# The State of Baden-Württemberg Green Bond Baden-Württemberg

Allocation Report March 2, 2021

# Inaugural Green Bond DE000A14JZS6





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# Green Bond Baden-Württemberg – key terms & conditions

Inaugural Green Bond Baden-Württemberg								
Issuer name	State of Baden-Württemberg							
Volume	EUR 300,000,000							
Status	Landesschatzanweisung							
Ratings	Aaa / AA+ (Moody's / S&P)							
ESG Rating	Advanced by V.E							
Second Party Opinion provider	V.E							
Tenor	10 Years							
Maturity Date	March 7, 2031							
Settlement Date	March 9, 2021							
Trade Date	March 2, 2021							
Coupon	0.01%							
ISIN / WKN	DE000A14JZS6 / A14JZS							
Documentation	Stand alone; German language							
Related links	www.green-bond-bw.de							

# Allocation Report – after full allocation

Inaugural Green Bone	d Baden-Württemberg
Scope of Reporting	Allocation Reporting
Publication date of reporting	March 2, 2021
Reporting period	Less than 24 months (budget year 2020)
Frequency of reporting	Once after allocation of the proceeds of the Green Bond
Verification of the expenses included in the final allocation report	Court of Audit, as part of the yearly budget audit
Reference to the Green Bond Framework applied	Yes
Alignment of the Green Bond with the EU Green Bond Standard	Yes
Alignment of the Green Bond Framework with the Green Bond Principles 2018	Yes
Number of allocated project categories (based on ICMA Green Bond Principles 2018)	10
Allocation of Green Bond proceeds	100% of the notional amount of the Green Bond
Related links	www.green-bond-bw.de

# Allocation to Green Project Sectors – based on Environmental objective (EU Taxonomy)<sup>1)</sup>

Green Bond ISIN		Climate Change Adaptation	Climate Change Mitigation	Pollution prevention and control	Protection and restoration of biodiversity and ecosystems	Sustainable use and protection of water and marine resources	Transition to a circular economy	Grand Total
	Sum of EUR allocated	1,216,661.25	187,791,307.49	11,300,194.50	67,073,137.27	32,365,153.68	253,545.81	300,000,000.00
DE000A14JZS6	Sum in % of Grand Total	0.4%	62.6%	3.8%	22.4%	10.8%	0.1%	100.0%
Sum of all outstanding Green Bonds YtD	Total YtD (in EUR)	1,216,661.25	187,791,307.49	11,300,194.50	67.073.137.27	32,365,153.68	253,545.81	300.000.000.00

# Allocation to Green Project Sectors – based on Green Bond Principle category (ICMA)<sup>1)</sup>

				Eco-efficient and/or circular economy adapted- products,		Environmentally sustainable management of					Sustainable	Terrestrial and	
				production		living natural			Pollution		water and	aquatic	
Green Bond			Climate Change	technologies and		resources and			prevention and	Renewable	wastewater	biodiversity	
ISIN		Clean transport	Adaption	processes	Energy efficiency	land use	Green buildings	Other/Several	control	energy	management	conservation	Grand Total
DE000A14JZS6	Sum of EUR allocated	18,304,833.57	1,216,661.25	228,830.47	72,248,708.75	3,010,635.55	41,206,860.53	50,133,566.16	11,300,194.50	5,922,053.82	32,365,153.68	64,062,501.72	300,000,000.00
	Sum in % of Grand Total	6.1%	0.4%	0.1%	24.1%	1.0%	13.7%	16.7%	3.8%	2.0%	10.8%	21.4%	100.0%
Sum of all													
outstanding													
Green Bonds	Total YtD (in EUR)	18,304,833.57	1,216,661.25	228,830.47	72,248,708.75	3,010,635.55	41,206,860.53	50,133,566.16	11,300,194.50	5,922,053.82	32,365,153.68	64,062,501.72	300,000,000.00

# **Eligible expenditures by Environmental objective (EU Taxonomy) and Green Bond Principle category (ICMA)**

Framework Category	No.	EUR eligible	<b>in %</b> <sup>1)</sup>	EUR allocated	in % <sup>2)</sup>
Climate Change Mitigation	22	189,954,223.28	62.6%	187,791,307.49	
Renewable energy	4	5,965,262.00	2.0%	5,897,338.48	
Energy efficiency	5	73,080,844.56	24.1%	72,248,708.75	
Green buildings	2	41,681,467.00	13.7%	41,206,860.53	
Clean transport	9	18,515,662.36	6.1%	18,304,833.57	
Other/Several	2	50,710,987.36	16.7%	50,133,566.16	
Climate Change Adaptation	4	1,230,674.34	0.4%	1,216,661.25	
Climate Change Adaption	4	1,230,674.34	0.4%	1,216,661.25	
Sustainable use and protection of water and marine resources	2	32,737,924.40	10.8%	32,365,153.68	
Sustainable water and wastewater management	2	32,737,924.40	10.8%	32,365,153.68	
Transition to a circular economy	3	256,466.06	0.1%	253,545.81	98.9%
Renewable energy	1	25,000.00	0.0%	24,715.34	
Eco-efficient and/or circular economy adapted- products, production technologies and processes	2	231,466.06	0.1%	228,830.47	
Pollution prevention and control	6	11,430,346.26	3.8%	11,300,194.50	
Pollution prevention and control	6	11,430,346.26	3.8%	11,300,194.50	
Protection and restoration of biodiversity and ecosystems	12	67,845,662.63	22.4%	67,073,137.27	
Terrestrial and aquatic biodiversity conservation	7	64,800,351.61	21.4%	64,062,501.72	
Environmentally sustainable management of living natural resources and land use	5	3,045,311.02	1.0%	3,010,635.55	
Sum	49	303,455,296.97	100%	300,000,000.00	

1) As of eligible projects; rounded figures in case of percentages.

2) As of notional amount; rounded figures in case of percentages.

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#### 01 Allocation

**02 Project Examples** 

# Eleven examples from inaugural bond selected to illustrate the scope of the total 49 eligible projects

Environmental object	<u>tive</u>	<u>Green project examples 2020</u>	<u>Enabling / Own activity</u>
Climate change mitigation			Own Enabling Enabling Enabling
Climate change adaptation		5: Rehabilitation of forests	Enabling
Sustainable use and protection of water and marine resources		6: Network water research	Enabling
Transition to a circular economy		7: Sewage phosphorus recovery	Enabling
Pollution prevention and control		8: Country-wide e-ticketing	Enabling
Protection and restoration of biodiversity and ecosystems		9: Agro-forestry Burundi 10: Organic food regions 11: Visitor center national park	Enabling Enabling Own

Source: The State of Baden-Württemberg

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# Debut Green Bond Baden-Württemberg – project example 1 –

**Energy-efficient buildings** 

# **Project introduction**

#### **Financials**

- Actual expenditure 2020: approx. EUR 34.9 mn
- Budget titles: Kap. 1208 (different titles)

#### Environmental objective

Climate change mitigation

#### Green Bond Principles category

Green buildings

#### **Description**

- New buildings, reaching the requirements for yearly primary energy demand
- Yearly primary energy demand is at least 20% below current EnEV-reference-value (= "nearly zero emission building" as in EU Taxonomy technical criteria)
- Building construction
- Own activity

#### UN Sustainable Development Goals



<u>Guiding principle(s)</u> sustainability strategy Baden-<u>Württemberg (I)</u>

# **Expected impact**

#### **Quantitative indicator(s)**

 Reduced GHG emissions compared to "Nearly Zero Energy Building" standard

#### **Qualitative description**

 Fulfilment of requirements for an energy-efficient building operation in usage-period.

# Debut Green Bond Baden-Württemberg – project example 2 –

**Broadband infrastructure** 

# **Project introduction**

#### **Financials**

- Actual expenditure 2020: approx. EUR 67.7 mn
- Budget title: Kap. 0303, Tit. 883 70 B

Environmental objective

Climate change mitigation

Green Bond Principles category Energy efficiency

#### UN Sustainable Development Goals



Guiding principle(s) sustainability strategy Baden-<u>Württemberg (IV)</u>

# **Expected impact**

#### **Quantitative indicator(s)**

 In Baden-Württemberg, gigabit networks should be available nationwide by 2025. Key figure: achieved average level of coverage in Baden-Württemberg with broadband (at least 50 Mbit/s, private households using all technologies). Target value at the end of 2025: 99.5%<sup>1)</sup>

#### **Qualitative description**

 Broadband infrastructure enables behavioral change (e.g. homeoffice) and new business models (e.g. telemedicine) to mitigate climate change

#### **Description**

- Allocations for investments in municipalities for broadband infrastructure
- Cable network underground engineering
- Enabling

# **Debut Green Bond Baden-Württemberg – project example 3 – Heating networks**

### **Project introduction**

#### **Financials**

- Actual expenditure 2020: approx. EUR 1.6 mn
- Budget titles: Kap. 1009, Tit. 891 70, 892 70, 883 70

#### Environmental objective

Climate change mitigation

#### Green Bond Principles category Energy efficiency

#### **Description**

- Promoting investments in developing and expanding energy-efficient heat networks
- Steam and air conditioning supply
- Efficiency criteria (renewable energy, combined heat and power, limited heat loss) increase impact
- Enabling

UN Sustainable Development Goals

### <u>Guiding principle(s)</u> sustainability strategy Baden-Württemberg (I)

# **Expected impact**

#### **Quantitative indicator(s)**

• A quantitative indicator is the length of supported line meters. Also the saving of CO<sub>2</sub>-equivalents compared to a conventional heat network can serve as an indicator

#### **Qualitative description**

 Expansion of energy-efficient heat networks (renewables, combined heat & power, limited heat loss)

# Debut Green Bond Baden-Württemberg – project example 4 – Green hydrogen

### **Project introduction**

#### **Financials**

- Actual expenditure 2020: approx. EUR 1.4 mn
- Budget titles: Kap. 0708, Tit. 894 86 D

#### **Description**

- Production of green hydrogen, R&D and test platform for H<sub>2</sub> technologies, CO<sub>2</sub>neutral location
- Production and sales of green hydrogen, research, development and technology transfer services in connection with the H<sub>2</sub> technical center
- Contributes to producing clean and efficient fuels; increasing clean mobility
- Enabling

#### Environmental objective

Climate change mitigation

#### Green Bond Principles category

Renewable energy

# UN Sustainable Development Goals

<u>Guiding principle(s)</u> sustainability strategy Baden-<u>Württemberg (I)</u>

# **Expected impact**

#### **Quantitative indicator(s)**

 Construction of an electrolyzer with a capacity of approx. 2 MW, after commissioning: generation of 50 t of liquid hydrogen per year

#### **Qualitative description**

 Substitution of fossil fuels through the production and use of green hydrogen in industrial scale

# Debut Green Bond Baden-Württemberg – project example 5 –

# **Rehabilitation of forests**

# **Project introduction**

#### **Financials**

- Actual expenditure 2020: approx. EUR 0.8 mn
- Budget titles: Kap 0804, Tit. 883 92, Kap. 0804, Tit. 893 92, Kap. 0804, Tit. 883 95, Kap. 0804, Tit. 893 95

#### Environmental objective

Climate change adaptation

#### Green Bond Principles category

Climate change adaptation

#### UN Sustainable Development Goals



<u>Guiding principle(s)</u> sustainability strategy Baden-<u>Württemberg (VI)</u>

# **Expected impact**

#### Quantitative indicator(s)

Surface area of forest in square meters

#### **Qualitative description**

 Improvement of climate resilience and carbon dioxide balance of supported forests

#### **Description**

- Subsidies for various measures as specified in the guidelines for sustainable forest management
- Sustainable forest management is the core of the subsidy; surface area is known
- Enabling

# Debut Green Bond Baden-Württemberg – project example 6 –

# **Network water research**

### **Project introduction**

#### **Financials**

- Actual expenditure 2020: approx. EUR 0.7 mn
- Budget titles: Kap. 1403, TG 74

#### Environmental objective

Sustainable use and protection of water and marine resources

#### Green Bond Principles category Sustainable water and wastewater management

#### **Description**

- Reduction of micro pollutants in aquatic ecosystems, research and management of storage spaces
- Protection of human health from the adverse effects of water pollution
- Research and Development
- Enabling

#### UN Sustainable Development Goals



<u>Guiding principle(s)</u> sustainability strategy Baden-<u>Württemberg (</u>XI)

# **Expected impact**

#### **Quantitative indicator(s)**

• This cannot be evaluated in the context of research projects

#### **Qualitative description**

Development of a concept for the management of consumerbehaviour and for environmental legislation

# Debut Green Bond Baden-Württemberg – project example 7 –

Sewage phosphorus recovery

# **Project introduction**

#### **Financials**

- Actual expenditure 2020: approx. EUR 0.2 mn
- Budget titles: Kap. 1006, Tit. 883 84

#### **Description**

- Grants for building plants for phosphorus recovery from sewage sludge
- Conservation of natural resources by materials recovery and reuse
- Enabling

Environmental objective Transition to a circular economy

#### Green Bond Principles category

Eco-efficient and/or circular economy adapted-products, production technologies and processes

#### UN Sustainable Development Goals

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<u>Guiding principle(s)</u> sustainability strategy Baden-<u>Württemberg (</u>V)

# **Expected impact**

#### **Quantitative indicator(s)**

 Number of experimental plants and industrial-scale pilot plants

#### **Qualitative description**

 Phosphorus recovery from sewage sludge reduces new input and promotes self-sufficiency

# Debut Green Bond Baden-Württemberg – project example 8 –

# **Country-wide e-ticketing**

# **Project introduction**

#### **Financials**

- Actual expenditure 2020: approx. EUR 1.0 mn
- Budget titles: Kap. 1223, Tit. TG 94, UT 18

#### **Description**

- Basis for development and expansion of a nationwide e-tickets system in Baden-Württemberg
- Reduction of CO<sub>2</sub>-emissions by improving efficiency of the overall transport/mobility system
- Funding (public transport)
- Enabling

Environmental objective Pollution prevention and control

Green Bond Principles category Pollution prevention and control

UN Sustainable Development Goals

# 13 CLIMATE

<u>Guiding principle(s)</u> sustainability strategy Baden-<u>Württemberg (</u>III)

# **Expected impact**

#### **Quantitative indicator(s)**

 Number of people using e-ticketing; realization of nationwide integrated e-ticket in Baden-Württemberg

#### **Qualitative description**

 Incentive to use public transport to reach less road traffic; intention of reducing GHG emissions

# Debut Green Bond Baden-Württemberg – project example 9 –

**Agro-forestry Burundi** 

# **Project introduction**

#### **Financials**

- Actual expenditure 2020: approx. EUR 0.1 mn
- Budget title: Kap. 0202, Tit. 685 70

#### **Description**

- Research and consulting activities to increase food stability, sustainable land management
- Project funding / financial contribution
- Enabling

Environmental objective

Protection and restoration of biodiversity and ecosystems

<u>Green Bond Principles category</u> Environmentally sustainable management of living natural resources and land use

UN Sustainable Development Goals										
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<u>Guiding principle(s)</u> sustainability strategy Baden-<u>Württemberg (</u>VI )

# **Expected impact**

#### **Quantitative indicator(s)**

 Scientific support through analysis of the initial state and regular evaluation

#### **Qualitative description**

- Less soil erosion, higher fertility
- Contribution to GHG emissions reduction
- Increases food security, knowledge and crop yields of the farmers, sustainable cultivation systems

# Debut Green Bond Baden-Württemberg – project example 10 –

# **Organic food regions**

# **Project introduction**

#### **Financials**

- Actual expenditure 2020: approx. EUR 0.6 mn
- Budget titles: Kap 0803, TG 73

#### Environmental objective

Protection and restoration of biodiversity and ecosystems

#### Green Bond Principles category

Environmentally sustainable management of living natural resources and land use

#### **Description**

- Subsidies and support to selected regions to support the production and commerce of organic food
- Contributes to sustainable agriculture and biodiversity
- Enabling

#### UN Sustainable Development Goals



<u>Guiding principle(s)</u> sustainability strategy Baden-<u>Württemberg (VI)</u>

# **Expected impact**

#### **Quantitative indicator(s)**

 Number of companies with organic production, surface area of organic production

#### **Qualitative description**

 Improved biodiversity, preservation of resources, reduced GHG emissions due to regional transport

# Debut Green Bond Baden-Württemberg – project example 11 –

Visitor center national park

# **Project introduction**

#### **Financials**

- Actual expenditure 2020: approx. EUR 9.9 mn
- Budget title: Kap. 1208, Tit 789 12

#### Environmental objective

Protection and restoration of biodiversity and ecosystems

<u>Green Bond Principles category</u> Terrestrial and aquatic biodiversity conservation

#### **Description**

- The visitor center constitutes the hub for the guidance and environmental education of visitors
- National parks have the explicit goal of conservation of biodiversity. Activity fulfils EU Taxonomy
- Building construction
- Own activity

UN Sustainable Development Goals



<u>Guiding principle(s)</u> sustainability strategy Baden-<u>Württemberg (VI)</u>

# **Expected impact**

#### **Quantitative indicator(s)**

 Number of visitors, number of classes or other groups, origin of visitors, surveys and possibilities for feedback after visiting

#### **Qualitative description**

• The building contributes to awareness for biodiversity and climate change

# **Debut Green Bond Baden-Württemberg – overview project examples**

Project example	No. 1 Energy-efficient buildings	No. 2 Broadband infrastructure	No. 3 Heating networks	No. 4 Green hydrogen	No. 5 Rehabilitation of forests		No. 7 Sewage phosphorus recovery	No. 8 Country-wide e- ticketing	No. 9 Agro-forestry Burundi	No. 10 Organic food regions	national park
Project description	New buildings, reaching the requirements for yearly primary energy demand	Allocations for investments in municipalities for broadband infrastructure	Programme promotes investments in developing and expanding energy- efficient heat networks	Production of green hydrogen, R&D and test platform for H <sub>2</sub> technologies, CO <sub>2</sub> - neutral location	Subsidies for various measures as specified in the guidelines for sustainable forest management		Programme for building plants for phosphorus recovery from sewage sludge	Basis for development and expansion of a nationwide e- tickets system in Baden- Württemberg	Research and consulting activities to increase food stability, sustainable land management	0 11	The visitor center constitutes the hub for the guidance and environmental education of visitors
Environmental objective (EU Taxonomy)	Climate change mitigation	Climate change mitigation	Climate change mitigation	Climate change mitigation	Climate change adaptation	Sustainable use and protection of water and marine resources	Transition to a circular economy	Pollution prevention and control	Protection and restoration of biodiversity and ecosystems	Protection and restoration of biodiversity and ecosystems	Protection and restoration of biodiversity and ecosystems
ICMA Green Bond Principles (category)	Green buildings	Energy efficiency	Energy efficiency	Renewable energy	Climate change adaptation	and wastewater management	Eco-efficient and/or circular economy adapted- products, production technologies and processes	Pollution prevention and control	Environmentally sustainable management of living natural resources and land use	Environmentally sustainable management of living natural resources and land use	Terrestrial and aquatic biodiversity conservation
Guiding principles sustainability strategy Baden- Württemberg	(I)	(IV)	(I)	(I)	(VI)	(XI)	(V)	(III)	(VI)	(VI)	(VI)
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Type of activity	Own activity	Enabling	Enabling	Enabling	Enabling	Enabling	Enabling	Enabling	Enabling	Enabling	Own activity
Expected impact (description)	Fulfilment of requirements for an energy-efficient building operation in usage-period	change (e.g. home- office) and new business models	energy-efficient heat networks (renewables, combined heat &	Substitution of fossil fuels through the production and use of green hydrogen in industrial scale	Improvement of climate resilience and carbon dioxide balance of supported forests	concept for the management of consumer behaviour and for	Phosphorus recovery from sewage sludge reduces new input and promotes self- sufficiency	Incentive to use public transport to reach less road traffic; intention of reducing CO <sub>2</sub> emissions	Increases food security, know- ledge and crop yields of the farmers, sustain- able cultivation systems	Improved biodiversity, preservation of resources, reduced GHG emissions due to regional transport	The building contributes to awareness for biodiversity and climate change



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