

Green Bond Framework

Berlin, 10 April 2019¹

I. Introduction

Berlin Hyp issues Green Bonds either as covered bonds (Green Pfandbriefe) or as senior unsecured bonds² (Green Senior) and is committed to using the proceeds of these bonds for financing and/or refinancing green assets. All eligible assets are loans for green buildings. The eligible assets remain on the bank's balance sheet. Investors do not bear the credit risk of the assets and rank pari-passu with existing covered bondholders (in the case of Green Pfandbriefe) or senior unsecured bondholders (in the case of Green Senior).

Eligible assets can form part of Berlin Hyp's mortgage cover pool. Eligibility criteria are described in Annex 1.

II. Rationale

Sustainability is an important aspect of Berlin Hyp's corporate strategy. In 2013, Berlin Hyp decided to systemise the bank's existing approaches and processes in a sustainability management system. Financing green buildings represents the part of Berlin Hyp's sustainability measures that is closest to its core business: commercial real estate lending. In order to further strengthen its green building lending, the bank introduced pricing incentives for eligible business earlier in 2016. Issuing Green Bonds represents the logical equivalent on the liability side of the bank's balance sheet. In 2017, having a leading position in green finance was added to Berlin Hyp's overall strategic goals: By the end of 2020, 20% of Berlin Hyp's loan portfolio should consist of loans for green energy efficient buildings.

As buildings account for 30 to 40 per cent of total energy demand and about 30 per cent of total energy related CO₂ emissions worldwide, Berlin Hyp actively contributes to the avoidance of CO₂ emissions by financing sustainable and low energy buildings. By issuing Green Bonds it offers investors the opportunity to support these efforts to aid in the transition to a low carbon economy.

Berlin Hyp is continuously aiming for diversification in its investor base and products. Green Bonds enable environmental investors to invest in the bank's liabilities.

With the issuance of Green Pfandbriefe and Green Senior Berlin Hyp offers investors an added value in addition to its own credit quality and/or the credit quality of its mortgage cover pool. This is enticing in an overall capital market environment of low interest rates and tight credit spreads as to date of the publication of this Green Bond Program.

¹ Third update of the initial Green Bond Framework dated 8 August 2016; the section Rationale has been amended and eligibility criteria (Annex 1) have been strengthened. Changes marked with green letters.

² The amendment of section 46f of the German Banking Act (KWG) as of 21 July 2018 has enabled German banks to issue two different sorts of senior unsecured debentures: senior preferred bonds and senior non-preferred bonds. These two asset classes are subject to different treatments in a bail-in scenario. In this framework, the term "senior unsecured" refers to both asset classes.

Berlin Hyp is an experienced Pfandbrief issuer and offers investors maximum transparency. Due to the requirements of the German Pfandbrief Act the bank discloses detailed information on its cover pool. The bank uses this experience to provide in-depth information on eligible assets to environmental investors.

With this Green Bond Program, Berlin Hyp intends to make its approach to green bond funding transparent for investors as an identical approach is to be used for all Green Bonds issued or to be issued by the bank. Under the program the bank focuses on refinancing loans for energy efficient commercial real estate and follows one single methodology for all bonds.

III. Green Bond Program

As of 30.12.2018, Berlin Hyp has a mortgage loan portfolio with a nominal value of € 20.2bn. A portion with a value of about € 3.4bn meets the bank's eligibility criteria and is labelled green building loans in its loan monitoring system. The nominal value of green building loans in Berlin Hyp's mortgage cover pool is € 2.2bn, while another € 1.2bn is not or not yet a part of the mortgage cover pool. The aggregated nominal value of eligible assets will change over time and is likely to increase as the bank:

- a) plans to generate new eligible assets and
- b) shall ask existing borrowers for sustainability certificates and energy performance certificates (EPCs).

Under this program the bank shall issue Green Pfandbriefe and Green Senior to refinance eligible assets. Berlin Hyp's primary focus is to refinance existing green building loans. Therefore, a new Green Bond can only be issued if there are green building loans with a sufficient aggregated nominal value on the bank's balance sheet that have not already been used for previous Green Bonds. Eligible assets shall not be allocated to more than one Green Bond of Berlin Hyp. That means that the aggregated nominal value of all outstanding Green Bonds shall not exceed the aggregated nominal value of eligible assets at any time. Furthermore, the bank shall ensure a 10 per cent excess of eligible assets at issuance of a new Green Bond. That means that the aggregated nominal amount of eligible assets has to be at least 110 per cent of the sum of the nominal values of the outstanding Green Bonds and the intended new Green Bond.

In addition, the aggregated nominal value of outstanding Green Pfandbriefe shall not exceed the aggregated eligible assets in the bank's mortgage cover pool at any time. If eligible assets mature or are redeemed before a Green Bond's maturity they are replaced by other eligible assets. The bank will thus make every effort to ensure that the aggregated nominal value of eligible assets exceeds the aggregated nominal value of all outstanding Green Bonds at any time.

In addition, Berlin Hyp shall make every effort to invest an amount equivalent to the net proceeds of the Green Bonds in new eligible assets and (in the case of Green Pfandbriefe) to include these into its mortgage cover pool.

Berlin Hyp's Green Pfandbriefe and Green Senior are issued as bearer bonds under its Offering Program, described in the current version of its base prospectus, which is published on the bank's website. Eligible assets may also be refinanced by using the proceeds of registered bonds or Schuldscheindarlehen.

III.1 Green Pfandbrief

Berlin Hyp's Green Pfandbriefe are Mortgage Pfandbriefe as defined in section 1 para. 1 (1) of the Pfandbrief Act. All cover assets fulfill the requirements of sections 13 to 18 Pfandbrief Act. Green Pfandbrief holders rank pari-passu with all other Mortgage Pfandbrief holders. In the event of issuer insolvency, the entire cover pool is liable for timely payment of the interest and principal of Green Pfandbriefe and all other outstanding Mortgage Pfandbriefe.

The cover principle from the Pfandbrief Act is applied by Berlin Hyp to its Green Pfandbriefe. That means that a new Green Pfandbrief can only be issued if the bank's mortgage cover pool contains sufficient eligible assets that have not already been allocated to a Berlin Hyp Green Bond. Proceeds are thus always used to refinance eligible assets in the bank's mortgage cover pool.

In addition, the bank makes every effort to invest an amount equivalent to the net proceeds of each Green Pfandbrief in new eligible assets and include them in its mortgage cover pool. Eligibility criteria for these new assets must meet as a minimum the standard that is applicable to the assets that are already on the bank's balance sheet at issuance.

III.2 Green Senior

Investors in Berlin Hyp's Green Senior rank pari-passu with investors in other senior unsecured notes of the bank within the same asset class. **I.e. holders of green senior preferred bonds rank pari-passu with those of other Berlin Hyp senior preferred bonds, and holders of senior non-preferred rank pari-passu with those of other Berlin Hyp senior non-preferred bonds.** A new Green Senior may only be issued if there are sufficient eligible assets on the bank's balance sheet that have not been allocated to a Berlin Hyp Green Bond before.

In addition, the bank shall make every effort to invest an amount equivalent to the net proceeds of each Green Senior in new eligible assets. Eligibility criteria for these new assets must meet as a minimum the standard that is applicable to the assets that are already on the bank's balance sheet at issuance.

Berlin Hyp's Green Bonds are not project bonds. Therefore, the bank will not assign a specific Green Bond to one or more specific projects. Eligible assets have to meet the eligibility criteria at the time they are flagged as eligible assets. If the bank decides to enhance eligibility criteria, then these new criteria are not applied retroactively to the existing eligible assets. Existing eligible assets do not lose their status if they do not meet the new eligibility criteria.

IV. Green Bond Principles

Berlin Hyp is a member of the Green Bond Principles. It aligns each Green Bond that it issues to the four core principles:

IV.1 Use of Proceeds

The proceeds of Berlin Hyp's Green Bonds will be used to refinance eligible assets. Eligible assets means loans for the (i) acquisition or (ii) construction or (iii) refurbishment of Green Buildings as defined in Annex 1. The mortgages on these Green Buildings serve as collateral for loans on Berlin Hyp's balance sheet. If they are used for Green Pfandbriefe the loans have to be eligible for and included in or to be included in the bank's mortgage cover pool.

IV.2 Process of Evaluation and Selection

The process of Selection and Evaluation is set up as follows:

Berlin Hyp has established a Green Building Commission (GBC). This consists of one representative from each of the following divisions of the bank: Corporate Strategy, Origination, Credit, Appraisal and Treasury. In its regular meetings the GBC discusses whether eligibility criteria (Annex 1) are still in line with market best practices of Green Building definition. If not, the GBC will discuss possible changes and decide on how to adapt the eligibility criteria. Any change shall only lead to stricter criteria, which means a lower level of energy demand and/or consumption.

At the beginning of the acquisition process, Berlin Hyp's borrowers are being asked to provide relevant documents concerning the eligibility for the bank's green finance portfolio, i.e. primarily EPCs and sustainability certificates. **Energy demand calculations are used in case of property developments.** The experts in the bank's appraisal division assess a property's qualification as a green building. In case of a positive decision by the appraisers, sales staff is allowed to deduct up to 10 basis points when pre-calculating the loan. Credit staff documents an asset's green building eligibility in the bank's loan monitoring system.

After documentation, Treasury vote on the asset's compliance with the green finance portfolio eligibility criteria and whether it should be included in Berlin Hyp's green finance portfolio. This ensures a four-eye-principle with respect to the identification process. Only loans that have been approved by both divisions, Appraisal and Treasury, are classified by credit staff as green bond eligible in the bank's loan monitoring system. In any case, data on the properties' energy efficiency and sustainability are entered into the loan monitoring system even if a property doesn't fulfill eligibility criteria. As this process is applied to all new business, it is one of Berlin Hyp's longer term targets to provide evidence about its entire mortgage loan portfolio's energy efficiency.

IV.3 Management of Proceeds

Eligible assets already exist on Berlin Hyp's balance sheet (and in the case of a Green Pfandbrief in its mortgage cover pool) at issuance of a new Green Bond. They are not booked in a separate portfolio but flagged in the bank's legal loan monitoring system. Thus, they form a sub-portfolio of Berlin Hyp's overall loan book. The bank shall report on the development of this sub-portfolio on an annual basis as described in IV.4.

IV.4 Reporting

Berlin Hyp has established a separate website which is exclusively used for providing information about its green bonds (Green Pfandbriefe and Green Senior). The German version of this website is to be found under www.gruener-pfandbrief.de. The English version of the website may be found under www.green-pfandbrief.com³.

Relevant documents and information concerning the bank's green bond activities are published on its green bond website. This also contains the bank's reports on its green bonds. As long as Berlin Hyp has green bonds outstanding, the bank will report on an annual basis. Each report will contain details about:

- (i) The development of eligible assets on Berlin Hyp's balance sheet and in its mortgage cover pool on a stratified basis

³ In December 2018, Berlin Hyp transferred their rights concerning the trademarks Grüner Pfandbrief and Green Pfandbrief to the Association of German Pfandbrief Banks (vdp) in order to make them useable by other member banks, too. In 2019, all contents of Berlin Hyp's green bond websites will be integrated into its general company website www.berlinhyp.de, and both internet domains will be transferred to the vdp.

(ii) New business in eligible assets since the last report and assignment of eligible assets to issued bonds on a loan-by-loan basis

(iii) Carbon emissions avoidance (impact reporting) evaluated in comparison to one or more appropriate baselines.

Berlin Hyp has already published its first annual reporting which can be found on its green bond website. Reports will remain available for investors for future reference.

V. External Review

V.1 Second Party Opinion

Berlin Hyp has appointed ISS-oekom to assess the sustainability of its Green Bond Program. ISS-oekom applies its own framework to carry out this assessment. The results are documented in ISS-oekom's Second Party Opinion which is available on the bank's green bond website. The Second Party Opinion refers to the whole Green Bond Program and includes every security that is issued under it.

V.2 Annual Re-verification

ISS-oekom or any other party appointed by Berlin Hyp later as a successor for ISS-oekom in the future will issue a report verifying the compliance of all issued bonds with the criteria documented in this program on an annual basis. These reports will reflect the results of the assessment of the sustainability performance of the program and the issued Green Pfandbriefe and Green Senior bonds. The reports will be published on the bank's green bond website.

Annex 1: Eligibility Criteria for the Selection of Eligible Assets

Green Buildings means energy efficient commercial real estate buildings with an energy demand or consumption that should not exceed:

Property type	Energy demand Heating kWh/(m ² *a)	Energy demand Electricity kWh/(m ² *a)	In total kWh/(m ² *a)
Residential	60	-	60
Office	100	80	180
Retail	60	75	135
Hotels	95	60	155
Logistics buildings (use: storage)	30	35	65
Light industrial (use: production)	105	65	170

Derived from the German Energy Savings Regulation (EnEV) and subject to the annual re-verification by ISS-oekom, these reference values⁴ provide the basis of our eligibility criteria. They reference to the final energy demand. If, in certain cases, the use of modern technology at/in the building (for example block power stations, heat recovery power units, etc.) results in a significant reduction of primary energy demand, the primary energy demand value can be used as an alternative.

The eligibility criteria must be fulfilled additively, which means that the main decision criterion is the sum of the energy demand of heating and electricity (shown in the column "In total" in the table above). In order to prevent buildings with energetically poor building envelopes or a disproportional power requirement from being included in the green finance portfolio, the maximum values per energy demand category may not exceed the respective category threshold by more than 20% (excluding for residential).

In addition/alternatively, eligibility criteria include the following external sustainability certifications⁵:

LEED	Gold or above
BREEAM	Very Good or above
DGNB	Gold or above (for certificates given until 30.06.2015: Silver or above)
HQE	High Level or above

Eligible assets shall also meet other environmental and/or social criteria. These assets are not to be used for the production of arms, pesticides, tobacco, pornography, nuclear power, coal, oil and fossil fuels.

⁴ Based on third-party energy consultant data, Berlin Hyp decided 2018 to further strengthen the category thresholds in order to reflect Berlin Hyp's long term strategy and its specific asset portfolio.

⁵ LEED, BREEAM, DGNB and HQE are providers of sustainability certificates for buildings. Buildings financed by Berlin Hyp after issuance of its inaugural Green Pfandbrief on 27 April 2015 have to score at least 50 per cent in the energy efficiency component of the green building certificate if the building does not qualify already by its energy demand or consumption as defined above.