

SECOND PARTY OPINION

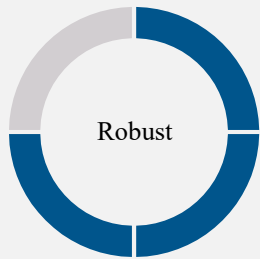
on the sustainability of the Green Bond Framework of the State of Baden-Württemberg

V.E is of the opinion that the Green Bond Framework of the State of Baden-Württemberg is aligned with the four core components of the Green Bond Principles 2018 (“GBP”).



Framework

Contribution to Sustainability:



- Advanced
- Limited
- Robust
- Weak

	Weak	Limited	Robust	Advanced
Expected impacts				
ESG risks management				

SDG Mapping



Characteristics of the Framework

Green Project Categories	⇒ Ten Green Categories
Project locations	Germany
Existence of framework	Yes
Share of refinancing	100% maximum
Look back period	(Equal or less) 24 months

Issuer

ESG Performance as of December 2020



- Advanced
- Limited
- Robust
- Weak

	Weak	Limited	Robust	Advanced
Environment				
Social				
Governance				

Controversies

Number of controversies	6
Frequency	Occasional
Severity	High
Responsiveness	Remediative

Coherence

Coherent
Partially coherent
Not coherent

We are of the opinion that the contemplated Framework is coherent with the State of Baden-Württemberg’s strategic sustainability priorities and sector issues, and that it contributes to achieving the Issuer’s sustainability commitments.



Key findings

V.E is of the opinion that Baden-Württemberg's Framework is aligned with the four core components of the GBP.

Use of Proceeds – aligned with GBP

- Eligible Categories are clearly defined, the issuer has communicated the nature of expenditures, the eligibility criteria and location of Eligible Projects. They follow the key recommendations of the TEG Final report on the EU Taxonomy (March 2020)¹. Of note, Categories for which technical criteria are not yet covered by the EU taxonomy remain broadly defined, without eligible technologies and thresholds.
- The Environmental Objectives are clearly defined, these are relevant for all Eligible Categories and set in coherence with sustainability objectives defined in international standards (including the EU taxonomy).
- The Expected Environmental Benefits are clear, these are considered relevant, measurable and, will be quantified for a majority of the Eligible Categories in the reporting wherever feasible.
- The Issuer has transparently communicated the estimated share of refinancing for the first issuance (100%) and has committed to transparently communicating the estimated share of refinancing for each bond issuance. The look-back period for refinanced projects will be equal or less than 24 months from the issuance date, in line with good market practices. Of note, due to federal debt brake in the German state constitution the issuer exclusively focuses on refinancing. Thus, the outflow of funds for the green projects has already occurred in the fiscal year preceding the year of the bond issuance.

Evaluation and Selection - aligned with GBP

- The Process for Project Evaluation and Selection has been clearly defined and detailed by the Issuer, it is considered structured in all the evaluation and selection steps (including proposal, selection, validation and monitoring). The roles and responsibilities are clear and include relevant internal and external expertise. The Process will be publicly disclosed in the Framework.
- Eligibility criteria (selection and exclusion criteria) for project selection have been clearly defined by the Issuer for a majority of categories.
- The process applied to identify and manage potentially material E&S risks associated with the projects is publicly disclosed in herewith SPO. The Process is considered robust: it combines monitoring, identification and corrective measures for a majority of all projects (see detailed analysis on page 25-27).

Management of Proceeds - aligned with GBP

- The Process for the Management and Allocation of Proceeds is clearly defined and detailed, and is publicly available in the Framework.
- The full allocation of funds will be at the issuance date as all issuances under the Framework will be 100% refinancing.
- The Issuer has informed V.E that there will not be any unallocated proceeds since the allocation will happen at issuance and thus, no temporary placement.
- The Issuer has provided information on the procedure that will be applied in case of expenditure divestment and it has committed to reallocate the proceeds to projects that are compliant with the bond framework within 24 months.

Reporting - aligned with GBP

- The issuer has committed to report on the Use of Proceeds annually, until full allocation and on a timely basis in case of material developments. The report, including its verification, will be publicly available.
- The reporting will cover relevant information related to the allocation of Bond proceeds and to the expected sustainable benefits of the expenditures. The Issuer has also committed to report on material ESG controversies related to the projects.
- The reporting methodology and assumptions used to report on environmental benefits of the Eligible Expenditures will be publicly disclosed.
- An external auditor will verify the tracking and allocation of funds, as well as the Indicators used to report on environmental and social benefits of Eligible Expenditures until full allocation and in case of material changes.

¹ This refers only to the categories whose environmental objectives have already been defined in the TEG Final Report on the EU Taxonomy (March 2020), namely Climate Change Mitigation and Climate Change Adaptation.



Contact

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SCOPE

V.E was commissioned to provide an independent opinion (thereafter “Second Party Opinion” or “SPO”) on the sustainability credentials and management of the Green Bonds² (“Bonds”) to be issued by the state Baden-Württemberg (the “Issuer”) in compliance with the Framework (the “Framework”) created to govern their issuance.

Our opinion is established according to V.E’s Environmental, Social and Governance (“ESG”) exclusive assessment methodology and to the latest version of the ICMA’s Green Bond Principles (“GBP”) - edited in June 2018.

Our opinion is built on the review of the following components:

- Issuance: we assessed the Framework, including the coherence between the Framework and the Issuer’s environmental commitments, the Bond’s potential contribution to sustainability and its alignment with the four core components of the GBP 2018.
- Issuer: we assessed the Issuer’s ESG performance, its management of potential stakeholder-related ESG controversies.

Our sources of information are multichannel, combining data (i) gathered from public sources, press content providers and stakeholders, (ii) from V.E’s exclusive ESG rating database, and (iii) information provided from the Issuer, through documents and interviews conducted with the Issuer’s managers and stakeholders involved in the Bonds issuance, held via a telecommunications system.

We carried out our due diligence assessment from December 1st 2020 to February 23th, 2021. We consider that we were provided with access to all the appropriate documents and interviewees we solicited. Reasonable efforts have been made to verify data accuracy.

Scope of External Reviews

<input checked="" type="checkbox"/>	Pre-issuance Second Party Opinion	<input checked="" type="checkbox"/>	Independent verification of impact reporting
<input checked="" type="checkbox"/>	Independent verification of funds allocation	<input type="checkbox"/>	Climate Bond Initiative Certification

² The “Green Bond” is to be considered as the bond to be potentially issued, subject to the discretion of the Issuer. The name “Green Bond” has been decided by the Issuer: it does not imply any opinion from V.E.

COHERENCE

Coherent
Partially coherent
Not coherent

We are of the opinion that the contemplated Framework is coherent with the strategic sustainability priorities of the state Baden-Württemberg and sector issues, and that it contributes to achieving the Issuer's sustainability commitments.

Local authorities play a crucial role in the promotion of sustainable development. Public institutions are often at the core of project financing for the development of the jurisdictions under their control. Through public tenders and contracts, local authorities can set the basic requirements to be followed in terms of social and environmental practices. These institutions are called to develop solutions for its population while promoting the sound use of environmental resources. By implementing actions targeting, among others, sustainable mobility, green buildings and energy efficiency local authorities could effectively support the attainment of the sustainable goals of the 2030 Agenda for Sustainable Development and drive meaningful, measurable and sustainable action on climate change.

The federal state Baden-Württemberg appears to acknowledge its role in providing solutions to address the challenges of sustainability. Baden-Württemberg formalised its sustainable development strategy in 2007 and created the "Advisory Council of the State Government for Sustainable Development". Furthermore, the UN Sustainable Development Goals (SDG) were incorporated into the strategy in 2018.

In accordance with this commitment and with the Sustainable Development Goals, Baden-Württemberg has formalised several policies, commitments and action plans based on the integration of environmental and social elements, which in some cases have quantitative targets:

- The federated state commits to all of its major responsibilities in terms of environmental protection including management of water resources, minimising environmental impacts from energy use, management of environmental impacts from transportation as well as the construction and rehabilitation of public buildings. The state administration of Baden-Württemberg aims to be carbon-neutral by 2040.
- Baden-Württemberg commits to reduce its energy-related emissions and therefore has set quantitative targets on this regard. According to its 'Integrated Energy and Climate Protection Concept' issued in 2014, Baden-Württemberg's aim is to reduce the final energy consumption by 16% by 2020 and by 49% by 2050. In the electricity sector, a reduction of 6% by 2020 and 14% by 2050 is to be implemented compared with 2010. The share of renewable energies in electricity consumption is to rise from 14% in 2010 to 36% in 2020 and to 89% in 2050.
- Baden-Württemberg aims to double its renewable energy for heat generation by 10% until 2020 and become climate-neutral by 2040. Furthermore, by strengthening the measures in the area of state-owned buildings, CO₂ emissions are to be significantly reduced compared to 1990 (660,000 tonnes per year): by at least 40% by 2020 (to 400,000 tonnes per year) and, by at least 60% by 2030 (to 266,000 tonnes per year).
- The federated state aims to reduce CO₂-emissions from 7.1 to 4.9t CO₂ per inhabitant per year by 2020. The total amount of greenhouse gas emissions in Baden-Württemberg is to be reduced by at least 25% by 2020 compared to the total emissions of 1990. Baden-Württemberg has committed to achieve a reduction of 42% by 2030 and 90% by 2050.
- Furthermore, the Ministry of the Environment, Climate and Energy (Ministerium für Umwelt, Klima und Energiewirtschaft Baden-Württemberg) and the Environmental Agency of Baden-Württemberg (Landesanstalt für Umwelt, Messungen und Naturschutz) set up an environmental agenda. An Advisory Board (July 2016) is divided into three working groups 'Education for Sustainable Development', 'Energy and Climate' and 'Sustainable Consumption'. The federated state consults relevant stakeholder groups during the whole process.
- In 2011, the federated state implemented the 2020 Nature Protection Strategy. Baden-Württemberg's commitment towards biodiversity protection addresses the main impacts: inclusion of biodiversity in urban planning, promotion of development of green areas and, preservation of the local ecosystems. Additionally, Baden-Württemberg participates with its protected areas in the expansion of the Europe-wide Natura 2000 network of protected areas.
- Baden-Württemberg commits to manage water resources on its territory and addresses all the major issues at stake: The federated state promotes a sustainable use of water resources, assures its communities' activities do not affect water heritage and ensures access to drinkable water. Furthermore, the federated state regularly publishes a detailed commitment to protect its groundwater resources.



- Baden-Württemberg commits to recycle its communities' non-hazardous waste. It follows the European Directives, adopted by national law, to prepare a waste plan that aims to avoid waste and to recycle non-hazardous and hazardous waste. Baden-Württemberg is committed to increase recycling rates and to decrease landfill gas emissions.
- Baden-Württemberg's commitment relative to controlling its local pollution focuses on all relevant sources (noise, odours, dust, and landscape aesthetics) of local pollution. Within its Environmental Plan, Baden-Württemberg commits itself to reduce local pollution, like noise, odours, dust, and landscape aesthetics.

V.E is of the opinion that the Green Bond Framework created to govern the issuance of bonds that will finance and refinance Eligible Green Projects, coherently aligns with the Issuer's strategic sustainability priorities, contributes to the realisation of its environmental commitments and goals, and addresses the main challenges in terms of sustainable development for local authorities.

FRAMEWORK

The Issuer has described the main characteristics of the Bonds within a formalised Green Bond Framework, which covers the four core components of the GBP 2018 (the last updated version was provided to V.E on February 23, 2021). The Issuer has committed to make this document publicly accessible on the website of the Ministry of Finance of Baden-Württemberg³, in line with good market practices.

Alignment with the Green Bond Principles

Use of Proceeds



The net proceeds of the Bonds will exclusively refinance, in part or in full, projects falling under ten Green Project Categories (“Eligible Categories”), as indicated in Table 1.

- Eligible Categories are clearly defined, the issuer has communicated the nature of expenditures, the eligibility criteria and location of Eligible Projects. They follow the key recommendations of the TEG Final report on the EU Taxonomy (March 2020)⁴. Of note, Categories for which technical criteria are not yet covered by the EU taxonomy remain broadly defined, without eligible technologies and thresholds.
- The Environmental Objectives are clearly defined, these are relevant for all the Eligible Categories and set in coherence with sustainability objectives defined in international standards (including the EU Taxonomy).
- The Expected Environmental Benefits are clear, these are considered relevant, measurable and will be quantified for a majority of the Eligible Categories in the reporting wherever feasible.
- The Issuer transparently communicated the estimated share of refinancing for the first issuance (100%) and has committed to transparently communicate the estimated share of refinancing for each bond issuance. The look-back period for refinanced projects will be equal or less than 24 months from the issuance date, in line with good market practices. Of note, due to federal debt brake in the German state constitution the issuer exclusively focuses on refinancing. Thus, the outflow of funds for the green projects has already occurred in the fiscal year preceding the year of the bond issuance.

BEST PRACTICES

- ⇒ The Issuer has committed to communicate the estimated share of refinancing for each bond issuance in its framework.
- ⇒ The look-back period for refinanced assets is equal or less than 24 months, in line with good market practices.

³ www.green-bond-bw.de

⁴ This refers only to the categories whose environmental objectives have already been defined in the TEG Final Report on the EU Taxonomy (March 2020), namely Climate Change Mitigation and Climate Change Adaptation.

Table 1. V.E' analysis of Eligible Categories, Sustainability Objectives and Expected Benefits as presented in the Issuer's Framework

- Nature of expenditures: The Issuer has communicated that the following types of expenditures will be eligible for all categories: capital expenditures, public subsidies and operating expenditure of the federal state.
- Location of Eligible Projects: The Issuer has also communicated that almost all projects – except for two projects located in Baden-Württemberg's partner countries Serbia and Burundi – will be located in Baden-Württemberg (Germany) and has provided specific locations for some of the projects included as examples in its Framework.
- Prior to each issuance the issuer commits to disclose to investors examples of the selected projects or the whole project list on demand.
- Projects that are implemented due to EU or federal regulation or court decisions are excluded.

ELIGIBLE CATEGORIES	DESCRIPTION	EXAMPLE OF ELIGIBLE EXPENDITURES FOR THE INAUGURAL ISSUANCE	SUSTAINABILITY OBJECTIVES AND BENEFITS	V.E'S ANALYSIS
Renewable energy	<p>The Green Eligible Expenditures include all above expenditures with a substantial contribution to climate change mitigation⁵ which are generating, transmitting, storing, distributing or using renewable energy, including:</p> <ul style="list-style-type: none"> - Production of Electricity from Solar Power (PV and CSP), Wind Power, Hydropower, Geothermal, Bioenergy. - Transmission and Distribution of Electricity - Storage (Electricity, Thermal Energy of Hydrogen) 	<ul style="list-style-type: none"> - R&D grant for the construction of a pilot plant for green hydrogen - Grant for R&D platform on hydrogen technologies, production and sales of electricity-based regenerative LNG, CO₂-neutral production - Subsidies for battery storage in the context of photovoltaic systems - R&D grant for a temporary professorship with a focus on sustainability and transformative research - R&D grant for the university of applied Sciences Aalen for the development of new energy- and resource-saving materials and processes 	<p><u>Climate Change Mitigation</u></p> <p>GHG emissions avoidance</p>	<p>The definition of this category is clear and detailed, including eligibility criteria and examples of eligible expenditures. All eligible expenditures under this category will comply with the Technical Screening Criteria outlined in the Technical Annex of the Technical Expert Group final report on the EU Taxonomy (March 2020).</p> <p>The intended environmental objective is relevant and set in coherence with sustainability objectives defined in international standards.</p> <p>The expected benefits are clear, relevant and measurable. The issuer has committed to quantify them in the reporting, wherever feasible.</p>

⁵ As defined by Article 10 of the Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment and amending Regulation (EU) 2019/2088 (Text with EEA relevance).

ELIGIBLE CATEGORIES	DESCRIPTION	EXAMPLE OF ELIGIBLE EXPENDITURES FOR THE INAUGURAL ISSUANCE	SUSTAINABILITY OBJECTIVES AND BENEFITS	V.E'S ANALYSIS
Energy efficiency	<p>The Green Eligible Expenditures include all above mentioned expenditures with a substantial contribution to climate change mitigation⁶ which are contributing to the improvement of energy efficiency, including:</p> <ul style="list-style-type: none"> - Heating networks - Smart grids - Energy Efficiency awareness programmes 	<ul style="list-style-type: none"> - Grants for investments in energy-efficient heating networks with a maximum loss of 20% of the heat input into the network - Investment grant for municipalities and associations of municipalities to further develop the broadband infrastructure - Investment grant for regional centres of excellence for energy efficiency raising businesses' awareness for energy and energy efficiency - Grant to the Resource Efficiency Programme of the promotional Bank of the state of Baden-Württemberg - Grant for a Regional Innovation Centre for Energy Technology focusing on mechanical, process and electrical engineering, information technology, mechatronics and energy systems engineering 	<p><u>Climate Change Mitigation</u></p> <p>Energy savings</p>	<p>The definition of this category is clear and detailed, including eligibility criteria and examples of eligible expenditures. All eligible expenditures under this category will comply with the Technical Screening Criteria outlined in the Technical Annex of the Technical Expert Group final report on the EU Taxonomy (March 2020).</p> <p>The intended environmental objective is relevant and set in coherence with sustainability objectives defined in international standards.</p> <p>The expected benefits are clear, relevant and measurable. The issuer has committed to quantify them with reporting, wherever feasible.</p>
Green buildings	<p>The Green Eligible Expenditures include all above mentioned expenditures with a substantial contribution to climate change mitigation⁸ related to:</p> <ul style="list-style-type: none"> - The construction of new buildings - The comprehensive renovation of existing buildings - Acquisition and ownership of buildings 	<ul style="list-style-type: none"> - Energy-efficient building construction of public buildings with primary energy consumption lower than 20% below "nearly zero emission standard" - Energy-efficient building renovation of public buildings with a maximum of 40% above the annual primary energy requirement of a legally defined reference building 	<p><u>Climate Change Mitigation</u></p> <p>GHG emissions avoidance</p>	<p>The definition of this category is clear and detailed, including eligibility criteria and examples of eligible expenditures. All eligible expenditures under this category will comply with the Technical Screening Criteria outlined in the Technical Annex of the Technical Expert Group final report on the EU Taxonomy (March 2020).</p> <p>The intended environmental objective is relevant and set in coherence with sustainability objectives defined in international standards.</p> <p>The expected benefits are clear, relevant and measurable. The issuer has committed to quantify them with reporting, wherever feasible.</p>

⁶ As defined by Article 10 of the Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 (Text with EEA relevance).

ELIGIBLE CATEGORIES	DESCRIPTION	EXAMPLE OF ELIGIBLE EXPENDITURES FOR THE INAUGURAL ISSUANCE	SUSTAINABILITY OBJECTIVES AND BENEFITS	V.E'S ANALYSIS
Clean transport	<p>The Green Eligible Expenditures include all above mentioned expenditures with a substantial contribution to climate change mitigation⁷ including:</p> <ul style="list-style-type: none"> - Public transport services - Low carbon passenger cars (electric, hydrogen and Hybrid vehicles) - Infrastructure for low-carbon transport (ancillary infrastructure and services promoting modal shift towards public transportation and soft mobility, charging points and other infrastructure supporting the use of electric vehicles) 	<ul style="list-style-type: none"> - Grant for the investment in developing charging infrastructure for electric vehicles in parking garages and underground garages - Project funding for the introduction of a Schwäbische Alb guest card to promote free public transportation. - Investment grant for the development of a state-wide e-ticketing system for public transport connecting local ticketing systems across Baden-Württemberg - Investment grant for low-carbon public transport such as the electrification of the Hochrheinbahn - Investment grant for electric charging infrastructure and the electric vehicle fleet for public entities - Investment grant for the Cycling Culture Initiative to foster cycling - Implementation of a state-wide bicycle route network and construction of bicycle expressways for everyday bicycle traffic - Funding programme to support municipalities in the construction, expansion and conversion of bicycle and pedestrian traffic measures - Research grant for the University of Stuttgart to develop a carbon-neutral campus - Procurement of hybrid vehicles and charging stations - Grant for low-emission public bus transportation - Funding the establishment of express bus lines in the Stuttgart region - Investment grant to foster e-mobility in the carpool of Baden Württembergs' police 	<p><u>Climate Change Mitigation</u></p> <p>GHG emissions reduction and avoidance</p> <p><u>Air pollution prevention and control</u></p> <p>Reduction of air pollutant emissions through the promotion of low carbon transportation.</p>	<p>The definition of this category is clear and detailed, including eligibility criteria and examples of eligible expenditures. All eligible expenditures under this category will comply with the Technical Screening Criteria outlined in the Technical Annex of the Technical Expert Group final report on the EU Taxonomy (March 2020).</p> <p>The intended environmental objective is relevant and set in coherence with sustainability objectives defined in international standards.</p> <p>The expected benefits are clear, relevant and measurable. The issuer has committed to quantify them with reporting, wherever feasible.</p>

⁷ Ibid.

ELIGIBLE CATEGORIES	DESCRIPTION	EXAMPLE OF ELIGIBLE EXPENDITURES FOR THE INAUGURAL ISSUANCE	SUSTAINABILITY OBJECTIVES AND BENEFITS	V.E'S ANALYSIS
Climate change adaptation	The Green Eligible Expenditures include all above mentioned expenditures with a substantial reduction of the risk of the adverse impact of the current climate and the expected future climate without increasing the risk of an adverse impact on people, nature or assets ⁸ .	<ul style="list-style-type: none"> - Project funding for capacity building and specification of the needs in Serbia for implementing an environmental portal. - Subsidies for the development of climate-resilient forests and/or (re-)afforestation as specified in the guidelines for sustainable forest management - Research grant for the development of stable and sustainable maize and wheat varieties - Research grant for the Transformation Centre for Sustainable Futures and Cultural Change 	<p><u>Climate change Adaptation</u></p> <p>Increase of resilience and adaptive capacities</p> <p>Reduction of vulnerabilities to climate change</p>	<p>The definition of this category is clear and detailed, including eligibility criteria and examples of eligible expenditures. All eligible expenditures will comply with the Technical Screening Criteria outlined in the Technical Annex of the Technical Expert Group final report on the EU Taxonomy (March 2020).</p> <p>The intended environmental objective is relevant and set in coherence with sustainability objectives defined in international standards.</p> <p>The expected benefits are clear, relevant and measurable. The issuer has committed to quantify them with reporting, wherever feasible.</p>
Sustainable water and wastewater management	The Green Eligible Expenditures include all above mentioned expenditures with a substantial contribution to the sustainable use and protection of water and marine resources ⁹ , including: <ul style="list-style-type: none"> - Expenses for supporting water collection, purification, sanitation, recycling, treatment and supply interventions. - Expenses for supporting water-saving interventions - Expenses for water quality monitoring 	<ul style="list-style-type: none"> - Investment grant for wastewater disposal 	<p><u>Conservation and sustainable use of water resources</u></p> <p>Increase in the efficiency of drinkable water production and consumption</p> <p>Increase in the amount of water reused</p> <p>Increase of the proportion of wastewater treated, reused and avoided</p>	<p>The Eligible Category is clearly defined, the Issuer has communicated the nature of the expenditures and location of Eligible Expenditures, although eligible criteria could be further developed. As the technical criteria are not yet covered by the EU taxonomy for this category, all projects will have to comply with additional requirement: in line with national and EU recommendations (Federal Water Act § 57, Surface Waters Ordinance, EU Water Framework Directive).</p> <p>The intended environmental objective is relevant and set in coherence with sustainability objectives defined in international standards.</p> <p>The expected benefits are clearly defined. The issuer has committed to quantify them with reporting, wherever feasible.</p>

⁸ As defined by Article 11 of the Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 (Text with EEA relevance).

⁹ As defined by Article 12 of the Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 (Text with EEA relevance).

ELIGIBLE CATEGORIES	DESCRIPTION	EXAMPLE OF ELIGIBLE EXPENDITURES FOR THE INAUGURAL ISSUANCE	SUSTAINABILITY OBJECTIVES AND BENEFITS	V.E'S ANALYSIS
Transition to a circular economy	<p>The Green Eligible Expenditures include all above mentioned expenditures with a substantial contribution to the transition to a circular economy¹⁰, including:</p> <ul style="list-style-type: none"> - Recovery of scarce raw materials - Public procurement of sustainable products with a resource saving focus (renewable resources). 	<ul style="list-style-type: none"> - Investment in circulation folders made of grass fibre from local meadows and of wastepaper for internal use - Funding the construction of plants for phosphorus recovery from sewage sludge or sewage sludge ash 	<p><u>Transition to a circular economy, including waste prevention, re-use and recycling</u></p> <p>Reduction in use of virgin materials</p> <p>Improved waste recovery</p>	<p>The Eligible Category is partially defined, the Issuer has communicated the nature of the expenditures and location of Eligible Expenditures, although eligible criteria could be further developed.</p> <p>The intended environmental objective is relevant and set in coherence with sustainability objectives defined in international standards.</p> <p>The expected benefits are partially defined. The issuer has committed to quantify them with reporting, wherever feasible.</p>
Pollution prevention and control	<p>The Green Eligible Expenditures include all above mentioned expenditures with a substantial contribution to the pollution prevention and control¹¹, including:</p> <ul style="list-style-type: none"> - Expenses towards the prevention and/or reduction of pollutant emissions into air, water or land, other than greenhouse gasses; - Expenses towards the improvement of levels of air, water or soil quality 	<ul style="list-style-type: none"> - Funding of projects to improve air quality and atmospheric pollution reduction such as filter cubes - Research Grant for the Programme Network Water Research to study the input of micro pollutants into water bodies 	<p><u>Pollution prevention and control</u></p> <p>Improvement of air quality through the reduction of air pollutants emissions</p> <p>Reduction of pollutant emissions into water</p>	<p>The Eligible Category is partially defined, the Issuer has communicated the nature of the expenditures and location of Eligible Expenditures, although eligible criteria and technologies could be further developed.</p> <p>The intended environmental objective is relevant and set in coherence with sustainability objectives defined in international standards.</p> <p>The expected benefits are clear, relevant and measurable. The issuer has committed to quantify them with reporting, wherever feasible.</p>

¹⁰ As defined by Article 13 of the Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 (Text with EEA relevance).

¹¹ As defined by Article 14 of the Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 (Text with EEA relevance).

ELIGIBLE CATEGORIES	DESCRIPTION	EXAMPLE OF ELIGIBLE EXPENDITURES FOR THE INAUGURAL ISSUANCE	SUSTAINABILITY OBJECTIVES AND BENEFITS	V.E'S ANALYSIS
Terrestrial and aquatic biodiversity conservation	<p>The Green Eligible Expenditures include all above mentioned expenditures with a substantial contribution to the protection and restoration of biodiversity and ecosystems¹², including:</p> <ul style="list-style-type: none"> - Activities that are aimed towards the conservation of biodiversity and natural ecosystems (managed and unmanaged) <p>Additionally, all projects must be in line with national and EU recommendations (Nature Conservation Areas, Natura 2000).</p>	<ul style="list-style-type: none"> - Important contribution to the preservation of biodiversity and regional, sustainable transformation - Construction of visitor and information centre (national park Black Forest) - Collecting essential data about the state and development of protected valuable habitats - Investments in the conservation and recreation of habitats for local animals and plants - Funding of various projects with a major impact on the biodiversity in different habitats 	<p><u>Terrestrial and aquatic biodiversity protection and conservation</u></p> <p>Promote the protection of terrestrial ecosystems and the preservation of biodiversity</p> <p>Conservation and sustainable use of terrestrial and inland freshwater ecosystems</p>	<p>The definition of this category is clear and detailed, including eligibility criteria and examples of expenditures.</p> <p>The intended environmental objective is relevant and set in coherence with sustainability objectives defined in international standards.</p> <p>The expected benefits are clear, relevant and measurable. The issuer has committed to quantify them with reporting, wherever feasible.</p>
Environmentally sustainable management of living natural resources and land use	<p>The Green Eligible Expenditures include all above-mentioned expenditures with a substantial contribution to the protection and restoration of biodiversity and ecosystems¹³, including:</p> <ul style="list-style-type: none"> - Organic farming activities <p>Additionally, all organic farming projects must fulfil at least European Standard for organic farming.</p>	<ul style="list-style-type: none"> - Development of agroforestry systems in Burundi - Exemplary regions for organic food - Purchasing properties with importance for environmental protection - Research grant for a programme on organic farming - Research grant for sustainable development in the Black Forest national park 	<p><u>Terrestrial and aquatic biodiversity protection and conservation</u></p> <p>Promotion of organic agriculture and sustainable land use</p>	<p>The definition of this category is clear and detailed, including eligibility criteria and examples of expenditures.</p> <p>The intended environmental objective is relevant and set in coherence with sustainability objectives defined in international standards.</p> <p>The expected benefits are clear, relevant and measurable. The issuer has committed to quantify them with reporting.</p>

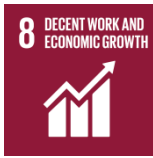




¹² As defined by Article 15 of the Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 (Text with EEA relevance).



¹³ As defined by Article 15 of the Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 (Text with EEA relevance).

SDG Contribution

The Eligible Categories are likely to contribute to thirteen of the seventeen United Nations' Sustainable Development Goals ("SDGs"), namely:

ELIGIBLE CATEGORIES	SDG	SDG TARGETS
Environmentally sustainable management of living natural resources and land use		1.a Ensure significant mobilisation of resources from a variety of sources, including through enhanced development cooperation, in order to provide adequate and predictable means for developing countries, in particular least developed countries, to implement programmes and policies to end poverty in all its dimensions
Environmentally sustainable management of living natural resources and land use		<p>2.3 By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment</p> <p>2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality</p> <p>2.a Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries</p>
Pollution prevention and control Clean Transport		3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination
Environmentally sustainable management of living natural resources and land use		4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development
Sustainable water and wastewater management Terrestrial and Aquatic Biodiversity Conservation		<p>6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all</p> <p>6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimising release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally</p> <p>6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes</p>
Energy efficiency Renewable energy		<p>7.1 By 2030, ensure universal access to affordable, reliable and modern energy services</p> <p>7.2 By 2030, increase substantially the share of renewable energy in the global energy mix</p> <p>7.3 By 2030, double the global rate of improvement in energy efficiency</p>

ELIGIBLE CATEGORIES	SDG	SDG TARGETS
Energy efficiency Eco-efficient and/or circular economy adapted-products, production technologies and processes		<p>8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors</p> <p>8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the ten-year framework of programmes on sustainable consumption and production, with developed countries taking the lead</p>
Energy efficiency Green Building Renewable Energy Eco-efficient and/or circular economy adapted-products, production technologies and processes		<p>9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all</p> <p>9.5 Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending</p>
Clean transport Pollution prevention and control		<p>11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons</p> <p>11.3 By 2030, enhance inclusive and sustainable urbanisation and capacity for participatory, integrated and sustainable human settlement planning and management in all countries</p> <p>11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management</p>
Environmentally sustainable management of living natural resources and land use Eco-efficient and/or circular economy adapted-products, production technologies and processes Pollution prevention and control		<p>12.2 By 2030, achieve the sustainable management and efficient use of natural resources</p> <p>12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimise their adverse impacts on human health and the environment</p> <p>12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse</p> <p>12.7 Promote public procurement practices that are sustainable, in accordance with national policies and priorities</p> <p>12.a Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production</p>
Environmentally sustainable management of living natural resources and land use Climate change adaptation		<p>13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries</p> <p>13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning</p> <p>13.b Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing states, including focussing on women, youth and local and marginalised communities</p>

ELIGIBLE CATEGORIES	SDG	SDG TARGETS
<p>Environmentally sustainable management of living natural resources and land use</p> <p>Terrestrial and Aquatic Biodiversity Conservation</p>		<p>15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements</p> <p>15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally</p> <p>15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species</p> <p>15.a Mobilise and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems</p>
<p>Environmentally sustainable management of living natural resources and land use</p>		<p>17.16 Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilise and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries</p> <p>17.17 Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships</p>

Evaluation and Selection of Eligible Projects



- The Process for Project Evaluation and Selection has been clearly defined and detailed by the Issuer, it is considered structured in all the evaluation and selection steps (including proposal, selection, validation and monitoring). The roles and responsibilities are clear and include relevant internal and external expertise. The Process will be publicly disclosed in the Framework.
- Eligibility criteria (selection and exclusion criteria) for project selection have been clearly defined by the Issuer for a majority of categories.
- The process applied to identify and manage potentially material E&S risks associated with the projects is publicly disclosed in herewith SPO. The Process is considered robust: it combines monitoring, identification and corrective measures for nearly all projects (see detailed analysis on page 25-27).

Process for Project Evaluation and Selection

- For the purpose of the Bonds, an Inter-ministerial Working Group (“the Working Group”) has been created. This Working Group is composed of representatives of:
 - Ministry of Finance, Treasury
 - Prime minister’s Office
 - Ministry for Environment, Climate and Energy
 - Ministry of the Interior, Digitalisation and Migration
 - Ministry of Justice and for Europe
 - Ministry for the Economy, Labour and Housing
 - Ministry for Rural Development and Consumer Protection
 - Ministry for Transport
 - Ministry for Science, Research and Arts contributing to the Eligible Projects.
- The Working Group is responsible for:
 - Identifying and pre-selecting potential Eligible Projects.
 - Evaluating the alignment of pre-selected projects with the eligibility criteria defined in the Framework and thus, with the technical screening criteria, the “Do-no-significant-harm” principles and minimum social safeguards defined in the TEG Final report on the EU Taxonomy (March 2020) (see detailed description on page 27).
- A Coordination Group within the Inter-ministerial Working Group consisting of members of the Ministry of Finance, Treasury, the Prime minister’s Office and the Ministry for Environment, Climate and Energy is responsible for:
 - Developing and upgrading the Green Bond Framework.
 - Selecting the Eligible Projects to be included in the Green Bonds according to a pre-selection of potential Eligible Projects made with the other members of the Inter-ministerial Working Group in accordance with the selection criteria established in this Framework and the Sustainability policy of Baden-Württemberg.
 - Coordinating the Inter- ministerial Working Group.
 - External communication about Green Bonds issued by the federal state Baden-Württemberg.
- The traceability and verification of the selection and evaluation of the projects is ensured throughout the process:
 - The Inter-ministerial Working Group ensures traceability of decisions taken regarding project evaluation, selection and monitoring by documenting each meeting in a dedicated written paper.
 - The Issuer reports that it will monitor annually the continued compliance of selected projects with selection and exclusion criteria specified in the Framework and potential ESG controversies throughout the life of the Bond. The Issuer has committed to reallocate the funds to another expenditure in case of non-compliance or if a controversy is found on a project.



Eligibility Criteria

The process relies on explicit eligibility criteria (selection and exclusion), relevant to the environmental objectives defined for the Eligible Categories.

- The selection criteria are based on definitions of Eligible Categories defined in Table 1 in the Use of Proceeds section. The Issuer refers to eligible business activities defined in the TEG Final Report on EU Taxonomy (March 2020) for those categories whose thresholds have already been defined, namely Climate Change Mitigation and Climate Change Adaptation. As soon as the EU publishes new (draft) technical criteria or delegated legislation for any environmental objective, they will be respected in the project selection process.
- When selecting projects for categories whose thresholds have not yet been defined by the EU, Baden-Württemberg follows the definitions of the EU Taxonomy Regulation and established standards:
 - Additional requirements for terrestrial and aquatic biodiversity conservation: activities must be in line with national and EU recommendations (Nature Conservation Areas, Natura 2000).
 - Additional requirements for environmentally sustainable management of living natural resources and land use: activities must be in line with organic farming fulfilling at least the European Standard for organic farming.
- The following activities are excluded in all categories without exception: Nuclear, Armament and Landfill expansion.
- Additional exclusions have been defined for the Transition to a circular economy Eligible Category: No landfill activities, Biomass only, if part of larger value chain and/or if biomass originates from non-hazardous or non-recyclable waste, resource efficiency measures only, if they close resource/material loops

Of note, the Framework lacks detailed eligibility criteria (selection and exclusion criteria) especially for those categories whose thresholds have not been defined and covered in the TEG Final Report on the EU Taxonomy (March 2020), namely sustainable use and protection of water and marine resources, transition to a circular economy, pollution prevention and control and, protection and restoration of biodiversity and ecosystems.



Management of Proceeds



- The Process for the Management and Allocation of Proceeds is clearly defined and detailed, and is publicly available in the Framework.
- The full allocation of funds will be at the issuance date as all issuances under the Framework will be 100% refinancing.
- The Issuer has informed V.E that there will not be any unallocated proceeds since the allocation will happen at issuance and thus, no temporary placement.
- The Issuer has provided information on the procedure that will be applied in case of expenditure divestment and it has committed to reallocate the proceeds to projects that are compliant with the bond framework within 24 months.

Management Process

- The net proceeds of the bond will be fully allocated at the moment of the issuance in accordance with the Framework. The financial ministry of Baden-Württemberg is responsible for the allocation process. Budgetary law (Haushaltsrecht) provides for the principle of total coverage (Gesamtdeckungsprinzip), which also applies to refinancing. The reference to actual expenditures of the previous fiscal year ensures that disbursements equal to the amount issued by each Bond have been assigned to Eligible Expenditures. The Issuer documents this process through the respective budget statement at individual item level, which in turn is audited annually by the Court of Audit.
- In case of projects postponement, cancellation, divestment or ineligibility, or in case an Eligible Project has matured, the Issuer has committed to replace the no longer Eligible Project by a new Eligible Project within 24 months.

BEST PRACTICES

⇒ The allocation period is 24 months or less.



Monitoring & Reporting



- The issuer has committed to report on the Use of Proceeds annually, until full allocation and on a timely basis in case of material developments. The report, including its verification, will be publicly available.
- The reporting will cover relevant information related to the allocation of Bond proceeds and to the expected sustainable benefits of the expenditures. The Issuer has also committed to report on material ESG controversies related to the projects.
- The reporting methodology and assumptions used to report on environmental benefits of the Eligible Expenditures will be publicly disclosed.
- An external auditor will verify the tracking and allocation of funds, as well as the Indicators used to report on environmental and social benefits of Eligible Expenditures until full allocation and in case of material changes.

Indicators

The Issuer has committed to transparently communicating at Eligible Category level, on:

- Allocation of proceeds: The indicators selected by the Issuer to report on the allocation of proceeds are relevant.

REPORTING INDICATORS
⇒ Selected Eligible Projects (re)financed for each environmental objective, including a brief description
⇒ The aggregated amount of (re)allocated net proceeds to Eligible Category

Of note, indicators related to the refinancing share or the type of temporary placements is not relevant as all issuances will be 100% refinancing.

- Environmental benefits: The indicators selected by the Issuer to report on the environmental benefits are clear and relevant.

ELIGIBLE CATEGORIES	ENVIRONMENTAL BENEFITS INDICATORS	
	OUTPUTS AND OUTCOMES	IMPACT INDICATORS
Renewable energy	<ul style="list-style-type: none"> - Generated liquid hydrogen (in tonnes) - Additional battery storages linked to photovoltaic systems - Number of researchers in improved infrastructure 	GHG emissions reduction (tCO ₂ e)
Energy efficiency	<ul style="list-style-type: none"> - Broadband coverage (in %) enabling behavioural change and business models without transport/mobility needs - Length of supported line metres (heat networks) (km) - Number of on-site inspections and implemented measures in companies based on annual reporting - Number of researchers in improved infrastructure - Broadband coverage enabling behavioural change and business models without transport/mobility needs 	GHG emissions reduction (tCO ₂ e)

ELIGIBLE CATEGORIES	ENVIRONMENTAL BENEFITS INDICATORS	
	OUTPUTS AND OUTCOMES	IMPACT INDICATORS
Green buildings	<ul style="list-style-type: none"> - Reduced CO₂-emissions compared to "Nearly Zero Energy Building"-standard - Reduced CO₂-emissions compared to non-restructured buildings 	GHG emissions reduction (tCO ₂ e)
Clean transport	<ul style="list-style-type: none"> - Sum of all users and frequency of usage of the guest card for public transport (ÖPNV) - Number of people using e-ticketing - Number of replaced diesel railcars by electro railcars - Number of supported programmes for electric vehicles - Absolute reduction of mobility-related emissions - Increased share of usage of public transport and bicycles 	GHG emissions reduction (tCO ₂ e)
Climate change adaptation	<ul style="list-style-type: none"> - Increased surface area of forests adapted to climate change (in square metres) - Number of dialogue events 	<ul style="list-style-type: none"> - Improvement of climate resilience and carbon dioxide balance of forests - Increase in scientific knowledge on transformative research and of municipal and sustainable concepts
Sustainable water and wastewater management	n.a.	n.a.
Eco-efficient and/or circular economy adapted-products, production technologies and processes	Number of experimental plants and industrial-scale pilot plants	Water use reduction (m ³)
Pollution prevention and control	<ul style="list-style-type: none"> - Increased number of hybrid vehicles - Capacity usage of express bus lines and number of passengers (in %) - Zero CO₂ and NO_X emissions (through usage of motorcycles with electric motor) 	Environmental and health hazards reduction
Terrestrial and aquatic biodiversity conservation	<ul style="list-style-type: none"> - Increased surface area of subsidised vineries (in m²) - Increased number of mapped/ updated biotopes - Number of individual projects and thereby incorporated total sum of areas per year - Number of visitors and number of classes (in the new building of the visitor and information centre of the national park Black Forest) 	<ul style="list-style-type: none"> - Nature conservation - Awareness for biodiversity



ELIGIBLE CATEGORIES	ENVIRONMENTAL BENEFITS INDICATORS	
	OUTPUTS AND OUTCOMES	IMPACT INDICATORS
Environmentally sustainable management of living natural resources and land use	<ul style="list-style-type: none"> - Number of companies with organic production and surface area of organic production - Investments in properties with importance for environmental protection 	<ul style="list-style-type: none"> - Enhancing biodiversity - Preservation of resources

BEST PRACTICES
<ul style="list-style-type: none"> ⇒ The reporting will cover relevant information related to the allocation of Bond proceeds and to the expected sustainable benefits of the projects/categories. The Issuer has also committed to report on material development related to the projects, including ESG controversies. ⇒ The Issuer will report on allocation of proceeds and on environmental benefits at category level. ⇒ The reporting methodology and assumptions used to report on environmental benefits of the Eligible projects will be disclosed publicly.

Contribution to sustainability

Expected Impacts

The potential positive Impact of the eligible projects on environmental and social objectives is considered robust.

ELIGIBLE CATEGORY	EXPECTED IMPACT	ANALYSIS
Renewable energy	ADVANCED	<p>According to the International Energy Agency, the energy mix of Baden-Württemberg is powered at around 37% by fossil fuels, therefore there is a particular need for the local authority to decarbonise its electricity production.</p> <p>The category follows the best technologies available in the sector to contribute to the claimed objective of climate change mitigation.</p>
Energy efficiency	ADVANCED	<p>Energy efficiency is a relevant tool to reduce CO₂ emissions, responding to the key issue of climate change mitigation. The Eligible Projects financed under this category will bring overall positive environmental impacts, do have a mid-long-term approach as they aim to reduce energy consumption in different sectors. The category follows the best technologies available in the sector to contribute to the claimed objective of climate change mitigation.</p>
Green buildings	ADVANCED	<p>The role of (federal) states is essential in organising the renovation of both private and public buildings. Positive impact locally by reducing energy consumption and globally through GHG emissions reduction. The category follows the best technologies available in the sector to contribute to the claimed objective of climate change mitigation.</p>
Clean transport	ADVANCED	<p>According to a study commissioned by the Ministry of Transport, 10% of daily mobility in Baden-Württemberg was by bicycle and 10% by public transport, but 60% by car, mainly based on fossil fuels. Therefore, there is a particular need and potential for the country to decarbonise its mobility sector.</p> <p>The category follows the best technologies available in the sector to contribute to the claimed objective of climate change mitigation.</p>
Environmentally sustainable management of living natural resources and land use	ADVANCED	<p>In Baden-Württemberg, 45% of the area is devoted to agriculture, being the largest share of land use. As of 2019, 13.2% of agricultural land in Baden-Württemberg was reported to be managed organically. By 2030, this share should rise to at least 30 to 40% according to the organic action plan. Furthermore, Baden-Württemberg aims to reduce the use of synthetic chemical pesticides by 40 to 50% by 2030 compared to 2020.</p> <p>Eligible Expenditures falling under this category have to comply with organic farming labels that promote the contribution to the protection and sustainable management of natural resources.</p>
Climate change adaptation	ROBUST	<p>In its current state, the forest in Baden-Württemberg has only limited robustness to future climate warming over a large area. Experts anticipate that countrywide forest ecosystems will be highly vulnerable to climate change. The issuer commits to follows the best technologies available in the sector to contribute to the claimed objective of climate adaptation.</p>
Sustainable water and wastewater management	ROBUST	<p>The state promotes sustainable use of water resources, ensures that its communities' activities do not affect water heritage, and ensures access to potable water. Reduction of substance discharges from municipal wastewater into water bodies through technologies meeting legal requirements.</p>
Eco-efficient and/or circular economy adapted-products, production technologies and processes	ROBUST	<p>According to the Circular Economy Index Germany is the leading country on an European level. A transition to a Circular Economy poses a real challenge for Germany and that is why it is a relevant objective to tackle. Of note, due to the fact that the definition of this category is quite broad and the issuer has not defined eligibility criteria V.E has only been able to assess the impact of the project(s) falling in this category for the inaugural issuance.</p>
Pollution prevention and control	ROBUST	<p>Stuttgart, the capital of Baden-Württemberg, struggles with particulate matter due to its geographic location in a basin with little air exchange and high traffic density. Projects appear to provide positive impacts, but locked-in negative impacts cannot be completely excluded. Technical choices have not been defined yet.</p> <p>Of note, due to the fact that the definition of this category is quite broad and the issuer has not defined eligibility criteria V.E has only been able to assess the impact of the project(s) falling in this category for the inaugural issuance.</p>



ELIGIBLE CATEGORY	EXPECTED IMPACT	ANALYSIS
Terrestrial and aquatic biodiversity conservation	ROBUST	Across the state, 1,025 nature reserves covering approximately 86,700 hectares were designated in Baden-Württemberg, covering 2.4% of the state's land area. This puts Baden-Württemberg below the national average in terms of area, number and size of nature reserves. Projects will be in line with national and EU recommendations such as Nature Conservation Areas, and Natura 2000.
OVERALL ASSESSMENT	ROBUST	



ESG Risks Identification and Management systems in place at project level

The identification and management of the environmental and social risks associated with the Eligible Projects are considered robust¹⁴.

	GREEN PROJECTS
Environmental Risks	Robust
Social Risks	Robust
Ethical Risks	Robust
OVERALL ASSESSMENT	Robust

Environmental Risks associated with Green Eligible Projects

Environmental risks associated with green eligible projects of the federal state Baden-Württemberg range from biodiversity, water, energy, climate change adaptation, just as pollution and accidents. Due to the projects' location in Baden-Württemberg, Germany, the Environmental Administration Act takes effect.

Environmental Impact Assessment

Baden-Württemberg has established the Environmental Administration Act, which regulates Environmental Impact Assessments, Strategic Environmental Assessment, the right to environmental information, environmental damage law and the recognition of environmental associations.

The Environmental Administration Act is considered transparent and relevant, and all the processes and documents related to Environmental Impact Assessments are digitized and publicly available on a separate website, including sector guides for environmental assessment, criteria, requirements, conditions, background records, reports, locations, decisions, procedures and procedural statuses.

Additional environmental measures in place (at project level)

Biodiversity

In 2011, the federated state has implemented the Nature Protection Strategy 2020. Baden-Württemberg's commitment towards biodiversity protection addresses the main impacts: inclusion of biodiversity in the urban planning, promotion of the development of green areas, preservation of the local ecosystem. Additionally, Baden-Württemberg participates with its protected areas to extend the Natura 2000 protected area network all over Europe. The federated state implements several measures in protection of the biodiversity and is proactive in its improvement: monitoring of existing species, study of the impact on ecosystem of new public works, protection of existing green areas, information to citizens on the respect of biodiversity, and promotion of sustainable agriculture. In addition, Baden-Württemberg publishes a detailed monitoring of existing species in its Environmental Plan. Furthermore, Baden-Württemberg reports on several measures taken to enhance biodiversity protection, e.g. development and improved management of protected areas (implementation of the EU's Flora Fauna Habitat (FFH) Directive) and integration of biodiversity aspects in the planning of infrastructure projects.

Water

Baden-Württemberg commits to manage water resources on its territory and addresses all the major issues at stake: The federated state promotes a sustainable use of water resources, assures its communities' activities do not affect water heritage and ensures access to drinkable water. Furthermore, the federated state publishes a detailed commitment to protect its groundwater resources. In terms of implementation, Baden-Württemberg has comprehensive systems in place to reduce its territory's impacts such as raising awareness on sustainable water use and on water pollution (especially related to agriculture), planification of water withdrawal, systems for water recycling, technologies to control water contamination and cooperations



for managing water-use conflicts. The federated state intensified its dialogue with relevant stakeholders for example to increase water treatment.

Energy

Baden-Württemberg has established an Integrated Energy and Climate Protection Concept (IEKK), which provides concrete strategies and measures for reducing emissions and clarifies what should be done in this area in the coming years. The IEKK takes into account all relevant sources of greenhouse gases. It therefore covers various areas of action such as electricity, heat, transport, land use and material flows. All departments of the state government are contributing with their activities to achieving the goals set. The Ministry for the Environment, Climate and Energy Management publishes regular monitoring reports on the Climate Protection Act and the Integrated Energy and Climate Protection Concept (IEKK). It contains all the relevant figures on the development of CO₂ emissions, as well as a chapter on the measures of the IEKK, which have largely been implemented.

Baden-Württemberg commits to reduce its energy consumption and has set quantitative targets. According to its Sustainable Development Strategy (“Nachhaltigkeitsstrategie Baden-Württemberg”) and its Energy Concept 2020 (“Energiekonzept 2020”), the federated state commits to reduce energy consumption on its own sites.

Climate Change adaptation

In accordance with Section 9 of the Baden-Württemberg Climate Protection Act, the state government intends to report every three years, starting in 2016, on the main consequences of climate change for Baden-Württemberg as well as the implementation and impact of important adaptation measures (Monitoring Report 2017). In this context, nine areas of action will be considered in accordance with the adaptation strategy, including forest and forestry, agriculture, nature conservation and biodiversity as well as tourism and urban and regional planning.

Pollution and accidents

The trade supervisory authority in Baden-Württemberg is responsible for operational and chemical safety, waste management, industrial wastewater as well as radiation protection and reports on a yearly basis on these issues. The tasks of the industrial inspectorate in occupational safety and environmental protection are carried out by the 44 municipal and district authorities. The Federal Immission Protection Law (“Bundes-Immissionsschutzgesetz”) defines clear emission values for the construction and operation of facilities and roads and railroads. The federated states are responsible for the implementation of the law, including monitoring and plant approval. Every federated state has its own law on immissions or air pollution control plan (“Luftreinhalteplan”) to supplement national law. Baden-Württemberg’s commitment relative to controlling its local pollution focuses on all relevant sources (noise, odors, dust, and landscape aesthetics) of local pollution. Within its Environmental Plan, Baden-Württemberg commits itself to reduce local pollution, such as noise, odours, dust, and landscape aesthetics.

Social Risks associated with Green Eligible Projects

Due to the projects’ location in Baden-Württemberg, Germany, the issuer sees no need for an explicit contractual regulation of human rights issues as well as for labour rights. Fundamental rights in accordance with Article 1 (3) of the Basic Law and by law and justice in accordance with Article 20 (3) of the Basic Law bind the state, its authorities and institutions. By means of laws, others, e.g. employers and companies, are also obliged to comply with fundamental rights. Compliance with these obligations is ensured by a wide variety of monitoring bodies (e.g. police, customs, trade unions, employers’ liability insurance association, staff councils or labour councils) and can be enforced if necessary.

Furthermore, the issuer highlights that there is a dense network of training courses, audits and control mechanisms, adapted to the respective protected good and for the most part legally obligatory in the area of health and safety.

Dialogue & participation

In Germany, various relevant laws already provide for a wide range of participation opportunities/control mechanisms. In addition, Baden-Württemberg attributes great importance to citizen participation in a wide range of projects (e.g. construction projects, laws, etc.) in order to increase acceptance among the population. Baden-Württemberg has a separate staff unit for citizen participation and civil society in the Ministry of State. For example, the Administrative Regulation on Citizen Participation (“VwV Bürgerbeteiligung”) regulates in which cases and how citizen participation processes are to be carried out. In addition, the public participation processes in Baden-Württemberg are scientifically monitored and regularly evaluated.

ESG aspects in public tender

The issuer integrates social and other sustainability aspects in public tenders under certain circumstances. Accordingly, when drawing up the service description above the EU threshold value, it must be checked whether sustainable aspects can be taken

into account. The issuer has established an Administrative Regulation on Citizen Participation directive, which is binding for all projects.

When drawing up the service description below the EU thresholds, sustainable aspects must be taken into account insofar as possible and appropriate with a reasonable amount of effort and insofar as there is a factual connection with the subject matter of the contract.

Ethical Risks

In terms of business ethics, all of the Green Eligible Projects are subject to public procurement, which includes mandatory evaluation criteria, namely economic and financial capacity (§ 45 VgV, § 33 Absatz 1 UVgO), technical and professional capacity (§ 46 VgV, § 33 Absatz 1 UVgO), just as a qualification and permission to practice the profession (§ 44 VgV, § 33 Absatz 1 UVgO).

The federal state Baden-Württemberg has regulated public procurement in an administrative directive¹⁵. In addition, in order to participate in the public procurement process and become a supplier/contractor of the Federal State Land Baden-Württemberg, companies need to register in the Registry of Suppliers of the Directorate of Public Procurement¹⁶.

The evaluation process of the Suppliers Registry verifies the veracity of the documents presented and intends to determine if there is any cause of inability to contract with the Federal State. Among the causes for mandatory exclusion of an offer are:

- Being convicted or fined for crimes such as terrorism financing, money laundering, corruption, bribery and fraud, just as human trafficking, forced prostitution, forced labour, labour exploitation, exploitation with the use of a deprivation of liberty or other crimes according to comparable regulations of other states.
- Not having fulfilled its corporate obligations to pay taxes, duties or social security contributions.

Moreover, a company can be optionally excluded from the public procurement process if it has demonstrably violated applicable environmental, social or labour law obligations in the performance of public contracts or if it is bankrupt. Other specific reasons for exclusion – among others – are falling short of minimal working wages and the employment of illegal immigrants.¹⁷

EU taxonomy (March 2020) – DNSH screening

The identification and management of the environmental and social risks associated with the Eligible Projects cover the “Do-no-significant-harm” principle and minimum social safeguards recommended by the TEG Final report on the EU Taxonomy (March 2020).

The Issuer has a designated process in place at ministry level to check the coherence of Eligible Projects with the criteria defined in the TEG Final report on the EU Taxonomy (March 2020). The ministries of "Land Baden-Württemberg" are responsible to evaluate potential projects and expenditures and their alignment with the eligibility criteria defined in the Framework and thus, with the technical screening criteria, the “Do-no-significant-harm” principles and minimum social safeguards defined in the TEG Final report on the EU Taxonomy (March 2020).

Information regarding the alignment with the criteria above is documented in project documentation sheets for each eligible project. The coordination group evaluates the project documentation sheets that are sent by the ministries and does a plausibility check. In case of doubts, projects are not included in the list of Eligible Expenditure.

Summary tables in the TEG Final report on the EU taxonomy (March 2020)¹⁸ show economic activities that make a substantial contribution to climate change mitigation and adaptation and indicate for which economic activities technical screening criteria have already been defined.

¹⁵ „Verwaltungsvorschrift der Landesregierung über die Vergabe öffentlicher Aufträge (VwV Beschaffung)“; <http://www.landesrecht-bw.de/jportal/?quelle=jlink&query=VVBW-LReg-20180724-SF&psml=bsbawueprod.psml&max=true&aiz=true>

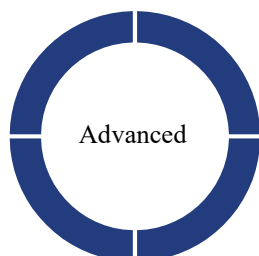
¹⁶ “Vergabemarktplatz Baden-Württemberg”; <https://ausschreibungen.landbw.de/Center/company/welcome.do>

¹⁷ http://www.landesrecht-bw.de/jportal/portal/t/lxx/page/bsbawueprod.psml/action/portlets.jw.MainAction?p1=44&eventSubmit_doNavigate=searchInSubtreeTOC&showdoccase=1&doc.hl=0&doc.id=VVBW-VVBW000028390&doc.part=S&doc.poskey=#focuspoint

¹⁸ https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/200309-sustainable-finance-teg-final-report-taxonomy_en.pdf



ISSUER



The State Baden-Württemberg (the “Issuer”) is one of the 16 federal states of the Federal Republic of Germany. With a territory of 35,748 km² and a population of 11.1 million inhabitants in 2019, the local authority is the third largest state of Germany in terms of inhabitants as well as in size. Under the Basic Law of the Federal Republic of Germany, the federal states retain residual legislative authority for some major issues such as culture (including education), transport and infrastructure or environment and conservation.

Level of ESG performance

The Issuer’s ESG performance was assessed through a complete process of rating and benchmark.

As of December 2020, the Issuer’s overall performance to manage ESG related issues in its activity is considered advanced. The Issuer’s performance is advanced concerning the Environmental, Social and Governance pillars, ranking 2nd in our “Local authorities” sector, which covers 30 Local entities.

DOMAIN	COMMENTS	OPINION
Environment	<p><u>The Issuer’s performance in the Environment pillar is considered advanced and has improved since last year’s review.</u></p> <p>Bundesland Baden-Württemberg has issued a formalised commitment to environmental protection in its Environmental Plan. In addition, the Federated State established detailed targets with regard to land utilisation, climate protection, air pollution, noise, water resources, soil protection and biodiversity.</p> <p>The Federated State commits to all of its major responsibilities in terms of environmental protection including management of water resources, minimising environmental impacts from energy use, management of environmental impacts from transportation as well as the construction and rehabilitation of public buildings. Baden-Württemberg aims to be carbon-neutral until 2040. Baden-Württemberg has further implemented comprehensive measures to address important issues such as biodiversity protection, soil and water protection, pollution prevention and management of local pollution.</p>	Advanced
		Robust
		Limited
		Weak
Social	<p><u>The Issuer’s performance in the Social pillar is considered advanced and has improved since last year’s review.</u></p> <p>Regarding Human Rights, the State Baden-Württemberg has issued formalised commitments regarding the respect of human rights, non-discrimination and freedom of association in society in its state constitution and laws. These commitments address its main responsibilities for all issues. Yet, information obtained from the Federated State regarding systems in place to ensure the respect of freedom of association, besides the right to take legal action by all citizens, is insufficient. Furthermore, there is a lack of visibility of non-discrimination in the services delivered to the citizens and in the workplace. On the other hand, the Federated State has implemented several measures to ensure the respect of human rights and to prevent discrimination in society.</p>	Advanced

DOMAIN	COMMENTS	OPINION
	<p>Regarding Human Resources, the State Baden-Württemberg has formalised commitments, applied means and results regarding the promotion of labour relations, employee participation and the respect and management of working hours. In terms of implementation, an internal job opportunity marketplace and formalised skill requirements for the various job positions have been implemented. Moreover, employees have regular performance assessment interviews. Programmes for health and safety and stress at work issues are accessible to every employee.</p> <p>Regarding Procurement and Services, the State Baden-Württemberg commits to a responsible relationship with service recipients and with suppliers. It has introduced a formalised and accessible system to handle complaints with a committee in charge of petitions and complaints. In its public procurement guidelines, the Federated State commits to integrate environmental and social factors in the supply chain. Additionally, the federated state implemented the Law on Complying with Collective Agreements, which includes guidelines to comply with minimum working standards, including a minimum wage.</p> <p>Regarding Community Development, on territorial planning and sustainable development of the territory, the State Baden-Württemberg has issued a formalised and accessible commitment to develop the economy, employment and vocational training in its Regional Development Plan (Landesentwicklungsprogramm) and the Development Programme for Rural Areas (Entwicklungsprogramms Ländlicher Raum (ELR)). Additionally, the local authority has allocated extensive means to develop the economy, employment and vocational training. Regarding social cohesion and fair development, the State Baden-Württemberg's commitment addresses its main responsibilities: access to education, healthcare systems and housing facilities for socially and economically disadvantaged people, access to childcare services, as well as access to public infrastructures and transport systems for people with disabilities, access to drinking water, social cohesion, initiatives on energy saving and efficient use of energy in low-income households and health dialogues.</p>	<p>Robust</p> <hr/> <p>Limited</p> <hr/> <p>Weak</p>
Governance	<p><u>The Issuer's performance in the Governance pillar is considered advanced and has improved since last year's review.</u></p> <p>Regarding prevention of corruption, the State Baden-Württemberg disclosed a formalised commitment to prevent corruption in its Administrative Regulation on Corruption Prevention (Verwaltungsvorschrift Korruptionsverhütung und -bekämpfung). The commitment is supported by the representatives of the local community. Baden-Württemberg's Ministry of Internal Affairs (Innenministerium Baden-Württemberg) is responsible for implementing the commitment. The State Baden-Württemberg has instituted formal training programmes for relevant employees on corruption prevention. Furthermore, the Federated State has set up internal controls to prevent corruption and dedicated non-confidential reporting systems.</p> <p>Regarding Internal controls & risk management, the Audit Office Baden-Württemberg (Rechnungshof Baden-Württemberg) is in charge of auditing all parts of the Bundesland Baden-Württemberg. The court is independent of the executive, which is ensured by law. All members of the Audit Committee have financial, political and/or audit experience. The Audit Committee has an exhaustive role with a monitoring tool reported for follow-up all voted projects, accessible and usable by the federated state population. Moreover, the Audit Office Baden-Württemberg (Rechnungshof Baden-Württemberg) monitors and publishes financial expenditures and efficient use on all projects of the federated state.</p> <p>In terms of representative and participative democracy, the State Baden-Württemberg provides information on the processes of an executive nomination, yet there is no visibility on the existence of an evaluation of local parliament functioning. The State Baden-Württemberg reports on significant measures to promote participation in local elections and significant measures to guarantee access to information and participation of opposition parties. Additionally, Baden-Württemberg's state law and partly the constitution provide participation tools besides elections.</p>	<p>Advanced</p> <hr/> <p>Robust</p> <hr/> <p>Limited</p>



DOMAIN	COMMENTS	OPINION
		Weak

Management of ESG Controversies

As of today, the federal state Baden-Württemberg is facing six stakeholder-related ESG controversies, linked to two of the six domains we analyse:

- Environment, in the criteria of “Prevention and management of industrial risks and natural disasters”, “Biodiversity”, “Water”, “Energy” and “Management of atmospheric emissions”.
- Community development, in the criteria of “Territorial development” and “Social cohesion”.
- Procurement and services, in the criterion of “Information to customers”.

Frequency: On average, the controversies are considered occasional, in line with the sector.

Severity: On average, the level of severity is high, based on the analysis of their impact on the Issuer and its stakeholders, in line with the sector.

Responsiveness: The Issuer is overall remediative, above the sector average.

METHODOLOGY

In V.E's view, Environmental, Social and Governance (ESG) factors are intertwined and complementary. As such, they cannot be separated in the assessment of ESG management in any organisation, activity or transaction. In this sense, V.E provides an opinion on the Issuer's ESG performance as an organisation, and on the processes and commitments applicable to the intended issuance.

Our Second Party Opinions (SPOs) are subject to internal quality control at three levels (Analyst, Project Manager and Quality Reviewer). If necessary, this process is complemented by a final review and validation by the Expertise Committee and Supervisor. A right of complaint and recourse is guaranteed to all companies under our review, following three levels: first, the team in contact with the company; then the Executive Director in charge of Methods, Innovation & Quality; and finally, V.E's Scientific Council. All employees are signatories of V.E's Code of Conduct, and all consultants have signed its add-on covering financial rules of confidentiality.

COHERENCE

Scale of assessment: not coherent, partially coherent, coherent

This section analyses whether the activity to be financed through the selected instrument is coherent with the Issuer's sustainability priorities and strategy, and whether it responds to the main sustainability issues of the sector where the Issuer operates.

ISSUANCE

Alignment with the Green and/or Social Bond Principles

Scale of assessment: Not aligned, Partially aligned, Aligned, Best Practices

The Framework has been evaluated by V.E according to the ICMA's Green Bond Principles - June 2018 ("GBP"), the TEG proposal for a Green Bond Standard, and on our methodology based on international standards and sector guidelines applicable in terms of ESG management and assessment.

Use of proceeds

The definition of the Eligible Projects and their sustainable objectives and benefits are a core element of Green/Social/Sustainable Bonds and Loans standards. V.E evaluates the clarity of the definition of the Eligible Categories, as well as the definition and the relevance of the primary sustainability objectives. We evaluate the descriptions of the expected benefits in terms of relevance, measurability and quantification. In addition, we map the potential contribution of Eligible Projects to the United Nations Sustainable Development Goals' targets.

Process for evaluation and selection

The evaluation and selection process is assessed by V.E on its transparency, governance and relevance. The eligibility criteria are assessed on their clarity, relevance and coverage vs. the intended objectives of the Eligible Projects.

Management of proceeds

The process and rules for the management and the allocation of proceeds are assessed by V.E on their transparency, traceability and verification.

Reporting

The monitoring and reporting process and commitments defined by the Issuer are assessed by V.E on their transparency, exhaustiveness and relevance, covering the reporting of both proceeds' allocation and sustainable benefits (output, impact indicators).



Contribution to sustainability

Scale of assessment: Weak, Limited, Robust, Advanced

V.E's assessment of activities' contribution to sustainability encompasses both the evaluation of their expected positive impacts on environmental and/or social objectives, as well the management of the associated potential negative impacts and externalities.

Expected positive impact of the activities on environmental and/or social objectives

The expected positive impact of activities on environmental and/or social objectives to be financed by the Issuer or Borrower is assessed on the basis of:

- i) the relevance of the activity to respond to an important environmental objective for the sector of the activity; or to respond to an important social need at country level;¹⁹
- ii) the scope of the impact: the extent to which the expected impacts are reaching relevant stakeholders (i.e. the issuer, its value chain, local and global stakeholders); or targeting those populations most in need;
- iii) the magnitude and durability of the potential impact of the proposed activity on the environmental and/or social objectives (capacity to not just reduce, but to prevent/avoid negative impact; or to provide a structural/long-term improvement);
- iv) only for environmental objectives, the extent to which the activity is adopting the best available option.

Activities' ESG risk management

The identification and management of the potential ESG risks associated with the eligible projects/activities are analysed on the basis of V.E's ESG assessment methodology, international standards and sector guidelines applicable in terms of ESG management and assessment.

ISSUER

Issuer's ESG performance

Scale of assessment of ESG performance: Weak, Limited, Robust, Advanced

NB: The Issuer's level of ESG performance (i.e. commitments, processes, results of the Issuer related to ESG issues), has been assessed through a complete process of rating and benchmarking developed by V.E.

The Issuer's ESG performance has been assessed by V.E on the basis of its:

- **Leadership**: relevance of the commitments (content, visibility and ownership).
- **Implementation**: coherence of the implementation (process, means, control/reporting).
- **Results**: indicators, stakeholders' feedbacks and controversies.

Management of stakeholder-related ESG controversies

A controversy is an information, a flow of information, or a contradictory opinion that is public, documented and traceable, allegation against an Issuer on corporate responsibility issues. Such allegations can relate to tangible facts, be an interpretation of these facts, or constitute an allegation based on unproven facts.

V.E reviewed information provided by the Issuer, press content providers and stakeholders (partnership with Factiva Dow Jones: access to the content of 28,500 publications worldwide from reference financial newspapers to sector-focused magazines, local publications or Non-Government Organisations). Information gathered from these sources is considered as long as it is public, documented and traceable.

V.E provides an opinion on companies' controversies risks mitigation based on the analysis of 3 factors:

- **Frequency**: reflects for each ESG challenge the number of controversies that the Issuer has faced. At corporate level, this factor reflects on the overall number of controversies that the Issuer has faced and the scope of ESG issues impacted (scale: Isolated, Occasional, Frequent, Persistent).
- **Severity**: the more a controversy is related to stakeholders' fundamental interests, proves actual corporate responsibility in its occurrence, and have caused adverse impacts for stakeholders and the company, the higher its severity is. Severity assigned at the corporate level will reflect the highest severity of all cases faced by the company (scale: Minor, Significant, High, Critical).
- **Responsiveness**: ability demonstrated by an Issuer to dialogue with its stakeholders in a risk management perspective and based on explanatory, preventative, remediating or corrective measures. At corporate level, this factor will reflect the overall responsiveness of the company for all cases faced (scale: Proactive, Remediate, Reactive, Non- Communicative).

The impact of a controversy on a company's reputation reduces with time, depending on the severity of the event and the company's responsiveness to this event. Conventionally, V.E's controversy database covers any controversy with Minor or Significant severity during 24 months after the last event registered and during 48 months for High and Critical controversies.

¹⁹ The importance of a specific social need at country level is assessed on the basis of the country performance on the priority SDG that the project is targeting using data from Sachs, J., Schmidt-Traub, G., Kroll, C., Lafortune, G., Fuller, G., Woelm, F. 2020. The Sustainable Development Goals and COVID-19. Sustainable Development Report 2020. Cambridge: Cambridge University Press.

V.E'S ASSESSMENT SCALES

Scale of assessment of Issuer's ESG performance or strategy and financial instrument's Contribution to sustainability		Scale of assessment of financial instrument's alignment with Green and/or Social Bond and Loan Principles	
Advanced	Advanced commitment; strong evidence of command over the issues dedicated to achieving the sustainability objective. An advanced expected impact combined with an advanced to robust level of E&S risk management & using innovative methods to anticipate new risks.	Best Practices	The Instrument's practices go beyond the core practices of the ICMA's Green and/or Social Bond Principles and/or of the Loan Market Association's Green Loan Principles by adopting recommended and best practices.
Robust	Convincing commitment; significant and consistent evidence of command over the issues. A robust expected impact combined with an advance to robust level of assurance of E&S risk management or an advanced expected impact combined with a limited level of assurance of E&S risk management.	Aligned	The Instrument has adopted all the core practices of the ICMA's Green and/or Social Bond Principles and/or of the Loan Market Association's Green Loan Principles.
Limited	Commitment to the objective of sustainability has been initiated or partially achieved; fragmentary evidence of command over the issues. A limited expected impact combined with an advanced to limited level of assurance of E&S risk management; or a robust expected impact combined with a limited to weak level of assurance of E&S risk management; or an advance expected impact combined with a weak level of assurance of E&S risk management.	Partially Aligned	The Instrument has adopted a majority of the core practices of the ICMA's Green and/or Social Bond Principles and/or of the Loan Market Association's Green Loan Principles, but not all of them.
Weak	Commitment to social/environmental responsibility is non-tangible; no evidence of command over the issues. A weak expected impact combined with an advanced to weak level of assurance of E&S risk management or a limited expected impact with a weak level of assurance of E&S risk management.	Not Aligned	The Instrument has adopted only a minority of the core practices of the ICMA's Green and/or Social Bond Principles and/or of the Loan Market Association's Green Loan Principles.



DISCLAIMER

Transparency on the relation between V.E and the Issuer: V.E has not carried out any audit mission or consultancy activity for Baden-Württemberg. V.E's conflict of interest policy is covered by its Code of Conduct, which can be found at <http://vigeo-eiris.com/wp-content/uploads/2018/07/Code-of-Conduct-Vigeo-Eiris-EN.pdf>.

This opinion aims at providing an independent opinion on the sustainability credentials and management of the Bond, based on the information which has been made available to V.E. V.E has neither interviewed stakeholders out of the Issuer's employees, nor performed an on-site audit nor other test to check the accuracy of the information provided by the Issuer. The accuracy, comprehensiveness and trustworthiness of the information collected are a responsibility of the Issuer. The Issuer is fully responsible for attesting the compliance with its commitments defined in its policies, for their implementation and their monitoring. The opinion delivered by V.E neither focuses on the financial performance of the Bond, nor on the effective allocation of its proceeds. V.E is not liable for the induced consequences when third parties use this opinion either to make investments decisions or to make any kind of business transaction.

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