

POST-ISSUANCE CLIMATE BOND CERTIFICATION

Verification Report for Post-Issuance Certification
for the Green Bond Issued by
Energie Baden-Württemberg AG (“EnBW”)



SCOPE

EnBW commissioned ISS-oekom to compile a Verifier’s Report for Post-Issuance Certification of its 2018 Green Bond by the Climate Bonds Initiative (CBI). The Climate Bonds Certification process includes verifying whether the provisions of the Climate Bonds Standards issued by the CBI are met and obtaining evidence to support the verification.

CRITERIA

Relevant CBI Standards for this Climate Bonds Certification:

- Climate Bonds Standard (Version 2.1)
- Marine Renewable Energy Sector Eligibility Criteria (status 10/2017)
- Wind – Sector Criteria (Version 1.1)
- Solar – Sector Criteria (Version 2.1)
- Low Carbon Transport (Version 1.0)

ISSUER’S RESPONSIBILITY

EnBW’s responsibility was to provide information and documentation on:

- Selection of nominated projects & assets
- Technical aspects of projects & assets
- Internal processes & controls
- Proposed reporting

ISS-oekom's VERIFICATION PROCESS

ISS-oekom is one of the world's leading independent environmental, social and governance (ESG) research, analysis and rating houses. The company has been actively involved in the sustainable capital markets for over 25 years. Since 2014, ISS-oekom has built up a reputation as a highly-reputed thought leader in the green and social bond market and has become one of the first CBI approved verifiers.

ISS-oekom has been conducted this independent Post-Issuance Verification Process of the green bond to be issued by EnBW based on the Climate Bond Standards 2.1. and in line with the limited assurance procedure defined by the International Standard on Assurance Engagements other than Audits or Reviews of Historical Financial Information (ISAE 3000).

ISS-oekom's approach to assess whether the issuer's Green Bond meets the criteria of the Climate Bond Standards 2.1. is as follows:

- The issuer provided an overview over the assets to be included in the Green Bond asset pool and the relevant processes and documentation regarding the proceeds (e.g. use of proceeds, management of proceeds) to ISS-oekom.
- The issuer filled in a questionnaire that covers all criteria of the Climate Bonds Standard 2.1.
- The issuer provided background documents that elaborate further on the information mentioned in the questionnaire.
- Using the questionnaire and background documents, ISS-oekom carried out an assessment of the CBI criteria. In case any answers were unclear, ISS-oekom contacted the issuer for more details and clarification.

The engagement with EnBW took place between October 2018 and October 2019.

ISS-oekom's BUSINESS PRACTICES

ISS has conducted this verification in strict compliance with the ISS Code of Ethics, which lays out detailed requirements in integrity, transparency and objectivity for the ISS business and team members. It is designed to ensure that the verification is conducted independently and without any conflicts of interest with other parts of the ISS Group.

RESTRICTION ON DISTRIBUTION AND USE OF REPORT

This Verification Report for Climate Bonds Certification including all documentation provided alongside is intended for the use of EnBW and the Climate Bonds Standard Board. The present document may be published by EnBW, CBI and ISS-oekom. CBI and ISS-oekom agree to publish the report with the consent of EnBW.

OPINION

Based on the limited assurance procedures conducted and evidence obtained, nothing has come to our attention that causes us to believe that, in all material respects the EnBW's 2018 Green Bond is not in conformance with the Climate Bonds Standard's Post-Issuance Requirements.

A handwritten signature in blue ink, appearing to read "R. Häbler".

ROBERT HÄBLER
ISS-oekom
Munich, 26 September 2019

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About ISS-oekom and ISS ESG

Since March 2018, ISS-oekom has been a member of the ISS family, sitting within the ISS ESG business unit, which also includes ISS-ethix and ISS-climate. ISS ESG provides high quality solutions for sustainable and responsible investment and corporate governance. The External Review team, covering Second Party Opinions (SPOs) and Climate Bond Certifications is made up of colleagues across ISS ESG, from ISS-oekom and ISS-climate.

Originally founded in 1993 and formerly known as oekom research AG, ISS-oekom is one of the world’s leading ESG research and rating agencies for sustainable investments with an unsurpassed rating methodology and quality recognition. ISS-oekom analyzes businesses and countries with respect to their environmental social and governance performance. As an experienced partner of institutional investors and financial service providers, we analyse the level of responsibility exercised by equity and bond issuers towards society and the environment. Under the new ownership, ISS-oekom completes the ESG research and RI services offerings of ISS, making it a worldwide pure-player in the area of RI Research & Solutions. ISS-oekom is headed by Robert Haßler, former CEO and co-founder of oekom research AG. More information: www.oekom-research.com and www.issgovernance.com.

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ANNEXES

Annex 1: Detailed Findings

Annex 2: Detailed Findings Marine Renewable Energy Standards

Annex 3: Detailed Findings Wind

Annex 4: Detailed Findings Solar

Annex 5: Detailed Findings Low Carbon Transport

ANNEX 1: DETAILED FINDINGS

4. NOMINATED PROJECTS & ASSETS

	REQUIREMENTS	FACTUAL FINDINGS	ANALYSIS AGAINST REQUIREMENTS
4.1	Decision-making process to determine the continuing eligibility of nominated projects and assets	EnBW has defined an environmental objective and has implemented processes to determine the eligibility of nominated assets.	✓
4.2	Conformance with the Bond's documented objectives and requirements of Part B of the CBI Standard	The full amount of the net proceeds is distributed to Eligible assets related to clean transportation and renewable energy projects that conform with the relevant eligibility requirements under part B of the Climate Bonds Standards.	✓
4.3	No double nomination of projects and assets	EnBW's selection method is designed to ensure that assets are not nominated twice. This is shown in the reporting.	✓

5. USE OF PROCEEDS

	REQUIREMENTS	FACTUAL FINDINGS	ANALYSIS AGAINST REQUIREMENTS
5.1	Allocation of net proceeds to nominated projects and assets	The full amount of the net proceeds has been allocated to nominated Eligible Assets.	✓
5.2	Allocation of funds within 24 months of issuance of the bond	The full amount of the net proceeds has been allocated to nominated Eligible Assets.	✓
5.3	Share of financing and refinancing	The net proceeds of the Green Bond were exclusively used to finance or refinance Eligible Assets identified by EnBW.	✓
5.4	Tracking of proceeds	The net proceeds of the bond are moved to a Green Bond portfolio and are tracked by the organisation.	✓
5.5	Net loan and investment proceeds to nominated projects and assets	To ensure bond proceeds can be directed in full to the Eligible Assets, the total capex of the Eligible Projects are in many cases greater than the allocated capex.	✓

6. NON-CONTAMINATION OF PROCEEDS

	REQUIREMENTS	FACTUAL FINDINGS	ANALYSIS AGAINST REQUIREMENTS
6.1	Tracking of proceeds	EnBW's internal accounting system allows to track and control at any point in time the amount of funds that have been allocated to an individual project.	✓
6.2	Non-contamination of proceeds	Unallocated proceeds will only be held in Investments in any form of cash, bank deposit or other form of available current financial assets.	✓
6.3	Cases of force majeure	Not applicable. All proceeds have been allocated.	-

7. CONFIDENTIALITY

	REQUIREMENTS	FACTUAL FINDINGS	ANALYSIS AGAINST REQUIREMENTS
7.1	Description of the projects	The full amount of the net proceeds is distributed to Eligible Assets related to the aforementioned categories (see Page 1) and conform with the relevant eligibility requirements under part B of the Climate Bonds Standards.	✓
7.2	Disclosure of information to the market	EnBW publishes a separate EnBW Green Bond Impact Report next to its regular Integrated Annual Report. Both documents are publicly available on EnBW's website (https://www.enbw.com/company/investors/news-and-publications/publications/)	✓

8. REPORTING

REQUIREMENTS	FACTUAL FINDINGS	ANALYSIS AGAINST REQUIREMENTS
8.1 Description of reporting	<p>EnBW publishes a separate EnBW Green Bond Impact Report next to its regular Integrated Annual Report. Both documents are publicly available on EnBW's website:</p> <ul style="list-style-type: none"> - Green Bond Impact Reporting 2018: https://www.enbw.com/enbw_com/bericht/bericht_2018/investors/enbw-green-bond-impact-report-2018.pdf - Integrated Annual Report 2018: https://www.enbw.com/enbw_com/bericht/bericht_2018/downloads/integrated-annual-report-2018.pdf 	✓

9. CLIMATE BOND TAXONOMY

REQUIREMENTS	FACTUAL FINDINGS	ANALYSIS AGAINST REQUIREMENTS
9.1 Matching of Climate Bond category	The full amount of the net proceeds is distributed to Eligible Assets related to the aforementioned categories (see Page 1) and conform with the relevant eligibility requirements under part B of the Climate Bonds Standards.	✓

10. TECHNICAL CRITERIA

REQUIREMENTS	FACTUAL FINDINGS	ANALYSIS AGAINST REQUIREMENTS
10.1 Sector-specific eligibility criteria	The full amount of the net proceeds is distributed to Eligible Assets related to the aforementioned categories (Page 1) and conform with the eligibility requirements under Climate Bonds Standards (part b).	✓
10.2 Bonds covering several sector-specific criteria	Not applicable.	-

11. PROJECT HOLDING

	REQUIREMENTS	FACTUAL FINDINGS	ANALYSIS AGAINST REQUIREMENTS
11.1	Holding of assets with a fair market value at least of the original amount at time of issuance	<p>The value of assets selected is equal to principal amount of bond issuance as external reporting of allocation.</p> <p>Additional Nominated Projects and Assets will always meet the eligibility criteria.</p>	✓

12. SETTLEMENT PERIOD

	REQUIREMENTS	FACTUAL FINDINGS	ANALYSIS AGAINST REQUIREMENTS
12.1	Description of the process and timeline of distribution of proceeds	The full amount of the net proceeds has been allocated to nominated Eligible Assets as of December 2018.	✓
12.2	Description of process regarding unallocated proceeds after 24 months	Not applicable. The full amount of the net proceeds has been allocated to nominated Eligible Assets as of December 2018.	–

13. EARMARKING

	REQUIREMENTS	FACTUAL FINDINGS	ANALYSIS AGAINST REQUIREMENTS
13.1	Description of internal earmarking process	EnBW has set up a register and has put internal systems in place to track the outstanding proceeds of Green Financing instruments internally. The earmarking of use of proceeds is reflected in the management of the project list and published in the EnBW Green Impact Report 2018.	✓

ANNEX 2: DETAILED FINDINGS MARINE RENEWABLE ENERGY

1. DISCLOSURE COMPONENT

REQUIREMENTS	DISCLOSURE EVIDENCE (information publicly available)	FULFILS THE REQUIREMENTS
Project location and size, including description of marine coastal ecosystem in proximity to planned installations, noting for example whether located in marine protected areas or vulnerable marine ecosystems.	<p>Project Hohe See: Germany North Sea, 71 turbines.</p> <p>Project Albatros: Germany North Sea, 16 turbines.</p>	<p>✓</p>
Projected lifespan of the asset/project.	<p>Project Hohe See: Expected lifespan of 25 years.</p> <p>Project Albatros: Expected lifespan of 25 years.</p>	<p>✓</p>
Key stakeholders involved, including other users of the area and surrounding area (sea, land or air depending on what is applicable) of the facility (ies).	<p>Projects Hohe See and Albatros: Relevant government bodies; environmental nature conservation authorities and organisations; fishermen organisations; shipping and aviation authorities; local public authorities; the public; and the Government of the Netherlands for potential transboundary impacts have been involved.</p>	<p>✓</p>
Description of the project activities including details on installation, operation and decommissioning activities.	<p>Projects Hohe See and Albatros: Description of the project activities is available on the projects' websites.</p>	<p>✓</p>
Expected/current facility capacity and generation during and after the life of the bond.	<p>Project Hohe See: 497 MW expected capacity</p> <p>Project Albatros: 112 MW expected capacity</p>	<p>✓</p>
Details of where the energy generated is being fed into, and estimated impact of the grid mix.	<p>Project Hohe See: Hohe See will be connected to BorWin 3 which is connected via a 130km long cable to the coast, that is transported a further 30km to Emden/east.</p> <p>Project Albatros: Albatros will be connected to BorWin 2 which is connected via a 125km long cable to the coast, that is transported a further 75km to Diele.</p>	<p>✓</p>

REQUIREMENTS	DISCLOSURE EVIDENCE (information publicly available)	FULFILS THE REQUIREMENTS
<p>Projected avoided GHG emissions compared to fossil fuel counterfactual (in kgCO₂e) using recognised conversion factors.</p>	<p>Projects Hohe See and Albatros: Expected savings of 1.9 million tonnes of CO₂ / year (of which 50.11% is attributed to EnBW).</p>	<p>✓</p>
<p>The planning standards, environmental regulations and other regulations that the project has been required to comply with.</p>	<p>Projects Hohe See and Albatros: The construction and operation of an offshore wind farm in the German EEZ, the area between 12 and 200 nautical miles from the German coast, requires a planning licence or approval decision (BSH Licence) and ‘releases’ (BSH Releases) from the Federal Maritime and Hydrographic Agency of Germany based on the Act on Marine Facilities.</p> <p>A BSH Licence covers in principle all planning consents required for an offshore wind farm (a ‘one stop shop’ approach to permitting), except for those consents required for the construction and operation of the grid connection.</p>	<p>✓</p>

2. Mitigation Component

The EnBW’s Green Bond Asset Pool is in line with the Mitigation Component of the Climate Bonds Initiative as it is entirely dedicated to renewable energy.

3. Adaptation & Resilience Requirements

REQUIREMENTS	FACTUAL FINDINGS	ANALYSIS AGAINST REQUIREMENTS
<p>1 Processes are in place to assess key risks to the assets from a changing climate and its impact on marine conditions.</p>	<p>Both projects underwent an EIA which takes into consideration risks and impacts.</p>	<p>✓</p>
<p>2 Processes are in place to assess improvements and impacts the assets have on the resilience of other stakeholders.</p>	<p>Impacts on the resilience of stakeholders are subject to existing regulatory requirements (Environmental Permits and EIAs) covered by national law (Germany) for both projects, accounting for 100% of the offshore wind asset pool.</p>	<p>✓</p>

	REQUIREMENTS	FACTUAL FINDINGS	ANALYSIS AGAINST REQUIREMENTS
3	An adaptation plan has been designed and is being implemented to address the risks identified in assessments outlined above.	For two projects, accounting for 100% of the offshore wind asset pool, monitoring, implementation, prevention, and response measures are in place to address identified risks.	✓
3.1	Inspections are carried out regularly and there is a maintenance regime for future inspection.	For two projects, accounting for 100% of the offshore wind asset pool, maintenance is provided by a specialised O&M Contractor.	✓
4	Involvement in stakeholder engagement and collaboration	Two projects, accounting for 100% of the asset pool, have carried out close collaborations with stakeholders in order to promote resilience and adaptation.	✓
5	The assets do not put at risk or endangered species or habitats or unduly impact ecosystem services. If so, mitigation measures have been implemented.	Two projects, accounting for 100% of the offshore wind asset pool, have avifauna monitoring plans and other mitigation measures in place to minimise impact on endangered species and the ecosystem, or are subject to existing regulatory requirements (Environmental Permits and EIAs) covered by national law (Germany).	✓
5.1	Waste is responsibly dealt with. Recycling is in place where possible.	Two projects, accounting for 100% of the asset pool, include waste disposal measures, or are subject to regulatory requirements (Environmental Permits and EIAs) covered by national law (Germany).	✓
5.2	Potential risks for accidental site contamination have been recognised. Steps have been taken to minimise these risks.	Two projects, accounting for 100% of the asset pool, include measures to minimise risks for accidental site contamination, or are subject to regulatory requirements (Environmental Permits/ EIAs) covered by national law (Germany and Netherlands).	✓
5.3	Plant decommissioning is planned to consider the environmental impacts.	Two projects, accounting for 100% of the offshore wind asset pool, include measures for responsible decommissioning.	✓
5.4	Plans and processes are in place to effectively manage and minimise conflicts with other users of the marine and coastal space.	Two projects, accounting for 100% of the offshore wind asset pool, include measures to minimise navigational risks to maritime traffic and aviation.	✓

ANNEX 3: DETAILED FINDINGS WIND POWER (onshore)



The Green Bond Asset Pool complies with the Wind Power criteria of the Climate Bonds Initiative.

All onshore wind projects are automatically eligible for the Climate Bonds certification.

ANNEX 4: DETAILED FINDINGS SOLAR POWER



The Green Bond Asset Pool complies with the Solar criteria of the Climate Bonds Initiative.

All onshore solar projects are automatically eligible for the Climate Bonds certification.

ANNEX 5: DETAILED FINDINGS LOW CARBON TRANSPORT (charging stations)



The Green Bond Asset Pool complies with the Low Carbon Transport criteria of the Climate Bonds Initiative.

All charging stations for electric vehicles are automatically eligible for the Climate Bonds certification.