

# GREEN BOND REPORTING 2023



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# LETTER FROM THE MANAGEMENT BOARD



The Management Board of DZ HYP  
From left to right: Jörg Hermes, Sabine Barthauer (CEO), Stefan Schrader

Dear readers,

as the Management Board of DZ HYP, we are committed to a high level of transparency also in terms of our sustainability activities. Our annual Green Bond Report is an elementary component of our sustainability communication, offering a detailed overview of our energy-efficient business activities and their measurable impact on the environment. Therefore, we are particularly pleased to present DZ HYP's Green Bond Report for 2023 below.

Concerning the climate in Germany, the past financial year was once again characterised by record highs in average temperatures and the certainty that we, as a society, must intensively engage in climate protection and adapt better to extreme weather conditions. In this context, we – as a major German real estate finance provider – can use our business activities to make a continuous contribution to supporting the transformation of the real estate sector and thus better prepare ourselves for the challenges of the future.

The framework conditions to support these developments, such as the EU Taxonomy or legal adjustments to energy efficiency, were also further developed at both national and European level last year.

Accordingly, we have adjusted our business activities towards classifying our property lending business according to energy efficiency criteria and generating new business also in line with these criteria. In addition we have integrated climate and environmental risks into our measurement system in order to obtain a detailed overview of the bank's risk situation from this perspective as well.

Our Green Pfandbrief issues offer investors the opportunity to participate in the transformation of the real estate sector, either via benchmark products or tailor-made private placements.

The Bank's diverse sustainability activities continued to evolve in the 2023 financial year. Detailed information about these activities is contained in our Sustainability Report 2023, which is due to be published in summer of 2024. A brief overview of our key activities can also be found in the next paragraph.

We hope that our report will provide interesting and useful information about the energy-efficient properties in our portfolio, their refinancing and their impact on the climate. If you have any further questions or comments, we cordially invite you to contact us.

Yours sincerely,



Sabine Barthauer  
(CEO)



Jörg Hermes



Stefan Schrader

The Management Board  
Hamburg and Munster, February 2024

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## SUSTAINABILITY AT DZ HYP

Sustainability is an integral part of DZ HYP's long-term corporate strategy, and is practised by the Management Board and employees across all divisions. In this context, we address the economic, ecological and social aspects with an established organisational structure.

As a major real estate and Pfandbriefbank within the DZ BANK Group, we cooperate with other member institutions to establish Group-wide standards. In the 2023 financial year, for example, the content of the joint Code of Conduct was specified in more detail with the development of the "Human Rights Guideline". It serves as an important guideline for the Bank's sustainable alignment.

In our Corporate Clients business, we had set ourselves the goal to achieve full transparency about the climate impact of the commercial real estate portfolio by 30 June 2024. We made significant progress towards this goal in 2023. By continuously requesting and recording sustainability certificates, we have been able to assess most of the portfolio along DZ HYP's classification scheme for energy-efficient properties.

Transparency on the energy efficiency of our portfolio has also increased in our Retail Customers segment. The joint market presence with the Volksbanken Raiffeisenbanken in this business area and the regulation to collect energy performance certificates as a mandatory disbursement requirement in accordance with section 80 of the GEG 2020 as part of our new business, resulted in an increase in classifiable business.

With its ESG risk assessment process, DZ HYP has laid solid fundament for assessing the sustainability risks associated with properties. Based on our understanding of sustainability, identifying, assessing, managing, monitoring and communicating risks is a key element of our business activities. By integrating practical experience, newly available data and updated regulatory requirements, we stabilised and optimised measuring methods and governance relating to ESG risks in 2023.

We also introduced an assessment of our real estate portfolio based on the greenhouse gas emissions along benchmark paths established at the market (climate alignment). The results of the ESG risk tools were integrated into the reporting and offer a high degree of transparency for DZ HYP-specific analyses as well as at DZ BANK level. This has also laid the foundation for the development of climate targets for financed emissions.

Our understanding of sustainable performance is reflected in DZ HYP's assessment by sustainability rating agencies. For example, DZ HYP was awarded by EcoVadis with the Platinum certificate (79/100) in the year under review. In addition, Morningstar Sustainalytics assigned an ESG risk rating of 14.2 points in February 2023, reflecting a low risk of material financial impacts from ESG factors. (The result must not be interpreted as investment advice or expert opinion within the meaning of applicable legislation.\*)

More information on our sustainability activities can be found in the Sustainability Report on our website.<sup>1</sup>

### **Group-wide human rights guidelines adopted**

### **Portfolio transparency in the corporate clients business by 30 June 2024**

### **Further development of ESG risk assessment**

### **Defining climate targets for our real estate portfolio**

### **Improving sustainability ratings**

<sup>1</sup> <https://dzhyp.de/en/hauptnavigation/sustainability/downloads/>

\* Further information can be found on page 11

## GREEN BOND FRAMEWORK

With the DZ HYP Green Bond Framework, we offer investors the opportunity to participate specifically in the sustainable transformation of the German real estate sector. Our framework is based on the ICMA Green Bond Principles (GBP) and covers the following topics: use of issue proceeds, project evaluation and selection process, management of proceeds, reporting and external audit.

**Targeted investment in the sustainable transformation of the German real estate sector**

The aim of the framework is to lay the foundation for issuing Green Mortgage



Pfandbriefe. The proceeds generated by the issue will be used to finance energy-efficient real estate. This is intended to actively support the SDG goals Sustainable Cities and Communities (SDG 11) and Climate Action (SDG 13).

Transparency is important in this context. For this reason, energy performance and sustainability certificates are requested and digitised as part of new lending business and the regular updating of appraisals. The properties are then classified according to their energy efficiency.

The main criterion for classification is the energy performance certificate. Because there are no energy efficiency classes for German commercial properties, the framework defines property type-specific thresholds that reflect the top 15 per cent of the national building stock in terms of energy efficiency. The following maximum final energy consumption/demand values per square metre and year are applied here:

**Top 15% of German building stock**

|                       |   |
|-----------------------|---|
| Residential           | 65 kWh/m <sup>2</sup> heat  |
| Office                | 90 kWh/m <sup>2</sup> heat and 70 kWh/m <sup>2</sup> electricity  |
| Retail                | 60 kWh/m <sup>2</sup> heat and 75 kWh/m <sup>2</sup> electricity  |
| Hotel                 | 95 kWh/m <sup>2</sup> heat and 60 kWh/m <sup>2</sup> electricity  |
| Logistics: warehouses | 30 kWh/m <sup>2</sup> heat and 35 kWh/m <sup>2</sup> electricity  |
| Logistics: production | 105 kWh/m <sup>2</sup> heat and 65 kWh/m <sup>2</sup> electricity |

In addition, a property can qualify as an eligible asset if certified by a recognised certification company. DZ HYP accepts the following certificates:

|        |                     |
|--------|---------------------|
| DGNB   | Gold and Platinum   |
| LEED   | Gold and Platinum   |
| BREEAM | Very good or better |

A property can also be classified as an eligible asset using the underlying energy efficiency standard based on the German Energy-Saving Ordinance (*Energieeinsparverordnung* – “EnEV 2016”) or the Building Energy Act (*Gebäudeenergiegesetz* – “GEG 2020”). The EnEV 2016 standard applied corresponds to the requirements of nearly zero energy buildings (NZEB) at the time the framework was created.<sup>2</sup>



The applied standards meet the minimum requirements for Green Mortgage Pfandbriefe defined by the Association of German Pfandbrief Banks (vdp).

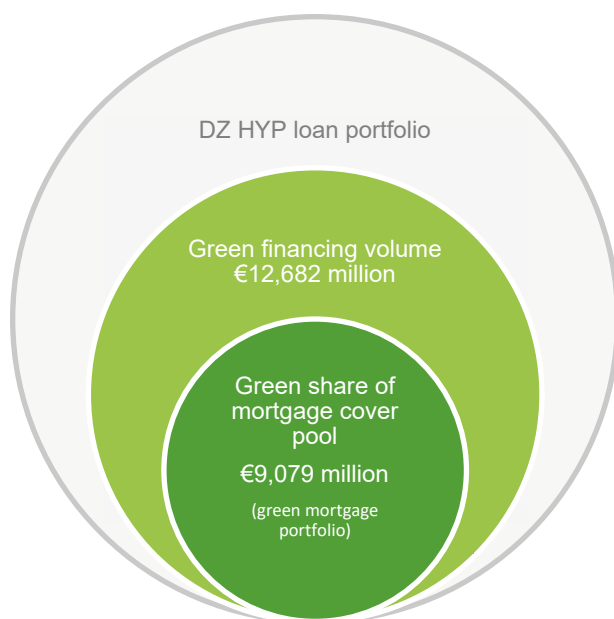
<sup>2</sup> Section 10 of the GEG 2020

## ALLOCATION REPORT

As of 31 December 2023, DZ HYP financed 15,502 properties classified as green in the volume of €12,682 million. Of this amount, €9,079 million is eligible for inclusion in the mortgage cover pool and can be refinanced via Green Pfandbriefe.<sup>3</sup>

**15,502 green properties financed in the volume of €12,682 mn**

### Categorisation of the green mortgage portfolio



Following the successful launch of Green Mortgage Pfandbriefe in 2022, DZ HYP placed further Green Pfandbrief issues in the volume of €2,026 million in 2023. A total of €1,500 million of these were issued in benchmark format. These €500 million bonds were placed with maturities of three, four-and-a-half and short 10 years. DZ HYP also increased the volume of a green benchmark by €250 million. In addition, €276 million were sold as green private placements. At the end of 2023, the total volume of outstanding Green Mortgage Pfandbriefe amounted to EUR 3,026 million.

**Consistent investor interest in green Pfandbrief issues**

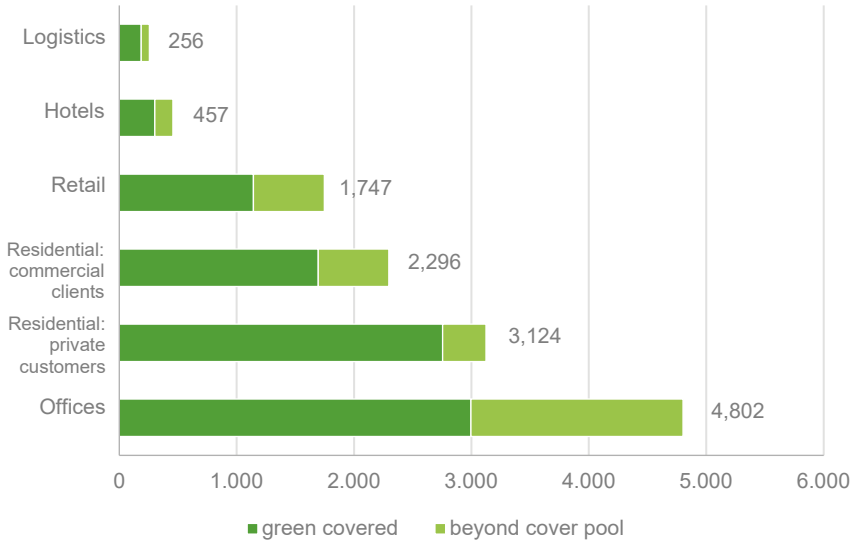
| Reference date                  | Volume  | Number |
|---------------------------------|---------|--------|
| 31 December 2023                | in € mn |        |
| Green Pfandbriefe outstanding   | 3,026   | 8      |
| Green mortgage cover pool (GMP) | 9,079   | 15,502 |

The amount of eligible assets in the mortgage cover pool exceeded the outstanding amount of Green Pfandbriefe at all times during the reporting period.

The composition of the green portfolio can be seen in the charts below.

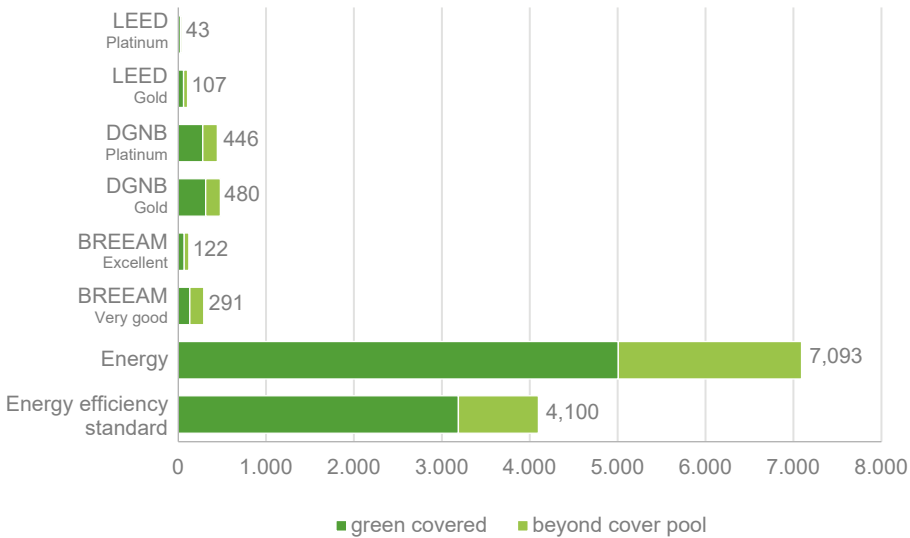
<sup>3</sup> Green properties that are not part of the mortgage cover pool are not included in this Green Bond Report

**Type of property by use**  
in € mn



**Real estate portfolio with a focus on office and residential properties**

**Sustainability evidence**  
in € mn



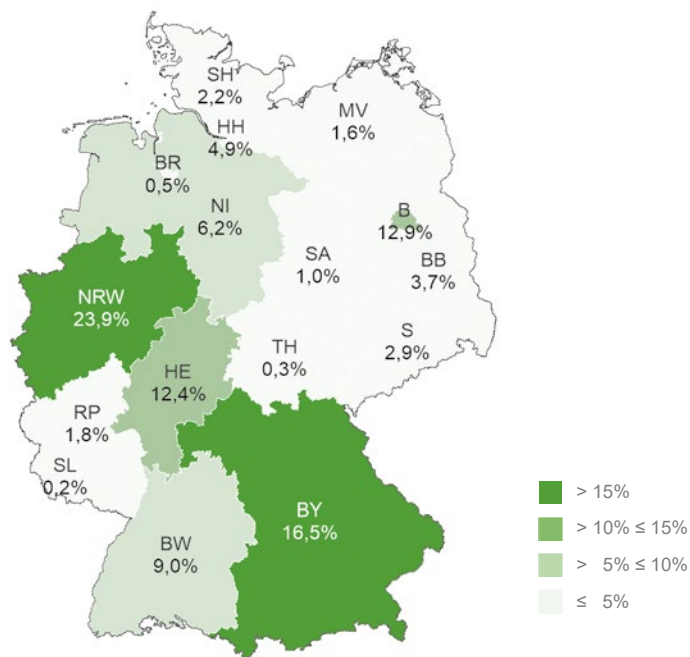
**Major part of the portfolio is classified on the basis of energy performance certificates**



### Energy efficiency classes in the residential portfolio (€ mn)

| Reference date         | green covered | beyond cover pool |
|------------------------|---------------|-------------------|
| 31 December 2023       |               |                   |
| A+                     | 204           | 55                |
| A                      | 318           | 134               |
| B                      | 815           | 256               |
| Minimum B <sup>4</sup> | 3,113         | 525               |
| <b>Total</b>           | <b>4,450</b>  | <b>970</b>        |

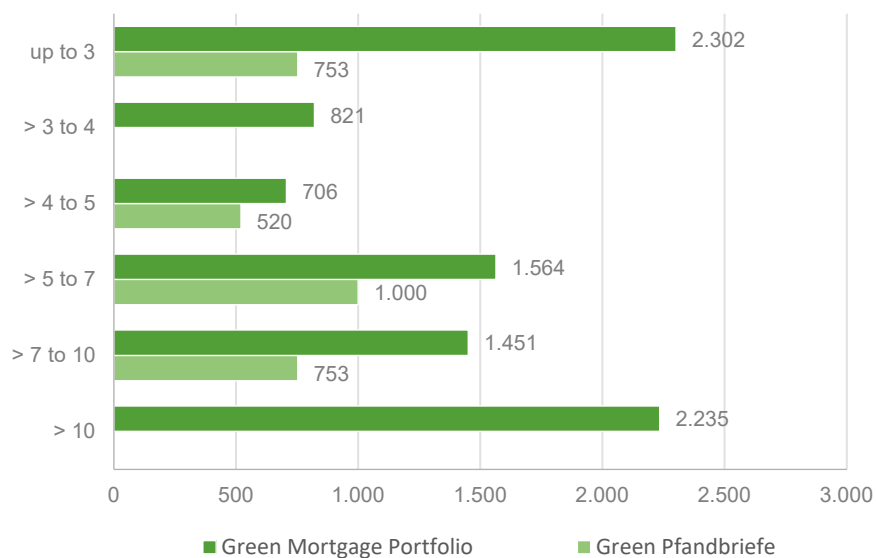
### Regional distribution of green cover assets



Real estate in Germany with a focus on economically strong regions

<sup>4</sup> according to EnEV 2016 / GEG 2020

**Maturity profile <sup>5</sup>**  
in years and € mn



**Green Pfandbriefe are backed by green assets at any time**

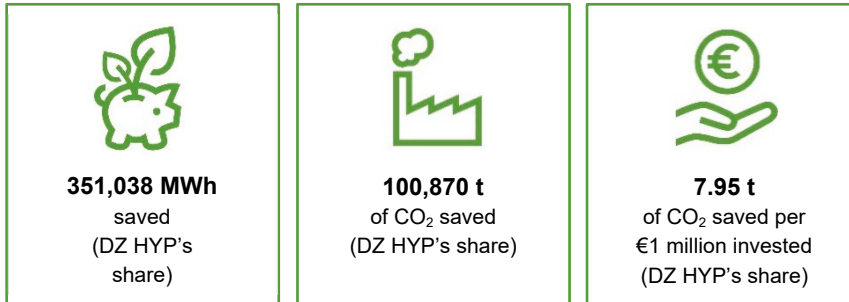
<sup>5</sup> Green Mortgage Portfolio according to fixed-rate periods

## IMPACT REPORT



### Results

Expected annual climate impact



### Methodology

This chapter reports on the CO<sub>2</sub>-savings of the green portfolio. To ensure that the methods used meet the highest quality standards, we have commissioned Drees & Sommer, a renowned consultancy firm, to carry out the calculation.

The calculation is initially based on Drees & Sommer's review of the properties assessed as green by DZ HYP, using the underlying selection criteria of the Green Bond Framework.

The buildings examined bear energy demand or consumption certificates that either comply with the final energy limits described in the framework, have a green building certificate or meet the EnEV 2016/GEG 2020 energy standard.

At first, the energy efficiency of the green buildings is determined. For buildings with energy performance certificates, the respective primary or final energy values are used. To determine the energy efficiency of buildings classified by means of EnEV 2016/GEG 2020, the existing building stock is compared with the corresponding legal regulations and requirements for building energy in order to determine reference key figures specific to the year of construction. If buildings are classified on the basis of certificates, the respective certificate version is used to determine the energy efficiency.

Secondly, the energy demand/consumption of green buildings is converted into CO<sub>2</sub>-emissions. For this purpose, key information such as the energy sources for heat (e.g. district heating, gas, oil or heat pump) and electricity is provided by DZ HYP for buildings with energy certificates. Drees & Sommer examines the underlying heat and electricity sources with regard to their CO<sub>2</sub>-emissions. Among other things, site-specific CO<sub>2</sub> intensities of district heating networks are used for this purpose. All sources and values used are from publicly accessible and representative data for building originate from official German institutions. Energy sources that are not available (e.g. for buildings without an energy performance certificate) are conservatively estimated using national or regional benchmarks.

In order to compare the CO<sub>2</sub> intensity of the green buildings portfolio in relation to conventional buildings, the energy efficiency of a reference building specific to the type of building is then determined. Based on the average energy balance of the reference buildings, the reference values are converted into CO<sub>2</sub>-intensities in the same way as the CO<sub>2</sub>-calculation of the green buildings. This results in the CO<sub>2</sub>-input of an average reference building for the respective asset class.

The difference between the CO<sub>2</sub>-emissions of the reference building and the respective green building represents the CO<sub>2</sub>-savings per year reported below.

In a final step, the savings are offset against the building-specific financing share (DZ HYP's lending volume in relation to the market value) in order to delimit DZ HYP's CO<sub>2</sub>-savings share.

### Detailed results | 31.12.2023

| Low Carbon Buildings | Year of Issuance | Type                | Signed Amount <sup>a</sup> | Reference Area <sup>b</sup> | Share of Total Portfolio Financing <sup>c</sup> | Annual final energy savings <sup>d</sup> | Annual CO <sub>2</sub> emissions avoidance <sup>e</sup> | Financing share Annual final energy savings <sup>f</sup> | Financing share Annual CO <sub>2</sub> emissions avoidance <sup>g</sup> |
|----------------------|------------------|---------------------|----------------------------|-----------------------------|---|--|---|--|---|
| Unit                 | [yyyy]           | [-]                 | [EUR]                      | [m <sup>2</sup> ]           | [%]   | [MWh/year]                               | [tCO <sub>2</sub> /year]                                | [MWh/year]   | [tCO <sub>2</sub> /year]  |
| DZ HYP AG            | 2023             | Low Carbon Building | 9.078.678.479              | 10.599.946                  | 100,0   | 874.700                                  | 251.925   | 351.038  | 100.870   |
| Office               | 2023             | Low Carbon Building | 2.995.609.401              | 3.212.780                   | 33,0  | 253.927                                  | 70.790  | 88.562   | 25.411  |
| Residential          |                  |                     | 4.450.175.527              | 4.744.543                   | 49,0  | 381.354                                  | 91.579  | 170.383  | 40.903  |
| Retail               |                  |                     | 1.142.726.234              | 1.658.262                   | 12,6  | 164.030                                  | 64.204  | 65.254   | 25.450  |
| Logistics            |                  |                     | 186.863.028                | 721.698                     | 2,1   | 54.477                                   | 18.262  | 17.863   | 6.007   |
| Hotels               |                  |                     | 303.304.290                | 262.663                     | 3,3   | 20.912                                   | 7.090   | 8.977  | 3.099   |

<sup>a</sup> Legally committed signed amount by the issuer for the portfolio or portfolio components eligible for green bond financing.  
<sup>b</sup> Reference area based on national definition, e.g. Energy performance certificate based, net floor conditioned area.  
<sup>c</sup> Portion of the total portfolio cost that is financed by the issuer.  
<sup>d</sup> Final energy savings calculated using the difference between the top 15% and the national building stock benchmarks  
<sup>e</sup> Greenhouse gas emissions avoidance determined by multiplying the final energy savings with the carbon emissions intensity  
<sup>f</sup> Final energy savings calculated adjusted with the financing share  
<sup>g</sup> Greenhouse gas emissions avoidance adjusted with the financing share

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