

# REPORT REVIEW Bayerische Landesbank Impact and Allocation Reporting report

Bayerische Landesbank Impact and Allocation Reporting report 31 March 2023

#### **VERIFICATION PARAMETERS**

Type(s) of reporting

Sustainable debt instruments Allocation and Impact Reporting

Relevant standard(s)

- Harmonised Framework for Impact Reporting (HFIR), administered by International Capital Market Association (ICMA) (as of June, 2022)
- BayernLB's Impact and Allocation Reporting report (as of March 28, 2023)
- BayernLB's Sustainable Financing Framework (as of September 27, 2022)<sup>1</sup>
- Sustainable debt instruments identification:

ISIN	Туре	Value Day	Maturity Day	Nominal m€
DE000BLB6JT9	Mortgage Covered Bond	19.10.2022	19.10.2027	500,00
DE000BLB6JP7	Public Covered Bond	28.06.2022	28.06.2032	500,00
XS2411178630	T2	22.11.2021	22.11.2032	500,00
XS2356569736	T2	23.06.2021	23.09.2031	500,00
DE000BLB6JJ0	Senior Nonpreferred MREL	10.02.2021	10.02.2028	500,00
DE000BLB9MY7	Senior Nonpreferred MREL	23.12.2020	23.12.2030	21,06
DE000BLB8386	Senior Nonpreferred MREL	22.12.2020	22.12.2028	21,84
DE000BLB8394	Senior Nonpreferred MREL	22.12.2020	22.12.2027	18,03
DE000BLB83W8	Senior Nonpreferred MREL	04.12.2020	04.12.2028	10,65
DE000BLB83V0	Senior Nonpreferred MREL	03.12.2020	03.12.2027	3,97
DE000BLB83X6	Senior Nonpreferred MREL	03.12.2020	03.12.2030	20,10
DE000BLB83L1	Senior Nonpreferred MREL	06.11.2020	06.11.2028	2,02
DE000BLB83J5	Senior Nonpreferred MREL	05.11.2020	05.11.2026	0,52
DE000BLB83K3	Senior Nonpreferred MREL	05.11.2020	05.11.2030	9,66
DE000BLB8246	Senior Nonpreferred MREL	09.10.2020	09.10.2028	3,11
DE000BLB8238	Senior Nonpreferred MREL	08.10.2020	08.10.2026	1,18
DE000BLB8253	Senior Nonpreferred MREL	08.10.2020	08.10.2030	16,69
DE000BLB82N9	Senior Nonpreferred MREL	11.09.2020	11.09.2028	3,44
DE000BLB82L3	Senior Nonpreferred MREL	10.09.2020	10.09.2030	5,98
DE000BLB8188	Senior Nonpreferred MREL	13.08.2020	13.08.2030	14,52
DE000BLB81V4	Senior Nonpreferred MREL	16.07.2020	16.07.2032	5,57
DE000BLB81T8	Senior Nonpreferred MREL	18.06.2020	18.06.2030	3,94
DE000BLB81U6	Senior Nonpreferred MREL	18.06.2020	18.06.2032	0,18
DE000BLB8063	Senior Nonpreferred MREL	30.04.2020	30.04.2027	0,94
DE000BLB8071	Senior Nonpreferred MREL	30.04.2020	30.04.2030	1,39
DE000BLB80S2	Senior Nonpreferred MREL	09.04.2020	09.10.2030	0,03
DE000BLB95A8	Commercial Paper	30.11.2022	28.02.2023	280,00
DE000BLB9699	Commercial Paper	03.10.2022	09.01.2023	20,00
DE000BLB96E8	Commercial Paper	29.08.2022	14.06.2023	25,00
DE000BLB9780	Commercial Paper	30.11.2022	28.02.2023	250,00
DE000BLB97R8	Commercial Paper	17.10.2022	17.04.2023	10,28

Scope of verification

Lifecycle

Post-issuance verification

Validity

 As long as no changes are undertaken by the Issuer to its Impact and Allocation Reporting as of March 28, 2023

<sup>&</sup>lt;sup>1</sup> Originally "Green Bond Framework". Renamed on December 19, 2020 and updated on February 7, 2020 and April 27, 2022.

#### REPORT REVIEW

Impact and Allocation Reporting BayernLB





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#### REPORT REVIEW

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#### SCOPE OF WORK

Bayerische Landesbank ("the Issuer" or "BayernLB") commissioned ISS Corporate Solutions (ICS) to provide a Report Review<sup>2</sup> on its Impact and Allocation Reporting report by assessing:

- 1. The alignment of the BayernLB's Impact and Allocation Reporting report with the commitments set forth in BayernLB's Sustainable Financing Framework (as of September 27, 2022)<sup>3</sup>.
- 2. BayernLB's Impact and Allocation Reporting report benchmarked against ICMA Harmonised Framework for Impact Reporting updated as of June, 2022.
- 3. The disclosure of proceeds allocation and soundness of reporting indicators whether the impact metrics align with best market practices and are relevant to the Sustainable debt instruments issued.

<sup>&</sup>lt;sup>2</sup> A limited or reasonable assurance is not provided on the information presented in BayernLB Impact and Allocation Reporting report. A review of the use of proceeds' allocation and impact reporting is solely conducted against ICMA's Standards (Green Bond Principles) core principles and recommendations where applicable, and the criteria outlined in the underlying Framework. The assessment is solely based on the information provided in the allocation and impact reporting. The Issuer [or BayernLB] is responsible for the preparation of the report including the application of methods and internal control procedures designed to ensure that the subject matter information is free from material misstatement.

<sup>&</sup>lt;sup>3</sup> The Framework was assessed as aligned with the Green Bond Principles as of September 27, 2022. Nominated rail transport project categories were also on a best-effort basis aligned with the EU Taxonomy Climate Delegated Act (June 2021), as of September 27, 2022.





# **ASSESSMENT SUMMARY**

REVIEW SECTION	SUMMARY	EVALUATION
Part 1.  Alignment with the Issuer's commitments set forth in the Framework	The BayernLB's Impact and Allocation Reporting report meets the Issuer's commitments set forth in the Sustainable Financing Framework. The proceeds have been used to (re)finance Renewable Energy, Mobility and Real Estate projects in accordance with the eligibility criteria defined in the Framework.	Aligned
Part 2.  Alignment with the ICMA Harmonised Framework for Impact Report	The Impact and Allocation Reporting report is in line with ICMA's ICMA Harmonised Framework for Impact Report. The Issuer follows core principles and where applicable key recommendations.  The Issuer has reported on an annual basis and the report illustrates the environmental impacts of the project categories funded. ESG risks were covered as defined in BayernLB's Sustainable Financing Framework. BayernLB tracks the proceeds and has clearly reported on the sustainable debt instrument use of proceeds.	Aligned
Part 3.  Disclosure of proceeds allocation and soundness of reporting indicators	The allocation of the bond's proceeds has been disclosed, with a detailed breakdown across different eligible project categories based on the share of total portfolio financing, as proposed in the Framework <sup>4</sup> .  The BayernLB's Sustainable Financing Framework has adopted an appropriate methodology to report the impact generated by providing comprehensive disclosure on data sourcing, calculations methodologies and granularity reflecting best market practices.	Positive

<sup>&</sup>lt;sup>4</sup> The assessment is based on the information provided in the Issuer's report. The Issuer is responsible for the preparation of the report including the application of methods and procedures designed to ensure that the subject matter information is free from material misstatement.





### REPORT REVIEW ASSESSMENT

# PART I: ALIGNMENT WITH COMMITMENTS SET FORTH IN THE SUSTAINABLE FINANCING FRAMEWORK<sup>5</sup>

The following table evaluates the Impact and Allocation Reporting against the commitments set forth in BayernLB's Framework, which are based on the core requirements of the Green Bond Principles Guidelines as well as best market practices.

GBP	OPINION	ALIGNMENT WITH COMMITMENT
1. Use of Proceeds	BayernLB confirms to follow the Use of Proceeds' description provided by BayernLB's Sustainable Financing Framework. The report is in line with the commitments set in the BayernLB's Sustainable Financing Framework. The proceeds have been used to (re)finance Renewable Energy, Mobility and Real Estate projects in accordance with the eligibility criteria defined in the Framework.  The Issuer's green categories align with the project	
	categories and are in accordance with the eligibility criteria set in the BayernLB's Sustainable Financing Framework. Environmental benefits at category level are described and quantified.  The financed projects align with the exclusion criteria defined in the framework; with no project found to be associated with the exclusion criteria through this assessment.	~
2. Process for Project Evaluation and Selection	BayernLB confirms to follow the Process for Project Evaluation and Selection description provided by BayernLB's Sustainable Financing Framework. The report is in line with the initial commitments set in the BayernLB's Sustainable Financing Framework: On top of complying with the selection criteria described in the Sustainable Financing Framework, Eligible Sustainable Loans financed through sustainable debt instruments comply with the standard credit requirements, the sustainability strategy and the risk management policies, including environmental and social directives, of BayernLB. Eligible Sustainable Loans also comply on a best effort basis with official national and international environmental and social standards.	~

<sup>&</sup>lt;sup>5</sup> The BayernLB's Sustainable Financing Framework was assessed as aligned with the GBP as of as of September 27, 2022.





	The projects selected are defined and structured in a congruous manner. The Issuer ensures compliance with the Eligibility Criteria. ESG risks associated with the project categories are identified and managed through an appropriate process.  The Issuer clearly defines responsibilities in the process for project evaluation and selection and is transparent about it.	
3. Management of Proceeds	BayernLB confirms to follow the Process for Management of Proceeds description provided by BayernLB's Sustainable Financing Framework. The report is in line with the initial commitments set in the BayernLB's Sustainable Financing Framework: BayernLB has established an "Eligible Sustainable Loan Portfolio" (ESLP) gathering all Eligible Sustainable Loans in order to manage its sustainable debt instrument proceeds in a portfolio approach. The ESLP comprises all Eligible Sustainable Loans successfully assessed and selected in accordance with the eligibility criteria and evaluation and selection process described in BayernLB's Sustainable Financing Framework.  The proceeds collected are equal to the amount allocated to eligible projects, with no exceptions. The proceeds are tracked in an appropriate manner and attested in a formal internal process. Moreover, the Issuer discloses the temporary investment instruments for unallocated proceeds.	
4. Reporting	The BayernLB Impact Report is coherent with the Reporting description provided by BayernLB's Sustainable Financing Framework. The report is in line with the initial commitments set in the BayernLB's Sustainable Financing Framework: to publish an Allocation and Impact Report annually for as long as sustainable debt instrument are outstanding.  The sections "Allocation reporting" and "Impact Reporting" of the Impact and Allocation Reporting comply with the pre-issuance commitment expressed in the framework. The report is intended to be publicly available.  Further analysis of this section is available in Part III of this report.	~
5. Verification	ISS ICS has provided A Second Party Opinion (SPO) on BayernLi Financing Framework.	B's Sustainable





# PART II: ASSESSMENT AGAINST THE ICMA HARMONISED FRAMEWORK FOR IMPACT REPORTING

Reporting is a core component of the GBP and transparency is of particular value in communicating the expected and/or achieved impact of projects in the form of an annual reporting. Green bond Issuers are required to report on both the use of green bond proceeds, as well as the environmental impacts at least on an annual basis until full allocation or maturity of the bond. ICMA Harmonised Framework for Impact Report has been chosen as benchmark for this analysis as it represents the most widely adopted standard.

The table below evaluates BayernLB's Impact and Allocation Reporting against ICMA ICMA Harmonised Framework for Impact Report.

CORE PRINCIPLES		
ICMA HFIR	IMPACT AND ALLOCATION REPORTING	ASSESSMENT
Reporting on an annual basis	BayernLB has reported on an annual basis and all the proceeds have been fully allocated. The report will be available on BayernLB's website:  https://www.bayernlb.com/internet/en/blb/resp/invest or relations 7/investor information/green bond/Gree nBonds.jsp	<b>✓</b>
Illustrating the environmental impacts or outcomes	The assessment and measurement of the impacts generated by BayernLB Green Bond(s) covered the following areas:  a. Annual GHG emissions avoided (tCO <sub>2</sub> ) and Annual GHG emissions avoided (adjusted to market value, tCO <sub>2</sub> , for the real estate project category)  b. Pro-rata installed capacity (MW) and Annual electricity production (MWh) of Renewable energy  c. Pro-rata seats and Pro-rata million passenger kilometers (mPkm) transported in electric rail projects	<b>✓</b>
ESG Risk Management	BayernLB has established an end-to-end credit process with a dedicated ESG assessment. All Eligible Sustainable Loans financed through sustainable debt instruments comply with the standard credit requirements, the sustainability strategy and the risk management policies, including environmental and social directives, of BayernLB. Eligible Sustainable Loans also comply on a best effort basis with official national and international environmental and social standards.	~





Allocation of proceeds Transparency on the currency

The Issuer reports the cash flows related to the Sustainable debt instruments and the total amount allocated to green assets in Euros.



RECOMMENDATIONS					
ICMA HFIR	IMPACT AND ALL	OCATION REPORTIN	IG		ASSESSMENT
Define and disclose period and process for Project Evaluation and Selection	Assets. Since E changes may st removed for valuation and evaluation financed and/or instruments is Framework we	proceeds has been BayernLB adopts a sill occur as new lost ious reasons (e.g. not spects).  wed a transparent of Eligible Green sounder Survey and the Eligibility Criter of t	portfolio ans can be naturity, sa process for n Projects n the sustain stainable selected	approach added or alle of loan, r selection . Projects nable debt Financing based on	<b>✓</b>
Disclose total amount of proceeds allocated to eligible disbursements	ISIN	Type Mortgage Covered Bond Public Covered Bond T2 T2 Senior Nonpreferred MREL	Maturity Day 19.10.2027 28.06.2032 22.11.2032 23.09.2031 10.02.2028 23.12.2030 22.12.2027 04.12.2028 03.12.2027 03.12.2030 06.11.2028 05.11.2036 09.10.2028 08.10.2026 08.10.2030 11.09.2028 10.09.2030 13.08.2030 14.09.2032 18.06.2032	Nominal m€ 500,00 500,00 500,00 500,00 500,00 21,06 21,84 18,03 10,65 3,97 20,10 2,02 0,52 9,66 3,11 1,18 16,69 3,44 5,98 14,52 5,57 3,94 0,18	*
	DE000BLB81T8	Senior Nonpreferred MREL Senior Nonpreferred MREL	18.06.2030	3,94	





	As of the end of 2022, 100% of the proceeds has been allocated to green Assets.	
Formal internal process for the allocation of proceeds and to report on the allocation of proceeds	The Issuer followed a transparent process for the allocation of proceeds and have reported that 100% of the proceeds have been allocated to green assets.	<b>✓</b>
Report at project or portfolio level	The Impact and Allocation Reporting includes the total amount of proceeds allocated to the green portfolio.	<b>~</b>
Describe the approach to impact reporting	The impact reporting is based on the overall results of the financed portfolio. Generally, the issuer aggregates the number of loans per green eligible category in terms of acquired and developed projects and discloses the amount and share of the loan portfolio.	<b>✓</b>
Report the estimated lifetime results and/or project economic life (in years)	The Issuer reports on the average portfolio lifetime (in years) for the eligible project category or subcategories based on the overall results of the financing portfolio.	<b>✓</b>
Ex-post verification of specific projects	Ex-post verification is provided for some of the projects. For renewable energy projects, a third party technical advisor prepares final reports which inclued details on the installed capacity of the facilities, while for finalised real estate projects, energy performance certificates are required, detailing heat and electricity requirements of the buildings. For rail projects no verification is performed by BayernLB or third parties.	<b>✓</b>
Report on at least a limited number of sector specific core	BayernLB reports on the following core indicators:  Renewable energy portfolio	
indicators	<ul> <li>Annual GHG emissions avoided (tCO<sub>2</sub>)</li> <li>Annual electricity production (MWh)</li> <li>Pro-rata renewable energy installed capacity (MW) (Pro-rata to BayernLB's share of total credit volume)</li> </ul>	<b>✓</b>
	Electric rail portfolio	
	<ul> <li>Annual GHG emissions avoided (tCO<sub>2</sub>)</li> <li>Pro-rata seats (Pro-rata to the share of seats on the electric rail projects financed by BayernLB's total credit volume)</li> </ul>	



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	<ul> <li>Pro-rata million passenger kilometers (mPkm) (the approximate driven person kilometers per seat, pro-rated to BayernLB's financed share of electric rail projects)</li> <li>Real estate portfolio</li> <li>Green building certificates (EPC, LEED, DGNB, BREEAM)</li> <li>Annual GHG emissions avoided (tCO<sub>2</sub>)</li> <li>Annual GHG emissions avoided (adjusted to market value, tCO<sub>2</sub>)</li> </ul>	
If there is no single commonly-used standard, Issuers may follow and disclose their own calculation methodologies	For all impact indicators (except for green building certification standards) where there is no single commonly-used standard, the issuer has provided the methodology used and assumptions made for the calculations in the Impact and Allocation Reporting.	~
Disclosure on the conversion approach (if applicable)	Not applicable because none of the reported units needs to be converted.	N/A
Projects with partial eligibility	The Issuer has not financed partially eligible projects.	N/A
When the expected impacts of different project components may not be reported separately, Issuers may use (and disclose) the attribution approach	The Issuer financed projects do not have projects components that may not be reported separately.	N/A

#### OPINION

The BayernLB follows ICMA Harmonised Framework for Impact Report's core principles and some key recommendations. The Issuer provides transparency on the level of expected reporting as well as on the frequency, scope and duration, aligned with best practices. The issuer discloses total amount of proceeds allocated (3,250 EURm) and reported annually and in one currency. BayernLB illustrated the environmental impacts of the total financed portfolio per category and sub-category on an aggregated basis.



# PART III: DISCLOSURE OF PROCEEDS ALLOCATION AND SOUNDNESS OF THE IMPACT REPORTING INDICATORS

#### Use of Proceeds Allocation

Use of Proceeds allocation reporting is key to put the impacts into perspective with the number of investments allocated to the respective Use of Proceeds' categories.

The Use of Proceeds allocation reporting occurred on an annual basis since 2020. This is the third year of allocation reporting and 100% of the sustainable debt instruments (3,250 EURm) has been allocated as of 2022, compares with the 100% of allocation in 2021. The Use of Proceeds allocation reporting occurred within the regular annual cycle from the issuance.

#### Share of total portfolio financing to eligible projects/assets

The share of financing is broken down at the portfolio level, broken down by the renewable energy, rail, and real estate portfolios. The Issuer has provided details about the type of projects included in the portfolio, breaking down by completed projects and projects under construction.

The share of financing report section of the Impact and Allocation Reporting report of BayernLB aligns with best-market practices by providing information on:

- The different technological split of wind (On-Shore/ Off-Shore) and solar energy (Photovoltaic/ Solar Thermal) infrastructures by %
- Geographical regions by countries by %
- The building types of real estate investments by %
- The building types by green building certificates by %
- The % of different seniority of bonds (in years) refinancing each portfolio
- 100% of proceeds allocated in million euros
- The outstanding loan amount and financed by German public entities under BayernLB public Cover for the Rail Portfolio
- The outstanding loan amount under the BayernLB mortgage cover pool for the Real Estate Portfolio.



# **Impact Reporting Indicators**

The table below presents an independent assessment of the Issuer's report and disclosure on the output, outcome, and/or impact of projects/assets using impact indicators.

ELEMENT	ASSESSMENT	
	The impact indicators chosen by the Issuer for these sustainable debt instruments are the following:	
	Renewable energy portfolio	
	<ul> <li>Annual GHG emissions avoided (tCO<sub>2</sub>)</li> <li>Annual electricity production (MWh)</li> <li>Pro-rata renewable energy installed capacity (MW) (Pro-rata to BayernLB's share of total credit volume)</li> </ul>	
	Electric rail portfolio	
Relevance	<ul> <li>Annual GHG emissions avoided (tCO<sub>2</sub>)</li> <li>Pro-rata seats (Pro-rata to the share of seats on the electric rail projects financed by BayernLB's total credit volume)</li> <li>Pro-rata million passenger kilometers (mPkm) (the approximate driven person kilometers per seat, pro-rated to BayernLB's financed share of electric rail projects)</li> </ul>	
	Real estate portfolio	
	<ul> <li>Green building certificates (EPC, LEED, DGNB, BREEAM, HQE)</li> <li>Annual GHG emissions avoided (tCO<sub>2</sub>)</li> <li>Annual GHG emissions avoided (adjusted to market value, tCO<sub>2</sub>)</li> </ul>	
	These indicators are quantitative and material to the Use of Proceeds categories financed through these sustainable debt instruments and are broadly in line with the Suggested Impact Reporting metrics for Renewable Energy, Clean transportation, and Green building projects by the ICMA Harmonised Framework for Impact Report for Green Bonds. This aligns with best market practices.	
Data sourcing and methodologies of quantitative assessment	For its green real estate projects' impact indicator(s), the Issuer uses Internationally recognized certification standards for Green Buildings such as Energy Performance Certificate (EPC), Leadership in Energy and Environmental Design (LEED), BREEAM (Building Research Establishment Environmental Assessment Method), Deutsche Gesellschaft für Nachhaltiges Bauen (DGNB) or Haute Qualité Environnementale (HQE), most of them are in line with the core indicator proposed by the ICMA Harmonised Framework for Impact Report for Green Bonds.	
	The Issuer also estimated the yearly CO <sub>2</sub> and energy avoidance by comparing the performance of each building against a benchmark from	



PCAF building emission factor database<sup>6</sup>. A three-tiered approach was used to determine the energy requirement: The energy and CO<sub>2</sub> data is taken from energy certificates. When CO<sub>2</sub> data is not available, the CO<sub>2</sub> emission are derived by multiplying the heat and energy requirements (primary energy) in kwh/m<sup>2</sup>\*a with the CO2 emissions factors. For heat requirement, the Issuer used external source, the annex 9 of the German Energy Saving Ordinance (GEG) to provide suitable emission factors for different energy sources when municipal utilities provide district heating data for the CO<sub>2</sub> factor. For electricity, the relevant GEG factors are used for German buildings, and data from other countries are sourced from the European Environment Agency<sup>7</sup>. If only energy reference class (A-G) is known, CO<sub>2</sub> avoidance is estimated based on the PCAF database for both the object and the benchmark. The Issuer also used conversion factors from GEG and local utilities factors to convert between primary and end energy.

For Renewable energy projects, the Issuer adjusts (done yearly for each impact report) the total installed capacity of each project with the share of total credit volume. To approximate the annual electricity generation, the Issuer adjusted the installed capacity to the average MWh generated for each MW of installed capacity for the individual country and technology (e.g. a German off-shore wind farm produced on average 3,287 MWh for each MW of installed capacity in 2019, based on data from International Renewable Energy Agency (IRENA)<sup>8</sup>. To estimate the annual CO<sub>2</sub> savings, the Issuer multiplied the total annual energy generation in MWh with a CO<sub>2</sub> intensity per MWh of 0.275 tons (CO<sub>2</sub> intensity representative of electricity generation in the European Union<sup>7</sup>). The Issuer also reduces the calculating CO<sub>2</sub> savings by the life cycle CO<sub>2</sub> emission from wind and solar power plants by 20 g/KWh and 50 g/KWh respectively.

For Rail projects, the Issuer adjusts (done yearly for each impact report) the total number of seats of each electric rail project with the Issuer's total credit volume. To approximate the driven person kilometers (Pkm) per seat the Issuer divided the total German passenger kilometers by the total number of seats in the German public transport system using data from the German Federal Statistics Office9. To calculate the annual GHG emissions avoided, the Issuer multiply the Pkm of each project with the difference of grams CO<sub>2</sub> per Pkm with a car and grams CO<sub>2</sub> per Pkm with an electric train using data available at German Environmental Office<sup>10</sup>.

<sup>&</sup>lt;sup>6</sup> Partners for Carbon Accounting Financials, <u>www.carbonaccountingfinancials.com</u>

<sup>&</sup>lt;sup>7</sup> European Environment Agency, <a href="https://www.eea.europa.eu/data-and-maps/daviz/co2-emission-intensity-12#tab-">https://www.eea.europa.eu/data-and-maps/daviz/co2-emission-intensity-12#tab-</a> googlechartid chart 11

<sup>&</sup>lt;sup>8</sup> Internal Renewable Energy Agency (IRENA), https://irena.org/Statistics

<sup>&</sup>lt;sup>9</sup> German Federal Statistics Office.

https://www.genesis.destatis.de/genesis/online?sequenz=statistikTabellen&selectionname=46181#abreadcrumb

<sup>&</sup>lt;sup>10</sup> https://www.umweltbundesamt.de/sites/default/files/medien/366/bilder/uba\_emissionstabelle\_personenverkehr\_2021.jpg





Baseline selection	The impact data is compared with relevant baseline ( $tCO_2$ avoided are calculated based on comparison with $CO_2$ intensity representative of conventional electricity generation in the European Union, for renewable energy projects, with PCAF building emission factor database, for real estate projects and with the German Environmental Office data on $CO_2$ impact of one person kilometer with a car in Germany for rail projects).
Scale and granularity	The impact data is presented at the Use of Proceed category level for the indicator(s) based on the overall results of the financed portfolio

#### High-level mapping of the impact indicators with the UN Sustainable Development Goals

Based on the project categories financed and refinanced by the bonds as disclosed in the Issuer's Impact and Allocation Reporting, the impact indicator(s) adopted by BayernLB for its Sustainable debt instruments can be mapped to the following SDGs, according to the ICMA "A High -Level Mapping to the Sustainable Development Goals" 11.

IMPACT INDICATORS	SUSTAINABLE DEVELOPMENT GOALS	
Annual GHG emissions avoided (tCO <sub>2</sub> ) Annual GHG emissions avoided (adjusted to market value, tCO <sub>2</sub> ) Pro-rata installed capacity (MW) from renewable energy projects Annual electricity production (MWh) from renewable energy projects Energy Performance Certificate (EPC)	7 AFTURBARILE AND 13 CLIMATE ACTION	
Pro-rata seats Pro-rata million passenger kilometers (mPkm) transported by electric rail Green Building Certificates (LEED, BREEAM, DGNB)	11 SUSTAINABLE CITIES  AND COMMUNITIES	

#### **OPINION**

The allocation of the bond's proceeds has been disclosed, as proposed in the Framework and the BayernLB's Impact and Allocation Reporting has adopted an appropriate methodology to report the impact generated by providing comprehensive disclosure on data sourcing, calculations methodologies and granularity reflecting best market practices. Besides, the impact indicators used broadly align with best market practices using ICMA's recommended metrics in the HFIR.

<sup>&</sup>lt;sup>11</sup> ICMA's Mapping-SDGs-to-Green-Social-and-Sustainability-Bonds

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#### **DISCLAIMER**

- 1. Validity of the External Review ("External Review"): Valid as long as no changes are undertaken by the Issuer to its Impact and Allocation Reporting report as of March 28, 2023.
- 2. ISS Corporate Solutions, Inc. ("ICS"), a wholly-owned subsidiary of Institutional Shareholder Services Inc. ("ISS"), sells/distributes External Reviews which are prepared and issued by ISS ESG, the responsible investment arm of ISS, on the basis of ISS ESG's proprietary methodology. In doing so, ISS adheres to standardized procedures to ensure consistent quality of responsibility research worldwide. Information on ISS's methodology is available upon request.
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## ANNEX 1: Methodology

#### Review of the post-issuance Reports

The report review of post-issuance reports provides the Issuer with an independent opinion on the soundness of its post-issuance report and of its alignment with recognized market guidelines and it provides investors with independent information regarding the reliability of the report produced. On the basis of the information provided by the Issuer, the alignment of the report is assessed with recognized market guidelines, the metrics chosen by the Issuer and the soundness of process and methodology of reporting. The metrics are analyzed based on specific sets of indicators using proprietary method referring to common market guidelines.

#### High-level mapping to the SDG

The 17 Sustainable Development Goals (SDGs) were endorsed in September 2015 by the United Nations and provide a benchmark for key opportunities and challenges toward a more sustainable future. Using a proprietary method based on ICMAs Green, Social and Sustainability Bonds: A High-Level Mapping to the Sustainable Development Goals, the extent to the Issuers reporting and project categories contribute to related SDGs is identified.



## ANNEX 2: Quality management processes

#### **SCOPE**

BayernLB commissioned ICS to compile a Report Review on its Bond Report. The Report Review process includes verifying whether the Bond Report aligns with the Issuer's Green, Social and Sustainability Bond Framework and the respective market standards, i.e. the Green Bond Principles, Social Bond Principles and Sustainability Bond Guidelines and to assess the robustness and completeness of the reporting methodologies.

#### **CRITERIA**

Relevant Standards for this Report Review:

- ICMA Green Bond Principles
- ICMA Harmonised Framework for Impact Reporting
- ICMA A High -Level Mapping to the Sustainable Development Goals

#### ISSUER'S RESPONSIBILITY

Issuer's responsibility was to provide information and documentation on:

- Impact and Allocation Reporting report (March 28, 2023)
- Sustainable Financing Framework (September 27, 2022)
- Proceeds Allocation
- Reporting Impact Indicators
- Methodologies, and assumptions for data gathering and calculation
- ESG Risk Management

#### ISS ESG's VERIFICATION PROCESS

ISS ESG is one of the world's leading independent environmental, social and governance (ESG) research, analysis and rating houses. The company has been actively involved in the sustainable capital markets for over 25 years. Since 2014, ISS ESG has built up a reputation as a highly-reputed thought leader in the green and social bond market and has become one of the first CBI approved verifiers.

This independent Report Review has been conducted by following the ICMA Guidelines for Green, Social, Sustainability and Sustainability-Linked Bonds External Reviews, and its methodology, considering, when relevant, the ISAE 3000 (Revised), Assurance Engagements Other than Audits or Reviews of Historical Financial Information.

The engagement with BayernLB took place in March 2023.

#### **ISS' BUSINESS PRACTICES**

ISS has conducted this verification in strict compliance with the ISS Code of Ethics, which lays out detailed requirements in integrity, transparency, professional competence and due care, professional behavior and objectivity for the ISS business and team members. It is designed to ensure that the verification is conducted independently and without any conflicts of interest with other parts of the ISS Group.



## About this Report Review

ISS ESG is one of the world's leading rating agencies in the field of sustainable investment. The agency analyzes companies and countries regarding their environmental and social performance.

We assess alignment with external principles (e.g. the ICMA Green Bond Principles, Social Bond Principles and Sustainable Bond Guidelines), analyze the sustainability quality of the assets and review the sustainability performance of the Issuer themselves. Following these three steps, we draw up an independent Report Review so that investors are as well informed as possible about the quality of the bond/loan from a sustainability perspective.

Learn more: https://www.isscorporatesolutions.com/solutions/esg-solutions/green-bond-services/

For information on Report Review services, contact: <a href="SPOsales@isscorporatesolutions.com">SPOsales@isscorporatesolutions.com</a>

For more information on this specific Impact and Allocation Reporting Report Review, please contact: <a href="mailto:specific-spe

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