Second-Party Opinion

Green Bonds – Made by KfW Framework

Second-Party Opinion
Reviewed by:
MORNINGSTAR | SUSTAINALYTICS

Evaluation Summary

KfW intends to use the Green Bonds – Made by KfW Framework to issue financial instruments and fund project-specific loans under its standard domestic loan programmes and other financing in the context of international cooperation and export and project finance. Specifically, the Climate Protection Programme for Corporates intends to promote activities in the EU Taxonomy Climate Delegated Act. KfW estimates that 80% to 90% of the proceeds from such instruments will be allocated to Green Buildings and Renewable Energy (predominantly wind and solar) projects.[1] Other relevant project categories include Clean Transportation and Biodiversity.

Evaluation Date	November 30, 2023[3]
Issuer/Borrower Location	Frankfurt, Germany

The UoPs contribute to the following SDGs:

Use of Proceeds Instruments

Green Bond Principles 2021

Sustainalytics is of the opinion that the Green Bonds – Made by KfW Framework[2] is credible and impactful and aligns with the four core components of the Green Bond Principles 2021 with June 2022 Appendix. The eligible categories for the use of proceeds – i) Renewable Energy; ii) Green Buildings; iii) Clean Transportation; iv) Biodiversity; v) Sustainable Water and Wastewater Management; vi) Pollution Prevention and Control; and vii) Energy Efficiency – are aligned with those recognized by the Green Bond Principles 2021 with June 2022 Appendix. Sustainalytics considers that investments in the eligible categories will contribute to positive environmental impacts and advance the UN Sustainable Development Goals, specifically SDGs 2, 6, 7, 9, 11, 12, 13 and 15.

Alignment with the EU Taxonomy

Sustainalytics has assessed the Green Bonds – Made by KfW Framework for alignment with the technical screening criteria for substantial contribution (SC) to environmental objectives of the EU Taxonomy. Sustainalytics mapped the criteria defined in the Framework's use of proceeds categories to 78 activities in the EU Taxonomy. Sustainalytics is of the opinion that 63 activities align with the applicable SC criteria, 7 partially align and 8 are not aligned. For more details, please refer to Table 2. Sustainalytics is also of the opinion that the activities and projects to be financed under the Framework will be carried out in alignment with the EU Taxonomy's Minimum Safeguards. The Framework activities were not assessed for alignment with the Do No Significant Harm (DNSH) criteria of the EU Taxonomy in this report.

[1] For our detailed assessment of these categories, please refer to: Table 1 (pp. 6-10) for the use of proceeds overview; Appendix 2 for the detailed EU Taxonomy assessment (tables 23-47 for Renewable Energy and tables 77-79 for Green Buildings).
[2] The Green Bonds – Made by KfW Framework herein means the 2024 version of the Framework as defined in the Introduction below.
[3] KfW has informed Sustainalytics that the Framework and its eligibility criteria will be applicable and valid starting from January 2024.

Table of Contents

Scope of Work and Limitations

Sustainalytics' Second-Party Opinion reflects Sustainalytics' independent[4] opinion on the alignment of the Green Bonds – Made by KfW Framework with current market standards. As part of this Second-Party Opinion, Sustainalytics assessed:

- The Framework's alignment with the Green Bond Principles 2021 with June 2022 Appendix, as administered by ICMA;
- The credibility and anticipated positive impacts of the use of proceeds;
- The use of proceeds criteria alignment with the technical screening criteria for substantial contribution to the environmental objectives and minimum safeguards of the EU Taxonomy; 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 1.15, 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 KfW's management team to understand the sustainability impact of its business processes and the core components of the Framework. KfW's representatives have confirmed that:

(1) They understand it is the sole responsibility of KfW to ensure that the information provided is complete, accurate and up to date;

(2) They have provided Sustainalytics with all relevant information;

(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 KfW.

Sustainalytics' Second-Party Opinion assesses alignment of the Framework with current market standards but does not provide any guarantee of alignment nor warrants alignment with any future versions of such standards.

This Second-Party Opinion addresses the anticipated impacts of eligible projects but does not measure their actual impact. Reporting and measuring impact of projects financed under the Framework are the responsibility of the Framework owner. Furthermore, this Second-Party Opinion opines on the potential allocation of proceeds but does not guarantee their realized allocation towards eligible activities.

No information Sustainalytics provides under the present Second-Party Opinion shall be considered as being a statement, representation, warrant or argument in favour or against the truthfulness, reliability or completeness of any facts or statements and related circumstances that KfW may have disclosed to Sustainalytics for the purpose of this Second-Party Opinion.

For inquiries, contact the Sustainable Corporate Solutions project team:

Lea Muething (Amsterdam)
Project Manager
lea.muething@morningstar.com

Siga Wu (Amsterdam)
Project Lead

Zoe Wittmann (Amsterdam)
Project Support

Siina Matihaldi (Amsterdam)
Project Support

Diego Gomez (London)
Client Relations
susfinance.emea@sustainalytics.com
(+44) 20 3880 0193

[4] 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.

Introduction

KfW Group ("KfW" or the "Group") is a German state-owned promotional bank headquartered in Frankfurt, Germany. KfW's mission is based on a legal mandate by the German government to promote and finance sustainable development in Germany and globally.[5] KfW consists of the following business sectors and subsidiaries: i) SME Bank and Private Clients division ; ii) Customized Finance and Public Clients division, which focuses on financing in Germany and Europe; iii) KfW IPEX-Bank GmbH (KfW IPEX-Bank), which provides export and project finance services across Germany, Europe and overseas; iv) KfW Development Bank, which finances development projects worldwide on behalf of the German Federal Government; v) Deutsche Investitions- und Entwicklungsgesellschaft mbH (DEG), which concentrates on financing in developing countries and emerging economies; and vi) KfW Capital GmbH & Co. KG (KfW Capital), which focuses on the supply of venture and growth capital to innovative technologies in Germany. As of 31 December 2022, the Group had 7,984 employees and a total lending volume of EUR 607 billion.[6]

KfW has developed the Green Bonds – Made by KfW Framework published in December 2023 and applicable and valid starting from January 2024 (the "Framework"), under which it intends to issue green bonds, Schuldscheine and debt private placements, and use the proceeds to finance eligible green projects as specified in the Framework. KfW engaged with Sustainalytics to review the Framework and provide a Second-Party Opinion on the Framework's alignment with the Green Bond Principles 2021 with June 2022 Appendix.[7] The Framework has been published in a separate document.[8]

Under use of proceeds instruments, the proceeds will finance, in whole or in part, future projects[9] that are expected to deliver positive environmental impacts. The Framework defines eligibility criteria in seven areas:

1. Renewable Energy
2. Green Buildings
3. Clean Transportation
4. Biodiversity
5. Sustainable Water and Wastewater Management
6. Pollution Prevention and Control
7. Energy Efficiency

[5] KfW, "Promotional mandate and history", at: https://www.kfw.de/About-KfW/F%C3%B6rderauftrag-und-Geschichte/
[6] KfW, "Financial Report 2022", at: https://www.kfw.de/PDF/Download-Center/Finanzpublikationen/PDF-Dokumente-Berichte-etc/3_Finanzberichte/Financial-Report_2022.pdf
[7] The Green Bond Principles are administered by the International Capital Market Association and are available at: https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/
[8] The Framework is available on KfW's website at: https://www.kfw.de/About-KfW/Investor-Relations/KfW-Green-Bonds/KfW-Green-Bonds-Funktionsweise/index.html
[9] KfW confirmed to Sustainalytics that the proceeds will be used to finance projects that are originated in the same calendar year of the bond issuances or the last three months of the previous calendar year of the bond issuances. Please see Section 1 for more details.

Sustainalytics' Opinion

Section 1: Sustainalytics' Opinion on the Green Bonds – Made by KfW Framework

Alignment with Use of Proceeds Principles

Sustainalytics is of the opinion that the Green Bonds – Made by KfW Framework is credible, impactful and aligns with the Green Bond Principles 2021 with June 2022 Appendix. For detailed information, please refer to Appendix 3: Green Bond / Green Bond Programme External Review Form. Sustainalytics highlights the following elements of the Framework:

Use of Proceeds

Overall Assessment of Use of Proceeds

- KfW will finance solely project-specific loans to corporations and organizations under its different loan programmes as follows:
    - KfW will finance its standard domestic loan programmes, with the majority of financing being done in Germany and a smaller share in other European countries.[10] KfW will also finance other individual lending, namely: i) International cooperation financing taking place in developing countries; and ii) project and export financing located outside Germany, including other European countries.
    - One of the standard domestic loan programmes is the Climate Protection Programme for Corporates, which allows for:
        - Financing projects within Germany. However, the borrower itself does not necessarily have to be based in Germany.
        - Financing projects in other EU countries where the borrower is a Germany-based company.
        - Financing projects where the lender is an EU-based subsidiary of a Germany-based corporate or joint venture with a German share of more than 25%.
        - KfW has informed Sustainalytics that the criteria of this programme are equivalent to the respective EU Taxonomy activities and that the applicable Substantial Contribution Criteria must be fulfilled in order to qualify for the programme.
- KfW has informed Sustainalytics that financing within Germany accounted for more than 90% of the eligible green projects KfW has financed in the past. Even though the Framework contemplates development finance as well as export and project finance for the first time, KfW does not expect financing outside of Europe to account for a dominant share of allocation going forward.
- KfW has also informed Sustainalytics that it estimates allocation of proceeds to projects and assets in individual categories as follows:
    - Approximately 80% to 90% in Green Buildings and Renewable Energy[11] through KfW's standard domestic loan programmes; approximately 5% to 10% of all allocation will be funded through the Climate Protection Programme for Corporates, mostly in Renewable Energy.
    - Approximately 5% to 10% in Clean Transportation through KfW's standard domestic loan programmes and other individual lending.
    - Up to 5% in Biodiversity through other individual lending.
- Sustainalytics notes that international financing under the Framework might involve allocation of net proceeds to projects in jurisdictions with an increased risk of negative environmental and social impacts. To help mitigate such risks, KfW has a social and environmental due diligence process for projects and assets, which includes carrying out an environmental and social impact assessment (ESIA) where appropriate. KfW also has in place mechanisms to ensure compliance with environmental and social laws and regulations in the respective country of investment. Furthermore, KfW has communicated that lending in countries that are affected by sanctions or do not comply with the Group's due diligence process are excluded from financing

[10] KfW has informed Sustainalytics that the majority of its overall financing will go towards such standard loan programmes.
[11] KfW has informed Sustainalytics that the majority of such Renewable Energy projects will be solar and onshore wind projects.

and that country-specific risks are considered in the due diligence and risk assessment of projects. Please refer to Section 2 for further information.

- The Framework excludes: i) projects that are dedicated to fossil fuel activities; ii) gas and nuclear activities as defined in the EU Taxonomy Complementary Climate Delegated Act;[12] and iii) activities listed in KfW's Exclusion list.[13]

Table 1: Use of Proceeds overview

- KfW defined eligibility criteria per category as follows:
  - The Climate Protection Programme for Corporates will finance projects and assets in the following categories: i) Renewable Energy; ii) Energy Efficiency; iii) Clean Transportation; iv) Sustainable Water and Wastewater Management; and v) Pollution Prevention and Control.
  - Other standard domestic loan programmes and other individual financing will finance projects and assets in the following categories: i) Renewable Energy; ii) Green Buildings; iii) Clean Transportation; and iv) Biodiversity.
- Table 1 displays the eligibility criteria KfW defined per category as applicable for each of KfW's loan programmes, namely:
  - Climate Protection Programme for Corporates (C)
  - Other standard domestic loan programmes (D)
  - Other individual lending (I)

Use of Proceeds category and Framework activity	Programme	Description and Sustainalytics' Assessment
Renewable Energy		
Construction, operation, expansion, modernization and acquisition of plants generating electricity, heat or cool from the following sources,[14] including cogeneration and combined heat and power:		
Offshore and onshore wind	C/D/I	- Financing of offshore and onshore wind energy generation projects. - This is in line with market practice.
Solar	C/D/I	- Financing of solar photovoltaic and concentrated solar power (CSP) energy generation projects. - KfW has confirmed that for CSP more than 85% of electricity generated from CSP will be sourced from solar energy. - This is in line with market practice.

Hydropower	C/D/I	- Under the Climate Protection Programme for Corporates plants that became operational after 2019 will meet the following criteria:
		  - i) run-of-river facilities without an artificial reservoir;
		  - ii) a power density above 10 W/m^3; or
		  - iii) life cycle emissions below 50 gCO_2e/kWh
		- Plants that became operational before the end of 2019 will meet the following criteria:
		  - run-of-river facilities without an artificial reservoir;
		  - ii) a power density above 5 W/m^3; or
		  - iii) life cycle emissions below 100 gCO_2e/kW.
		- Under KfW's other standard domestic loan programmes and other individual financing, KfW may finance facilities with capacities lower than 20 MW, having informed Sustainalytics that these facilities may not meet the above thresholds. Sustainalytics considers the life cycle emissions intensity threshold to be a crucial environmental consideration for hydropower facilities. Sustainalytics encourages KfW to favour projects with low life cycle emissions intensity and to report where possible on the intensity of such projects.[15] However, KfW has

[12] Commission Delegated Regulation (EU) 2022/1214 of 9 March 2022, at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022R1214

[13] KfW, "Exclusion List of KfW Group", at: https://www.kfw.de/PDF/Download-Center/Konzernthemen/Nachhaltigkeit/Ausschlussliste_EN.pdf#:~:text=Exclusion%20List%20of%20KfW%20Group%20I.%20Exclusions%20In,regulations%20or%20to%20an%20international%20ban%2C%20for%20example

[14] In case of the Corporate Programme (D), this refers to electricity and heat generation for a company's own energy consumption.

[15] Sustainalytics highlights that hydropower facilities have a global median emissions intensity of 23 gCO_2/kWh and that emissions from a hydropower facility depend on various factors, especially the impoundment of the reservoir, which leads to subsequent methane emissions. Sustainalytics further notes that there is no strong correlation between plant capacity and emissions intensity, and emphasizes the importance of regular monitoring and reporting on the same. Please find more information here: https://www.hydropower.org/blog/carbon-emissions-from-hydropower-reservoirs-facts-and-myths

		informed Sustainalytics that it is assessing to align thresholds of the other standard domestic loan programmes and other individual financing with those above for the Climate Protection Programme for Corporates. - KfW has informed Sustainalytics that projects will be subject to an environmental and social risk assessment to control for significant risks, negative impacts and controversies related to the projects financed.
Bioenergy	C/D/I	- This includes solid biomass and biogas. - KfW has confirmed that feedstock used needs to meet the criteria as defined in Article 29 RED II (EU) 2018/2001.[16] - KfW has confirmed that the greenhouse gas emissions savings will be at least 70% for electricity, heating and cooling production from biomass fuels used in installations starting operation from 1 January 2021 until 31 December 2025, and 80% for installations starting operation from 1 January 2026. - Examples of biomass are industrial biomass such as food production and brewery waste or cellulose waste from paper production. KfW has further confirmed that biomass needs to have a sustainability certification,[17] such as Global Bioenergy Partnership (GBEP), FSC or RSPO.[18] - KfW has confirmed that its environmental and social impact assessment covers food security issues regarding non-waste biomass. For further information, please see Section 2. - This is in line with market practice.
Geothermal	C/D/I	- Under the Climate Protection Programme for Corporates, KfW has confirmed that life cycle emissions for such plants will be below 100 gCO_2e/kWh. - Under its financing outside of the corporate programme, KfW has confirmed that financing will take place in Germany but is unable to confirm compliance with the threshold of 100 gCO_2e/kWh. Sustainalytics notes that for geothermal projects a direct emissions threshold is a crucial environmental consideration. Sustainalytics encourages KfW to favour projects with low-carbon intensity and to report where possible on the intensity of such projects.[19] Sustainalytics further notes that KfW has communicated that it is assessing to align financing under its other standard domestic loan programmes and other individual financing with the 100 gCO_2e/kWh threshold.
Ocean energy	C/D/I	- Financing of ocean energy generation projects. - KfW has confirmed the exclusion of fossil fuels apart from restart or continuity purposes. - This is in line with market practice.
Renewable non-fossil gaseous and liquid fuels	C	- Projects with life cycle emissions lower than 100 gCO_2e/kWh. - Sustainalytics considers energy generation using renewable and low-carbon gases to drive positive environmental outcomes. Sustainalytics encourages KfW to disclose the low-carbon gases these projects intend to utilize for energy generation.
Waste heat	C	- Financing heating and cooling using waste heat. - Sustainalytics notes that KfW does not have an exclusion for utilizing waste heat from fossil fuel operations from such financing, which may create risk of fossil fuel lock-in. While noting that these criteria are in line with the EU Taxonomy Climate Delegated Act, Sustainalytics nevertheless encourages KfW to exclude projects that utilize waste heat from carbon-intensive sectors.
Construction and operation of the following infrastructure:		
District heating and cooling	C/D/I	- Under the Climate Protection Programme for Corporates KfW has confirmed it will finance:

[16] EUR-Lex, "Directive (EU) 2018/2001 of the European Parliament and of the Council", (2018), at: https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32018L2001#d1e3697-82-1

[17] KfW, "Paris-compatible Sector Guidelines of KfW Group", at: https://www.kfw.de/nachhaltigkeit/Dokumente/KEa4/ENG-Paris-compatible-sector-guidelines-202301.pdf

[18] Sustainalytics notes that the palm oil industry is associated with a wide range of environmental and social challenges including deforestation, biodiversity loss, land and water pollution and labour rights. Sustainalytics recognizes RSPO as a credible international standard that addresses key environmental and social issues associated with the industry, and notes that there have been issues surrounding the audits and grievances procedure surrounding RSPO.

[19] Sustainalytics highlights that geothermal facilities have global weighted average direct emissions of 122 gCO_2/kWh. Although geothermal facilities in many regions, such as the US and Ireland, have upper bound emissions of 180 gCO_2/kWh, which are still approximately 50% lower than the average from gas-powered (CCGT) facilities. Nevertheless, regular monitoring and reporting remains important for geothermal facilities' emissions, which depend on the type of technology, local climate conditions and geological setting, which affect the release of naturally occurring non-condensable gases (NCGs) from the geothermal fluid during the energy extraction process.

		- The construction and operation of pipelines and associated infrastructure for distributing heating and cooling, where the system meets the definition of efficient district heating and cooling systems laid down in Article 2, point 41, of Directive 2012/27/EU; - The refurbishment of pipelines and associated infrastructure for distributing heating and cooling, where the investment that makes the system meet the definition of efficient district heating or cooling laid down in Article 2, point 41, of Directive 2012/27/EU starts within a three-year period as underpinned by a contractual obligation or equivalent in case of operators in charge of both generation and the network; - Activities consisting in the following: ▪ modification to lower temperature regimes; ▪ advanced pilot systems (control and energy management systems, Internet of Things). - The definition of "efficient district heating and cooling" as per Article 2, point 41, of Directive 2012/27/EU is a system using at least 50% renewable energy, 50% waste heat, 75% cogenerated heat or 50% of a combination of such energy and heat. Sustainalytics notes that cogenerated heat could include energy coming from fossil fuel power plants or bioenergy. While noting that these criteria are in line with the EU Taxonomy Climate Delegated Act, Sustainalytics nevertheless encourages the issuer to prioritize systems that utilize heat or cool from renewable energy or waste heat sources. - Under its other standard domestic loan programmes and other individual financing, KfW will finance pipelines and associated infrastructure for distributing heating and cooling from renewable energy.
Transmission and distribution of electricity	C/D/I	- Under the Climate Protection Programme for Corporates KfW has confirmed it will finance systems in the interconnected European system, i.e. the interconnected control areas of EU Member States, Norway, Switzerland and the United Kingdom, and its subordinated systems. Sustainalytics considers the expansion and maintenance of resilient electricity grids broadly to be supportive of positive environmental outcomes and recognizes KfW's intent to largely align with the EU Taxonomy. Nevertheless, it has become common practice in the market to finance transmission and distribution of assets employed predominantly to transmit or enable the use of renewable energy. Therefore, not requiring that assets align with emissions intensity thresholds or transition trajectories represents a deviation from common practice that may allow for the financing of transmission of carbon-intensive energy. - KfW may further finance activities as per 4.9. Transmission and distribution of electricity point 2 a) to g) as listed in the EU Taxonomy Climate Delegated Act.[20] The installation of these assets would enable energy efficiency savings in transmission and distribution systems. Sustainalytics notes that these criteria are in line with the EU Taxonomy Climate Delegated Act. - KfW also excludes any financing going towards infrastructure dedicated to creating a direct connection or expanding an existing direct connection between a power production plant with carbon intensity higher than 100 gCO_2e/kWh. - Under KfW's other standard domestic loan programmes and other individual financing, this includes low-voltage distribution systems and charging stations for renewable energy, which is line with market practice.

[20] "(a) construction and operation of direct connection, or expansion of existing direct connection, of low carbon electricity generation below the threshold of 100 gCO_2e/kWh measured on a life cycle basis to a substation or network; (b) construction and operation of electric vehicle (EV) charging stations and supporting electric infrastructure for the electrification of transport, subject to compliance with the technical screening criteria under the transport Section of this Annex; (c) installation of transmission and distribution transformers that comply with the Tier 2 (1 July 2021) requirements set out in Annex I to the Commission Regulation (EU) No 548/2014178 and, for medium power transformers with highest voltage for equipment not exceeding 36 kV, with AAA0 level requirements on no-load losses set out in standard EN 50588-1 179. (d) construction/installation and operation of equipment and infrastructure where the main objective is an increase of the generation or use of renewable electricity generation; (e) installation of equipment to increase the controllability and observability of the electricity system and to enable the development and integration of renewable energy sources, including: (i) sensors and measurement tools (including meteorological sensors for forecasting renewable production); (ii) communication and control (including advanced software and control rooms, automation of substations or feeders, and voltage control capabilities to adapt to more decentralised renewable infeed). (f) installation of equipment such as, but not limited to future smart metering systems or those replacing smart metering systems in line with Article 19(6) of Directive (EU) 2019/944 of the European Parliament and of the Council180, which meet the requirements of Article 20 of Directive (EU) 2019/944, able to carry information to users for remotely acting on consumption, including customer data hubs; (g) construction/installation of equipment to allow for exchange of specifically renewable electricity between users." Derived from the EU Taxonomy Climate Delegated Act, (2021), available at: https://ec.europa.eu/finance/docs/level-2-measures/taxonomy-regulation-delegated-act-2021-2800-annex-1_en.pdf

Transmission and distribution of renewable and low-carbon gases	C/D/I	- Transmission and distribution systems for green hydrogen and other low-carbon gases including the conversion and repurposing of existing natural gas networks to 100% hydrogen. - This also includes retrofits of networks for integration of hydrogen and other low-carbon gases where a higher mixture of hydrogen or other low-carbon gases is required. - Sustainalytics considers the transmission and distribution network dedicated to hydrogen and low-carbon gases to enable the delivery and scaling up of alternative low-carbon sources of energy. Sustainalytics encourages KfW to disclose low-carbon gases these projects intend to transport. - Regarding retrofit of gas transmission networks to enable the integration of low-carbon gases in the system and reduction of methane leakage, Sustainalytics recognizes that such investments can contribute to the decarbonization of transmission and distribution networks, when accompanied by a strategy to gradually increase the blend of low-carbon gases and eventually transition to only distributing low-carbon gases. Sustainalytics notes that KfW does not have criteria for borrowers to have targets for such lending and investments. - Sustainalytics notes that these expenditures are in line with the EU Taxonomy Climate Delegated Act.

Energy storage	C/D/I	- Under its Climate Protection Programme for Corporates, KfW will finance thermal energy storage, including underground thermal energy storage (UTES) or aquifer thermal energy storage (ATES) as well as electricity storage.
		- Under its other standard domestic loan programmes and other individual financing, KfW may finance energy storage solutions for electricity and thermal energy, including the following:
		  - i) short- and long-term storage of electricity;
		  - ii) pumped storage power stations in closed loop;
		  - iii) hydrogen storage facilities;
		  - iv) conversion of existing underground gas storage facilities into storage facilities dedicated to hydrogen storage;
		  - v) power-to-heat;
		  - iv) power-to-liquid;
		  - vi) power-to-X connected to hydrogen;
		  - vii) underground thermal energy storage;[21]
		  - viii) aquifer thermal energy storage.[22]
		- Regarding pumped hydropower, for the Climate Protection Programme for Corporates, other standard domestic loan programmes and other individual financing, KfW has informed Sustainalytics that projects will be subject to an environmental and social risk assessment to control for significant risks, negative impacts and controversies related to the projects financed.
		- Sustainalytics recognizes the critical need to expand utility-scale storage systems to enable the expansion of renewable energy, while also noting that the environmental benefit of storage systems depends on the carbon intensity of the grid to which they are connected, and that deploying such assets to carbon-intensive grids or associated systems may result in increased emissions. Sustainalytics encourages the issuer to prioritize instalments of storage systems on grids that follow a credible decarbonization pathway[23] and to report on the positive impact of such instalments, where feasible.
		- This is in line with market practice.

Heat pumps	C	- Investment in installation and operation of electric heat pumps, which Sustainalytics considers to be an energy-efficient heat transfer alternative to conventional systems. Although acknowledging that KfW has limited operational control over such heat pumps, Sustainalytics recommends KfW to exclude financing of heat pumps with high-GWP refrigerants, and prioritize lending to borrowers that have robust refrigerant leak control, detection and monitoring, while ensuring recovery, reclamation, recycling or destruction of refrigerants at end of life. - This is in line with market practice.

[21] Laloui, L. (2022), Underground Thermal Energy Storage, Encyclopedia of Energy Storage, at: https://www.sciencedirect.com/topics/engineering/underground-thermal-energy-storage

[22] Wageningen University, "Aquifer Thermal Energy Storage", https://www.wur.nl/en/show/aquifer-thermal-energy-storage.htm

[23] Sustainalytics considers a transmission and distribution grid to be aligned with a credible decarbonization pathway if it meets either of the following criteria: i) more than 67% of newly enabled generation installed capacity in the system is below the emissions threshold of 100 gCO_2e/kWh, measured on a life cycle basis in accordance with electricity generation criteria, over a rolling five-year period; or ii) the average system grid emissions factor is below the threshold of 100 gCO_2e/kWh, over a rolling five-year period.

Manufacture of:		
Renewable energy technologies	C	- Renewable energy supply chains for onshore solar, wind, hydropower, geothermal or facilities that are wholly dedicated to components of renewables. - This is in line with market practice.
Biogas and biofuels for use in transport and of bioliquids	C	- KfW has confirmed that feedstock used needs to meet the criteria as defined in Article 29 RED II (EU) 2018/2001.[24] - KfW has confirmed that the greenhouse gas emissions savings will be at least 70% for electricity, heating and cooling production from biomass fuels used in installations starting operation from 1 January 2021 until 31 December 2025, and 80% for installations starting operation from 1 January 2026. - Examples of biomass include industrial biomass such as food production and brewery waste or cellulose waste from paper production. KfW has further confirmed that biomass needs to have a sustainability certification, such as Global Bioenergy Partnership (GBEP), FSC or RSPO.[25] - KfW has confirmed that its environmental and social impact assessment covers food security issues regarding non-waste biomass. For further information, please see Section 2. - This is in line with market practice.
Exclusions		
Fossil fuels	C/D/I	- Plants for the generation of power or heat using fossil fuels. - Plants that are directly linked to power or heat generated on the basis of fossil fuels.
Nuclear power	C/D/I	- Equipment for the use of nuclear power.
Green Buildings		
Acquisition and construction of residential, commercial and municipal buildings in Germany that meet one of the following criteria:		

QNG certification and Effizienzhaus 40 standard	D	- New buildings in accordance with the following criteria:
		  - life cycle emissions below 24 $kgCO_2e/m^2a$ or have obtained Qualitätssiegel Nachhaltiges Gebäude (QNG) certification;[26]
		  and
		  - comply with Effizienzhaus 40 standard.[27]
		- Sustainalytics highlights that meeting Effizienzhaus 40 corresponds to a 60% improvement in primary energy demand in relation to Germany's NZEB requirements (outlined in the German Building Energy Act), while the EU Taxonomy prescribes a 10% improvement in PED in relation to local NZEB requirements.
		- Sustainalytics recognizes the importance of reducing embodied carbon in buildings and highlights KfW's ambition to address this by reducing embodied carbon emissions in construction to achieve a carbon intensity of 24 $kgCO_2e/m^2a$.[28]
		- This is in line with market practice.

Renovation of existing residential, commercial and municipal buildings in Germany that meet the following criteria:		
Achieve Effizienzhaus/ Effizienzgebäude standard of at least 85 post renovation	D	- Renovation of buildings that will achieve the standard Effizienzhaus/Effizienzgebäude 85 or better upon completion of the renovation. - KfW has further confirmed that renovations will have achieved an improvement of 30% in energy efficiency post renovation. - KfW has further informed Sustainalytics that it plans to finance the whole building costs as opposed to solely renovation costs. Sustainalytics notes that this is in line with market practice because of the commitment of achieving at least the Effizienzhaus/Effizienzgebäude 85 standard.[29]
Professional services related to energy performance of buildings:		

[24] EUR-Lex, "Directive (EU) 2018/2001 of the European Parliament and of the Council", (2018), at: https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32018L2001#d1e3697-82-1

[25] Sustainalytics notes that the palm oil industry is associated with a wide range of environmental and social challenges including deforestation, biodiversity loss, land and water pollution and labour rights. Sustainalytics recognizes RSPO as a credible international standard that addresses key environmental and social issues associated with the industry, and notes that there have been issues surrounding the audits and grievances procedure surrounding RSPO.

[26] QNG: https://www.nachhaltigesbauen.de/austausch/beg/

[27] Effizienzhaus: https://www.kfw.de/inlandsfoerderung/Privatpersonen/Neubau/Das-Effizienzhaus/.

[28] Sustainalytics notes that the life cycle emissions intensity of buildings fall between 50 - 230 $kgCO_2e/m^2a$, differentiating between residential and commercial buildings: https://publications.jrc.ec.europa.eu/repository/bitstream/JRC110085/deliverable-2-report_d2_online.pdf

[29] This is the equivalent to NZEB -15% PED.

Energy efficiency expertise services	D	- Costs related to hiring energy efficiency experts from the Federal Energy Efficiency Expert List for Federal Funding Programmes,[30] who verify and confirm compliance with requirements, such as the energy standard Effizienzhaus 40 and GHG emissions requirements for the building life cycle for new construction of non-residential buildings. - Sustainalytics notes that these costs are exclusively dedicated to support the activities under the Green Building category and this will always be complementary to financing of any buildings as per above criteria. - This is in line with market practice.
Exclusions		
Fossil fuels or biomass for heating	D	- KfW has confirmed that the use of fossil fuels or biomass is excluded from financing.
Clean Transportation		
Acquisition of the following passenger and light commercial vehicles, trains and vessels:		
Urban and suburban transport	C/D/I	- The following zero CO_2 emissions transport types will be financed: i) light rail vehicles; ii) metros; iii) trams; and iii) buses. - This is in line with market practice.
Rail – trains and coaches	C/D/I	- Financing of trains and passenger coaches, including trains with zero tailpipe emissions and bi-mode trains with zero tailpipe emissions when operated on a track with necessary infrastructure, and use a conventional engine where such infrastructure is not available. - KfW intends to also finance bi-mode trains, which may still use fossil fuels but have the potential to become fully electrified in the future. Sustainalytics considers trains with a carbon intensity below 25 gCO_2/tkm for freight and 50 gCO_2/pkm for passenger rail to drive positive environmental outcomes, and encourages KfW to report on carbon emissions intensity of the financed bi-mode vehicles. - Sustainalytics considers the criteria to be in line with the EU Taxonomy Climate Delegated Act.
Passenger and light commercial vehicles	C/D/I	- Zero emissions passenger and light commercial vehicles. - This is in line with market practice.
Active mobility	C/D/I	- Personal mobility devices powered by zero emissions motors, a mix of zero emissions motors and physical activity, such as e-bicycles. - This is in line with market practice.

Water – vessels	C/D/I	- Financing inland water passenger transport meeting the following criteria:
		  - the vessels have zero direct (tailpipe) CO_2 emissions;
		  - until 31 December 2025, hybrid and dual-fuel vessels that derive at least 50% of their energy from zero direct (tailpipe) CO_2 emissions fuels or plug-in power for their normal operation.
		  - where technologically and economically not feasible to comply with the zero direct (tailpipe) CO_2 emissions criterion, until 31 December 2025, the vessels have an attained energy efficiency design index (EEDI) value 10% below the EEDI requirements applicable on 1 April 2022, if the vessels are able to run on zero direct (tailpipe) emission fuels or on fuels from renewable sources.
		- Sustainalytics recognizes that financing hybrid and dual vessels contribute to the decarbonization of the shipping sector by replacing traditional fossil fuel vessels. While noting that these criteria are in line with the EU Taxonomy Climate Delegated Act, Sustainalytics encourages the KfW to report on the emissions intensity, type of fuels used by such vessels, and prioritize vessels that have the potential to run on low-carbon fuels in the long term.

Manufacture of:		
Acquisition and manufacture of the following vehicles, trains and vessels for freight for which KfW has confirmed that transport of fossil fuels will be excluded:		
Rail	C/D/I	- Financing of trains and passenger coaches, including trains with zero tailpipe emissions and bi-mode trains with zero tailpipe emissions when operated on a track with necessary infrastructure, and use a conventional engine where such infrastructure is not available. - KfW intends to also finance bi-mode trains, which may still use fossil fuels but have the potential to become fully electrified in the future. Sustainalytics considers trains with a carbon intensity below 25 gCO_2/tkm to drive positive

[30] https://www.energie-effizienz-experten.de/

		environmental outcomes, and encourages KfW to report on carbon emissions intensity of the financed bi-mode vehicles. - Sustainalytics considers the criteria to be in line with the EU Taxonomy Climate Delegated Act.
Road	C/D/I	- Hydrogen-powered trucks and e-trucks as well as where technologically and economically not feasible to comply with the criterion for zero-emission heavy-duty vehicles, comply with the "low-emission heavy-duty vehicles" as defined in Article 3, point (12).[31] - Sustainalytics notes that as per EU Commission Implementing Decision,[32] depending on the type of vehicle, the range of emissions intensities could be large. While noting these criteria are in line with the EU Taxonomy Delegated Act, Sustainalytics encourages the issuer to prioritize financing vehicles with emissions intensities below 25 gCO_2/tkm and to report on the emissions intensities of the financed vehicles, where feasible.

Water	C/D/I	- Freight water transport, including inland freight vessels, coastal freight water transport and vessels for port operations with zero direct (tailpipe) CO_2 emissions.
		- KfW may also finance ships meeting one of the following criteria:
		  - until 31 December 2025, hybrid and dual-fuel vessels that derive at least 25% of their energy from zero direct (tailpipe) CO_2 emission fuels or plug-in power for their normal operations at sea or in ports;
		  - until 31 December 2025, and only where it can be proved that the vessels are used exclusively for operating coastal and short sea services designed to enable modal shift of freight currently transported by land to sea, the vessels have direct (tailpipe) CO_2 emissions, calculated using the International Maritime Organization (IMO) Energy Efficiency Design Index (EEDI), 50% lower[33] than the average reference CO_2 emissions value defined for heavy-duty vehicles (vehicle sub group 5- LH) in accordance with Article 11 of Regulation 2019/1242;
		  - until 31 December 2025, the vessels have direct (tailpipe) emissions of CO_2 per tonne-kilometre (gCO_2/tkm), calculated (or estimated in case of new vessels) using the Energy Efficiency Operational Indicator, 50% lower[34] than the average reference value for emissions of CO_2 defined for heavy-duty vehicles (vehicle subgroup 5- LH) in accordance with Article 11 of Regulation 2019/1242;
		  - until 31 December 2025, the vessels have an attained Energy Efficiency Design Index (EEDI) value 10% below the EEDI requirements applicable on 1 April 2022 if the vessels are able to run on zero direct (tailpipe) CO_2 emission fuels or on fuels from renewable sources.
		- Sustainalytics recognizes that financing such vessels contribute to the decarbonization of the shipping sector by replacing traditional fossil fuel vessels. While noting that these criteria are in line with the EU Taxonomy Climate Delegated Act, Sustainalytics encourages KfW to report on the emissions intensity, type of fuels used by such vessels, and prioritize vessels that have the potential to run on low-carbon fuels in the long term.

Retrofit and upgrade of the following:		
Vessels	C/D/I	- Retrofits that reduce fuel consumption of the vessel by at least 10% expressed in grams of fuel per deadweight tonnes per nautical mile, as demonstrated by computational fluid dynamics (CFD), tank tests or similar engineering calculations until 31 December 2025. - Sustainalytics notes that such investments may reduce fuel consumption of conventional sea vessels, fully running on conventional fossil-based fuels. While noting that these criteria are in line with the EU Taxonomy Climate Delegated Act, Sustainalytics encourages the KfW to prioritize vessels that have the potential to run on low-carbon fuels in the long term.
Construction of infrastructure for:		

[31] "Low-emission heavy-duty vehicle" means a heavy-duty vehicle, other than a zero-emission heavy-duty vehicle, with specific CO_2 emissions of less than half of the reference CO_2 emissions of all vehicles in the vehicle sub-group to which the heavy-duty vehicle belongs.
[32] EUR-Lex, "Commission implementing decision (EU) 2021/781 of 10 May 2021", at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32021D0781&rid=1
[33] Sustainalytics notes that the carbon intensity threshold is 28.30 gCO_2/tkm. The reference value was extracted on November 3, 2023 for 5-LH vehicles as per Article 11 of Regulation 2019/1242: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32021D0781&rid=1
[34] Sustainalytics notes that the carbon intensity threshold is 28.30 gCO_2/tkm. The reference value was extracted on November 3, 2023 for 5-LH vehicles as per Article 11 of Regulation 2019/1242: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32021D0781&rid=1

Low-carbon road transport and public transport	C/D/I	- Infrastructure including the following:
		  - installation of bus stations;
		  - infrastructure for unloading goods onto an electric freight train;
		  - electric vehicle charging stations;
		  - hydrogen fuelling stations
		- KfW has confirmed that road infrastructure and bridges unless directly linked to public transport (e.g. bus lane), fossil fuel filing stations, parking facilities unless directly linked to public transport (park & ride) and other assets that prolong the life or facilitate the use of fossil fuel-powered transport are excluded from financing.
		- This is in line with market practice.

Rail transport	C/D/I	- Infrastructure for rail transport meeting one of the following criteria:
		  - i) Infrastructure for electrified trains; ii) rail lines and associated subsystems that have plans to electrify in the next 10 years; and iii) trackside infrastructure and associated subsystems that are not part of the TEN-T network, until 2030. Sustainalytics notes that 60% of European rail infrastructure is electrified, and the average emissions from rail transport in the EU are 33 gCO_2/pkm.[35]
		  - Infrastructure and installations dedicated to transhipping freight between the modes;
		  - Infrastructure and installations dedicated to the transfer of passengers from rail to rail or from other modes to rail.
		- Sustainalytics recognizes KfW's intention of promoting the modal shift of transportation to rail transport, which has the potential to reduce emissions in up to 75% compared to other forms of road transport. KfW has further confirmed that any infrastructure dedicated to the fossil fuel storage, transportation, will be excluded.
		- Sustainalytics considers this criterion to be consistent with the EU Taxonomy Climate Delegated Act.

Active mobility	C/D/I	- Infrastructure for personal mobility, including pavements, bike lanes, pedestrian zones and electrical charging refuelling installations for personal mobility devices. - This is in line with market practice.

Water transport	C/D/I	- Infrastructure for low-carbon water transport meeting the following criteria:
		  - i) infrastructure that is dedicated to the operation of vessels with zero direct (tailpipe) CO_2 emissions;
		  - ii) the infrastructure and installations that are dedicated to transhipping freight between modes: terminal infrastructure and superstructures for loading, unloading and transhipment of goods, such as from a truck to a vessel with zero emissions.
		- KfW has confirmed that the infrastructure is not dedicated to the transport or storage of fossil fuels.
		- This is in line with market practice.

Airport	C/D/I	- Financing infrastructure for low-carbon airports meeting the following criteria:
		  - the infrastructure is dedicated to the operation of aircraft with zero tailpipe CO_2 emissions, including electricity charging and hydrogen refuelling;
		  - the infrastructure is dedicated to the provision of fixed electrical ground power and preconditioned air to stationary aircrafts;
		  - the infrastructure is dedicated to the zero direct emissions performance of the airport's own operations: electric charging points, electricity grid connection upgrades, hydrogen refuelling stations.
		- The infrastructure is not dedicated to the transport or storage of fossil fuels.
		- Sustainalytics considers this to be in line with the EU Taxonomy Climate Delegated Act.

Data-driven solutions:		
Traffic data management	D/I	- Financing of ICT solutions for collection, transmission, storage, modelling and use of mobility data, including the following: i) intelligent collection, analysis and management of traffic flows; ii) integration of the Internet of Things in transport; iii) development of smart parking management systems. - KfW has confirmed to Sustainalytics the exclusion of ICT solutions that: i) increase the use of private motorized transport; ii) discriminate against active mobility and public transport; and iii) lead to an increase in CO_2 emissions. - This is in line with market practice.

[35] Transport & Environment, "Rail", at: https://www.transportenvironment.org/challenges/rail/

Digital services for public transport and active mobility	D/I	- Investments in digital services that improve the connectivity in public transport and active mobility. - Third-party service costs related to planning, implementation, monitoring and the preparation of expert opinions and evidence of compliance. - This is in line with market practice.
Exclusions		
Hybrid vehicles	C/D/I	- KfW has communicated to Sustainalytics that hybrid vehicles will be excluded from financing, except for hybrid vessels and trains, which will follow the criteria laid out above.
Transport of fossil fuels	C/D/I	- Systems and infrastructure dedicated to the transport of fossil fuels for freight financing.
Biodiversity		
Protection, maintenance, restoration, conservation and enhancement of biodiversity and ecosystems as well as sustainably manage living natural resources in the form of the following projects:		
Restoration and protection of terrestrial, marine and other aquatic ecosystems	I	- Financing of protection and restoration of forests and forests adjacent ecosystems and reforestation activities. - KfW has confirmed the following: i) the tree species are well adapted to site conditions; ii) the projects have a sustainable forest management plan in place; iii) projects aim to obtain FSC[36] or PEFC[37] certification if possible. - This is in line with market practice.
Protection of soil biodiversity	I	- Financing of activities to protect and improve soil health and biodiversity, including soil rehabilitation. - KfW has confirmed to Sustainalytics that soil remediation activities are not related to contamination or negative environmental externalities from the lender's own activities. - This is in line with market practice.
Agroforestry	I	- Financing of low-tillage agriculture techniques, switch to biofertilizers, restoration of existing farmland and mixing agricultural crops and tree species. - KfW has confirmed the following: i) the projects have sustainable forest management plan in place; ii) activities related to livestock management will be excluded from financing; iii) projects may obtain a relevant certification, such as organic, Fair Trade, FSC or PEFC, when feasible. - This is in line with market practice.
Sustainable forest management meeting one of the following criteria:		
Monitoring and prevention of deforestation	I	- Financing includes forest inventory, remote sensing data and satellite images and will take place in developing countries. - Sustainalytics notes that illegal deforestation can lead to significant CO_2 emissions and destruction of highly diverse ecological areas. Considering ecosystems and the need to ensure their protection across multiple countries, especially developing countries, Sustainalytics views this as in line with market practice and encourages the issuer to report on the measures and results achieved towards contribution of decreasing illegal deforestation.
Climate adaptation in arboreal ecosystems	I	- Financing includes natural forest regeneration and planting of mixed species that better adapt to climate change and its effects. - KfW has confirmed that there will be a sustainable forest management in place and that species are well adapted to site conditions. - This is in line with market practice.
Reforestation	I	- KfW has confirmed that there will be a sustainable forest management in place and that species are well adapted to site conditions. - This is in line with market practice.
Fire protection	I	- Fire protection measures when there is an increased risk of forest fires, which are complementary to projects outlined above in order to reduce risks of fire that may lead to harming ecosystems, habitat loss and adverse impacts on local populations. Examples include financing of firefighting equipment and fire breaks. - This is in line with market practice.
Enabling one of the above activities through:		
Education of local population	I	- Financing related to the education of the population complementing the aforementioned measures (reforestation, biodiversity conservation, fire protection, etc.). This includes "environmental education" for the local population,

[36] FSC: https://fsc.org/en
[37] PEFC: https://www.pefc.org/

		consulting for companies depending on the ecosystem and professional training for staff. - Sustainalytics considers such financing to be credible and impactful.
Sustainable water and wastewater management		
Construction, extension, operation and renewal of:		
Water collection, treatment and supply systems	C	- Measures to reduce GHG emissions in the provision of drinking water, including drinking water treatment and water recycling systems. - This is in line with market practice.
Wastewater collection and treatment systems	C	- Financing measures to reduce GHG emissions in wastewater treatment including water recycling systems, sewer network and treatment. - Sustainalytics notes that KfW has confirmed that treatment of wastewater from fossil fuel operations is excluded. - This is in line with market practice.
Pollution Prevention and Control		
Construction[38] and operation of facilities for:		

Anaerobic digestion of bio-waste	C	- Facilities for anaerobic digestion of bio-waste meeting the following criteria:
		  - i) a monitoring and contingency plan is in place in order to minimize methane leakage at the facility;
		  - ii) the produced biogas is used directly for the generation of electricity or heat, or upgraded to bio-methane for injection in the natural gas grid, or used as vehicle fuel or as feedstock in chemical industry;
		  - iii) The bio-waste that is used for anaerobic digestion is source segregated and collected separately;
		  - iv) The produced digestate is used as fertilizer or soil improver, either directly or after composting or any other treatment.
		  - In the dedicated bio-waste treatment plants, the annual average share of food and feed crops used as input feedstock, measured in weight, is at most 10% of the input feedstock.
		- Examples of biomass are industrial biomass such as from food production, brewery waste or cellulose waste from paper production. KfW has further confirmed that biomass needs to have a sustainability certification,[39] such as Global Bioenergy Partnership (GBEP), FSC or RSPO.[40]

Anaerobic digestion of sewage sludge	C	- Financing the construction and operation of facilities for anaerobic digestion of sewage sludge where:
		  - i) a monitoring and contingency plan is in place in order to minimize methane leakage at the facility;
		  - ii) the produced biogas is used directly for the generation of electricity or heat, or upgraded to bio-methane for injection in the natural gas grid, used as vehicle fuel or as feedstock in the chemical industry.
		- KfW has confirmed that sewage sludge from fossil fuel operations will be excluded from financing.
		- This is in line with market practice.

Composting of bio-waste	C	- Composting of biowaste from: i) green waste from gardening; or ii) municipal waste where the waste is segregated at source. - The compost produced is used as fertilizer or soil improver. - This is in line with market practice.
Material recovery from non-hazardous waste	C	- Facilities for material recovery from non-hazardous waste where the activity converts at least 50%, in terms of weight, of the processed separately collected non-hazardous waste into secondary raw materials that are suitable for the substitution of virgin materials in production processes. - This is in line with market practice.
Landfill gas capture and utilization	C	- Landfill gas capture and usage from closed or decommissioned landfills with a capture rate of 100%. - This is in line with market practice.
Transportation of:		

[38] In the case of landfill gas capture and utilization it is rather installation than construction.
[39] KfW, "Paris-compatible Sector Guidelines of KfW Group", at: https://www.kfw.de/nachhaltigkeit/Dokumente/KEa4/ENG-Paris-compatible-sector-guidelines-202301.pdf
[40] Sustainalytics notes that the palm oil industry is associated with a wide range of environmental and social challenges including deforestation, biodiversity loss, land and water pollution and labour rights. Sustainalytics recognizes RSPO as a credible international standard that addresses key environmental and social issues associated with the industry, and notes that there have been issues surrounding the audits and grievances procedure surrounding RSPO.

CO_2 including storage	C	- Financing dedicated to the transport of captured CO_2 where:
		  - i) the CO_2 transported from the installation where it is captured to the injection point does not lead to CO_2 leakages above 0.5% of the mass of CO_2 transported;
		  - ii) the CO_2 is delivered to a permanent CO_2 storage site that meets the criteria for underground geological storage of CO_2 or to other transport modalities that lead to permanent CO_2 storage sites that meet those criteria; and
		  - iii) appropriate leak detection systems are applied, and a monitoring plan is in place, with the report verified by an independent third party.
		  - iv) the activity may include the installation of assets that increase the flexibility and improve the management of an existing network.
		- Financing dedicated to the storage of captured CO_2 where:
		  - Characterization and assessment of the potential storage complex and surrounding area, or exploration within the meaning of Article 3, point (8), of Directive 2009/31/EC of the European Parliament and of the Council is carried out in order to establish whether the geological formation is suitable for use as a CO_2 storage site.
		  - For operation of underground geological CO_2 storage sites, including closure and post-closure obligations:
		  ▪ appropriate leakage detection systems are implemented to prevent release during operation;
		  ▪ a monitoring plan of the injection facilities, the storage complex, and, where appropriate, the surrounding environment is in place, with the regular reports checked by the competent national authority.
		  - For the exploration and operation of storage sites within the EU, the activity complies with Directive 2009/31/EC. For the exploration and operation of storage sites in third countries, the activity complies with ISO 27914:2017225 for geological storage of CO_2.
		- KfW has confirmed the exclusion of the transportation and storage of CO_2 from fossil fuel extraction, production and refining activities.
		- Sustainalytics considers carbon, capture and storage (CCS) to have the potential to enable emissions reduction in hard-to-abate industries, and considers it a technology that could support the decarbonization of these industries until alternative low-carbon technologies and solutions are developed. Sustainalytics notes that KfW's criteria are in line with the SC of the EU Taxonomy Climate Delegated Act for the transport of CO_2 and underground permanent geological storage of CO_2.

Non-hazardous waste including collection	C	- Collection and transport of non-hazardous waste where all separately collected and transported non-hazardous waste that is segregated at source is intended for preparation for reuse or recycling operations.
		- KfW has confirmed that this includes the acquisition of collection vehicles and that such vehicles will meet the following criteria:
		  - i) vehicle of category N1 with zero direct emissions;
		  - ii) heavy trucks of category N2 with a technically permissible maximum laden mass lower than 7.5 tonnes that have direct CO_2 emissions below 1 gCO_2/kWh or 1 gCO_2/km;
		  - iii) heavy trucks of category N2 with a technically permissible maximum laden mass exceeding 7.5 tonnes that have direct CO_2 emissions below 1 gCO_2/kWh or 1 gCO_2/km, or have emissions less than 50% of the reference CO_2 emissions of all vehicles in the corresponding vehicle sub-group as defined in the Commission Implementing Decision (EU) 2021/781.[41]
		- Sustainalytics considers this to be consistent with the EU Taxonomy Climate Delegated Act and encourages KfW to prioritize financing low-carbon waste collection vehicles.

Manufacture of low-carbon technologies and products:		
Hydrogen and equipment for the production and use of hydrogen	C	- This includes: i) equipment for electrolysis;[42] and ii) equipment for the use of hydrogen, such as fuel cells. - KfW has informed Sustainalytics that equipment for steam reformation is excluded from financing. - Manufacturing of hydrogen is limited to production via electrolysis powered by renewable energy. KfW has confirmed that blue hydrogen is excluded from financing.

[41] Commission Implementing Decision (EU) 2021/781, at: https://eur-lex.europa.eu/eli/dec_impl/2021/781
[42] KfW will not finance or is not involved in the hydrogen production process.

		- This is in line with market practice.
Batteries	C	- Manufacture of rechargeable batteries, which includes: i) electrochemical battery storage; ii) EV batteries; battery packs and accumulators including key components such as housings and electronic components. - KfW has informed Sustainalytics that these may be used by any industry for power storage. - Sustainalytics recognizes the critical need to expand utility-scale storage systems to enable the expansion of renewable energy, while also noting that the environmental benefits of storage systems depend on the carbon intensity of the grid to which they are connected, and that deploying such assets to carbon-intensive grids or associated systems may result in increased emissions.
Manufacture of materials with the goal to decarbonise energy-intensive production processes:		

Cement	C	- Manufacturing of cement meeting the following criteria:
		  - i) grey cement clinker where the specific GHG emissions are lower than 0,722 tCO_2e per tonne of grey cement clinker;
		  - ii) cement from grey clinker or alternative hydraulic binder, where the specific GHG emissions from the clinker and cement or alternative binder production are lower than 0,469 tCO_2e per tonne of cement or alternative binder manufactured.
		- With regard to assurance of the credible transition of these activities, Sustainalytics encourages KfW to extend financing to borrowers with a credible transition strategy following decarbonization pathways that promote sectoral emissions reductions in line with corresponding transition standards in those sectors.

Aluminium	C	- Manufacturing primary aluminium meeting all of the following criteria:
		  - i) GHG emissions below 1,484 tCO_2e per tonne of aluminium manufactured;
		  - ii) average carbon intensity of indirect GHG emissions below 100 gCO_2e/kWh;
		  - iii) electricity consumption of the manufacturing process below 15.5 MWh/t aluminium.
		- Manufacturing of secondary aluminium.
		- With regard to assurance of the credible transition of these activities, Sustainalytics encourages KfW to extend financing to borrowers with a credible transition strategy following decarbonization pathways that promote sectoral emissions reductions in line with corresponding transition standards in those sectors.

Iron and steel	C	- Manufacturing of iron and steel meeting the following criteria:
		  - i) iron and steel whose GHG emissions (reduced by the amount of emissions assigned to the production of waste gases as per 10.1.5(a) of Annex VII to Regulation EU 2019/331) do not exceed the values applied to the different manufacturing process steps in the EU Taxonomy Climate Delegated Act.[43]
		  - ii) steel in electric arc furnaces (EAFs) producing EAF carbon steel or EAF high alloy steel, as defined in the Commission Delegated Regulation (EU) 2019/331 and where the steel scrap input relative to product output is not lower than:
		  ▪ 70% for the production of high alloy steel;
		  ▪ 90% for the production of carbon steel.
		  - iii) Where the CO_2 that would otherwise be emitted from the manufacturing process is captured for the purpose of underground storage, the CO_2 is transported and stored underground, in accordance with the technical screening criteria set out in Sections 5.11 and 5.12 of the Annex.
		- KfW has its own transition guidelines and transition strategy in place for the iron and steel sector, which were developed to conform to the Paris Agreement 1.5°C climate goal. KfW's transition guidelines include minimum requirements for compliance with the decarbonization pathways mapped out in Paris-aligned climate scenarios. With the support of PwC and the Fraunhofer Institute for Systems and Innovation Research ISI, KfW Group derived these minimum requirements from scientifically recognized climate scenarios. The Sustainable Development Scenario of the International Energy Agency, which corresponds to limiting global temperature rise to 1.65°C, was used to derive the sector guidelines. Moreover, the sector guidelines are used for implementation of Germany's climate policy.

[43] hot metal = 1,331 tCO_2e/t product; sintered ore = 0,163 tCO_2e/t product; coke (excluding lignite coke) = 0,144 tCO_2e/t product; iron casting = 0,299 tCO_2e/t product; electric Arc Furnace (EAF) high alloy steel = 0,266(116) tCO_2e/t product; electric Arc Furnace (EAF) carbon steel = 0,209(117) tCO_2e/t product.

Carbon black	C	- Manufacturing of carbon black where the GHG emissions related to the production processes are below 1,141 tCO_2e per tonne of product. - With regard to assurance of the credible transition of these activities, Sustainalytics encourages KfW to extend financing to borrowers with a credible transition strategy following decarbonization pathways that promote sectoral emissions reductions in line with corresponding transition standards in those sectors.
Soda Ash	C	- Manufacturing of soda ash where GHG emissions related to the production processes are below 0.789 tCO_2e per tonne of product. - With regard to assurance of the credible transition of these activities, Sustainalytics encourages KfW to extend financing to borrowers with a credible transition strategy and follow decarbonization pathways that promote sectoral emissions reductions in line with corresponding transition standards in those sectors.

Chlorine	C	- Investment in the manufacture of chlorine meeting the following thresholds:
		  - Electricity consumption for electrolysis and chlorine treatment is up to 2.45 MWh per tonne of chlorine.
		  - Average life cycle GHG emissions of the electricity used for chlorine production is up to 100 gCO_2e/kWh.
		  - Life cycle GHG emissions are calculated using Recommendation 2013/179/EU or, alternatively, using ISO 14067:2018132 or ISO 14064-1:2018133.
		  - Quantified life cycle GHG emissions are verified by an independent third party.
		- KfW's activities financed are in line with SC of the EU Taxonomy Climate Delegated Act for the manufacture of chlorine.

Organic basic chemicals	C	- Manufacturing of organic basic chemical meeting the following criteria:
		  - i) GHG emissions from the production processes are lower than those stated in the EU Taxonomy Climate Delegated Act.[44]
		  - ii) Where the organic chemicals in scope are produced wholly or partially from renewable feedstock, the life cycle GHG emissions of the manufactured chemical, manufactured wholly or partially from renewable feedstock, are lower than the life cycle GHG emissions of the equivalent chemical manufactured from fossil fuel feedstock.
		  - iii) Life cycle GHG emissions are calculated using Recommendation 2013/179/EU or, alternatively, using ISO 14067:2018 or ISO 14064-1:2018.
		  - iv) Quantified life cycle GHG emissions are verified by an independent third party.
		  - Agricultural biomass used for the manufacture of organic basic chemicals complies with the criteria laid down in Article 29, paragraphs 2 to 5 of Directive (EU) 2018/2001. Forest biomass used for the manufacture of organic basic chemicals complies with the criteria laid down in Article 29, paragraphs 6 and 7 of that Directive.
		- With regard to assurance of the credible transition of these activities, Sustainalytics encourages KfW to extend financing to borrowers with a credible transition strategy following decarbonization pathways that promote sectoral emissions reductions in line with corresponding transition standards in those sectors.
		- Sustainalytics notes that KfW limits the financing to HVC manufacturing with GHG emissions from the production processes below 0,693 tCO_2e/t of HVC. Sustainalytics also notes that the average GHG emissions for ethylene and propylene production across various production process technologies and feedstocks was 0.6974 tCO_2e/tonne HVC in 2013, with the potential to further reduce emissions by improving energy and catalytic efficiency in the production process. Therefore, Sustainalytics considers 0.51 tCO_2e/t HVC to be a credible threshold for HVC manufacturing. Nevertheless, Sustainalytics notes that KfW's criteria are in line with the EU Taxonomy Delegated Act.[45]

Anhydrous ammonia	C	- Manufacturing of anhydrous ammonia meeting the following criteria:
		  - i) Ammonia is produced from hydrogen that complies with the criteria for production of hydrogen and equipment for the production and use of hydrogen;
		  - ii) ammonia is recovered from wastewater.
		- KfW has confirmed that wastewater from fossil fuel operations will be excluded.

[44] for HVC: 0,693 tCO_2e/t of HVC; for aromatics: 0,0072 tCO_2e/t of complex weighted throughput; for vinyl chloride: 0,171 tCO_2e/t of vinyl chloride; for styrene: 0,419 tCO_2e/t of styrene; for ethylene oxide/ethylene glycols: 0,314 tCO_2e/t of ethylene oxide/glycol; for adipic acid: 0,32 tCO_2e/t of adipic acid

[45] Climate Bonds Initiative, "Basic Chemicals Background Paper", at: https://www.climatebonds.net/files/files/background-paper-basic-chemicals-oct-2022-06102022.pdf

		- With regard to assurance of the credible transition of these activities, Sustainalytics encourages KfW to extend financing to borrowers with a credible transition strategy following decarbonization pathways that promote sectoral emissions reductions in line with corresponding transition standards in those sectors.
Nitric acid	C	- Manufacturing of nitric acid where GHG emissions related to the production processes are below 0.038 tCO_2e per tonne of nitric acid. - With regard to assurance of the credible transition of these activities, Sustainalytics encourages KfW to extend financing to borrowers with a credible transition strategy following decarbonization pathways that promote sectoral emissions reductions in line with corresponding transition standards in those sectors.

Manufacture of plastics in primary form	C	- Manufacturing of plastics in primary form meeting the following criteria:
		  - i) the plastic in primary form is fully manufactured by mechanical recycling of plastic waste;
		  - ii) where mechanical recycling is not technically feasible or economically viable, the plastic in primary form is fully manufactured by chemical recycling of plastic waste and the life cycle GHG emissions of the manufactured plastic, excluding any calculated credits from the production of fuels, are lower than the life cycle GHG emissions of the equivalent plastic in primary form manufactured from fossil fuel feedstock. Life cycle GHG emissions are calculated using Recommendation 2013/179/EU or, alternatively, using ISO 14067:2018 or ISO 14064-1:2018. Quantified life cycle GHG emissions are verified by an independent third party.
		  - iii) derived wholly or partially from renewable feedstock and having life cycle GHG emissions lower than the life cycle GHG emissions of the equivalent plastics in primary form manufactured from fossil fuel feedstock. Life cycle GHG emissions are calculated using Recommendation 2013/179/EU or, alternatively, using ISO 14067:2018 or ISO 14064-1:2018. Quantified life cycle GHG emissions are verified by an independent third party.
		  - Agricultural biomass used for the manufacture of plastics in its primary form complies with the criteria laid down in Article 29, paragraphs 2 to 5, of Directive (EU) 2018/2001. Forest biomass used for the manufacture of plastics in its primary form complies with the criteria laid down in Article 29, paragraphs 6 and 7, of that Directive.
		- KfW has informed Sustainalytics that the production involves at least 90% of recycled, renewable or bio-based input. KfW also confirmed that bio-based input will be sourced sustainably and will meet the criteria as defined in Article 29 RED II (EU) 2018/2001.[46]
		- Sustainalytics notes that the plastics produced may be intended for the production of single-use plastic products. Waste from single-use plastic products waste is currently more likely to end up in the environment rather than being recycled or appropriately managed.[47] In addition, Sustainalytics notes that the extent of recycling of plastics is very low, with an estimated 9% of total plastic waste being recycled, 19% incinerated and 50% going to sanitary landfills. The remaining 22% is mismanaged, for example, being disposed in uncontrolled dumpsites, burned in open pits or leaked into the environment.[48] Sustainalytics further recognizes that improved recycling rates alone, even if attainable, will not fully address the holistic environmental issues associated with plastics. Unlike steel, glass and aluminium, plastics can only be recycled a finite number of times before being disposed of. In order to achieve full circularity, the industry needs to take substantial measures, including an increased use of sustainably sourced alternative (low-carbon) materials that can be recycled indefinitely without loss of quality.

Energy efficiency		
Data processing through data centres	C	- Financing of construction and modernization of data centres that meet the criteria of the European Code of Conduct for Data Centres or the recommendation

[46] EUR-Lex, "Directive (EU) 2018/2001 of the European Parliament and of the Council", (2018), at: https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32018L2001#d1e3697-82-1
[47] https://www.unep.org/interactives/beat-plastic-pollution/
[48] https://www.oecd-ilibrary.org/sites/dfe099c9-en/index.html?itemId=/content/component/dfe099c9-en

		of the energy efficiency in data centres after DIN CLC/TR 50600-99-1,[49] including the following: - energy-efficient IT-hardware that has obtained an Energy Star certificate, when feasible; - measures to optimize air circulation; - measures to use free-cooling; - energy efficient cooling; - speed-controlled engines for compressors, pumps and ventilators, energy-efficient engines; - energy-efficient UPV systems complying with DIN EN 62040[50] - measures to improve solar-driven heating; - ledger technologies (DLT), such as blockchain solutions for mobility, Internet of Things applications, application of artificial intelligence to optimize industrial material flows - KfW may finance facilities that comply with the "expected practices" of the European Code of Conduct on Data Centre Energy Efficiency and that use refrigerants with a maximum 675 global warming potential. Sustainalytics views a PUE threshold of 1.5 to be aligned with market practice and notes that the criteria are in line with the requirements of the EU Taxonomy Climate Delegated Act, while also recognizing that the referenced code does not guarantee a specific level of environmental performance. Sustainalytics encourages KfW to ensure the achievement of the noted PUE levels at all facilities. - Regarding modernisation, Sustainalytics notes that data centres are inherently energy intensive, and that KfW intends to finance the installation of energy-efficient systems, hardware and technologies in data centres with the purpose of reducing overall GHG emissions and improving energy performance. Sustainalytics recommends KfW to monitor and report on improvements in energy or carbon performance resulting from such installations.
Data-driven solutions for GHG emissions reductions	C	- Financing of ICT solutions for the provision of data and analytics enabling GHG emissions reductions. - Where an alternative solution or technology is already available on the market, the ICT solution demonstrates substantial life cycle GHG emissions savings compared to the best performing alternative solution or technology. - While noting that these criteria are in line with the EU Taxonomy Climate Delegated Act, Sustainalytics encourages KfW to disclose the types of measures, solutions and technologies financed under this category, and the expected emissions savings.
Manufacture of energy efficiency equipment for buildings	C	- Equipment as defined in the activity Manufacture of Energy Efficiency Equipment for Buildings of the EU Taxonomy Climate Delegated Act.[51] - Sustainalytics notes that KfW intends to finance highly energy-efficient appliances and systems in buildings, such as space heating and domestic hot water systems and smart gas meters, and that KfW does not have an exclusionary

[49] European Committee for Standardization (CEN) and the European Committee for Electrotechnical Standardization (CENELEC), "DIN CLC/TR 50600-99-1", (2019), at: https://www.cencenelec.eu/?p=104:110:508227404055501::::FSP_ORG_ID,FSP_PROJECT,FSP_LANG_ID:1258297,65095,25

[50] DIN EN 62040: https://www.vde-verlag.de/standards/0500232/din-en-iec-62040-3-vde-0558-530-2022-10.html

[51] "a) windows with U-value lower or equal to 1,0 W/m2K; b) doors with U-value lower or equal to 1,2 W/m2K; c) external wall systems with U-value lower or equal to 0,5 W/m2K; d) roofing systems with U-value lower or equal to 0,3 W/m2K; e) insulating products with a lambda value lower or equal to 0,06 W/mK; f) household appliances falling into the highest two populated classes of energy efficiency in accordance with Regulation (EU) 2017/1369 of the European Parliament and of the Council and delegated acts adopted under that Regulation; g) light sources rated in the highest two populated classes of energy efficiency in accordance with Regulation (EU) 2017/1369 and delegated acts adopted under that Regulation; h) space heating and domestic hot water systems rated in the highest two populated classes of energy efficiency in accordance with Regulation (EU) 2017/1369 and delegated acts adopted under that Regulation; i) cooling and ventilation systems rated in the highest two populated classes of energy efficiency in accordance with Regulation (EU) 2017/1369 and delegated acts adopted under that Regulation;
j) presence and daylight controls for lighting systems; k) heat pumps compliant with the technical screening criteria set out in Section 4.16 of this Annex; l) façade and roofing elements with a solar shading or solar control function, including those that support the growing of vegetation; (m) energy-efficient building automation and control systems for residential and nonresidential buildings; n) zoned thermostats and devices for the smart monitoring of the main electricity loads or heat loads for buildings, and sensoring equipment; o) products for heat metering and thermostatic controls for individual homes connected to district heating systems, for individual flats connected to central heating systems serving a whole building, and for central heating systems;
p) district heating exchangers and substations compliant with the district heating/cooling distribution activity set out in Section 4.15 of this Annex; q) products for smart monitoring and regulating of heating system, and censoring equipment." Derived from the EU Taxonomy Climate Delegated Act, (2021), available at: https://ec.europa.eu/finance/docs/level-2-measures/taxonomy-regulation-delegated-act-2021-2800-annex-1_en.pdf

		criterion for fossil fuel-powered systems or supporting appliances. While noting that these criteria are in line with the EU Taxonomy Climate Delegated Act, Sustainalytics encourages KfW to prioritize electrified appliances and exclude fossil fuel-powered appliances and systems for buildings.

Project Evaluation and Selection

- For its standard domestic loan programmes, including the Climate Protection Programme for Corporates (C), KfW has in place an automated screening process against technical minimum requirements as laid out in KfW's Module documents approved by KfW's lending department. For its other individual financing (I) and, if deemed necessary, for specific cases under the Climate Protection Programme for Corporates (C) and other standard domestic loan programmes (D), such business departments that are responsible for respective geographies or types of financing, will conduct a screening against technical minimum requirements and further assess on a case-by-case basis. Further, the corresponding business department will select the eligible financings in line with the Framework's eligibility criteria and submit them for approval by KfW's Financial Markets department.
- KfW will assess and mitigate environmental and social risks associated with the eligible projects, including by implementing the following measures: i) a group-wide exclusion list; ii) Paris Agreement-aligned sector guidelines, which define minimum requirements for lending in different sectors; and iii) an environmental and social risk screening for all projects, as well as an ESIA where necessary. The ESIA follows the requirements of KfW's sustainability guidelines for different risk levels. For additional detail, refer to Section 2.
- Based on the established process 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

- KfW's Financial Market department will be responsible for the management of proceeds and will track the proceeds using an internal register. An amount equal to the net proceeds resulting from issuances will be allocated to the internal register on an annual basis. Additionally, amounts matching the expenditures for eligible green projects will be allocated to the register on a monthly basis.
- KfW has confirmed that the proceeds from the bond issuances will only be used to finance projects disbursed within the same calendar year or within the last three months of the previous calendar year.
- KfW intends to fully allocate the proceeds by the end of the issuance year. Pending allocation, unallocated proceeds will be held in cash or cash equivalent instruments. Sustainalytics notes that KfW may tap or reopen bonds issued under the Framework in the future. KfW has confirmed that taps will be treated like a new issuance subject to the relevant framework then applicable.
- Based on the presence of an internal tracking system and the disclosure of temporary use of proceeds, Sustainalytics considers this process to be aligned with market practice.

Reporting

- KfW commits to report annually on the allocation of proceeds and corresponding impact on its website until full allocation.
- Allocation reporting will include details such as the amount of allocated and unallocated proceeds, the breakdown of eligible projects financed by category and country, and the share of proceeds allocated to projects that are aligned with the substantial contribution criteria of the EU Taxonomy.

- Impact reporting may include metrics, such as annual GHG emissions reduced or avoided (in tCO_2e), annual renewable energy generated (in MWh) and annual energy savings (in MWh).
- Based on the commitment to both allocation and impact reporting, Sustainalytics considers this process to be in line with market practice.

Alignment with the EU Taxonomy

Sustainalytics has assessed each of the Framework's eligible green use of proceeds criterion against the relevant technical screening criteria in the EU Taxonomy to determine their alignment with two of the EU Taxonomy's three sets of requirements. The results of this assessment are as follows:

1. Substantial Contribution to an Environmental Objective of the EU Taxonomy
   - The criteria in the seven eligible categories defined in the Framework were identified to be associated with 78 activities of the EU Taxonomy. At the time of the assessment, 63 activities were assessed as aligned, 7 as partially aligned, and 8 as not aligned with the applicable SC of the EU Taxonomy.

2. Minimum Safeguards
   - Based on a consideration of the policies and management systems applicable to Framework criteria, as well as the regulatory context in which financing will occur, Sustainalytics is of the opinion that the EU Taxonomy's Minimum Safeguards requirements will be met.
   - For Sustainalytics' assessment of alignment with the Minimum Safeguard, see Section 2 below.

Table 2 below provides an overview of the alignment of the criteria in the Framework with the applicable technical screening criteria for substantial contribution to an environmental objective of the EU Taxonomy.

Table 2: Summary of Alignment of Framework Criteria with the EU Taxonomy

EU Taxonomy Activity	Alignment with the SC criteria per Environmental Objective of the EU Taxonomy	
	Mitigation	Biodiversity
1.1. Conservation including restoration of habitats, ecosystems and species		◘
1.3. Forest management	◘	
1.4. Conservation forestry	◘	
3.1. Manufacture of renewable energy technologies	■	
3.2. Manufacture of equipment for the production and use of hydrogen	■	
3.3. Manufacture of low carbon technologies for transport	■	
3.4. Manufacture of batteries	■	
3.5. Manufacture of energy efficiency equipment for buildings	■	
3.7. Manufacture of cement	■	
3.8. Manufacture of aluminium	■	
3.9. Manufacture of iron and steel	■	
3.10. Manufacture of hydrogen	■	

3.11. Manufacture of carbon black	■	
3.12. Manufacture of soda ash	■	
3.13. Manufacture of chlorine	■	
3.14. Manufacture of organic basic chemicals	■	
3.15. Manufacture of anhydrous ammonia	■	
3.16. Manufacture of nitric acid	■	
3.17. Manufacture of plastics in primary form	■	
4.1. Electricity generation using solar photovoltaic technology	■	
4.2. Electricity generation using concentrated solar power (CSP) technology	■	
4.3. Electricity generation from wind power	■	
4.4. Electricity generation from ocean energy technologies	■	
4.5. Electricity generation from hydropower	☒	
4.6. Electricity generation from geothermal energy	☒	
4.7. Electricity generation from renewable non-fossil gaseous and liquid fuels	☒	
4.8. Electricity generation from bioenergy	◘	
4.9. Transmission and distribution of electricity	■	
4.10. Storage of electricity	■	
4.11. Storage of thermal energy	■	
4.12. Storage of hydrogen	■	
4.13. Manufacture of biogas and biofuels for use in transport and of bioliquids	■	
4.14. Transmission and distribution networks for renewable and low-carbon gases	◘	
4.15. District heating/cooling distribution	■	
4.16. Installation and operation of electric heat pumps	■	
4.17. Cogeneration of heat/cool and power from solar energy	■	
4.18. Cogeneration of heat/cool and power from geothermal energy	☒	
4.19. Cogeneration of heat/cool and power from renewable non-fossil gaseous and liquid fuels	■	
4.20. Cogeneration of heat/cool and power from bioenergy	☒	
4.21. Production of heat/cool from solar thermal heating	■	
4.22. Production of heat/cool from geothermal energy	☒	
4.23. Production of heat/cool from renewable non-fossil gaseous and liquid fuels	☒	
4.24. Production of heat/cool from bioenergy	◘	

4.25. Production of heat/cool using waste heat	■	
5.1. Construction, extension and operation of water collection, treatment and supply systems	■	
5.2. Renewal of water collection, treatment and supply systems	■	
5.3. Construction, extension and operation of waste water collection and treatment	■	
5.4. Renewal of waste water collection and treatment	■	
5.5. Collection and transport of non-hazardous waste in source segregated fractions	■	
5.6. Anaerobic digestion of sewage sludge	■	
5.7. Anaerobic digestion of bio-waste	■	
5.8. Composting of bio-waste	■	
5.9. Material recovery from non-hazardous waste	■	
5.10. Landfill gas capture and utilisation	■	
5.11. Transport of CO2	■	
5.12. Underground permanent geological storage of CO2	■	
6.1. Passenger interurban rail transport	■	
6.2. Freight rail transport	■	
6.3. Urban and suburban transport, road passenger transport	■	
6.4. Operation of personal mobility devices, cycle logistics	■	
6.5. Transport by motorbikes, passenger cars and light commercial vehicles	■	
6.6. Freight transport services by road	■	
6.7. Inland passenger water transport	■	
6.8. Inland freight water transport	■	
6.9. Retrofitting of inland water passenger and freight transport	■	
6.10. Sea and coastal freight water transport, vessels for port operations and auxiliary activities	■	
6.11. Sea and coastal passenger water transport	■	
6.12. Retrofitting of sea and coastal freight and passenger water transport	■	
6.13. Infrastructure for personal mobility, cycle logistics	■	
6.14. Infrastructure for rail transport	■	
6.15. Infrastructure enabling low-carbon road transport and public transport	■	
6.16. Infrastructure enabling low carbon water transport	■	
6.17. Low carbon airport infrastructure	■	
7.1. Construction of new buildings	□	

7.2. Renovation of existing buildings	■	
8.1. Data processing, hosting and related activities	■	
8.2. Data-driven solutions for GHG emissions reductions	☒	
9.3. Professional services related to energy performance of buildings	■	

Legend	
Aligned	■
Partially aligned	◘
Not aligned	☒
Criterion does not map to an EU activity and has not been assessed	■
Grey shading indicates the primary EU Environmental Objective	

Section 2: Sustainability Strategy of KfW

Contribution to KfW's sustainable and transition strategy

As part of Germany's Climate Action Programme 2030 to advance the transition to a carbon-neutral future,[52] KfW's mission is based on a legal mandate by the German government to promote and finance sustainable development in Germany and globally.[53] As such, KfW implements the German Federal Government's National Sustainable Development Strategy and supports the achievement of the country's 2030 climate goals as well as the overall objectives of the Paris Agreement.[54] In 2006, KfW signed the UN Principles for Responsible Investment, through which it commits to integrating ESG criteria in its core lending business and financial investments.

KfW set a target to have environmental and climate-related financing account for at least 38% of its total annual new committed financing volume and to achieve a net zero emissions loan portfolio by 2050. In order to achieve this target, KfW initiated the tranSForm project, which sets out a strategic plan regarding KfW's sustainable financing activities.[55] KfW developed financing guidelines for six emission-intensive sectors – i) automotive, ii) iron and steel, iii) building, iv) power generation, v) aviation and vi) shipping – in accordance with the Paris Agreement 1.5°C climate goal. Among others, KfW has made the following commitments for its financing activities: i) increasing new allocation in the automotive segment to technologies for battery electric vehicles and fuel cell electric vehicles to 83% by 2024, to 93% by 2029 and to 100% by 2035, as well as limiting the investment in internal combustion engines, plug-in hybrid electric vehicles and hybrid electric vehicles; ii) with regard to iron and steel production, KfW aims to limit its financing to transformative technologies, including hydrogen and natural gas (only if transformative) direct reduction, electrolysis of iron, and recycling technologies, which directly contribute to the sector's carbon neutrality, from 2026 onwards; iii) in the buildings segment, steering its financing towards buildings that meet efficiency and heat generating requirements under the German Building Energy Act 2023 to 2050; iv) increasing its financing in renewable energy, including wind, solar PV, CSP, hydropower, tidal power, geothermal, power generated from biomass and electricity storage facilities, to 81.2% of its new investment commitments in this sector by 2024 and achieve 100% by 2025; v) regarding aviation, KfW has an annually decreasing CO_2 budget (in tCO_2 per year); and vi) with respect to the shipping sector, KfW has established efficiency requirements per type and size of ship following the Energy Efficiency Design Index (EEDI). In addition, the shipping portfolio is steered towards a 1.5°C reduction path using real emissions data by the Poseidon Principles framework.[56] In addition, KfW implements exclusion criteria in its investment decisions to prevent funding projects that may lead to negative environmental and social impacts, such as production or trade in certain pharmaceuticals, pesticides, controversial weapons and radioactive material.[57]

[52] KfW, "Law Concerning Kreditanstalt für Wiederaufbau", at: https://www.kfw.de/PDF/Download-Center/Law-Concerning-KfW/KfW-Gesetz-DE-EN.pdf
[53] KfW, "Promotional mandate and history", at: https://www.kfw.de/kfw.de-2.html
[54] KfW, "KfW Group sustainability mission statement and sustainability action areas", at: https://www.kfw.de/nachhaltigkeit/Dokumente/Nachhaltigkeit/Nachhaltigkeitsleitbild-en.pdf
[55] KfW, "tranSForm: a key implementation project for KfW Group's Sustainable Finance Agenda", (2023), at: https://www.kfw.de/nachhaltigkeit/Dokumente/KEa4/Presentation-Rollout-Sustainable-Finance.pdf
[56] KfW, "Background paper on the Paris-aligned sector guidelines of KfW Group", (2023), at: https://www.kfw.de/nachhaltigkeit/Dokumente/KEa4/background-paper-Paris-compatible-sector-guidelines-202303.pdf
[57] KfW, "Exclusion List of KfW Group", at: https://www.kfw.de/PDF/Download-Center/Konzernthemen/Nachhaltigkeit/Ausschlussliste_EN.pdf

With respect to the Group's broader sustainability strategy, KfW focuses on four megatrends in its financing activities: i) climate change and the environment, ii) globalization, iii) social change, and iv) digitalization and innovation; having structured its promotional banking business in alignment with these trends. Through its subsidiaries and business sectors, KfW allocated approximately EUR 60 billion in 2022 to projects corresponding to its climate change and environment financing, which accounted for 36% of the Group's total promotional business volume.[58] Among that, the SME Bank and private clients segment committed a volume of EUR 19.5 billion for projects in the area of climate change and environment and a further EUR 25.8 billion for the priority area of energy efficiency and renewable energies. KfW Development Bank provided EUR 7.6 billion to finance climate action and environmental protection projects in developing countries and emerging economies;[59] DEG financed climate action and environmental protection projects totalling EUR 609 million with a focus on renewable energy projects in Africa, Asia and Latin America.[60]

KfW reports and publishes its progress in accordance with the GRI standards and the recommendations of the Task Force on Climate-related financial Disclosures in its annual sustainability report. Regarding regulatory developments and the progress in the tranSForm activities, the Group is developing a reporting framework that will: i) include detailed information on its EU Taxonomy Activities; iii) comply with the European Banking Authority's Pillar III disclosure requirements[61]; and iii) follow the non-financial sustainability reporting requirements of the Non-Financial Reporting Directive (NFDR)[62]. KfW has communicated to Sustainalytics that it is monitoring the sustainability reporting standards of the Corporate Sustainability Reporting Directive (CSRD)[63] and the International Sustainability Standards Board (ISSB), as they become relevant in the future.[64,65]

The Group's Chief Executive Officer (CEO), also serving as Chief Sustainability Officer, has the overall responsibility for KfW's sustainability strategy and communications. In collaboration with the Executive Board members and the management boards for DEG, KfW, IPEX-Bank and KfW Capital, the CEO ensures the operational implementation of sustainable financing transactions and sustainable banking operations. A Sustainability Strategy team, headed by the Group Sustainability Officer, is responsible for KfW's sustainability report and ESG ratings. The team forms part of the department Corporate Strategy and Sustainability and the Sustainable Finance Management team, with responsibilities including managing the tranSForm project, including the central management of the topics of "SDG contribution of KfW's financing activities" and "Paris compatibility of KfW's financing activities".[66]

Sustainalytics is of the opinion that the Green Bonds – Made by KfW Framework is aligned with the Group's overall sustainability strategy and initiatives and will further KfW's support of sustainable finance in Germany, the EU and globally.

Approach to managing environmental and social risks associated with the projects

Sustainalytics recognizes that the net proceeds from the financing issued under the Framework will be directed towards eligible projects that are expected to have positive environmental and social impact. However, Sustainalytics is aware that such eligible projects could also lead to negative environmental and social outcomes. Key environmental and social risks possibly associated with the eligible projects include land use and biodiversity loss associated with large infrastructure projects; emissions, effluents and waste; occupational health and safety; adverse impacts on the living conditions of communities; and predatory lending or over-indebtedness of financially vulnerable individuals.

Sustainalytics is of the opinion that KfW is able to manage and mitigate potential risks through implementation of the following:

- KfW's subsidiaries and business sectors follow a similar Environmental and Social Due Diligence (ESDD) process to identify and appraise the type and scale of any adverse environmental and social risks and impacts that may arise from the planned financing. One component of the ESDD is a risk screening, which assigns the risks to different risk categories,

[58] KfW's promotional banking business volume was EUR 166.9 billion in 2022.
KfW, "Berichterstattung 2022", at: https://www.kfw.de/%C3%9Cber-die-KfW/Berichtsportal/Berichterstattung-2022/
[59] KfW, "Bundesförderung für effiziente Gebäude (BEG)", at: https://www.kfw.de/inlandsfoerderung/Bundesf%C3%B6rderung-f%C3%BCr-effiziente-Geb%C3%A4ude/
[60] KfW, "2022 Sustainability Report", at: https://www.kfw.de/PDF/Download-Center/Konzernthemen/Nachhaltigkeit/englisch/Sustainability-Report-2022.pdf
[61] European Banking Authority, "Transparency and Pillar 3", at: https://www.eba.europa.eu/regulation-and-policy/transparency-and-pillar-3
[62] European Parliament, "Directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups Text with EEA relevance", (2014), at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32014L0095
[63] European Commission, "Corporate sustainability reporting", at: https://finance.ec.europa.eu/capital-markets-union-and-financial-markets/company-reporting-and-auditing/company-reporting/corporate-sustainability-reporting_en
[64] International Financial Reporting Standards Foundation, "International Sustainability Standards Board", at: https://www.ifrs.org/groups/international-sustainability-standards-board/
[65] KfW, "tranSForm: a key implementation project for KfW Group's Sustainable Finance Agenda", (2023), at: https://www.kfw.de/nachhaltigkeit/Dokumente/KEa4/Presentation-Rollout-Sustainable-Finance.pdf
[66] KfW, "2022 Sustainability Report", at: https://www.kfw.de/PDF/Download-Center/Konzernthemen/Nachhaltigkeit/englisch/Sustainability-Report-2022.pdf

and depending on the risk category, an Environmental and Social Impact Assessment (ESIA) process will be performed to assess the potential impact The ESIA follows international standards, such as the World Bank's Environmental and Social Standards,[67] the International Finance Corporation's Performance Standards[68] and the Equator Principles.[69] KfW carries out an ESDD for export and project financing and all projects in developing countries and emerging economies. Similar risk screening and ESIA processes apply to KfW's direct financing in Germany, the EU and high-income OECD countries. Regarding loans indirectly extended via an on-lending bank, KfW conducts sample checks on the application of ESIAs. The Group will not fund projects identified as likely to have adverse environmental or social impacts through an ESIA and the impacts cannot be prevented or mitigated by suitable measures.

- Regarding risks related to land use, biodiversity loss, and emissions, effluents and waste, projects financed in the EU are also expected to comply with the requirements of the EU directive on environmental impact assessments, Directive 2014/52/EU, which requires projects that are likely to have a significant impact on the environment to be adequately assessed before approval. It also requires that adequate measures be undertaken to avoid, prevent, reduce and, if possible, offset significant adverse effects on the environment, in particular on species and habitats. For land-intensive projects, the directive requires land-use related impacts to be identified, described and assessed through an environmental impact assessment. For large-scale projects, this also includes limiting impact on land and soil, including organic matter, erosion, compaction and sealing.[70] Regarding occupational health and safety, the EU Directive on Worker Health and Safety establishes minimum safety and health requirements throughout Europe. The directive requires employers to implement necessary measures to prevent occupational risks, improve working conditions, provide adequate instructions and training, among other health and safety provisions at the workplace.[71]
- KfW has in place a Code of Conduct[72] and a Code of Conduct for Board Members,[73] which guide the Group's employees, board members, managers and its external partners on business ethics, including requirements on integrity, conflicts of interest and human rights. It also sets standards for compliance with laws, ethical handling of assets, as well as practices to prevent financial crime, such as corruption and money laundering.
- KfW's Compliance department, which operates independently from the Group's other divisions, oversees and monitors compliance with all statutory regulations and provisions and the Group's internal requirements that relates to: i) corruption and fraud, ii) money laundering, iii) financing of terrorism, iv) financial sanctions and embargoes, v) securities compliance, vi) tax compliance, vii) document organization, viii) data protection, ix) minimum requirements for risk management, and x) environmental, social and economic matters. Additionally, complying with environmental and social laws and regulations in the investment country is a minimum requirement under KfW's ESIAs.[74]
- In addition, KfW's subsidiary KfW IPEX-Bank became a signatory to the Equator Principles in 2008,[75,76] a globally recognized risk management framework, which is recognized by Sustainalytics as a proxy for robust environmental, social and governance policies.

Based on the policies, standards and assessments, Sustainalytics is of the opinion that KfW has implemented adequate measures and is well positioned to manage and mitigate environmental and social risks commonly associated with the eligible categories.

Alignment with the EU Taxonomy's Minimum Safeguards

[67] World Bank, "Environmental and Social Standards (ESS)", at: https://www.worldbank.org/en/projects-operations/environmental-and-social-framework/brief/environmental-and-social-standards
[68] International Finance Corporation, "IFC's Performance Standards on Environmental and Social Sustainability", at: https://www.ifc.org/en/insights-reports/2012/ifc-performance-standards
[69] Equator Principles, "About the Equator Principles", at: https://equator-principles.com/about-the-equator-principles/
[70] European Commission, "Directive 2014/52/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/PDF/?uri=CELEX:32014L0052
[71] European Commission, "Directive 89/391/EEC on the introduction of measures to encourage improvements in the safety and health of workers at work", (1989), at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:01989L0391-20081211&qid=1691606114488
[72] KfW, "Code of Conduct – Implementing responsibility", at: https://www.kfw.de/PDF/Download-Center/Law-Concerning-KfW/Code-of-Conduct.pdf
[73] KfW, "Verhaltenskodex für Mitglieder des Vorstands der KfW", at: https://www.kfw.de/PDF/Download-Center/KfW-Gesetz/Verhaltenskodex-KfW-Vorstand.pdf
[74] KfW, "2022 Sustainability Report", at: https://www.kfw.de/PDF/Download-Center/Konzernthemen/Nachhaltigkeit/englisch/Sustainability-Report-2022.pdf
[75] The Equator Principles, at: https://equator-principles.com/about-the-equator-principles/
[76] KfW IPEX-Bank, "Equator Principles", at: https://www.kfw-ipex-bank.de/Sustainability/Equator-Principles/#The%20History%20and%20Impact%20of%20The%20Equator%20Principles

The EU Taxonomy recommends that companies have policies aligned with international and regional guidelines and regulations pertaining to human rights, labour rights, and combating bribery and corruption. Specifically, activities should be carried out in alignment with the UN Guiding Principles on Business and Human Rights and the OECD Guidelines for Multinational Enterprises. Additionally, companies should comply with the International Labour Organisation's declaration on Fundamental Rights and Principles at Work.

Human and labour rights

KfW has implemented the following policies and procedures aimed at ensuring human and labour rights:

- KfW established a Policy Statement on Human Rights, which applies to the Group and its subsidiaries, and follows international standards, such as the UN Guiding Principles on Business and Human Rights, the European Convention on Human Rights and the standards of the International Labour Organization, amongst others. The Policy Statement outlines KfW's approach on the protection of human and labour rights, including respective measures to be applied across the development and provision of KfW's financing and services. Representing the minimum requirement for all KfW financing, the Policy Statement aims to ensure compliance with laws and regulations in respective investment countries. As part of its due diligence procedures for all financing, KfW identifies and prioritizes human and labour rights related risks, such as forced and child labour, across its banking operations, and develops appropriate prevention and corrective measures, where necessary. Further, KfW established a risk-based control process to monitor compliance with KfW's human rights strategy and requirements, and commits to ensure immediate action in the event of human and labour rights violations.[77] In addition, KfW has developed a whistleblowing process, as part of which an ombudsperson is assigned to act as an external point of contact and help gather information regarding possible compliance violations.[78]
- KfW is subject to the German Supply Chain Due Diligence Act (Lieferkettensorgfaltspflichtengesetz, LkSG), which came into force in January 2023. The Act requires enterprises to implement defined due diligence obligations and risk management processes with regard to the protection of human rights, which apply to KfW's banking operations activities.[79] Further, KfW has a Code of Conduct to oversee the implementation of international standards, such as the UN Declaration of Human Rights and national regulations including the German LkSG.[80].
- All financing activities under the Framewok must be subject to an internal environmental and social due diligence process, which follows international standards, such as the standards of the International Labour Organization and includes a human right focused assessment, among other social matters.[81] For more detailed information regarding the process, please refer to Section 1 and Section 2 above. Additionally, KfW has in place an internal ESIA process to assess and manage environmental and social risks associated with its financing activities.[82] Furthermore, KfW is a signatory of the Principles for Responsible Investment and, thus, commits to incorporate ESG issues into investment analysis and decision-making processes, as well as seek appropriate disclosures on ESG issues by the entities in which it invests.[83]

Based on the work of its research services and its ESG Risk Rating assessment, Sustainalytics has evaluated the performance of KfW in the areas of human and labour rights and has not detected involvement in any significant controversies that would suggest that the above policies are not being implemented effectively. Sustainalytics is of the opinion that these measures appropriately safeguard minimum standards on human and labour rights in relation to the activities of the Framework.

Anti-bribery and anti-corruption

KfW has implemented the following policies and procedures on anti-bribery and anti-corruption:

[77] KfW, "Policy statement of KfW and its subsidiaries' on human rights and on its human rights strategy", at: https://www.kfw.de/nachhaltigkeit/Dokumente/Sonstiges/KfW-Group%27s-Human-Rights-Policy-Statement.pdf
[78] KfW, "Compliance ombudsperson (whistle-blowing contact)", at: https://www.kfw.de/About-KfW/Arbeitsweise-und-Unternehmensf%C3%BChrung/Integrity-Compliance/Hinweisgebersystem/#:~:text=With%20the%20whistle-blower%20system%2C%20KfW%20has%20a%20recognised,the%20KfW%20Group%20to%20pursue%20such%20irregularities%20resolutely.
[79] Germany Federal Ministry of Justice, "Gesetz über die unternehmerischen Sorgfaltspflichten zur Vermeidung von Menschenrechtsverletzungen in Lieferketten", at: https://www.gesetze-im-internet.de/lksg/index.html
[80] KfW, "Code of Conduct – Implementing responsibility", at: https://www.kfw.de/PDF/Download-Center/Law-Concerning-KfW/Code-of-Conduct.pdf
[81] KfW Development Bank, "Sustainability Guideline – Assessment and management of Environmental, Social and Climate Aspects: Principles and Procedures", (2023), at: https://www.kfw-entwicklungsbank.de/PDF/Download-Center/PDF-Dokumente-Richtlinien/Nachhaltigkeitsrichtlinie_EN.pdf
[82] KfW, "Environmental & Social Impact Assessments", at: https://www.kfw.de/nachhaltigkeit/About-KfW/Sustainability/Strategie-Management/Umwelt-Sozialvertr%C3%A4glichkeitspr%C3%BCfungen/
[83] KfW, "Principles for Responsible Investment". at: https://www.kfw.de/nachhaltigkeit/About-KfW/Sustainability/Sustainable-Banking-Operations/Responsible-Investment/Principles-for-Responsible-Investment-(PRI)/

- As outlined in its overarching Sustainability Mission Statement, KfW commits to comply with all applicable laws and regulations pertaining to corruption, fraud and money-laundering, including the German Federal Government's Public Corporate Governance Code.[84,85] As part of its Code of Conduct, KfW identifies forms of misconduct and calls for employees' precautious actions to prevent fraud, corruption and money-laundering.[86]
- KfW follows a zero-tolerance approach to all forms of bribery and corruption across the Group's operations and addresses the prevention of fraud and corruption as part of its Code of Conduct.[87] The Group's Compliance department conducts annual risk analyses on fraud and corruption that are associated with individual customers, business partners, products, processes, transactions and countries. Moreover, the Group has a procedure for country risk analyses, which considers the Corruption Perceptions Index published by Transparency International.[88,89]
- KfW complies with the German national legislation against money laundering and is supervised by the German Federal Ministry of Finance. In the international context, KfW is a supporting member of the Extractive Industries Transparency Initiative, a voluntary coalition of governments, private enterprises and civil society organizations, aimed at ensuring the transparent and accountable payment of extractive industry revenues into the national budgets of developing countries.[90] KfW established minimum anti-money laundering standards, including the assignment of an anti-money laundering officer, reporting of suspicious transactions to authorities, and regular training of employees on anti-money laundering. Further, KfW established an Anti-Money- Laundering Policy, under which KfW conducts background checks against suspicious customers and transactions. If violations are identified, KfW may terminate the business and report the matter to authorities.[91]
- KfW has a Conflict of Interest Policy laying out principles to identify conflicts of interest and take reasonable measures to avoid, manage and disclose such conflicts.[92] Moreover, KfW established a Code of Conduct for its executive board members, which specifies the requirements to the board members of handling conflicts of interest, acceptance of gifts and honorary positions, amongst others.[93]
- Furthermore, KfW has developed a whistleblowing process, through which an ombudsperson is assigned to act as an external point of contact and help gather information regarding possible compliance violations.[94]

Based on the work of its research services and its ESG Risk Rating assessment, Sustainalytics evaluated the performance of KfW in the area of anti-bribery and anti-corruption, and has not detected involvement in any relevant controversies which would suggest that the above policies are not adequate in addressing key risks. Sustainalytics is of the opinion that these measures appropriately safeguard anti-bribery and anti-corruption in relation to the activities of the Framework.

Based on these policies, standards and assessments, Sustainalytics is of the opinion that KfW's policies, guidelines and commitments are sufficient to demonstrate that the activities and projects to be financed under the Framework will be carried out in alignment with the EU Taxonomy's Minimum Safeguards.

Section 3: Impact of Use of Proceeds

[84] KfW, "KfW Group sustainability mission statement and sustainability action areas", at: https://www.kfw.de/nachhaltigkeit/Dokumente/Nachhaltigkeit/Nachhaltigkeitsleitbild-en.pdf
[85] German Federal Government, "Die Bundesregierung, "Grundsätze guter Unternehmens- und aktiver Beteiligungsführung im Bereich des Bundes", at: https://www.verwaltungsvorschriften-im-internet.de/bsvwvbund_16092020_VIIIB1FB02032010002003.htm
[86] KfW, "Code of Conduct – Implementing responsibility", at: https://www.kfw.de/PDF/Download-Center/Law-Concerning-KfW/Code-of-Conduct.pdf
[87] KfW, "Code of Conduct – Implementing responsibility", at: https://www.kfw.de/PDF/Download-Center/Law-Concerning-KfW/Code-of-Conduct.pdf
[88] Transparency International, "Corruption Perceptions Index", at: https://www.transparency.org/en/cpi/2020
[89] KfW, "2022 Sustainability Report", at: https://www.kfw.de/PDF/Download-Center/Konzernthemen/Nachhaltigkeit/englisch/Sustainability-Report-2022.pdf
[90] KfW, "Supporting member of EITI", at: https://www.kfw.de/About-KfW/Arbeitsweise-und-Unternehmensf%C3%BChrung/Integrity-Compliance/KfW-ist-F%C3%B6rdermitglied-der-EITI/
[91] KfW, "Prevention of Money Laundering", at: https://www.kfw.de/About-KfW/Arbeitsweise-und-Unternehmensf%C3%BChrung/Integrity-Compliance/Geldw%C3%A4schepr%C3%A4vention/
[92] KfW, "Conflict of Interest Policy", at: https://www.kfw.de/PDF/Unternehmen/Verantwortung-und-Corporate-Governance/Integrit%C3%A4t-Compliance/Interessenkonflikt-Policy-EN.pdf
[93] KfW, "Code of Conduct for executive members", (2021), at: https://www.kfw.de/PDF/Download-Center/KfW-Gesetz/Verhaltenskodex-KfW-Vorstand.pdf
[94] KfW, "Compliance ombudsperson (whistle-blowing contact)", at: https://www.kfw.de/About-KfW/Arbeitsweise-und-Unternehmensf%C3%BChrung/Integrity-Compliance/Hinweisgebersystem/#:~:text=With%20the%20whistle-blower%20system%2C%20KfW%20has%20a%20recognised,the%20KfW%20Group%20to%20pursue%20such%20irregularities%20resolutely.

All seven use of proceeds categories are aligned with those recognized by the GBP. Sustainalytics has focused on two below where the impact is specifically relevant in the local context.

Importance of financing renewable energy in Germany

The European Commission has committed to achieve climate neutrality by 2050, with the interim target to reduce GHG emissions by 55% by 2030, compared to 1990 levels.[95] In May 2022, the European Commission released its REPowerEU Plan, which proposes to increase the share of renewable energy in the EU's final energy consumption from 40% to 45% by 2030.[96] In Germany, the energy sector accounted for approximately 32% of total GHG emissions in 2021 and 36% in 2022.[97,98] Under its Climate Energy Act, Germany has set a target to become greenhouse gas neutral by 2045, with interim targets to reduce its GHG emissions by 65% by 2030 and 88% by 2040.[99] To achieve its climate goals, Germany has established a Climate Action Programme and passed the so-called Easter Package in July 2022, which consists of a series of changes to the country's energy policy that aim at accelerating the expansion of renewable energy, among other goals.[100] In 2022, 20.4% of Germany's total energy consumption was linked to renewable energy sources.[101] As part of the Easter Package, the German government committed to source 80% of Germany's electricity demand from renewable sources by 2030,[102] which involves the following renewable capacities to be achieved by 2030: 115 GW of installed onshore wind capacity; 30 GW of offshore wind capacity; and 215 GW of solar PV capacity.[103]

Based on the above, Sustainalytics is of the opinion that KfW'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 Germany and the EU.

Importance of financing green buildings in Germany

As the most populated country in the EU,[104] 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.[105] The operation of buildings accounts for approximately 35% of Germany's total final energy consumption.[106] More specifically, a 60% share of the final energy demand from residential buildings in Germany is directed towards space heating, two-thirds of which powered by fossil fuels, while 83% of heating in non-residential buildings is produced using fossil fuels, making heating from alternative renewable sources of energy fundamental to reduce future energy demand across the German building stock.[107,108]

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.[109] In addition, Germany committed to reducing the primary energy consumption of its building sector by at least 80% by 2050 relative to 2008 levels.[110] To achieve this goal, Germany focuses on increasing the adoption of renewable energy sources, reducing energy consumption and improving energy efficiency to achieve a climate-neutral building stock.[111]

[95] European Commission, "2030 climate & energy framework", at: https://ec.europa.eu/clima/policies/strategies/2030_en
[96] 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
[97] German Federal Ministry for Economic Affairs and Climate Action, "Climate Action in Figures", (2022), at: https://www.bmwk.de/Redaktion/EN/Publikationen/Klimaschutz/climate-action-in-figures.pdf?__blob=publicationFile&v=1
[98] German Federal Environment Agency, "UBA forecast: 2022 greenhouse gas emissions down by 1.9 percent", (2022), at: https://www.umweltbundesamt.de/en/press/pressinformation/uba-forecast-2022-greenhouse-gas-emissions-down-19
[99] German Federal Ministry for Economic Affairs and Climate Action, "Climate Action in Figures", (2022), at: https://www.bmwk.de/Redaktion/EN/Publikationen/Klimaschutz/climate-action-in-figures.pdf?__blob=publicationFile&v=1
[100] Ibid.
[101] Ibid.
[102] Ibid.
[103] Euractiv, "Germany's green energy transition enters make-or-break year", (2023), at: https://www.euractiv.com/section/energy/news/germanys-green-energy-transition-enters-make-or-break-year/
[104] European Union, "Facts and figures on life in the European Union", at: https://europa.eu/european-union/about-eu/figures/living_en
[105] 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
[106] German 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
[107] 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
[108] Build Energy Transition, "Database Closes Knowledge Gap about Non-Residential Buildings", (2021), at: https://www.energiewendebauen.de/news/en/database-closes-knowledge-gap-about-non-residential-buildings
[109] German Federal Ministry of Economic Affairs and Energy, "Climate Action Plan 2050", (2016), at: https://www.bmu.de/fileadmin/Daten_BMU/Pools/Broschueren/klimaschutzplan_2050_en_bf.pdf
[110] German Federal Ministry of Economic Affairs and Energy, "Climate Action Plan 2050", (2016), at: https://www.bmu.de/fileadmin/Daten_BMU/Pools/Broschueren/klimaschutzplan_2050_en_bf.pdf
[111] 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

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

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 Framework is expected to help advance the following SDGs and targets:

Use of Proceeds Category	SDG	SDG Target
Renewable Energy	7. Affordable and clean energy	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix
		7.a By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil fuel technology, and promote investment in energy infrastructure and clean energy technology
Green Buildings	7. Affordable and clean energy	7.3 By 2030, double the global rate of improvement in energy efficiency
	9. Industry, innovation and infrastructure	9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities
	11. Sustainable cities and communities	11.c Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials
Clean Transportation	11. Sustainable Cities and Communities	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
Biodiversity	15. Life on Land	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
		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.
		15.3 By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world
		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.

	2. Zero hunger	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
	13. Climate Action	13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning
Sustainable Water and Wastewater Management	6. Clean Water and Sanitation	6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally
		6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of fresh water to address water scarcity and substantially reduce the number of people suffering from water scarcity
Pollution Prevention and Control	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
	9. Industry, innovation and infrastructure	9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities
	12. Responsible consumption and production	12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse
Energy Efficiency	7. Affordable and clean energy	7.3 By 2030, double the global rate of improvement in energy efficiency

Conclusion

KfW has developed the Green Bonds – Made by KfW Framework under which it will issue financial instruments and use an amount equivalent to the net proceeds to finance environmentally beneficial projects to advance sustainable development in Germany and KfW's partner countries. Sustainalytics considers that the eligible projects are expected to have positive environmental impacts.

The Green Bonds – Made by KfW Framework outlines a process for tracking, allocation and management of proceeds, and makes commitments for reporting on allocation and impact. Sustainalytics considers that the Framework is aligned with the overall sustainability strategy of the Group and that the use of proceeds categories will contribute to the advancement of the UN Sustainable Development Goals 2, 6, 7, 9, 11, 12 and 15. Additionally, Sustainalytics is of the opinion that KfW has adequate measures to identify, manage and mitigate environmental and social risks commonly associated with the eligible projects.

Sustainalytics has assessed the Green Bonds – Made by KfW Framework for alignment with the substantial contribution criteria of the EU Taxonomy. Sustainalytics mapped the criteria defined in the Framework's seven use of proceeds categories to 78 EU activities. Sustainalytics is of the opinion that 63 activities align with the applicable SC criteria in the EU Taxonomy. Seven activities were determined to be partially aligned and 8 activities were determined to be not aligned. Sustainalytics is also of the opinion that the activities and projects to be financed under the Framework will be carried out in alignment with the EU

Taxonomy's Minimum Safeguards. The Framework's activities were not assessed for their alignment with the Do No Significant Harm criteria of the EU Taxonomy in this report.

Based on the above, Sustainalytics is confident that KfW is well positioned to issue the financial instruments listed in the Framework, which is robust, transparent and in alignment with the four core components of the Green Bond Principles 2021 with June 2022 Appendix.

Appendices

Appendix 1: Approach to Assessing Alignment with the EU Taxonomy

Sustainalytics has assessed the criteria in the Framework against the technical screening criteria for substantial contribution to an environmental objective of the EU Taxonomy that apply to each corresponding activity in the EU Taxonomy.[112] This appendix describes Sustainalytics' process and presents the outcome of its assessment on the alignment of the criteria in the Framework with the EU Taxonomy's applicable technical screening criteria. Sustainalytics' assessment involves two steps:

Mapping Framework Criteria to Activities in the EU Taxonomy

The initial step in Sustainalytics' assessment process involves mapping each criterion in the Framework to a relevant and applicable activity in the EU Taxonomy. Note that each Framework criterion may be relevant and applicable to more than one activity in the EU Taxonomy and vice versa. Sustainalytics recognizes that some Framework criteria relate to projects that do not map well to a specific activity in the EU Taxonomy. In such cases, Sustainalytics has mapped to the activity that is most relevant to the primary environmental objective established in the EU Taxonomy.

In some cases, the Framework criteria cannot be mapped to an activity in the EU Taxonomy because some economic activities are not yet covered by the EU Taxonomy. In other cases, categories of activities which are traditionally included in green bonds and loans may not be associated with a specific EU Taxonomy activity. While recognizing that financing projects in these areas may still have environmental benefits, Sustainalytics has not assessed these criteria in this report.

Table 3 below displays Sustainalytics' mapping process for this report.

Determining Alignment with EU Taxonomy Criteria

The second step in Sustainalytics' process is to determine the alignment of each criterion in the Framework with the relevant technical screening criteria for substantial contribution to an environmental objective for the corresponding activity in the EU Taxonomy. Alignment with the SC criteria is usually based on the specific criteria defined in the Framework, and may in many cases also be based on management systems, processes or regulatory compliance. To assess alignment with the EU Taxonomy's Minimum Safeguards, Sustainalytics has conducted an assessment of policies, management systems and processes applicable to the use of proceeds criteria, including the regulatory context in the geographical location of activities and projects. (See Section 2 above.)

Sustainalytics' detailed assessment of alignment is provided in Appendix 2.

[112] The EU Taxonomy establishes a list of "environmentally sustainable economic activities" which, where possible, follows the classification of economic activities laid down in the NACE system of economic activities (established by Regulation EC 1893/2006).

Table 3: Framework mapping table

Framework Category	Framework Criterion (Eligible Use of Proceeds)	Programme	EU Taxonomy Activity	Corresponding NACE Code	Environmental Objective	Refer to Table
Biodiversity	Nature and biodiversity conservation, protecting and restoring terrestrial, marine and other aquatic ecosystems	I	1.1. Conservation including restoration of habitats, ecosystems and species	R91.04	Biodiversity	Table 04[113]
	Sustainable forest management	I	1.3 Forest management	A2	Mitigation	Table 05
	Nature and biodiversity conservation, protecting and restoring terrestrial, marine and other aquatic ecosystems	I	1.4 Conservation forestry	A2	Mitigation	Table 06
Pollution Prevention and Control	Manufacturing of renewable energy technologies	C	3.1. Manufacture of renewable energy technologies	C25, C27 and C28	Mitigation	Table 07
	Manufacturing of equipment for hydrogen production	C	3.2. Manufacture of equipment for the production and use of hydrogen	C25, C27 and C28	Mitigation	Table 08
	Manufacturing of vehicles with zero-tailpipe emissions	C	3.3. Manufacture of low carbon technologies for transport	C29.1, C30.1, C30.2, C30.9, C33.15, and C33.17	Mitigation	Table 09
	Manufacturing of batteries to be used in transportation sector, for energy storage and others	C	3.4. Manufacture of batteries	C27.2 and E38.32	Mitigation	Table 10
	Manufacturing of energy efficiency equipment for buildings.	C	3.5. Manufacture of energy efficiency equipment for buildings	C16.23, C23.11, C23.20, C23.31, C23.32, C23.43, C.23.61, C25.11, C25.12, C25.21, C25.29, C25.93, C27.31, C27.32, C27.33, C27.40, C27.51, C28.11, C28.12, C28.13, and C28.14	Mitigation	Table 11
	KfW's Framework does not outline a corresponding Framework	C	3.6. Manufacture of other low carbon technologies	C22, C25, C26, C27 and C28	Mitigation	Table 12

[113] Please note that criteria displayed in assessment table 01 are derived from Annex IV for the Protection and Restoration of Biodiversity and Ecosystems, published in June 2023: https://finance.ec.europa.eu/system/files/2023-06/taxonomy-regulation-delegated-act-2022-environmental-annex-4_en_0.pdf. The criteria outlined in the following assessment tables align with the EU Taxonomy Delegated Act 2021

	criterion, but references the EU Taxonomy Activity number.					
	Manufacture of cement with the goal to decarbonize energy-intensive production processes	C	3.7. Manufacture of cement	C23.51	Mitigation	Table 12
	Manufacture of aluminium with the goal to decarbonize energy-intensive production processes	C	3.8. Manufacture of aluminium	C24.42 and C24.53	Mitigation	Table 13
	Manufacture of iron and steel with the goal to decarbonize energy-intensive production processes	C	3.9. Manufacture of iron and steel	C24.10, C24.20, C24.31, C24.32, C24.33, C24.34, C24.51 and C24.52	Mitigation	Table 14
	Manufacture of hydrogen	C	3.10. Manufacture of hydrogen	C20.11	Mitigation	Table 15
	Manufacture of carbon black with the goal to decarbonize energy-intensive production processes	C	3.11. Manufacture of carbon black	C20.13	Mitigation	Table 16
	Manufacture of soda ash with the goal to decarbonize energy-intensive production processes	C	3.12. Manufacture of soda ash	C20.13	Mitigation	Table 17
	Manufacture of chlorine with the goal to decarbonize energy-intensive production processes	C	3.13. Manufacture of chlorine	C20.13	Mitigation	Table 18
	Manufacture of organic basic chemicals with the goal to decarbonize energy-intensive production processes	C	3.14. Manufacture of organic basic chemicals	C20.14	Mitigation	Table 19
	Manufacture of anhydrous ammonia with the goal to decarbonize energy-intensive production processes	C	3.15. Manufacture of anhydrous ammonia	C20.15	Mitigation	Table 20
	Manufacture of nitric acid with the goal to decarbonize energy-intensive production processes	C	3.16. Manufacture of nitric acid	C20.15	Mitigation	Table 21
	Manufacture of plastics in primary form with the goal to decarbonize energy-intensive production processes	C	3.17. Manufacture of plastics in primary form	C20.16	Mitigation	Table 22

Renewable Energy	Construction, operation, expansion, modernization and acquisition of plants generating electricity from solar PVs	C/D/I	4.1. Electricity generation using solar photovoltaic technology	D35.11 and F42.22	Mitigation	Table 23
	Construction, operation, expansion, modernization and acquisition of plants generating electricity from CSP	C/D/I	4.2. Electricity generation using concentrated solar power (CSP) technology	D35.11 and F42.22	Mitigation	Table 24
	Construction, operation, expansion, modernization and acquisition of plants generating electricity from offshore and onshore wind	C/D/I	4.3. Electricity generation from wind power	D35.11 and F42.22	Mitigation	Table 25
	Energy production from ocean energy technologies	C/D/I	4.4. Electricity generation from ocean energy technologies	D35.11 and F42.22	Mitigation	Table 26
	Construction, operation, expansion, modernization and acquisition of plants generating electricity from hydropower	C/D/I	4.5. Electricity generation from hydropower	D35.11 and F42.22	Mitigation	Table 27
	Construction, operation, expansion, modernization and acquisition of plants generating electricity from geothermal energy	C/D/I	4.6. Electricity generation from geothermal energy	D35.11 and F42.22	Mitigation	Table 28
	Energy production from renewable non-fossil gaseous and liquid fuels for a company's own power consumption or in the context of integrated transport projects	C	4.7. Electricity generation from renewable non-fossil gaseous and liquid fuels	D35.11 and F42.22	Mitigation	Table 29
	Construction, operation, expansion, modernization and acquisition of plants generating electricity from bioenergy	C/D/I	4.8. Electricity generation from bioenergy	D35.11	Mitigation	Table 30
	Grids and plants for the distribution of power	C/D/I	4.9. Transmission and distribution of electricity	D35.12, D35.13	Mitigation	Table 31
	Grids and plants for the storage of power, feed-in by renewable energy	C/D/I	4.10. Storage of electricity	No associated code	Mitigation	Table 32
	Grids and plants for the storage of heat, feed-in by renewable energy	C/D/I	4.11. Storage of thermal energy	4.11. Storage of thermal energy	Mitigation	Table 33

	Storage of hydrogen for a company's own power consumption or in the context of integrated transport projects	C	4.12. Storage of hydrogen	No associated code	Mitigation	Table 34
	Manufacture of biogas and biofuels for a company's own power consumption or in the context of integrated transport projects	C	4.13. Manufacture of biogas and biofuels for use in transport and of bioliquids	D35.21	Mitigation	Table 35
	Transmission and distribution networks for renewable and low-carbon gases	C/D/I	4.14. Transmission and distribution networks for renewable and low-carbon gases	D35.22, F42.21 and H49.50	Mitigation	Table 36
	Construction and operation of pipelines and associated infrastructure for distributing heating and cooling	C/D/I	4.15. District heating/cooling distribution	D35.30	Mitigation	Table 37
	Installation and operation of electric heat pumps for a company's own power consumption or in the context of integrated transport	C	4.16. Installation and operation of electric heat pumps	D35.30 and F43.22	Mitigation	Table 38
	Cogeneration of heat/cool and power from solar energy for a company's own power consumption or in the context of integrated transport	C	4.17. Cogeneration of heat/cool and power from solar energy	D35.11 and D35.30	Mitigation	Table 39
	Electricity and heat generated from geothermal energy in combined heat and power stations	C/D/I	4.18. Cogeneration of heat/cool and power from geothermal energy	D35.11 and D35.30	Mitigation	Table 40
	Cogeneration of heat/cool and power from renewable non-fossil gaseous and liquid fuels for a company's own power consumption or in the context of integrated transport	C	4.19. Cogeneration of heat/cool and power from renewable non-fossil gaseous and liquid fuels	D35.11 and D35.30	Mitigation	Table 41

	Electricity and heat generated from bioenergy in combined heat and power stations	C/D/I	4.20. Cogeneration of heat/cool and power from bioenergy	D35.11 and D35.30	Mitigation	Table 42
	Production of heat/cool from solar thermal heating	C/D/I	4.21. Production of heat/cool from solar thermal heating	D35.30	Mitigation	Table 43
	Production of heat/cool from geothermal energy	C/D/I	4.22. Production of heat/cool from geothermal energy	D35.30	Mitigation	Table 44
	Production of heat/cool from renewable non-fossil gaseous and liquid fuels for a company's own power consumption or in the context of integrated transport	C	4.23. Production of heat/cool from renewable non-fossil gaseous and liquid fuels	D35.30	Mitigation	Table 45
	Production of heat/cool from bioenergy	C/D/I	4.24. Production of heat/cool from bioenergy	D35.30	Mitigation	Table 46
	Production of heat/cool using waste heat for a company's own power consumption or in the context of integrated transport	C	4.25. Production of heat/cool using waste heat	D35.30	Mitigation	Table 47
Sustainable water and wastewater management	Measures with the aim to reduce GHG emissions in the provision of drinking water and the treatment of wastewater	C	5.1. Construction, extension and operation of water collection, treatment and supply systems	E36.00, F42.99	Mitigation	Table 48
	Measures with the aim to reduce GHG emissions in the provision of drinking water and the treatment of wastewater	C	5.2. Renewal of water collection, treatment and supply systems	E36.00 and F42.99	Mitigation	Table 49
	Measures with the aim to reduce GHG emissions in the provision of drinking water and the treatment of wastewater	C	5.3. Construction, extension and operation of wastewater collection and treatment	E37.00, F42.99	Mitigation	Table 50
	Measures with the aim to reduce GHG emissions in the provision of drinking water and the treatment of wastewater	C	5.4 Renewal of waste water collection and treatment	E37.00	Mitigation	Table 51
Pollution Prevention and Control	Measures with the aim to reduce GHG emissions in the recycling of waste	C	5.5. Collection and transport of non-hazardous waste in source segregated fractions	E38.11	Mitigation	Table 52

	Measures with the aim to reduce GHG emissions in the treatment of wastewater	C	5.6 Anaerobic digestion of sewage sludge	E37.00 and F42.99	Mitigation	Table 53
	Measures with the aim to reduce GHG emissions in the treatment of wastewater	C	5.7. Anaerobic digestion of bio-waste	E38.21, F42.99	Mitigation	Table 54
	Measures with the aim to reduce GHG emissions in the treatment of wastewater	C	5.8. Composting of bio-waste	E38.21, F42.99	Mitigation	Table 55
	Measures with the aim to reduce GHG emissions in the recycling of waste	C	5.9. Material recovery from non-hazardous waste	E38.32 and F42.99	Mitigation	Table 56
	Landfill gas capture and utilisation	C	5.10. Landfill gas capture and utilisation	E38.21	Mitigation	Table 57
	Transport of carbon	C	5.11. Transport of CO2	F42.21 and H49.50	Mitigation	Table 58
	Storage of carbon	C	5.12. Underground permanent geological storage of CO2	E39.00	Mitigation	Table 59
Clean Transportation	Acquisition of rail vehicles for urban and suburban public transport	C/D/I	6.1 Passenger interurban rail transport	H49.10 and N77.39	Mitigation	Table 60
	Acquisition of trains for freight rail transport	C/D/I	6.2 Freight rail transport	H49.20 and N77.39	Mitigation	Table 61
	Acquisition of busses for urban and suburban public transport	C/D/I	6.3 Urban and suburban transport, road passenger transport	H49.31, H49.3.9, N77.39 and N77.11	Mitigation	Table 62
	Devices for active mobility	C/D/I	6.4. Operation of personal mobility devices, cycle logistics	N77.11 and N77.21	Mitigation	Table 63
	Acquisition of passenger cars and light commercial vehicles	C/D/I	6.5. Transport by motorbikes, passenger cars and light commercial vehicles	H49.32, H49.39 and N77.11	Mitigation	Table 64
	Acquisition of vehicles for freight road transport	C/D/I	6.6. Freight transport services by road	H49.4.1, H53.10, H53.20 and N77.12	Mitigation	Table 65
	Acquisition of vessels for inland passenger water transport	C/D/I	6.7. Inland passenger water transport	H50.30	Mitigation	Table 66

	Acquisition of vessels for freight water transport	C/D/I	6.8. Inland freight water transport	H50.4	Mitigation	Table 67
	Retrofitting of inland water passenger and freight transport	C/D/I	6.9. Retrofitting of inland water passenger and freight transport	H50.4, H50.30 and C33.15	Mitigation	Table 68
	Acquisition of vessels for freight water transport	C/D/I	6.10. Sea and coastal freight water transport, vessels for port operations and auxiliary activities	H50.2, H52.22 and N77.34	Mitigation	Table 69
	Acquisition of vessels for sea and coastal passenger water transport	C/D/I	6.11. Sea and coastal passenger water transport	H50.10, N77.21 and N77.34	Mitigation	Table 70
	Retrofitting of sea and coastal freight and passenger water transport	C/D/I	6.12. Retrofitting of sea and coastal freight and passenger water transport	H50.10, H50.2, H52.22, C33.15, N77.21 and N.77.34	Mitigation	Table 71
	Infrastructure for active mobility	C/D/I	6.13. Infrastructure for personal mobility, cycle logistics	F42.11, F42.12, F43.21, F71.1 and F71.20	Mitigation	Table 72
	Infrastructure for rail transport	C/D/I	6.14. Infrastructure for rail transport	F42.12, F42.13, M71.12, M71.20, F43.21, and H52.21	Mitigation	Table 73
	Infrastructure enabling low-carbon road transport and public transport, including charging infrastructure and hydrogen fuel stations	C/D/I	6.15. Infrastructure enabling low-carbon road transport and public transport	F42.11, F42.13, F71.1 and F71.20	Mitigation	Table 74
	Construction of infrastructure enabling low carbon water transport	C/D/I	6.16. Infrastructure enabling low carbon water transport	F42.91, F71.1 or F71.20	Mitigation	Table 75
	Construction of low carbon airport infrastructure	C/D/I	6.17. Low carbon airport infrastructure	F41.20 and F42.99	Mitigation	Table 76
Green Buildings	Construction of residential, commercial and municipal buildings	D	7.1. Construction of new Buildings	F41.1, F41.2, F43	Mitigation	Table 77
	Renovation of existing residential, commercial and municipal buildings	D	7.2. Renovation of existing buildings	F41 and F43	Mitigation	Table 78

	Energy efficiency expertise services	D	9.3. Professional services related to energy performance of buildings	M71	Mitigation	Table 79
Energy Efficiency	Energy-efficient hardware and cooling solutions	C	8.1. Data processing, hosting and related activities	J63.11	Mitigation	Table 80
	Data-driven solutions to reduce GHG emissions	C	8.2. Data-driven solutions for GHG emissions reductions	J61, J62 and J63.11	Mitigation	Table 81

Appendix 2: Comprehensive EU Taxonomy Alignment Assessment

The tables below provide a detailed assessment of the alignment of the Framework criteria with the technical screening criteria for substantial contribution (SC) to an environmental objective for each relevant EU Taxonomy activity.

Table 4[114]

Framework Activity assessed	Biodiversity		
EU Taxonomy Activity	1.1 Conservation, including restoration, of habitats, ecosystems and species		
Corresponding NACE Code	A2		
SC Criteria of the EU Taxonomy		**Alignment**	
Biodiversity	1. General conditions 1.1. The activity contributes to at least one of the following: (a) maintaining good condition of ecosystems, species, habitats or of habitats of species; (b) re-establishing or restoring ecosystems, habitats or habitats of species towards or to good condition, including through increasing their area or range. 1.2. The activity may be carried out by any type of operator irrespective of the main domain of activity. 2. Initial description of the area covered by the conservation activity 2.1. The activity takes place in an area with a detailed description of its initial ecological conditions which contains the following elements: (a) mapping of the current habitats and their condition; (b) where applicable, the protection status of the area; (c) characterisation of the situation of the main species in terms of conservation relevance present in the area (including list of species, approximate size of the population, approximate size of the habitat of the species and its quality, period during which the area is used by the species); (d) the importance of the area to reaching good condition of species, habitats or habitats of species at regional, national or international level as appropriate; (e) where relevant, the potential for improving the condition of species, habitats or habitats of species present on the area or	Financing under the criteria of this activity underlies KfW's international financing scope. KfW intends to finance both, the maintenance of good condition of ecosystems, as well as the restoration of ecosystems and has confirmed to include a forest management plan for forest management activities. The respective forest management plans will be carried out in alignment with national law as all funding activities are subject to an Environmental and Social Due Diligence (ESDD) process, which requires compliance with relevant national law and legal requirements. The KfW assessment standards are based on the following international standards: i) the Environmental and Social Standards of the World Bank Group for public agencies; ii) the IFC Performance Standards for cooperation with the private sector, iii) general and sector-specific environmental, health and safety (EHS) guidelines; and iv) the environmental, health and safety (EHS) guidelines of the International Labour Organization (ILO). KfW is unable to confirm additional information regarding the management plan, requirements specifying the area covered by the conservation activity, requirements regarding guarantee of permanence, audit and other minimum requirements. Given the above context, Sustainalytics considers this activity to be partially aligned.	Partially aligned

[114] Please note that criteria displayed in assessment table 01 are derived from Annex IV for the Protection and Restoration of Biodiversity and Ecosystems, published in June 2023: https://finance.ec.europa.eu/system/files/2023-06/taxonomy-regulation-delegated-act-2022-environmental-annex-4_en_0.pdf. The criteria outlined in the following assessment tables align with the EU Taxonomy Delegated Act 2021.

	re-establishing habitats or habitats of species in the area or to enhance connectivity between habitats. 3.Management plan or equivalent instrument 3.1. The area is covered by a management plan or by an equivalent instrument, such as a restoration plan,[115] which is regularly updated and in any case at least every ten years, and contains the following information: (a) a description of the expected contribution of the area to the nature conservation objectives set by the competent nature or environment authority considering the regional, national, Union and international legal and policy context; (b) the list of species, habitats and habitats of the species that will benefit from the conservation measures (hereafter "targeted habitats and species"); (c) the duration of the plan and a clear description of the conservation objectives for each targeted habitat and species and of the corresponding conservation measures that address identified pressures and threats, including the expected deadline for the achievement of the conservation objectives. In case the deadlines exceed the duration of the management plan, the expected progress (milestones) towards achievement is defined; (d) a description of the threats and pressures that could hinder the achievement of the conservation objectives, including projected habitat transformations caused by climate change; (e) the measures to ensure that all DNSH criteria for this activity are achieved; (f) consideration of societal issues (including preservation of landscape, consultation of stakeholders in accordance with the terms and conditions laid down in national law); (g) where applicable, a description of enhanced ecosystem services, such as carbon storage, water purification, flood protection, erosion prevention, pollination, recreational opportunities, and wider socio-economic benefits; (h) a monitoring scheme with specific and relevant indicators, allowing to measure progress towards achieving the conservation objectives and an identification of corrective measures as necessary; (i) the persons and organisations involved in the management or restoration of the area and, if relevant, the necessary collaborations or partnerships to put in place to achieve the conservation objectives;		

[115] The restoration plan can be part of a management plan. Where the area is covered by a management plan, no additional restoration plan is required.

	(j) the measures taken to ensure transparency about the conservation objectives, the conservation measures and the monitoring and its results; (k) the funding necessary for implementing the conservation measures, for the monitoring of the area and its audit. 3.2. Where the management plan or the equivalent instrument does not contain all the elements specified in point 3.1, the information is provided by the operator of the activity. 4. Audit 4.1. The initial description of the conservation area and the management plan or equivalent instrument specified in points 2 and 3 are verified by an independent third-party certifier at the start of the conservation activity. 4.2. At the end of the duration of the management plan or equivalent instrument and at least every ten years, the achievement of the objectives set at the start of the management plan and the respect of the DNSH criteria are verified. The verification includes an updated detailed description of the ecological conditions of the area as specified in point 2, an evaluation of the effectiveness of the conservation measures, and of the achievement of the conservation objectives, an evaluation of an updated version of the management plan or equivalent instrument, and the recommendations for the next management plan or equivalent instrument. 4.3. The verification in accordance with points 4.1 and 4.2 is carried out by either of the following: (a) the relevant national competent authorities; (b) an independent third-party certifier, at the request of national authorities or the operator of the activity. In order to reduce costs, audits may be performed together with any forest certification, land-use certification, biodiversity certification, climate certification or other audit. The independent third-party certifier may not have any conflict of interest with the owner or the funder and may not be involved in the development or operation of the activity. As a result of the verification, the certifier issues an audit report. 5. Guarantee of permanence 5.1. In accordance with national law, the area on which the activity takes place is covered by one of the following measures: (a) the area is classified as a protected area in line with the IUCN Protected Area Categories System,[116] as a Natura 2000 site under Directive 92/43/EEC, or as an Other Effective area-based		

[116] See https://www.iucn.org/theme/protected-areas/about/protected-area-categories, (version of [adoption date]).

	Conservation Measure (OECM),[117] by national law or under an international convention to which the country is signatory and is effectively managed to prevent deterioration and enable the recovery of species and habitats or habitats of species; (a) the area is destined to restoration or conservation in a statutory land, freshwater or maritime use plan approved by the competent authorities; (b) the area is the subject to a public or private contractual arrangement that can ensure that the conservation objectives can be achieved and maintained. 5.2. The operator of the area where the conservation activity takes place commits that a new management plan or equivalent instrument in line with the conservation objectives will be produced before the end of the previous plan. 6. Additional minimum requirements 6.1. The offsetting of the impacts of another economic activity is excluded under this activity.[118] Only net biodiversity gains resulting from conservation/restoration can be accounted for as substantial contribution under this activity.[119] 6.2. The introduction of invasive alien species is prevented or their spread is managed in accordance with Regulation (EU) No 1143/2014.		

Table 5

Framework Activity assessed	Biodiversity		
EU Taxonomy Activity	1.3. Forest management		
Corresponding NACE Code	A2		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	1. Forest management plan or equivalent instrument 1.1. The activity takes place on area that is subject to a forest management plan or an equivalent instrument, as set out in national law or, where national law does not define a forest management plan or	Financing under the criteria of this activity underlies KfW's international financing scope. 1.1 KfW has confirmed to follow a forest management plan. In addition, all funding activities are subject to an Environmental and Social Due Diligence (ESDD), which requires compliance	Partially aligned

[117] The definition of OECM and a guidance for its application is set out in Decision 14/8 of the UN Convention on Biological Diversity (version of [adoption date]: https://www.cbd.int/doc/decisions/cop14/cop-14-dec-08-en.pdf).
[118] Biodiversity offsets are measurable conservation outcomes resulting from measures designed to compensate for residual, unavoidable, adverse biodiversity impacts arising from an activity or project after appropriate prevention and mitigation measures have been taken. The goal of biodiversity offsets is to conserve the same biodiversity values (habitats, species or ecosystems) that are negatively impacted by the activity or project.
[119] This can include additional conservation/restoration outcomes beyond offsetting measure.

	equivalent instrument, as referred to in the FAO definition of 'forest area with long-term forest management plan'[120]. The forest management plan or equivalent instrument covers a period of 10 years or more and is continuously updated. 1.2. Information is provided on the following points that are not already documented in the forest management plan or equivalent system: (a) management goals, including major constraints[121]; (b) general strategies and activities planned to reach the management goals, including expected operations over the whole forest cycle; (c) definition of the forest habitat context, including main existing and intended forest tree species, and their extent and distribution; (d) definition of the area according to its gazetting in the land registry; (e) compartments, roads, rights of way and other public access, physical features including waterways, areas under legal and other restrictions; (f) measures deployed to maintain the good condition of forest ecosystems; (g) consideration of societal issues (including preservation of landscape, consultation of stakeholders in accordance with the terms and conditions laid down in national law); (h) assessment of forest related risks, including forest fires, and pests and diseases outbreaks, with the aim of preventing, reducing and controlling the risks and measures deployed to ensure protection and adaptation against residual risks; (i) all DNSH criteria relevant for forest management. 1.3. The sustainability of the forest management systems, as documented in the plan referred to in point 1.1, is ensured by choosing the most ambitious of the following approaches: (a) the forest management matches the applicable national definition of sustainable forest management;	with relevant national law and legal requirements. The KfW assessment standards are based on the following international standards: i) the Environmental and Social Standards of the World Bank Group for public agencies; ii) the IFC Performance Standards for cooperation with the private sector, iii) general and sector-specific environmental, health and safety (EHS) guidelines; and iv) the environmental, health and safety (EHS) guidelines of the International Labour Organization (ILO). Given that criteria under 1.2-5. are not met, Sustainalytics considers this activity to be partially aligned.	

[120]Forest area that has a long-term (ten years or more) documented management plan, aiming at defined management goals, and which is periodically revised. FAO Global Resources Assessment 2020. Terms and definitions (version of [adoption date]: http://www.fao.org/3/I8661EN/i8661en.pdf).

[121] Which implements in the Union the Stockholm Convention on persistent organic pollutants (OJ L 209, 31.7.2006, p. 3).

	(b) the forest management matches the Forest Europe definition[122] of sustainable forest management, and complies with the Pan-European Operational Level Guidelines for Sustainable Forest Management[123]; (c) the management system in place shows compliance with the forest sustainability criteria set out in Article 29(6) of Directive (EU) 2018/2001, and as of the date of its application with the implementing act on operational guidance for energy from forest biomass adopted under Article 29(8) of that Directive. 1.4. The activity does not involve the degradation of land with high carbon stock[124]. 1.5. The management system associated with the activity in place complies with the due diligence obligation and legality requirements laid down in Regulation (EU) No 995/2010. 1.6. The forest management plan or equivalent instrument provides for monitoring which ensures the correctness of the information contained in the plan, in particular as regards the data relating to the involved area. 2. Climate benefit analysis 2.1. For areas that comply with the requirements at forest sourcing area level to ensure that carbon stocks and sinks levels in the forest are maintained or strengthened over the long term in accordance with Article 29(7), point (b), of Directive (EU) 2018/2001 the activity complies with the following criteria: (a) the climate benefit analysis demonstrates that the net balance of GHG emissions and removals generated by the activity over a period of 30 years after the beginning of the activity is lower than a baseline, corresponding to the balance of GHG emissions and removals over a period of 30 years starting at the beginning of the activity, associated to the business-as-usual practices that would have occurred on the involved area in the absence of the activity;		

[122] The stewardship and use of forests and forest lands in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfil, now and in the future, relevant ecological, economic and social functions, at local, national, and global levels, and that does not cause damage to other ecosystems.
Resolution H1 General Guidelines for the Sustainable Management of Forests in Europe Second Ministerial Conference on the Protection of Forests in Europe (Forest Europe), 16-17 June 1993, Helsinki/Finland (version of [adoption date]: https://www.foresteurope.org/docs/MC/MC_helsinki_resolutionH1.pdf).
[123] Annex 2 of the Resolution L2. Pan-European Operational Level Guidelines for Sustainable Forest Management. Third Ministerial Conference on the Protection of Forests in Europe 2-4 June 1998, Lisbon/Portugal (version of [adoption date]: https://foresteurope.org/wp-content/uploads/2016/10/MC_lisbon_resolutionL2_with_annexes.pdf#page=18).
[124] Land with high-carbon stock means wetlands, including peatland, and continuously forested areas within the meaning of Article 29(4)(a), (b) and (c) of Directive (EU) 2018/2001.

	(b) long-term climate benefits are considered demonstrated by proof of alignment with Article 29(7), point (b), of Directive (EU) 2018/2001. 2.2. For areas that do not comply with the requirements at forest sourcing area level to ensure that carbon stocks and sinks levels in the forest are maintained or strengthened over the long term in accordance with Article 29(7), point (b), of Directive (EU) 2018/2001 the activity complies with the following criteria: (a) the climate benefit analysis demonstrates that the net balance of GHG emissions and removals generated by the activity over a period of 30 years after the beginning of the activity is lower than a baseline, corresponding to the balance of GHG emissions and removals over a period of 30 years starting at the beginning of the activity, associated to the business-as-usual practices that would have occurred on the involved area in the absence of the activity. (b) the projected long-term average net GHG balance of the activity is lower than the long-term average GHG balance projected for the baseline, referred to in point 2.2, where long term corresponds to the longer duration between 100 years and the duration of an entire forest cycle. 2.3. The calculation of climate benefit complies with all of the following criteria: (a) the analysis is consistent with the 2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories[125]. The climate benefit analysis is based on transparent, accurate, consistent, complete and comparable information, covers all carbon pools impacted by the activity, including above-ground biomass, below-ground biomass, deadwood, litter and soil, relies on the most conservative assumptions for calculations and includes appropriate considerations about the risks of non-permanence and reversals of carbon sequestration, the risk of saturation and the risk of leakage. (b) the business-as-usual practices, including harvesting practices, are one of the following: (i) the management practices as documented in the latest version of the forest management plan or equivalent instrument before the start of the activity, if any;		

[125] 2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories (version of [adoption date]: https://www.ipcc-nggip.iges.or.jp/public/2019rf/).

	(ii) the most recent business-as-usual practices prior to the start of the activity; (iii) the practices corresponding to a management system ensuring that carbon stocks and sinks levels in the forest area are maintained or strengthened over the long term as set out in Article 29(7), point (b), of Directive (EU) 2018/2001. (c) the resolution of the analysis is proportionate to the size of the area concerned and values specific to the area concerned are used. (d) emissions and removals that occur due to natural disturbances, such as pests and diseases infestations, forest fires, wind, storm damages, that impact the area and cause underperformance do not result in non-compliance with Regulation (EU) 2020/852, provided that the climate benefit analysis is consistent with the 2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories regarding emissions and removals due to natural disturbances. 2.4. Forest holdings under 13ha are not required to perform a climate benefit analysis. 3. Guarantee of permanence 3.1. In accordance with national law, the forest status of the area in which the activity takes place is guaranteed by one of the following measures: (a) the area is classified in the permanent forest estate as defined by the FAO[126]; (b) the area is classified as a protected area; (c) the area is the subject of any legal or contractual guarantee ensuring that it will remain a forest. 3.2. In accordance with national law, the operator of the activity commits that future updates to the forest management plan or equivalent instrument, beyond the activity that is financed, will continue to seek the climate benefits as determined in point 2. Besides, the operator of the activity commits to compensate any reduction in the climate benefit determined in point 2 with an equivalent climate benefit resulting from the conduct of an activity that corresponds to one of the forestry activities defined in this Regulation. 4. Audit		

[126] Forest area that is designated to be retained as forest and may not be converted to other land use. (FAO Global Resources Assessment 2020. Terms and definitions version of [adoption date]: http://www.fao.org/3/I8661EN/i8661en.pdf).

	Within two years after the beginning of the activity and every 10 years thereafter, the compliance of the activity the substantial contribution to climate change mitigation criteria and the DNSH criteria is verified by either of the following: (a) the relevant national competent authorities; (b) an independent third-party certifier, at the request of national authorities or the operator of the activity. In order to reduce costs, audits may be performed together with any forest certification, climate certification or other audit. The independent third-party certifier may not have any conflict of interest with the owner or the funder, and may not be involved in the development or operation of the activity. 5. Group assessment The compliance with the criteria for substantial contribution to climate change mitigation and with DNSH criteria may be checked: (a) at the level of the forest sourcing area[127] as defined in Article 2, point (30), of Directive (EU) 2018/2001; (b) at the level of a group of holdings sufficiently homogeneous to evaluate the risk of the sustainability of the forest activity, provided that all those holdings have a durable relationship between them and participate in the activity and the group of those holdings remains the same for all subsequent audits.		

Table 6

Framework Activity assessed	Biodiversity		
EU Taxonomy Activity	1.4. Conservation forestry		
Corresponding NACE Code	A2		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	1. Forest management plan or equivalent instrument 1.1. The activity takes place on area that is subject to a forest management plan or an equivalent instrument, as set out in national law or, where national law does not define a forest management plan or	Financing under the criteria of this activity underlies KfW's international financing scope. 1.2 KfW has confirmed to follow a forest management plan. In addition, all funding activities are subject to an Environmental and Social Due Diligence (ESDD) process, which requires compliance with relevant national law and legal requirements.	Partially aligned

[127] 'Sourcing area' means the geographically defined area from which the forest biomass feedstock is sourced, from which reliable and independent information is available and where conditions are sufficiently homogeneous to evaluate the risk of the sustainability and legality characteristics of the forest biomass.

	equivalent instrument, as referred to in the FAO definition of 'forest area with long-term forest management plan'[128]. The forest management plan or equivalent instrument covers a period of 10 years or more and is continuously updated. 1.2. Information is provided on the following points that are not already documented in the forest management plan or equivalent system: (a) management goals, including major constraints; (b) general strategies and activities planned to reach the management goals, including expected operations over the whole forest cycle; (c) definition of the forest habitat context, main forest tree species and those intended and their extent and distribution, in accordance to the local forest ecosystem context; (d) definition of the area according to its gazetting in the land registry; (e) compartments, roads, rights of way and other public access, physical features including waterways, areas under legal and other restrictions; (f) measures deployed to maintain the good condition of forest ecosystems; (g) consideration of societal issues (including preservation of landscape, consultation of stakeholders in accordance with the terms and conditions laid down in national law); (h) assessment of forest related risks, including forest fires, and pests and diseases outbreaks, with the aim of preventing, reducing and controlling the risks and measures deployed to ensure protection and adaptation against residual risks; (i) all DNSH relevant to forest management. 1.3. The forest management plan or the equivalent instrument: shows a primary designated management objective[129] that consists in protection of soil and water[130], conservation of	The KfW assessment standards are based on the following international standards: i) the Environmental and Social Standards of the World Bank Group for public agencies; ii) the IFC Performance Standards for cooperation with the private sector, iii) general and sector-specific environmental, health and safety (EHS) guidelines; and iv) the environmental, health and safety (EHS) guidelines of the International Labour Organization (ILO). Given that criteria under 1.2-5. are not met, Sustainalytics considers this activity to be partially aligned.	

[128]Forest area that has a long-term (ten years or more) documented management plan, aiming at defined management goals, and which is periodically revised. FAO Global Resources Assessment 2020. Terms and definitions (version of [adoption date]: http://www.fao.org/3/I8661EN/i8661en.pdf).
[129]The primary designated management objective assigned to a management unit (FAO Global Resources Assessment 2020. Terms and definitions version of [adoption date]: http://www.fao.org/3/I8661EN/i8661en.pdf).
[130] Forest where the management objective is protection of soil and water. (FAO Global Resources Assessment 2020. Terms and definitions version of [adoption date]: http://www.fao.org/3/I8661EN/i8661en.pdf).

	biodiversity[131] or social services[132] based on the FAO definitions; (b) promotes biodiversity-friendly practices that enhance forests' natural processes; (c) includes an analysis of: (i) impacts and pressures on habitat conservation and diversity of associated habitats; (ii) condition of harvesting minimizing soil impacts; (iii) other activities that have an impact on conservation objectives, such as hunting and fishing, agricultural, pastoral and forestry activities, industrial, mining, and commercial activities. 1.4. The sustainability of the forest management systems as documented in the plan referred to in point 1.1 is ensured by choosing the most ambitious of the following approaches: (a) the forest management matches the national definition of sustainable forest management, if any; (b) the forest management matches the Forest Europe definition[133] of sustainable forest management and complies with the Pan-European Operational Level Guidelines for Sustainable Forest Management[134]; (c) the management system in place shows compliance with the forest sustainability criteria as defined in Article 29(6) of Directive (EU) 2018/2001, and as of the date of its application with the implementing act on operational guidance for energy from forest biomass adopted under Article 29(8) of that Directive. 1.5 The activity does not involve the degradation of land with high carbon stock[135].		

[131] Forest where the management objective is conservation of biological diversity. Includes but is not limited to areas designated for biodiversity conservation within the protected areas. (FAO Global Resources Assessment 2020. Terms and definitions version of [adoption date]: http://www.fao.org/3/I8661EN/i8661en.pdf).
[132] Forest where the management objective is social services. (FAO Global Resources Assessment 2020. Terms and definitions version of [adoption date]: http://www.fao.org/3/I8661EN/i8661en.pdf)
[133] The stewardship and use of forests and forest lands in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfil, now and in the future, relevant ecological, economic and social functions, at local, national, and global levels, and that does not cause damage to other ecosystems.
Resolution H1 General Guidelines for the Sustainable Management of Forests in Europe Second Ministerial Conference on the Protection of Forests in Europe (Forest Europe), 16-17 June 1993, Helsinki/Finland (version of [adoption date]: https://www.foresteurope.org/docs/MC/MC_helsinki_resolutionH1.pdf)
[134] Annex 2 of the Resolution L2. Pan-European Operational Level Guidelines for Sustainable Forest Management. Third Ministerial Conference on the Protection of Forests in Europe 2-4 June 1998, Lisbon/Portugal (version of [adoption date]: https://foresteurope.org/wp-content/uploads/2016/10/MC_lisbon_resolutionL2_with_annexes.pdf#page=18).
[135] Land with high-carbon stock means wetlands, including peatland, and continuously forested areas within the meaning of Article 29(4)(a), (b) and (c) of Directive (EU) 2018/2001.

	1.6. The management system associated with the activity in place complies with the due diligence obligation and legality requirements laid down in Regulation (EU) No 995/2010. 1.7. The forest management plan or equivalent instrument provides for monitoring which ensures the correctness of the information contained in the plan, in particular as regards the data relating to the involved area. 2. Climate benefit analysis 2.1. For areas that comply with the requirements at forest sourcing area level to ensure that carbon stocks and sinks levels in the forest are maintained or strengthened over the long term in accordance with Article 29(7), point (b), of Directive (EU) 2018/2001 the activity complies with the following criteria: (a) the climate benefit analysis demonstrates that the net balance of GHG emissions and removals generated by the activity over a period of 30 years after the beginning of the activity is lower than a baseline, corresponding to the balance of GHG emissions and removals over a period of 30 years starting at the beginning of the activity, associated to the business-as-usual practices that would have occurred on the involved area in the absence of the activity; (b) long-term climate benefits are considered demonstrated by proof of alignment with Article 29(7), point (b), of Directive (EU) 2018/2001. 2.2. For areas that do not comply with the requirements at forest sourcing area level to ensure that carbon stocks and sinks levels in the forest are maintained or strengthened over the long term in accordance with Article 29(7), point (b), of Directive (EU) 2018/2001 the activity complies with the following criteria: (a) the climate benefit analysis demonstrates that the net balance of GHG emissions and removals generated by the activity over a period of 30 years after the beginning of the activity is lower than a baseline, corresponding to the balance of GHG emissions and removals over a period of 30 years starting at the beginning of the activity, associated to the business-as-usual practices that would have occurred on the involved area in the absence of the activity. (b) the projected long-term average net GHG balance of the activity is lower than the long-term average GHG balance projected for the baseline, referred to in point 2.2, where long		

	term corresponds to the longer duration between 100 years and the duration of an entire forest cycle. 2.3. The calculation of climate benefit complies with all of the following criteria: (a) the analysis is consistent with the 2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories[136]. The climate benefit analysis is based on transparent, accurate, consistent, complete and comparable information, covers all carbon pools impacted by the activity, including above-ground biomass, below-ground biomass, deadwood, litter and soil, relies on the most conservative assumptions for calculations and includes appropriate considerations about the risks of non-permanence and reversals of carbon sequestration, the risk of saturation and the risk of leakage. (b) the business as-usual practices, including harvesting practices, are one of the following: (i) the management practices as documented in the latest version of the forest management plan or equivalent instrument before the start of the activity, if any; (ii) the most recent business-as-usual practices prior to the start of the activity; (iii) the practices corresponding to a management system ensuring that carbon stocks and sinks levels in the forest area are maintained or strengthened over the long term as set out in Article 29(7), point (b), of Directive (EU) 2018/2001. (c) the resolution of the analysis is proportionate to the size of the area concerned and values specific to the area concerned are used. (d) emissions and removals that occur due to natural disturbances, such as pests and diseases infestations, forest fires, wind, storm damages, that impact the area and cause underperformance do not result in non-compliance with the criteria of Regulation (EU) 2020/852, provided that the climate benefit analysis is consistent with the 2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories regarding emissions and removals due to natural disturbances. 2.4. Forest holdings under 13ha are not required to perform a climate benefit analysis.		

[136] 2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories (version of [adoption date]: https://www.ipcc-nggip.iges.or.jp/public/2019rf/).

	3. Guarantee of permanence 3.1. In accordance with national law, the forest status of the area in which the activity takes place is guaranteed by one of the following measures: (a) the area is classified in the permanent forest estate as defined by the FAO[137] ; (b) the area is classified as a protected area; (c) the area is the subject of any legal or contractual guarantee ensuring that it will remain a forest. 3.2. In accordance with national law, the operator of the activity commits that future updates to the forest management plan or equivalent instrument, beyond the activity that is financed, will continue to seek the climate benefits as determined in point 2. Besides, the operator of the activity commits to compensate any reduction in the climate benefit determined in point 2 with an equivalent climate benefit resulting from the conduct of an activity that corresponds to one of the forestry activities defined in this Regulation. 4. Audit Within two years after the beginning of the activity and every 10 years thereafter, the compliance of the activity with the substantial contribution to climate change mitigation criteria and the DNSH criteria are verified by either of the following: (a) the relevant national competent authorities; (b) an independent third-party certifier, at the request of national authorities or the operator of the activity. In order to reduce costs, audits may be performed together with any forest certification, climate certification or other audit. The independent third-party certifier may not have any conflict of interest with the owner or the funder, and may not be involved in the development or operation of the activity. 5. Group assessment The compliance with the criteria for substantial contribution to climate change mitigation and with DNSH criteria may be checked:		

[137] 60 Forest area that is designated to be retained as forest and may not be converted to other land use.
(FAO Global Resources Assessment 2020. Terms and definitions version of [adoption date]: http://www.fao.org/3/I8661EN/i8661en.pdf).

	(a) at the level of the forest sourcing area[138] as defined in Article 2, point (30), of Directive (EU) 2018/2001; (b) at the level of a group of forest holdings sufficiently homogeneous to evaluate the risk of the sustainability of the forest activity, provided that all those holdings have a durable relationship between them and participate in the activity and the group of those holdings remains the same for all subsequent audits.		

Table 7

Framework Activity assessed	Pollution Prevention and Control		
EU Taxonomy Activity	3.1. Manufacture of renewable energy technologies		
Corresponding NACE Codes	C25, C27 and C28		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	The economic activity manufactures renewable energy technologies.	Financing under the criteria of this activity is part of KfW's Climate Protection Programme for Corporates. Only projects that meet the Substantial Contribution to Climate Change Mitigation criteria of Technical Annex I of the Climate Delegated Act are eligible for financing. Hence, since the eligibility criteria for the programme are those set out under the EU Taxonomy, this activity is assessed as aligned.	Aligned

Table 8

Framework Activity assessed	Pollution Prevention and Control		
EU Taxonomy Activity	3.2. Manufacture of equipment for the production and use of hydrogen		
Corresponding NACE Codes	C25, C27 and C28		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	The economic activity manufactures equipment for the production of hydrogen compliant with the Technical Screening Criteria set out in Section 3.10 of the Annex I I of the Climate Delegated Act and equipment for the use of hydrogen.	Financing under the criteria of this activity is part of KfW's Climate Protection Programme for Corporates. Only projects that meet the Substantial Contribution to Climate Change Mitigation criteria of Technical Annex I of the Climate Delegated Act are eligible for financing. Hence, since the eligibility criteria for the programme are those set out under the EU Taxonomy, this activity is assessed as aligned.	Aligned

[138] 'Sourcing area' means the geographically defined area from which the forest biomass feedstock is sourced, from which reliable and independent information is available and where conditions are sufficiently homogeneous to evaluate the risk of the sustainability and legality characteristics of the forest biomass.

Table 9

Framework Activity assessed	Pollution Prevention and Control		
EU Taxonomy Activity	3.3. Manufacture of low carbon technologies for transport		
Corresponding NACE Codes	C29.1, C30.1, C30.2, C30.9, C33.15, C33.17		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	The economic activity manufactures, repairs, maintains, retrofits[139], repurposes or upgrades: (a) trains, passenger coaches and wagons that have zero direct (tailpipe) CO_2 emissions; (b) trains, passenger coaches and wagons that have zero direct tailpipe CO_2 emission when operated on a track with necessary infrastructure, and use a conventional engine where such infrastructure is not available (bimode); (c) urban, suburban and road passenger transport devices, where the direct (tailpipe) CO_2 emissions of the vehicles are zero; (d) until 31 December 2025, vehicles designated as categories M2 and M3[140] that have a type of bodywork classified as 'CA' (single-deck vehicle), 'CB' (double-deck vehicle), 'CC' (single-deck articulated vehicle) or 'CD' (double-deck articulated vehicle)[141], and comply with the latest EURO VI standard, i.e. both with the requirements of Regulation (EC) No 595/2009 of the European Parliament and of the Council[142] and, from the time of the entry into force of amendments to that Regulation, in those amending acts, even before they become applicable, and with the latest step of the Euro VI standard set out in Table 1 of Appendix 9 to Annex I to Commission Regulation (EU) No 582/2011[143] where the provisions governing that step have entered into force but have not yet	Financing under the criteria of this activity is part of KfW's Climate Protection Programme for Corporates. Only projects that meet the Substantial Contribution to Climate Change Mitigation criteria of Technical Annex I of the Climate Delegated Act are eligible for financing. In this case only the manufacture of zero direct (tailpipe) CO_2 emissions vehicles is eligible. Hence, this activity is assessed as aligned.	Aligned

[139] For points (j) to (m), the criteria related to retrofitting are covered in Sections 6.9 and 6.12 of the Annex I of the Climate Delegated Act.
[140] As referred to in Article 4(1), point (a), of Regulation (EU) 2018/858 of the European Parliament and of the Council of 30 May 2018 on the approval and market surveillance of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles, amending Regulations (EC) No 715/2007 and (EC) No 595/2009 and repealing Directive 2007/46/EC (OJ L 151, 14.06.2018, p. 1)
[141] As set out in point 3 of part C of Annex I to Regulation (EU) 2018/858.
[142] Regulation (EC) No 595/2009 of the European Parliament and of the Council of 18 June 2009 on type-approval of motor vehicles and engines with respect to emissions from heavy duty vehicles (Euro VI) and on access to vehicle repair and maintenance information and amending Regulation (EC) No 715/2007 and Directive 2007/46/EC and repealing Directives 80/1269/EEC, 2005/55/EC and 2005/78/EC (OJ L 188, 18.7.2009, p. 1).
[143] Commission Regulation (EU) No 582/2011 of 25 May 2011 implementing and amending Regulation (EC) No 595/2009 of the European Parliament and of the Council with respect to emissions from heavy duty vehicles (Euro VI) and amending Annexes I and III to Directive 2007/46/EC of the European Parliament and of the Council (OJ L 167, 25.6.2011, p. 1).

	become applicable for this type of vehicle[144]. Where such standard is not available, the direct CO_2 emissions of the vehicles are zero; (e) personal mobility devices with a propulsion that comes from the physical activity of the user, from a zero-emissions motor, or a mix of zero-emissions motor and physical activity; (f) vehicles of category M1 and N1 classified as light-duty vehicles[145] with: (i) until 31 December 2025: specific emissions of CO_2, as defined in Article 3(1), point (h), of Regulation (EU) 2019/631 of the European Parliament and of the Council[146], lower than 50gCO_2/km (low- and zero-emission light-duty vehicles); (ii) from 1 January 2026: specific emissions of CO_2, as defined in Article 3(1), point (h), of Regulation (EU) 2019/631, are zero; (g) vehicles of category L[147] with tailpipe CO_2 emissions equal to 0g CO_2e/km calculated in accordance with the emission test laid down in Regulation (EU) 168/2013 of the European Parliament and of the Council[148]; (h) vehicles of categories N2 and N3, and N1 classified as heavy-duty vehicles, not dedicated to transporting fossil fuels with a technically permissible maximum laden mass not exceeding 7,5 tonnes that are 'zero-emission heavy-duty vehicles' as defined in Article 3, point (11), of Regulation (EU) 2019/1242 of the European Parliament and of the Council[149], (i) vehicles of categories N2 and N3 not dedicated to transporting fossil fuels with a technically permissible maximum laden mass exceeding 7,5 tonnes that are zero-emission heavy-duty vehicles', as defined in Article 3, point (11), of Regulation (EU)		

[144] Until 31/12/2022, the EURO VI, step E as set out in Regulation (EC) No 595/2009.
[145] As defined in Article 4(1), points (a) and (b) of Regulation (EU) 2018/858).
[146] Regulation (EU) 2019/631 of the European Parliament and of the Council of 17 April 2019 setting CO_2 emission performance standards for new passenger cars and for new light commercial vehicles, and repealing Regulations (EC) No 443/2009 and (EU) No 510/2011 (OJ L 111, 25.4.2019, p. 13).
[147] As defined in Article 4 of Regulation (EU) No 168/2013 of the European Parliament and of the Council of 15 January 2013 on the approval and market surveillance of two- or three-wheel vehicles and quadricycles (OJ L 60, 2.3.2013, p. 52).
[148] Regulation (EU) No 168/2013 of the European Parliament and of the Council of 15 January 2013 on the approval and market surveillance of two- or three-wheel vehicles and quadricycles (OJ L 60, 2.3.2013, p. 52).
[149] Regulation (EU) 2019/1242 of the European Parliament and of the Council of 20 June 2019 setting CO_2 emission performance standards for new heavy-duty vehicles and amending Regulations (EC) No 595/2009 and (EU) 2018/956 of the European Parliament and of the Council and Council Directive 96/53/EC (OJ L 198, 25.7.2019, p. 202).

	2019/1242 or 'low-emission heavy-duty vehicles' as defined in Article 3, point (12) of that Regulation; (j) inland passenger water transport vessels that: (i) have zero direct (tailpipe) CO_2 emissions; (ii) until 31 December 2025, are hybrid and dual fuel vessels using at least 50 % of their energy from zero direct (tailpipe) CO_2 emission fuels or plug-in power for their normal operation; (k) inland freight water transport vessels, not dedicated to transporting fossil fuels, that: (i) have zero direct (tailpipe) CO_2 emission; (ii) until 31 December 2025, have direct (tailpipe) emissions of CO_2 per tonne kilometre (gCO_2/tkm), calculated (or estimated in case of new vessels) using the Energy Efficiency Operational Indicator[150], 50 % lower than the average reference value for emissions of CO_2 defined for heavy duty vehicles (vehicle subgroup 5-LH) in accordance with Article 11 of Regulation (EU) 2019/1242; (l) sea and coastal freight water transport vessels, vessels for port operations and auxiliary activities, that are not dedicated to transporting fossil fuels, that: (i) have zero direct (tailpipe) CO_2 emissions; (ii) until 31 December 2025, are hybrid and dual fuel vessels that derive at least 25 % of their energy from zero direct (tailpipe) CO_2 emission fuels or plug-in power for their normal operation at sea and in ports; (iii) until 31 December 2025, and only where it can be proved that the vessels are used exclusively for operating coastal and short sea services designed to enable modal shift of freight currently transported by land to sea, the vessels that have (iv) until 31 December 2025, the vessels have an attained Energy Efficiency Design Index (EEDI) value 10 % below the EEDI requirements applicable on 1		

[150] The Energy Efficiency Operational Indicator is defined as the ratio of mass of CO_2 emitted per unit of transport work. It is a representative value of the energy efficiency of the ship operation over a consistent period which represents the overall trading pattern of the vessel. Guidance on how to calculate this indicator is provided in the document MEPC.1/Circ. 684 from IMO.

	April 2022[151] if the vessels are able to run on zero direct (tailpipe) CO_2 emission fuels or on fuels from renewable sources[152]; (m) sea and coastal passenger water transport vessels, not dedicated to transporting fossil fuels, that: (i) have zero direct (tailpipe) CO_2 emissions; (ii) until 31 December 2025, hybrid and dual fuel vessels derive at least 25 % of their energy from zero direct (tailpipe) CO_2 emission fuels or plug-in power for their normal operation at sea and in ports; (iii) until 31 December 2025, the vessels have an attained Energy Efficiency Design Index (EEDI) value 10 % below the EEDI requirements applicable on 1 April 2022 if the vessels are able to run on zero direct (tailpipe) CO_2 emission fuels or on fuels from renewable sources[153].		

Table 10

Framework Activity assessed	Pollution Prevention and Control		
EU Taxonomy Activity	3.4. Manufacture of batteries		
Corresponding NACE Codes	C27.2 and E38.32		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	The economic activity manufactures rechargeable batteries, battery packs and accumulators (and their respective components), including from secondary raw materials, that result in substantial GHG emissions reductions in transport, stationary and off-grid energy storage and other industrial applications. The economic activity recycles end-of-life batteries.	Financing under the criteria of this activity is part of KfW's Climate Protection Programme for Corporates. Only projects that meet the Substantial Contribution to Climate Change Mitigation criteria of Technical Annex I of the Climate Delegated Act are eligible for financing. For further information regarding the types of batteries, please refer to Section 1 of this SPO. Hence, since the eligibility criteria for the programme are those set out under the EU Taxonomy, this activity is assessed as aligned.	Aligned

Table 11

Framework Activity assessed	Pollution Prevention and Control

[151] EEDI requirements applicable on 1 April 2022 as agreed by the Marine Environment Protection Committee of the International Maritime Organization on its seventy fourth session.

[152] Fuels that meet the technical screening criteria specified in Sections 3.10 and 4.13 of the Annex I of the Climate Delegated Act .

[153] Fuels that meet the technical screening criteria specified in Sections 3.10 and 4.13 of the Annex I of the Climate Delegated Act.

EU Taxonomy Activity	3.5 Manufacture of energy efficiency equipment for buildings		
Corresponding NACE Codes	C16.23, C23.11, C23.20, C23.31, C23.32, C23.43, C.23.61, C25.11, C25.12, C25.21, C25.29, C25.93, C27.31, C27.32, C27.33, C27.40, C27.51, C28.11, C28.12, C28.13, C28.14		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	The economic activity manufactures one or more of the following products and their key components[154]: (a) windows with U-value lower or equal to 1,0 W/m^{2}K; (b) doors with U-value lower or equal to 1,2 W/m^{2}K; (c) external wall systems with U-value lower or equal to 0,5 W/m^{2}K; (d) roofing systems with U-value lower or equal to 0,3 W/m^{2}K; (e) insulating products with a lambda value lower or equal to 0,06 W/mK; (f) household appliances falling into the highest two populated classes of energy efficiency in accordance with Regulation (EU) 2017/1369 of the European Parliament and of the Council[155] and delegated acts adopted under that Regulation; (g) light sources rated in the highest two populated classes of energy efficiency in accordance with Regulation (EU) 2017/1369 and delegated acts adopted under that Regulation; (h) space heating and domestic hot water systems rated in the highest two populated classes of energy efficiency in accordance with Regulation (EU) 2017/1369 and delegated acts adopted under that Regulation; (i) cooling and ventilation systems rated in the highest two populated classes of energy efficiency in accordance with Regulation (EU) 2017/1369 and delegated acts adopted under that Regulation; (j) presence and daylight controls for lighting systems; (k) heat pumps compliant with the technical screening criteria set out in Section 4.16 of the Annex I of the Climate Delegated Act;	Financing under the criteria of this activity is part of KfW's Climate Protection Programme for Corporates. Only projects that meet the Substantial Contribution to Climate Change Mitigation criteria of Technical Annex I of the Climate Delegated Act are eligible for financing. Hence, since the eligibility criteria for the programme are those set out under the EU Taxonomy, this activity is assessed as aligned.	Aligned

[154] Where relevant, the U-value is calculated according to the applicable standards, e.g. EN ISO 10077-1:2017 (windows and doors), EN ISO 12631:2017 (curtain walls) and EN ISO 6946:2017 (other building components and elements).
[155] Regulation (EU) 2017/1369 of the European Parliament and of the Council of 4 July 2017 setting a framework for energy labelling and repealing Directive 2010/30/EU (OJ L 198, 28.7.2017, p. 1).

	(l) façade and roofing elements with a solar shading or solar control function, including those that support the growing of vegetation; (m) energy-efficient building automation and control systems for residential and non-residential buildings; (n) zoned thermostats and devices for the smart monitoring of the main electricity loads or heat loads for buildings, and sensoring equipment; (o) products for heat metering and thermostatic controls for individual homes connected to district heating systems, for individual flats connected to central heating systems serving a whole building, and for central heating systems; (p) district heating exchangers and substations compliant with the district heating/cooling distribution activity set out in Section 4.15 of the Annex I of the Climate Delegated Act; (q) products for smart monitoring and regulating of heating system, and sensoring equipment.		

Table 12

Framework Activity assessed	Pollution Prevention and Control		
EU Taxonomy Activity	3.7. Manufacture of cement		
Corresponding NACE Code	C23.51		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	The activity manufactures one of the following: (a) grey cement clinker where the specific GHG emissions[156] are lower than 0,722[157] tCO_2e per tonne of grey cement clinker; (b) cement from grey clinker or alternative hydraulic binder, where the specific GHG emissions[158] from the clinker and	Financing under the criteria of this activity is part of KfW's Climate Protection Programme for Corporates. Only projects that meet the Substantial Contribution to Climate Change Mitigation criteria of Technical Annex I of the Climate Delegated Act are eligible for financing. Hence, since the eligibility criteria for the programme are those set out under the EU Taxonomy, this activity is assessed as aligned.	Aligned

[156] Calculated in accordance with Commission Delegated Regulation (EU) 2019/331 of 19 December 2018 determining transitional Union-wide rules for harmonised free allocation of emission allowances pursuant to Article 10a of Directive 2003/87/EC of the European Parliament and of the Council (OJ L 59, 27.2.2019, p. 8).
[157] Reflecting the average value of the 10% most efficient installations in 2016 and 2017 (t CO_2 equivalents/t) as set out in the Annex to the Commission Implementing Regulation (EU) 2021/447 of 12 March 2021 determining revised benchmark values for free allocation of emission allowances for the period from 2021 to 2025 pursuant to Article 10a(2) of Directive 2003/87/EC of the European Parliament and of the Council, (OJ L 87, 15.3.2021, p. 29).
[158] Calculated in accordance with Regulation (EU) 2019/331.

	cement or alternative binder production are lower than 0,469[159] tCO_2e per tonne of cement or alternative binder manufactured. Where CO_2 that would otherwise be emitted from the manufacturing process is captured for the purpose of underground storage, the CO_2 is transported and stored underground, in accordance with the technical screening criteria set out in Sections 5.11 and 5.12 of the Annex I.of the Climate Delegated Act.		

Table 13

Framework Activity assessed	Pollution Prevention and Control		
EU Taxonomy Activity	3.8. Manufacture of aluminium		
Corresponding NACE Codes	C24.42, C24.53		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	The activity manufactures one of the following: (a) primary aluminium where the economic activity complies with two of the following criteria until 2025 and with all of the following criteria105 after 2025: (i) the GHG emissions106 do not exceed 1,484107 tCO_2e per ton of aluminium manufactured108: (ii) the average carbon intensity for the indirect GHG emissions109 does not exceed 100g CO_2e/kWh; (iii) the electricity consumption for the manufacturing process does not exceed 15.5 MWh/t Al. (b) secondary aluminium.	Financing under the criteria of this activity is part of KfW's Climate Protection Programme for Corporates. Only projects that meet the Substantial Contribution to Climate Change Mitigation criteria of Technical Annex I of the Climate Delegated Act are eligible for financing. Hence, since the eligibility criteria for the programme are those set out under the EU Taxonomy, this activity is assessed as aligned.	Aligned

Table 14

Framework Activity assessed	Pollution Prevention and Control
EU Taxonomy Activity	3.9. Manufacture of iron and steel
Corresponding NACE Codes	C24.10, C24.20, C24.31, C24.32, C24.33, C24.34, C24.51 and C24.52
SC Criteria of the EU Taxonomy	**Alignment**

[159] Reflecting the average value of the 10% most efficient installations in 2016 and 2017 (tCO_2 equivalents/t) for grey cement clinker as set out in the Annex to the Implementing Regulation (EU) 2021/447, multiplied by the clinker to cement ratio of 0,65.

Mitigation	The activity manufactures one of the following: (a) iron and steel where GHG emissions[160], reduced by the amount of emissions assigned to the production of waste gases in accordance with point 10.1.5(a) of Annex VII to Regulation (EU) 2019/331 do not exceed the following values applied to the different manufacturing process steps: (i) hot metal = 1,3311[161] tCO_2e/t product; (ii) sintered ore = 0,163[162] tCO_2e/t product; (iii) coke (excluding lignite coke) = 0,144[163] tCO_2e/t product; iv) iron casting = 0,299[164] tCO_2e/t product; (v) electric Arc Furnace (EAF) high alloy steel = 0,266[165] tCO_2e/t product; vi) electric Arc Furnace (EAF) carbon steel = 0,209[166] tCO_2e/t product. (b) steel in electric arc furnaces (EAFs) producing EAF carbon steel or EAF high alloy steel, as defined in Commission Delegated Regulation (EU) 2019/331 and where the steel scrap input relative to product output is not lower than: (i) 70 % for the production of high alloy steel; (ii) 90 % for the production of carbon steel. Where the CO_2 that would otherwise be emitted from the manufacturing process is captured for the purpose of underground storage, the CO_2 is transported and stored underground, in accordance with the technical screening criteria set out in Sections 5.11 and 5.12 of the Annex I of the Climate Delegated Act.	Financing under the criteria of this activity is part of KfW's Climate Protection Programme for Corporates. Only projects that meet the Substantial Contribution to Climate Change Mitigation criteria of Technical Annex I of the Climate Delegated Act are eligible for financing. Hence, since the eligibility criteria for the programme are those set out under the EU Taxonomy, this activity is assessed as aligned.	Aligned

Table 15

Framework Activity assessed	Pollution Prevention and Control

[160] Calculated in accordance with Regulation (EU) 2019/331.
[161] Reflecting the average value of the 10% most efficient installations in 2016 and 2017 (tCO_2 equivalents/t) as set out in the Annex to the Implementing Regulation (EU) 2021/447.
[162] Reflecting the average value of the 10% most efficient installations in 2016 and 2017 (tCO_2 equivalents/t) as set out in the Annex to the Implementing Regulation (EU) 2021/447.
[163] Reflecting the average value of the 10% most efficient installations in 2016 and 2017 (tCO_2 equivalents/t) as set out in the Annex to the Implementing Regulation (EU) 2021/447.
[164] Reflecting the average value of the 10% most efficient installations in 2016 and 2017 (tCO_2 equivalents/t) as set out in the Annex to the Implementing Regulation (EU) 2021/447.
[165] Reflecting the average value of the 10% most efficient installations in 2016 and 2017 (tCO_2 equivalents/t) as set out in the Annex to the Implementing Regulation (EU) 2021/447.
[166] Reflecting the average value of the 10% most efficient installations in 2016 and 2017 (tCO_2 equivalents/t) as set out in the Annex to the Implementing Regulation (EU) 2021/447.

EU Taxonomy Activity	3.10. Manufacture of hydrogen		
Corresponding NACE Code	C20.11		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	The activity complies with the life-cycle GHG emissions savings requirement of 73.4% for hydrogen [resulting in life-cycle GHG emissions lower than 3tCO_2e/tH2] and 70% for hydrogen-based synthetic fuels relative to a fossil fuel comparator of 94g CO_2e/MJ in analogy to the approach set out in Article 25(2) of and Annex V to Directive (EU) 2018/2001. Life-cycle GHG emissions savings are calculated using the methodology referred to in Article 28(5) of Directive (EU) 2018/2001 or, alternatively, using ISO 14067:2018[167] or ISO 14064-1:2018[168]. Quantified life-cycle GHG emission savings are verified in line with Article 30 of Directive (EU) 2018/2001 where applicable, or by an independent third party. Where the CO_2 that would otherwise be emitted from the manufacturing process is captured for the purpose of underground storage, the CO_2 is transported and stored underground, in accordance with the technical screening criteria set out in Sections 5.11 and 5.12, respectively, of the Annex I of the Climate Delegated Act..	Financing under the criteria of this activity is part of KfW's Climate Protection Programme for Corporates. Only projects that meet the Substantial Contribution to Climate Change Mitigation criteria of Technical Annex I of the Climate Delegated Act are eligible for financing. Hence, since the eligibility criteria for the programme are those set out under the EU Taxonomy, this activity is assessed as aligned.	Aligned

Table 16

Framework Activity assessed	Pollution Prevention and Control		
EU Taxonomy Activity	3.11. Manufacture of carbon black		
Corresponding NACE Code	C20.13		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	GHG emissions[169] from the carbon black production processes are lower than 1,141[170] tCO_2e per tonne of product.	Financing under the criteria of this activity is part of KfW's Climate Protection Programme for Corporates. Only projects that meet the Substantial Contribution to Climate Change Mitigation criteria of Technical Annex I of the Climate Delegated Act are eligible for financing. Hence, since the eligibility criteria for the programme are	Aligned

[167] ISO standard 14067:2018, Greenhouse gases — Carbon footprint of products — Requirements and guidelines for quantification (version of [adoption date]: https://www.iso.org/standard/71206.html).
[168] ISO standard 14064-1:2018, Greenhouse gases — Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals (version of [adoption date]: https://www.iso.org/standard/66453.html).
[169] Calculated in accordance with Regulation (EU) 2019/331.
[170] Reflecting the average value of the 10% most efficient installations in 2016 and 2017 (tCO_2 equivalents/t) as set out in the Annex to the Implementing Regulation (EU) 2021/447.

		those set out under the EU Taxonomy, this activity is assessed as aligned.	

Table 17

Framework Activity assessed	Pollution Prevention and Control		
EU Taxonomy Activity	3.12. Manufacture of soda ash		
Corresponding NACE Code	C20.13		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	GHG emissions[171] from the soda ash production processes are lower than 0,789[172] tCO_2e per tonne of product.	Financing under the criteria of this activity is part of KfW's Climate Protection Programme for Corporates. Only projects that meet the Substantial Contribution to Climate Change Mitigation criteria of Technical Annex I of the Climate Delegated Act are eligible for financing. Hence, since the eligibility criteria for the programme are those set out under the EU Taxonomy, this activity is assessed as aligned.	Aligned

Table 18

Framework Activity assessed	Pollution Prevention and Control		
EU Taxonomy Activity	3.13. Manufacture of chlorine		
Corresponding NACE Code	C20.13		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	Electricity consumption for electrolysis and chlorine treatment is equal or lower than 2.45 MWh per tonne of chlorine. Average life-cycle GHG emissions of the electricity used for chlorine production is at or lower than 100 g CO_2e/kWh. Life-cycle GHG emissions are calculated using Recommendation 2013/179/EU or, alternatively, using ISO 14067:2018[173] or ISO 14064-1:2018[174].	Financing under the criteria of this activity is part of KfW's Climate Protection Programme for Corporates. Only projects that meet the Substantial Contribution to Climate Change Mitigation criteria of Technical Annex I of the Climate Delegated Act are eligible for financing. Hence, since the eligibility criteria for the programme are those set out under the EU Taxonomy, this activity is assessed as aligned.	Aligned

[171] Calculated in accordance with Regulation (EU) 2019/331.
[172] Reflecting the average value of the 10% most efficient installations in 2016 and 2017 (t CO_2 equivalents/t) as set out in the Annex to the Implementing Regulation (EU) 2021/447.
[173] ISO standard 14067:2018, Greenhouse gases — Carbon footprint of products — Requirements and guidelines for quantification (version of [adoption date]: https://www.iso.org/standard/71206.html).
[174] ISO standard 14064-1:2018, Greenhouse gases — Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals (version of [adoption date]: https://www.iso.org/standard/66453.html).

	Quantified life-cycle GHG emissions are verified by an independent third party.		

Table 19

Framework Activity assessed	Pollution Prevention and Control		
EU Taxonomy Activity	3.14. Manufacture of organic basic chemicals		
Corresponding NACE Code	C20.14		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	GHG emissions[175] from the organic basic chemicals production processes are lower than: (a) for HVC: 0,693[176] tCO_2e/t of HVC; (b) for aromatics: 0,0072[177] tCO_2e/t of complex weighted throughput; (c) for vinyl chloride: 0,171[178] tCO_2e/t of vinyl chloride; (d) for styrene: 0,419[179] tCO_2e/t of styrene; (e) for ethylene oxide/ethylene glycols: 0,314[180] tCO_2e/t of ethylene oxide/glycol; (f) for adipic acid: 0,32[181] tCO_2e /t of adipic acid. Where the organic chemicals in scope are produced wholly or partially from renewable feedstock, the life-cycle GHG emissions of the manufactured chemical, manufactured wholly or partially from renewable feedstock, are lower than the life-cycle GHG emissions of the equivalent chemical manufactured from fossil fuel feedstock.	Financing under the criteria of this activity is part of KfW's Climate Protection Programme for Corporates. Only projects that meet the Substantial Contribution to Climate Change Mitigation criteria of Technical Annex I of the Climate Delegated Act are eligible for financing. Hence, since the eligibility criteria for the programme are those set out under the EU Taxonomy, this activity is assessed as aligned.	Aligned

[175] Calculated in accordance with Regulation (EU) 2019/331.
[176] Reflecting the average value of the 10% most efficient installations in 2016 and 2017 (t CO_2 equivalents/t) as set out in the Annex to the Implementing Regulation (EU) 2021/447.
[177] Reflecting the average value of the 10% most efficient installations in 2016 and 2017 (t CO_2 equivalents/t) as set out in the Annex to the Implementing Regulation (EU) 2021/447.
[178] Reflecting the average value of the 10% most efficient installations in 2016 and 2017 (t CO_2 equivalents/t) as set out in the Annex to the Implementing Regulation (EU) 2021/447.
[179] Reflecting the average value of the 10% most efficient installations in 2016 and 2017 (t CO_2 equivalents/t) as set out in the Annex to the Implementing Regulation (EU) 2021/447.
[180] Reflecting the average value of the 10% most efficient installations in 2016 and 2017 (t CO_2 equivalents/t) as set out in the Annex to the Implementing Regulation (EU) 2021/447.
[181] Reflecting the average value of the 10% most efficient installations in 2016 and 2017 (t CO_2 equivalents/t) as set out in the Annex to the Implementing Regulation (EU) 2021/447.

	Life cycle GHG emissions are calculated using Recommendation 2013/179/EU or, alternatively, using ISO 14067:2018[182] or ISO 14064-1:2018[183]. Quantified life cycle GHG emissions are verified by an independent third party. Agricultural biomass used for the manufacture of organic basic chemicals complies with the criteria laid down in Article 29, paragraphs 2 to 5 of Directive (EU) 2018/2001. Forest biomass used for the manufacture of organic basic chemicals complies with the criteria laid down in Article 29, paragraphs 6 and 7 of that Directive.yrene: 0,419140 tCO_2e/t of styrene;		

Table 20

Framework Activity assessed	Pollution Prevention and Control		
EU Taxonomy Activity	3.15. Manufacture of anhydrous ammonia		
Corresponding NACE Code	C20.15		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	The activity complies with one of the following criteria: (a) ammonia is produced from hydrogen that complies with the technical screening criteria set out in Section 3.10 of the Annex I of the Climate Delegated Act (Manufacturing of hydrogen); (b) ammonia is recovered from waste water.	Financing under the criteria of this activity is part of KfW's Climate Protection Programme for Corporates. Only projects that meet the Substantial Contribution to Climate Change Mitigation criteria of Technical Annex I of the Climate Delegated Act are eligible for financing. Hence, since the eligibility criteria for the programme are those set out under the EU Taxonomy, this activity is assessed as aligned.	Aligned

Table 21

Framework Activity assessed	Pollution Prevention and Control	
EU Taxonomy Activity	3.16. Manufacture of nitric acid	
Corresponding NACE Code	C20.15	
SC Criteria of the EU Taxonomy	**Alignment**	

[182]ISO standard 14067:2018, Greenhouse gases — Carbon footprint of products — Requirements and guidelines for quantification (version of [adoption date]: https://www.iso.org/standard/71206.html).
[183] ISO standard 14064-1:2018, Greenhouse gases — Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals (version of [adoption date]: https://www.iso.org/standard/66453.html).

Mitigation	GHG emissions[184] from the manufacture of nitric acid are lower than 0,038[185] tCO_2e per tonne of nitric acid.	Financing under the criteria of this activity is part of KfW's Climate Protection Programme for Corporates. Only projects that meet the Substantial Contribution to Climate Change Mitigation criteria of Technical Annex I of the Climate Delegated Act are eligible for financing. Hence, since the eligibility criteria for the programme are those set out under the EU Taxonomy, this activity is assessed as aligned.	Aligned

Table 22

Framework Activity assessed	Pollution Prevention and Control		
EU Taxonomy Activity	3.17. Manufacture of plastics in primary form		
Corresponding NACE Code	C20.16		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	The activity complies with one of the following criteria: a) the plastic in primary form is fully manufactured by mechanical recycling of plastic waste; b) where mechanical recycling is not technically feasible or economically viable, the plastic in primary form is fully manufactured by chemical recycling of plastic waste and the life cycle GHG emissions of the manufactured plastic, excluding any calculated credits from the production of fuels, are lower than the life cycle GHG emissions of the equivalent plastic in primary form manufactured from fossil fuel feedstock. Lifecycle GHG emissions are calculated using Recommendation 2013/179/EU or, alternatively, using ISO 14067:2018[186] or ISO 14064-1:2018[187]. Quantified life cycle GHG emissions are verified by an independent third party. c) derived wholly or partially from renewable feedstock[188] and its life-cycle GHG emissions are lower than the life-cycle GHG emissions of the equivalent plastics in primary form manufactured from fossil fuel feedstock. Life-cycle GHG emissions are calculated using Recommendation	Financing that falls under the criteria of this activity is part of KfW's Climate Protection Programme for Corporates. Only projects that meet the Substantial Contribution to Climate Change Mitigation criteria of Technical Annex I of the Climate Delegated Act are eligible for financing. Hence, since the eligibility criteria for the programme are those set out under the EU Taxonomy, this activity is assessed as aligned.	Aligned

[184] Calculated in accordance with the Regulation (EU) 2019/331.
[185] Reflecting the average value of the 10% most efficient installations in 2016 and 2017 (tCO_2 equivalents/t) as set out in the Annex to the Implementing Regulation (EU) 2021/447.
[186] ISO standard 14067:2018, Greenhouse gases — Carbon footprint of products — Requirements and guidelines for quantification (version of [adoption date]: https://www.iso.org/standard/71206.html).
[187] ISO standard 14064-1:2018, Greenhouse gases — Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals (version of [adoption date]: https://www.iso.org/standard/66453.html).
[188] Renewable feedstock refers to biomass, industrial bio-waste or municipal bio-waste.

	2013/179/EU or, alternatively, using ISO 14067:2018 or ISO 14064-1:2018. Quantified life-cycle GHG emissions are verified by an independent third party. Agricultural biomass used for the manufacture of plastics in its primary form complies with the criteria laid down in Article 29, paragraphs 2 to 5, of Directive (EU) 2018/2001. Forest biomass used for the manufacture of plastics in its primary form complies with the criteria laid down in Article 29, paragraphs 6 and 7 of that Directive.		

Table 23

Framework Activity assessed	Renewable Energy		
EU Taxonomy Activity	4.1. Electricity generation using solar photovoltaic technology		
Corresponding NACE Codes	D35.11 and F42.22		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	The activity generates electricity using solar PV technology.	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other standard domestic loan programmes and other individual financing. Since KfW has confirmed that eligibility criteria are fulfilled under all programmes and individual financing, this activity is assessed as aligned.	Aligned

Table 24

Framework Activity assessed	Renewable Energy		
EU Taxonomy Activity	4.2. Electricity generation using concentrated solar power (CSP) technology		
Corresponding NACE Codes	D35.11 and F42.22		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	The activity generates electricity using CSP technology.	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other standard domestic loan programmes and other individual financing. Since KfW has confirmed that eligibility criteria are fulfilled under all programmes and individual financing, this activity is assessed as aligned.	Aligned

Table 25

Framework Activity assessed	Renewable Energy

EU Taxonomy Activity	4.3. Electricity generation from wind power		
Corresponding NACE Codes	D35.11 and F42.22		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	The activity generates electricity from wind power.	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other standard domestic loan programmes and other individual financing. Since KfW has confirmed that eligibility criteria are fulfilled under all programmes and individual financing, this activity is assessed as aligned.	Aligned

Table 26

Framework Activity assessed	Renewable Energy		
EU Taxonomy Activity	4.4. Electricity generation from ocean energy technologies		
Corresponding NACE Codes	D35.11 and F42.22		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	The activity generates electricity from ocean energy.	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other standard domestic loan programmes and other individual financing. Since KfW has confirmed that eligibility criteria are fulfilled under all programmes and other individual financing, this activity is assessed as aligned.	Aligned

Table 27

Framework Activity assessed	Renewable Energy		
EU Taxonomy Activity	4.5. Electricity generation from hydropower		
Corresponding NACE Codes	D35.11 and F42.22		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	The activity complies with either of the following criteria: a) the electricity generation facility is a run-of-river plant and does not have an artificial reservoir; b) the power density of the electricity generation facility is above 5W/m2; c) the life-cycle GHG emissions from the generation of electricity from hydropower, are lower than 100gCO_2e/kWh. The life-cycle	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other standard loan programmes and other individual financing. KfW has confirmed that its other standard domestic loan programmes and other individual financing under this activity will not meet the mitigation criteria. However, under the Climate Protection Programme for Corporates, only projects expected to meet the Substantial Contribution to Climate Change Mitigation criteria of Technical Annex I of the Climate Delegated Act are eligible for financing.	Not aligned

	GHG emissions are calculated using Recommendation 2013/179/EU or, alternatively, using ISO 14067:2018[189], ISO 14064-1:2018[190] or the G-res tool. Quantified life-cycle GHG emissions are verified by an independent third party.	Climate Protection Programme for Corporates. Since the criteria are not met for KfW's other standard domestic loan programmes and other individual financing, this activity is assessed as not aligned.[191]	

Table 28

Framework Activity assessed	Renewable Energy		
EU Taxonomy Activity	4.6. Electricity generation from geothermal energy		
Corresponding NACE Codes	D35.11 and F42.22		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	Life-cycle GHG emissions from the generation of electricity from geothermal energy are lower than 100gCO_2e/kWh. Life-cycle GHG emissions savings are calculated using Commission Recommendation 2013/179/EU or, alternatively, using ISO 14067:2018 or ISO 14064-1:2018. Quantified life-cycle GHG emissions are verified by an independent third party.	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other standard domestic loan programmes and other individual financing. KfW has confirmed that its other standard domestic loan programmes and other individual financing under this activity will not meet the mitigation criteria. However, under the Climate Protection Programme for Corporates, only projects expected to meet the Substantial Contribution to Climate Change Mitigation criteria of Technical Annex I of the Climate Delegated Act are eligible for financing. Since the criteria are not met for KfW's other standard domestic loan programmes and other individual financing, this activity is assessed as not aligned.[192]	Not aligned

Table 29

Framework Activity assessed	Renewable Energy		
EU Taxonomy Activity	4.7. Electricity generation from renewable non-fossil gaseous and liquid fuels		
Corresponding NACE Codes	D35.11 and F42.22		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	1. Life-cycle GHG emissions from the generation of electricity using renewable gaseous and liquid fuels are lower than 100gCO_2e/kWh.	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other standard domestic loan programmes and other individual financing. KfW has confirmed that its other standard domestic loan programmes and	Not aligned

[189] ISO standard 14067:2018, Greenhouse gases — Carbon footprint of products — Requirements and guidelines for quantification (version of [adoption date]: https://www.iso.org/standard/71206.html).
[190] ISO standard 14064-1:2018, Greenhouse gases — Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals (version of [adoption date]: https://www.iso.org/standard/66453.html).
[191] For further information regarding estimated allocation volumes, please refer to Section 1.
[192] For further information regarding estimated allocation volumes, please refer to Section 1.

	Life-cycle GHG emissions are calculated based on project-specific data, where available, using Recommendation 2013/179/EU or, alternatively, using ISO 14067:2018[193] or ISO 14064-1:2018.[194] Quantified life-cycle GHG emissions are verified by an independent third party. 2. Where facilities incorporate any form of abatement (including carbon capture or use of decarbonised fuels), that abatement activity complies with the criteria set out in the relevant Section of the Annex I of the Climate Delegated Act, where applicable. Where the CO_2 that would otherwise be emitted from the electricity generation process is captured for the purpose of underground storage, the CO_2 is transported and stored underground, in accordance with the technical screening criteria set out in Sections 5.11 and 5.12 of the Annex I of the Climate Delegated Act. 3. The activity meets either of the following criteria: a) at construction, measurement equipment for monitoring of physical emissions, such as methane leakage is installed or a leak detection and repair program is introduced; b) at operation, physical measurement of methane emissions are reported and leak is eliminated. 4. Where the activity blends renewable gaseous or liquid fuels with biogas or bioliquids, the agricultural biomass used for the production of the biogas or bioliquids complies with the criteria laid down in Article 29, paragraphs 2 to 5, of Directive (EU) 2018/2001 while forest biomass complies with the criteria laid down in Article 29, paragraphs 6 and 7 of that Directive.	other individual financing under this activity will only meet criterion 4. However, under the Climate Protection Programme for Corporates, only projects expected to meet the Substantial Contribution to Climate Change Mitigation criteria of Technical Annex I of the Climate Delegated Act are eligible for financing. Climate Protection Programme for Corporates. Due to the majority of criteria not being met by KfW's other standard domestic loan programmes and other individual financing, this activity is assessed as not aligned.	

Table 30

Framework Activity assessed	Renewable Energy
EU Taxonomy Activity	4.8. Electricity generation from bioenergy
Corresponding NACE Code	D35.11

[193] ISO standard 14067:2018, Greenhouse gases — Carbon footprint of products — Requirements and guidelines for quantification (version of [adoption date]: https://www.iso.org/standard/71206.html).
[194] ISO standard 14064-1:2018, Greenhouse gases — Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals (version of [adoption date]: https://www.iso.org/standard/66453.html)

SC Criteria of the EU Taxonomy		Alignment	
Mitigation	1. Agricultural biomass used in the activity complies with the criteria laid down in Article 29, paragraphs 2 to 5, of Directive (EU) 2018/2001. Forest biomass used in the activity complies with the criteria laid down in Article 29, paragraphs 6 and 7 of that Directive. 2. The greenhouse gas emission savings from the use of biomass are at least 80% in relation to the GHG saving methodology and the relative fossil fuel comparator set out in Annex VI to Directive (EU) 2018/2001. 3. Where the installations rely on anaerobic digestion of organic material, the production of the digestate meets the criteria in Sections 5.6 and criteria 1 and 2 of Section 5.7 of the Annex I of the Climate Delegated Act, as applicable. 4. Points 1 and 2 do not apply to electricity generation installations with a total rated thermal input below 2 MW and using gaseous biomass fuels. 5. For electricity generation installations with a total rated thermal input from 50 to 100 MW, the activity applies high-efficiency cogeneration technology, or, for electricity-only installations, the activity meets an energy efficiency level associated with the best available techniques (BAT-AEL) ranges set out in the latest relevant best available techniques (BAT) conclusions, including the best available techniques (BAT) conclusions for large combustion plants.[195] 6. For electricity generation installations with a total rated thermal input above 100 MW, the activity complies with one or more of the following criteria: a) attains electrical efficiency of at least 36%; b) applies highly efficient CHP (combined heat and power) technology as referred to in Directive 2012/27/EU of the European Parliament and of the Council;[196] c) uses carbon capture and storage technology. Where the CO_2 that would otherwise be emitted from the electricity generation process is captured for the purpose of underground storage, the CO_2 is transported and stored underground in accordance with the technical screening criteria set out in Sections 5.11 and 5.12, respectively, of the Annex I of the Climate Delegated Act.	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other standard domestic loan programmes and other individual financing. KfW has confirmed that its other standard domestic loan programmes and individual financing under this activity will meet the mitigation criteria of points 1, 2, 3 and 5. However, under the Climate Protection Programme for Corporates, only projects expected to meet the Substantial Contribution to Climate Change Mitigation criteria of Technical Annex I of the Climate Delegated Act are eligible for financing. Climate Protection Programme for Corporates Hence, Sustainalytics assesses this as partially aligned.	Partially aligned

[195] Implementing Decision (EU) 2017/1442

[196] Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC (OJ L 315, 14.11.2012, p. 1).

Table 31

Framework Activity assessed	Renewable Energy		
EU Taxonomy Activity	4.9. Transmission and distribution of electricity		
Corresponding NACE Codes	D35.12, D35.13		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	The activity complies with one of the following criteria: 1. The transmission and distribution infrastructure or equipment is in an electricity system that complies with at least one of the following criteria: a) the system is the interconnected European system, i.e., the interconnected control areas of Member States, Norway, Switzerland and the United Kingdom, and its subordinated systems; b) more than 67% of newly enabled generation capacity in the system is below the generation threshold value of 100 gCO_2e/kWh measured on a life cycle basis in accordance with electricity generation criteria, over a rolling five-year period; c) the average system grid emissions factor, calculated as the total annual emissions from power generation connected to the system, divided by the total annual net electricity production in that system, is below the threshold value of 100 gCO_2e/kWh measured on a life cycle basis in accordance with electricity generation criteria, over a rolling five-year period; Infrastructure dedicated to creating a direct connection or expanding an existing direct connection between a substation or network and a power production plant that is more greenhouse gas intensive than 100 gCO_2e/kWh measured on a life cycle basis is not compliant. Installation of metering infrastructure that does not meet the requirements of smart metering systems of Article 20 of Directive (EU) 2019/944 is not compliant. 2. The activity is one of the following: a) construction and operation of direct connection, or expansion of existing direct connection, of low carbon	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other standard domestic loan programmes and other individual financing. Under the Climate Protection Programme for Corporates KfW has confirmed it will finance systems in the interconnected European system, i.e. the interconnected control areas of EU Member States, Norway, Switzerland and the United Kingdom, and its subordinated systems. Further, KfW has confirmed that its other standard domestic loan programmes and other individual financing under this activity will fund activities as listed under 2 a) to g). Hence, this activity is assessed as aligned.	Aligned

	electricity generation below the threshold of 100 gCO_2e/kWh measured on a life cycle basis to a substation or network; b) construction and operation of electric vehicle (EV) charging stations and supporting electric infrastructure for the electrification of transport, subject to compliance with the technical screening criteria under the transport Section of the Annex I of the Climate Delegated Act; c) installation of transmission and distribution transformers that comply with the Tier 2 (1 July 2021) requirements set out in Annex I to the Commission Regulation (EU) No 548/2014[197] and, for medium power transformers with highest voltage for equipment not exceeding 36 kV, with AAA0 level requirements on no-load losses set out in standard EN 50588-1[198] d) construction/installation and operation of equipment and infrastructure where the main objective is an increase of the generation or use of renewable electricity generation; e) installation of equipment to increase the controllability and observability of the electricity system and to enable the development and integration of renewable energy sources, including: i) sensors and measurement tools (including meteorological sensors for forecasting renewable production); ii) communication and control (including advanced software and control rooms, automation of substations or feeders, and voltage control capabilities to adapt to more decentralised renewable infeed). f) installation of equipment such as, but not limited to future smart metering systems or those replacing smart metering systems in line with Article 19(6) of Directive (EU) 2019/944 of the European Parliament and of the Council[199], which meet the requirements of Article 20 of Directive (EU) 2019/944, able to carry information to users for remotely acting on consumption, including customer data hubs;		

[197] Commission Regulation (EU) No 548/2014 of 21 May 2014 on implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to small, medium and large power transformers (OJ L 152, 22.5.2014, p. 1).
[198] CEI EN 50588-1 Medium power transformers 50 Hz, with highest voltage for equipment not exceeding 36 kV.
[199] Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 on rules for the internal market for electricity and amending Directive 2012/27/EU (OJ L 158/125, 14.6.2019),

	g) construction/installation of equipment to allow for exchange of specifically renewable electricity between users; h) construction and operation of interconnectors between transmission systems, provided that one of the systems is compliant. For the purposes of this Section, the following specifications apply: a) the rolling five-year period used in determining compliance with the thresholds is based on five consecutive historical years, including the year for which the most recent data are available; b) a 'system' means the power control area of the transmission or distribution network where the infrastructure or equipment is installed; c) transmission systems may include generation capacity connected to subordinated distribution systems; d) distribution systems subordinated to a transmission system that is deemed to be on a trajectory to full decarbonisation may also be deemed to be on a trajectory to full decarbonisation; e) to determine compliance, it is possible to consider a system covering multiple control areas which are interconnected and with significant energy exchanges between them, in which case the weighted average emissions factor across all included control areas is used, and individual subordinated transmission or distribution systems within that system is not required to demonstrate compliance separately; f) it is possible for a system to become non-compliant after having previously been compliant. In systems that become non-compliant, no new transmission and distribution activities are compliant from that moment onward, until the system complies again with the threshold (except for those activities that are always compliant, see above). Activities in subordinated systems may still be compliant, where those subordinated systems meet the criteria of this Section; g) a direct connection or expansion of an existing direct connection to production plants includes infrastructure that is indispensable to carry the associated electricity from the power generating facility to a substation or to the network.		

Table 32

Framework Activity assessed	Renewable Energy		
EU Taxonomy Activity	4.10. Storage of electricity		
Corresponding NACE Code	No associated code		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	The activity is the construction and operation of electricity storage including pumped hydropower storage. Where the activity includes chemical energy storage, the medium of storage (such as hydrogen or ammonia) complies with the criteria for manufacturing of the corresponding product specified in Sections 3.7 to 3.17 of the Annex I. In case of using hydrogen as electricity storage, where hydrogen meets the technical screening criteria specified in Section 3.10 of the Annex I of the Climate Delegated Act, re-electrification of hydrogen is also considered part of the activity.	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other standard domestic loan programmes and other individual financing. KfW has confirmed the exclusion of chemical energy and hydrogen storage and that eligibility criteria are fulfilled under all programmes and individual financing. This activity is assessed as aligned.	Aligned

Table 33

Framework Activity assessed	Renewable Energy		
EU Taxonomy Activity	4.11. Storage of thermal energy		
Corresponding NACE Code	J63.11		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	The activity stores thermal energy, including Underground Thermal Energy Storage (UTES) or Aquifer Thermal Energy Storage (ATES).	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other standard domestic loan programmes and other individual financing. Since KfW has confirmed that eligibility criteria are fulfilled under all programmes and individual financing, this activity is assessed as aligned.	Aligned

Table 34

Framework Activity assessed	Renewable Energy
EU Taxonomy Activity	4.12. Storage of hydrogen

Corresponding NACE Code	No associated code		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	The activity is one of the following: a) construction of hydrogen storage facilities; b) conversion of existing underground gas storage facilities into storage facilities dedicated to hydrogen-storage; c) operation of hydrogen storage facilities where the hydrogen stored in the facility meets the criteria for manufacture of hydrogen set out in Section 3.10. of the Annex I of the Climate Delegated Act.	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other standard domestic loan programmes and other individual financing. Since KfW has confirmed that eligibility criteria are fulfilled under all programmes and individual financing, this activity is assessed as aligned.	Aligned

Table 35

Framework Activity assessed	Renewable Energy		
EU Taxonomy Activity	4.13. Manufacture of biogas and biofuels for use in transport and of bioliquids		
Corresponding NACE Code	D35.21		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	1. Agricultural biomass used for the manufacture of biogas or biofuels for use in transport and for the manufacture of bioliquids complies with the criteria laid down in Article 29, paragraphs 2 to 5, of Directive (EU) 2018/2001. Forest biomass used for the manufacture of biogas or biofuels for use in transport and for the manufacture of bioliquids complies with the criteria laid down in Article 29, paragraphs 6 and 7 of that Directive. Food-and feed crops are not used for the manufacture of biofuels for use in transport and for the manufacture of bioliquids. 2. The greenhouse gas emission savings from the manufacture of biofuels and biogas for use in transport and from the manufacture of bioliquids are at least 65 % in relation to the GHG saving methodology and the relative fossil fuel comparator set out in Annex V to Directive (EU) 2018/2001. 3. Where the manufacture of biogas relies on anaerobic digestion of organic material, the production of the digestate meets the criteria in Sections 5.6 and criteria 1 and 2 of Section 5.7 of the Annex I of the Climate Delegated Act, as applicable.	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other standard domestic loan programmes and other individual financing. Since KfW has confirmed that eligibility criteria are fulfilled under all programmes and individual financing, this activity is assessed as aligned.	Aligned

	4. Where the CO_2 that otherwise would be emitted from the manufacturing process is captured for the purpose of underground storage, the CO_2 is transported and stored underground in accordance with the technical screening criteria set out in Sections 5.11 and 5.12 of the Annex I of the Climate Delegated Act.		

Table 36

Framework Activity assessed	Renewable Energy		
EU Taxonomy Activity	4.14. Transmission and distribution networks for renewable and low-carbon gases		
Corresponding NACE Codes	D35.22, F42.21 and H49.50		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	1. The activity consists in one of the following: a) construction or operation of new transmission and distribution networks dedicated to hydrogen or other low carbon gases; b) conversion/repurposing of existing natural gas networks to 100% hydrogen; c) retrofit of gas transmission and distribution networks that enables the integration of hydrogen and other low-carbon gases in the network, including any gas transmission or distribution network activity that enables the increase of the blend of hydrogen or other low carbon gasses in the gas system; 2. The activity includes leak detection and repair of existing gas pipelines and other network elements to reduce methane leakage.	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other standard domestic loan programmes and other individual financing. For its other standard domestic loan programmes and individual financing, KfW has confirmed projects will only meet criterion 1a. Under the Climate Protection Programme for Corporates, only projects expected to meet the Substantial Contribution to Climate Change Mitigation criteria of Technical Annex I of the Climate Delegated Act are eligible for financing. Hence, this activity is assessed as partially aligned.	Partially aligned

Table 37

Framework Activity assessed	Renewable Energy		
EU Taxonomy Activity	4.15. District heating/cooling distribution		
Corresponding NACE Code	D35.30		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	The activity complies with one of the following criteria: a) for construction and operation of pipelines and associated infrastructure for distributing heating and cooling, the system meets the definition of efficient district heating and cooling	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other standard domestic loan programmes and other individual financing. Regarding financing outside of Europe, KfW has confirmed, eligibility will be determined on an individual basis before allocation	Aligned

	systems laid down in Article 2, point 41, of Directive 2012/27/EU; b) for refurbishment of pipelines and associated infrastructure for distributing heating and cooling, the investment that makes the system meet the definition of efficient district heating or cooling laid down in Article 2, point 41, of Directive 2012/27/EU starts within a three year period as underpinned by a contractual obligation or an equivalent in case of operators in charge of both generation and the network; c) the activity is the following: i) modification to lower temperature regimes; ii) advanced pilot systems (control and energy management systems, Internet of Things).	also considering requirements by EU Directives. Since KfW has confirmed that eligibility criteria are fulfilled under all programmes and individual financing, this activity is assessed as aligned.	

Table 38

Framework Activity assessed	Renewable Energy		
EU Taxonomy Activity	4.16 Installation and operation of electric heat pumps		
Corresponding NACE Codes	D35.30 and F43.22		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	The installation and operation of electric heat pumps complies with both of the following criteria: (a) refrigerant threshold: Global Warming Potential does not exceed 675; (b) energy efficiency requirements laid down in the implementing regulations188 under Directive 2009/125/EC are met.	Financing under the criteria of this activity is part of KfW's Climate Protection Programme for Corporates. Only projects that meet the Substantial Contribution to Climate Change Mitigation criteria of Technical Annex I of the Climate Delegated Act are eligible for financing. Hence, since the eligibility criteria for the programme are those set out under the EU Taxonomy, this activity is assessed as aligned.	Aligned

Table 39

Framework Activity assessed	Renewable Energy		
EU Taxonomy Activity	4.17. Cogeneration of heat/cool and power from solar energy		
Corresponding NACE Codes	D35.11 and D35.30		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	The activity consists in the cogeneration[200] of electricity and heat/cool from solar energy.	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other standard domestic loan programmes and other individual financing. Since	Aligned

[200] Cogeneration is defined in Article 2 point 30 of Directive 2012/27/EU.

		KfW has confirmed that eligibility criteria are fulfilled under all programmes and individual financing, this activity is assessed as aligned.	

Table 40

Framework Activity assessed	Renewable Energy		
EU Taxonomy Activity	4.18 Cogeneration of heat/cool and power from geothermal energy		
Corresponding NACE Codes	D35.11 and D35.30		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	The life-cycle GHG emissions from the combined generation of heat/cool and power[201] from geothermal energy are lower than 100gCO_2e per 1 kWh of energy output from the combined generation. Life-cycle GHG emissions are calculated based on project-specific data, where available, using Commission Recommendation 2013/179/EU or, alternatively, using ISO 14067:2018 or ISO 14064-1:2018. Quantified life-cycle GHG emissions are verified by an independent third party.	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other domestic standard loan programmes and other individual financing. KfW has confirmed that its standard domestic loan programmes and other individual financing under this activity will not meet the mitigation criteria. Hence this activity is assessed as not aligned.	Not aligned

Table 41

Framework Activity assessed	Renewable Energy		
EU Taxonomy Activity	4.19 Cogeneration of heat/cool and power from renewable non-fossil gaseous and liquid fuels		
Corresponding NACE Codes	D35.11 and D35.30		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	1. The life-cycle GHG emissions from the co-generation of heat/cool and power[202] from renewable gaseous and liquid fuels are lower than 100gCO_2e per 1 kWh of energy output from the co-generation. Life-cycle GHG emissions are calculated based on project-specific data, where available, using Recommendation 2013/179/EU or, alternatively, using ISO 14067:2018[203] or ISO 14064-1:2018.[204]	Financing under the criteria of this activity is part of KfW's Climate Protection Programme for Corporates. Only projects that meet the Substantial Contribution to Climate Change Mitigation criteria of Technical Annex I of the Climate Delegated Act are eligible for financing. Hence, since the eligibility criteria for the programme are those set out under the EU Taxonomy, this activity is assessed as aligned.	Aligned

[201] Cogeneration is defined in Article 2 point 30 of Directive 2012/27/EU.
[202] Cogeneration is defined in Article 2 point 30 of Directive 2012/27/EU.
[203] ISO standard 14067:2018, Greenhouse gases — Carbon footprint of products — Requirements and guidelines for quantification (version of [adoption date]: https://www.iso.org/standard/71206.html).
[204] ISO standard 14064-1:2018, Greenhouse gases — Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals (version of [adoption date]: https://www.iso.org/standard/66453.html).

	Quantified life-cycle GHG emissions are verified by an independent third party. 2. Where facilities incorporate any form of abatement (including carbon capture or use of decarbonised fuels) that abatement activity complies with the relevant Sections of the Annex I of the Climate Delegated Act, where applicable. Where the CO_2 that would otherwise be emitted from the cogeneration process is captured for the purpose of underground storage, the CO_2 is transported and stored underground, in accordance with the technical screening criteria set out in Sections 5.11 and 5.12 of the Annex I of the Climate Delegated Act. 3. The activity meets either of the following criteria: (a) at construction, measurement equipment for monitoring of physical emissions, such as methane leakage is installed or a leak detection and repair program is introduced; (b) at operation, physical measurement of methane emissions are reported and leak is eliminated. 4. Where the activity blends renewable gaseous or liquid fuels with biogas or bioliquids, the agricultural biomass used for the production of the biogas or bioliquids complies with the criteria laid down in Article 29, paragraphs 2 to 5, of Directive (EU) 2018/2001 while forest biomass complies with the criteria laid down in Article 29, paragraphs 6 and 7, of that Directive.		

Table 42

Framework Activity assessed	Renewable Energy		
EU Taxonomy Activity	4.20. Cogeneration of heat/cool and power from bioenergy		
Corresponding NACE Codes	D35.11 and D35.30		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	1. Agricultural biomass used in the activity complies with the criteria laid down in Article 29, paragraphs 2 to 5, of Directive (EU) 2018/2001. Forest biomass used in the activity complies with the criteria laid down in Article 29, paragraphs 6 and 7 of that Directive.	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other standard domestic loan programmes and other individual financing. KfW has confirmed that its other standard domestic loan programmes and	Not aligned

	2. The greenhouse gas emission savings from the use of biomass in cogeneration installations are at least 80 % in relation to the GHG emissions saving methodology and fossil fuel comparator set out in Annex VI to Directive (EU) 2018/2001. 3. Where the cogeneration installations rely on anaerobic digestion of organic material, the production of the digestate meets the criteria in Sections 5.6 and criteria 1 and 2 of Section 5.7 of the Annex I of the Climate Delegated Act, as applicable. 4. Points 1 and 2 do not apply to cogeneration installations with a total rated thermal input below 2 MW and using gaseous biomass fuels.	other individual financing under this activity will solely meet criterion 1. Under the Climate Protection Programme for Corporates, only projects expected to meet the Substantial Contribution to Climate Change Mitigation criteria of Technical Annex I of the Climate Delegated Act are eligible for financing. Due to the majority of criteria not being met for KfW's other standard domestic loan programmes and other individual financing, this activity is assessed as not aligned.	

Table 43

Framework Activity assessed	Renewable Energy		
EU Taxonomy Activity	4.21. Production of heat/cool from solar thermal heating		
Corresponding NACE Code	D35.30		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	The activity produces heat/cool using solar thermal heating.	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates as well as other standard domestic loan programmes and other individual financing. Since KfW has confirmed that eligibility criteria are fulfilled under all programmes and individual financing, this activity is assessed as aligned.	Aligned

Table 44

Framework Activity assessed	Renewable Energy		
EU Taxonomy Activity	4.22. Production of heat/cool from geothermal energy		
Corresponding NACE Code	D35.30		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	1. The life-cycle GHG emissions from the generation of heat/cool from geothermal energy are lower than 100gCO_2e/kWh. 2. Life-cycle GHG emissions are calculated based on project-specific data, where available, using Commission Recommendation 2013/179/EU or, alternatively, using ISO 14067:2018 or ISO 14064-1:2018.	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other standard domestic loan programmes and other individual financing. KfW has confirmed that its standard domestic loan programmes and other individual financing under this activity will not meet the mitigation criteria. Under the Climate Protection Programme for Corporates, only projects that meet the Substantial Contribution to Climate	Not aligned

	3. Quantified life-cycle GHG emissions are verified by an independent third party	Change Mitigation criteria of Technical Annex I of the Climate Delegated Act are eligible for financing. . Since the criteria are not met for KfW's other standard domestic loan programmes and other individual financing, this activity is assessed as not aligned.	

Table 45

Framework Activity assessed	Renewable Energy		
EU Taxonomy Activity	4.23. Production of heat/cool from renewable non-fossil gaseous and liquid fuels		
Corresponding NACE Codes	F42, F43, M71, C16, C17, C22, C23, C25, C27 and C28		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	1. The life-cycle GHG emissions from the generation of heat/cool using renewable gaseous and liquid fuels are lower than 100gCO_2e/kWh. Life-cycle GHG emissions are calculated based on project-specific data, where available, using Recommendation 2013/179/EU or, alternatively, using ISO 14067:2018[205] or ISO 14064-1:2018.[206] Quantified life-cycle GHG emissions are verified by an independent third party. 2. Where facilities incorporate any form of abatement (including carbon capture or use of decarbonised fuels), that abatement activity complies with the relevant Sections of the Annex I of the Climate Delegated Act, where applicable. Where the CO_2 that would otherwise be emitted from the electricity generation process is captured for the purpose of underground storage, the CO_2 is transported and stored underground, in accordance with the technical screening criteria set out in Sections 5.11 and 5.12 of the Annex I of the Climate Delegated Act. 3. The activity meets either of the following criteria: (a) at construction, measurement equipment for monitoring physical emissions, such as methane leakage is installed or a leak detection and repair program is introduced;	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other standard domestic loan programmes and other individual financing. Under KfW's other standard domestic loan programmes and individual financing, only point 4 will be met. Due to the majority of criteria not being met for KfW's other standard domestic loan programmes and other individual financing, this activity is assessed as not aligned.	Not aligned

[205] ISO standard 14067:2018, Greenhouse gases — Carbon footprint of products — Requirements and guidelines for quantification (version of [adoption date]: https://www.iso.org/standard/71206.html).
[206] ISO standard 14064-1:2018, Greenhouse gases — Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals (version of [adoption date]: https://www.iso.org/standard/66453.html).

	(b) at operation, physical measurement of methane emissions are reported and leak is eliminated. 4. Where the activity blends renewable gaseous or liquid fuels with biogas or bioliquids, the agricultural biomass used for the production of the biogas or bioliquids complies with the criteria laid down in Article 29, paragraphs 2 to 5, of Directive (EU) 2018/2001 while forest biomass complies with the criteria laid down in Article 29, paragraphs 6 and 7, of that Directive.		

Table 46

Framework Activity assessed	Renewable Energy		
EU Taxonomy Activity	4.24. Production of heat/cool from bioenergy		
Corresponding NACE Code	D35.30		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	1. Agricultural biomass used in the activity for the production of heat and cool complies with the criteria laid down in Article 29, paragraphs 2 to 5, of Directive (EU) 2018/2001. Forest biomass used in the activity complies with the criteria laid down in Article 29, paragraphs 6 and 7, of that Directive. 2. The greenhouse gas emission savings from the use of biomass are at least 80 % in relation to the GHG emissions saving methodology and relative fossil fuel comparator set out in Annex VI to Directive (EU) 2018/2001. 3. Where the installations rely on anaerobic digestion of organic material, the production of the digestate meets the criteria in Sections 5.6 and criteria 1 and 2 of Section 5.7 of the Annex I of the Climate Delegated Act, as applicable. 4. Points 1 and 2 do not apply to heat generation installations with a total rated thermal input below 2 MW and using gaseous biomass fuels.	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other standard domestic loan programmes and other individual financing. KfW has confirmed that its other standard domestic loan programmes and other individual financing under this activity will meet criteria 1, 2 and 4. Under the Climate Protection Programme for Corporates, only projects expected to meet the Substantial Contribution to Climate Change Mitigation criteria of Technical Annex I of the Climate Delegated Act are eligible for financing. Hence this activity is assessed as partially aligned.	Partially aligned

Table 47

Framework Activity assessed	Renewable Energy
EU Taxonomy Activity	4.25. Production of heat/cool using waste heat
Corresponding NACE Code	D35.30

SC Criteria of the EU Taxonomy		Alignment	
Mitigation	The activity produces heat/cool from waste heat.	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other standard domestic loan programmes and other individual financing. Since KfW has confirmed that eligibility criteria are fulfilled under all programmes and individual financing, this activity is assessed as aligned.	Aligned

Table 48

Framework Activity assessed	Sustainable water and wastewater management
EU Taxonomy Activity	5.1. Construction, extension and operation of water collection, treatment and supply systems
Corresponding NACE Codes	E36.00 and F42.99

SC Criteria of the EU Taxonomy		Alignment	
Mitigation	The water supply system complies with one of the following criteria: a) the net average energy consumption for abstraction and treatment equals to or is lower than 0.5 kWh per cubic meter produced water supply. Net energy consumption may take into account measures decreasing energy consumption, such as source control (pollutant load inputs), and, as appropriate, energy generation (such as hydraulic, solar and wind energy); b) the leakage level is either calculated using the Infrastructure Leakage Index (ILI)[207] rating method and the threshold value equals to or is lower than 1.5 or is calculated using another appropriate method and the threshold value is established in accordance with Article 4 of Directive (EU) 2020/2184 of the European Parliament and of the Council.[208] That calculation is to be applied across the extent of water supply (distribution) network where the works are carried out, i.e., at water supply zone level, district metered area(s) (DMAs) or pressure managed area(s) (PMAs).	Financing under the criteria of this activity is part of KfW's Climate Protection Programme for Corporates. Only projects that meet the Substantial Contribution to Climate Change Mitigation criteria of Technical Annex I of the Climate Delegated Act are eligible for financing. Hence, since the eligibility criteria for the programme are those set out under the EU Taxonomy, this activity is assessed as aligned.	Aligned

Table 49

[207] The Infrastructure Leakage Index (ILI) is calculated as current annual real losses (CARL)/unavoidable annual real losses (UARL): The current annual real losses (CARL) represent the amount of water that is actually lost from the distribution network (i.e. not delivered to final users). The unavoidable annual real losses (UARL) take into consideration that there will always be some leakage in a water distribution network. The UARL is calculated based on factors such as the length of the network, the number of service connections and the pressure at which the network is operating.

[208] Directive (EU) 2020/2184 of the European Parliament and of the Council of 16 December 2020 on the quality of water intended for human consumption (recast) (OJ L 435, 23.12.2020, p. 1).

Framework Activity assessed	Sustainable water and wastewater management		
EU Taxonomy Activity	5.2. Renewal of water collection, treatment and supply systems		
Corresponding NACE Codes	E36.00 and F42.99		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	The renewal of the water supply system leads to improved energy efficiency in one of the following ways: a) by decreasing the net average energy consumption of the system by at least 20% compared to own baseline performance averaged for three years, including abstraction and treatment, measured in kWh per cubic meter produced water supply; b) by closing the gap by at least 20% either between the current leakage level averaged EN 117 EN over three years, calculated using the Infrastructure Leakage Index (ILI) rating method and an ILI of 1.5[209] or between the current leakage level averaged over three years, calculated using another appropriate method, and the threshold value established in accordance with Article 4 of Directive (EU) 2020/2184. The current leakage level averaged over three years is calculated across the extent of water supply (distribution) network where the works are carried out, i.e., for the renewed water supply (distribution) network at district metered area(s) (DMAs) or pressure managed area(s) (PMAs).	Financing under the criteria of this activity is part of KfW's Climate Protection Programme for Corporates. Only projects that meet the Substantial Contribution to Climate Change Mitigation criteria of Technical Annex I of the Climate Delegated Act are eligible for financing. Hence, since the eligibility criteria for the programme are those set out under the EU Taxonomy, this activity is assessed as aligned.	Aligned

Table 50

Framework Activity assessed	Sustainable water and wastewater management	
EU Taxonomy Activity	5.3 Construction, extension and operation of wastewater collection and treatment	
Corresponding NACE Codes	E37.00 and F42.99	
SC Criteria of the EU Taxonomy	**Alignment**	

[209] The Infrastructure Leakage Index (ILI) is calculated as current annual real losses (CARL)/unavoidable annual real losses (UARL): The current annual real losses (CARL) represent the amount of water that is actually lost from the distribution network (i.e. not delivered to final users). The unavoidable annual real losses (UARL) take into consideration that there will always be some leakage in a water distribution network. The UARL is calculated based on factors such as the length of the network, the number of service connections and the pressure at which the network is operating.

Mitigation	1. The net energy consumption of the wastewater treatment plant equals to or is lower than: a) 35 kWh per population equivalent (p.e.) per annum for treatment plant capacity below 10000 p.e.; b) 25 kWh per population equivalent (p.e.) per annum for treatment plant capacity between 10000 and 100000 p.e.; c) 20 kWh per population equivalent (p.e.) per annum for treatment plant capacity above 100000 p.e. Net energy consumption of the operation of the wastewater treatment plant may take into account measures decreasing energy consumption relating to source control (reduction of storm water or pollutant load inputs), and, as appropriate, energy generation within the system (such as hydraulic, solar, thermal and wind energy). 2. For the construction and extension of a wastewater treatment plant or a waste water treatment plant with a collection system, which are substituting more GHG-intensive treatment systems (such as septic tanks, anaerobic lagoons), an assessment of the direct GHG emissions is performed.[210] The results are disclosed to investors and clients on demand	Financing under the criteria of this activity is part of KfW's Climate Protection Programme for Corporates. Only projects that meet the Substantial Contribution to Climate Change Mitigation criteria of Technical Annex I of the Climate Delegated Act are eligible for financing. Hence, since the eligibility criteria for the programme are those set out under the EU Taxonomy, this activity is assessed as aligned.	Aligned

Table 51

Framework Activity assessed	Sustainable water and wastewater management	
EU Taxonomy Activity	5.4 Renewal of waste water collection and treatment	
Corresponding NACE Code	E37.00	
SC Criteria of the EU Taxonomy		**Alignment**
Mitigation	1. The renewal of a collection system improves energy efficiency by decreasing the average energy consumption by 20% compared to own baseline performance averaged over three years, demonstrated on an annual basis. That decrease of energy consumption can be accounted for at the level of the project (i.e. the collection system renewal) or, across the downstream waste water agglomeration (i.e. including the downstream collection system, treatment plant or discharge of waste water).	Financing under the criteria of this activity is part of KfW's Climate Protection Programme for Corporates. Only projects that meet the Substantial Contribution to Climate Change Mitigation criteria of Technical Annex I of the Climate Delegated Act are eligible for financing. Hence, since the eligibility criteria for the programme are those set out under the EU Taxonomy, this activity is assessed as aligned.	Aligned

[210] For example, following IPCC guidelines for national GHG inventories for waste water treatment (version of [adoption date]: https://www.ipccnggip.iges.or.jp/public/2019rf/pdf/5_Volume5/19R_V5_6_Ch06_Wastewater.pdf)

	2. The renewal of a waste water treatment plant improves energy efficiency by decreasing the average energy consumption of the system by at least 20% compared to own baseline performance averaged over three years, demonstrated on an annual basis. 3. For the purposes of points 1 and 2, the net energy consumption of the system is calculated in kWh per population equivalent per annum of the waste water collected or effluent treated, taking into account measures decreasing energy consumption relating to source control (reduction of storm water or pollutant load inputs) and, as appropriate, energy generation within the system (such as hydraulic, solar, thermal and wind energy). 4. For the purpose of point 1 and 2, the operator demonstrates that there are no material changes relating to external conditions, including modifications to discharge authorisation(s) or changes in load to the agglomeration that would lead to a reduction of energy consumption, independent of efficiency measures taken.		

Table 52

Framework Activity assessed	Pollution Prevention and Control		
EU Taxonomy Activity	5.5. Collection and transport of non-hazardous waste in source segregated fractions		
Corresponding NACE Code	E38.11		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	All separately collected and transported non-hazardous waste that is segregated at source is intended for preparation for reuse or recycling operations.	Financing under the criteria of this activity is part of KfW's Climate Protection Programme for Corporates. Only projects that meet the Substantial Contribution to Climate Change Mitigation criteria of Technical Annex I of the Climate Delegated Act are eligible for financing. Hence, since the eligibility criteria for the programme are those set out under the EU Taxonomy, this activity is assessed as aligned.	Aligned

Table 53

Framework Activity assessed	Pollution Prevention and Control
EU Taxonomy Activity	5.6 Anaerobic digestion of sewage sludge
Corresponding NACE Codes	E37.00 and F42.99

SC Criteria of the EU Taxonomy			Alignment	
Mitigation	1.	A monitoring and contingency plan is in place in order to minimise methane leakage at the facility.	Financing under the criteria of this activity is part of KfW's Climate Protection Programme for Corporates. Only projects that meet the Substantial Contribution to Climate Change Mitigation criteria of Technical Annex I of the Climate Delegated Act are eligible for financing. Hence, since the eligibility criteria for the programme are those set out under the EU Taxonomy, this activity is assessed as aligned.	Aligned
	2.	The produced biogas is used directly for the generation of electricity or heat, or upgraded to bio-methane for injection in the natural gas grid, or used as vehicle fuel or as feedstock in chemical industry.		

Table 54

Framework Activity assessed	Pollution Prevention and Control
EU Taxonomy Activity	5.7. Anaerobic digestion of bio-waste
Corresponding NACE Codes	E38.21 and F42.99

SC Criteria of the EU Taxonomy			Alignment	
Mitigation	1.	A monitoring and contingency plan is in place in order to minimise methane leakage at the facility.	Financing under the criteria of this activity is part of KfW's Climate Protection Programme for Corporates. Only projects that meet the Substantial Contribution to Climate Change Mitigation criteria of Technical Annex I of the Climate Delegated Act are eligible for financing. Hence, since the eligibility criteria for the programme are those set out under the EU Taxonomy, this activity is assessed as aligned.	Aligned
	2.	The produced biogas is used directly for the generation of electricity or heat or upgraded to bio-methane for injection in the natural gas grid, or used as vehicle fuel or as feedstock in chemical industry.		
	3.	The bio-waste that is used for anaerobic digestion is source segregated and collected separately.		
	4.	The produced digestate is used as fertiliser or soil improver, either directly or after composting or any other treatment.		
	5.	In the dedicated bio-waste treatment plants, the share of food and feed crops[211] used as input feedstock, measured in weight, as an annual average, is less than or equal to 10% of the input feedstock.		

Table 55

Framework Activity assessed	Pollution Prevention and Control

[211] As defined in Article 2, point (40), of Directive (EU) 2018/2001.

EU Taxonomy Activity	5.8. Composting of bio-waste		
Corresponding NACE Codes	E38.21, andF42.99		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	1. The bio-waste that is composted is source segregated and collected separately. 2. The compost produced is used as fertiliser or soil improver and meets the requirements for fertilising materials set out in Component Material Category 3 in Annex II to Regulation (EU) 2019/1009 or national rules on fertilisers or soil improvers for agricultural use.	Financing under the criteria of this activity is part of KfW's Climate Protection Programme for Corporates. Only projects that meet the Substantial Contribution to Climate Change Mitigation criteria of Technical Annex I of the Climate Delegated Act are eligible for financing. Hence, since the eligibility criteria for the programme are those set out under the EU Taxonomy, this activity is assessed as aligned.	Aligned

Table 56

Framework Activity assessed	Pollution Prevention and Control		
EU Taxonomy Activity	5.9. Material recovery from non-hazardous waste		
Corresponding NACE Codes	E38.32 and F42.99		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	The activity converts at least 50 %, in terms of weight, of the processed separately collected non-hazardous waste into secondary raw materials that are suitable for the substitution of virgin materials in production processes.	Financing under the criteria of this activity is part of KfW's Climate Protection Programme for Corporates. Only projects that meet the Substantial Contribution to Climate Change Mitigation criteria of Technical Annex I of the Climate Delegated Act are eligible for financing. Hence, since the eligibility criteria for the programme are those set out under the EU Taxonomy, this activity is assessed as aligned.	Aligned

Table 57

Framework Activity assessed	Pollution Prevention and Control	
EU Taxonomy Activity	5.10. Landfill gas capture and utilisation	
Corresponding NACE Code	E38.21	
SC Criteria of the EU Taxonomy	**Alignment**	

Mitigation	1. The landfill has not been opened after 8 July 2020. 2. The landfill or landfill cell where the gas capture system is newly installed, extended, or retrofitted is permanently closed and is not taking in further biodegradable waste.[212] 3. The produced landfill gas is used for the generation of electricity or heat as biogas,[213] or upgraded to bio-methane for injection in the natural gas grid, or used as vehicle fuel or as feedstock in chemical industry. 4. Methane emissions from the landfill and leakages from the landfill gas collection and utilisation facilities are subject to control and monitoring procedures set out in Annex III to Council Directive 1999/31/EC.[214]	Financing under the criteria of this activity is part of KfW's Climate Protection Programme for Corporates. Only projects that meet the Substantial Contribution to Climate Change Mitigation criteria of Technical Annex I of the Climate Delegated Act are eligible for financing. Hence, since the eligibility criteria for the programme are those set out under the EU Taxonomy, this activity is assessed as aligned.	Aligned

Table 58

Framework Activity assessed	Pollution Prevention and Control		
EU Taxonomy Activity	5.11. Transport of CO_2		
Corresponding NACE Codes	F42.21 and H49.50		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	1. The CO_2 transported from the installation where it is captured to the injection point does not lead to CO_2 leakages above 0.5 % of the mass of CO_2 transported. 2. The CO_2 is delivered to a permanent CO_2 storage site that meets the criteria for underground geological storage of CO_2 set out in Section 5.12 of the Annex I of the Climate Delegated Act; or to other transport modalities, which lead to permanent CO_2 storage site that meet those criteria. 3. Appropriate leak detection systems are applied and a monitoring plan is in place, with the report verified by an independent third party. 4. The activity may include the installation of assets that increase the flexibility and improve the management of an existing network.	Financing under the criteria of this activity is part of KfW's Climate Protection Programme for Corporates. Only projects that meet the Substantial Contribution to Climate Change Mitigation criteria of Technical Annex I of the Climate Delegated Act are eligible for financing. Hence, since the eligibility criteria for the programme are those set out under the EU Taxonomy, this activity is assessed as aligned.	Aligned

[212] As set out in Article 5(3) of Directive 1999/31/EC.
[213] 'Biogas' is defined in Article 2, point 28, of Directive (EU) 2018/2001.
[214] Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste (OJ L 182, 16.7.1999, p. 1).

Table 59

Framework Activity assessed	Pollution Prevention and Control		
EU Taxonomy Activity	5.12. Underground permanent geological storage of CO_2		
Corresponding NACE Code	E39.00		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	1. Characterisation and assessment of the potential storage complex and surrounding area, or exploration within the meaning of Article 3, point (8), of Directive 2009/31/EC of the European Parliament and of the Council[215] is carried out in order to establish whether the geological formation is suitable for use as a CO_2 storage site. 2. For operation of underground geological CO_2 storage sites, including closure and post-closure obligations: (a) appropriate leakage detection systems are implemented to prevent release during operation; (b) a monitoring plan of the injection facilities, the storage complex, and, where appropriate, the surrounding environment is in place, with the regular reports checked by the competent national authority. 3. For the exploration and operation of storage sites within the Union, the activity complies with Directive 2009/31/EC. For the exploration and operation of storage sites in third countries, the activity complies with ISO 27914:2017[216] for geological storage of CO_2.	Financing under the criteria of this activity is part of KfW's Climate Protection Programme for Corporates. Only projects that meet the Substantial Contribution to Climate Change Mitigation criteria of Technical Annex I of the Climate Delegated Act are eligible for financing. Hence, since the eligibility criteria for the programme are those set out under the EU Taxonomy, this activity is assessed as aligned.	Aligned

Table 60

Framework Activity assessed	Clean Transportation	
EU Taxonomy Activity	6.1 Passenger interurban rail transport	
Corresponding NACE Codes	H49.10 and N77.39	
SC Criteria of the EU Taxonomy		**Alignment**

[215] Directive 2009/31/EC of the European Parliament and of the Council of 23 April 2009 on the geological storage of carbon dioxide and amending Council Directive 85/337/EEC, European Parliament and Council Directives 2000/60/EC, 2001/80/EC, 2004/35/EC, 2006/12/EC, 2008/1/EC and Regulation (EC) No 1013/2006 (OJ L 140, 5.6.2009, p. 114).
[216] ISO Standard 27914:2017, Carbon dioxide capture, transportation and geological storage — Geological storage (version of [adoption date]: https://www.iso.org/standard/64148.html).

Mitigation	The activity complies with one of the following criteria: a) the trains and passenger coaches have zero direct (tailpipe) CO_2 emissions; b) the trains and passenger coaches have zero direct (tailpipe) CO_2 emission when operated on a track with necessary infrastructure, and use a conventional engine where such infrastructure is not available (bimode).	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other standard domestic loan programmes and other individual financing. Since KfW has confirmed that eligibility criteria are fulfilled under all programmes and individual financing, this activity is assessed as aligned.	Aligned

Table 61

Framework Activity assessed	Clean Transportation		
EU Taxonomy Activity	6.2 Freight rail transport		
Corresponding NACE Codes	H49.20 and N77.39		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	1. The activity complies with one or both of the following criteria: a) the trains and wagons have zero direct tailpipe CO_2 emission; b) the trains and wagons have zero direct tailpipe CO_2 emission when operated on a track with necessary infrastructure, and use a conventional engine where such infrastructure is not available (bimode). 2. The trains and wagons are not dedicated to the transport of fossil fuels.	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other standard domestic loan programmes and other individual financing. KfW has confirmed that all vehicles meeting the definition of points a) and b) are and will be eligible for financing. KfW has confirmed that freight will not be dedicated to the transport of fossil fuels. Hence, such financing is considered aligned.	Aligned

Table 62

Framework Activity assessed	Clean Transportation		
EU Taxonomy Activity	6.3 Urban and suburban transport, road passenger transport		
Corresponding NACE Codes	H49.31, H49.3.9, N77.39 and N77.11		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	The activity complies with the one of following criteria:	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other standard domestic loan programmes and other individual financing. KfW has confirmed that only vehicles meeting the definition of point a) – i.e.	Aligned

	a) the activity provides urban or suburban passenger transport and its direct (tailpipe) CO_2 emissions are zero; [217] b) until 31 December 2025, the activity provides interurban passenger road transport using vehicles designated as categories M2 and M3[218] that have a type of bodywork classified as 'CA' (single-deck vehicle),[219] 'CB' (double-deck vehicle), 'CC' (singledeck articulated vehicle) or 'CD' (double-deck articulated vehicle), and comply with the latest EURO VI standard, i.e. both with the requirements of Regulation (EC) No 595/2009 and, from the time of the entry into force of amendments to that Regulation, in those amending acts, even before they become applicable, and with the latest step of the Euro VI standard set out in Table 1 of Appendix 9 to Annex I to Regulation (EU) No 582/2011 where the provisions governing that step have entered into force but have not yet become applicable for this type of vehicle.[220] Where such standard is not available, the direct CO_2 emissions of the vehicles are zero.	zero direct (tailpipe) CO_2 emissions – will be eligible for financing. Hence, such financing is considered aligned.	

Table 63

Framework Activity assessed	Clean Transportation		
EU Taxonomy Activity	6.4. Operation of personal mobility devices, cycle logistics		
Corresponding NACE Codes	N77.11 and N77.21		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	1. The propulsion of personal mobility devices comes from the physical activity of the user, from a zero-emissions motor, or a mix of zero-emissions motor and physical activity. 2. The personal mobility devices are allowed to be operated on the same public infrastructure as bikes or pedestrians.	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other standard domestic loan programmes and other individual financing. KfW has confirmed that both criteria under point 1 and 2 are and will be met. KfW has informed Sustainalytics that devices financed include bikes, cargo bikes, e-bikes and e- kick-scooters. Hence, such financing is considered aligned.	Aligned

[217] This includes Motor buses with type of bodywork classified as 'CE' (low-floor single-deck vehicle), 'CF' (low-floor double-deck vehicle), 'CG' (Articulated low-floor single-deck vehicle), 'CH' (Articulated low-floor double-deck vehicle), 'CI' (open top single deck vehicle) or 'CJ' (open top double deck vehicle), as set out in point 3 of part C of Annex I to Regulation (EU) 2018/858.
[218] As referred to in Article 4(1), point (a), of Regulation (EU) 2018/858.
[219] As set out in point 3 of part C of Annex I to Regulation (EU) 2018/858.
[220] Until 31/12/2021, the EURO VI, step E as set out in Regulation (EC) No 595/2009.

Table 64

Framework Activity assessed	Clean Transportation		
EU Taxonomy Activity	6.5. Transport by motorbikes, passenger cars and light commercial vehicles		
Corresponding NACE Codes	H49.32, H49.39 and N77.11		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	The activity complies with the following criteria: a) for vehicles of category M1 and N1, both falling under the scope of Regulation (EC) No 715/2007: i) until 31 December 2025, specific emissions of CO_2, as defined in Article 3(1), point (h), of Regulation (EU) 2019/631, are lower than 50gCO_2/km (low-and zero-emission light-duty vehicles); ii) from 1 January 2026, specific emissions of CO_2, as defined in Article 3(1), point (h), of Regulation (EU) 2019/631, are zero. b) for vehicles of category L, the tailpipe CO_2 emissions equal to 0g CO_2e/km calculated in accordance with the emission test laid down in Regulation (EU) 168/2013.	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other standard domestic loan programmes and other individual financing. KfW has confirmed that only vehicles meeting the definition of points a) ii and b) will be eligible for financing and that vehicles financed will have zero emissions. Hence, such financing is considered aligned.	Aligned

Table 65

Framework Activity assessed	Clean Transportation		
EU Taxonomy Activity	6.6. Freight transport services by road		
Corresponding NACE Codes	H49.4.1, H53.10, H53.20 and N77.12		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	1. The activity complies with one of the following criteria: (a) vehicles of category N1 have zero direct (tailpipe) CO_2 emissions; (b) vehicles of category N2 and N3 with a technically permissible maximum laden mass not exceeding 7,5 tonnes are 'zero-emission heavy-duty vehicles' as defined in Article 3, point (11), of Regulation (EU) 2019/1242;	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other standard domestic loan programmes and other individual financing. KfW has confirmed that all vehicles meeting the definition of points a) to c) are and will be eligible for financing. KfW has confirmed that freight will not be dedicated to the transport of fossil fuels. Hence, such financing is considered aligned.	Aligned

	(c) vehicles of category N2 and N3 with a technically permissible maximum laden mass exceeding 7,5 tonnes are one of the following: (i)'zero-emission heavy-duty vehicles', as defined in Article 3, point (11), of Regulation (EU) 2019/1242; (ii) where technologically and economically not feasible to comply with the criterion in point (i), 'low-emission heavy-duty vehicles' as defined in Article 3, point (12), of that Regulation. 2. Vehicles are not dedicated to the transport of fossil fuels.		

Table 66

Framework Activity assessed	Clean Transportation		
EU Taxonomy Activity	6.7. Inland passenger water transport		
Corresponding NACE Code	H50.30		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	The activity complies with one of the following criteria: (a) the vessels have zero direct (tailpipe) CO_2 emissions; (b) until 31 December 2025, hybrid and dual fuel vessels derive at least 50% of their energy from zero direct (tailpipe) CO_2 emission fuels or plug-in power for their normal operation.	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other standard domestic loan programmes and other individual financing. KfW has confirmed that all vehicles meeting the definitions of points a) and b) will be eligible for financing. Hence, such financing is considered aligned.	Aligned

Table 67

Framework Activity assessed	Clean Transportation		
EU Taxonomy Activity	6.8. Inland freight water transport		
Corresponding NACE Code	H50.4		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	1. The activity complies with one or both of the following criteria: (a) the vessels have zero direct (tailpipe) CO_2 emission; (b) where technologically and economically not feasible to comply with the criterion in point (a), until 31 December 2025, the vessels have direct (tailpipe) emissions of CO_2 per tonne kilometre (gCO_2/tkm), calculated	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other standard domestic loan programmes and other individual financing. KfW has confirmed that all vehicles meeting the definitions of points a) and b) are and will be eligible for financing. KfW has confirmed that freight will not be dedicated to the transport of fossil fuels. Hence, such financing is considered aligned.	Aligned

	(or estimated in case of new vessels) using the Energy Efficiency Operational Indicator[221], 50% lower than the average reference value for emissions of CO_2 defined for heavy duty vehicles (vehicle subgroup 5-LH) in accordance with Article 11 of Regulation 2019/1242. 2. Vessels are not dedicated to the transport of fossil fuels.		

Table 68

Framework Activity assessed	Clean Transportation		
EU Taxonomy Activity	6.9. Retrofitting of inland water passenger and freight transport		
Corresponding NACE Codes	H50.4, H50.30 and C33.15		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	1. Until 31 December 2025, the retrofitting activity reduces fuel consumption of the vessel by at least 10 % expressed in litre of fuel per tonne kilometre, as demonstrated by a comparative calculation for the representative navigation areas (including representative load profiles) in which the vessel is to operate or by means of the results of model tests or simulations. 2. Vessels retrofitted or upgraded are not dedicated to transport of fossil fuels.	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other standard domestic loan programmes and other individual financing. KfW has confirmed that financing will meet the criteria as set out under point 1 and confirmed that freight will not be dedicated to the transport of fossil fuels. Hence, such financing is considered aligned.	Aligned

Table 69

Framework Activity assessed	Clean Transportation		
EU Taxonomy Activity	6.10. Sea and coastal freight water transport, vessels for port operations and auxiliary activities		
Corresponding NACE Codes	H50.2, H52.22 and N77.34		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	1. The activity complies with one or more of the following criteria: (a) the vessels have zero direct (tailpipe) CO_2 emissions; (b) until 31 December 2025, hybrid and dual fuel vessels derive at least 25 % of their energy from zero direct (tailpipe) CO_2 emission fuels or plug-in power for their normal operation at sea and in ports;	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other standard domestic loan programmes and other individual financing. KfW has confirmed that all vehicles meeting the definitions of points a) to d) will be eligible for financing. KfW has confirmed that freight will not be dedicated to the transport of fossil fuels. Hence, such financing is considered aligned.	Aligned

[221] The Energy Efficiency Operational Indicator is defined as the ratio of mass of CO_2 emitted per unit of transport work. It is a representative value of the energy efficiency of the ship operation over a consistent period which represents the overall trading pattern of the vessel. Guidance on how to calculate this indicator is provided in the document MEPC.1/Circ. 684 from IMO.

	(c) where technologically and economically not feasible to comply with the criterion in point (a), until 31 December 2025, and only where it can be proved that the vessels are used exclusively for operating coastal and short sea services designed to enable modal shift of freight currently transported by land to sea, the vessels have direct (tailpipe) CO_2 emissions, calculated using the International Maritime Organization (IMO) Energy Efficiency Design Index (EEDI)[222] , 50 % lower than the average reference CO_2 emissions value defined for heavy duty vehicles (vehicle sub group 5- LH) in accordance with Article 11 of Regulation 2019/1242; (d) where technologically and economically not feasible to comply with the criterion in point (a), until 31 December 2025, the vessels have an attained Energy Efficiency Design Index (EEDI) value 10 % below the EEDI requirements applicable on 1 April 2022[223] if the vessels are able to run on zero direct (tailpipe) CO_2 emission fuels or on fuels from renewable sources.[224] 2. Vessels are not dedicated to the transport of fossil fuels.		

Table 70

Framework Activity assessed	Clean Transportation		
EU Taxonomy Activity	6.11. Sea and coastal passenger water transport		
Corresponding NACE Codes	H50.10, N77.21 and N77.34		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	The activity complies with one or more of the following criteria: (a) the vessels have zero direct (tailpipe) CO_2 emissions; (b) where technologically and economically not feasible to comply with the criterion in point (a), until 31 December 2025, hybrid and dual fuel vessels derive at least 25% of their energy from zero direct (tailpipe) CO_2 emission fuels or plug-in power for their normal operation at sea and in ports;	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other standard domestic loan programmes and other individual financing. KfW has confirmed that all vehicles meeting the definitions of points a) to c) will be eligible for financing. Hence, such financing is considered aligned.	Aligned

[222] Energy Efficiency Design Index (version of [adoption date]: http://www.imo.org/fr/MediaCentre/HotTopics/GHG/Pages/EEDI.aspx)
[223] EEDI requirements as agreed by the Marine Environment Protection Committee of the International Maritime Organization on its seventy-fifth session. Vessels that fall into the ship types set out in MARPOL Annex VI Regulation 2, but are not considered as new ship under that regulation may provide attained EEDI value calculated on a voluntary basis in line with MARPOL Annex VI Chapter 4 and have those calculations verified in line with MARPOL Annex VI, Chapter 2.
[224] Fuels that meet the technical screening criteria specified in sections 3.10 and 4.13 of the Annex I of the Climate Delegated Act.

	(c) where technologically and economically not feasible to comply with the criterion in point (a), until 31 December 2025, the vessels have an attained Energy Efficiency Design Index (EEDI)[225] value 10% below the EEDI requirements applicable on 1 April 2022261, if the vessels are able to run on zero direct (tailpipe) emission fuels or on fuels from renewable sources.[226]		

Table 71

Framework Activity assessed	Clean Transportation		
EU Taxonomy Activity	6.12. Retrofitting of sea and coastal freight and passenger water transport		
Corresponding NACE Codes	H50.10, H50.2, H52.22, C33.15, N77.21 and N.77.34		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	1. Until 31 December 2025, the retrofitting activity reduces fuel consumption of the vessel by at least 10 % expressed in grams of fuel per deadweight tons per nautical mile, as demonstrated by computational fluid dynamics (CFD), tank tests or similar engineering calculations. 2. Vessels are not dedicated to the transport of fossil fuels.	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other standard domestic loan programmes and other individual financing. KfW has confirmed that financing will meet the criteria set out under point 1 and confirmed that freight will not be dedicated to the transport of fossil fuels. Hence, such financing is considered aligned.	Aligned

Table 72

Framework Activity assessed	Clean Transportation		
EU Taxonomy Activity	6.13. Infrastructure for personal mobility, cycle logistics		
Corresponding NACE Codes	F42.11, F42.12, F43.21, F71.1 and F71.20		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	The infrastructure that is constructed and operated is dedicated to personal mobility or cycle logistics: pavements, bike lanes and pedestrian zones, electrical charging and hydrogen refuelling installations for personal mobility devices.	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other standard domestic loan programmes and other individual financing. Since KfW has confirmed that eligibility criteria are fulfilled under all programmes and individual financing, this activity is assessed as aligned.	Aligned

Table 73

[225] Energy Efficiency Design Index (version of [adoption date]: http://www.imo.org/fr/MediaCentre/HotTopics/GHG/Pages/EEDI.aspx).
[226] Fuels that meet the technical screening criteria specified in sections 3.10 and 4.13 of the Annex I of the Climate Delegated Act.

Framework Activity assessed	Clean Transportation		
EU Taxonomy Activity	6.14. Infrastructure for rail transport		
Corresponding NACE Codes	F42.12, F42.13, M71.12, M71.20, F43.21, and H52.21		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	1. The activity complies with one of the following criteria: (a) the infrastructure (as defined in Annex II.2 to Directive (EU) 2016/797 of the European Parliament and of the Council[227]) is either : (i) electrified trackside infrastructure and associated subsystems: infrastructure, energy, on-board control-command and signalling, and trackside control command and signalling subsystems as defined in Annex II.2 to Directive (EU)2016/797; (ii) new and existing trackside infrastructure and associated subsystems where there is a plan for electrification as regards line tracks, and, to the extent necessary for electric train operations, as regards sidings, or where the infrastructure will be fit for use by zero tailpipe CO_2 emission trains within 10 years from the beginning of the activity: infrastructure, energy, on-board control-command and signalling, and trackside control-command and signalling subsystems as defined in Annex II.2 to Directive (EU)2016/797; (iii) until 2030, existing trackside infrastructure and associated subsystems that are not part of the TEN-T network[228] and its indicative extensions to third countries, nor any nationally, supranationally or internationally defined network of major rail lines: infrastructure, energy, on-board control-command and signalling, and trackside control-command and signalling subsystems as defined in Annex II.2 to Directive (EU) 2016/797; (b) the infrastructure and installations are dedicated to transhipping freight between the modes: terminal infrastructure and superstructures for loading, unloading and transhipment of goods; (c) infrastructure and installations are dedicated to the transfer of passengers from rail to rail or from other modes to rail.	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other standard domestic loan programmes and other individual financing. KfW has confirmed that only infrastructure as per criteria laid out under this activity are and will be eligible for financing and regarding financing outside of Europe, that eligibility will be determined on an individual basis before allocation also considering requirements by EU Directives. KfW has confirmed that freight will not be dedicated to the transport of fossil fuels. Hence, such financing is considered aligned.	Aligned

[227] Directive (EU) 2016/797 of the European Parliament and of the Council of 11 May 2016 on the interoperability of the rail system within the European Union (OJ L 138, 26.5.2016, p. 44).
[228] In accordance with Regulation (EU) No 1315/2013 of the European Parliament and of the Council of 11 December 2013 on Union guidelines for the development of the trans-European transport network and repealing Decision No 661/2010/EU (OJ L 348, 20.12.2013, p. 1).

	2. The infrastructure is not dedicated to the transport or storage of fossil fuels.		

Table 74

Framework Activity assessed	Clean Transportation		
EU Taxonomy Activity	6.15. Infrastructure enabling low-carbon road transport and public transport		
Corresponding NACE Codes	F42.11, F42.13, F71.1 and F71.20		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	1. The activity complies with one or more of the following criteria: (a) the infrastructure is dedicated to the operation of vehicles with zero tailpipe CO_2 emissions: electric charging points, electricity grid connection upgrades, hydrogen fuelling stations or electric road systems (ERS); (b) the infrastructure and installations are dedicated to transhipping freight between the modes: terminal infrastructure and superstructures for loading, unloading and transhipment of goods; (c) the infrastructure and installations are dedicated to urban and suburban public passenger transport, including associated signalling systems for metro, tram and rail systems. 2. The infrastructure is not dedicated to the transport or storage of fossil fuels.	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other standard domestic loan programmes and other individual financing. KfW has confirmed that only infrastructure as per 1a) to 1c) under this activity will be eligible for financing and that freight infrastructure will not be dedicated to the transport or storage of fossil fuels. Hence, such financing is considered aligned.	Aligned

Table 75

Framework Activity assessed	Clean Transportation		
EU Taxonomy Activity	6.16. Infrastructure enabling low carbon water transport		
Corresponding NACE Codes	F42.91, F71.1 or F71.20		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	1. The activity complies with one or more of the following criteria: (a) the infrastructure is dedicated to the operation of vessels with zero direct (tailpipe) CO_2 emissions: electricity charging, hydrogen-based refuelling;	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other standard domestic loan programmes and other individual financing. KfW has confirmed that only infrastructure as per 1a) to 1d) under this activity are and will be eligible for financing and that freight	Aligned

	(b) the infrastructure is dedicated to the provision of shore-side electrical power to vessels at berth; (c) the infrastructure is dedicated to the performance of the port's own operations with zero direct (tailpipe) CO_2 emissions; (d) the infrastructure and installations are dedicated to transhipping freight between the modes: terminal infrastructure and superstructures for loading, unloading and transhipment of goods. 2. The infrastructure is not dedicated to the transport or storage of fossil fuels.	infrastructure will not be dedicated to the transport or storage of fossil fuels. Hence, such financing is considered aligned.	

Table 76

Framework Activity assessed	Clean Transportation		
EU Taxonomy Activity	6.17. Low carbon airport infrastructure		
Corresponding NACE Codes	F41.20 and F42.99		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	1. The activity complies with one or more of the following criteria: (a) the infrastructure is dedicated to the operation of aircraft with zero tailpipe CO_2 emissions: electricity charging and hydrogen refuelling; (b) the infrastructure is dedicated to the provision of fixed electrical ground power and preconditioned air to stationary aircrafts; (c) the infrastructure is dedicated to the zero direct emissions performance of the airport's own operations: electric charging points, electricity grid connection upgrades, hydrogen refuelling stations. 2. The infrastructure is not dedicated to the transport or storage of fossil fuels.	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other standard domestic loan programmes and other individual financing. KfW has confirmed that only infrastructure as per 1a) to 1c) under this activity will be eligible for financing and that freight infrastructure will not be dedicated to the transport or storage of fossil fuels. Hence, such financing is considered aligned.	Aligned

Table 77

Framework Activity assessed	Green Buildings
EU Taxonomy Activity	7.1. Construction of new buildings

Corresponding NACE Codes	F41.1, F41.2 and F43		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	Constructions of new buildings for which: 1. The Primary Energy Demand (PED),[229] defining the energy performance of the building resulting from the construction, is at least 10 % lower than the threshold set for the nearly zero-energy building (NZEB) requirements in national measures implementing Directive 2010/31/EU of the European Parliament and of the Council.[230] The energy performance is certified using an as built Energy Performance Certificate (EPC). 2. For buildings larger than 5000 m^2,[231] upon completion, the building resulting from the construction undergoes testing for airtightness and thermal integrity,[232] and any deviation in the levels of performance set at the design stage or defects in the building envelope are disclosed to investors and clients. As an alternative; where robust and traceable quality control processes are in place during the construction process this is acceptable as an alternative to thermal integrity testing. 3. For buildings larger than 5000 m^2,[233] the life-cycle Global Warming Potential (GWP)[234] of the building resulting from the construction has been calculated for each stage in the life cycle and is disclosed to investors and clients on demand.	1.KfW has confirmed to follow its energy efficiency standard called Effizienzhaus 40,[235] which correlates to the use of 40% primary energy demand compared to a reference building in line with the requirements of the German Building Energy Act (Gebäudeenergiegesetz, GEG).[236] The GEG 2020 represents the NZEB standard in Germany. 2. KfW has confirmed to comply with requirements regarding airtightness and thermal integrity only for buildings smaller than 5,000 m^2. 3. KfW has confirmed to calculate life cycle GWP in line with the outlined criteria only for buildings smaller than 5,000 m^2. Since the EU Taxonomy criteria as outlined under 2. and 3. are not met for buildings larger than 5, 000 m^2, Sustainalytics considers this activity to be partially aligned.	Partially aligned

[229] The calculated amount of energy needed to meet the energy demand associated with the typical uses of a building expressed by a numeric indicator of total primary energy use in kWh/m2 per year and based on the relevant national calculation methodology and as displayed on the Energy Performance Certificate (EPC)
[230] Directive 2010/31/EU of the European Parliament and of the Council of 19 May 2010 on the energy performance of buildings (OJ L 153, 18.6.2010, p. 13)
[231] For residential buildings, the testing is made for a representative set of dwelling/apartment types
[232] The testing is carried out in accordance with EN13187 (Thermal Performance of Buildings - Qualitative Detection of Thermal Irregularities in Building Envelopes - Infrared Method) and EN 13829 (Thermal performance of buildings. Determination of air permeability of buildings. Fan pressurisation method) or equivalent standards accepted by the respective building control body where the building is located.
[233] For residential buildings, the calculation and disclosure are made for a representative set of dwelling/apartment types.
[234] The GWP is communicated as a numeric indicator for each life cycle stage expressed as $kgCO_2e/m^2$ (of useful internal floor area) averaged for one year of a reference study period of 50 years. The data selection, scenario definition and calculations are carried out in accordance with EN 15978 (BS EN 15978:2011. Sustainability of construction works. Assessment of environmental performance of buildings. Calculation method). The scope of building elements and technical equipment is as defined in the Level(s) common EU framework for indicator 1.2. Where a national calculation tool exists, or is required for making disclosures or for obtaining building permits, the respective tool may be used to provide the required disclosure. Other calculation tools may be used if they fulfil the minimum criteria laid down by the Level(s) common EU framework (version of [adoption date]: https://susproc.jrc.ec.europa.eu/product-bureau/product-groups/412/documents), see indicator 1.2 user manual.
[235] Effizienzhaus 40: https://www.kfw.de/inlandsfoerderung/Privatpersonen/Bestehende-Immobilie/Energieeffizient-sanieren/Das-Effizienzhaus/
[236] German Federal Law, "Gebäudeenergiegesetz, GEG", (2020), at: https://www.bgbl.de/xaver/bgbl/start.xav?startbk=Bundesanzeiger_BGBl&bk=Bundesanzeiger_BGBl&start=//*[@attr_id=%27bgbl107s1519.pdf%27]#__bgbl__%2F%2F*%5B%40attr_id%3D%27bgbl120s1728.pdf%27%5D__1699279311190

Table 78

Framework Activity assessed	Green Buildings		
EU Taxonomy Activity	7.2. Renovation of existing buildings		
Corresponding NACE Codes	F41 and F43		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	The building renovation complies with the applicable requirements for major renovations.[237] Alternatively, it leads to a reduction of primary energy demand (PED) of at least 30 %.[238]	KfW has confirmed to comply with the 30% threshold regarding minimum reduction of primary energy demand (PED). Hence, Sustainalytics considers this activity to be aligned.	Aligned

Table 79

Framework Activity assessed	Energy Efficiency		
EU Taxonomy Activity	8.1 Data processing, hosting and related activities		
Corresponding NACE Code	J63.11		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	1. The activity has implemented all relevant practices listed as "expected practices" in the most recent version of the European Code of Conduct on Data Centre Energy Efficiency[239], or in CEN-CENELEC document CLC TR50600-99-1 "Data centre facilities and infrastructures - Part 99-1: Recommended practices for energy management".[240] The implementation of those practices is verified by an independent third-party and audited at least every three years. 2. Where an expected practice is not considered relevant due to physical, logistical, planning or other constraints, an explanation of why the expected practice is not applicable or practical is	Financing under the criteria of this activity is part of KfW's Climate Protection Programme for Corporates. Only projects that meet the Substantial Contribution to Climate Change Mitigation criteria of Technical Annex I of the Climate Delegated Act are eligible for financing. Hence, since the eligibility criteria for the programme are those set out under the EU Taxonomy, this activity is assessed as aligned.	Aligned

[237] As set in the applicable national and regional building regulations for 'major renovation' implementing Directive 2010/31/EU. The energy performance of the building or the renovated part that is upgraded meets cost-optimal minimum energy performance requirements in accordance with the respective directive.
[238] The initial primary energy demand and the estimated improvement is based on a detailed building survey, an energy audit conducted by an accredited independent expert or any other transparent and proportionate method and validated through an Energy Performance Certificate. The 30 % improvement results from an actual reduction in primary energy demand (where the reductions in net primary energy demand through renewable energy sources are not taken into account) and can be achieved through a succession of measures within a maximum of three years.
[239] The most recent version of the European Code of Conduct on Data Centre Energy Efficiency is the latest version published at the Joint Research Centre European Energy Efficiency Platform (E3P) website, https://e3p.jrc.ec.europa.eu/communities/data-centres-code-conduct, with a transition period of six months starting from the day of its publication (the 2021 version is available at https://e3p.jrc.ec.europa.eu/publications/2021-best-practice-guidelines-eu-code-conduct-data-centreenergy-efficiency).
[240] Issued on 1 July 2019 by the European Committee for Standardization (CEN) and the European Committee for Electrotechnical Standardization (CENELEC), (version of [adoption date]: https://www.cenelec.eu/dyn/www/f?p=104:110:508227404055501::::FSP_ORG_ID,FSP_PROJECT,FS P_LANG_ID:1258297,65095,25).

	provided. Alternative best practices from the European Code of Conduct on Data Centre Energy Efficiency or other equivalent sources may be identified as direct replacements if they result in similar energy savings. 3. The global warming potential (GWP) of refrigerants used in the data centre cooling system does not exceed 675.		

Table 80

Framework Activity assessed	Energy Efficiency		
EU Taxonomy Activity	8.2. Data-driven solutions for GHG emissions reductions		
Corresponding NACE Codes	J61, J62 and J63.11		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	1. The ICT solutions are predominantly used for the provision of data and analytics enabling GHG emissions reductions. 2. Where an alternative solution/technology is already available on the market, the ICT solution demonstrates substantial life-cycle GHG emissions savings compared to the best performing alternative solution/technology. Life-cycle GHG emissions and net emissions are calculated using Recommendation 2013/179/EU or, alternatively, using ETSI ES 203 199,[241] ISO 14067:2018[242] or ISO 14064- 2:2019.[243] Quantified life-cycle GHG emissions reductions are verified by an independent third party which transparently assesses how the standard criteria, including those for critical review, have been followed when the value was derived.	Sustainalytics notes that such financing will take place under the Climate Protection Programme for Corporates, other standard domestic loan programmes and other individual financing. KfW has confirmed that its other standard domestic loan programmes and individual financing only aligns with criterion 2 referring to ICT solutions with substantial life cycle GHG emissions savings compared to the best performing alternative technology on the market. Due to the majority of criteria not being met by KfW's other standard domestic loan programmes and other individual financing, this activity is assessed as not aligned.	Not aligned

Table 81

Framework Activity assessed	Green Buildings
EU Taxonomy Activity	9.3. Professional services related to energy performance of buildings

[241] ETSI ES 203 199, Environmental Engineering (EE); Methodology for environmental Life Cycle Assessment (LCA) of Information and Communication Technology (ICT) goods, networks and services (version of [adoption date]: https://www.etsi.org/deliver/etsi_es/203100_203199/203199/01.03.00_50/es_203199v010300m.pdf). The ETSI standard ETSI ES 203 199 correspond to the ITU standard ITU–T L.1410.

[242] ISO standard 14067:2018, Greenhouse gases — Carbon footprint of products — Requirements and guidelines for quantification (version of [adoption date]: https://www.iso.org/standard/71206.html).

[243] ISO standard14064-2:2019, Greenhouse gases — Part 2: Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements (version of [adoption date]: https://www.iso.org/standard/66454.html).

Corresponding NACE Code	M71		
SC Criteria of the EU Taxonomy		**Alignment**	
Mitigation	The activity consists in one of the following: (a) technical consultations (energy consultations, energy simulations, project management, production of energy performance contracts, dedicated trainings) linked to the improvement of energy performance of buildings; (b) accredited energy audits and building performance assessments; (c) energy management services; (d) energy performance contracts; (e) energy services provided by energy service companies (ESCOs).	KfW has confirmed that such financing will be done in conjunction with and complement financing eligible under 7.1 Construction of new buildings and 7.2 Renovation of existing buildings. KfW has confirmed that financing will be one or more of the activities listed under a) to e). Hence, this activity is assessed as aligned.	Aligned

Appendix 3: Green Bond / Green Bond Programme - External Review Form

Section 1. Basic Information

Issuer name:	KfW Group
Green Bond ISIN or Issuer Green Bond Framework Name, if applicable:	Green Bonds – Made by KfW
Review provider's name:	Sustainalytics
Completion date of this form:	November 30, 2023
Publication date of review publication: **Original publication:**	

Section 2. Review overview

SCOPE OF REVIEW

The review:

☒ assessed the 4 core components of the Principles (**complete review**) and confirmed the alignment with the GBP/SBP/SBG (*delete where appropriate*).

☐ assessed only some of them (**partial review**) and confirmed the alignment with the GBP/SBP/SBG (*delete where appropriate*); please indicate which ones:

- ☐ Use of Proceeds
- ☐ Process for Project Evaluation and Selection
- ☐ Management of Proceeds
- ☐ Reporting

☒ assessed the alignment with other regulations or standards (CBI, EU GBS, ASEAN Green Bond Standard, ISO 14030, etc.); please indicate which ones: EU Taxonomy's Substantial Contribution criteria and Minimum Safeguards.

ROLE(S) OF INDEPENDENT REVIEW PROVIDER

- ☒ Second Party Opinion
- ☐ Certification
- ☐ Verification
- ☐ Scoring/Rating
- ☐ Other (please specify):

Does the review include a sustainability quality score?

☐ Of the issuer

☐ Of the project

☐ Of the Framework

☐ Other (please specify):

☒ No scoring

ASSESSMENT OF THE PROJECT(S)

Does the review include:

☒ The environmental and/or social features of the type of project(s) intended for the Use of Proceeds?

☒ The environmental and/or social benefits and impact targeted by the eligible Green and/or Social Project(s) financed by the Green, Social or Sustainability Bond?

☒ The potentially material environmental and/or social risks associated with the project(s) (where relevant)?

ISSUER'S OVERARCHING OBJECTIVES

Does the review include:

☒ An assessment of the issuer's overarching sustainability objectives and strategy, and the policies and/or processes towards their delivery?

☒ An identification and assessment of environmental, social and governance related risks of adverse impact through the Issuer's [actions] and explanations on how they are managed and mitigated by the issuer?

☒ A reference to the issuer's relevant regulations, standards, or frameworks for sustainability-related disclosure and reporting?

CLIMATE TRANSITION STRATEGY

Does the review assess:

☐ The issuer's climate transition strategy & governance?

☐ The alignment of both the long-term and short/medium-term targets with the relevant regional, sector, or international climate scenario?

☐ The credibility of the issuer's climate transition strategy to reach its targets?

☐ The level/type of independent governance and oversight of the issuer's climate transition strategy (e.g. by independent members of the board, dedicated board sub-committees with relevant expertise, or via the submission of an issuer's climate transition strategy to shareholders' approval).

☐ If appropriate, the materiality of the planned transition trajectory in the context of the issuers overall business (including the relevant historical datapoints)?

☐ The alignment of the issuer's proposed strategy and targets with appropriate science-based targets and transition pathways that are deemed necessary to limit climate change to targeted levels?

☐ The comprehensiveness of the issuer's disclosure to help investors assess its performance holistically?

Overall comment on this section:

Section 3. Detailed Review

1. USE OF PROCEEDS

Does the review assess:

☒ the environmental/social benefits of the project(s)?

☒ whether those benefits are quantifiable and meaningful?

☐ for social projects, whether the target population is properly identified?

Does the review assess if the issuer provides clear information on:

☐ the estimated proceeds allocation per project category (in case of multiple projects)?

☐ the estimated share of financing vs. re-financing (and the related lookback period)?

Overall comment on this section:
The eligible categories for the use of proceeds – i) Renewable Energy; ii) Green Buildings; iii) Clean Transportation; iv) Biodiversity; v) Sustainable Water and Wastewater Management; vi) Pollution Prevention and Control and vii) Energy Efficiency – are aligned with those recognized by the Green Bond Principles 2021 with June 2022 Appendix. Sustainalytics considers that investments in the eligible categories will contribute to positive environmental impacts and advance the UN Sustainable Development Goals, specifically SDGs 2, 6, 7, 9, 11, 12, 13 and 15.

2. PROCESS FOR PROJECT EVALUATION AND SELECTION

Does the review assess:

☒ whether the eligibility of the project(s) is aligned with official or market-based taxonomies or recognised international standards? Please specify which ones: Sustainalytics has a proprietary taxonomy which is influenced by the EU taxonomy, Climate Bonds Initiative taxonomy as well as international standards.

☒ whether the eligible projects are aligned with the overall sustainability strategy of the issuer and/or if the eligible projects are aligned with material ESG-related objectives in the issuer's industry?

☒ the process and governance to set the eligibility criteria including, if applicable, exclusion criteria?

☒ the processes by which the issuer identifies and manages perceived social and environmental risks associated with the relevant project(s)?

☒ any process in place to identify mitigants to known material risks of negative social and/or environmental impacts from the relevant project(s)?

Overall comment on this section:
KfW has an automated process in place to evaluate loan programmes. KfW's Lending department will be responsible for selecting eligible loan programmes. KfW's respective business departments will be responsible for evaluating and selecting eligible domestic and international financing projects. The selected loan programmes and domestic and international financing projects will be submitted to the Green Bond Committee for final approval. KfW will undertake environmental and social risk management measures which are applicable to all allocation decisions made under the Framework. Sustainalytics considers this process to be in line with market practice.

3. MANAGEMENT OF PROCEEDS

Does the review assess:

☒ the issuer's policy for segregating or tracking the proceeds in an appropriate manner?

☒ the intended types of temporary investment instruments for unallocated proceeds?

☐ Whether an external auditor will verify the internal tracking of the proceeds and the allocation of the funds?

Overall comment on this section:
KfW's Financial Market department will track the allocation of proceeds through an internal register. KfW intends to fully allocate the proceeds by the end of the issuance year. Pending allocation, the unallocated proceeds will be held in cash or cash equivalent instruments. Sustainalytics considers this process to be in line with market practice.

4. REPORTING

Does the review assess:

☒ the expected type of allocation and impact reporting (bond-by-bond or on a portfolio basis)?

☒ the frequency and the means of disclosure?

☐ the disclosure of the methodology of the expected or achieved impact of the financed project(s)?

Overall comment on this section:
KfW will report on the allocation of proceeds and corresponding impact on its website on an annual basis until full allocation. Allocation reporting will include details such as the amount of allocated and unallocated proceeds, the breakdown of eligible projects and loans to be financed by category and country, and the share of proceeds allocated to projects that are aligned with the substantial contribution criteria of the EU Taxonomy. Sustainalytics views KfW's allocation and impact reporting as aligned with market practice.

Section 4. Additional Information

Useful links *(e.g. to the external review provider's methodology or credentials, to the full review, to issuer's documentation, etc.)*

Analysis of the contribution of the project(s) to the UN Sustainable Development Goals:

Additional assessment in relation to the issuer/bond framework/eligible project(s):

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.

Disclaimer

About Sustainalytics, a Morningstar Company

Sustainalytics, a Morningstar Company, is a leading ESG research, ratings and data firm that supports investors around the world with the development and implementation of responsible investment strategies. For more than 30 years, the firm has been at the forefront of developing high-quality, innovative solutions to meet the evolving needs of global investors. Today, Sustainalytics works with hundreds of the world's leading asset managers and pension funds who incorporate ESG and corporate governance information and assessments into their investment processes. Sustainalytics also works with hundreds of companies and their financial intermediaries to help them consider sustainability in policies, practices and capital projects. With 17 offices globally, Sustainalytics has more than 1500 staff members, including more than 500 analysts with varied multidisciplinary expertise across more than 40 industry groups.

For more information, visit www.sustainalytics.com

Or contact us contact@sustainalytics.com