



**Berlin Hyp
Sustainability-Linked
Bond**

Berlin Hyp

Sustainability-Linked Bond Report 2021



S Finanzgruppe

A partnership built on trust



Key Figures Portfolio 2021

Carbon intensity reduction
7.6%

Carbon intensity
34.3 kgCO₂/m²

Total carbon emissions
1,111,635,880 kgCO₂/a

Total portfolio area
32,420,207 m²

Average energy demand
140.7 kWh/m²/a

Total energy demand of portfolio
4,562,184,615 kWh/a

Transparency ratio EPCs
44.4%



Strategic ESG target:

Reduction of the carbon intensity of the entire loan portfolio by **40 percent** between 2020 and 2030

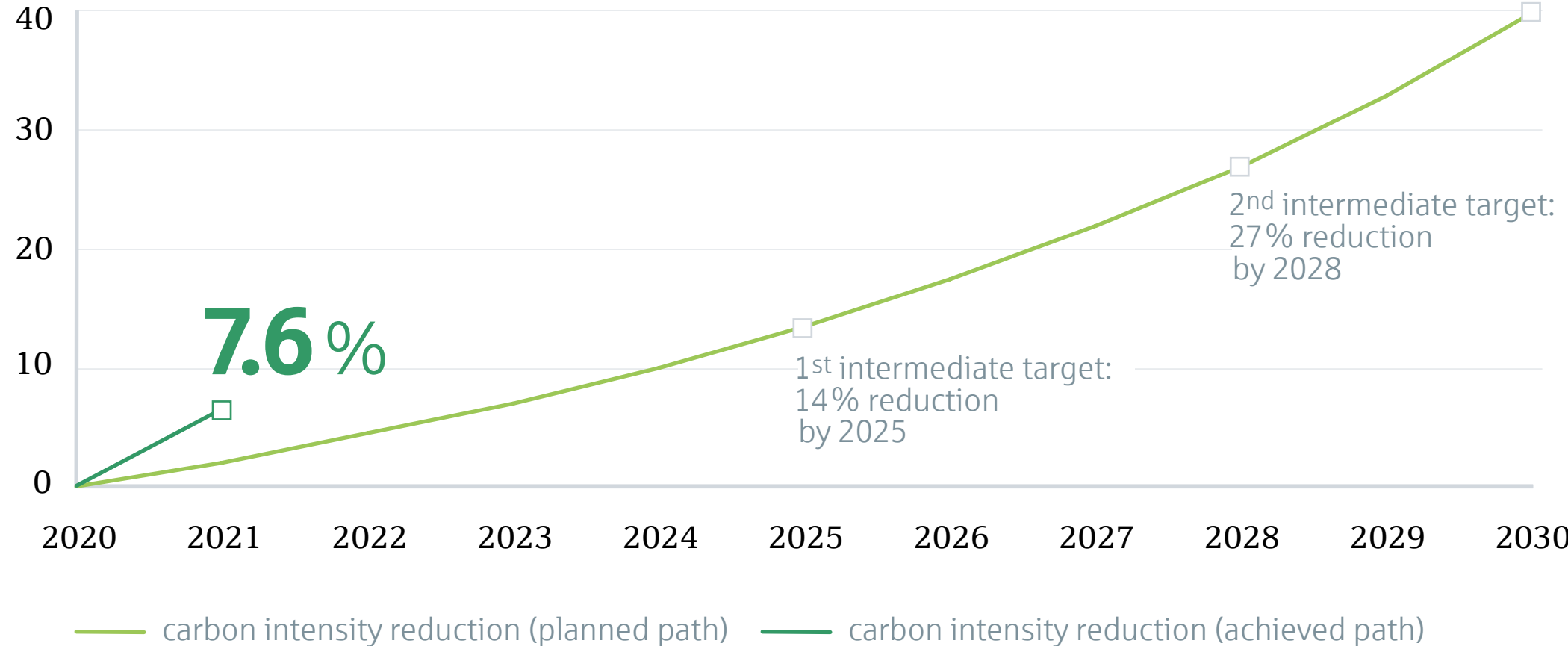
In the first year of the reporting period, the carbon intensity* of BerlinHyp's loan portfolio has decreased by 7.6 percent, exceeding our expectations. The development of the KPI was influenced by two factors: on the one hand by the energy quality of the financed buildings, and on the other hand by the development of the conversion factors which are used to convert the energy demand/consumption of the financed buildings into CO₂.

Around 18 percent of the carbon intensity reduction is due to the improvement of the energetic quality of the buildings in BerlinHyp's loan portfolio. At around 82 percent, the majority of the reduction

is due to partially significant improvements of the conversion factors. The conversion factors, for their part, depend on the composition of the energy mix in the individual countries. If the share of fossil components within the energy mix decreases, the conversion factors become smaller. This was the case in the reporting period and is a pleasant development. However, the extent to which this development will continue depends on many external factors influencing the national energy mixes.

This is more relevant than ever in the current discussion about Europe's energy supply against the backdrop of the war in Ukraine.

Carbon intensity reduction trajectory in %



* ratio of the aggregated CO₂ emissions of all properties financed by BerlinHyp to the total financed area

Portfolio overview

Energy data for **97.9 percent** of entire loan portfolio
(% of financed area)

Berlin Hyp financed buildings with a total area of 32.4 million m² as at the reporting date. Energy certificates were available for buildings that account for more than 44 percent of this area. With an energy demand/consumption of 4,562 gWh/a, the emissions of the portfolio aggregate to a total of 1.112 million t/CO₂/a. The average energy demand/consumption of the buildings is thus 141 kWh/m²/a for thermal energy and electricity.

Berlin Hyp is consistently working on integrating sustainability into its business processes.

In the past financial year, for example, financing for green buildings was expanded by 21.7 percent to € 7.28 billion¹ and the transparency ratio with regard to the energetic quality in the loan portfolio has increased from 26.1 percent to 44.4 percent. In January 2022, the Bank published its updated Green Bond Framework based on the EU taxonomy.²

In addition, the Bank is working on precise financing offers to actively support its customers in the transformation to more energy-efficient, sustainable buildings.



■ Proxies ■ Data from EPCs

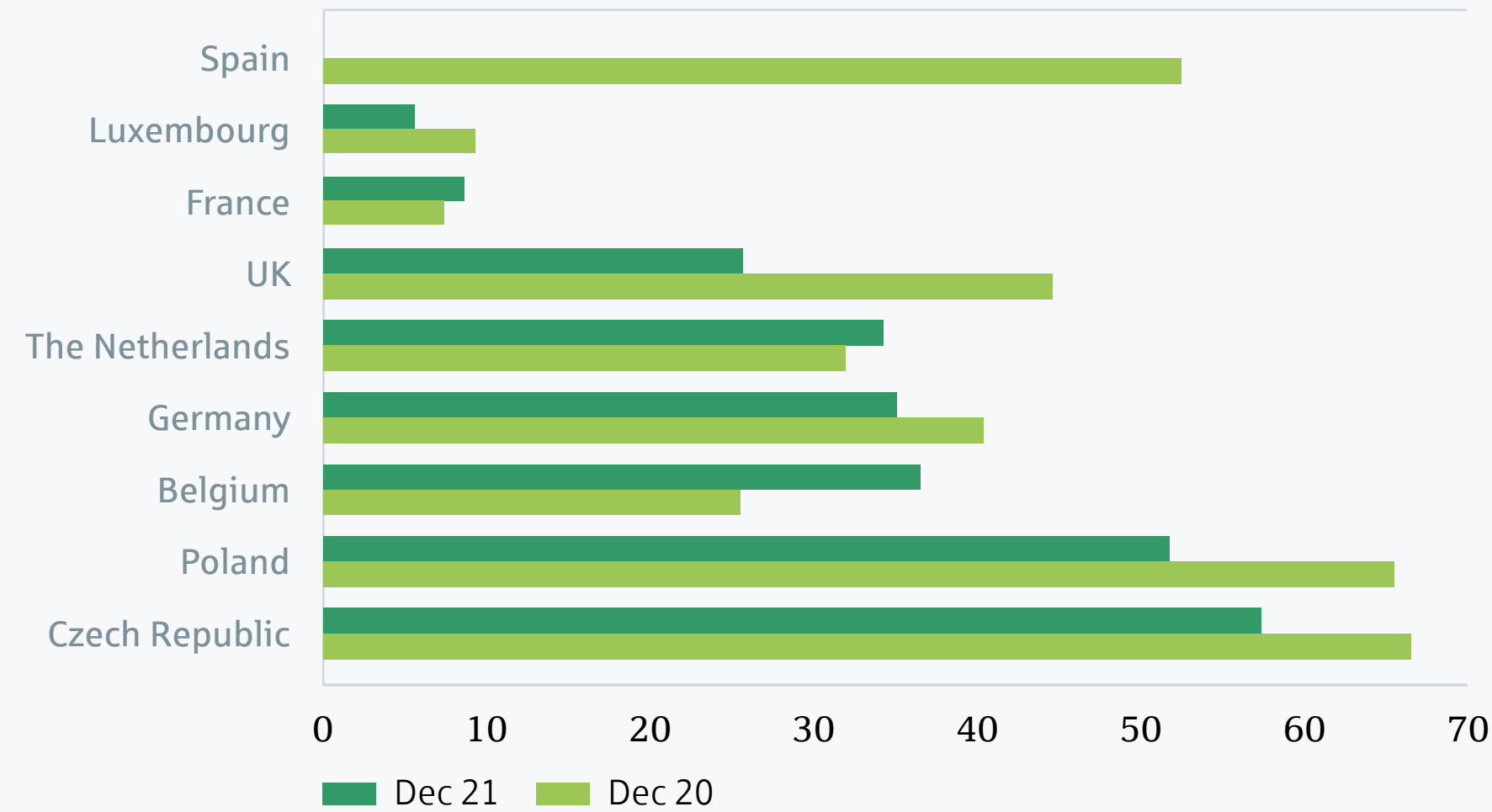
¹ See Green Bond Reporting at: <https://www.berlinhyp.de/en/investors/green-bonds>

² <https://www.berlinhyp.de/en/investors/green-bonds?file=files/media/corporate/investoren/green-bonds/green-bonds/green-bond-framework%20en/berlin-hyp-green-bond-framework-eng-v8-1001-20211203.pdf>

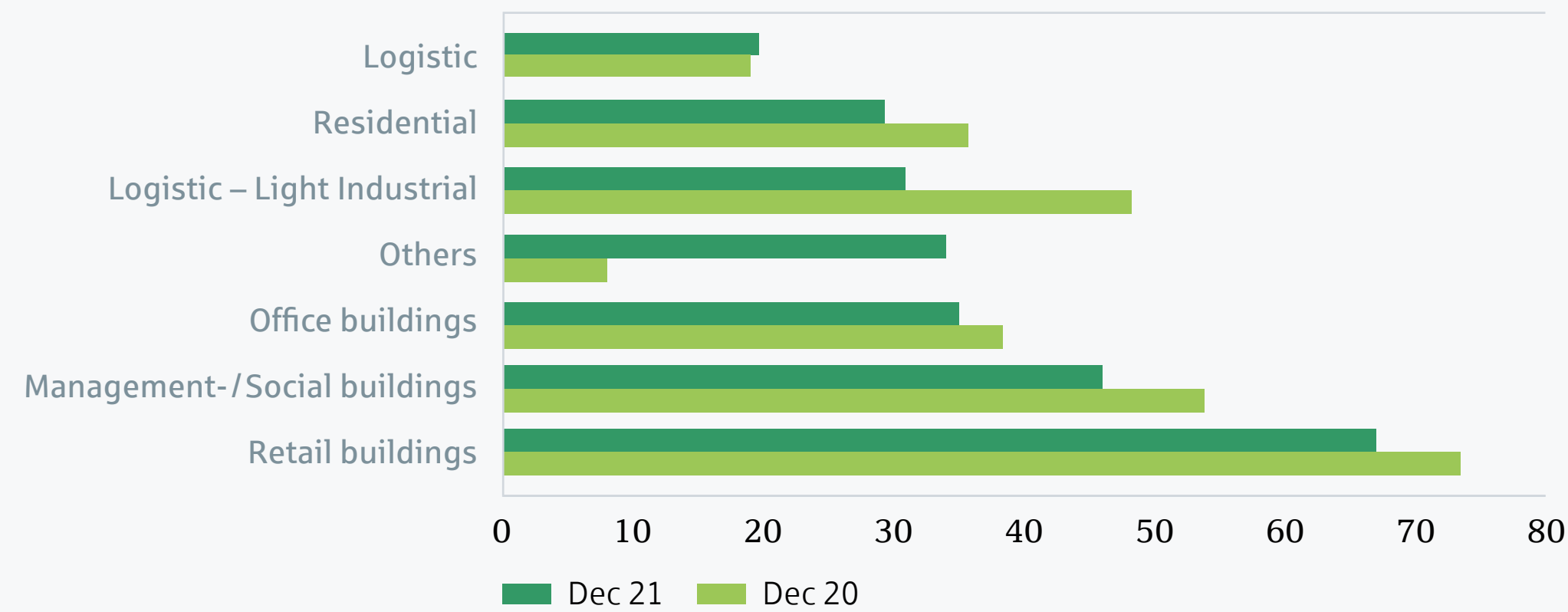




Carbon intensity by country



Carbon intensity by type of use



Portfolio overview

Comment on adjustment factor

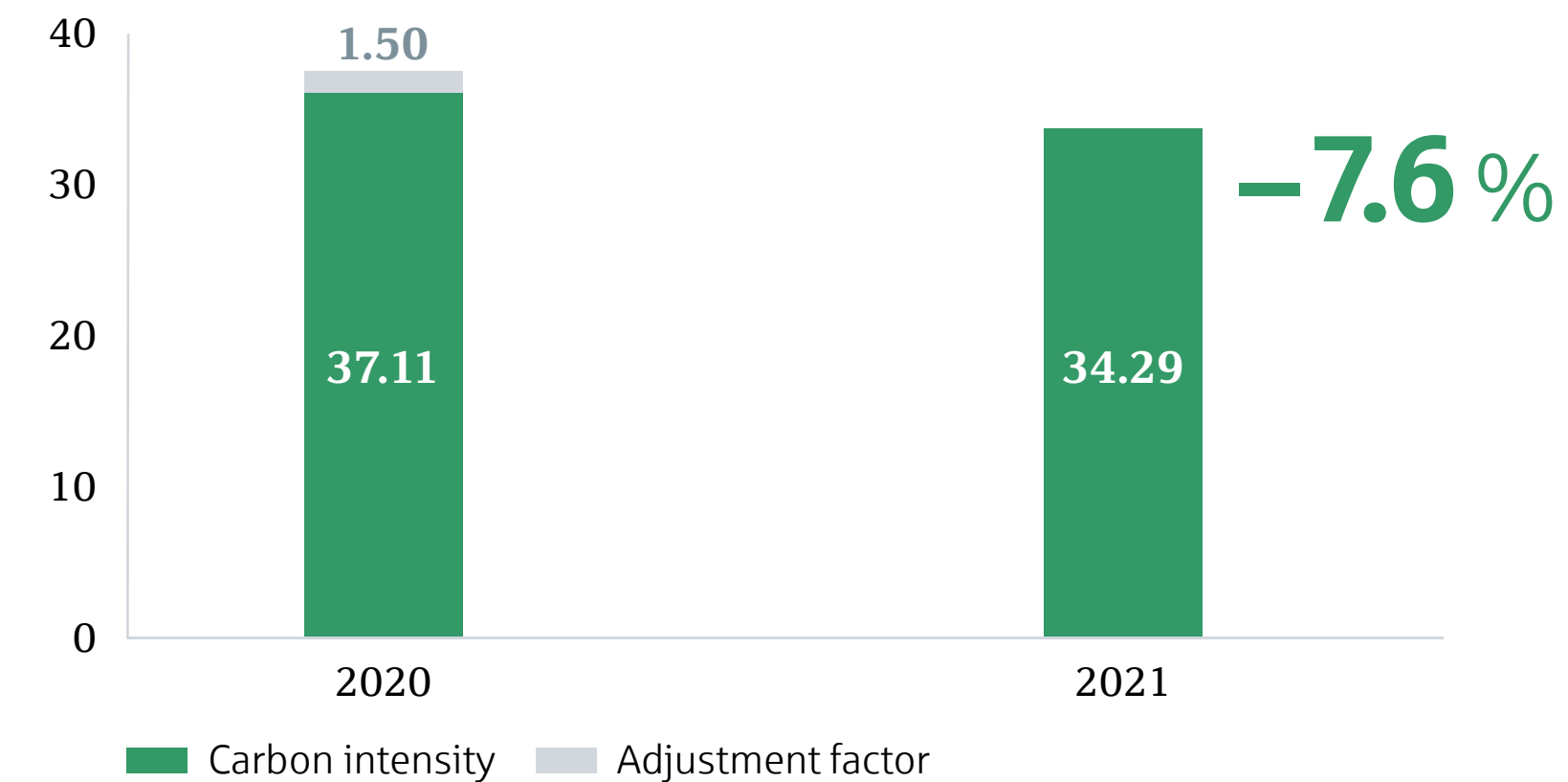
In order to calculate the total carbon emissions for 2020, Berlin Hyp has used the proxy values for buildings* lacking precise EPC data. During the reporting year, numerous EPCs for newly financed buildings and those already in the portfolio were obtained and recorded in the systems.

As a result, the transparency ratio in relation to the financed area increased from 26.1 percent to 44.4 percent.

As outlined in the Sustainability-Linked Bond Framework, changes in carbon intensity resulting from a more accurate dataset are not taken into account for measuring the development of the KPI.

In the specific case, this means that 48,118 tCO₂ resulting from the additional transparency must not be included in the KPI measurement. Accordingly, the carbon intensity of the initial year 2020 was subsequently reduced by 1.5 from 38.6 to 37.1.

Carbon intensity (kgCO₂/m²/a)



* For more information see "Carbon Footprint Assessment Methodology": <https://www.berlinhyp.de/en/investors/sustainability-linked-bonds?file=files/media/corporate/investoren/sustainability-linked-bond/bhyp-gb-sustainability-linkedbond-eng-2020.pdf>



Appendix

Conversion factors

District heating ¹	kg CO ₂ /kWh
Belgium	0.077
Germany	0.171
France	0.032
UK	0.093
Luxembourg	0.014
The Netherlands	0.165
Poland	0.323
Czech Republic	0.276

Electricity by country ²	kg CO ₂ /kWh final energy demand
Belgium	0.162
Germany	0.339
France	0.051
UK	0.196
Luxembourg	0.101
The Netherlands	0.374
Poland	0.76
Spain	0.236
Czech Republic	0.495

German city ¹	kg CO ₂ /kWh
Berlin	0.129
Böblingen	0
Bochum	0.099
Bonn	0.141
Dinslaken	0.138
Duisburg	0.138
Dresden	0
Düsseldorf	0
Essen	0.175
Frankfurt am Main	0.065
Hamburg	0.064
Hanau	0.178
Hanover	0.091
Heidelberg	0.157
Karlsruhe	0.081
Cologne	0
Leipzig	0.091
Mainz	0.092
Mannheim	0.227
Munich	0.066
Münster	0
Neubrandenburg	0.194
Nürnberg	0
Oberhausen	0.07
Offenbach am Main	0.317
Rostock	0.133
Saarbrücken	0
Sandersdorf	0.071
Stuttgart	0.174
Welden	0.097

Carbon intensity of energy mix (kg CO ₂ /kWh)	Residential	Commercial	Source
Belgium	0.197	0.192	StatBel 2021
Germany	0.210	0.250	Source: Zahlen und Fakten Energiedaten 2020 ; Source précise : Onglet 6a
France	0.110	0.139	Statistique développement durable France 2021
UK	0.200	0.193	DUKE 2021. Aggregate energy balances (DUKES 1.1–1.3) – Excel
Luxembourg	0.194	0.136	Portail des Statistiques
The Netherlands	0.227	0.276	StatLine
Poland	0.369	0.442	Statistics Poland 2020
Spain	0.215	0.233	Spain2021.pdf (windows.net)
Czech Republic	0.230	0.329	EU energy in figures – Publications Office of the EU (europa.eu)

1 Annual Green Bonds 2021: <https://www.berlinhyp.de/en/investors/green-bonds>

2 European Residual Mixes – Results of the calculation of Residual Mixes for the calendar year 2020
https://www.aib-net.org/sites/default/files/assets/facts/residual-mix/2020/AIB_2020_Residual_Mix_Results.pdf