



Deutsche Pfandbriefbank AG (pbb) External Review of Green Bond Impact Report 2022

23 January 2023

CICERO Shades of Green has reviewed pbb's Green Bond Impact Report 2022 ("Report"). We review allocation against pbb's Green Bond Framework (dated March 2020, the "Framework") criteria, and impact metrics for relevance and transparency.

We consider that the allocations considered in the Report align with the Framework and that the Report utilizes a relevant and sufficiently transparent impact metric. Moreover, we consider the Report aligns with the core principles and recommendations contained in ICMA's Handbook – Harmonized Framework for Impact Reporting (June 2022),¹ though more specific information on emissions factors could be included.

Project allocation

As at 30 November, pbb had outstanding green bonds totaling EUR 2.45 billion.

In respect of allocation, CICERO Shades of Green considers the Report aligned with the Framework; for a more detailed review, please see Appendix 1.

pbb reports on its green bond portfolio as at 30 November 2022, which totals approximately EUR 3 billion in green loans. pbb continues to rely exclusively on the Framework's energy performance criteria when selecting projects for its green bond portfolio. It has, however, developed a scoring model for its green loans, which, on top of energy criteria, also factors in environmental certifications and other sustainability factors.² Given the number of factors that contribute to a building's climate performance, these additional considerations are welcome. pbb also informed us that its green bond committee also discusses tenants' business operations in the selection process.

For the purposes of its allocation reporting, pbb includes a residential portfolio, consisting of 82 properties. According to pbb, these properties are not listed individually because they consist of a large number of comparatively small size, though each individual building satisfies the Framework criteria.

The Framework was assigned an overall Light Green in our Second Party Opinion.³ The Framework included only one project category, green buildings, where proceeds would finance or re-finance loans extended in respect of such buildings. This project category also received a Light Green shading, and all proceeds have necessarily been allocated to this category (see Figure 1).

¹ [ICMA Handbook](#)

² E.g. soil surfacing, closeness to public transport, heating type, use of 'green' electricity, use of recycled materials in construction.

³ [pbb - SPO](#)

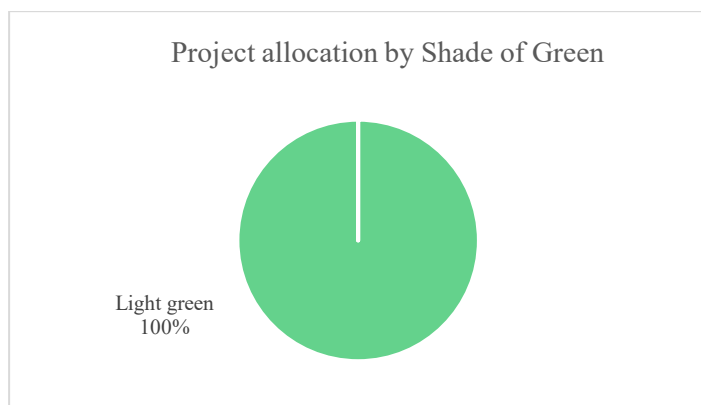


Figure 1: Allocation by SPO Shade of Green. Allocation by SPO Shade of Green. Shading is based on evaluation at time of issuance and does not reflect ex-post project verification.

Impact metrics

Impacts are reported on the green bond portfolio as at 30 November 2022, and pbb sets out estimated impact for a one year period.

The Report sets out estimated annual reduced/avoided GHG emissions in tons CO₂e - this is an example indicator given in the Framework and commonly used for green buildings. This is reported on a portfolio level, though pbb calculates impacts on a line-by-line basis. pbb has furthermore pro-rated the impacts: firstly by every EUR 1 million of issued bonds, and secondly by every EUR 1 million financed.

Investors should note that there have been changes to pbb's impact methodology since last year - this reduces comparability of impacts across Reports. More precisely, pbb now utilizes emission information contained in buildings' EPC (where available), PCAF data for benchmarking energy consumption,⁴ and the emissions factors from a tool it has developed with KPMG used in its underwriting process. If emissions data is missing from the EPC, emissions are calculated on the basis of an assumption of what is typical for the given property type.

In respect of impacts, CICERO Shades of Green considers that the Report is sufficiently transparent. There is always uncertainty around emissions data and especially avoided emissions, and we welcome that pbb includes information on its methodology. More specific information on emission factors could improve the reporting. For a more detailed review, please see Appendix 1.

Terms

CICERO Shades of Green provides a review of pbb's annual reporting based on documentation provided by pbb and information gathered during teleconferences and e-mail correspondence with pbb. pbb is solely responsible for providing accurate information. All financial aspects of the sustainable finance reporting - including the financial performance of the bond and the value of any investments in the bond - are outside of our scope, as are general governance issues such as corruption and misuse of funds. CICERO Shades of Green does not validate nor certify the existence of the projects financed and does not validate nor certify the climate effects of the projects. Our objective has been to provide an assessment of the extent to which the bond has met the allocation and reporting criteria established in the Framework. The review is intended to inform pbb management, investors and other interested stakeholders and has been made based on the information provided to us. CICERO Shades of Green cannot be held liable if estimates, findings, opinions, or conclusions are incorrect. Our review does not

⁴ [PCAF](#)



follow verification or assurance standards and we can therefore not provide assurance that the information presented does not contain material discrepancies.



Appendix 1 - Detailed Review

Category	Description	Review against framework criteria	Impact Metrics	Relevance of metrics	Transparency considerations
Green Buildings	Investments in buildings which achieve certain environmental certifications (BREEAM Very Good or above, LEED Gold or above, etc) or achieve a certain energy performance, as set out in the Framework.	<p>No discrepancies identified</p> <ul style="list-style-type: none"> As was the case last year, pbb relies exclusively on the energy performance criteria in the Framework. No building has been selected on the basis of environmental certifications alone. Nonetheless, for example, according to the Report around 20% of buildings in the green bond portfolio are certified BREEAM Very Good or above. pbb includes a residential portfolio in its allocation reporting, though has confirmed that each individual building satisfies the Framework criteria. In line with its statement during the SPO process, the green bond portfolio does not include any buildings with oil heating. The Report includes information on heating sources; some 24% of financed properties had natural gas heating. 	<ul style="list-style-type: none"> Estimated ex-ante annual reduced/avoided GHG emissions in tons CO₂e. 	<ul style="list-style-type: none"> ✓ Metric provides a good indication of the environmental impact of the investment. ✓ The metric is commonly used in green bond reporting and is in line with core indicators in the ICMA Handbook. 	<ul style="list-style-type: none"> ✓ There have been changes to pbb's impact methodology since last year. pbb is generally transparent on these. The changes in methodology reduce the comparability of impacts reported across pbb's Reports. According to pbb, using PCAF benchmarks sets the average energy use at a lower level, and therefore reduces pbb calculated impacts compared to the previous methodology. pbb's use of more conservative and recent benchmarks is welcome. ✓ The ambition of each building depends on its performance compared to the regulatory requirements in the jurisdiction. pbb's use of



country specific benchmarks helps with this to some extent, though note that PCAF benchmarks represent the emissions of standard properties in a specific market.

- ✓ pbb is transparent on its overarching methodology, though it does not set out line by line calculations or emission factors. This could improve transparency.
-