — BLB Building

**LHO** — LHO Building

**IAK** — IAK Building











# Carbon Footprint Report 2021

Greenhouse gas emissions resulting  
from EIB Group internal operations



**The EIB Group** consists of  
the European Investment Bank and  
the European Investment Fund.

pdf: ISBN 978-92-861-5244-3

EN 01/2023