Green Financing Framework of EnBW Energie Baden-Württemberg AG

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1. Introduction

The EnBW Group is a German utility with its registered office in Karlsruhe. With revenues of around EUR 22bn (FY2017) and over 21,000 employees, it is among the largest utility companies in Germany. As an integrated power and gas company, EnBW operates along the entire energy industry value chain in four segments: Sales, Grids, Renewable Energies, and Generation and Trading. Since 2013 EnBW has been following its 2020 Strategy with the majority of its investments focusing on the two segments renewable energies and grids.

EnBW’s activities in the area of power generation from renewable energy sources – where the company utilises the natural resources of water, wind and sun – are combined under the Renewable Energies segment. EnBW is expanding renewable energies, above all in the areas of onshore and offshore wind energy, and broadening its activities along the value chain. The Grids segment encompasses the transmission\(^1\) and distribution of electricity and gas, the provision of grid-related services, e.g. the operation of grids for third parties, and the supply of water. The sales segment focuses on intelligent solutions for customers including smart city, energy efficiency and e-mobility solutions. The Generation and Trading segment encompasses all conventional generation activities of the EnBW group, however it loses its economic importance going forward.

EnBW is to a large extent owned by NECKARPRI-Beteiligungsgesellschaft mbH, a 100% subsidiary of the federal state of Baden-Württemberg, and OEW Energie-Beteiligungs GmbH, a group of municipalities in Baden-Württemberg, with each holding a 46.75% stake. This stable shareholding structure is unique in Germany’s utilities landscape. EnBW is in the position to demonstrate the transformation from a former nuclear and conventional power generator to a provider of renewable energies while maintaining security of supply. The green party-led state of Baden-Württemberg, which plays a leading role in making the Energiewende (energy transition) happen in Germany, is supporting EnBW’s strategy.

EnBW intends to invest €14.1 billion in total by 2020 (based on the reference year of 2012). In this context, the focus will be on expanding renewable energies on an industrial scale. Moreover, the Group will also concentrate on the expansion of its transmission grid and on upgrading its distribution grid to so-called smart grids.

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\(^1\) The transmission grid in Baden-Württemberg is owned and operated by TransnetBW, a 100% subsidiary of EnBW. It is run under an ITO (independent transmission grid operator)-license, whereas EnBW is the first source of financing for TransnetBW. The operator of the transmission grid is currently involved in important projects of the Energiewende in Germany with two DC expansion lines ("Ultranet" and "SuedLink").
Compared to 2012, EnBW will increase its adjusted EBITDA from Renewable Energies by about 250% to €0.7bn in 2020. At the same time adjusted EBITDA contribution of the grid activities will rise by about 25% to €1.0bn.

EnBW contributes to climate protection by reducing the CO2 intensity of its electricity generation (excluding nuclear power) by 15 to 20% by 2020 compared to 606 g / kWh in the reference year 2015. In order to achieve this target EnBW aims to double its share of generation capacity from renewable energies compared to 2012.

### 1.1 Sustainability Approach of EnBW

**Al EnBW’s understanding of sustainability**

Sustainability is an integral component of EnBW’s strategy. By sustainability EnBW means the creation of economic, as well as ecological and social added value for EnBW’s stakeholders (including customers, shareholders, employees, partners and society as a whole) - today and in the future. It is EnBW’s declared goal to make all business activities sustainable and shape them responsibly.
Sustainability aspects are coordinated by the Sustainability Unit, which is located in the strategy division. It serves all of EnBW’s functional and business units as a single point of contact and acts as impulse generator and sparring partner for all sustainability issues in the EnBW Group.

EnBW’s sustainability approach defines specific areas of action (goal dimensions) as well as related KPI, for example in the fields of reputation, customer proximity, supply reliability, employee commitment, occupational safety, expand renewable energies and climate protection. It takes into account external demands for sustainable corporate activities, as well as integrating aspects of sustainability into the operating business along the entire value chain from responsible sourcing of raw materials, over regular surveys on employee satisfaction and the development of suggestions to ideas and advice on how to work on issues of energy efficiency.

Exhibit 3: Goal dimensions for sustainability

The strategic orientation of the company towards sustainability will be guaranteed through strong links with the corporate strategy and the core business. An intensive cooperation and exchange process between the sustainability department and all business units has been established at the managerial as well as at the operational level.

B) EnBW’s strategic view of a low-carbon economy and climate protection

1) For EnBW, the development towards a climate-friendly economy is an essential planning framework because we believe that this development will represent a significant and irreversible trend in the coming decades. As early as 2013, EnBW unreservedly committed itself to the “energy transition” and based its strategy for 2020 on it. We have also further spelled out these goals for the following years, especially in our 2025 strategy. The long-term strategy of the company is thus fully in line with the Paris Agreement and the goals of the EU and the German government. Consequently, EnBW supports the achievement of international and national climate protection targets.
As a group, we are striving strategically for the greatest possible CO2-free power generation and also want to build up the infrastructure required for this, so that we can participate in the development of a climate-friendly energy supply in its entire range. Our investments in climate-friendly segments are congruent with the main growth areas of the energy industry in the coming decades. These fields include renewable energies, replacing climate-damaging fuels with more climate-friendly ones, innovative transport and distribution network infrastructure, energy efficiency and others. We are also intensifying our activities in the coupling of sectors, so that renewable energies can increasingly be used in the areas of heat and mobility.

2) EnBW’s strategic goals are derived from national and international climate protection targets, which represent a key planning premise for us. For example, we have incorporated the provisions of the Paris Agreement and the objectives of the EU and the German government derived from it into our long-term forecasts. One of the scenarios we use here is based on the implementation of extremely ambitious climate protection targets. The model results derived from the scenarios form the basis for our investment decisions.

Our investments in climate-friendly energy supply are significant. We plan to expand our onshore and offshore wind portfolio to over 3.5 GW by 2025, making EnBW one of the largest wind energy investors in Germany. In addition, we intend to expand our international commitment in the field of renewable energies in the coming years.

Experience shows that climate-friendly energy supply is infrastructure-intensive. With its transport and distribution networks, EnBW is one of Germany’s most important infrastructure operators. Consequently, we are also planning massive investments in our grid in order to ensure long-term supply security and efficient energy supply even with a high penetration of renewables. Our transport network subsidiary, TransnetBW, for example, is currently involved in the construction of two North-South connections using extra-high voltage direct current (HVDC) technology.

We are constantly reviewing our strategic orientation, thereby using climate impacts as a major criterion. The inclusion of the key indicator ‘CO2 intensity’ reflects the great importance of climate protection as an economic and social goal of EnBW. The key indicator CO2 intensity is calculated on the basis of the Group’s greenhouse gas emissions - once with, once without the inclusion of nuclear energy. The latter is done to make the influence of nuclear energy visible, which, however, will no longer be in the portfolio after 2022. Our goal is to reduce CO2 intensity of our own generation of electricity (excluding nuclear power) by 15 to 20 percent by 2020 compared to 606 g/kWh in 2015.

3) We expect stable conditions for further reduction of greenhouse gases, whereby we expect market signals to become increasingly important. In this context, EnBW advocates the introduction of a price floor for CO2 of 25 EUR/t in 2020 and 30 EUR/t in 2025. A price floor will reduce the risk of market-oriented investments in renewables and will help to achieve the expansion targets even in a market-oriented environment. In addition, a market signal is being created for the reduced use of emission-intensive power plants. At the same time, we call for a restructuring and simplification of the complex German system of state burdens on electricity (taxes, levies, surcharges) with the aim of creating climate-friendly incentives for consumers. In particular, we support the at least partial abolition of the German electricity
tax, which has no climate-related incentive effect. We are convinced that it can be replaced by a broad pricing of greenhouse gases across sectors.

4) EnBW emphasizes its climate policy positions not only through numerous bilateral stakeholder consultations, but also by supporting various national and international sustainability initiatives. EnBW joined the UN Global Compact in 2010 and is one of the founding members of econsense (Forum for Sustainable Development of German Business) as well as of the sustainable WIN-initiative in the federal state of Baden Württemberg.

EnBW fully supports the United Nations Agenda 2030 for sustainable development adopted in 2015. The business activities and projects of EnBW make, among others, significant contributions to the following three SDGs (Sustainable Development Goals) in particular: Affordable and clean Energy (7), Industry, Innovation and Infrastructure (9) and Climate Action (13). In addition, its business activities and projects contribute to the following six additional SDGs: High-quality education (4), gender equality (5), clean water and sanitation (6), good jobs and economic growth (8), sustainable cities and communities (11), responsible consumption (12).

C) EnBW’s integrated annual reporting and sustainability ratings

EnBW not only reports sustainability information according to the Global Reporting Initiative (GRI) standard, but is also an active supporter of integrated reporting and the International Integrated Reporting Council (IIRC). EnBW participates in the ongoing development of integrated reporting in bodies such as the IIRC Business Network and IIRC Framework Panel, where the Chief Financial Officer of EnBW, Thomas Kusterer, represents EnBW as a member of the IIRC.

Moreover, EnBW is represented on the international Task Force on Climate-related Financial Disclosures (TCFD), appointed by the G20, through its CFO.

Each year, EnBW publishes an Integrated Annual Report with financial and non-financial information as well as an Investor Factbook. These publications include EnBW’s key indicators and goals in the area of sustainability. The key indicators stretch over 5 dimensions - finance, strategy, customers and society, employees and the environment. These performance indicators measure the degree to which objectives have been achieved and thus form important indicators for the management of the company:

EnBW strives to continuously improve its ratings and assessments by leading agencies in the area of sustainability. In 2017, EnBW achieved the following improvements in its sustainability ratings:

- in terms of the ratings and assessments by ISS-oekom, EnBW improved from “C+” to an above-average assessment of ”B-“ (on a scale from ”D-“ to ”A+“) in 2017. The company thus achieved prime status and now belongs to the leading group of energy companies in Germany and Europe.
- in terms of the ratings and assessments of Sustainalytics, EnBW made progress from an overall ESG Score of ”68/Average Performer“ to ”73/Outperformer” (on a scale from 0/Laggard to 100/Leader) in 2018 - with this result, EnBW belongs to the leading 25% in the utility sector worldwide (sample of around 200 companies).
• in terms of the Carbon Disclosure Project (CDP) assessment, EnBW received a climate protection rating of "A-/Leadership" for its climate performance and reporting in 2017, after a previous rating of B/Management (on a scale from "D-/Disclosure" to "A/Leadership").

1.2 Rationale for Green Financing
Since EnBW started its transformation in 2013, the company has been repositioning its business profile from a traditional utility with the majority of earnings coming from conventional power generation towards a company where the organization as a whole, strategically as well as operationally, is working towards becoming a renewable energies generator and infrastructure provider. EnBW’s grid operators for transmission and distribution grids connect renewable energy capacities to the grid as well as optimise the grid towards the needs of sustainable generation and e-mobility. The company develops, builds and operates both on- and offshore wind farms with a pipeline for future projects. Additionally, EnBW focuses on customer products in connection with sustainable transportation solutions, energy savings and smart cities.

EnBW has identified major trends for its strategy going forward. These include the global decarbonisation that drives:

• political and regulatory frameworks in Germany and Europe
• renewable energies and intelligent networks remaining key focus areas of decentralized energy systems
• ongoing convergence of energy and infrastructure (e.g. e-mobility).

EnBW is transforming itself into a sustainable and innovative infrastructure partner with a focus on three central investment areas:

• Sustainable Generation Infrastructure: expansion of low carbon electricity generation, decarbonisation activities in relation to coal-based generation and phasing out of nuclear energy.
• System Critical Infrastructure: expansion and operation of transmission grids and upgrading of distribution grids as well as grid-related services.
• Smart Infrastructure for customers: development of new, digital business models, launching them onto the market and scaling them up.

With establishing a Green Financing Framework, EnBW intends to not only work towards sustainability on the asset side, but also on the liabilities side of the balance sheet. EnBW believes that bringing together sustainable financing and sustainable investment projects will be beneficial to all stakeholders.
2. Scope of the Framework

The purpose of this framework is to define how Green Financing Instruments are set up within EnBW Group as of the date of publication.

This framework is valid for all Green Financing Instruments of EnBW Group, including green bonds, green loans, green project finance and any other financial instrument to which eligible assets or projects are allocated.

This framework is based on the existing international standards:

- The Green Bond Principles as published by the International Capital Market Association (ICMA) in June 2018
- The Green Loan Principles published by the Loan Market Association (LMA) in March 2018

The Principles are voluntary process guidelines that recommend transparency and disclosure and promote integrity in the development of the Green Bond and Green Loan market by clarifying the approach for Green Financing.

Future changes in the Green Financing standards may be implemented in future updated versions of this Green Financing Framework.

The EnBW Group owns a number of operating subsidiaries that hold assets in whole or part of their own. These subsidiaries can have minority shareholders and their own indebtedness. During the lifetime of assets in both, subsidiaries and the Group, transfer of ownership or changes in the capital structure may occur. Any future updated version of this framework that may exist will either maintain or improve the current levels of transparency and reporting.
2.1 Use of Proceeds
The net proceeds of Green Financing instruments will be used to finance or refinance in whole or in part any Eligible Green Projects as defined below and may include new projects with disbursements after the issuance of the Green Financing instrument or existing projects with commercial operation starting not earlier than calendar year 2017. Disbursements to be financed include operating expenditures, capital expenditures, expenditures related to research and development as well as expenditures for acquisitions of eligible projects or assets.

Eligible Green Projects include projects or assets in the following eligible categories:

Renewable energy projects:
- onshore wind energy generation
- offshore wind energy generation
- solar (photovoltaic) energy generation

Energy efficiency projects
- smart meters

Clean transportation projects
- e-mobility infrastructure (charging stations)

2.2 Project evaluation and selection
In order to ensure a diligent project evaluation and selection process, EnBW has set up a two-step approach:

- The capex intensive growth projects of EnBW are aligned with EnBW’s sustainability approach (as outlined under 1.1) as well as national and international environmental and social standards.
- To ensure eligibility for green financing, EnBW has set up a Green Financing Committee with representatives from the corporate finance department, the corporate sustainability department, and on case by case basis, with representatives from business units. Projects to be allocated with proceeds from Green Financing can be submitted by the business units or be chosen by the Green Financing Committee directly. The final decision on the selection of eligible Green Assets can only be taken unanimously.

The Committee is responsible for verifying compliance of all projects with the eligibility criteria (as per 2.1). Typical exclusion filters include but are not limited to material controversies, major concerns about impact on environment.
In addition, selection criteria have been defined for prioritising projects. It will be examined whether the projects contribute to the following criteria:

1. Non-financial key performance indicators and targets of EnBW:
   - Expand renewable energies (RE) - Installed output of RE in GW and the share of the generation Capacity accounted for by RE in %;
   - Climate protection - CO2 intensity in g / kWh
   - Customer proximity - EnBW Customer Satisfaction Index
   - Reputation - Reputation Index

2. Relevant Sustainable Development Goals (SDGs) for EnBW:
   - SDG 7: Ensure access to affordable, reliable, sustainable and modern energy
   - SDG 9: Build resilient infrastructure, promote sustainable industrialisation and foster innovation
   - SDG 11: Make cities and human settlements inclusive, safe, resilient and sustainable
   - SDG 13: Take immediate action to combat climate change and its impacts.

3. Relevant GRI-topics and -disclosures for EnBW:
   Chosen GRI-topics and -disclosures in combination with environmental and economic aspects (GRI 203, 304, 305) as well as issues related to the supply chain (GRI 414).

In addition to the eligibility criteria as per 2.1 the Green Financing Committee will select among the pool of eligible projects, the ones that contribute the most to the above indicators.

The Green Financing Committee will document the project assessment process.

In order to guarantee only the issuer’s share of a project is financed, the maximum green financing proceeds to be allocated to a single eligible project are calculated as follows:

   - \([\text{Total asset capex}^2 - \text{external debt associated with the project}] \times \text{percentage of EnBW Group’s ownership}\)

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\(^2\text{In case of eligible projects owned by subsidiaries having their own external debt, a pro-rata calculation will be conducted to get estimates of external debt associated to that project.}\)
2.3 Management of Proceeds
EnBW has set up a register and has put internal systems in place to track the outstanding proceeds of Green Financing instruments internally. This allows for comprehensive monitoring of allocated and to be allocated amounts.

Prior to issuance of each Green Financing Instrument, EnBW will disclose which projects are to be refinanced, and to what extent proceeds are to finance future investments.

EnBW intends to fully allocate the proceeds within 24 months after the issuance date of each Green Financing instrument.

Until full allocation, the Green Financing Committee will approve at least semi-annually the amount of net proceeds that has been allocated to Eligible Green Projects.

Net proceeds of Green Financing instruments will be allocated in different ways:

   a) Refinancing of operational projects that qualify as Eligible Green Projects
   b) Investments into projects under development that qualify as Eligible Green Projects.
   c) Unallocated proceeds: Investments in any form of cash, bank deposit or other form of available current financial assets.

To ensure the maximum transparency and prevent double-counting, the following describes general guidelines on how allocation of funds is to be done:

   • The proceeds of each of the Green Financing instruments can be allocated to one or several eligible green assets or projects within the EnBW Group. EnBW will ensure, through the implementation of a control system, that all proceeds and flows are tracked thoroughly inside EnBW to ensure transparency.
   • In case the above stated prerequisite is not fulfilled due to changed conditions, such as changes in ownership or capital structure EnBW is obliged to reallocate the resulting excess proceeds to other eligible assets or projects. These changes would be tracked and included in reporting.
   • In case a project or asset where proceeds of green financing have been allocated no longer meets the eligible criteria, EnBW is committed to re-allocate proceeds into alternative eligible projects or assets.
   • In case an asset with proceeds from green financing has reached the end of its lifetime and has been fully decommissioned proceeds will be re-allocated to other eligible projects or assets. These changes would be tracked and included in reporting.
   • In case a project with allocated proceeds has been stopped or abandoned, EnBW is committed to re-allocate the funds to other eligible projects or assets. These changes would be tracked and included in reporting.

To facilitate the tracking process and to increase transparency and investor comfort, EnBW can select investments fully or largely disbursed when selecting Eligible Green Projects.
2.4 Reporting
Green Finance standards encourage reporting on both the use of Green Financing proceeds and the expected environmental impacts at least on an annual basis with the first reporting published within a year after the launch of the Green Financing instrument.

EnBW seeks to provide data on each Green Financing project on an individual basis but might also choose to aggregate certain classes of projects. EnBW is committed to report annually, and until the maturity date on:

A) Use of the Green Financing proceeds
   a) List of projects with some individual information.
   b) Total funds allocation [with breakdown per type of project and breakdown of the allocation of proceeds between new financing and refinancing].
   c) The amount of unallocated proceeds

B) Benefits in terms of sustainability
The company will publish annually a set of reporting indicators to describe the achieved benefits in terms of sustainability. The type of indicators will depend on the type of asset or activity financed by green instrument.

The charts on the following page include a description of the reporting indicators per asset category.
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<th>Type of Project</th>
<th>Benefits</th>
<th>Reporting indicators</th>
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<td>Renewable energy projects</td>
<td>Climate Change Mitigation (generation)</td>
<td>Per Project:</td>
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<td></td>
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<td>- Name</td>
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<td>- Installed capacity (MW) [attributable to the financing instrument]</td>
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<td></td>
<td></td>
<td>For each category:</td>
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<td></td>
<td>- Invested capital attributable to the financing instrument</td>
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<td></td>
<td></td>
<td>- [Expected] Annual energy produced (MWh per year) attributable to the financing instrument</td>
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<td>- [Expected] Annual GHG emissions avoided (CO2 in t) attributable to the financing instrument</td>
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<td>Energy efficiency projects</td>
<td>Climate Change mitigation/ Security of Supply</td>
<td>For each category:</td>
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<td>- Physical indicator i.e. Smart meters (total and attributable number)</td>
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<td>- Invested capital attributable to the financing instrument</td>
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<tr>
<td>Clean transportation projects</td>
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<td>- Physical indicator, i.e. number of charging stations, number of charging procedures (total and attributable number)</td>
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<td>- Invested capital attributable to the financing instrument</td>
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Table 1: reporting indicators per asset category

Furthermore, EnBW intends to report with regard to qualitative impacts. For example:
- mitigation of negative impact (e.g. biodiversity, noise level)
- management of social aspects of projects (e.g. human rights impacts/ working and living conditions)
C) Assurance of compliance of selected projects with the Framework for Green Financing

EnBW will annually assess the compliance with this Framework, including a description of material exceptions, controversies, and mitigating action.

The reporting will be publicly disclosed on EnBW’s website. The company intends to include the reporting within its Annual Integrated Report.

2.5 External Review

The Green Financing issuance of EnBW is backed by two layers of external reviews to ensure maximum transparency and certainty for investors.

A) Layer one – Second Party Opinion

Prior to an issuance, EnBW intends to commission ISS-oekom to obtain an external review of its Green Financing Framework. ISS-oekom will issue a second opinion confirming the alignment of EnBW’s Green Financing Framework with the Green Bond and Green Loan Principles and the framework’s strong environmental credentials. Under this framework, the issuance of multiple Green Financing Instruments is possible. Prior to issuance of each instrument, EnBW will disclose for which projects or assets proceeds are to be used.

B) Layer two – Verification

EnBW intends to receive a pre- and post-issuance certification by CBI. In case a reallocation of proceeds will be necessary, EnBW will request an additional external review.