

A close-up photograph of a tree trunk with a heart shape carved into its bark. The heart is made of a lighter, smoother material, possibly wood or a different type of bark, contrasting with the rough, textured bark of the tree. The background is a blurred forest with sunlight filtering through the trees.

»» Green Bonds – Made by KfW

Impact Report: 2015 & 2016

KfW

Letter from the Treasurer

Since we entered the young green bond market in 2014, it has experienced an impressive quantitative and qualitative development. In 2017, new issuances exceeded the threshold of EUR 100 billion for the first time. We have seen new investor types, such as corporates and governments, as well as a growing number of green bond indices and ETFs. Green and sustainable finance have fully reached the international capital markets, and politicians and policy makers have joined the stage as new stakeholders.

In our role as one of the largest green bond issuers and as green bond investor, we actively participate in the development of standards and provide new impetus to the green bond market. KfW is a member of the Green Bond Principles and, furthermore, was part of the working group consisting of ten international financial institutions that published the “Harmonized Framework for Impact Reporting”. The publication of these guidelines for impact reporting of environmental and climate protection projects financed with green bonds marks an important milestone in the standardization process and was particularly well received in the market. Needless to say that transparency and state of the art impact reporting are key to “Green Bonds – Made by KfW”.

After our award-winning inaugural impact report for the year 2014, the following report completes the reporting cycle for “Green Bonds – Made by KfW” issued in 2015 and 2016. Referring to eight green bonds and one tap with aggregate net proceeds of EUR 6.5 billion, it includes all relevant information on the issuances and on the distribution of the net proceeds, and provides information on the actual environmental and social impact achieved in the respective years. The impact is calculated based on the evaluation results of the underlying loan programme provided by the independent Center for Solar Energy and Hydrogen Research Baden-Württemberg (ZSW), Germany.



Dr Frank Czichowski
Treasurer of KfW Group

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Sustainable development

SUSTAINABLE DEVELOPMENT GOALS

“Green Bonds – Made by KfW” contribute to the United Nations’ Sustainable Development Goals (SDG) 7 “Affordable and Clean Energy” and 13 “Climate Action” and thus contribute to shifting the world on a sustainable path.



Key Facts

>>> 2015:

Green Bonds	Net proceeds
5	EUR 3.7 bn
GHG emission reductions in CO ₂ -equivalents p.a.	
3.2 mn tons	



>>> 2016:

Green Bonds	Net proceeds
4	EUR 2.8 bn
GHG emission reductions in CO ₂ -equivalents p.a.	
2.2 mn tons	

corresponding to an equivalent of the yearly CO₂-emissions of

2,491,816 cars*

2015: 1,460,952 cars 2016: 1,030,864 cars



installed electrical power:

2015:

2,439 MW_{el}

2016:

1,759 MW_{el}



renewable energy produced:

2015:

4.5 TWh_{el}/a

2016:

3.3 TWh_{el}/a



* Sources: https://www.kba.de/DE/Statistik/Kraftverkehr/VerkehrKilometer/verkehr_in_kilometern_node.html,
https://www.kba.de/DE/Statistik/Fahrzeuge/Bestand/Fahrzeugaalter/fahrzeugaalter_node.html,
<https://de.statista.com/statistik/daten/studie/399048/umfrage/entwicklung-der-co2-emissionen-von-neuwagen-deutschland/>

“Green Bonds – Made by KfW”

“Green Bonds – Made by KfW” offer investors the opportunity to directly combine measurable climate protection effects with the safety and liquidity of an investment in KfW bonds.

KfW entered the young green bond market as an issuer in 2014. With its high standards regarding transparency and impact evaluation, KfW has set standards in the market and contributed significantly to the important growth the market has experienced since.

Net proceeds from “Green Bonds – Made by KfW” are dedicated exclusively to the financing of green projects under KfW’s loan programme “Renewable Energies – Standard” (*Erneuerbare Energien – Standard*). This loan programme promotes projects for the use of renewable energy sources such as wind energy, photovoltaic, hydro-power and biogas/mass, and contributes to the environmental objective “climate change mitigation”. Immediately after the inflow of the net proceeds from the green bond

issuance, an amount equivalent to the green bond net proceeds in euro is allocated to an internal account which in turn is reduced by amounts matching requests for disbursement under the loan programme in the same calendar year as that of the issuance. Net proceeds from a green bond are considered to be fully allocated once the cumulated disbursement requests from the promotional programme equal the net proceeds from the issuance. The volume-weighted average maturity of “Green Bonds – Made by KfW” for each calendar year does not exceed the respective prior year’s average duration of loan commitments under the “Renewable Energies – Standard” programme. The use of proceeds is monitored regularly and reported on a quarterly basis until full allocation.

Snapshot: Outstanding quality and transparency standards

External evaluation: green eligibility and impact measurement

KfW’s green bond framework and the impact of the financed projects is externally evaluated. CICERO¹ provides a third party opinion on the quality of its green eligibility, classifying “Green Bonds - Made by KfW” as “dark green” – the best grade achievable. The actual environmental and social impact of the loan programme is evaluated by the independent research institute ZSW².

Transparency and reporting: award-winning impact report

KfW reports the amount and the distribution of disbursements under the “Renewable Energies – Standard” loan programme on a quarterly basis. After ZSW has evaluated the actual impact of the funded projects for each year, KfW discloses its respective impact report. Its inaugural impact report was honored in the category “Best impact reporting”.

°CICERO

CICERO’s Shades of Green - Methodology

Light green Medium green Dark green



Green Bonds - Made by KfW



Project examples



Wind farm “Dretzen II” by NOTUS energy in Dretzen, Brandenburg (2017)

Total project cost: EUR 22.5 million
thereof KfW funds: EUR 19.7 million
Annual electricity production: 34,000 MWh

PV system by FEH Solarpark 6 GmbH in Senftenberg, Brandenburg (2016)

Total project cost: EUR 2.0 million
thereof KfW funds: EUR 1.5 million
Annual electricity production: 1,481 MWh



¹ CICERO: Center for International Climate and Environmental Research Oslo, Norway

² ZSW: Center for Solar Energy and Hydrogen Research Baden-Württemberg, Germany

Underlying Assets

KfW has defined comprehensive criteria for eligibility under the loan programme “Renewable Energies – Standard” and assesses the environmental and social eligibility of each project.

KfW’s promotional loan programme “Renewable Energies – Standard”

Eligibility and exclusions

Plants complying with the requirements defined by the German Renewable Energy Sources Act (Erneuerbare-Energien-Gesetz – EEG 2017) are basically eligible for financings under the “Renewable Energies – Standard” loan programme.

However, the following plants and projects are excluded:

- › Hydropower plants with an installed power exceeding 20 MW.
- › Used plants that have been connected to the power grid for more than 12 months and such that were financed by KfW.
- › Plants for the generation of power or heat using fossil fuels as well as plants for heat storage that are directly linked to power or heat generated on the base of fossil fuels.
- › Projects using any form of trust structures or self-dealing.
- › Equipment for the use of nuclear power.

What for? The programme provides financings for the construction, expansion and acquisition of plants generating power or heat from renewable energy sources that comply with the requirements defined by the German Renewable Energy Sources Act (Erneuerbare-Energien-Gesetz – EEG 2017). This includes especially wind energy, solar energy (photovoltaics), hydropower, biomass and geothermal energy. Furthermore, grids and plants for the storage of heat are supported.

For whom? Funds are available for private individuals and not-for-profit organisations which feed the generated electricity/heat into the grid, at least in part, self-employed professionals and farmers, as well as German and non-German enterprises majority-owned by private individuals or municipalities. Investments outside Germany are eligible for German companies, German citizens and joint ventures with a substantial German stake.

Up to 100% of the investment costs are eligible for financing with a cap at EUR 50 million.

Selection process

The project selection is conducted by KfW’s lending department. First, project eligibility is assessed according to the guidelines of the “Renewable Energies – Standard” loan programme ([Link](#) – German only).

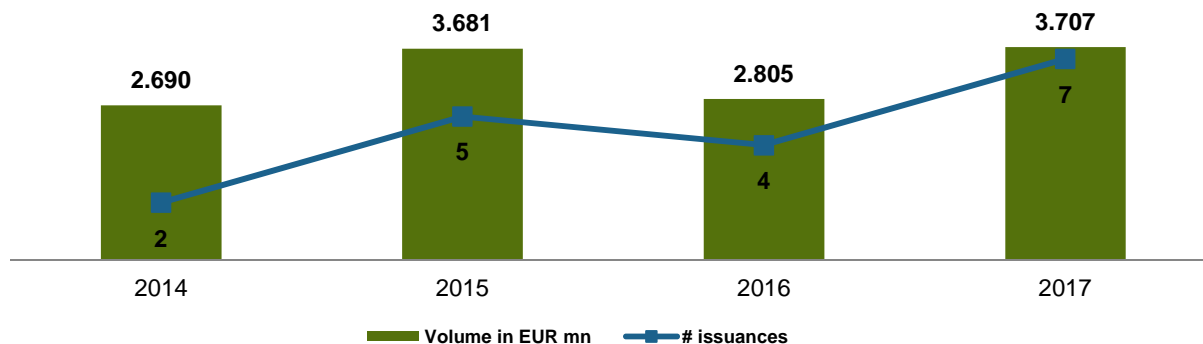
In addition, all transactions are screened according to KfW’s environmental and social risk management framework ([Link](#) – German only).

KfW conducts comprehensive initial assessment of the projects’ environmental and social impact:

- › In the case of investments in countries where an extensive set of rules and regulations for environmental and social issues is in place and enforced, there is no requirement to appraise the environmental impact and social aspects of a measure. This applies to EU countries and generally to all other OECD countries outside the EU.
- › With regard to investments in all other countries, KfW’s lending department assesses whether the planned measure may have any negative environmental or social impact.
- › If a project is deemed to be environmentally or socially relevant, KfW’s Competence Centre for Environment and Sustainability examines the environmental and social effects in more detail. Basically, projects must comply with national regulation of the investee country, including its environmental and social requirements. **However, they must be at least equivalent to the internationally recognised environmental and social standards, such as those formulated in the Environmental, Health and Safety Guidelines of the World Bank Group (EHS Guidelines) and the ILO (International Labour Organization) core labour standards.**

Issuance Summary

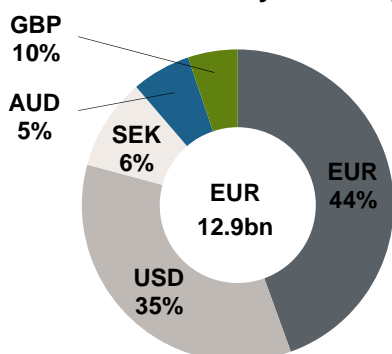
"Green Bonds - Made by KfW" issuances



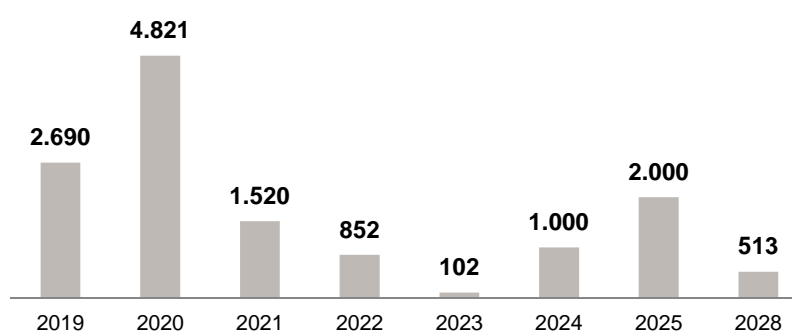
Listed "Green Bonds – Made by KfW"

Green Bond	ISIN	Volume	Coupon	Lead Manager
KfW Green Bond EUR 2014/2019	XS1087815483	EUR 1.5 bn	0.375%	Crédit Agricole, Deutsche Bank, SEB
KfW Green Bond USD 2014/2019	US500769GF56	USD 1.5 bn	1.75%	BofAML, Citi, Morgan Stanley
KfW Green Bond AUD 2015/2020	AU000KFWHAC9	AUD 1 bn	2.40%	J.P. Morgan, Nomura, RBC
KfW Green Bond GBP 2015/2020	XS1268337844	GBP 1 bn	1.625%	Barclays, HSBC, RBS
KfW Green Bond EUR 2015/2020	XS1311459694	EUR 1.5 bn	0.125%	Crédit Agricole, HSBC, SEB
KfW Green Bond USD 2015/2020	US500769GU24	USD 1 bn	1.875%	BofAML, Goldman Sachs, Morgan Stanley
KfW Green Bond SEK 2015/2020	XS1333145040	SEK 1 bn	0.586%	Deutsche Bank
KfW Green Bond SEK 2016/2021	XS1351716896	SEK 1 bn	0.50%	Nordea, SEB
KfW Green Bond EUR 2016/2024	XS1414146669	EUR 1 bn	0.05%	Crédit Agricole, Rabobank, UniCredit
KfW Green Bond USD 2016/2021	US500769HD99	USD 1.5 bn	2.00%	BofAML, Goldman Sachs, Société Générale
KfW Green Bond EUR 2017/2025	XS1612940558	EUR 2 bn	0.25%	Citi, LBBW, Société Générale
KfW Green Bond USD 2017/2020	US48245ACK51	USD 150 mn	1.66%	J.P. Morgan
KfW Green Bond USD 2017/2020	US48245ACL35	USD 200 mn	1.79%	J.P. Morgan
KfW Green Bond USD 2017/2022	US500769HP20	USD 1 bn	2.00%	BofAML, RBC, Toronto Dominion

Distribution by currency



Distribution by maturity
outstanding in EUR mn



2015: Issuance Summary and Use of Proceeds

Overview

5 Green Bonds

in 5 currencies (EUR, USD, GBP, AUD, SEK)

EUR 3.7 billion

net proceeds

6%

of KfW's total funding (EUR 62.6bn)

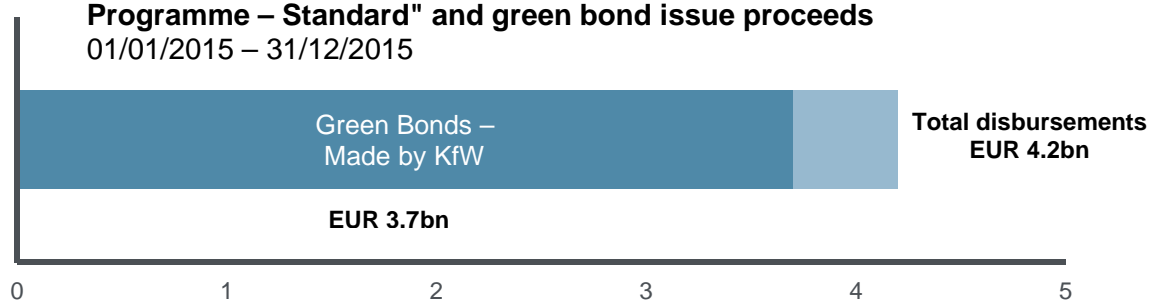
In 2015, KfW issued five "Green Bonds – Made by KfW" and thereby raised net proceeds in the amount of EUR 3.7 billion. Net proceeds in foreign currencies were converted into EUR at the ECB's exchange reference rate on the respective pricing date.

In the same period, KfW received requests for disbursements under the "Renewable Energies Programme – Standard" in an amount of EUR 4.2 billion. Thus, an amount equal to the net proceeds from all KfW green bonds issued in 2015 was fully allocated as of December 31, 2015.

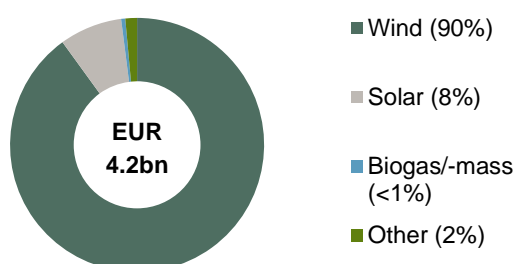
The majority of the funded projects were for the use of wind energy (90%) and solar energy (8%). 79% of all projects financed under the loan programme "Renewable Energies – Standard" were located in Germany. The remaining 21% were located in France, Finland, Italy, the UK, the Netherlands, Austria, Canada, and Ireland.

KfW Green Bond	AUD 2015/2020	GBP 2015/2020	EUR 2015/2020	USD 2015/2020	SEK 2015/2020
ISIN	AU000KFWHAC9	XS1268337844	XS1311459694	US500769GU24	XS1333145040
Volume	AUD 600mn	GBP 500mn	EUR 1.5bn	USD 1bn	SEK 1bn
Net proceeds	AUD 601,440,000	GBP 498,925,000	EUR 1,497,150,000	USD 996,650,000	SEK 1,000,000,000
Net proceeds (in EUR)	EUR 429,907,076	EUR 708,297,842	EUR 1,497,150,000	EUR 930,492,018	EUR 108,473,988
Maturity	2 Apr 2015 - 2 Jul 2020	30 Jul 2015 - 5 Jun 2020	27 Oct 2015 - 27 Oct 2020	18 Nov 2015 - 30 Nov 2020	14 Dec 2015 - 14 Dec 2020
Coupon	2.4%	1.625%	0.125%	1.875%	0.586%
Format	Kangaroo	Note Programme	Note Programme	Global/SEC reg.	Note Programme

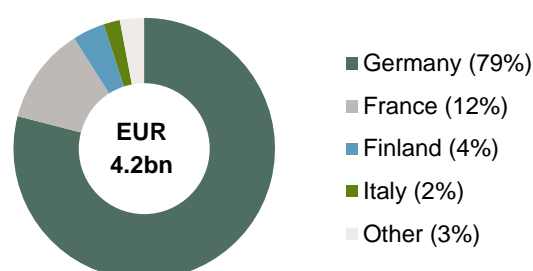
Requests for Disbursements under KfW's "Renewable Energies Programme – Standard" and green bond issue proceeds 01/01/2015 – 31/12/2015



Distribution by energy type



Distribution by region



Distributions refer to the requests for disbursements under the loan programme in 2015.

2015: Impact

The independent non-profit research institute Center for Solar Energy and Hydrogen Research Baden-Württemberg (ZSW) evaluated the environmental and social impact of projects financed under KfW's programme "Renewable Energies – Standard" based on new commitments in 2015.

In 2015, the volume of commitments under KfW's loan programme "Renewable Energies – Standard" totalled almost EUR 2.9 billion and triggered investments of approx. EUR 4.3 billion – representing an average share of KfW financing amounting to 79%. Thereof, EUR 1.1 billion and EUR 1.3 billion, respectively, were attributable to renewable energy plants built outside Germany. The average investment per commitment amounted to EUR 1.9 million.

Commitments under KfW's programme "Renewable Energies – Standard" in 2015

Number of loan commitments	2,887
Volume of loan commitments (EUR mn)	4,266
Thereof outside Germany (EUR mn)	1,088
Investments financed (EUR mn)	5,421
Thereof outside Germany (EUR mn)	1,336
Average loan volume per commitment (EUR)	1,477,781
Average investment financed per commitment (EUR)	1,877,657
Average share of financing	79%

Installed electrical power supported in 2015		MW _{el}
Plant type	Biogas	13.7
	Solid biomass	0.5
	Photovoltaic energy	560.6
	Hydropower	8.3
	Wind energy onshore	3,015.9
Total		3,598.9
Annual electricity production		TWh
		6.7

In 2015, KfW's programme "Renewable Energies – Standard" co-financed plants with a total electrical power of approx. 3.6 GW_{el}, of which 75% were attributable to plants built in Germany and the remaining 25% to plants built outside Germany. The table provides a detailed picture of the installed electrical power by plant type.

The estimated annual electricity production of the supported plants amounts to 6.7 TWh over the twenty-year-lifetime of the plants.

The projects co-financed under KfW's "Renewable Energies – Standard" programme in 2015 had the following environmental and social impact:

	Unit	Germany
Annual savings in greenhouse gas emission due to plants supported	million tons CO ₂ -equivalents p.a.	3.51
Annual savings in energy imports and costs for fossil fuels	EUR million p.a.	191
Employment effects: jobs created and/or secured for one year	person years	67,160
Annual savings in external costs (e.g., by avoiding environmental and health damage)	EUR million p.a.	353

2016: Issuance Summary and Use of Proceeds

Overview

4 Green Bonds

in 4 currencies (EUR, USD, GBP, SEK)

EUR 2.8 billion

net proceeds

4%

of KfW's total funding (EUR 72.8bn)

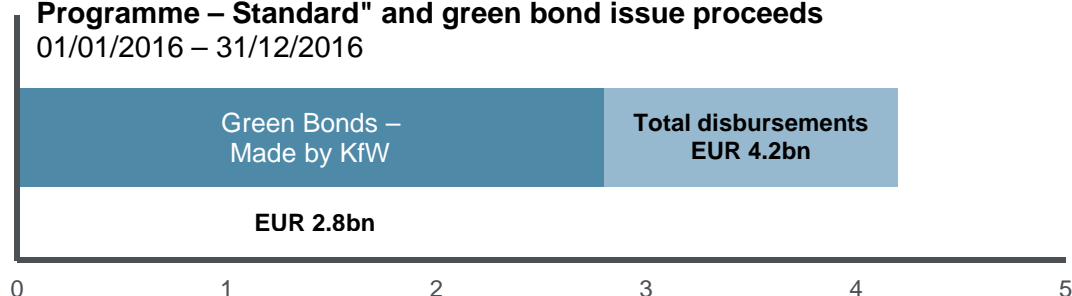
In 2016, KfW issued four "Green Bonds – Made by KfW" and thereby raised net proceeds in the amount of EUR 2.8 billion. Net proceeds in foreign currencies were converted into EUR at the ECB's exchange rate on the respective pricing date.

In the same period, KfW received requests for disbursements under the "Renewable Energies Programme – Standard" in an amount of EUR 4.2 billion. Thus, an amount equal to the net proceeds from all KfW green bonds issued in 2016 was fully allocated as of December 31, 2016.

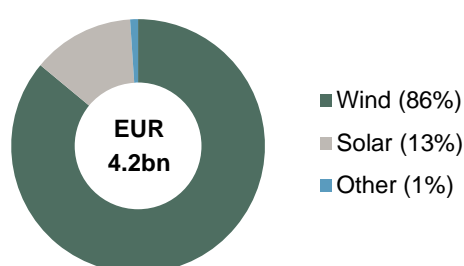
The majority of the funded projects were for the use of wind energy (86%) and solar energy (13%). 79% of all projects financed under the loan programme "Renewable Energies – Standard" were located in Germany. The remaining 21% were located in France, Denmark, the UK, Finland, the Netherlands, Croatia, Japan, Ireland, Austria, and Canada.

KfW Green Bond	SEK 2016/2021	EUR 2016/2024	GBP 2015/2020 1 st Tap	USD 2016/2021
ISIN	XS1351716896	XS1414146669	XS1268337844	US500769HD99
Volume	SEK 1bn	EUR 1bn	GBP 250mn	USD 1.5bn
Net proceeds	SEK 997,300,000	EUR 994,500,000	GBP 259,961,473	USD 1,494,360,000
Net proceeds (in EUR)	EUR 106,741,874	EUR 994,500,000	EUR 296,134,274	EUR 1,407,516,248
Maturity	27 Jan 2016 - 27 Jan 2021	20 May 2016 - 30 May 2024	17 Nov 2016 - 5 Jun 2020	30 Nov 2016 - 30 Nov 2021
Coupon	0.5%	0.05%	1.625%	2%
Format	Note Programme	Note Programme	Note Programme	Global/SEC reg.

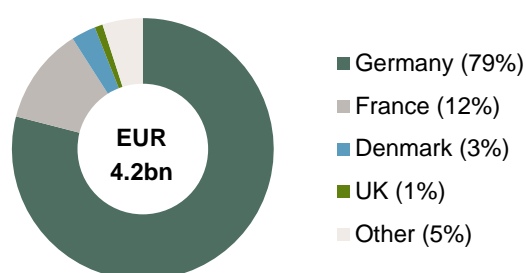
Requests for Disbursements under KfW's "Renewable Energies Programme – Standard" and green bond issue proceeds 01/01/2016 – 31/12/2016



Distribution by energy type



Distribution by region



Distributions refer to the requests for disbursements under the loan programme in 2016.

2016: Impact

The independent non-profit research institute Center for Solar Energy and Hydrogen Research Baden-Württemberg (ZSW) evaluated the social and environmental impact of projects financed under KfW's programme "Renewable Energies – Standard" based on new commitments in 2016.

In 2016, the volume of commitments under KfW's loan programme "Renewable Energies – Standard" totalled EUR 3.1 billion and triggered investments of nearly EUR 5.6 billion – leading to an average share of financing of 80%. Thereof, some EUR 0.8 billion and EUR 1.1 billion, respectively, were attributable to renewable energy plants built outside Germany. The average investment per commitment amounted to EUR 1.8 million.

Commitments under KfW's programme "Renewable Energies – Standard" in 2016	
Number of loan commitments	3,138
Volume of loan commitments (EUR mn)	4,516
Thereof outside Germany (EUR mn)	826
Investments financed (EUR mn)	5,670
Thereof outside Germany (EUR mn)	1,112
Average loan volume per commitment (EUR)	1,438,987
Average investment financed per commitment (EUR)	1,806,860
Average share of financing	80%

Installed electrical power supported in 2016		MW _{el}
Plant type	Biogas	0.9
	Solid biomass	-
	Photovoltaic energy	538.5
	Hydropower	1.78
	Wind energy onshore	3,015.2
Total		3,556.4
Annual electricity production		TWh
		6.7

In 2016, KfW's programme "Renewable Energies – Standard" co-financed plants with a total electrical power of more than 3.5 GW_{el}, of which 80% were attributable to plants built in Germany and 20% to plants built abroad. The table provides a detailed picture of the installed electrical power by plant type.

The estimated annual electricity production of the supported plants amounts to 6.7 TWh over the twenty-year-lifetime of the plants.

The projects co-financed under KfW's "Renewable Energies – Standard" programme in 2016 had the following environmental and social impact:

	Unit	Germany
Annual savings in greenhouse gas emission due to plants supported	million tons CO ₂ -equivalents p.a.	3.62
Annual savings in energy imports and costs for fossil fuels	EUR million p.a.	202
Employment effects: jobs created and/or secured for one year	person years	71,340
Annual savings in external costs (e.g., by avoiding environmental and health damage)	EUR million p.a.	367.9

Methodology and Actual Environmental and Social Impact

Transparent calculation of the estimated and actual impact of “Green Bonds – Made by KfW” issued in 2015 and 2016.

KfW calculates the impact of its green bonds based on the evaluation of the underlying promotional programme “Renewable Energies – Standard”. The impact is quantified for the supported plants built in Germany and calculated per EUR 1 million investment in “Green Bonds – Made by KfW”.

With this impact report, KfW improves its methodology, thus increasing transparency. While the impact was measured considering the total investments co-financed so far, it now also reflects KfW’s average financing share in the respective year – which was already disclosed before, but not included in the estimated impact. Hereafter, both measures are presented, allowing for a better comparison.

Accounting for KfW’s financing share, an investment of EUR 1 million in “Green Bonds – Made by KfW” issued in 2015 and in 2016 leads to 859 and 794 tons of GHG reductions (CO₂e) per annum. This is in line with the previously estimated effect, although the latter did not consider KfW’s financing share. The numbers relating to the total investments triggered are even higher, amounting to 1,104 tons CO₂e per annum in 2015 and 981 tons CO₂e in 2016. While the employment effects and savings in external costs are also in line with expectations, the savings in energy imports and costs for fossil fuels are slightly below the estimated values. This is mainly due to the increasing share of renewable energies in Germany, which leads to a, all other aspects being equal, smaller effect on fossil fuels.

Impact of “Green Bonds – Made by KfW” in 2015 and 2016

Impact of EUR 1 million investment:		2015		2016		
	Previously estimated	Actual		Actual		
	Total	Total	KfW financing share	Total	KfW financing share	
	800 tons	1,104 tons	859 tons	981 tons	794 tons	of GHG emission reductions (CO ₂ -equivalents) per annum
	69,000 EUR	60,095 EUR	46,759 EUR	54,744 EUR	44,321 EUR	of savings on energy imports to Germany and fossil fuel costs per annum
	22 jobs	21 jobs	16 jobs	19 jobs	16 jobs	created and/or secured (person years)
	94,000 EUR	111,066 EUR	86,418 EUR	99,705 EUR	80,721 EUR	of savings in external costs per annum

Values are based on programme impacts in 2015 and 2016 in Germany – with numbers evaluated by ZSW – and internal calculations; impact for projects outside Germany might be different.

The impact described in this report is derived from the evaluation made by ZSW. The full evaluation report³ (available in German only) as well as an English abstract⁴ are available on KfW’s website. A detailed description of calculation approaches and results of all national renewable energy promotional activities of KfW can be found in the full evaluation report.

³ Bickel, P., Kelm, T., Edler, D.: Evaluierung der inländischen KfW-Programme zur Förderung Erneuerbarer Energien in den Jahren 2015 und 2016. Gutachten im Auftrag der KfW Bankengruppe, Stuttgart, November 2017. <https://www.kfw.de/PDF/Download-Center/Konzernthemen/Research/PDF-Dokumente-alle-Evaluationen/Evaluierung-Erneuerbare-Energien-2015-und-2016.pdf> (only available in German)

⁴ Bickel, P., Kelm, T.: Assessment of environmental and social impacts of the KfW loan programme “Renewable Energies – Standard” for the years 2015 and 2016. Evaluation commissioned by KfW Group, Stuttgart, December 2017. https://www.kfw.de/PDF/Download-Center/Konzernthemen/Research/PDF-Dokumente-alle-Evaluationen/Evaluation_Summary_KfW_RE-Standard_2015-and-2016.pdf

Environmental and Social Impact per Green Bond

Actual environmental and social impact related to each green bond issued in 2015 and 2016.

The following tables provide the actual environmental and social impact achieved by each KfW green bond issued in 2015 and 2016. The impact is calculated on the basis of the evaluation results for the underlying loan programme "Renewable Energies – Standard" as provided by ZSW, and accounts for KfW's financing share in the respective year.

Impact of "Green Bonds – Made by KfW" issuances in 2015

KfW Green Bond	AUD 2015/2020	GBP 2015/2020	EUR 2015/2020	USD 2015/2020	SEK 2015/2020
of GHG emissions reductions (CO ₂ -equivalents) per annum*	369,412 tons	608,628 tons	1,286,476 tons	799,556 tons	93,210 tons
of savings on energy imports to Germany and fossil fuel costs per annum*	20,101,903 EUR	33,119,097 EUR	70,004,811 EUR	43,508,611 EUR	5,072,104 EUR
jobs created and/or secured (person years)*	7,068 jobs	11,645 jobs	24,615 jobs	15,299 jobs	1,783 jobs
of savings in external costs per annum*	37,151,684 EUR	61,209,640 EUR	129,380,618 EUR	80,411,203 EUR	9,374,099 EUR

Impact of "Green Bonds – Made by KfW" issuances in 2016

KfW Green Bond	SEK 2016/2021	EUR 2016/2024	GBP 2015/2020 1 st Tap	USD 2016/2021
of GHG emissions reductions (CO ₂ -equivalents) per annum*	84,781 tons	789,892 tons	235,208 tons	1,117,934 tons
of savings on energy imports to Germany and fossil fuel costs per annum*	4,730,864 EUR	44,076,837 EUR	13,124,849 EUR	62,381,965 EUR
jobs created and/or secured (person years)*	1,671 jobs	15,567 jobs	4,635 jobs	22,031 jobs
of savings in external costs per annum*	8,616,262 EUR	80,276,576 EUR	23,904,118 EUR	113,615,470 EUR

Installed Electrical Power and Renewable Energy Produced

Actual installed electrical power and electricity production related to each green bond issued in 2015 and 2016.

Based on the evaluation results provided by ZSW, KfW determines the actual installed electrical power and the actual renewable energy produced by the plants supported, attributable to its green bonds issued 2015 and 2016. The numbers are calculated using all plants financed – i.e., plants located in Germany as well as plants located abroad – and account for KfW's financing share in the respective year.

The table presented on the right-hand side discloses the effect per EUR 1 million investment in "Green Bonds – Made by KfW" in both 2015 and 2016.

The tables below outline the aggregated actual effect attributable to each green bond issued in the reporting period.

Installed electrical power and electricity production per EUR 1 mn investment in "Green Bonds – Made by KfW"			
		2015	2016
Installed electrical power	MW _{el}	0.66	0.63
Renewable energy production	MWh _{el} p.a.	1,236	1,182

Impact of "Green Bonds – Made by KfW" issuances in 2015

KfW Green Bond	AUD 2015/2020	GBP 2015/2020	EUR 2015/2020	USD 2015/2020	SEK 2015/2020
Installed energy capacity	285 MW _{el}	470 MW _{el}	994 MW _{el}	618 MW _{el}	72 MW _{el}
Renewable energy produced per annum	531,357 MWh _{el}	875,442 MWh _{el}	1,850,447 MWh _{el}	1,150,069 MWh _{el}	134,072 MWh _{el}

Impact of "Green Bonds – Made by KfW" issuances in 2016

KfW Green Bond	SEK 2016/2021	EUR 2016/2024	GBP 2015/2020 1 st Tap	USD 2016/2021
Installed energy capacity	67 MW _{el}	624 MW _{el}	186 MW _{el}	883 MW _{el}
Renewable energy produced per annum	126,135 MWh _{el}	1,175,179 MWh _{el}	349,936 MWh _{el}	1,663,232 MWh _{el}

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