

Taxonomy disclosures

1.

What is the EU Taxonomy and its purpose?

The European Union (EU) has the goal to become climate neutral by 2050. With the Action Plan on Financing Sustainable Growth, the European Commission aims to make the economic and financial system in the EU more sustainable. The core element of this action plan is the EU Taxonomy, which is a classification system that 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 for which economic activities can be considered environmentally sustainable. Further, the Taxonomy is aiming to inhibit greenwashing and encourages more transparency regarding the level of environmental sustainability of economic activities.

The Taxonomy regulation¹, the Climate Delegated Act², the associated Annexes I³ + II⁴ and the supplementary Delegated Act⁵, which regulates the disclosure obligations in accordance with Article 8 of the Taxonomy regulation currently form the legal framework for reporting. In addition, the FAQs published by the European Commission have been taken into considerations in our EU Taxonomy disclosures.

For the first-year reporting on financial year 2021, the disclosures are limited to:

- The first two environmental objectives, namely climate change mitigation and climate change adaptation, for which the technical screening criteria (TSC) have already been developed.
- The proportion of Taxonomy-eligible and Taxonomy non-eligible turnover, capital expenditure (CAPEX), and operating expenditure (OPEX) as well as qualitative information.

The turnover KPI is aimed to show the current contribution to the environmental objectives, whereas the CAPEX and part of the OPEX KPI related to Research & Development (R&D) are forward looking measures.

Taxonomy-eligible economic activities are defined as an economic activity that is described in the Climate Delegated Act, irrespective of whether that activity meets any or all of the technical screening criteria laid down. Taxonomy-non-eligible economic activities are defined as any activity that is not specifically described in the Climate Delegated Act and for which no technical screening criteria have been developed.

The following disclosures are based on the Taxonomy regulation, Art. 8 and related delegated acts. The Taxonomy regulation is a living document and is dynamic in its developments. Therefore, applied principles can potentially not be applied consistently in the future.

¹ [Online document \(PDF\)](#)

² Commission Delegated Regulation (EU) 2021/2139

³ [taxonomy-regulation-delegated-act-2021-2800-annex-1_en.pdf \(europa.eu\)](#)

⁴ [taxonomy-regulation-delegated-act-2021-2800-annex-2_en.pdf \(europa.eu\)](#)

⁵ Commission Delegated Regulation (EU) 2021/2178

2.

How ABB adopted the EU Taxonomy?

Following the release of the Climate delegated act in April 2021, we conducted a thorough analysis of our products, sites and activities around the world 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, sustainability champions, R&D controllers, Real Estate managers and various members of the finance functions from the division level up to the corporate level and took external advice from subject matter expert consultants. Through this procedure relevant taxonomy eligible activities were identified across the group.

In order to assess our eligibility, we reviewed the existing economic activities defined by the Taxonomy and identified all relevant activities for ABB. The majority of our products and services are eligible as enabling activities as defined by the EU Taxonomy.

In order to identify the relevant activities we used the description of the activity, the relevant Nomenclature of Economic Activities (NACE) codes mentioned, and if necessary, referred to the substantial contribution criteria to assess whether the economic business activity carried out by ABB matches the activity description. Each division then broke down their offerings to the level of granularity required to meet the eligibility definition of the various activities.

This activity mapping then became the basis for which ABB identified the relevant turnover, CAPEX and OPEX for taxonomy eligible activities.

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

3.

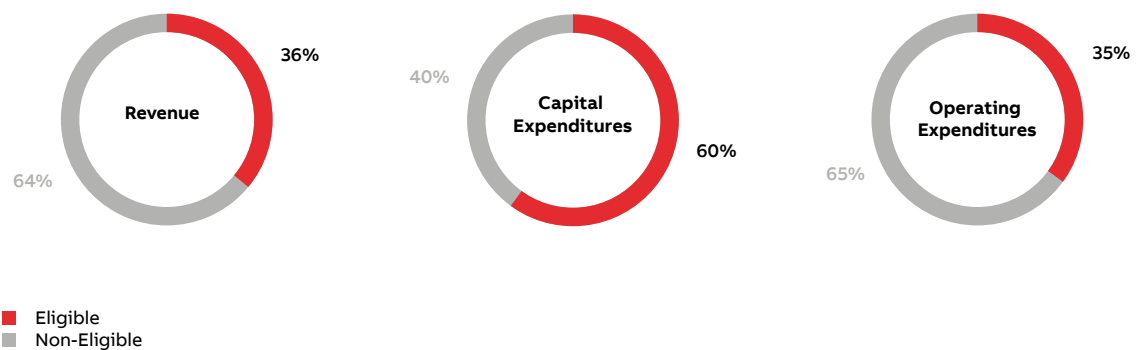
Results of ABB assessment of Eligibility

ABB prepares its Consolidated Financial Statements in accordance with U.S. GAAP, whereas the Taxonomy regulation refers to International Financial Reporting Standards (IFRS). For the accounting treatment of financial data required for the KPI disclosures the 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
- Leases with tenure of 1 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 difference between revenue recognition, tangible and intangible assets, and leases are largely converged and no material differences which would impact the comparability of data would be expected.

ABB's activities were mapped following the ABB Master Data hierarchy by Business Area, Division, Product Group, Product Lines 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. The results of our assessment on the eligibility of our offerings are summarized in the graph below:



Turnover KPI:

The proportion of Taxonomy-eligible turnover has been calculated as the part of net turnover derived from products and services associated with Taxonomy-eligible economic activities (numerator) divided by the net turnover (denominator), for the financial year, ended December 31, 2021. The denominator of the KPI is the group's net turnover as presented on the face of the Consolidated Income Statements under the line item "Total revenues" in accordance with U.S. GAAP.

We used the activity mapping described above and identified total third-party revenues associated with the taxonomy eligible activities. For the year ended December 31, 2021, 36 percent of ABB revenues are eligible under the objective of climate change mitigation. In some instances, we disaggregated revenues by product as well as industry usage in order to identify the taxonomy eligible 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, the Activity 3.6. "Manufacture of other low carbon technologies" is of high relevance to us. This activity covers the manufacturing 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 which aim to directly improve energy efficiency and/or reduce GHG emissions. This includes products such as energy efficient motors, drives, turbochargers, EV Chargers, measurement and analytics tools, energy efficient electrical components, as well as a large portion of our marine & ports division. ABB's offerings which are essential to enabling our customers to produce low carbon technologies but do not seem to directly fall under the description of the activity, such as electrical components essential for the transmission and distribution of electricity or robots for EV manufacturing have not been considered.

The majority of our Taxonomy-eligible turnover (numerator) are reported under Activity 3.6. "Manufacture of other low carbon technologies". We have also reported a portion of our turnover under Activity 3.1. "Manufacture of renewable energy technologies" and Activity 3.5. "Manufacture of energy efficient equipment for buildings" primarily from our Electrification Business Area.

We note that while we strongly believe that all the products included as eligible under Activity 3.6. "Manufacture of other low carbon technologies" are specifically aimed at substantially reducing or directly enabling the reduction of GHG emissions, the technical screening criteria (TSC) need further clarification as they do not allow for the correct recognition of our electrical and industrial automation solutions. For example, the current substantial contribution criteria for this activity require the substantial contribution to GHG emission reductions be measured using a life-cycle GHG emissions savings calculation that can prove the savings compared to the best performing alternative technology/product/solution available on the market. These criteria are unclear how to define the best performing alternative on the market, as well as how these could be assessed if not all companies publish this information.

Capital Expenditure (CAPEX) KPI:

The CAPEX KPI is defined as Taxonomy-eligible CAPEX (numerator) divided by total CAPEX (denominator), for the financial year, ended December 31, 2021. Total CAPEX (denominator) used for the calculation of the KPI include capital expenditures for assets purchased as presented in Note 23 "Operating segment and geographic data" of the Consolidated Financial Statements, the present value of new leases signed during the period as presented in Note 14 "Leases" of the Consolidated Financial Statements, as well as assets acquired as part of a business combination as presented in Note 4 "Acquisitions, divestments and equity-accounted companies" of the Consolidated Financial Statements.

Taxonomy-eligible CAPEX (numerator) includes Capex related to assets or processes that are associated with Taxonomy-eligible activities and Capex related to the purchase of output for Taxonomy-eligible activities and individual measures.

These investments have been reported in the activity where the revenue is recognized, for example, the construction of a new facility to produce drives has been reported under Activity 3.6 "Manufacture of other low carbon technologies" as this division is taxonomy eligible. Furthermore, ABB's real estate function assessed Investments made that were eligible under the Construction and Real Estate sector for all activities from 7.1 to 7.7¹. Lastly, we have reported in Activity 6.5 "Transport by motorbikes, passenger cars and light commercial vehicles" all investments made for ABB's fleet.

1 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

For the year ended December 31, 2021, 60 percent of ABB CAPEX are Taxonomy-eligible 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. Due to unavailability of data, for the remaining capital expenditures, we made use of a justified allocation key by allocating the capital expenditures based on the percentage of eligible revenue in that division. For example, if 10% of the divisions revenues were eligible, 10% of the remaining CAPEX not specifically mapped could be allocated to the activity where the associated revenue was recognized. By initially mapping the large projects and only allocating the remaining CAPEX, we ensured that there was no double counting of eligible of CAPEX.

Operating Expenditure (OPEX) KPI:

The OPEX KPI is defined as Taxonomy-eligible OPEX (numerator) divided by total OPEX (denominator), for the financial year, ended December 31, 2021. Total OPEX (denominator) consists of direct non-capitalized costs that relate to research and development, building renovation measures, short-term lease, maintenance and repair, and any other direct expenditures relating to the day-to-day servicing of assets of property, plant and equipment. Direct costs for training and other human resources adaptation needs are not included in the denominator and the numerator. Research & Development (R&D) are presented on the face of the Consolidated Income Statements under the line item "Non-Order related Research & Development". Other corre-

sponding values can be derived from our internal reporting systems, but are not directly reconcilable to the presentation in the Consolidated Income Statements.

For the year ended December 31, 2021, 35 percent of OPEX are Taxonomy-eligible under the objective of climate change mitigation.

R&D was allocated to taxonomy-eligible activities identified in the activity mapping phase described above. R&D manager working on projects not associated with taxonomy-eligible activities, but which aim to substantially reduce GHG emissions assessed their eligibility using the criteria under Activity 9.1. "Close to market research, development and innovation" where appropriate.

With regards to the use of allocation keys, building renovation measures, maintenance and repair, and any other direct expenditures relating to the day-to-day servicing of assets of property, as well as short term leases were allocated by our Divisions based on the percentage of eligible revenue in that Division due to a lack of more granular data on the same basis as described above for the CAPEX KPI.

Next Steps:

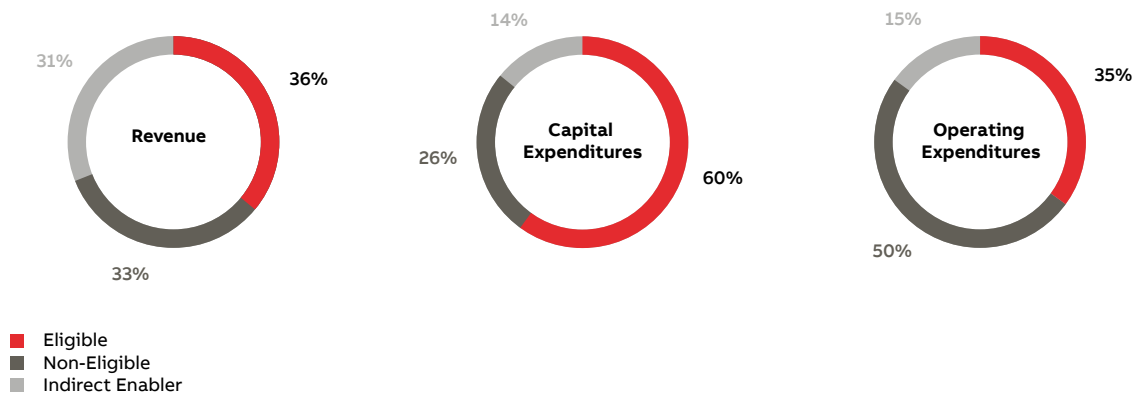
During 2022 we are implementing the required processes and expertise to assess our compliance with the Technical Screening Criteria (TSC). Furthermore, upon release of the Environmental delegated act we will implement a similar process above to assess the eligibility with these activities.

4.

Additional voluntary disclosures

A large portion of ABB's offerings are essential to enabling our customers operating in other sectors to become taxonomy eligible and aligned. Upon review of the economic activities included in the EU taxonomy it does not fully address the role of numerous associated activities that will be important for facilitating lasting and effective decarbonization, and as such we have classified these as indirect enablers of climate change mitigation in the charts below. These activities primarily consist of

the manufactured electrical components sold that are essential for the taxonomy activity 4.9 "Transmission and distribution of electricity", as well as a portion of our Robotics & Machine Automation offerings that are essential for the efficient production of Activity 3.1. "Manufacture of renewable energy technologies" and Activity 3.3 "Manufacture of low carbon technologies for transport". The quantification of these impacts can be seen in the graphs below under the label Indirect Enabler:



To be effective, the EU taxonomy needs to take account of all economic activities that play an important role in the transition towards net zero. As it stands, the taxonomy focuses on sectors that are directly responsible for greenhouse gas emissions, but takes no account of many critical technologies, such as electrical equipment or 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 time frame through the deployment of readily available and cost-effective technologies. For example, upgrading an electric motor to higher energy 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.

Recommendations and way forward

In summary, we see the EU taxonomy as a significant step forward in developing a common classification system for sustainable economic activities. However, it needs to be expanded to include activities and sectors that contribute indirectly, but still significantly, to a low-carbon society – something that the EU acknowledges. ABB recommends and is ready 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.