06 Appendix

Approach to reporting

This report was compiled as of February 23, 2023, and published on February 24, 2023. We prepared the report in accordance with the GRI Standards (2021) for the reporting period January 1 to December 31, 2022. The GRI content index is available as a separate document. In addition to the GRI Standards, the framework for our Sustainability and Integrated Reports is based on the EU Non-Financial Reporting Directive (NFRD), the Sustainability Accounting Standards Board (SASB), the European Union's common classification system for sustainable economic activities, known as the EU Taxonomy, the Task Force for Climate-related Financial Disclosures (TCFD) Recommendations, and the 10 principles of the UN Global Compact.

We aim to maintain alignment with best practices in our sustainability reporting, and we closely follow all pertinent developments in international sustainability reporting. This includes applicable regulations such as the amended Code of Obligations in Switzerland, the Corporate Sustainability Reporting Directive (CSRD) in the European Union, and the proposed SEC Rules to Enhance and Standardize Climate-Related Disclosures for Investors in the United States, as well as developments in reporting standards such as the European Sustainability Reporting Standards and the IFRS Sustainability Standards.

Our Sustainability Report covers ABB's material economic, environmental and social impacts and how we manage them. Omission from the material issues addressed in our report does not mean that an issue is not managed. In addition to our annual sustainability reporting, ABB reports quarterly on a selection of our strategic sustainability KPIs.

Reporting boundaries

Our formal sustainability reporting system covers all ABB Group companies worldwide, including wholly owned subsidiaries, majority-owned joint ventures and direct and indirect participations (as listed in the ABB Corporate Governance Report 2022, pages 23-24). Newly acquired businesses are typically reflected in annual sustainability reporting in the subsequent year. Businesses that are divested in the first half of the year are typically excluded from annual sustainability reporting. For a list of acquisitions and divestments in 2022, please refer to the ABB Integrated Report 2022, pages 118-119.

Data collection processes

We rely on a global, online data reporting system to measure and gather data from across ABB. The system is used to file reports on hazards, incidents, sustainability

observation tours and environmental performance at every production and service site, as well as a majority of our office locations. It is also used to collect annual social data from every country. This centralized reporting system simplifies data collection and facilitates greater transparency.

The data in this report relating to health, safety and our social performance covers 99 percent of ABB employees. Data relating to our environmental performance (including energy, emissions, water and waste) was sourced from 332 ABB sites and offices, covering approximately 91 percent of employees. Data on the environmental performance of the remaining employees, who are located at non-manufacturing sites with limited impacts, is generated by estimating energy, water and waste parameters pro rata. In 2022, we added 1.3 percent of our employees to these estimates when we removed 50 of our smallest sites from our reporting system, representing a fraction of a percent of our environmental impact.

Calculation of energy and GHG data

All GHG emission factors for fuels used at our sites are sourced from the GHG Protocol's "Emission Factors from Cross-Sector Tools" (March 2017). They include the emissions of CO_2, CH_4 and N_2O. Biogenic emissions from biofuels include only CH_4 and N_2O emission factors. Global warming potential (GWP) factors for CH_4, N_2O and SF_6 follow the IPCC's AR5 report. Emissions from ABB's vehicle fleet are based on lease contract distances and tank-to-wheel gCO_2/pkm (grams of CO_2 per passenger kilometer). We applied lab-to-road uplift factors from the International Council on Clean Transportation Europe to better reflect our vehicles' real emissions on the road vs. the laboratory.

ABB uses the market-based method to calculate and report scope 2 GHG emissions. For purchased electricity and district heating, we have obtained local emission factors from utilities. Scope 2 GHG emissions for electricity have also been calculated using the location-based method; for these calculations we sourced our data from the International Energy Agency (2022).

In our 2030 Sustainability Strategy, launched in 2020, we measure our progress against a 2019 baseline, which is adjusted to portfolio changes. The adjusted 2019 baseline is 639 kilotons.

The results are provided for comparison below:

Scope 2 GHG emissions from electricity	Kilotons CO_2e
Market-based:	51.9
Location-based:	305

Scope 3 GHG emissions are calculated using average emission factors together with inhouse data on, e.g., product performance, sales volumes, average lifetimes, and other data required to calculate emissions in the 13 out of 15 scope 3 categories that are

relevant for ABB. For example, the category “Purchased goods and services” includes all upstream (cradle-to-gate) emissions for the extraction, production and transportation of goods and services purchased or acquired by ABB in the reporting year, not included in other categories. Our calculation uses secondary data, applying spending data and global industry average emission factors per material consumed from life cycle inventory databases. In the category “Business travel”, emissions from air travel are calculated using emission factors, with radiative forcing (RF), published by the UK Department for Business, Energy & Industrial Strategy (BEIS) in its 2022 Government GHG Conversion Factors for Company Reporting. For the category “Use of sold products”, we calculated the emissions due to losses in equipment such as electric motors, drives, switches, switchgear and breakers during conduction, conversion, and transformation of electricity through our products. For products with a direct energy use, like industrial robots, we calculated the emissions due to the electricity-use during the product's service life.

Estimates

As this report was published in February 2023, the environmental data in the report is based on measured data for the first 11 months of 2022. For December, each site was required to estimate its environmental performance using data from December 2021 as a starting point and then to consider the impact of possible changes from the previous year. These may include physical changes at the site, changes in production volumes and weather conditions.

Changes in 2022

In order to extend our GRI reporting, ABB has decided for the first time to report on GRI Disclosure 301-1 (Materials used by weight or volume) in its 2022 reporting, replacing our previous disclosure on hazardous materials. Additionally, we have decided not to report on GRI Disclosure 302-4 (Reduction of energy consumption) in this report as we are currently revisiting the calculation methodology for this KPI.

Independent assurance

KPMG AG has been engaged by ABB to provide independent assurance for selected GRI KPIs disclosed in the Sustainability Report and for reported progress against the 2030 sustainability targets. KPMG AG's full Assurance Statement, including opinion and basis of opinion, is available in the following section "Assurance statement."

Certified ABB management system information

ISO management system standards enable organizations to improve performance by specifying repeatable steps that the organizations can implement to achieve their goals and objectives.

ISO 14001 sets forth the criteria for an effective environmental management system and maps out a framework for the implementation of such a system. ISO 50001 sets energy management standards, providing organizations with a clear way to improve energy use through the development of an energy management system. ISO 45001 is the international standard for occupational health and safety management systems. It is aimed at mitigating any factors that could harm the mental or physical well-being of workers; ISO 45001 replaces the OHSAS 1800 family of standards, which was withdrawn on March 31, 2021.

- 80 percent of our manufacturing and service sites are covered by a certified environmental management system (ISO 14001 or equivalent)
- 79 percent of our employees at manufacturing or service sites are covered by a certified occupational health and safety management system (ISO 45001 or equivalent)
- 32 percent of our energy use at manufacturing or service sites is covered by a certified energy management system (ISO 50001 or equivalent)[7]

Sustainable Development Goals

To reflect how the selected case study examples in this report contribute to the United Nations' Sustainable Development Goals (SDGs), we have mapped the main impacts of each case study to the sub-goals of the SDGs. Based on the results from this process, we have selected those SDGs most impacted by each of the case studies. During the course of the materiality assessment we plan to conduct in 2023, we intend to comprehensively map the positive impact ABB is having on the SDGs.

Additional disclosures

All of ABB’s policies, statements and declarations related to the topic of sustainability can be found on our Group website.

7 Previously, we reported the coverage by certified energy management systems as percentage of employees at manufacturing or service sites. We have decided to report the coverage by certified energy management systems in this report as percentage of energy use at manufacturing or service sites to reflect the coverage more accurately.

Assurance statement

Independent limited assurance report on selected quantitative and qualitative sustainability information in ABB Ltd's Sustainability Report 2022

To the Board of Directors of ABB Ltd, Zurich

We have undertaken a limited assurance engagement on ABB Ltd's (hereinafter "ABB") following selected quantitative and qualitative sustainability information in ABB's Sustainability Report for the year ended December 31, 2022 (hereinafter "Sustainability Information"):

- 2022 performance data marked as "assured" in the GRI disclosures table, starting on page 102 of the Sustainability Report.
- The status and progress for the 2030 sustainability targets within the tables presented on pages 25, 40, 55, and 82-83 of the Sustainability Report.

Our assurance engagement does not extend to information in respect of earlier periods or to any other information included in the Sustainability Report or within the ABB Annual Reporting Suite (consisting of the Integrated Report, the Financial report, the Corporate governance report, and the Compensation report) for the year ended December 31, 2022, or any other report, including any images, audio files or embedded videos.

Our Limited Assurance Conclusion

Based on the procedures we have performed as described under the 'Summary of the work we performed as the basis for our assurance conclusion' and the evidence we have obtained, nothing has come to our attention that causes us to believe that the Sustainability Information in ABB's Sustainability Report for the year ended December 31, 2022, is not prepared, in all material respects, in accordance with the GRI Sustainability Reporting Standards (GRI Standards) as described on pages 95-98 of the report, or according to the self-developed criteria by ABB for status and progress indicators for certain 2030 targets (collectively the "Reporting Frameworks").

We do not express an assurance conclusion on information in respect of earlier periods or to any other information included in the Sustainability Report or within the ABB Annual Reporting Suite (consisting of the Integrated Report, the Financial report, the Corporate governance report, and the Compensation report) for the year ended December 31, 2022, or any other report, including any images, audio files or embedded videos.

Understanding how ABB has Prepared the Sustainability Information

The Reporting Frameworks have been used as criteria references for the Sustainability Information. Consequently, the Sustainability Information needs to be read and understood together with these Reporting Frameworks.

Inherent Limitations in Preparing the Sustainability Information

Due to the inherent limitations of any internal control structure, it is possible that errors or irregularities may occur in disclosures of the Sustainability Information and not be detected. Our engagement is not designed to detect all internal control weaknesses in the preparation of the Sustainability Information because the engagement was not performed on a continuous basis throughout the period and the audit procedures performed were on a test basis.

ABB's Responsibilities

The Board of Directors of ABB is responsible for:

- Selecting or establishing suitable criteria for preparing the Sustainability Information, taking into account applicable law and regulations related to reporting the Sustainability Information;
- The preparation of the Sustainability Information in accordance with the criteria of the Reporting Frameworks;
- Designing, implementing and maintaining internal control over information relevant to the preparation of the Sustainability Information that is free from material misstatement, whether due to fraud or error.

Our Responsibilities

We are responsible for:

- Planning and performing the engagement to obtain limited assurance about whether the Sustainability Information is free from material misstatement, whether due to fraud or error;
- Forming an independent conclusion, based on the procedures we have performed and the evidence we have obtained; and
- Reporting our conclusion to the Board of Directors of ABB.

As we are engaged to form an independent conclusion on the Sustainability Information as prepared by management and the Board of Directors, we are not permitted to be involved in the preparation of the Sustainability Information as doing so may compromise our independence.

Professional Standards Applied

We performed a limited assurance engagement in accordance with International Standard on Assurance Engagements 3000 (Revised) Assurance Engagements other than Audits or Reviews of Historical Financial Information, issued by the International Auditing and Assurance Standards Board.

Our Independence and Quality Control

We have complied with the independence and other ethical requirements of the International Code of Ethics for Professional Accountants (including International Independence Standards) issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality, and professional behavior.

Our firm applies International Standard on Quality Control 1 and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards, and applicable legal and regulatory requirements.

Our work was carried out by an independent and multidisciplinary team including assurance practitioners and sustainability experts. We remain solely responsible for our assurance conclusion.

Summary of the Work we Performed as the Basis for our Assurance Conclusion

We are required to plan and perform our work to address the areas where we have identified that a material misstatement of the Sustainability Information is likely to arise. The procedures we performed were based on our professional judgment. Carrying out our limited assurance engagement on the Sustainability Information included, among others:

- Assessment of the design and implementation of systems, processes and internal controls for determining, processing and monitoring sustainability performance data, including the consolidation of data;
- Inquiries of employees responsible for the determination and consolidation as well as the implementation of internal control procedures regarding the selected disclosures;

KPMG

— Inspection of selected internal and external documents to determine whether qualitative and quantitative information is supported by sufficient evidence and presented in an accurate and balanced manner;

— Assessment of the data collection, validation and reporting processes as well as the reliability of the reported data on a test basis and through testing of selected calculations;

— Analytical assessment of the data and trends of the quantitative disclosures in the scope of the limited assurance engagement;

— Assessment of the consistency of the disclosures applicable to ABB with the other disclosures and key figures, and of the overall presentation of the disclosures through critical reading of the Sustainability Report 2022.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement.

KPMG AG

Hans-Dieter Krauss
Licensed Audit Expert

Mohamad Midani

Zurich, Switzerland
February 23, 2023

KPMG AG, Badenerstrasse 172, CH-8036 Zurich

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GRI disclosures table

Environmental

GRI ref.	Indicator description	Assurance (2022 data)	2022	2021	2020	2019
301-1	Materials used by weight or volume (kilotons)[1,2]					
	Metals	√	1,190	-	-	-
	Copper	√	93	-	-	-
	Aluminum	√	82	-	-	-
	Steel (incl. iron casting)	√	1,015	-	-	-
	Plastics	√	173	-	-	-
302-1	Energy consumption within the organization (gigawatt-hours – GWh)[3,4,5]					
	Biofuels	√	2.03	1.98	0.92	52.9
	Oil (11.63 MWh/ton)	√	7.1	6.8	7.3	49.0
	Diesel (11.75 MWh/ton)	√	4.6	2.0	3.5	4.4
	Coal (7.56 MWh/ton)	√	0	0	0	0

GRI ref.	Indicator description	Assurance (2022 data)	2022	2021	2020	2019
	Gas	✓	388	435	448	728
	District heat consumption	✓	107	127	125	208
	Electricity consumption	✓	909	981	1,031	1,635
	Total energy used	✓	**1,417**	**1,553**	**1,616**	**2,677**
	Electricity sold	✓	1.7	2.2	2	2
	Total energy consumption within the organization from renewable sources		741	**503**	321	409
	Total energy consumption within the organization from non-renewable sources		676	**1,050**	1,295	2,268
302-3	**Energy intensity (MWh/million $ sales)**[3,4,6]	✓	48	52	62	72
303-3	**Water withdrawal (kilotons)**[3,4]					
	Purchased from water companies	✓	1,991	2,162	2,523	3,896
	Groundwater extracted by ABB	✓	751	585	576	2,066
	Surface water extracted by ABB	✓	57	76	109	2,406
	Collection of rainwater	✓	5	5	4.2	9.8
	Waste water from external source	✓	10	11	12.0	21.7

GRI ref.	Indicator description	Assurance (2022 data)	2022	2021	2020	2019
	Water withdrawal from areas of water stress[7]	✓	1,112	1,044	1,072	2,266
	Total water withdrawal	✓	**2,815**	**2,839**	**3,224**	**8,401**
303-4	Water discharge (kilotons)[3,4]					
	Public sewer		1,727	1,840	2,018	3,591
	treated (percentage)		20%	27%	25%	36%
	untreated (percentage)		80%	73%	75%	64%
	Recipient		648	543	585	1,123
	treated (percentage)		25%	29%	29%	84%
	untreated (percentage)		75%	72%	71%	16%
	Hazardous treatment company		49	43	47	140
	treated (percentage)		59%	52%	45%	81%
	untreated (percentage)		41%	48%	55%	19%
	External use		1.5	0.74	0.01	0
	treated (percentage)		100%	99%	0%	0%
	untreated (percentage)		0%	1%	100%	100%

GRI ref.	Indicator description	Assurance (2022 data)	2022	2021	2020	2019
303-5	**Water consumption**[3,4]					
	Total water consumption from all areas[8]		389	412	580	643
	Total water consumption from all areas with water stress[7,8]		166	167	223	116
	Water recycled and reused[3,4]					
	Volume of water reused and recycled (kilotons)		894	953	1,033	8,051
	As percentage of total water withdrawal (%)[9]		32%	34%	32%	96%
304-1	**Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas**[10]					
	Number of ABB sites located in, or bordering to, a protected area		9	9	-	-

GRI ref.	Indicator description	Assurance (2022 data)	2022	2021	2020	2019
Greenhouse gas (GHG) emissions[11] (kilotons CO_2e)						
305-1	**Direct (Scope 1) GHG Emissions[3,4]**					
	Use of energy	✓	82	90	94	162
	Coolants[2]	✓	5.1	-	-	-
	SF_6[12]	✓	20	52	77	159
	Transport by own fleet[13]	✓	49	48	55	75
	Total scope 1 GHG emissions	✓	**156**	**190**	**226**	**396**
	Other					
	Biogenic CO_2 emissions[14]		0.7	0.7	-	-
305-2	**Energy indirect (Scope 2) GHG Emissions[3,4]**					
	District heat consumption	✓	16	19	18	33
	Electricity consumption	✓	52	195	318	569
	Total scope 2 GHG emissions	✓	**68**	**214**	**336**	**602**
	Total scope 1 and 2 GHG emissions	✓	**223**	**405**	**561**	**998**

GRI ref.	Indicator description	Assurance (2022 data)	2022	2021	2020	2019
305-3	Other indirect (Scope 3) GHG Emissions[15]					
	Purchased goods and services[16]	✓	7,261	5,346	5,760	5,760
	Capital goods		429	424	438	486
	Fuel and energy-related activities not in scope 1/2		43	44	44	51
	Up- and downstream transportation		500	500	760	760
	Waste generated in operations		15	19	17	24
	Business travel[17]	✓	93	71	85	159
	Employee commuting		180	175	187	187
	Up- and downstream leased assets		227	253	273	171
	Processing of sold products		0	0	0	0
	Use of sold products[18]		117,780	117,780	118,022	118,022
	End-of-life treatment of sold products		99	79	80	89
	Franchises		0	0	0	0
	Investments[19]		0	54	54	326
	Total scope 3 GHG emissions		**126,627**	**124,745**	125,720	126,034

GRI ref.	Indicator description	Assurance (2022 data)	2022	2021	2020	2019
305-4	**GHG emissions intensity (tons CO_2e/million $)**[3,4]					
	Tons CO_2 equivalent per million $ sales, Scope 1+2	√	7.6	14	21	27
305-7	**Nitrogen oxides (NO_x), sulfur oxides (SO_x), and other significant air emissions (tons)**[3,4]					
	Volatile organic compounds (VOC)	√	481	592	668	1,128
	Emissions of NO_x and SO_x (tons SO_2 and NO_2)					
	SO_x from burning coal		0	0	0	0
	SO_x from burning oil and biofuels		10	8	8	77
	NO_x from burning coal		0	0	0	0
	NO_x from burning oil and biofuels		7	6	6	57
	NO_x from burning gas		84	93	94	156
306-3 (2016)	**Significant spills (total number)**[3,4,20]					
	Oil spills		2	8	0	9
	Chemical spills		0	0	5	4
	Emissions to air		1	0	0	6
	Others		0	2	0	7
	Total number of significant spills		**3**	**10**	**5**	**26**

GRI ref.	Indicator description	Assurance (2022 data)	2022	2021	2020	2019
306-3 (2020)	**Waste generated (kilotons)**[3,4]					
	Total waste (generated)	√	182	194	192	283
306-4 (2020)	**Waste diverted from disposal (kilotons)**[3,4]					
	Non-hazardous waste recycled	√	153	160	159	228
	Scrap metal recycled	√	118	124	124	167
	Other non-hazardous waste recycled	√	35	36	35	61
	Hazardous waste recycled[21]	√	4	4	3	7
306-5 (2020)	**Waste directed to disposal (kilotons)**[3,4]					
	Non-hazardous waste sent for disposal	√	21	22	24	41
	Sent to incineration with energy recovery	√	9.3	9.8	9.3	17.1
	Sent to landfill or other disposal method	√	11.6	12.6	15.1	24.2
	Waste from construction and demolition	√	0.5	-	-	-
	Hazardous waste sent for disposal[21]	√	3	7	5	7

Note: Due to rounding, numbers presented in the GRI table may not add to the toals provided.

1 Estimated with calculation model based on $ spend. Numbers include materials sourced both as raw material and part of components.

2 Reported in 2022 for the first time.

3 The table is not adjusted to portfolio changes. Power Grids (PG) is included in 2019 data but excluded from 2020 data. Mechanical Power Transmission is included in data until the end of 2021.

4 Results for these indicators are based on reported data covering 91% of employees in 2022, 96% in 2021, 95% in 2020, 93% in 2019, plus an adjustment for the remaining employees pro rata. See the "Approach to reporting" section for more details.

5 The energy use of our fleet of leased vehicles is not included in these data.

6 Includes all types of energy used within the organization.

7 In 2022, we aligned our definition of water stress to GRI and only include areas of 'extremely high' and 'high' level of water stress, excluding areas of 'medium to high' level of water stress. Data for 2019 to 2021 are restated.

8 We have restated the water consumption data for 2021, due to an error in how it was defined. 2021 was the first time we reported on this KPI.

9 Data on water reused and recycled as percentage of total water withdrawal have been restated for 2020 and 2021 due to an error in the definition of the KPI these years.

10 Sites responding "yes" to this question in yearly environmental questionnaire.

11 See "Approach to reporting" for more details on GHG emission calculation.

12 In 2019, we updated the factor used to convert SF_6 emissions to CO_2 equivalent to 23,500 kg CO_2e/kg SF_6, as recommended by the IPCC 2013 (Fifth Assessment Report).

13 Reported fleet emissions for 2020 and 2019 lag one year behind. See "Approach to reporting".

14 ABB considers only methane and N_2O emissions of biogenic emissions, following SBT guidance.

15 We continually update our methodologies for how to caclulate the different categories in our scope 3 emissions. See "Approach to reporting". Power Grids (PG) is excluded from all scope 3 data.

16 Includes estimations of upstream emissions from purchased steel, copper, aluminum, plastics, solvent-based products, and tap water. Improvement of calculation model in 2022 resulted in 17% increase of estimated upstream emissions from purchased goods.

17 Assurance scope only covers air travel. As of 2021 business travel data includes air travel, rented vehicles and hotel nights. In 2020 and 2019, business travel included air travel only. Data for air travel is calculated using the emission factors published by the UK Department for Business, Energy & Industrial Strategy in its 2021 "Greenhouse gas reporting: conversion factors 2021".

18 Data not yet calculated for 2022, which is why we have published 2021 data from our latest disclosure to CDP as our best estimate.

19 In 2022, ABB completed the divestiture of its stake in Hitachi Energy joint venture, why scope 3 related to Investments decreased to zero.

20 An environmental incident is regarded as significant if at least one of the following criteria applies to the incident: obligation to inform local authorities or a governmental agency about the incident and/ or regulatory violation; inspection by an environmental agency results in a formal complaint; environmental Notice of Violation, a Consent Order or a Potential Responsible Party (PRP) notification; imposition of a penalty or fine; significant impact on an ecosystem; costs related to the incident exceed, or may exceed, $10,000.

21 Hazardous waste as classified in the country where it is generated.

Social

GRI ref.	Indicator description	Assurance (2022 data)	2022		2021		2020		2019	
401-1	New employee hires and employee turnover (reflected in headcount)									
	Total workforce by region (ABB employees)									
	Europe		51,360		52,390		49,200		68,400	
	The Americas		25,950		25,750		27,600		35,200	
	Asia, Middle East and Africa		29,540		29,450		28,800		40,800	
	Total		**106,850**		**107,590**		**105,600**		**144,400**	
	Employee turnover (reflected in headcount)									
	Turnover of all employees[22]									
	Europe		7,032	14%	7,129	14%	8,570	17%	9,732	14%
	The Americas		5,726	22%	5,805	23%	3,849	14%	5,443	16%
	Asia, Middle East and Africa		4,438	15%	4,238	14%	4,252	15%	6,860	17%
	Total employee turnover: ABB Group		**17,196**	**16%**	**17,172**	**16%**	**16,671**	**16%**	**22,035**	**15%**
	Turnover of all female employees[22]									
	Europe		2,336	5%	2,303	4%	3,038	6%	2,871	4%
	The Americas		2,055	8%	1,920	7%	1,162	4%	1,553	4%
	Asia, Middle East and Africa		984	3%	973	3%	906	3%	1,399	3%

GRI ref.	Indicator description	Assurance (2022 data)	2022		2021		2020		2019	
	Total female employee turnover: ABB Group		**5,375**	**5%**	5,196	5%	5,106	5%	5,823	4%
	Employee hires (reflected in headcount)									
	Hires of all employees[22]									
	Europe		6,068	12%	4,799	9%	7,649	15%	11,560	17%
	The Americas		4,466	17%	3,970	15%	2,106	8%	4,221	12%
	Asia, Middle East and Africa		5,087	17%	4,732	16%	4,209	14%	6,121	15%
	Total employee hires: ABB Group		**15,621**	**15%**	**13,501**	**13%**	**13,964**	**13%**	**21,902**	**15%**
	Hires of all female employees[22]									
	Europe		2,033	4%	1,493	3%	2,799	6%	3,898	6%
	The Americas		1,613	6%	994	4%	742	3%	1,357	4%
	Asia, Middle East and Africa		1,337	5%	1,598	5%	1,006	3%	1,275	3%
	Total female employee hires: ABB Group		**4,983**	**5%**	**4,085**	**4%**	**4,547**	**4%**	**6,530**	**4%**
403-9	**Work-related injuries**									
	Employee work-related fatalities[23,24]	✓	0		0		1		1	
	Incident rate[25]	✓	0.00		0.00		0.00		0.01	
	Employee business travel fatalities[23,26]	✓	1		0		0		0	
	Incident rate[25]	✓	0.001		0.00		0.00		0.00	

GRI ref.	Indicator description	Assurance (2022 data)	2022	2021	2020	2019
	Contractor work-related fatalities[24]	✓	0	0	1	1
	Contractor business travel fatalities[23,26]	✓	0	0	0	0
	Members of the public fatalities[23]	✓	0	0	0	0
	Employee total recordable incident number[24,27]	✓	358	332	410	744
	Injury rate[25]	✓	0.31	0.29	0.31	0.47
	Contractor total recordable incident number[24,27]	✓	73	86	100	149
	Injury rate[25]	✓	0.41	0.45	0.46	0.46
	Employee lost time incident number[24]	✓	165	145	197	372
	Injury rate[25]	✓	0.14	0.13	0.15	0.23
	Contractor lost time incident number[24]	✓	30	49	56	96
	Injury rate[25]	✓	0.17	0.26	0.26	0.29
	Combined lost time incident number		182	195	253	468
	Combined lost time injury rate		0.143	0.142	0.159	0.246
	Employee lost days due to industrial incidents[28]		2,981	1,334	2,014	6,757
	Days lost rate[25]		2.6	1,2	1.5	4.3

GRI ref.	Indicator description	Assurance (2022 data)	2022	2021	2020	2019
	Employee occupational health illnesses[24]	✓	11	10	5	16
	Employee occupational health illness rate[24,25]	✓	0.01	0.01	0.00	0.01
	Sustainability Observation Tours (SOT) conducted[29]	✓	65,687	67,878	74,266	83,859
	SOT rate[29,30]	✓	5.28	5.15	4.31	5.52
	Hazards reported[24]	✓	250,741	248,038	270,985	336,747
	Hazards reporting rate[31]	✓	2.18	2.16	2.06	2.12
404-1	Average hours of training per year per employee					
	Training per year per employee (average hours) by employee category[32,33]					
	Top and senior managers		4.6	-	-	-
	Middle and lower managers		8.4	-	-	-
	Other employees		33.2	-	-	-
	Training per year per employee (average hours) by gender[32]					-
	Female		97	-	-	-
	Male		4	-	-	-
	Total workforce		30	-	-	-

GRI ref.	Indicator description	Assurance (2022 data)	2022	2021	2020	2019
404-3	Percentage of employees receiving regular performance and career development reviews[33,34]					
	Top and senior managers		98%	96%	94%	73%
	Middle and lower managers		95%	95%	92%	89%
	Other employees		85%	87%	90%	89%
	Total workforce		**92%**	**89%**	**92%**	**89%**
405-1	Diversity of governance bodies and employees					
	Composition of governance bodies					
	Board of Directors					
	Women in Board (percentage)		20%	20%	18%	18%
	Age group diversity (percentage)					
	<30 years old		0%	0	0%	0%
	30–50 years old		10%	30%	9%	9%
	>50 years old		90%	70%	91%	91%
	Number of nationalities		9	9	9	7
	Executive Committee					
	Women in Executive Committee (percentage)		22%	22%	22%	16%

GRI ref.	Indicator description	Assurance (2022 data)	2022	2021	2020	2019
	Age group diversity total (percentage)					
	<30 years old		0%	0%	0%	0%
	30–50 years old		33%	33%	33%	8%
	>50 years old		67%	67%	67%	92%
	Number of nationalities		7	7	6	8
	Employees in senior and middle management[35]					
	Women in senior and middle management		22%	22%	20%	18%
	Men in senior and middle management		78%	78%	80%	82%
	Total workforce (ABB employees)					
	Women in total workforce		28%	27%	26%	24%
	Men in total workforce		72%	73%	74%	76%
406-1	Incidents of discrimination and corrective actions taken[3]					
	Total number of incidents of discrimination		10	3	0	8
	Total number of incidents of harassment		64	26	36	19
415-1	Political contributions[3]					
	Financial and in-kind political contributions		0	0	$14,908	$1,260

Note: Due to rounding, numbers presented in the GRI table may not add to the toals provided.

22 2022 data excludes Accelleron and 2020 data excludes PG. Includes part-time employees. Turnover rate calculated as number of ABB employees (full- and part-time) leaving during the year/ total number of ABB employees (full- and part-time) as at December 31. For the purpose of this calculation, employees who leave the organization voluntarily or involuntarily whether due to dismissal, retirement, end of fixed-term contract or death in service or any other reason, are included. However, involuntary turnover arising out of divestments is excluded from the definition.

23 Fatalities include deaths occurring within one year as a result of injuries sustained and commuting is excluded.

24 Data covers incidents that happened at workplace (ABB facility, customer site, project site) and excludes incidents that occurred during business travel.

25 Rates are per 100 employees or per 200,000 contractor hours worked. Employees in the rates are defined as persons who are permanent or temporary employees, working full time or part time, in the employment of an ABB Group Company (ABBGC). Persons hired via work agencies where ABB provides supervision, defines work to be done, training are also included in this category. For 2022 this amounts to 114,897 FTEs.

26 Includes incidents during business travel by road. Air and rail travels are excluded.

27 Recordable incidents include fatal, lost time incidents, serious injury incidents, medical treatment injuries, occupational diseases and restricted workday cases.

28 Days lost are calendar days and are counted from the day after the incident.

29 SOTs are typically conducted by all line managers at all levels.

30 Rate per manager.

31 Rate is calculated per employee.

32 Scope includes centrally managed tools such as My learning, Harvard Spark, Harvard Manager Mentor, LinkedIn Learning. It covers both leadership and functional/technical learnings. Data are based on the extractions from the respective tools for internal employees (office workers and factory ones). Our plan is to work with the business to expand the coverage in 2023, identifying which other tools are in place locally to capture the additional hours of trainings delivered across business.

33 Top and senior managers: 1-7 grades; Middle and lower managers: Other line managers; Other employees: Individual contributors not considered as managers.

34 The calculation of performance review data is based on the population that is included in the global people performance management system (HR Group Tools). 100% of top and senior managers and of middle and low managers are covered in the HR Group Tools system and 66% of other employees. This is the only centralized reporting of performance management data that can be quantified and verified and is deemed the ‘eligible population.

35 This indicator focuses on senior and middle management and includes employees in hay grades 1 to 10. 2019 data includes PG.

SASB table

SASB requirement	SASB requirement – detail	ABB answer 2022
Energy Management	a. Total Energy Consumed (Gigajoules) b. Percentage Grid Electricity (%) c. Percentage Renewable (%)	a. 5,101,131 GJ; Summary of GRI indicators – 302-1 b. 63%; Summary of GRI indicators – 302-1 c. 52%; Summary of GRI indicators – 302-1
Hazardous Waste Management	a. Amount of hazardous waste generated, percentage recycled (Metric tons, %) b. Number and aggregate quantity of reportable spills, quantity recovered (number, kilograms)	a. 7,294 metric tons; 57%; Summary of GRI indicators – 306-4 b. 2 spills, a total of 107 liters of diesel and oil, not recovered; Summary of GRI indicators – 306-3
Product Safety	a. Number of recalls issued, total units recalled (number) b. Total amount of monetary losses as a result of legal proceedings associated with product safety	a. As of 2022, this number is not available on an aggregated level at ABB. b. Not applicable. Due to NDA agreements with third parties, we are unable to disclose monetary values resulting from legal proceedings with these third parties.
Product Lifecycle Management	a. Percentage of products by revenue that contain IEC 62474 declarable substances (% by revenue) b. Percentage of eligible products by revenue, that meet Energy Star® Criteria (% by revenue) c. Revenue from renewable energy-related and energy-efficiency-related products (reporting currency)	a. As of 2022, we are unable to respond to this question. Please refer to the section Materials. b. Only applicable to North America products. All ABB products are included in point c. c. Using the EU taxonomy as reference: In 2022 and for the first fiscal year, ABB reached a 10% Taxonomy-aligned revenue under the Climate Change Mitigation environmental objective that covers partially this requirement. For further details please refer to ABB's EU Taxonomy report.

SASB requirement	SASB requirement – detail	ABB answer 2022
Material sourcing	a. Description of the management risks associated with the use of critical materials (discussion & analysis)	a. Please refer to the section Responsible sourcing and Materials.
Business ethics	Description of policies and practices for prevention of: a. corruption and bribery and anti-competitive behavior (discussion & analysis) b. Total amount of monetary losses as a result of legal proceedings associated with bribery or corruption (reporting currency) c. Total amount of monetary losses as a result of legal proceedings associated with anti-competitive behavior regulations (reporting currency)	a. Please refer to the section in the ABB Sustainability Report 2022, Integrity & Transparency; - to the section in the ABB Integrated Report 2022 , Performance, Integrity & Transparency; - to the ABB Code of Conduct ; - to the ABB Supplier Code of Conduct ; - and to The Global ABB Integrity Program (December 2022) . b. Approximately $325 million USD for Kusile settlements. c. We are unable to disclose monetary values resulting from legal proceedings associated with anti-competitive behavior regulations.
Activity Metrics	a. Number of units produced (production should be disclosed as number of units produced by product category, where relevant product categories include energy generation, energy delivery, and lighting and indoor climate control electronics.) b. Number of employees	a. Please refer to the ABB Financial Report 2022 , in section "Analysis of results of operations". b. 106,850 (reflected in headcount)[1]

1 For the purpose of consistency, the number of employees is reflected in headcount in the Sustainability Report 2022.

EU Taxonomy: Disclosures for financial year 2022

EU Taxonomy: Background and objectives

At ABB, we are determined to shape our future in an environmentally sustainable way by investing in environmentally sustainable activities.

The pursuit of environmentally sustainable business is not only important to the public – it represents the paramount challenge of our times. To help address this challenge, the European Union (EU) has taken the lead in standardizing sustainability-related data and defining environmentally sustainable criteria and objectives.

As part of the European Green Deal, the EU aims to become climate-neutral and to reduce greenhouse gases generated within its borders to net zero by 2050. With the Action Plan on Financing Sustainable Growth, the European Commission intends to reorient the European economic and financial system towards more sustainable technologies and businesses.

The core of the action plan is found in the EU Taxonomy, which establishes a list of sustainable economic activities with the goal of identifying and scaling up green investments. This classification system defines "environmentally sustainable" business activities and translates the EU's climate and environmental objectives into criteria for specific economic activities. The EU Taxonomy aims to provide companies, investors and policymakers with appropriate definitions that specify under which circumstances economic activities can be considered environmentally sustainable. Furthermore, the EU Taxonomy seeks to inhibit "greenwashing" and to promote greater transparency regarding the true environmental sustainability of economic activities.

The Taxonomy regulation[8], the Climate Delegated Act including associated Annexes I and II[9], the Delegated Act supplementing Article 8[10] and the Complementary Climate Delegated Act[11], which regulate the disclosure obligations in accordance with Article 8 of the Taxonomy regulation, currently form the legal framework for the EU Taxonomy reporting. In addition, the Taxonomy FAQs and Notices published by the European Commission have been taken into consideration in our disclosures.

8 Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088.
9 Commission Delegated Regulation (EU) 2021/2139 of 4 June 2021 supplementing Regulation (EU) 2020/852.
10 Commission Delegated Regulation (EU) 2021/2178 of 6 July 2021 supplementing Regulation (EU) 2020/852.
11 Commission Delegated Regulation (EU) 2022/1214 of 9 March 2022 amending (EU) 2021/2139 and (EU) 2021/2178 will apply from January 1, 2023, and includes specific nuclear and gas energy activities in the list of economic activities.

In accordance with the EU Taxonomy, an economic activity is "eligible" if it can potentially contribute to realizing at least one of the six environmental objectives[12] and is listed in relevant EU Taxonomy delegated acts, irrespective of whether that activity meets any or all of the technical screening criteria laid down.

Economic activities are not eligible for the Taxonomy when they are not specifically described in the Climate Delegated Act or other relevant delegated acts and when no technical screening criteria have been defined for them.

From January 1, 2022, the Taxonomy regulation requires corporate entities to disclose their environmentally sustainable activities. An eligible activity is only considered environmentally sustainable (i.e., "Taxonomy-aligned") if it meets the technical screening criteria (TSC):

- Makes a substantial contribution to one of the environmental objectives[13] by complying with the substantial contribution (SC) defined for the activity (e.g., level of carbon emissions)
- Meets "do no significant harm" (DNSH) criteria, having no negative effect on any of the other five environmental objectives (e.g., from the asset, process or product)
- Complies with the minimum safeguards (MS) related primarily to human rights and social and labor standards

For the **first year of reporting**, on financial year 2021, disclosures were limited to the proportions of Taxonomy-eligible and Taxonomy-non-eligible turnover, capital expenditure (Capex) and operating expenditure (Opex), as well as qualitative information.

The turnover KPI is intended to indicate current contributions to the environmental objectives, while the Capex KPI and the part of the Opex KPI related to research and development (R&D) are forward-looking investment measures.

For the **second year of reporting**, on financial year 2022, the disclosure requirements were expanded. In addition to the previous disclosures, companies must also disclose the proportions of "Taxonomy-aligned" turnover, Capex and Opex, along with supporting qualitative information.

12 Climate change mitigation, climate change adaptation, sustainable use and protection of water and marine resources, transition to a circular economy, pollution prevention and control and protection and restoration of biodiversity and ecosystems.

13 For the 2022 reporting period, only the two climate objectives must be covered, as the technical screening criteria for the remaining four environmental objectives are not yet available.

The following disclosures are prepared in line with the Taxonomy regulation Art. 8, and the related delegated acts. The Taxonomy regulation is a living legislation, dynamic in its development; the formulations and terms contained in these pieces of legislation are subject to uncertainty in interpretation and will require further clarification. Therefore, the following discussion relies on our own current interpretation; the principles applied for this year's reporting may not be applied in the same way in the future.

How ABB adopted the EU Taxonomy

Following the release of the Climate Delegated Act in June 2021, we conducted an analysis of our products, sites and activities and reviewed them against the economic activities defined by the Taxonomy in all the countries in which we operate. We involved the expertise of our product managers, real estate managers, sustainability managers, financial controllers, R&D controllers and environmental managers across all levels of our organization and solicited advice from external consultants. Through this procedure, relevant Taxonomy-eligible and -aligned activities were identified across the Group.

To assess eligibility, we reviewed the ABB Global product offering and mapped these to the economic activities defined by the Taxonomy. Most of our eligible products and services are considered "enabling activities" as defined by the Taxonomy.

To identify the relevant activities, we referred to the descriptions of the activities, the relevant Nomenclature of Economic Activities (NACE) codes and, if necessary, the substantial contribution criteria, thereby assessing whether an economic business activity carried out by ABB matches an activity description. Each ABB business division then broke down their offerings or economic activities to the level of granularity required to identify and meet the eligibility and alignment criteria.

ABB's real estate initiatives were mapped at the country level, and EU Taxonomy data collection and reporting was coordinated centrally. Investments were identified either centrally, at the business area or division level (e.g., large investments, such as business acquisitions), or at the country level (e.g., real estate) and then mapped to the relevant activity or allocated to activities based on the percentage of eligible and/or aligned revenue. Research and development activities were analyzed for the purpose of Taxonomy reporting under a twofold approach: (i) eligible and aligned R&D projects identified based on the product mapping, and (ii) other Opex allocated based on the percentage of eligible and aligned turnover[14] allocated projects.

The procedures were determined in consultation with ABB's Sustainability Board. The Sustainability Board and the Finance, Audit and Compliance Committee of the Board were kept informed of progress, possible risks and obstacles, as well as current developments.

14 The terms turnover and revenue are used interchangeably throughout this document.

Economic activities of ABB in the context of the EU Taxonomy

ABB's purpose is to enable a more sustainable and resource-efficient future through all our business activities. As a global technology leader, ABB is well-positioned in all our markets, and our businesses benefit from the key global trends of sustainability, digitalization, electrification and automation. ABB's strategy is deeply rooted in our purpose and is designed to accelerate profitable growth by capitalizing on key global trends.[15]

Our purpose is the cornerstone of ABB's direction and strategy. Through our technologies and responsible business practices, we aim to make our stakeholders and society more sustainable. We achieve this by addressing the world's energy challenges, transforming industries and embedding sustainability in all our activities and processes across our value chain.

Our purpose is based on five themes that capture the essence of what ABB stands for, what we aspire to, and how we make a permanent sustainable impact: creating success, leading with technology, addressing the world's energy challenges, transforming industries, and embedding sustainability. With these themes in mind, we enable a more sustainable and resource-efficient future with our technology leadership in electrification and automation.

Eligibility and substantial contribution assessments

Our activities in Electrification, Motion, Process Automation and Robotics & Discrete Automation business areas, together with our real estate activities, are partially eligible under the EU Taxonomy to contribute to the environmental objective of climate change mitigation.

The analysis of the economic activities in the context of the EU Taxonomy has not revealed any ABB activities that are eligible under the environmental objective of climate change adaptation; hence we believe that our main contribution is in climate change mitigation.

The table below presents the allocation of our activities to the economic activities listed in the EU Taxonomy under the environmental objective of climate change mitigation. Changes may be made to this list of economic activities in the future as the rules around the Taxonomy evolve.

15 For additional information, refer to the ABB Integrated Report 2022.

ABB Group Economic activities 2022 in accordance with the EU Taxonomy ("Taxonomy-eligible")
Environmental objective: climate change mitigation

Economic activity under the EU Taxonomy	Description of economic activity	Application to ABB Group business areas
3. Manufacturing		
3.1 Renewable energy technologies	Manufacture of renewable energy technologies, as renewable energy is defined in Article 2(1) of Directive (EU) 2018/2001	Electrification Motion Process Automation
3.2 Equipment for the production and use of hydrogen	Manufacture of equipment for the production and use of hydrogen	Motion Process Automation
3.3 Manufacture of low-carbon technologies for transport	Manufacture, repair, maintenance, retrofitting, repurposing and upgrading of low-carbon vehicles, rolling stock and vessels	Motion Process Automation
3.4 Manufacture of batteries	Manufacture of rechargeable batteries, battery packs and accumulators for transport, stationary and off-grid energy storage and other industrial applications Manufacture of respective components	Electrification
3.5 Energy efficiency equipment for buildings	Manufacture of energy efficiency equipment for buildings	Electrification Robotics & Discrete Automation
3.6 Manufacture of other low-carbon technologies	Manufacture of technologies aimed at substantial GHG emission reductions in other sectors of the economy, where those technologies are not covered by activities 3.1 to 3.5	Electrification Motion Process Automation
6. Transport		
6.5 Transport by motorbikes, passenger cars and light commercial vehicles	Purchase, financing, renting, leasing and operation of vehicles designated as category M1 (232), N1 (233), both falling under the scope of Regulation (EC) No 715/2007 of the European Parliament and of the Council (234), or L (2- and 3-wheel vehicles and quadricycles), as referred to in Article 4(1) of Regulation (EU) 2018/858	Electrification Motion Process Automation Robotics & Discrete Automation
6.12 Retrofitting of sea and coastal freight and passenger water transport	Retrofit and upgrade of vessels designed and equipped for the transport of freight or passengers on sea or coastal waters, and of vessels required for port operations and auxiliary activities, such as tugboats, mooring vessels, pilot vessels, salvage vessels and icebreakers	Process Automation

Economic activity under the EU Taxonomy	Description of economic activity	Application to ABB Group business areas
6.15 Infrastructure enabling low-carbon road transport and public transport	Construction, modernization, maintenance and operation of infrastructure that is required for zero tailpipe CO_2e operation of zero-emissions road transport, as well as infrastructure dedicated to transshipment and infrastructure required for operating urban transport	Electrification Process Automation
6.16 Infrastructure enabling low-carbon water transport	Construction, modernization, operation and maintenance of infrastructure that is required for zero tailpipe CO_2e operation of vessels or the port's own operations, as well as infrastructure dedicated to transshipment	Electrification Process Automation
7. Construction		
7.1 Construction of new buildings	Development of building projects for residential and non-residential buildings by bringing together financial, technical and physical means to realize the building projects for later sale as well as the construction of complete residential or non-residential buildings, on own account for sale or on a fee or contract basis	Electrification Process Automation Motion Robotics & Discrete Automation
7.2 Renovation of existing buildings	Construction and civil engineering works or preparation thereof	Electrification Process Automation Motion Robotics & Discrete Automation
7.3 Installation, maintenance and repair of energy efficiency equipment	Individual renovation measures consisting of installation, maintenance or repair of energy efficiency equipment	Electrification Motion Process Automation Robotics & Discrete Automation
7.4 Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings)	Installation, maintenance and repair of charging stations for electric vehicles in buildings and parking spaces attached to buildings	Electrification Motion Process Automation Robotics & Discrete Automation
7.5 Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings	Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings	Electrification Motion Process Automation Robotics & Discrete Automation

Economic activity under the EU Taxonomy	Description of economic activity	Application to ABB Group business areas
7.6 Installation, maintenance, and repair of renewable energy technologies	Installation, maintenance and repair of renewable energy technologies, on site	Electrification Motion Process Automation Robotics & Discrete Automation
7.7 Acquisition and ownership of buildings	Buying real estate and exercising ownership of that real estate	Electrification Motion Process Automation Robotics & Discrete Automation
8. Information & Communication		
8.2 Data-driven solutions for GHG emissions reductions	Development or use of ICT solutions that are aimed at collecting, transmitting, storing data and at its modelling and use where those activities are predominantly aimed at the provision of data and analytics enabling GHG emission reductions; such ICT solutions may include, inter alia, the use of decentralized technologies (i.e., distributed ledger technologies), Internet of Things (IoT), 5G and artificial intelligence	Motion Process Automation
9. Professional, scientific and technical activities		
9.1 Close to market research, development and innovation	Research, applied research and experimental development of solutions, processes, technologies, business models and other products dedicated to the reduction, avoidance or removal of GHG emissions (RD&I) for which the ability to reduce, remove or avoid GHG emissions in the target economic activities has at least been demonstrated in a relevant environment, corresponding to at least Technology Readiness Level (TRL) 6	Electrification Process Automation Motion

ABB's activities were mapped following the ABB product tree by business area, division, product group, product line and industry usage. Financial data was extracted from various management reporting tools and reconciled to our consolidated figures at the division or product group level.

In 2022 we reassessed our 2021 eligible activity mapping, and activities were subjected to a series of screening tests to determine if they are Taxonomy-aligned. We completed the alignment assessment for our products, our real estate and R&D activities centrally at the business area and business division levels.

ABB makes substantial contributions to the following activities:

- 3.1 Manufacture of renewable energy technologies,
- 3.3 Manufacture of low-carbon technologies for transport,
- 3.4 Manufacture of batteries,
- 3.5 Manufacture of energy efficiency equipment for buildings,
- 6.15 Infrastructure enabling low-carbon road transport and public transport,
- 6.16 Infrastructure enabling low-carbon water transport,
- 7.3 Installation, maintenance and repair of energy efficiency equipment,
- 7.4 Installation, maintenance and repair of charging stations for electric vehicles in buildings,
- 7.5 Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings, and
- 7.6 Installation, maintenance and repair of renewable energy technologies.

The alignment criteria were assessed on an activity-by-activity or product-by-product basis using the technical screening criteria for the mapped activity.

Do no signifcant harm (DNSH)

The DNSH criteria were analyzed for economic activities where ABB meets the substantial contribution condition as listed above. ABB used a structured assessment to document its compliance with the DNSH criteria for the other five environmental objectives. Based on the DNSH criteria for the relevant economic activities, our assessment was carried out at the activity, company and site levels. For site-specific criteria, we focused our analysis on sites that produce products meeting the substantial contribution condition.
Below, we set out our interpretation and describe the main analyses conducted. The assessments confirm that we meet the requirements of the DNSH criteria.

1. **Climate change adaptation**
   We conducted a screening of the relevant physical climate risks and performed an initial climate risk and vulnerability assessment to identify which manufacturing sites may be affected by physical climate risks during their expected lifetimes. The climate risk and vulnerability analysis were based on Representative Concentration Pathway (RCP) scenarios 4.5 and 8.5 up to the year 2050. Furthermore, we assessed the relevance of identified climate risks on the economic activity and potential adaptation solutions that could reduce identified risks. At ABB, we are continuously aiming to improve our climate risk assessments.

2. **Sustainable use and protection of water and marine resources**[16]
   We assessed our activities for relevant sites regarding the sustainable use and protection of water and marine resources by measuring the fulfillment of requirements for water quality preservation, water stress avoidance and water impact assessment. Our sites within this scope are certified according to ISO 14001 Environmental Management Systems and ISO 9001 Quality Management Systems or provided other documentation which served as a basis for our assessment, supplemented by additional external data sources.
3. **Transition to a circular economy**
   To help preserve the Earth's resources for future generations, ABB takes a company-wide approach to circularity. By 2030, at least 80 percent of our products and solutions will be covered by our circularity approach and evaluated against a clear set of KPIs, corresponding to each stage of the product lifecycle. This internal circularity framework[17] serves as the basis of our assessment.
4. **Pollution prevention and control**
   The DNSH criteria require that the economic activity does not lead to the production, use or trade of chemical substances listed in a variety of EU chemical regulations and directives (e.g., EU Regulation 2019/1021 or 2017/852 or Annex XVII of EC 1907/2006, the REACH directive). We implemented a screening and monitoring process for hazardous substances[18] that aims to analyze the compliance of each in-scope site with the relevant EU regulations and directives.
5. **Protection and restoration of biodiversity and ecosystems**
   In order to verify adherence to the requirements for biodiversity and ecosystems, the relevant sites in or near biodiversity-sensitive or -protected areas were identified (e.g., using Natura 2000). Most of our sites within this scope are certified according to ISO 14001 Environmental Management Systems and ISO 9001 Quality Management Systems, which provided the basis for our assessment, supplemented by additional external data sources.

Minimum safeguards

The minimum safeguards are based on Article 18 of Regulation (EU) 2020/852 and drawn from principles expressed by the OECD, the UN, the Fundamental Conventions of the International Labour Organization and the International Bill of Human Rights.

16 For further information, refer to the "Water conservation" chapter in the ABB Sustainability Report 2022.
17 For further information, refer to the "Circularity approach" chapter in the ABB Sustainability Report 2022.
18 The ABB list of prohibited and restricted substances is available on our website.

ABB used a structured assessment to document its compliance with the minimum safeguards. The assessment considered the recommendations for the operationalization of the minimum safeguards as set forth in the Final Report on Minimum Safeguards from the EU Platform on Sustainable Finance (October 2022). Our assessment in 2022 was carried out separately for nine guiding principles: policies, due diligence and risk assessment, addressing impacts and tracking remediation effectiveness, communication, grievance mechanisms, consumer interests, anti-corruption, competition, and taxation.

For further information, please refer to the chapters on "Promoting social progress" and "Integrity and transparency" in the ABB Sustainability Report.

ABB financial and non-financial reporting

ABB prepares its consolidated financial statements in accordance with U.S. GAAP. The EU's Taxonomy regulation references the KPI disclosure in accordance with International Financial Reporting Standards (IFRS). For the accounting treatment of financial data required for the KPI disclosures, the two standards are largely converged, with the following exceptions:

- Non-order related research and development is expensed as incurred under U.S. GAAP and therefore has been reported as part of the Opex KPI and
- Leases with a term of one year or less are expensed as incurred under U.S. GAAP and not capitalized; therefore, these have also been reported as part of our Opex KPI.

The remaining differences between revenue recognition, tangible and intangible assets, and leases are largely converged, and no material differences impacting the comparability of data would be expected.

The results of our assessment of the Taxonomy eligibility and alignment of our offerings are summarized below. As our Taxonomy alignment is being reported for the first time, figures and comparable information from 2021 are not provided.

The method used to calculate the KPIs for year-end 2022 was based on financial data as available on December 31, 2022.

Taxonomy KPI disclosures

Turnover KPI

The proportion of Taxonomy-eligible and/or -aligned turnover has been calculated as the part of net turnover derived from products and services associated with Taxonomy-eligible and/or -aligned economic activities (numerator) divided by net turnover (denominator) for the financial year ended December 31, 2022.

The denominator is the Group's net turnover as presented in the Consolidated Income Statements under the line item "Total revenues," in accordance with U.S. GAAP. To calculate the numerator, we used the activity mapping described above and identified all third-party revenues associated with the Taxonomy-eligible and/or -aligned activities. For the year ended December 31, 2022, 37 percent of ABB revenues were Taxonomy-eligible, and 10 percent of ABB revenues were Taxonomy-aligned under the objective of climate change mitigation. In some instances, we disaggregated revenues by product as well as industry usage to identify the Taxonomy-eligible and -aligned turnover.

Large parts of ABB's business activities are not directly covered by the Taxonomy's activities, as the current version of the EU Taxonomy regulation is not directly aimed at our sector. Against this background, ABB is Taxonomy-aligned in the following activities:

- 3.1 Manufacture of renewable energy technologies,
- 3.3 Manufacture of low-carbon technologies for transport,
- 3.4 Manufacture of batteries,
- 3.5 Manufacture of energy efficiency equipment for buildings,
- 6.15 Infrastructure enabling low-carbon road transport and public transport,
- 6.16 Infrastructure enabling low-carbon water transport, and
- 7.6 Installation, maintenance and repair of renewable energy technologies.

The majority of our Taxonomy-eligible turnover is reported under Activity 3.6 "Manufacture of other low-carbon technologies." Activity 3.6 is of increasing importance and covers the manufacture of technologies aimed at substantial GHG emission reductions in other sectors of the economy. When assessing our eligibility under this activity, ABB has strictly filtered the product portfolio for products that directly aim to improve energy efficiency or reduce GHG emissions. These includes products such as energy-efficient motors, drives, turbochargers, measurement and analytics tools and energy-efficient electrical components.

The current "substantial contribution" condition for Activity 3.6 requires that the contribution to GHG emission reductions be measured using a life-cycle GHG emission savings calculation that demonstrates the savings compared to the best-performing alternative technology, product or solution available on the market. For many of our significant electrical and industrial automation solutions, it was unclear how to define the best-performing alternative on the market, as such products are not widely available. The technical screening criteria (TSC) need further clarification, as they do not allow for proper recognition of our electrical and industrial automation solutions.

The detailed proportion of turnover from products and services associated with Taxonomy-aligned economic activities is disclosed page 136 of the report.

Capital expenditure (Capex) KPI

The Capex KPI is defined as Taxonomy-eligible and/or -aligned Capex (numerator) divided by total Capex (denominator) for the financial year ended December 31, 2022. The total Capex used for the denominator includes total additions to tangible and intangible assets before depreciation, amortization and revaluations and impairments, as presented in Note 23 “Operating segment and geographic data” of the Consolidated Financial Statements, and from leases (finance and operating), as presented in Note 14 “Leases,” as well as assets acquired as part of business combinations, as presented in Note 4 “Acquisitions, divestments and equity-accounted companies.” Taxonomy-eligible and/or -aligned Capex used for the numerator includes Capex related to assets or processes that are associated with eligible or aligned activities, and Capex related to the purchase of output for eligible or aligned activities and measures. No “Capex plans” in line with the Taxonomy regulation were considered.

Within ABB, real estate initiatives and large investments are identified and mapped to the relevant activities at the business area and divisional levels. Capex KPI data collection is coordinated centrally. Investments have been reported under the activity with which the Capex is associated. Against this background, ABB is Taxonomy-aligned in the following activities:

- 3.1 Manufacture of renewable energy technologies,
- 3.3 Manufacture of low-carbon technologies for transport,
- 3.4 Manufacture of batteries,
- 3.5 Manufacture of energy efficiency equipment for buildings,
- 6.15 Infrastructure enabling low-carbon road transport and public transport,
- 6.16 Infrastructure enabling low-carbon water transport,
- 7.3 Installation, maintenance and repair of energy efficiency equipment,
- 7.4 Installation, maintenance and repair of charging stations for electric vehicles in buildings,
- 7.5 Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings, and
- 7.6 Installation, maintenance and repair of renewable energy technologies.

For the year ended December 31, 2022, 64 percent of ABB Capex are Taxonomy-eligible, and 14 percent of ABB Capex are Taxonomy-aligned under the objective of climate change mitigation.

Large investments were assessed and analyzed on a case-by-case basis and mapped to the relevant activity. ABB's real estate function assessed eligible investments in the construction and real estate sector for all activities from 7.1 to 7.7.[19] Under Activity 6.5 "Transport by motorbikes, passenger cars and light commercial vehicles," we have reported all eligible investments made in ABB's vehicle fleet.

Due to unavailability of data, for all remaining expenditures we allocated Capex according to a factor based on the percentage of eligible and aligned revenue per business division. For example, if 10 percent of the division's revenues were eligible, 10 percent of the remaining Capex not specifically mapped could be allocated to the activity associated with that revenue. By initially mapping large projects and subsequently allocating the remaining Capex, we ensured there was no double counting of Capex KPIs.

The detailed proportion of Capex from products and services associated with Taxonomy-aligned economic activities is disclosed page 138 of the report.

Operating expenditure (Opex) KPI

The Opex KPI is defined as Taxonomy-eligible and/or -aligned Opex (numerator) divided by total Opex (denominator) for the financial year ended December 31, 2022.

Total Opex used for the denominator consists of direct non-capitalized costs related to R&D, short-term leases (less than 1 year), repairs and maintenance, building renovation projects, and any other direct expenditures associated with the day-to-day servicing of assets including property, plants and equipment.

Direct costs for training and other human resource needs are not included in either the denominator or the numerator.

R&D is based on the line item "Non-Order related Research & Development" in the Consolidated Income Statements. Other corresponding values can be derived from our internal reporting systems but are not directly reconcilable with the figures presented in the Consolidated Income Statements.

19 7.1 Construction of new buildings, 7.2 Renovation of existing buildings, 7.3 Installation, maintenance and repair of energy efficiency equipment,7.4 Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings),7.5 Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings, 7.6 Installation, maintenance and repair of renewable energy technologies, 7.7 Acquisition and ownership of buildings

Against this background, ABB is Taxonomy-aligned in the following activities:

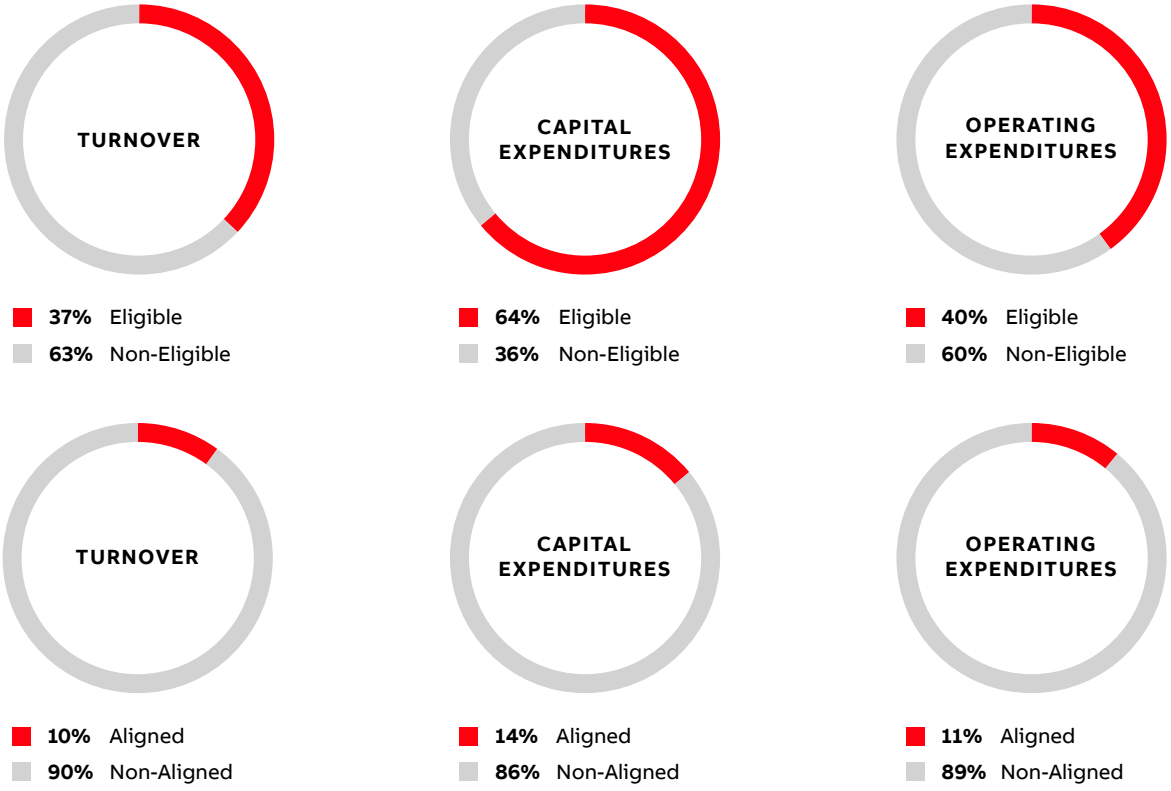
- 3.1 Manufacture of renewable energy technologies,
- 3.3 Manufacture of low-carbon technologies for transport,
- 3.4 Manufacture of batteries,
- 3.5 Manufacture of energy efficiency equipment for buildings,
- 6.15 Infrastructure enabling low-carbon road transport and public transport,
- 6.16 Infrastructure enabling low-carbon water transport, and
- 7.6 Installation, maintenance and repair of renewable energy technologies.

For the year ended December 31, 2022, 40 percent of Opex are Taxonomy-eligible and 11 percent of ABB's Opex are Taxonomy-aligned under the objective of climate change mitigation.

The Opex data aggregation was broken into two distinct processes. R&D was allocated to Taxonomy-eligible activities identified in the activity mapping phase described above. R&D managers working on projects not associated with Taxonomy-eligible activities but intended to substantially reduce GHG emissions assessed their eligibility using the criteria under Activity 9.1 "Close to market research, development and innovation" where appropriate. Allocation factors were applied to building renovation projects, maintenance and repair, and any other direct expenditures relating to the day-to-day servicing of real property assets, as well as short-term leases. These expenses were considered for each division and multiplied by the percentage of eligible and aligned revenue in that division. This approach was necessary due to a lack of more granular data on the same basis as described above for the Capex KPI. With this process, we ensured there was no double counting for Opex KPIs.

The detailed proportion of Opex from products and services associated with Taxonomy-aligned economic activities is disclosed page 140 of the report.

ABB assessment results under the EU Taxonomy: 2022 non-eligible, eligible, non-aligned and aligned KPIs



Next steps

At present, the EU has finalized the Climate Delegated Act, which details the technical screening criteria for activities that can make a substantial contribution to climate change mitigation and adaptation. The act focuses on economic activities in the sectors that are most relevant for climate neutrality and climate change adaptation, including energy, manufacturing, transport and buildings.

The EU is soon expected to publish a draft version of the Environmental Delegated Act. This act will address all the activities that can make a substantial contribution under the other four environmental objectives. In addition, the EU plans to release additional activities under the climate change mitigation objective, for which we will assess eligibility and alignment.

Upon release of the Environmental Delegated Act, we will implement a process similar to the above to assess our eligibility. In addition, we plan to implement the required processes and expertise to assess our compliance with the technical screening criteria (TSC) for the remaining four environmental objectives.

We intend to implement all the required processes for the financial year 2024, which is the expected period for mandatory compliance with the Corporate Sustainability Reporting Directive (CSRD) and the European Sustainability Reporting Standards

(ESRS). The CSRD and ESRS aim to standardize sustainability reporting and close the gap between financial and sustainability information, and the mandatory assurance for the ABB Groups sustainability reporting.

Recommendations and way forward

To be effective, the EU Taxonomy needs to take account of all economic activities that play an important role in the transition to net zero. As it stands, the Taxonomy focuses on sectors that are directly responsible for greenhouse gas emissions but takes less or no account of many critical technologies, such as electrical equipment and industrial automation, that are needed to enable a renewable energy system.

The EU Taxonomy also fails to consider the management of electricity consumption, which could be substantially reduced in a short timeframe through the deployment of readily available and cost-effective technologies. For example, upgrading an electric motor to a higher efficiency standard can deliver significant energy savings that recoup the cost of the motor in lower energy bills. The same applies to industrial automation, which in the process industries can deliver energy savings of up to 25 percent.

In summary, we view the EU Taxonomy as a significant step forward in developing a common classification system for sustainable economic activities. However, it should be expanded to include activities and sectors that contribute indirectly, but still significantly, to a low-carbon society – a shortcoming that the EU has acknowledged. ABB recommends and is prepared to support greater private-sector involvement in determining which activities and sectors should be covered.

Climate change is a global challenge that requires a global approach. The end goal should be a common global classification system for sustainable activities that is comprehensive, credible and relevant to the entire world. If the gaps and shortcomings in the EU Taxonomy are addressed, we believe that it has the potential to serve as a model for such a system, as well as an important driver of investment in sustainable development.

EU Taxonomy results

Turnover

				Substantial contribution criteria	DNSH criteria								
Economic activities	Code(s)	Absolute turnover Musd	Proportion of turnover %	Climate change mitigation %	Climate change mitigation Y/N	Climate change adaptation Y/N	Water and marine resources Y/N	Circular economy Y/N	Pollution Y/N	Biodiversity and ecosystems Y/N	Minimum safeguards Y/N	Taxonomy-aligned proportion of turnover year N %	Category (enabling activity) E
A. TAXONOMY-ELIGIBLE ACTIVITIES													
A.1. Environmentally sustainable activities (Taxonomy-aligned)													
3.1 Manufacture of renewable energy technologies	3.1	1,259	4%	100%	N/A	Y	Y	Y	Y	Y	Y	4%	E
3.3 Manufacture of low-carbon technologies for transport	3.3	480	2%	100%	N/A	Y	Y	Y	Y	Y	Y	2%	E
3.4 Manufacture of batteries	3.4	26	0%	100%	N/A	Y	Y	Y	Y	Y	Y	0%	E
3.5 Manufacture of energy efficiency equipment for buildings	3.5	406	1%	100%	N/A	Y	Y	Y	Y	Y	Y	1%	E
6.15 Infrastructure enabling low-carbon road transport and public transport	6.15	627	2%	100%	N/A	Y	Y	Y	Y	Y	Y	2%	E
6.16 Infrastructure enabling low-carbon water transport	6.16	186	1%	100%	N/A	Y	Y	Y	Y	Y	Y	1%	E
7.6 Installation, maintenance and repair of renewable energy technologies	7.6	19	0%	100%	N/A	Y	Y	Y	Y	Y	Y	0%	E
Turnover of enivironmental sustainable activities (Taxonomy-aligned activities) (A.1)		**3,003**	**10%**	**100%**	**N/A**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**10%**	
A.2. Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)													
3.2 Equipment for the production and use of hydrogen	3.2	29	0%										
3.3 Manufacture of low-carbon technologies for transport	3.3	761	3%										
3.6 Manufacture of other low-carbon technologies	3.6	6,952	24%										
6.12 Retrofitting of sea and coastal freight and passenger water transport	6.12	23	0%										
6.15 Infrastructure enabling low-carbon road transport and public transport	6.15	16	0%										

				Substantial contribution criteria	DNSH criteria								
Economic activities	**Code(s)**	**Absolute turnover** Musd	**Proportion of turnover** %	**Climate change mitigation** %	**Climate change mitigation** Y/N	**Climate change adaptation** Y/N	**Water and marine resources** Y/N	**Circular economy** Y/N	**Pollution** Y/N	**Biodiversity and ecosystems** Y/N	**Minimum safeguards** Y/N	**Taxonomy-aligned proportion of turnover year N** %	**Category (enabling activity)** E
6.16 Infrastructure enabling low-carbon water transport	6.16	23	0%										
7.6 Installation, maintenance and repair of renewable energy technologies	7.6	20	0%										
8.2 Data-driven solutions for GHG emissions reductions	8.2	109	0%										
Turnover of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		**7,933**	**27%**										
Total (A.1+A.2)		**10,936**	**37%**										
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES													
Turnover of Taxonomy-non-eligible activities (B)		**18,510**	**63%**										
Total (A+B)		**29,446**	**100%**										

Capital expenditure (Capex) KPI

				Substantial contribution criteria	DNSH criteria									
Economic activities	Code(s)	Absolute CapEx Musd	Proportion of CapEx %	Climate change mitigation %	Climate change mitigation Y/N	Climate change adaptation Y/N	Water and marine resources Y/N	Circular economy Y/N	Pollution Y/N	Biodiversity and ecosystems Y/N	Minimum safeguards Y/N	Taxonomy-aligned proportion of CapEx year N %	Category (enabling activity) E	Category (transitional activity) T
A. TAXONOMY-ELIGIBLE ACTIVITIES														
A.1. Environmentally sustainable activities (Taxonomy-aligned)														
3.1 Manufacture of renewable energy technologies	3.1	4	0%	100%	N/A	Y	Y	Y	Y	Y	Y	0%	E	
3.3 Manufacture of low-carbon technologies for transport	3.3	12	1%	100%	N/A	Y	Y	Y	Y	Y	Y	1%	E	
3.5 Manufacture of energy efficiency equipment for buildings	3.5	1	0%	100%	N/A	Y	Y	Y	Y	Y	Y	0%	E	
6.5 Transport by motorbikes, passenger cars and light commercial vehicles	6.5	25	2%	100%	N/A	Y	Y	Y	Y	Y	Y	2%		T
6.15 Infrastructure enabling low-carbon road transport and public transport	6.15	137	10%	100%	N/A	Y	Y	Y	Y	Y	Y	10%	E	
7.3 Installation, maintenance and repair of energy efficiency equipment	7.3	1	0%	100%	N/A	Y	Y	Y	Y	Y	Y	0%	E	
CapEx of enivironmental sustainable activities (Taxonomy-aligned activities) (A.1)		**180**	**14%**	**100%**	**N/A**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**14%**		
A.2. Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)														
3.1 Manufacture of renewable energy technologies	3.1	22	2%											
3.3 Manufacture of low-carbon technologies for transport	3.3	32	2%											
3.5 Manufacture of energy efficiency equipment for buildings	3.5	11	1%											
3.6 Manufacture of other low-carbon technologies	3.6	122	9%											
6.5 Transport by motorbikes, passenger cars and light commercial vehicles	6.5	22	2%											
6.15 Infrastructure enabling low-carbon road transport and public transport	6.15	3	0%											

				Substantial contribution criteria	DNSH criteria									
Economic activities	**Code(s)**	**Absolute CapEx** Musd	**Proportion of CapEx** %	**Climate change mitigation** %	**Climate change mitigation** Y/N	**Climate change adaptation** Y/N	**Water and marine resources** Y/N	**Circular economy** Y/N	**Pollution** Y/N	**Biodiversity and ecosystems** Y/N	**Minimum safeguards** Y/N	**Taxonomy-aligned proportion of CapEx year N** %	**Category (enabling activity)** E	**Category (transitional activity)** T
6.16 Infrastructure enabling low-carbon water transport	6.16	2	0%											
7.1 Construction of new buildings	7.1	97	7%											
7.2 Renovation of Existing Buildings	7.2	17	1%											
7.3 Installation, maintenance and repair of energy efficiency equipment	7.3	14	1%											
7.4 Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings)	7.4	1	0%											
7.5 Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings	7.5	2	0%											
7.6 Installation, maintenance and repair of renewable energy technologies	7.6	4	0%											
7.7 Acquisition and ownership of buildings	7.7	307	23%											
8.2 Data-driven solutions for GHG emissions reductions	8.2	1	0%											
CapEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		**657**	**50%**											
Total (A.1+A.2)		**837**	**64%**											
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES														
CapEx of Taxonomy-non-eligible activities (B)		**471**	**36%**											
Total (A+B)		**1,308**	**100%**											

Operating expenditure (Opex) KPI

Economic activities	Code(s)	Absolute OpEx Musd	Proportion of OpEx %	Substantial contribution criteria: Climate change mitigation %	DNSH criteria: Climate change mitigation Y/N	DNSH criteria: Climate change adaptation Y/N	DNSH criteria: Water and marine resources Y/N	DNSH criteria: Circular economy Y/N	DNSH criteria: Pollution Y/N	DNSH criteria: Biodiversity and ecosystems Y/N	Minimum safeguards Y/N	Taxonomy-aligned proportion of OpEx year N %	Category (enabling activity) E
A. TAXONOMY-ELIGIBLE ACTIVITIES													
A.1. Environmentally sustainable activities (Taxonomy-aligned)													
3.1 Manufacture of renewable energy technologies	3.1	66	4%	100%	N/A	Y	Y	Y	Y	Y	Y	4%	E
3.3 Manufacture of low-carbon technologies for transport	3.3	7	0%	100%	N/A	Y	Y	Y	Y	Y	Y	0%	E
3.5 Manufacture of energy efficiency equipment for buildings	3.5	32	2%	100%	N/A	Y	Y	Y	Y	Y	Y	2%	E
6.15 Infrastructure enabling low-carbon road transport and public transport	6.15	81	5%	100%	N/A	Y	Y	Y	Y	Y	Y	5%	E
6.16 Infrastructure enabling low-carbon water transport	6.16	2	0%	100%	N/A	Y	Y	Y	Y	Y	Y	0%	E
7.6 Installation, maintenance and repair of renewable energy technologies	7.6	3	0%	100%	N/A	Y	Y	Y	Y	Y	Y	0%	E
OpEx of enivironmental sustainable activities (Taxonomy-aligned activities) (A.1)		**191**	**11%**	**100%**	**N/A**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**11%**	
A.2. Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)													
3.1 Manufacture of renewable energy technologies	3.1	7	0%										
3.2 Equipment for the production and use of hydrogen	3.2	2	0%										
3.3 Manufacture of low carbon technologies for transport	3.3	35	2%										
3.5 Manufacture of energy efficiency equipment for buildings	3.5	14	1%										
3.6 Manufacture of other low-carbon technologies	3.6	380	22%										
6.12 Retrofitting of sea and coastal freight and passenger water transport	6.12	3	0%										
6.15 Infrastructure enabling low-carbon road transport and public transport	6.15	11	1%										
6.16 Infrastructure enabling low-carbon water transport	6.16	3	0%										
8.2 Data-driven solutions for GHG emissions reductions	8.2	13	1%										
9.1 Close to market research, development and innovation	9.1	17	1%										

				Substantial contribution criteria	DNSH criteria								
Economic activities	Code(s)	Absolute OpEx Musd	Proportion of OpEx %	Climate change mitigation %	Climate change mitigation Y/N	Climate change adaptation Y/N	Water and marine resources Y/N	Circular economy Y/N	Pollution Y/N	Biodiversity and ecosystems Y/N	Minimum safeguards Y/N	Taxonomy-aligned proportion of OpEx year N %	Category (enabling activity) E
OpEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		485	29%										
Total (A.1+A.2)		676	40%										
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES													
OpEx of Taxonomy-non-eligible activities (B)		1,020	60%										
Total (A+B)		1,696	100%										

Definitions

Greenhouse gas emissions

GHG emissions refer to all emissions that have a warming effect on the earth's surface by trapping heat in the atmosphere. Carbon dioxide (CO_2) makes up the vast majority of GHG emissions, but other gases, including methane (CH_4), nitrous oxide (N_2O) and sulfur hexafluoride (SF_6), also have a warming effect. CO_2, methane and nitrous oxide are released during the combustion of fossil fuels, such as coal, oil and natural gas, to produce energy. At ABB, we use the metric of CO_2-equivalent (CO_2e) to calculate our GHG emissions and to measure progress toward our emissions reduction targets.

Scope 1 GHG emissions

Direct emissions from company-owned and controlled resources, for example, emissions from combustion in owned or controlled boilers, furnaces, vehicles, etc.

Scope 2 GHG emissions

Indirect emissions from the generation of purchased energy (electricity, steam, heat, cooling) from a utility provider.

Scope 3 GHG emissions

All other indirect emissions not included in scope 2 that occur in the value chain, both upstream and downstream. According to the GHG protocol, scope 3 emissions are separated into 15 categories and include, for example, purchased goods and services, business travel and commuting, and use of sold products.