

Second-Party Opinion

W&W Group Green Bond Framework



Evaluation Summary

Sustainalytics is of the opinion that the W&W Group Green Bond Framework is credible and impactful and aligns with the four core components of the Green Bond Principles 2021. This assessment is based on the following:



USE OF PROCEEDS The eligible categories for the use of proceeds – Green Buildings and Renewable Energy – are aligned with those recognized by the Green Bond Principles. Sustainalytics considers that investments in the eligible categories will contribute to the decarbonization of W&W Group’s own investment portfolio in Europe, the US and Canada and advance the UN Sustainable Development Goals, specifically SDGs 7 and 11.



PROJECT EVALUATION AND SELECTION W&W Group’s Green Bond Committee – which comprises representatives from the Risk and Finance Department and the business divisions of Housing and Insurance, and Sustainability – will be responsible for evaluating and selecting eligible green investments in line with the Framework’s eligibility criteria. W&W Group will assess and mitigate environmental and social risks associated with the eligible green assets as part of its property valuation and credit assessment. Sustainalytics considers W&W Group’s risk management system to be adequate and the project selection process to be in line with market practice.



MANAGEMENT OF PROCEEDS W&W Group’s Green Bond Committee oversees the process for managing proceeds through an internal monitoring system. W&W Group intends to allocate the proceeds within 36 months of issuance. Pending full allocation, W&W Group will temporarily invest the proceeds in green, social or sustainable bonds, cash or cash equivalents. This is in line with market practice.



REPORTING W&W Group intends to report on the allocation of proceeds and the corresponding impact in its Green Bond Investor Report on an annual basis until full allocation. Allocation reporting will include the total amount of outstanding green bonds issued, the eligible green investments, the geographical distribution of eligible green investments and the distribution of the types of eligible green investments. In addition, W&W Group is committed to reporting on relevant impact metrics. Sustainalytics views W&W Group’s allocation and impact reporting as aligned with market practice.

Evaluation Date	March 17, 2023
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Issuer Location	Stuttgart, Germany
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Introduction

W&W Group (“W&W” or the “Group”) is a German financial services group that operates in the housing sector, as well as in life, health, property and casualty insurance products and other financial planning segments. Established in 1999 from the merger of two companies, Wüstenrot and Württembergische has EUR 48.8 billion in assets under management and approximately 13,000 employees as of 2021.¹ Wüstenrot & Württembergische AG (W&W AG), based in Kornwestheim, Germany, is the strategic management holding company of the Group.

W&W has developed the W&W Group Green Bond Framework dated March 2023 (the “Framework”), under which the Group and its subsidiaries² intend to issue green German covered bonds (Grüner Pfandbrief) under the German Pfandbrief Act (Pfandbriefgesetz). The Framework is also intended for the issuance of green senior unsecured bonds and green subordinated bonds. Proceeds of these instruments will be used to finance or refinance, in whole or in part, existing and future green assets and funds aimed at supporting the low-carbon transition in Europe, the US and Canada. The Framework defines eligibility criteria in two areas:

The Framework defines eligibility criteria in two areas:

1. Green Buildings
2. Renewable Energy

W&W engaged Sustainalytics to review the W&W Group Green Bond Framework and provide a Second-Party Opinion on the Framework’s environmental credentials and its alignment with the Green Bond Principles 2021 (GBP).³ W&W will publish the Framework in a separate document.⁴

Scope of work and limitations of Sustainalytics’ Second-Party Opinion

Sustainalytics’ Second-Party Opinion reflects Sustainalytics’ independent⁵ opinion on the alignment of the reviewed Framework with current market standards and the extent to which the eligible project categories are credible and impactful.

As part of the Second-Party Opinion, Sustainalytics assessed the following:

- The Framework’s alignment with the Green Bond Principles 2021, as administered by ICMA;
- The credibility and anticipated positive impacts of the use of proceeds; and
- The alignment of the issuer’s sustainability strategy and performance and sustainability risk management in relation to the use of proceeds.

For the use of proceeds assessment, Sustainalytics relied on its internal taxonomy, version 1.13, which is informed by market practice and Sustainalytics’ expertise as an ESG research provider.

As part of this engagement, Sustainalytics held conversations with various members of W&W’s management team to understand the sustainability impact of their business processes and planned use of proceeds, as well as management of proceeds and reporting aspects of the Framework. W&W representatives have confirmed that (1) they understand it is the sole responsibility of W&W to ensure that the information provided is complete, accurate or up to date; (2) they have provided Sustainalytics with all relevant information and (3) any provided material information has been duly disclosed in a timely manner. Sustainalytics also reviewed relevant public documents and non-public information.

This document contains Sustainalytics’ opinion of the Framework and should be read in conjunction with that Framework.

Any update of the present Second-Party Opinion will be conducted according to the agreed engagement conditions between Sustainalytics and W&W.

¹ W&W Group, “Annual Report 2021”, at: <https://www.ww-ag.com/en/investor-relations/reports>

² W&W has confirmed that the subsidiaries are wholly owned or majorly controlled by W&W, and the Group will be responsible for ensuring that its subsidiaries’ issuances continuously align with the criteria defined in the Framework.

³ The Green Bond Principles are administered by the International Capital Market Association and are available at <https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/>.

⁴ The W&W Group Green Bond Framework is available on W&W Group’s website at: <https://www.ww-ag.com/de/investor-relations/anleihen>

⁵ When operating multiple lines of business that serve a variety of client types, objective research is a cornerstone of Sustainalytics and ensuring analyst independence is paramount to producing objective, actionable research. Sustainalytics has therefore put in place a robust conflict management framework that specifically addresses the need for analyst independence, consistency of process, structural separation of commercial and research (and engagement) teams, data protection and systems separation. Last but not the least, analyst compensation is not directly tied to specific commercial outcomes. One of Sustainalytics’ hallmarks is integrity, another is transparency.

Sustainalytics' Second-Party Opinion, while reflecting on the alignment of the Framework with market standards, is no guarantee of alignment nor warrants any alignment with future versions of relevant market standards. Furthermore, Sustainalytics' Second-Party Opinion addresses the anticipated impacts of eligible projects expected to be financed with bond proceeds but does not measure the actual impact. The measurement and reporting of the impact achieved through projects financed under the Framework is the responsibility of the Framework owner. Upon twenty-four (24) months following the evaluation date set stated herein, W&W is encouraged to update the Framework, if necessary, and seek an update to the Second-Party Opinion to ensure ongoing alignment of the Framework with market standards and expectations.

In addition, the Second-Party Opinion opines on the potential allocation of proceeds but does not guarantee the realized allocation of the bond proceeds towards eligible activities.

No information provided by Sustainalytics under the present Second-Party Opinion shall be considered as being a statement, representation, warrant or argument, either in favour or against, the truthfulness, reliability or completeness of any facts or statements and related surrounding circumstances that W&W has made available to Sustainalytics for the purpose of this Second-Party Opinion.

Sustainalytics' Opinion

Section 1: Sustainalytics' Opinion on the W&W Group Green Bond Framework

Sustainalytics is of the opinion that the W&W Group Green Bond Framework is credible and impactful and aligns with the four core components of the GBP. Sustainalytics highlights the following elements of the Framework:

- Use of Proceeds:
 - The eligible categories – Green Buildings and Renewable Energy – are aligned with those recognized by the GBP. Sustainalytics notes that the projects financed under the Framework are expected to contribute to the decarbonization of W&W's own investment portfolio in Europe, the US and Canada.
 - The Framework states that the green financing instruments can be used to finance equity participation, in private, non-listed companies that derive at least 90% of their revenue from eligible green projects. By placing a quantitative threshold of 90%, Sustainalytics believes that W&W Group has ensured that proceeds from its green financing instruments will be directed to activities that generate positive environmental impact. Sustainalytics notes that the Group's financing under the Framework may include investments in funds, wherein all portfolio companies will be pure plays and 100% of proceeds will be invested in eligible green projects that meet the eligibility criteria defined under the Framework.
 - W&W Group has not defined a look-back period as it has confirmed refinancing will be limited to capital expenditures under the Framework.
 - Under the Green Buildings category, the Company intends to invest in new, existing or renovated residential and commercial buildings^{6,7} that meet at least one of the following eligibility criteria:
 - Residential buildings that have received an energy performance certificate (EPC) label of A+, A or B based on primary energy demand (PED), which correspond to buildings in the top 15% of the residential real estate stock in their location.
 - Residential buildings with a PED of 74 kWh/m² or lower belonging to the top 15% of the residential real estate stock in their location. The Group may also finance renovations of existing residential and commercial buildings resulting in at least a 30% reduction in net PED compared to pre-renovation levels.
 - Residential, office or retail buildings that are built in accordance with the German Energy Saving Ordinance of 2009 (Energieeinsparverordnung, EnEV 2009)⁸ and logistics buildings that are built in accordance with the German Energy Saving

⁶ W&W communicated to Sustainalytics that commercial buildings include office, retail or logistics buildings.

⁷ W&W has confirmed that the buildings are not designed for the purpose of extraction, storage, transportation or manufacture of fossil fuels.

⁸ Government of Germany, "EnEV 2009 - Energy Saving Ordinance for Buildings", at: https://enev-online.org/enev_2009_volltext/index.htm

- Ordinance of 2014 (Energieeinsparverordnung, EnEV 2014).^{9,10} Sustainalytics has assessed these energy-efficiency standards and views them to align with the top 15% of the German building stock.
- Residential and commercial buildings that have achieved or are expected to achieve the following minimum certification levels: DGNB (Gold or above), LEED (Gold or above)¹¹ and BREEAM (Excellent or above).¹² Sustainalytics has assessed these certification schemes and views them to be credible and impactful.
 - Under the Renewable Energy category, the Company intends to finance the equipment, development, construction, operation, distribution, infrastructure and maintenance of renewable energy projects related to offshore and onshore wind, and solar photovoltaic technology. Projects funded under this category include production units,¹³ energy storage facilities and distributed assets that are components of the grid. The Company has confirmed that energy storage technologies will be solely connected to renewable sources of electricity. The Company has confirmed that transmission and distribution infrastructure dedicated to connecting new fossil fuel power plants or new nuclear power plants will not be financed under the Framework.
 - The Framework excludes the financing of manufacturing companies that violate UN conventions on the prohibition of controversial weapons, such as biological and chemical weapons; anti-personnel mines and cluster munitions; companies associated with arms manufacturing or dealing; activities related to coal; and companies that use child or forced labour.
 - Project Evaluation and Selection:
 - W&W Groups Green Bond Committee (the “W&W Committee”) – which comprises representatives from the Risk and Finance Department, and the business divisions of Housing, Insurance, and Sustainability – will be responsible for evaluating and selecting eligible green investments in line with the Framework’s eligibility criteria. Sustainalytics considers this process to be in line with market practice.
 - W&W Group will assess and mitigate environmental and social (E&S) risks associated with the eligible assets as part of its property valuation and credit assessment. If the Group’s valuation and credit assessment identifies any relevant E&S risks that do not comply with national and international standards, the respective investment will be excluded from the eligible green asset pool. For additional details, please see Section 2.
 - Based on the presence of a dedicated team for project evaluation and selection and the presence of risk management systems, Sustainalytics considers this process to be in line with market practice.
 - Management of Proceeds:
 - W&W’s Green Bond Committee will oversee the process for managing proceeds through an internal monitoring system. Proceeds raised under the Framework will be managed on a portfolio basis. The Group will ensure that the matching of the proceeds will be ongoing on a 100% basis until the bond maturity.
 - W&W intends to allocate the proceeds within 36 months of issuance. Pending full allocation, W&W Group will temporarily invest the proceeds in green, social or sustainable bonds, cash or cash equivalents. The Group has confirmed to Sustainalytics that it will exclude any debt refinancing that is associated with carbon-intensive activities.
 - Based on the presence of an internal tracking system and the disclosure of the temporary use of proceeds, Sustainalytics considers this process to be in line with market practice.
 - Reporting:
 - W&W intends to report on the allocation of proceeds and the corresponding impact in its Green Bond Investor Report on an annual basis until full allocation. Allocation reporting will include the

⁹ Government of Germany, “Energy Saving Ordinance - EnEV 2014 / EnEV from 2016”, at: https://www.enev-online.com/enev_2014_volltext/

¹⁰ In November 2020, the German Energy Conservation Ordinances EnEV 2009 and EnEV 2014 were merged under the German Buildings Energy Act (Gebäudeenergiegesetz, GEG). The GEG is available at: https://www.bgbl.de/xaver/bgbl/start.xav?startbk=Bundesanzeiger_BGBl&jumpTo=bgbl120s1728.pdf#_bgbl_%2F%2F*%5B%40attr_id%3D%27bgbl120s1728.pdf%27%5D_1678718707878

¹¹ LEED: <https://www.usgbc.org/leed>

¹² BREEAM: <https://www.breeam.nl/>

¹³ W&W confirmed that the manufacturing of components or supply chain for renewable energy projects, such as wind and solar energy technology, will be wholly dedicated to components for renewables.

total amount of outstanding green bonds issued, the eligible green investments, the geographical distribution of eligible green investments and the distribution of the types of eligible green investments.

- Impact reporting will include relevant environmental impact metrics, such as the capacity of renewable energy plants constructed or rehabilitated, the estimated annual GHG emissions reduced or avoided (in tCO₂e), the annual renewable energy generation (in MWh), the number of green buildings and units financed and the estimated annual energy savings (in kWh/m²).
- Based on the commitment to both allocation and impact reporting, Sustainalytics considers this process to be in line with market practice.

Alignment with Green Bond Principles 2021

Sustainalytics has determined that the W&W Group Green Bond Framework aligns with the four core components of the GBP. For detailed information, please refer to Appendix 1: Green Bond/Green Bond Programme External Review Form.

Section 2: Sustainability Strategy of W&W Group

Contribution to W&W Group's sustainability strategy

Sustainalytics is of the opinion that W&W demonstrates a commitment to sustainability through the integration of ESG considerations into the following areas: i) customers and products; ii) capital investments and refinancing; iii) business operations; iv) employees; v) society; and vi) the organization.¹⁴ These six thematic areas are part of W&W's integrated strategy process and subject to the Group's non-financial reporting and application of regulatory requirements.¹⁵

As part of its sustainability strategy and 2025 sustainability targets, W&W has set environmental goals, including further development of its green products, such as: i) home loans for the development or acquisition of energy-efficient buildings or renovation activities; ii) home savings with a climate bonus for renovation activities to increase energy efficiency in buildings; and iii) insurance products for solar PV installations and reduced insurance premiums for new buildings that comply with sustainability requirements.¹⁶ W&W commits to increasing the share of modernization loans provided to improve buildings' energy efficiency to more than 50% of the total amount of modernization loans provided by 2025. It also aims to align its product offerings linked to the construction and acquisition of buildings with the EU Taxonomy by 2025.¹⁷ The Group commits to reducing CO₂ emissions across its capital investment portfolio by 10% by 2025 compared to 2022, which is in line with the overarching target to achieve climate neutral capital investments by 2050.¹⁸ Furthermore, W&W AG commits to increasing its green and sustainable bond issuances for new financing and refinancing of sustainable projects. The Group's portfolio of green and sustainable bonds accounted for a market value of EUR 1.2 billion in 2022.¹⁹

In 2021, W&W's insurance stock covered technical insurances for 38,000 solar PV systems and 2,100 wind turbines for corporate clients, and 9,600 photovoltaic systems for private households.²⁰ The Group's capital investment portfolio accounted for 1,149 MW of renewable energy generation capacity based on solar and wind power, and more than half of W&W's real estate investments were classified in accordance with the EnEV 2009 in 2021.²¹

Sustainalytics is of the opinion that the W&W Group Green Bond Framework is aligned with the Group's overall sustainability strategy and will further the Group's action on the noted key environmental priorities. Sustainalytics encourages W&W to disclose its sustainability strategy and to report on progress to further strengthen its sustainability practices.

¹⁴ W&W AG has shared its 2023 sustainability strategy with Sustainalytics on a confidential basis.

¹⁵ W&W AG, "Non-financial report 2021", (2021), at: https://www.ww-ag.com/media/dokumente/gruppe_1/nachhaltigkeit_1/Zusammengefasster_nichtfinanzieller_Bericht_GJ2021.pdf

¹⁶ W&W AG shared its 2023 sustainability strategy with Sustainalytics confidentially.

¹⁷ Ibid.

¹⁸ Ibid.

¹⁹ W&W AG, "Principles for Sustainable Insurance Report", (2022), at: https://www.ww-ag.com/media/dokumente/gruppe_1/nachhaltigkeit_1/2022_PSI_Reporting_WW_Gruppe_DE_final_220802.pdf

²⁰ Ibid.

²¹ Ibid.

Approach to managing environmental and social risks associated with the projects

Sustainalytics recognizes that the net proceeds from the instruments issued under the Framework will be directed towards eligible projects that are expected to have positive environmental impacts. However, Sustainalytics is aware that such eligible projects could also lead to negative environmental and social outcomes. Some key environmental and social risks possibly associated with the eligible projects could include issues related to business ethics and responsible investment; occupational health and safety; land use and biodiversity issues associated with infrastructure development; and emissions, effluents and waste generated in construction.

Sustainalytics is of the opinion that W&W is able to manage or mitigate potential risks through the implementation of the following:

- Regarding business ethics, W&W has developed a Policy Statement with Respect for Human Rights, outlining guidelines, risk assessment procedures and corresponding reporting practices.²² W&W also has in place a code of conduct that applies to the Group's employees and their interactions with customers, business partners and shareholders. The code guides W&W's policies and procedures regarding corporate values, conflicts of interest, anti-corruption, data privacy and anti-money laundering, among other topics.²³
- W&W has developed a Responsible Investment Policy, which includes ESG guidelines for responsible investment activities in accordance with the Group's overarching investment goals and corresponding reporting practices.²⁴ W&W has also been following the Principles for Responsible Investment (PRI)²⁵ and the Principles for Sustainable Insurance (PSI)²⁶ in its investment and insurance business since 2020.²⁷
- Regarding occupational health and safety, W&W provides courses, seminars and advisory services to ensure the physical and mental well-being of its employees. In addition, the Group adheres to national legislation regarding occupational safety.²⁸
- All EU countries, the UK, Canada and the US are recognized under the Equator Principles as Designated Countries, indicating the presence of robust environmental and social governance legislation systems and institutional capacity to ensure mitigation of common environmental and social risks.²⁹ In addition, assets financed in the EU and the UK comply with the requirements in the EU Environmental Impact Assessment (EIA) Directive 2014/52/EU and the Waste Framework Directive 2008/98/EC.^{30,31} The EIA Directive ensures that projects conducted in the EU that are likely to have a significant impact on the environment are adequately assessed before approval. It also requires measures to be taken to avoid, prevent, reduce and offset significant negative effects on the environment, especially on species and habitats. The Waste Framework Directive defines key concepts such as waste, recovery and disposal and outlines requirements for the management of waste.

Based on the policies, standards and assessments, Sustainalytics is of the opinion that W&W has implemented adequate measures and is well positioned to manage and mitigate environmental and social risks commonly associated with projects in the eligible categories. Sustainalytics encourages W&W to continue to elaborate and set policies to address environmental and social risks.

²² W&W AG, "Policy statement on the respect for human rights", at: https://www.ww-ag.com/media/dokumente/gruppe_1/compliance_1/Grundsatzerklaerung_Menschenrechte_WW_AG.pdf

²³ W&W AG, "Code of Conduct", (2022), at: https://www.ww-ag.com/media/dokumente/gruppe_1/compliance_1/Verhaltenskodex_WW-Gruppe_Oktober_2022.pdf

²⁴ W&W AG has shared the Responsible Investment Policy with Sustainalytics on a confidential basis.

²⁵ PRI, "What are the Principles for Responsible Investment?", at: <https://www.unpri.org/about-us/what-are-the-principles-for-responsible-investment>

²⁶ UN EP, "The Principles", at: <https://www.unepfi.org/insurance/insurance/the-principles/>

²⁷ W&W AG, "Non-financial report 2021", (2021), at: https://www.ww-ag.com/media/dokumente/gruppe_1/nachhaltigkeit_1/Zusammengefasster_nichtfinanzieller_Bericht_GJ2021.pdf

²⁸ Ibid.

²⁹ Equator Principles, "About the Equator Principles", at: <https://equator-principles.com/about-the-equator-principles/>

³⁰ European Parliament, "Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment", (2014), at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32014L0052>

³¹ European Parliament, "Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives", (2008), at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32008L0098>

Section 3: Impact of Use of Proceeds

The use of proceeds categories – Green Buildings and Renewable Energy – are aligned with those recognized by the GBP. Sustainalytics has focused on where the impact is specifically relevant in the local context.

Importance of green buildings in the EU and Germany

The building sector is a key contributor to GHG emissions in the EU, accounting for 36% of total CO₂ emissions and 40% of energy consumption in 2021.³² Decarbonizing the building sector is fundamental to meet the EU's commitment to reduce GHG emissions by 55% below 1990 levels by 2030 and achieve climate neutrality by 2050 under the 2030 Climate Target Plan.³³ To achieve the 2030 and 2050 goals, the European Commission requires all EU member states to have nearly zero-emission building requirements for all new buildings as of 2021³⁴ and establish a long-term strategy to decarbonize the building stock by 2050, with a roadmap of clear milestones for 2030 and 2040.³⁵ Given that 75% of the building stock in the EU is energy inefficient, the European Green Deal aims to at least double the annual renovation rate of buildings by 2030 compared to 2020 levels, promoting deep energy renovations in 35 million building units by 2030.³⁶

As the most populated country in the EU,³⁷ Germany accounted for 24% of net GHG emissions in the EU in 2021, and therefore, plays a significant role in meeting the EU's climate goals.³⁸ The operation of buildings accounts for approximately 35% of Germany's total final energy consumption.³⁹ As part of its efforts towards minimizing climate impact, the German government has set a target to make Germany's building stock climate neutral by 2050 and reduce 68% of the GHG emissions from buildings by 2030 compared to 1990.⁴⁰ The heating sector will be an important contributor towards this goal as approximately 60% of the final energy demand from residential buildings in Germany is directed towards space heating, two-thirds of which is powered through fossil fuels.⁴¹ The government also aims to reduce the primary energy consumption of its building sector by at least 80% by 2050 relative to 2008 levels.⁴² The government plans to achieve the goal through increased adoption of renewable energy sources, reduction in energy consumption and improvement in energy efficiency to achieve the climate-neutral building stock.⁴³

In this context, Sustainalytics is of the opinion that W&W's investments in green buildings have the potential to reduce the environmental footprint of Germany's building sector and will contribute to achieving the short and long-term climate targets set by Germany and the EU.

Importance of increasing the share of renewable energy and renewable electricity in the UK, the EU, the US and Canada

Energy supply accounted for 23.6% of the UK's total CO₂ emissions in 2021,⁴⁴ with fossil fuels representing 35% of the country's sources for electricity production the same year.⁴⁵ Electricity demand in the UK is projected to increase by 50% by 2035 compared to 2019 due to increasing demand from the transport, building and industrial sectors.⁴⁶ In 2021, the UK government pledged to fully decarbonize the British power system by

³² European Commission, "Factsheet - Energy Performance of Buildings", (2021), at: https://ec.europa.eu/commission/presscorner/detail/en/fs_21_6691

³³ European Commission, "2030 Climate Target Plan", at: https://ec.europa.eu/clima/eu-action/european-green-deal/2030-climate-target-plan_en

³⁴ Buildings that meet one of the certification levels specified under the Framework meet the requirements for a nearly zero-emission building.

³⁵ European Commission, "Directive (EU) 2018/844 of the European Parliament and of the Council", (2018), at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJ.L_.2018.156.01.0075.01.ENG

³⁶ European Commission, "A Renovation Wave for Europe – greening our buildings, creating jobs, improving lives", (2020), at: https://eurlex.europa.eu/resource.html?uri=cellar:0638aa1d-0f02-11eb-bc07-01aa75ed71a1.0003.02/DOC_1&format=PDF

³⁷ European Union, "Facts and figures on life in the European Union", at: https://europa.eu/european-union/about-eu/figures/living_en

³⁸ Simões, H., (2021), "Climate action in Germany: Latest state of play", European Parliament, at:

[https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/690661/EPRS_BRI\(2021\)690661_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/690661/EPRS_BRI(2021)690661_EN.pdf)

³⁹ Federal Ministry for Economic Affairs and Energy, "Enhancing energy efficiency in buildings", at:

<https://www.bmwi.de/Redaktion/EN/Dossier/enhancing-energy-efficiency-in-buildings.html>

⁴⁰ Federal Ministry of Economic Affairs and Energy, "Climate Action Plan 2050", (2016), at:

https://www.bmu.de/fileadmin/Daten_BMU/Pool/Broschueren/klimaschutzplan_2050_en_bf.pdf

⁴¹ Baldino, C. et al., (2021), "Hydrogen for Heating? Decarbonization Options for Households in Germany in 2050", ICCT, at:

<https://theicct.org/publications/hydrogen-heating-germany-april2021>

⁴² Federal Ministry of Economic Affairs and Energy, "Climate Action Plan 2050", (2016), at:

https://www.bmu.de/fileadmin/Daten_BMU/Pool/Broschueren/klimaschutzplan_2050_en_bf.pdf

⁴³ Appunn, K. et al., (2022), "Germany's greenhouse gas emissions and energy transition targets", Clean Energy Wire, at:

<https://www.cleanenergywire.org/factsheets/germanys-greenhouse-gas-emissions-and-climate-targets>

⁴⁴ UK Department for Business, Energy & Industrial Strategy, "2021 UK greenhouse gas emissions, provisional figures", (2022), at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1064923/2021-provisional-emissions-statistics-report.pdf

⁴⁵ Energy Guide, "Electricity Generation UK Sources In 2023", (2023), at: <https://energyguide.org.uk/electricity-generation-uk-sources/>

⁴⁶ Climate Change Committee, "The Sixth Carbon Budget: The UK's path to Net Zero", (2020), at: <https://www.theccc.org.uk/wp-content/uploads/2020/12/The-Sixth-Carbon-Budget-The-UKs-path-to-Net-Zero.pdf>

2035.⁴⁷ In this scenario, energy generated from renewable sources is expected to play a key role in achieving the country's decarbonization targets and clean-power goals.⁴⁸ Additionally, the UK government aims to increase onshore wind and solar capacity by an additional 12 GW and offshore wind capacity to 40 GW by 2030.⁴⁹

The energy sector accounted for 75% of the EU's total GHG emissions in 2021.⁵⁰ The share of electricity produced from renewable sources in the EU reached 21.8% in 2021, a decrease from 22.1% in 2020.⁵¹ As part of the European Green Deal, the EU set a goal to become climate neutral by 2050, including intermediate targets to reduce its GHG emissions by at least 40% and to increase the share of energy usage from renewable sources to at least 32% by 2030 relative to 1990 levels.⁵² To meet the targets, the REPowerEU plan aims to install new solar PV systems with a total capacity of more than 320 GW by 2025 and almost 600 GW by 2030.⁵³ The REPowerEU plan also includes targets for the EU to have an installed capacity of more than 60 GW of offshore wind and 1 GW of ocean energy by 2030, as well as 300 GW and 40 GW, respectively, by 2050.⁵⁴

The US is the second-largest electricity consumer in the world, accounting for nearly 17% of the world's electricity consumption in 2021.⁵⁵ According to the US Energy Information Administration, approximately 60% of US electricity generation came from fossil fuels as of 2022.⁵⁶ Furthermore, while renewable energy generation in the US has experienced significant growth in recent decades, it accounted for only 21.5% of generation in 2022.⁵⁷ The electricity sector is one of the country's largest GHG emitters, accounting for 25% of total emissions in 2020.⁵⁸ As part of its Nationally Determined Contribution under the Paris Agreement, the US has committed to reducing GHG emissions by at least 50-52% from a 2005 baseline by 2030, and to achieve economy-wide net zero emissions by 2050.^{59,60} In line with these targets, the US government established a goal in 2021 of achieving a 100% carbon-free electricity sector by 2035.⁶¹

The energy sector accounted for 81% of total GHG emissions in Canada in 2021 as the country's energy supply still highly relies on fossil fuels.⁶² Specifically, the electricity sector contributed 8.4% of the country's total GHG emissions in 2019.⁶³ Canada is also a signatory to the Paris Agreement and has committed to becoming a net zero economy by 2050.⁶⁴ In line with this target, the country has set a target of producing 90% of its electricity from non-emitting sources by 2030.⁶⁵ In this context, continuing to increase the share of renewable energy generation has the potential to contribute to the country's climate goals. In June 2021, the federal government announced a CAD 964 million investment in a renewable energy programme to increase the

⁴⁷ Government of the UK, "Net Zero Strategy: Build Back Greener", (2021), at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1033990/net-zero-strategy-beis.pdf

⁴⁸ Government of the UK, "Energy White Paper: Powering our Net Zero Future", (2020), at: <https://www.gov.uk/government/publications/energy-white-paper-powering-our-net-zero-future>

⁴⁹ Ibid.

⁵⁰ European Commission, "Questions and Answers – Making our energy system fit for our climate targets", (2021), at:

https://ec.europa.eu/commission/presscorner/detail/en/qanda_21_3544

⁵¹ Eurostat, "Renewable energy statistics", at: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Renewable_energy_statistics

⁵² European Commission, "2030 climate & energy framework", at: https://climate.ec.europa.eu/eu-action/climate-strategies-targets/2030-climate-energy-framework_en

⁵³ European Commission, "REPowerEU: affordable, secure and sustainable energy for Europe", at: https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/repowereu-affordable-secure-and-sustainable-energy-europe_en

⁵⁴ European Commission, "Offshore renewable energy", at: https://energy.ec.europa.eu/topics/renewable-energy/offshore-renewable-energy_en

⁵⁵ International Energy Agency, "IEA Atlas of Energy", at: <http://energyatlas.iea.org/#!/tellmap/-1118783123/1>

⁵⁶ EIA, "What is U.S. electricity generation by energy source?", (2022), at: <https://www.eia.gov/tools/faqs/faq.php?id=427&t=3>

⁵⁷ Ibid.

⁵⁸ EIA, "U.S. Economic Assumptions and Energy-Related Carbon Dioxide Emissions", at:

https://www.eia.gov/outlooks/steo/report/renew_co2.php#:~:text=U.S.%20energy%2Drelated%20carbon%20dioxide,growing%20transportation%2Drelated%20petroleum%20consumption

⁵⁹ Government of the US, "The Long-Term Strategy of the United States", (2021), at: <https://www.whitehouse.gov/wp-content/uploads/2021/10/US-Long-Term-Strategy.pdf>

⁶⁰ UNFCCC, "The United States of America Nationally Determined Contribution", (2022), at: <https://unfccc.int/sites/default/files/NDC/2022-06/United%20States%20NDC%20April%202021%20Final.pdf>

⁶¹ The White House, "FACT SHEET: President Biden Sets 2030 Greenhouse Gas Pollution Reduction Target Aimed at Creating Good-Paying Union Jobs and Securing U.S. Leadership on Clean Energy Technologies", (2021), at: <https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/22/fact-sheet-president-biden-sets-2030-greenhouse-gas-pollution-reduction-target-aimed-at-creating-good-paying-union-jobs-and-securing-u-s-leadership-on-clean-energy-technologies/>

⁶² Natural Resources Canada, "Energy Fact Book 2021-2022", at: https://www.nrcan.gc.ca/sites/nrcan/files/energy/energy_fact/2021-2022/PDF/2021_Energy-factbook_december23_EN_accessible.pdf

⁶³ Environment and Climate Change Canada, "Greenhouse Gas Emissions: Canadian Environmental Sustainability Indicators", (2021), at: <https://www.canada.ca/content/dam/eccc/documents/pdf/cesindicators/ghg-emissions/2021/greenhouse-gas-emissions-en.pdf>

⁶⁴ Government of Canada, "Progress towards Canada's greenhouse gas emissions reduction target", (2020), at:

<https://www.canada.ca/content/dam/eccc/documents/pdf/cesindicators/progress-towards-canada-greenhouse-gas-reduction-target/2020/progress-ghg-emissions-reduction-target.pdf>

⁶⁵ Government of Canada, "Powering our future with clean electricity", at:

<https://www.canada.ca/en/services/environment/weather/climatechange/climate-action/powering-future-clean-energy.html>

number of smart energy and grid modernization projects that promote the use of clean technologies, such as wind and solar energy.⁶⁶

Based on the above, Sustainalytics is of the opinion that W&W’s financing of renewable energy projects is expected to contribute to expanding the use of renewables and consequently help reduce energy-related GHG emissions in the UK, EU, US and Canada.

Contribution to SDGs

The Sustainable Development Goals were adopted in September 2015 by the United Nations General Assembly and form part of an agenda for achieving sustainable development by 2030. The instruments issued under the W&W Group Green Bond Framework are expected to help advance the following SDGs and targets:

Use of Proceeds Category	SDG	SDG target
Green Buildings	11. Sustainable Cities and Communities	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
Renewable Energy	7. Affordable and Clean Energy	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix

Conclusion

W&W has developed the W&W Group Green Bond Framework, under which the Group and its subsidiaries intend to issue green German covered bonds under the German Pfandbrief Act, green senior unsecured bonds and green subordinated bonds and use the proceeds to finance or refinance, in whole or in part, existing and future green assets and funds to support the low-carbon transition in Europe, the US and Canada. Sustainalytics considers that the assets and funds financed by the green bond proceeds are expected to provide positive environmental impact.

The W&W Group Green Bond Framework outlines a process by which proceeds will be tracked, allocated and managed, and commitments have been made for reporting on the allocation and impact of the use of proceeds. Furthermore, Sustainalytics believes that the W&W Group Green Bond Framework is aligned with the overall sustainability strategy of the Group and that the green use of proceeds categories will contribute to the advancement of the UN Sustainable Development Goals 7 and 11. Additionally, Sustainalytics is of the opinion that W&W has adequate measures to identify, manage and mitigate environmental and social risks commonly associated with the eligible projects funded by the proceeds.

Based on the above, Sustainalytics is confident that W&W Group is well positioned to issue green bonds and that the W&W Group Green Bond Framework is robust, transparent and in alignment with the four core components of the Green Bond Principles 2021.

⁶⁶ Natural Resources Canada, “Canada Invests Over \$960-Million in Renewable Energy and Grid Modernization Projects”, (2021), at: <https://www.canada.ca/en/natural-resources-canada/news/2021/06/canada-invests-over-960-million-in-renewable-energy-and-grid-modernization-projects.html>

Appendix

Appendix 1: Green Bond / Green Bond Programme - External Review Form

Section 1. Basic Information

Issuer name:	W&W Group
Green Bond ISIN or Issuer Green Bond Framework Name, if applicable:	W&W Group Green Bond Framework
Review provider's name:	Sustainalytics
Completion date of this form:	March 17, 2023
Publication date of review publication: Original publication date [please fill this out for updates]:	

Section 2. Review overview

SCOPE OF REVIEW

The following may be used or adapted, where appropriate, to summarise the scope of the review.

The review assessed the following elements and confirmed their alignment with the GBP:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Use of Proceeds | <input checked="" type="checkbox"/> Process for Project Evaluation and Selection |
| <input checked="" type="checkbox"/> Management of Proceeds | <input checked="" type="checkbox"/> Reporting |

ROLE(S) OF REVIEW PROVIDER

- | | |
|---|--|
| <input checked="" type="checkbox"/> Consultancy (incl. 2 nd opinion) | <input type="checkbox"/> Certification |
| <input type="checkbox"/> Verification | <input type="checkbox"/> Rating |
| <input type="checkbox"/> Other (please specify): | |

Note: In case of multiple reviews / different providers, please provide separate forms for each review.

EXECUTIVE SUMMARY OF REVIEW and/or LINK TO FULL REVIEW (if applicable)

Please refer to Evaluation Summary above.

Section 3. Detailed review

Reviewers are encouraged to provide the information below to the extent possible and use the comment section to explain the scope of their review.

1. USE OF PROCEEDS

Overall comment on section (if applicable):

The eligible categories for the use of proceeds – Green Buildings and Renewable Energy – are aligned with those recognized by the Green Bond Principles. Sustainalytics considers that investments in the eligible categories will contribute to the decarbonization of W&W Group’s own investment portfolio in Europe, the US and Canada and advance the UN Sustainable Development Goals, specifically SDGs 7 and 11.

Use of proceeds categories as per GBP:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Renewable energy | <input type="checkbox"/> Energy efficiency |
| <input type="checkbox"/> Pollution prevention and control | <input type="checkbox"/> Environmentally sustainable management of living natural resources and land use |
| <input type="checkbox"/> Terrestrial and aquatic biodiversity conservation | <input type="checkbox"/> Clean transportation |
| <input type="checkbox"/> Sustainable water and wastewater management | <input type="checkbox"/> Climate change adaptation |
| <input type="checkbox"/> Eco-efficient and/or circular economy adapted products, production technologies and processes | <input checked="" type="checkbox"/> Green buildings |
| <input type="checkbox"/> Unknown at issuance but currently expected to conform with GBP categories, or other eligible areas not yet stated in GBP | <input type="checkbox"/> Other (please specify): |

If applicable please specify the environmental taxonomy, if other than GBP:

2. PROCESS FOR PROJECT EVALUATION AND SELECTION

Overall comment on section (if applicable):

W&W Group’s Green Bond Committee – which comprises representatives from the Risk and Finance Department and the business divisions of Housing and Insurance, and Sustainability – will be responsible for evaluating and selecting eligible green investments in line with the Framework’s eligibility criteria. W&W Group will assess and mitigate environmental and social risks associated with the eligible green assets as part of its property valuation and credit assessment. Sustainalytics considers W&W Group’s risk management system to be adequate and the project selection process to be in line with market practice.

Evaluation and selection

- | | |
|---|---|
| <input checked="" type="checkbox"/> Credentials on the issuer’s environmental sustainability objectives | <input checked="" type="checkbox"/> Documented process to determine that projects fit within defined categories |
|---|---|

- | | |
|--|---|
| <input checked="" type="checkbox"/> Defined and transparent criteria for projects eligible for Green Bond proceeds | <input checked="" type="checkbox"/> Documented process to identify and manage potential ESG risks associated with the project |
| <input type="checkbox"/> Summary criteria for project evaluation and selection publicly available | <input type="checkbox"/> Other (<i>please specify</i>): |

Information on Responsibilities and Accountability

- | | |
|--|--|
| <input checked="" type="checkbox"/> Evaluation / Selection criteria subject to external advice or verification | <input type="checkbox"/> In-house assessment |
| <input type="checkbox"/> Other (<i>please specify</i>): | |

3. MANAGEMENT OF PROCEEDS

Overall comment on section (*if applicable*):

W&W Group's Green Bond Committee oversees the process for managing proceeds through an internal monitoring system. W&W Group intends to allocate the proceeds within 36 months of issuance. Pending full allocation, W&W Group will temporarily invest the proceeds in green, social or sustainable bonds, cash or cash equivalents. This is in line with market practice.

Tracking of proceeds:

- | |
|--|
| <input checked="" type="checkbox"/> Green Bond proceeds segregated or tracked by the issuer in an appropriate manner |
| <input type="checkbox"/> Disclosure of intended types of temporary investment instruments for unallocated proceeds |
| <input type="checkbox"/> Other (<i>please specify</i>): |

Additional disclosure:

- | | |
|--|--|
| <input type="checkbox"/> Allocations to future investments only | <input type="checkbox"/> Allocations to both existing and future investments |
| <input type="checkbox"/> Allocation to individual disbursements | <input type="checkbox"/> Allocation to a portfolio of disbursements |
| <input type="checkbox"/> Disclosure of portfolio balance of unallocated proceeds | <input type="checkbox"/> Other (<i>please specify</i>): |

4. REPORTING

Overall comment on section (*if applicable*):

W&W Group intends to report on the allocation of proceeds and the corresponding impact in its Green Bond Investor Report on an annual basis until full allocation. Allocation reporting will include the total amount of outstanding green bonds issued, the eligible green investments, the geographical distribution of eligible green investments and the distribution of the types of eligible green investments. In addition, W&W Group is committed to reporting on relevant impact metrics. Sustainalytics views W&W Group's allocation and impact reporting as aligned with market practice.

Use of proceeds reporting:

- | | |
|--|--|
| <input type="checkbox"/> Project-by-project | <input checked="" type="checkbox"/> On a project portfolio basis |
| <input type="checkbox"/> Linkage to individual bond(s) | <input type="checkbox"/> Other (please specify): |

Information reported:

- | | |
|---|---|
| <input checked="" type="checkbox"/> Allocated amounts | <input checked="" type="checkbox"/> Green Bond financed share of total investment |
| <input type="checkbox"/> Other (please specify): | |

Frequency:

- | | |
|--|--------------------------------------|
| <input checked="" type="checkbox"/> Annual | <input type="checkbox"/> Semi-annual |
| <input type="checkbox"/> Other (please specify): | |

Impact reporting:

- | | |
|--|--|
| <input type="checkbox"/> Project-by-project | <input checked="" type="checkbox"/> On a project portfolio basis |
| <input type="checkbox"/> Linkage to individual bond(s) | <input type="checkbox"/> Other (please specify): |

Information reported (expected or ex-post):

- | | |
|---|---|
| <input checked="" type="checkbox"/> GHG Emissions / Savings | <input checked="" type="checkbox"/> Energy Savings |
| <input type="checkbox"/> Decrease in water use | <input type="checkbox"/> Other ESG indicators (please specify): |

Frequency

- | | |
|--|--------------------------------------|
| <input checked="" type="checkbox"/> Annual | <input type="checkbox"/> Semi-annual |
| <input type="checkbox"/> Other (please specify): | |

Means of Disclosure

- | | |
|---|---|
| <input type="checkbox"/> Information published in financial report | <input type="checkbox"/> Information published in sustainability report |
| <input checked="" type="checkbox"/> Information published in ad hoc documents | <input type="checkbox"/> Other (please specify): |
| <input type="checkbox"/> Reporting reviewed (if yes, please specify which parts of the reporting are subject to external review): | |

Where appropriate, please specify name and date of publication in the useful links section.

USEFUL LINKS (e.g. to review provider methodology or credentials, to issuer's documentation, etc.)

SPECIFY OTHER EXTERNAL REVIEWS AVAILABLE, IF APPROPRIATE

Type(s) of Review provided:

- | | |
|--|--|
| <input type="checkbox"/> Consultancy (incl. 2 nd opinion) | <input type="checkbox"/> Certification |
| <input type="checkbox"/> Verification / Audit | <input type="checkbox"/> Rating |
| <input type="checkbox"/> Other (<i>please specify</i>): | |

Review provider(s):

Date of publication:

ABOUT ROLE(S) OF INDEPENDENT REVIEW PROVIDERS AS DEFINED BY THE GBP

- i. **Second-Party Opinion:** An institution with environmental expertise, that is independent from the issuer may issue a Second-Party Opinion. The institution should be independent from the issuer's adviser for its Green Bond framework, or appropriate procedures, such as information barriers, will have been implemented within the institution to ensure the independence of the Second-Party Opinion. It normally entails an assessment of the alignment with the Green Bond Principles. In particular, it can include an assessment of the issuer's overarching objectives, strategy, policy and/or processes relating to environmental sustainability, and an evaluation of the environmental features of the type of projects intended for the Use of Proceeds.
- ii. **Verification:** An issuer can obtain independent verification against a designated set of criteria, typically pertaining to business processes and/or environmental criteria. Verification may focus on alignment with internal or external standards or claims made by the issuer. Also, evaluation of the environmentally sustainable features of underlying assets may be termed verification and may reference external criteria. Assurance or attestation regarding an issuer's internal tracking method for use of proceeds, allocation of funds from Green Bond proceeds, statement of environmental impact or alignment of reporting with the GBP, may also be termed verification.
- iii. **Certification:** An issuer can have its Green Bond or associated Green Bond framework or Use of Proceeds certified against a recognised external green standard or label. A standard or label defines specific criteria, and alignment with such criteria is normally tested by qualified, accredited third parties, which may verify consistency with the certification criteria.
- iv. **Green Bond Scoring/Rating:** An issuer can have its Green Bond, associated Green Bond framework or a key feature such as Use of Proceeds evaluated or assessed by qualified third parties, such as specialised research providers or rating agencies, according to an established scoring/rating methodology. The output may include a focus on environmental performance data, the process relative to the GBP, or another benchmark, such as a 2-degree climate change scenario. Such scoring/rating is distinct from credit ratings, which may nonetheless reflect material environmental risks.

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