

# PROGRAMMATIC CLIMATE BOND CERTIFICATION – PRE-ISSUANCE VERIFIER’S REPORT

---

Pre-issuance Verification Report for Programmatic Certification  
for Green Bonds Issued by Energie Baden-Württemberg AG (EnBW)



## SCOPE

EnBW commissioned ISS-oekom to compile a Verifier’s Report for Pre-Issuance Certification of its Green Bond by the Climate Bonds Initiative (CBI). The Climate Bonds Certification process includes verifying whether the provisions of the Climate Bonds Standard 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 Eligibility Criteria (Version 1.1)
- Solar Sector Eligibility Criteria (Version 2.1)

## 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 Pre-Issuance Verification Process of the green bond programme of EnBW based on the Climate Bond Standard 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 Programme meets the criteria of the Climate Bond Standard 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 in July 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 EnBW's Green Bond Programme, covering onshore wind, offshore wind and solar power assets, is not in conformance with the Climate Bonds Standard's Pre-Issuance Requirements.

A handwritten signature in blue ink, appearing to read "R. Häbler", written over a faint rectangular stamp.

ROBERT HÄBLER  
ISS-oekom  
Munich, 23 July 2019

## Disclaimer

Copyright © 2019 Institutional Shareholder Services Inc. (“ISS”). This document and all of the information contained in it is the property of ISS and/or its subsidiaries. The Information may not be reproduced or disseminated in whole or in part without the prior written permission of ISS. While we exercise due care in compiling this document, we assume no liability with respect to the consequences of relying on this information for investment or other purposes. ISS makes no express or implied warranties or representations with respect to the information.

## 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, 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. More information: [www.oekom-research.com](http://www.oekom-research.com) and [www.issgovernance.com](http://www.issgovernance.com).

## Contact

Federico Pezzolato – SPO Business Manager  
ISS Corporate Solutions, 1 London Bridge, London, SE1 9BG  
tel: +44 (0) 203 192 5760  
e-mail: [SPO@isscorporatesolutions.com](mailto:SPO@isscorporatesolutions.com)

## ANNEXES

Annex 1: Detailed Findings

Annex 2: Detailed Findings Marine Renewable Energy

Annex 3: Detailed Findings Wind power (onshore)

Annex 4: Detailed Findings Solar Power (onshore)

## ANNEX 1: DETAILED FINDINGS

### 1. SELECTION OF NOMINATED PROJECTS & ASSETS

	REQUIREMENT	FACTUAL FINDINGS	ANALYSIS AGAINST REQUIREMENTS
1.1.	Decision-making process to determine eligibility of nominated projects & assets.	EnBW has defined a set of environmental objectives for its programmatic approach and has implemented processes to determine the eligibility of nominated assets, based on the CBI taxonomy and Sector criteria for Low Carbon Buildings.	✓
1.2.	Assessment of proposed nominated projects & assets.	EnBW assesses all proposed assets against its eligibility criteria, whether defined thanks to the CBI Sector Criteria or thanks to external consultants' calculation on carbon intensity. These meet the bond programme's objectives and conform with the eligibility criteria under Part B of the Climate Bonds Standard.	✓
1.3.	Documentation of eligibility of nominated projects & assets.	EnBW has developed and established a selection process based on the Climate Bond Initiative Taxonomy and on the Climate Bond Sector Criteria. This process allows to provide instant impact reporting upon qualification of assets. All process steps are decided with, and finally approved by, the EnBW Green Financing Committee.	✓
1.4.	No double nomination of projects & assets.	EnBW will keep a ledger to ensure assets are not nominated twice.	✓
1.5.	Net proceeds in relation to issuer's debt obligation.	Under a programmatic approach, EnBW uses a load factor which measures the usage of the programme (nominal amount of bonds outstanding vs. eligible asset base). EnBW is committed to keep an overcollateralization ensuring that the outstanding bond balance remain lower than eligible asset base.	✓

## 2. INTERNAL PROCESSES & CONTROLS

	REQUIREMENT	FACTUAL FINDINGS	ANALYSIS AGAINST REQUIREMENTS
2.1.1.	Tracking 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.	✓
2.1.2.	Managing unallocated proceeds	EnBW states that unallocated proceeds will be invested, at its own discretion, in treasury liquidity portfolio, in cash or other short term and liquid instruments.	✓
2.1.3.	Earmarking funds to nominated projects & assets	Eligible asset portfolio under the Updated Framework have been tagged based on portfolio screening of existing assets by EnBW.	✓

## 3. REPORTING PRIOR TO ISSUANCE

	REQUIREMENT	FACTUAL FINDINGS	ANALYSIS AGAINST REQUIREMENTS
3.1.1.	Disclosure on investment areas	EnBW has confirmed that it will report prior to issuance that all nominated assets fall into two project categories as listed in the Climate Bonds Standard in the prospectus document.	✓
3.1.2.	Disclosure on intended types of temporary investment instruments	EnBW has ensured that it will disclose the intended types of temporary investment instruments prior to issuance.	✓
3.1.3.	Disclosure regarding pre-issuance verification	EnBW has confirmed that it will report prior to issuance on its pre-issuance verification procedure.	✓
3.1.4.	Disclosure on periodic assurance engagements	EnBW has confirmed that it seeks to comply with the CBI Programmatic requirement and plans annual verification to reaffirm conformation with the Climate Bond Standard and will report on this fact.	✓

## ANNEX 2: DETAILED FINDINGS MARINE RENEWABLE ENERGY STANDARD

### 1. DISCLOSURE COMPONENT

REQUIREMENT	DISCLOSURE EVIDENCE (information publicly available)	FULFILLS THE REQUIREMENTS	COMMENT
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><b>Project 1:</b> North Sea, Germany, 71 turbines.</p> <p><b>Project 2:</b> North Sea, Germany, 16 turbines.</p>	✓	
Projected lifespan of the asset/project.	<p><b>Project 1:</b> 25 years.</p> <p><b>Project 2:</b> 25 years.</p>	✓	
Key stakeholders involved, including other users of the area and surrounding area (sea, land or air depending on what is applicable) of the facilities.	<p><b>Projects 1 &amp; 2:</b> 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>	✓	
Description of the project activities including details on installation, operation and decommissioning activities.	<p><b>Projects 1 &amp; 2:</b> Description of the project activities is available on the project’s developer website.</p>	✓	
Expected/current facility capacity and generation during and after the life of the bond.	<p><b>Project 1:</b> 497 MW</p> <p><b>Project 2:</b> 112 MW</p>	✓	
Details of where the energy generated is being fed into, and estimated impact of the grid mix.	<p><b>Project Hohe:</b> 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>	✓	



**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.

Projected avoided GHG emissions compared to fossil fuel counterfactual (in kgCO<sub>2</sub>e) using recognised conversion factors.

**Projects 1 & 2:** 1.9 million tonnes of CO<sub>2</sub> saved.



The planning standards, environmental regulations and other regulations that the project has been required to comply with.

**Projects 1 & 2:** 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.



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.

## 2. Mitigation Component

The issuer'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

	REQUIREMENT	FACTUAL FINDINGS	ANALYSIS AGAINST REQUIREMENTS
1	Processes are in place to assess key risks to the assets from a changing climate and its impact on marine conditions.	Both projects underwent an EIA which takes into consideration risks and impacts.	✓
2	Processes are in place to assess improvements and impacts the assets have on the resilience of other stakeholders.	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.	✓
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 offshore wind 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 / EIAs) covered by national law (Germany).	✓

<p>5.1 Waste is responsibly dealt with. Recycling is in place where possible.</p>	<p>Two projects, accounting for 100% of the offshore wind asset pool, include waste disposal measures, or are subject to regulatory requirements (Environmental Permits and EIAs) covered by national law (Germany).</p>	<p>✓</p>
<p>5.2 Potential risks for accidental site contamination have been recognised. Steps have been taken to minimise these risks.</p>	<p>Two projects, accounting for 100% of the offshore wind asset pool, include measures to minimise risks for accidental site contamination, or are subject to regulatory requirements (Environmental Permits and EIAs) covered by national law (Germany and Netherlands).</p>	<p>✓</p>
<p>5.3 Decommissioning of the plant is planned in a way that considers the environmental impacts.</p>	<p>Two projects, accounting for 100% of the offshore wind asset pool, include measures for responsible decommissioning.</p>	<p>✓</p>
<p>5.4 Plans and processes are in place to effectively manage and minimise conflicts with other users of the marine and coastal space.</p>	<p>Two projects, accounting for 100% of the offshore wind asset pool, include measures to minimise navigational risks to maritime traffic and aviation.</p>	<p>✓</p>

### 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 parks are automatically eligible for Climate Bonds Certification.

### ANNEX 4: DETAILED FINDINGS SOLAR POWER ONSHORE

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

All solar parks are automatically eligible for Climate Bonds Certification.