EU Taxonomy

The EU Taxonomy Regulation

On July 12, 2020, Regulation (EU) 2020/852 of the European Parliament and of the Council of June 18, 2020 (the EU Taxonomy Regulation) entered into force. The EU Taxonomy Regulation provides the basis for the EU Taxonomy, which is a classification system, on the basis of which a list of environmentally sustainable economic activities has been drawn up. As a result of the EU Taxonomy Regulation, we must disclose information on how and to what extent our activities are associated with economic activities that qualify as environmentally sustainable.

Environmental objectives

The EU Taxonomy Regulation defines overarching conditions that an economic activity must meet to be considered environmentally sustainable and focuses on six environmental objectives, being (i) climate change mitigation, (ii) climate change adaptation, (iii) the sustainable use and protection of water and marine resources, (iv) the transition to a circular economy, (v) pollution prevention and control and (vi) the protection and restoration of biodiversity and ecosystems. For each environmental objective, a delegated act will be issued in which technical screening criteria (EU Taxonomy criteria) will be laid down, which specify environmental performance requirements for the economic activities to be classified as environmentally sustainable (EU Taxonomy Delegated Acts).

On January 1, 2022, the EU Taxonomy Delegated Acts on climate change mitigation and climate change adaptation, entered into force. No delegated acts have currently entered into force for the other four environmental objectives.

Eligibility – alignment

Disclosure obligations under the EU Taxonomy Regulation will enter into force in multiple phases. For the financial year 2021, non-financial undertakings such as ST will only have to disclose information on the Taxonomy-eligibility of their economic activities. For the financial year 2022, non-financial undertakings such as ST will have to disclose information on the Taxonomy-alignment of their economic activities as well.

An activity can be considered Taxonomy-eligible when the activity is described as such in the relevant EU Taxonomy Delegated Act. To assess whether the activity can also be considered Taxonomy-aligned, an additional evaluation has to be made to identify if the EU Taxonomy criteria are met.

Applicability of EU Taxonomy to ST

As we are subject to an obligation to publish non-financial information pursuant to the Directive 2013/34/EU of the European Parliament and of the Council of June 26, 2013 (the NFRD), the EU Taxonomy Regulation is applicable to us, and subsequently, we must disclose information on how and to what extent our activities are associated with economic activities that potentially qualify as environmentally sustainable under the EU Taxonomy Regulation.

For the current financial year 2021, the disclosure for non-financial undertakings such as ST is limited to the disclosure of Taxonomy-eligible and Taxonomy non-eligible economic activities within their turnover, capital expenditure (CAPEX) and operating expenditure (OPEX) aiming at substantially contributing to climate change mitigation and climate change adaptation and the qualitative information relevant for this disclosure.

For the financial year 2022, we will perform the additional evaluation in view of Taxonomy-alignment for our reporting in 2023.

The following disclosures are prepared based on our current interpretation of the EU Taxonomy, while acknowledging that the EU Taxonomy Regulation is still under development and its interpretation and application is evolving.

ST and EU Taxonomy: Enabling activities

Whereas some sectors contribute directly to climate change mitigation and adaptation, we, as an intermediate product manufacturer, enable the manufacturing of low-carbon technologies. Our activities that significantly aim at contributing to climate change mitigation and adaptation, as per the definition of the EU Taxonomy Regulation, are the manufacturing of electronic components (NACE code 26.1.1) that enable other sustainable economic activities and applications. We identified all our products, technologies and detailed applications that aim at contributing substantially to climate change mitigation. This encompasses all products that aim at substantial GHG emissions savings across their lifecycle in other sectors of the economy (the GHG Saving Products).

Our taxonomy-eligible activities are therefore considered to be mainly based on the revenue derived from the sale of GHG Saving Products critical to enabling the activities listed in the EU Taxonomy as 3.6 Manufacturing of other low-carbon technologies.

With regard to climate change adaptation, it follows from our assessment that our activities are not covered by climate change adaptation as per the EU Taxonomy definition. Therefore, the proportion of turnover, CAPEX and OPEX that can be considered as Taxonomy-eligible with respect to climate change adaptation is 0%, and therefore is not included in our report on the eligibility assessment and eligible activities described below.

ST EU Taxonomy eligibility assessment

At ST, we believe that the semiconductor industry is a strategic enabler of a low carbon society as well as managing the transition towards carbon neutrality. As part of our value proposition, we aim at designing and manufacturing products that have the greatest positive impact on the planet and society. We therefore develop technologies to enable our customers to create responsible applications for safer, greener, and smarter living.

Our advanced technologies, such as SiC, GaN or FD-SOI, enable low carbon applications and bring competitive advantage in terms of GHG emissions.

Low carbon applications such as electric mobility, renewable energies, smart cities, or smart buildings have been and remain strategic markets for us.

We are a market leader in the design and manufacturing of power solutions or motor control enabling products, in which areas there are ample opportunities for short term impact on GHG emissions.

We also lead the semiconductor market in terms of ultra-low power ICs such as sensors or microcontrollers.

Lifecycle assessment: a key criterion for our EU Taxonomy reporting

For more than 10 years we have deployed a responsible product lifecycle assessment, which details the GHG footprint and handprint, as part of our sustainable technology program. We have set a target for 2027 of generating 33% of our sales to environmental and social issues, mainly for GHG reduction.

As a semiconductor manufacturer, we play a significant role in developing products enabling GHG reduction, so contributing to climate change mitigation. Our approach and methodology are based on climate change mitigation activities.

We use our advanced product lifecycle assessment experience in GHG emissions to report on the EU Taxonomy requirements. Our approach considers the full product lifecycle and its impact on the environment.

EU Taxonomy reporting – Taxonomy eligible activities related to climate change mitigation

Taxonomy eligible turnover

We have based the proportion of Taxonomy eligible turnover metrics on revenues from GHG Saving Products. The denominator is based on total revenues as reported on the consolidated income statement for the year ended December 31, 2021.

All product families have been reviewed by ST divisions, and their potential GHG reduction assessed. We have selected only product families that aim at substantial GHG reduction across the product lifecycle, from material sourcing to end of life. We have excluded products aiming at advanced functionalities vs power management, or products dedicated to comfort applications even if they are competitive from a power management perspective.

This results in Taxonomy eligible turnover amounting to 37% of total revenues reported for the full year, whereby the split by activity in our reportable segments is as follows:

Automotive and Discrete Group (ADG)	40%
Analog, MEMS and Sensors Group (AMS)	43%
Microcontrollers and Digital ICs Group (MDG)	26%
Total	**37%**

Taxonomy eligible CAPEX

The Taxonomy eligible CAPEX is based on capital expenditures related to our assets or processes associated with economic activities that are described in the relevant EU Taxonomy delegated acts.

The denominator is determined based on the 2021 additions to property, plant and equipment (including rights of use for leased assets), intangible assets (including capitalized development costs), as reported in notes 7.6.11, 7.6.12 and 7.6.13 of our consolidated financial statements for the year ended December 31, 2021 (2021 Statutory Annual Report including IFRS Financial Statements available on www.st.com)

Our methodology is mainly based on existing or future technologies enabling products that aim at substantial GHG reduction across their lifecycle. It also includes investments supporting our carbon neutrality program.

This results in taxonomy eligible activities amounting to 46% of the CAPEX.

Taxonomy eligible OPEX

The Taxonomy eligible OPEX is based on operational expenditures related to our assets or processes associated with economic activities that qualify as environmentally sustainable under the relevant EU Taxonomy delegated acts.

The denominator is determined based on research and development expenses, as reported in the consolidated income statement for the year ended December 31, 2021, after deducting expenses, primarily overheads, which are not directly associated with the development of new products or technologies.

Our methodology is mainly based on systematic review of new product development aiming at substantial GHG reduction across lifecycle. Standard costs have been reviewed based on related technologies enabling products that aim at substantial GHG reduction across their lifecycle.

This results in taxonomy eligible activities amounting to 36% of the OPEX.

To summarize, the following table sets forth the proportion of our turnover, CAPEX and OPEX which is Taxonomy-eligible, and which is Taxonomy non-eligible.

	Turnover	CAPEX	OPEX
Taxonomy-eligible economic activities (in %)	37%	46%	36%
Taxonomy non-eligible economic activities (in %)	63%	54%	64%
Total (in US$ million)	12,761	2,726	1,157

Future developments

There is currently limited guidance published by European or Dutch institutes available on the discretionary leeway to assess whether or not certain economic activities are taxonomy-eligible or taxonomy non-eligible. Despite the fact that we have carefully balanced our assessment and disclosures on the EU Taxonomy, taking into account that this first reporting year is considered to be a transitionary year, this reporting may differ from future disclosures as more guidance becomes available over time. Furthermore:

- Turnover is based on best estimate to our knowledge and available data regarding our eligible products;
- OPEX is based on best estimate to our knowledge and possible allocation of new eligible products or technologies' development costs; and
- CAPEX is based on best estimate to our knowledge and possible allocation of eligible products or technologies used in capacity increase or technological research and development.

In the coming years, we will continue to report under the EU Taxonomy with regard to our Taxonomy-eligible economic activities as well as our Taxonomy-aligned economic activities (as of financial year 2022). This entails a further and continuous review of our economic activities. Future guidance on the EU Taxonomy could result in updated definitions and other decision-making in meeting reporting obligations that may come into force. We expect that our reporting will evolve over time as more insights will be gained on how best to comply with the EU Taxonomy.