

Landesbank Baden-Württemberg (LBBW) Green Bond Framework

Stuttgart, 5 Dezember 2017

1. Introduction

1.1. Background

Landesbank Baden-Württemberg ('LBBW') is both a universal bank and a commercial bank with a regional focus.

LBBW has total assets of around EUR 244 billion (as at 31 December 2016) and a staff of approx. 10,840 within the Group. Its head offices are located in Stuttgart, Karlsruhe, Mannheim and Mainz.

Its three customer-driven banks - BW-Bank, LBBW Rheinland-Pfalz Bank and LBBW Sachsen Bank - allow LBBW to offer the full array of business services across Germany, while also drawing on extensive regional roots. Within the state capital Stuttgart, BW-Bank fulfils the role of a municipal savings bank for LBBW.

LBBW's business model is based on five pillars and comprises the following areas of business: corporate customers, private customers, savings banks, real estate financing, project finance and capital markets. BW-Bank, LBBW Rheinland-Pfalz Bank and LBBW Sachsen Bank as dependent institutions with their own market presence form the three strong regional pillars in the Group's business with private and corporate customers.

LBBW also supports both its own corporate customers and those of the affiliated savings banks with their international activities. Branches and representative offices around the world provide support through their country expertise, market knowledge and finance solutions. In addition, LBBW operates German Centres in selected locations that provide local offices and networks to German corporate customers and advise them on their market entry.

Subsidiaries specializing in specific areas of business such as leasing, factoring, asset management, real estate or equity finance diversify and amplify LBBW's portfolio of services within the Group.

1.2. LBBW's sustainability ambitions

LBBW is a member of the UNEP Finance Initiative since 1999 and has since developed strong sustainability policies and goals. LBBW's Sustainability Policy provides guidelines that form a framework for all sustainability activities at LBBW and therefore forms the basis for integrating economic, environmental, and social issues into our business activities as a whole. For purposes of implementing

the Sustainability Policy, LBBW has defined overarching goals, which are broken down into individual targets and specific measures, and put into operation in the annual Sustainability Program. The Principles and Guidelines for Implementation of LBBW's Sustainability Policy and Goals provide concrete guidance for implementation of the umbrella sustainability goals, which include specific exclusion criteria for certain planned transactions along with overarching compliance, human rights, LBBW climate strategy and business area-specific guidelines (for further information please see [Sustainability Report 2016](#), pages 12-20).¹

In addition LBBW's code of conduct also includes no-tolerance policy towards corruption, fraud or money laundering, the protection of data and intellectual property, compliance with all relevant laws and regulations and a good corporate citizenship in general.

Regarding the protection of environment, LBBW has already achieved its aim to reduce CO₂ emissions in business operations by one-quarter by 2020 (starting from 2009 figures).

While backing all of the 17 "Sustainable Development Goals" (SDGs), as defined in September 2015 by the United Nations for the period 2015-2030, LBBW can predominantly contribute to these goals in its own areas of competence covering a broad range of financing solutions in order to:

- Support the sustainable development of companies
- Promote projects which contribute to the fight against climate change, notably through LBBW's commercial real estate and project financing activities.

1.3. Rationale

LBBW is convinced that Green Bonds are an effective tool to channel investments to assets that have climate benefits and thereby contribute to the achievement of the UN SDGs, particularly SDG 11 (sustainable cities and communities) SDG 13 (Climate Action), SDG 7 (Affordable and Clean Energy) LBBW has been a signatory of the ICMA Green Bond Principles since 2014. LBBW believe that Green Bonds offer transparency and traceability to investors who wish to allocate funds to green assets. LBBW hopes to broaden its investor base by attracting investors that seek to focus their investments towards environmentally friendly projects. LBBW has designed therefore this Green Bond Framework in accordance with the ICMA Green Bond Principles 2017², to provide investors with a state of the art green bond, in line with the market practice in terms of transparency, impact reporting, and commitments. As one of the first German financial institution entering the green bond market, LBBW believes also it has a key role to play as a standard setter in Germany.

¹ https://www.lbbw.de/media/verantwortung/pdf_nachhaltigkeit/LBBW_Sustainability-Report_2016.pdf

² <https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/GreenBondsBrochure-JUNE2017.pdf>

2. Application of ICMA Green Bond Principles 2017

LBBW has created this Green Bond Framework in accordance with ICMA Green Bond Principles 2017, and elected to issue Green Bond(s) with particular focus on the following areas:

- Green buildings financing
- Renewable energy projects financing

The ICMA Green Bond Principles are a set of voluntary guidelines that recommend transparency and disclosure and promote integrity in the development of the green bond market by clarifying the approach for issuing a green bond. In alignment with the ICMA Green Bond Principles 2017, LBBW's Green Bond Framework is presented through the following key pillars:

1. Use of Proceeds
2. Process for Project Evaluation and Selection
3. Management of Proceeds
4. Reporting
5. External review

For each Green Bond issued, (i) Use of Proceeds (ii) Project Evaluation and Selection (iii) Management of Proceeds, (iv) Reporting, and (v) External review will be adopted subject to and in accordance with this Green Bond Framework as amended from time to time.

A dedicated Green Bond Committee has been established to create this Green Bond Framework, manage any future updates to the Framework, including expansions to the list of Eligible Categories, and oversee its implementation.

The committee consists of representatives of the Treasury, the Risk department and the Sustainability department.

2.1. Use of Proceeds

The net proceeds of Green Bond issuances will be used exclusively to finance or refinance in whole or in part an Eligible Green Loan Portfolio consisting of Eligible Green Loans in the following Eligible Categories:

- **Green commercial buildings** which meet regional, national or internationally recognized regulations, standards or certifications in either:
 - (i) New or existing commercial buildings belonging to top 15% low carbon buildings in Germany, in accordance with the methodology defined by an external specialized consultant in green buildings, Drees & Sommer Advanced Building Technologies GmbH.

The methodology, which is defined by Drees & Sommer Advanced Building Technologies GmbH as a green bond standard for commercial real estate in Germany can also be used by other participants in the green bond market, notably includes the following criteria for German commercial buildings:

- i. German office and retail buildings from 2007 with an Energy Performance Certificate under EnEV³ 2007 regulation and later⁴.

or

- ii. German office buildings from 1995 and German retail buildings from 1985 with a maximum site energy consumption of 120 kWh/m²/a (assumption based on research from German Energy Agency Dena). The German Energy Passport for commercial buildings (Energieausweis Nichtwohngebäude) is an example of an instrument that LBBW will use to verify compliance.

(ii) Refurbished buildings: All German refurbished buildings that have undergone a major refurbishment since 2007 under EnEV regulation. The energy demand of buildings which have been undergone this major refurbishment is maximally 40% above the energy demand of a comparable new building

(iii) New, existing or refurbished green buildings which received at least following classifications: LEED “Silver“, DGNB “Silver“, BREEAM “Very Good“, ENERGY STAR “70“ or equivalent or higher level of certification. The certified buildings must also have a good energy performance.

- **Renewable energy projects**, defined as the financing or as investments in or expenditures for the acquisition, conception, construction, development and installation of renewable energy production units; as well as the connection of renewable energy production units to the electricity grid and the transportation through the network. Renewable energy sources include:

(i) On- and offshore wind energy

(ii) Solar energy

2.2. Process for project evaluation and selection

The Green Bond Committee will oversee the entire Green Bond process, including the evaluation and selection of eligible loans originated across relevant business lines.

For the Eligible Loan Category which fall under the category green commercial buildings, LBBW has relied on the support of an external real estate expert consultant Drees & Sommer Advanced Building Technologies GmbH to (1) define the associated eligibility criteria for the top 15% of low carbon buildings and the eligible regulations, standards and certifications and (2) to identify the buildings that

³ EnEV – Energieeinsparverordnung (Ordinance on the Implementation of the Energy Saving Act EnEG). The buildings are calculated using a standardized calculation method in accordance with DIN V 185996.

⁴ This is a very conservative approach since all German office buildings from 1995 and all German retail buildings (non-food) constructed after 1985 are potentially part of the top 15% of the local market.

comply with these criteria within LBBW's existing portfolio of commercial real estate (CRE). The consultant will also identify which part of the Eligible Green Loan Portfolio is in line with the criteria in the Climate Bonds Initiative standards and guidance on low carbon buildings⁵. For newly originated loans, i.e. loans which will be originated after LBBW's inaugural issuance, and for existing loans for which detailed information has become available (such as building certifications or German energy passports) the Green Bond committee will oversee the process for evaluation and selection of eligible loans according to the methodology defined by the consultant. LBBW will in this way gradually expand the Eligible Green Loan Portfolio.

LBBW takes care that all selected Eligible Assets comply with official national and international environmental and social standards and local laws and regulations on a best effort basis. It is part of LBBW's transaction approval process to take care, that all its activities comply with internal environmental and social directives. LBBW has minimum environmental and social requirements in place for all lending businesses, including those financed with the proceeds of the Green Bonds. These eligibility criteria and minimum requirements and ESG related are continuously developed and renewed in its external and internal policy frameworks. LBBW's environmental and social policies can be found on:

https://www.lbbw.de/en/verantwortung/verantwortung_start/verantwortung_und_nachhaltigkeit.jsp

2.3. Management of proceeds

The Green Bonds proceeds will be managed by LBBW in a portfolio approach.

LBBW intends to allocate the proceeds from the Green Bonds to a portfolio of loans that meet the use of proceeds eligibility criteria and in accordance with the evaluation and selection process presented above, the Eligible Green Loan Portfolio.

LBBW intends to allocate all green bond proceeds to the Eligible Green Loan Portfolio within one year of the Green Bond issuance.

LBBW intends to designate sufficient eligible loans in the Eligible Green Loan Portfolio to provide that its outstanding balance of Eligible Green Loans always exceeds the total balance of all outstanding Green Bonds. For each new Green Bond issuance, where necessary, additional Eligible Green loans will be added to this Eligible Green Loan Portfolio pool to provide for sufficient and timely allocation of the incremental net proceeds. During the life of the Green Bonds, if a loan ceases to fulfil the eligibility criteria, LBBW will use its best efforts to remove the loan from the Eligible Green Loan Portfolio and replace it when necessary for the balance of the portfolio as soon as reasonably practicable.

Whilst any Green Bond net proceeds remain unallocated, LBBW will hold and/or invest, at its own discretion, in its liquidity portfolio in money market instruments, the balance of net proceeds not yet allocated to eligible loans.

⁵ <https://www.climatebonds.net/files/files/Commercial%20Property%20Criteria.pdf>

2.4. Reporting

The Green Bond Principles require green bond issuers to provide information on the allocation of proceeds. In addition to information related to the projects to which green bond proceeds have been allocated, the Green Bond Principles recommend communicating on the expected impact of the projects.

On a best effort basis LBBW will align the reporting with the portfolio approach described in "Green Bonds- working towards a Harmonized Framework for Impact Reporting (December 2015)"⁶. The reporting basis for all LBBW green bonds and other potential green funding is the Eligible Green Loan Portfolio and will be aggregated for all green bonds outstanding.

Allocation Reporting

Allocation reporting will be available to investors within one year from the date of each Green Bond transaction and annually thereafter until the proceeds have been fully allocated. The report will provide, for each Eligible Category:

- the total amount of proceeds allocated to eligible loans
- the number of eligible loans
- the balance of unallocated proceeds
- the amount or the percentage of new financing and refinancing

Additionally, when appropriate and subject to confidentiality obligations, LBBW may provide concrete examples of eligible assets refinanced through the proceeds of the Green Bonds.

Impact Reporting

LBBW commits on a best effort basis to report yearly and until full allocation on climate benefits associated to the eligible loans, i.e. :

- For Green buildings eligible loans on:
 - Estimated ex-ante annual energy consumption in KWh/m²/a or energy savings in MWh
 - Estimated annual GHG emissions reduced/avoided in tons of CO₂ equivalent
- For Renewable Energy eligible loans on:
 - Installed capacity in MWh
 - Annual GHG emissions reduction in tons of CO₂ equivalent

For the Green buildings Eligible category, LBBW has appointed a specialized consultant to develop the methodology for the estimation and calculation of the impacts that will be made publically available. Where reasonably feasible, LBBW will seek to provide data on a building basis but due to confidentiality reasons will also choose to aggregate certain classes of buildings.

⁶ <https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/20151202-0530-FINALRevised-Proposal2.pdf>

Both allocation report and impact report will be made available via the LBBW's website:

www.lbbw.de/greenbond

To offer maximum transparency to investors LBBW will also strive to deliver such impact estimates in an investor presentation alongside with the issuance of each Green Bond.

2.5. External review

2.5.1. Second party opinion

Prior to issuance, LBBW has commissioned oekom research AG to obtain an external sustainable verification of its Green Bond Framework. Oekom has reviewed LBBW's green bond framework and issued a second opinion confirming the alignment of it with the Green Bond Principles and the framework's strong environmental credentials. Under this framework the issuance of multiple Green Bonds is possible.

LBBW will put a link to the document on the website of the Second Party Opinion provider in the Green Bond section of LBBW's Investor Relations webpage.

The Climate Bond Initiative certification of LBBW's inaugural bond is included in the scope of the work of the Second Party Opinion.

2.5.2. Verification post issuance

LBBW has appointed oekom to perform for the coming three years following the first issuance, an annual update of its SPO on the Green Bond Programme once. The mission of oekom will notably consist in verifying the sustainability soundness (environment and social risk management and potential controversies) of the assets that will have been added to the portfolio since first issuance.

At the end of its mission, oekom will provide an updated version of its SPO report that will be published by LBBW.