

EnBW Green Bond Impact Report 2020 >



Contents

The EnBW green bonds3

Projects and fund allocation4

EnBW Green Financing Framework5

Contribution of green financing6

External certifications and additional links7



EnBW uses proceeds from green bonds to finance, among other things, the roll-out of fast charging infrastructure.

EnBW is involved in a number of initiatives that pave the way for sustainable finance.



International Integrated Reporting Council (IIRC) [↗](#)



Task Force on Climate-related Financial Disclosures [↗](#)



Technical expert group on sustainable finance (TEG) [↗](#)



Sustainable Finance


Sustainable Finance-Committee of the German Federal Government [↗](#)

The EnBW green bonds: Investing in the future of energy

In line with our strategy of developing into a sustainable and innovative infrastructure partner, we are investing more and more in climate-friendly growth projects. For this reason, we plan to invest a total of around €12 billion between 2021 and 2025, 80% of which will be spent on growth projects (focusing on grid expansion, renewables and smart infrastructure). In addition, we aim to reduce our CO₂ emissions to net zero by 2035.

Our first, €500 million green bond issued in October 2018 was followed by the next green bond comprising Germany's first two green subordinated bonds (for a total of €1 billion) in July 2019. We issued a further €500 million green subordinated bond in June 2020. Green bonds are issued exclusively to fund climate-friendly projects. All EnBW green bonds have met the criteria for certification by the Climate Bonds Standard Board on behalf of the Climate Bonds Initiative. Based on our Green Financing Framework proceeds from our green bonds must go exclusively to projects in the following categories that are eligible for support:

- > Renewable energy (onshore and offshore wind power and solar/photovoltaics)
- > Energy efficiency (such as smart meters)
- > Clean transportation (such as electric mobility infrastructure/charging points)

 For further information about our green bonds and the Impact Report, please visit our [website](#) ➤

Key data on EnBW green bonds





Bond-type	Rating (Moody's / S&P / Fitch)	Issue size in €m	Net issue proceeds in €m	Issue date	Term in years	Coupon in % p.a.	Denomination in €	ISIN
Green Senior Bond	A3 (negative) / A- (stable) / A- (stable)	500	496.42	24 Oct 2018	15	1.875	1,000	XS1901055472
Green Subordinated	Baa2 / BBB- / BBB	500	498.25	29 July 2019	60	1.625	100,000	XS2035564629
Green Subordinated	Baa2 / BBB- / BBB	500	498.25	29 July 2019	60.25	1.125	100,000	XS2035564975
Green Subordinated	Baa2 / BBB- / BBB	500	494.75	22 June 2020	60	1.875	100,000	XS2196328608

Impact Report

2018 green senior bond (XS1901055472) and 2019 green subordinated bonds (XS2035564975 & XS2035564629)

For the detailed fund allocation, please see the Impact Report at www.enbw.com/impact-reporting2020/en ↗

49% of the proceeds of the green senior bond issued in 2018 were used for new construction projects and 51% to refinance projects already in operation. For the green subordinated bonds issued in 2019, 87% were used for new construction projects and 13% to refinance projects already in operation.

Project category	Capital expenditure attributable to the bonds (€m, per category) ¹		Generation capacity attributable to the bonds (MW) ¹		Generated electricity attributable to the bonds (MWh) in 2020	CO ₂ avoidance factor (gCO ₂ eq/kWh) ²	Emissions avoided attributable to the bonds (tCO ₂ eq)	
	2018 green senior bond	2019 green subordinated bonds ³	2018 green senior bond	2019 green subordinated bonds			2018 green senior bond	2019 green subordinated bonds
Offshore wind 	227.5	839.8	68.2	251.5	1,240,571	701	174,381	695,260
Onshore wind 	233.3	142.4	143.9	48.3	709,579	693	225,024	59,732
Onshore wind 			-	105.5	298,675	-4	-	-
Solar (PV) 	27.6	14.3	37.8	23.7	66,341	627	25,238	16,357
Total	488.4	996.5	250.0	429.1	2,315,165		424,642	771,350

Formula for calculating the CO₂ avoidance factors by the Federal Environment Agency¹

The calculation method is identical for PV, for offshore wind and for onshore wind. However, different emission- and substitution factors are utilized. The emission gases CO₂, CH₄ and N₂O are taken into account. This way, not only CO₂ emissions are being calculated but the respective CO₂ equivalents (CO₂eq)¹

CO₂eq emissions avoided by RE generation, gross

-

CO₂eq emissions from RE generation (indirect emissions from manufacture of generating equipment, auxiliary energy, etc.)

=

CO₂eq emissions avoided by RE generation, net


CO₂eq emissions avoided by RE generation, net

÷

RE energy generation

=

CO₂ avoidance factor (CO₂eq)

Project category	Capital expenditure attributable to the bonds (€m) ¹		Locations	Number of charges in 2020
	2018 green senior bond	2019 green subordinated bonds		
Expansion of  fast charging infrastructure	8.1	-	123 charging points at 89 locations on the German autobahn network	66,798

¹ Rounded figures

² Source: Germany: Federal Environmental Agency publication "Climate Change 37/2019 - Emissionsbilanz erneuerbarer Energieträger, Bestimmung der vermiedenen Emissionen im Jahr 2018" (PDF, 4141 KB), as of November 2019; France: Own calculation



³ Allocation of funds differs from prior-year figure due to the final allocation of unallocated proceeds

⁴ No calculation of avoided emissions. In Sweden, the energy generated from renewables and low-CO₂ generation (nuclear energy) is at over 90%. It is assumed that additional renewables do not contribute to additional CO₂ avoidance.; Source: International Energy Agency - Energy Policies of IEA countries - Sweden 2019 Review

Impact Reporting

2020 green subordinated bond (XS2196328608)

Proceeds of this bond have been used to refinance the acquisition of Groupe Valeco in 2019. Groupe Valeco is a French project developer that builds and operates wind and PV projects.

Project Category	Capital expenditure attributable to the bond (€m, per category) ¹	Generation capacity attributable to the bond (MW) ¹	Generated electricity attributable to the bond (MWh) in 2020	CO ₂ avoidance factor (gCO ₂ eq/kWh)	Emissions avoided attributable to the bond (tCO ₂ eq)
Onshore wind 	494.8	188.8	425,614	56	23,834
Solar (PV) 		45.1	61,199	19	1,163
Total	494.8	233.9	486,813		24,997

Formula for calculating the CO₂ avoidance factors for France²

It is assumed that renewable generation in France substitutes conventional generation. Therefore, the specific CO₂ equivalent (CO₂eq) of electricity generation in France is calculated from the generation data of conventional generation with the corresponding CO₂ emission factors.

The CO₂ avoidance factor from renewables is calculated for each generation type by subtracting the specific CO₂eq from the life cycle of the respective renewable generation type from the calculated specific CO₂eq from electricity generation.

$$\begin{array}{c} \text{Specific} \\ \text{CO}_2\text{eq emissions} \\ \text{from conventional} \\ \text{generation} \\ \text{in France} \end{array} - \begin{array}{c} \text{Lifecycle CO}_2\text{eq} \\ \text{of specific} \\ \text{renewable} \\ \text{energy type} \end{array} = \text{CO}_2 \text{ avoidance} \\ \text{factor (CO}_2\text{eq)} \quad \text{_____}$$

¹ Rounded figures

² Source: Electricity generation of France: RTE-Electricity-Report 2019

CO₂ emission factors:

1) IPCC WGIII Contribution AR5 2014, Climate Change 2014 Mitigation of Climate Change.

2) IPCC 2011 Special Report on renewable energy sources and climate change mitigation (SRREN).

EnBW Green Financing Framework

We published our EnBW Green Financing Framework in October 2018. It is based on the Green Bond Principles published by the International Capital Market Association (ICMA) in June 2018. Sustainability rating agency ISS ESG has confirmed that the EnBW Green Financing Framework is in accordance with the Green Bond Principles.

The Green Financing Framework governs the use of green financing instruments² within the EnBW Group. We have selected a two-step approach to ensure a diligent project evaluation and selection process. This approach is likewise integrated into the Green Financing Framework:

- > To ensure eligibility for green financing, we have set up a Green Financing Committee with representatives from the corporate finance department, the corporate sustainability department and, on a case by case basis, representatives from business units.

Projects may either be proposed by the business units or directly selected by the Green Financing Committee. 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 (which are specified in the Green Financing Framework). Typical exclusion filters include but are not limited to material controversies and concerns about impacts on the environment.

In addition, selection criteria have been defined for prioritising projects. A prioritisation mechanism is used to assess the extent to which projects meet the selection criteria.

² Green bonds, green loans, green project financing, etc.

The contribution of green financing to the SDGs and our non-financial KPIs

The EnBW Green Financing Framework is based around the 17 sustainable development goals (SDGs) adopted by the United Nations as part of the Agenda 2030 for Sustainable Development. The project categories eligible for support under the Framework

– renewable energy, energy efficiency and clean transportation – contribute significantly to climate change mitigation and the transition to a low-carbon sustainable economy and notably support SDGs 7, 9, 11 and 13.



SDG 7: Affordable and clean energy
By investing substantially in offshore and onshore wind power and in photovoltaics, we contribute to the expansion of renewable energy sources.



SDG 11: Sustainable cities and communities
With the expansion of charging infrastructure to boost electric mobility in Germany, we pave the way for sustainable urban development.




SDG 9: Industry, innovation and infrastructure
By investing in the rollout of charging infrastructure for electric mobility in Germany, we create innovative and climate-friendly infrastructure solutions to promote clean and more environmentally compatible transportation.



SDG 13: Climate action
The expansion of renewable energy for electricity generation helps reduce emissions and supports global action for the climate.

The green bonds likewise support our non-financial KPIs:


Environment 	Renewable energy	The share of EnBW generating capacity accounted for by renewable energies in 2020 had doubled relative to 2012. The target for 2025 is 6.5–7.5 GW installed capacity and for renewable energy sources to account for at least 50% of generating capacity.
	Climate	We actively contribute to climate protection by successively reducing the carbon intensity of our electricity generation activities (excluding nuclear power). In the period 2015 to 2020, we reduced our CO ₂ intensity by 39%. Our target for 2025 is a 15% to 30% reduction compared to the base year 2018.

The green bonds also have a positive impact on other top non-financial performance indicators such as our reputation index (further information is provided on our [website](#) ↗).

The full Integrated Annual Report is available online at: www.enbw.com/report2020 ↗.

Good independent assessments

For an independent assessment of the EnBW green bonds, we have obtained both a Second Party Opinion from ISS ESG and CBI certification for all of our green bonds.

 Further information on the EnBW Framework, ISS ESG and CBI certification is available [online](#) ↗



ISS ESG Second Party Opinion

ISS ESG, a rating agency internationally specialised in sustainability, has confirmed that all EnBW green bonds issued to date comply with the Green Bond Principles on the basis of International Capital Market Association (ICMA) criteria. In addition, ISS ESG confirmed the good sustainability quality of the bonds and also our above-average sustainability performance as the issuer (ISS ESG Prime Status).

Further information (PDF, 1.05 MB) is available as [download](#) ↗



Climate Bonds Initiative certification

Our green bonds are also certified to the high standards of the Climate Bonds Initiative (CBI). The Climate Bonds Initiative (CBI) is an international organisation that works to mobilise the bond market for climate change solutions. Its standards feature detailed sector-specific criteria for qualification as green bonds. The CBI-certificate (PDF, 253 KB) is available as [download](#) ↗.

EU Green Bond Standard

We closely monitor developments involving the EU Green Bond Standard, which is formulated by an EU

expert group, and use them as guidance for future green bond issues.

- > Comprehensive information about our company, our business segments and our range of services is available on our website: www.enbw.com/company ↗
- > More in-depth information on our current financial strategy (Strategy 2025 and Climate Neutrality by 2035) is available at www.enbw.com/financial-strategy ↗
- > News and our financial calendar are available for investors at www.enbw.com/company/investors ↗
- > We provide information on our corporate social responsibility and how we generate economic, environmental and social added value at www.enbw.com/company/sustainability ↗
- > Details about the green bonds with key documents to download and regular updates are available at <https://www.enbw.com/green-bonds> ↗

If you have any further questions, please do not hesitate to contact us:



Julia von Wietersheim
investor.relations@enbw.com ✉



Dr. Lothar Rieth
nachhaltigkeit@enbw.com ✉

Published: 03/2021

EnBW Energie Baden-Württemberg AG
Durlacher Allee 93
76131 Karlsruhe
Phone +49 721 63-00
www.enbw.com