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GRI content index

Abbreviations: IR - Integrated Report 2023

Code	GRI disclosure title	Reference or additional information	Page
GRI 2: General Disclosures 2021			
02-01	Organizational details	IR, Sustainability factbook	156
02-02	Entities included in the organization's sustainability reporting	IR, Sustainability factbook	156
02-03	Reporting period, frequency and contact point	IR, Sustainability factbook	156
02-04	Restatements of information	IR, Sustainability factbook	156
02-05	External assurance	IR, Sustainability factbook	156
02-06	Activities, value chain and other business relationships	IR, About HydrogenPro ASA	14
02-07	Employees	IR, Sustainability factbook	158-160
02-08	Workers who are not employees	IR, Sustainability factbook	158-160
02-09	Governance structure and composition	IR, NUES Corporate Governance report, Board of Directors' report	54, 62, 65
02-10	Nomination and selection of the highest governance body	IR, NUES Corporate Governance report	65
02-11	Chair of the highest governance body	The chair of the highest governance body is not a senior executive in the organization.	
02-12	Role of the highest governance body in overseeing the management of impacts	IR, NUES Corporate Governance report, Board of Directors' report	57, 66-67
02-13	Delegation of responsibility for managing impacts	IR, NUES Corporate Governance report, Board of Directors' report	57, 66-67
02-14	Role of the highest governance body in sustainability reporting	IR, NUES Corporate Governance report, Board of Directors' report	57, 66
02-15	Conflicts of interest	IR, NUES Corporate Governance report	66
02-16	Communication of critical concerns	IR, NUES Corporate Governance report, Ethics in HydrogenPro	67, 74
02-17	Collective knowledge of the highest governance body	IR, Board of Directors report	58
02-18	Evaluation of the performance of the highest governance body	IR, NUES Corporate Governance report	66
02-19	Remuneration policies	IR, NUES Corporate Governance report	68
02-20	Process to determine remuneration	IR, NUES Corporate Governance report	68
02-21	Annual total compensation ratio	IR, Sustainability factbook	163
02-22	Statement on sustainable development strategy	IR, Material ESG topics, Sustainability targets	21, 24
02-23	Policy commitments	IR, Ethics in HydrogenPro	74
02-24	Embedding policy commitments	IR, Ethics in HydrogenPro	74
02-25	Processes to remediate negative impacts	IR, NUES Corporate Governance	67
02-26	Mechanisms for seeking advice and raising concerns	IR, NUES Corporate Governance, Ethical Business Conduct, A safe and attractive place to work	46, 67, 74
02-27	Compliance with laws and regulations	No significant instances of non-compliance during the reporting period. No monetary fines for instances of non-compliance paid.	
02-28	Membership associations	IR, Stakeholder dialogue	16
02-29	Approach to stakeholder engagement	IR, Stakeholder dialogue	16
02-30	Collective bargaining agreements	IR, A safe and attractive place to work	44
GRI 3: Material Topics 2021			
03-01	3-1 Process to determine material topics	IR, Material ESG topics	21
03-02	3-2 List of material topics	IR, Material ESG topics	21
03-03	3-3 Management of material topics	IR, Material ESG topics	21
GRI 201: Economic Performance 2016			
201-2	Financial implications and other risks and opportunities due to climate change	IR, Board of Directors' report	50
GRI 205: Anti-corruption 2016			
205-1	Operations assessed for risks related to corruption	IR, NUES Corporate Governance report, Ethics in HydrogenPro	67, 74
205-2	Communication and training about anti-corruption policies and procedures	IR, NUES Corporate Governance report, Ethics in HydrogenPro	67, 74
205-3	Confirmed incidents of corruption and actions taken	No confirmed incidents of corruption during the reporting year.	
GRI 301: Materials 2016			
301-1	Materials used by weight or volume	IR, Sustainability factbook	157
301-2	Recycled input materials used	IR, Sustainability factbook	157
GRI 302: Energy 2016			
302-1	Energy consumption within the organization	IR, Sustainability factbook	156
302-2	Energy consumption outside of the organization	Data not available for 2023.	
302-3	Energy intensity	IR, Sustainable manufacturing and supply chain	33
302-4	Reduction of energy consumption	Data not available for 2023.	
302-5	Reductions in energy requirements of products and services	IR, Efficient technology and scalability	26
GRI 303: Water and Effluents 2018			
303-1	Interactions with water as a shared resource	IR, Efficient technology and scalability, Sustainable manufacturing and supply chain	31, 33

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Code	GRI disclosure title	Reference or additional information	Page
303-2	Management of water discharge-related impacts	IR, Efficient technology and scalability, Sustainable manufacturing and supply chain	31, 33
303-3	Water withdrawal	IR, Sustainability factbook	157
303-4	Water discharge	IR, Sustainability factbook	157
303-5	Water consumption	IR, Sustainability factbook	157
GRI 305: Emissions 2016			
305-1	Direct (Scope 1) GHG emissions	IR, Sustainability factbook, GHG accounts	170
305-2	Energy indirect (Scope 2) GHG emissions	IR, Sustainability factbook, GHG accounts	170
305-3	Other indirect (Scope 3) GHG emissions	IR, Sustainability factbook, GHG accounts	170
305-4	GHG emissions intensity	IR, Sustainable manufacturing and supply chain	33
305-5	Reduction of GHG emissions	Data not available for 2023.	
305-6	Emissions of ozone-depleting substances (ODS)	IR, Sustainability factbook	158
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	IR, Sustainability factbook	158
GRI 306: Waste 2020			
306-1	Waste generation and significant waste-related impacts	IR, Sustainable manufacturing and supply chain	34
306-2	Management of significant waste-related impacts	IR, Sustainable manufacturing and supply chain	34
306-3	Waste generated	IR, Sustainability factbook	158
306-4	Waste diverted from disposal	IR, Sustainability factbook	158
306-5	Waste directed to disposal	IR, Sustainability factbook	158
GRI 308: Supplier Environmental Assessment 2016			
308-1	New suppliers that were screened using environmental criteria	IR, Sustainable manufacturing and supply chain	35
308-2	Negative environmental impacts in the supply chain and actions taken	IR, Sustainable manufacturing and supply chain	35
GRI 401: Employment 2016			
401-1	New employee hires and employee turnover	IR, Sustainability factbook	158-161
GRI 402: Labor/Management Relations 2016			
402-1	Minimum notice periods regarding operational changes	IR, A safe and attractive place to work	44
GRI 403: Occupational Health and Safety 2018			
403-1	Occupational health and safety management system	IR, A safe and attractive place to work	45
403-2	Hazard identification, risk assessment, and incident investigation	IR, A safe and attractive place to work	45
403-3	Occupational health services	IR, A safe and attractive place to work	45
403-4	Worker participation, consultation, and communication on occupational health and safety	IR, A safe and attractive place to work	45
403-5	Worker training on occupational health and safety	IR, A safe and attractive place to work	45
403-6	Promotion of worker health	IR, A safe and attractive place to work	45
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	IR, A safe and attractive place to work	45
403-8	Workers covered by an occupational health and safety management system	IR, A safe and attractive place to work	45
403-9	Work-related injuries	IR, Sustainability factbook	161
403-1	Work-related ill health	IR, Sustainability factbook	161
GRI 404: Training and Education 2016			
404-1	Average hours of training per year per employee	IR, A safe and attractive place to work	46
404-2	Programs for upgrading employee skills and transition assistance programs	IR, A safe and attractive place to work	46
404-3	Percentage of employees receiving regular performance and career development reviews	IR, Sustainability factbook	162
GRI 405: Diversity and Equal Opportunity 2016			
405-1	Diversity of governance bodies and employees	IR, Sustainability factbook	162
405-2	Ratio of basic salary and remuneration of women to men	IR, Sustainability factbook	163
GRI 406: Non-discrimination 2016			
406-1	Incidents of discrimination and corrective actions taken	IR, A safe and attractive place to work	45
GRI 407: Freedom of Association and Collective Bargaining 2016			
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	IR, Sustainable manufacturing and supply chain, A safe and attractive place to work	35, 44
GRI 408: Child Labor 2016			
408-1	Operations and suppliers at significant risk for incidents of child labor	IR, Sustainable manufacturing and supply chain, A safe and attractive place to work	35, 45
GRI 409: Forced or Compulsory Labor 2016			
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	IR, Sustainable manufacturing and supply chain, A safe and attractive place to work	35, 45
GRI 414: Supplier Social Assessment 2016			
414-1	New suppliers that were screened using social criteria	IR, Sustainable manufacturing and supply chain	35
414-2	Negative social impacts in the supply chain and actions taken	IR, Sustainable manufacturing and supply chain	35

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TCFD Index

Corporate Governance

Disclose the organisation's governance around climate-related risks and opportunities.

TCFD Recommended Disclosures	References
Describe the board's oversight of climate-related risks and opportunities	Material ESG topics, page 21
	Board of Directors, report, page 50
	NUES Corporate Governance report, page 62
	Material ESG topics, page 21
Describe management's role in assessing and managing climate-related risks and opportunities	Board of Directors, report, page 50

Strategy

Disclose the actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning where such information is material.

TCFD Recommended Disclosures	References
Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term.	Board of Directors, report, page 50
	Efficient technology and scalability, page 26
	Material ESG topics, page 21
Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning.	About HydrogenPro, page 14
	Board of Directors, report, page 50
Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	Material ESG topics, page 21
	Board of Directors, report, page 50

Risk Management

Disclose how the organisation identifies, assesses, and manages climate-related risks.

TCFD Recommended Disclosures	References
Describe the organisation's processes for identifying and assessing climate-related risks.	Material ESG topics, page 21
	Board of Directors, report, page 50
	NUES Corporate Governance report, page 62
Describe the organisation's processes for managing climate-related risks.	Board of Directors, report, page 50
	NUES Corporate Governance report, page 62
Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management.	Board of Directors, report, page 50
	NUES Corporate Governance, report, page 62

Metrics and Targets

Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.

TCFD Recommended Disclosures	References
Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process.	Sustainability targets, page 24
	Efficient technology and scalability, page 26
	Sustainability Factbook, page 156
Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	Sustainability Factbook, page 156
Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets.	Sustainability targets, page 24
Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	Material ESG topics, page 21
	Board of Directors, report, page 50

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GHG accounts

Introduction
This report provides a detailed inventory of the company's emission sources and associated greenhouse gas emissions for the period 1. Jan 2023 - 31. Dec 2023. The emissions are quantified according to the Greenhouse Gas (GHG) Protocol. The company's activities and transactions are calculated into tonnes of CO_2- equivalents using emission factors from vetted sources.

A greenhouse gas inventory allows companies to identify emission hot-spots in their operations and in their value chain, and consequently to initiate measures to mitigate their contribution to climate change. This annual report allows the company to measure their emissions over time and thereby manage their progress.

0,5%
of emissions in Scope 1

3,5%
of emissions in Scope 2

95,9%
of emissions in Scope 3

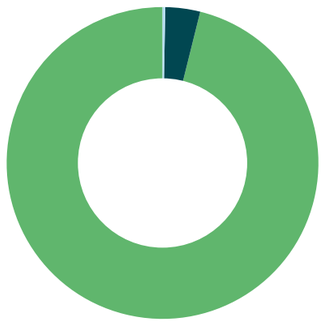

Figure 1: Emissions by Scope

	Emissions (tCO_2e)		
Emission source	**2021**	**2022**	**2023 (base year)**
Mobile combustion	0	2.3	27
Stationary combustion	0	14.0[1]	173
Scope 1 total	**0**	**16.3**	**200**
Purchased electricity[2]	0	111.3	769
Purchased heat	0	30.0	524
Scope 2 total	**0**	**141.3**	**1293**
Purchased good and services	1200.3	5614.7	33 269
Fuel and energy related emissions	0	0.0	53
Upstream transport and distribution	1.4	279.3	316
Waste generated in operations	0.3	0.7	1 082
Business travel	0	10.3	271
Upstream leased assets	0	2.6	16
Scope 3 total	**1202.0**	**5907.5**	**35 008**
Scope 1, 2 and 3 Total	**1202.0**	**6065,1**	**36501**

[1] Mentioned in 2022 as "Purchased Gases"
[2] Electricity is calculated using location-based method. Read more about location-based and market-based method under Annual Inventory, Methodology and Sources in this report.

	Emissions (tCO_2e)		
Emission source	**2021**	**2022**	**2023 (base year)**
Electricity market-based method[3]	0	383.9	866
Scope 2 market-based method total	**0**	**388.9**	**866**
Scope 1, 2 and 3 total market based method	**1202.0**	**6312.6**	**36074**

[3] Electricity is calculated using market-based method. Read more about location-based and market-based method under *Annual Inventory, Methodology and Sources* in this report.

While we did report last year that 2022 would be our basis year, we see the need to reassess this decision. This is primarily due to the fact that our production facility in Tianjin, China was not fully operational until the end of 2022, making 2023 our first year with full production. Thus, we consider our GHG emissions for 2023 to be much more representative of our operations, and we will use it as a benchmark to measure our progress going forward.

The compelling change in our operations compared to 2022 is one of the reasons why our GHG emissions are much higher in 2023. The other reason is that we have significantly increased the accuracy of our GHG accounting in 2023[1]. To do so, we have increased the scope of data reported, both from a top-down approach through spend and from a bottom-down approach through activity-based reporting. We have actively involved all our business units in the process to ensure the accuracy and completeness of the reported emissions.

Annual Inventory, Methodology and Sources
This Greenhouse Gas Inventory is prepared in accordance with the Greenhouse Gas Protocol (GHG Protocol) Corporate Accounting and Reporting Standard, and its related updates and guidelines. The GHG Protocol is a partnership between the World Resource Institute (WRI) and the World Business for Sustainable Development (WBCSD) that provides standards, guidance, tools and training for business and government to measure and manage climate-warming emissions.

The standard covers the accounting and reporting of the seven greenhouse gases covered by the Kyoto Protocol – carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PCFs), and sulphur hexafluoride (SF_6). The emissions of each GHG (CO_2, CH_4, N_2O, etc.) are calculated separately and then converted to CO_2 equivalents on the basis of their global warming potential.

The GHG Protocol differentiates between two approaches for consolidating the inventory: the equity share approach and the control approach. The control approach can then be defined as operational control or financial control. The inventory is based on the Operational Control approach.

According to this, a company should account for all the entities over which it has full authority to introduce and implement its operating policies. In line with this approach, we have considered necessary to add this year a nickel plating facility that HydrogenPro used in 2022 and 2023. This facility has previously been accounted for as a supplier. The relationship with the industrial park where the facility is located was terminated primo December 2023, and the data related to the facility will therefore not be included in 2024 figures. This will lead to a temporary increase in emissions related to operations in the factory by 2259 tons CO_2 in 2023. Around 32% of these emissions come from scope 2 sources, and 67% from scope 3, with purchased heat and electricity and purchased materials being the most important emissions for scope 2 and 3 respectively.

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In line with the GHG Protocol, the inventory divides greenhouse gas emissions, calculated into CO_2 equivalents, into three scopes, where Scope 1 & 2 are deemed mandatory by the Protocol, while Scope 3 is encouraged but voluntary.

Scope 1 & 2
Scope 1 includes direct GHG emissions from sources that are owned or controlled by the company. These sources are categorized in four groups: mobile combustion (e.g. company-owned vehicles), stationary combustion (e.g. furnace heating of facilities), process emissions (e.g. emissions from chemical production), and fugitive emissions (e.g. leakage of refrigerants).

Direct CO_2 emissions from the combustion of biomass, also called biogenic emissions, shall not be included in Scope 1 but should be reported separately.

Scope 2 includes indirect GHG emissions from the generation of purchased electricity consumed by the company. Purchased electricity is defined as electricity that is purchased or otherwise brought into the organizational boundary of the company. Scope 2 emissions physically occur at the facility where electricity is generated. The Protocol mandates that Scope 2 emissions must be reported in two ways: with location- based method and market-based method.

Location-based method reflects the average emissions intensity of grids on which energy consumption occurs, which is usually a mix between renewable and non-renewable energy sources. It derives emission factors mostly from grid-averages for defined geographic locations, including local, subnational, or national boundaries.

Market-based method reflects emissions from electricity that companies have purposefully chosen (or not chosen). It derives emission factors from contractual instruments, such as Guarantees of Origin (GoOs), Renewable Energy Certificates (RECs) and Power Purchase Agreements (PPAs). If the company has purchased such contractual instruments, the market-based emissions will reflect this, whereas if such instruments are not purchased, the market-based emissions will reflect the residual emissions of the unclaimed electricity mix (often referred to as the "residual mix"), which tends to be much higher than the location-based emission factors.

The inventory includes all material emission sources in Scope 1 & 2 and data is complete for both scopes, across all entities. 88,4% of our emissions in Scope 1 & 2 is calculated based on bottom-up activity data, while 11,6% is calculated based on top-down transaction data.

We did not have any biogenic emissions during the reporting period.

Scope 3
Scope 3 includes other indirect GHG emissions that occur upstream and downstream of the company's activities. These emissions occur as a consequence of the activities of the company, but stem from sources not owned or controlled by the company. Scope 3 emissions are divided into 15 categories (see diagram below).

For the reporting period we have been able to include the following categories: Mobile combustion, Stationary combustion, Purchased electricity, Purchased heat, Purchased goods and services, Fuel and energy related emissions, Upstream transport and distribution, Waste generated in operations, Business travel, Upstream leased asset. For all these categories, data is complete across all entities except for Business travel[2], where only air mileage is complete across all entities, while road transport is only reported for Denmark, Germany and China and not comprehensively. For the other scope 3 categories not mentioned here, evaluations of relevance have not been conducted. We will continue to improve and expand our Scope 3 inventory to include all material categories in the near future.

5,3% of our emissions in Scope 3 is calculated based on bottom-up activity data, while 94,7% is calculated based on top-down transaction data (read more about types of data in the Methodology chapter of this report).

0,5% of emissions in Scope 1
13,3% activity data
86,7% transaction data

3,5% of emissions in Scope 2
100,0% activity data
0,0% transaction data

95,9% of emissions in Scope 3
5,3% activity data
94,7% transaction data

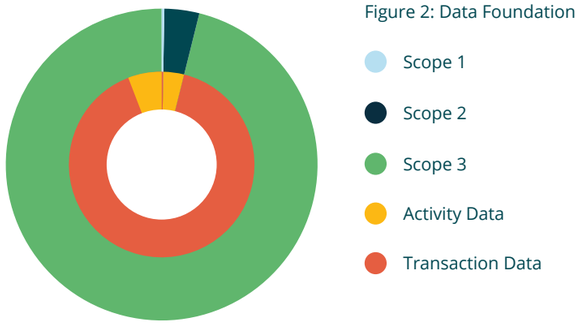

Figure 2: Data Foundation

Input data
The input data used to calculate emissions in the three scopes can either be primary data in the form of activity data that the company retrieves itself or supplier-specific activity data that is retrieved from suppliers, or it can be secondary data in the form of averages for similar activities or transaction data retrieved through accounting systems. The GHG Protocol prefers activity data to be used for calculating emissions in Scope 1 & 2, as activity data will allow for a more granular analysis that will enable decision-making. However, activity data is hard to come by for Scope 3, which leads to incomplete inventories. Thus, average and transaction-based data can be used to populate the inventory.

In addition to allowing for input of activity data, the tool used for the GHG accounts enables the calculation of transaction-based emissions using an environmentally-extended multi-regional input-output model (EE-MRIO) which estimates emissions resulting from the production and upstream supply chain activities of different sectors and products based on their geographical location. EEIO models are derived by allocating direct sectoral GHG emissions and relate these to the output level in the sector (sectoral intensities or sectoral Scope 1 emissions). All sectoral intensities are further interlinked with material and service input and output relations of all sectors in the world (66 individual economies + ROW group). By combining this model with company business data, we achieve estimated cradle-to-gate GHG emissions, and these are particularly useful when screening emission hot-spots in a global value-chain perspective.

This dual approach - a bottom-up activity-based approach combined with a top-down transaction-based approach - allows companies to harness the combined strength of accuracy and completeness in their GHG inventory, thereby maximizing their ability to use the inventory for strategic decision-making in planning their decarbonization. The SaaS platform the GHG accounting tool is based on, always ensures that the GHG emissions are captured either with activity data or by the transaction-based method, thus double counting will not occur.

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Changes in methodology from the 2022 GHG accounts*:*

[1] In 2022 emissions from the daughter company HydrogenPro China were calculated entirely through internal spend and accounted as Scope 3. In 2023 internal transactions from HydrogenPro ASA to its Chinese daughter were removed from the calculation and standardized spend data was collected for all entities across HydrogenPro. This led to a much more accurate accounting of the Chinese operations, that are now accounted for in all scopes.

[2] In 2022 the emission factors from the travel agency Bennett Norway were used to calculate emissions from business flights from the Norwegian business. In 2023 the emission factors provided by the MoreScope platform was used for all business travels across locations.

Voluntary reporting under Article 8 of the EU taxonomy regulation

The Taxonomy is a classification system created by the European Union (EU) that determines which economic activities are to be considered environmentally sustainable for investment purposes. In Norway, the EU Taxonomy is incorporated into Norwegian law through the Act on Disclosure of Sustainability-related Information in the Financial Sector that entered into force 1 January 2023. HydrogenPro is not required to report in accordance with the EU Taxonomy, as we do not qualify for the Non-Financial Reporting Directive's definition of a large company of public interest. However, we acknowledge that this information is of interest to many of our stakeholders and have chosen to do a preliminary voluntary reporting of our taxonomy eligible activities. We will continue to follow best practice with respect to ESG reporting while waiting for harmonized disclosure rules for all non-financial companies. We welcome the Corporate Sustainability Reporting Directive and European Sustainability Reporting Standards coming into effect for accounting year 2025.

HydrogenPro has identified two economic activities described in the EU Taxonomy Climate Delegated Act that are of relevance for our company. Most of our business activities are taxonomy eligible under the activity *3.2 Manufacturing of equipment for hydrogen production*, but we also have a small portion of R&D and engineering studies that meet the description stated in activity *9.1 Close to market research, development, and innovation*. We have identified the part of our turnover, capital expenditures (CapEx) and operational expenditures (OpEx) that are taxonomy eligible for the accounting year of 2023.

- **Turnover**: All our turnover is taxonomy eligible. Our revenue is derived from either sale of electrolyser systems which qualifies under activity 3.2, or revenue from sale of front-end engineering and design (FEED) and case studies, covered by activity 9.1.

- **CAPEX**: All investments made in 2023 are related to activity 3.2 Manufacturing of hydrogen and is thus taxonomy eligible.

- **OPEX**: We have included costs related to manufacturing of hydrogen equipment as eligible. This includes, among other things, personnel expenses and maintenance material. In addition, we have included non-capitalised costs related to research and development, which are eligible under 9.1. We have excluded costs that are not directly linked to the economic activities described above, such as costs related to our uplisting to Oslo Børs main market and consultancy fees following the implementation of a new ERP-system. This results in a total of 89% of our OPEX being taxonomy eligible. We do acknowledge that there is no common standardised way of determining how to calculate the OPEX KPI. We will monitor how the reporting requirements evolve going forward.

Further down the line, we will start to assess what part of our activities that are taxonomy aligned. This is particularly interesting for activity 3.2, which covers the majority of our business. To meet the technical screening criteria set out for taxonomy aligned activities under 3.2 Manufacturing of hydrogen equipment, the equipment manufactured must produce hydrogen in accordance with the requirements set out in activity 3.10 Production of hydrogen. Activity 3.10 states that for hydrogen production to be taxonomy aligned, life cycle GHG emissions must be lower than 3tCO2e/tH2, equaling a life cycle GHG emission saving of 73,4%. We expect that our equipment meets the current technical screening criteria for life-cycle emissions posted in 3.10 Production of hydrogen, as our high-pressure alkaline electrolysers run on renewable energy. We will take further steps to assess and include the "do no significant harm" and "minimum social safeguard" criteria in our taxonomy reporting for the accounting year 2024.