

Welcome to your CDP Climate Change Questionnaire 2023

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

Hydro is a leading aluminium and energy company that builds businesses and partnerships for a more sustainable future. We develop industries that matter to people and society.

Since 1905, Hydro has turned natural resources into valuable products for people and businesses, creating a safe and secure workplace for our 32,000 employees in more than 140 locations and 40 countries.

Today, we own and operate various businesses and have investments with a base in sustainable industries. Hydro is present in a broad range of market segments for aluminium and metal recycling, and energy and renewables. We offer a unique wealth of knowledge and competence.

Hydro is committed to leading the way towards a more sustainable future, creating more viable societies by developing natural resources into products and solutions in innovative and efficient ways.

Hydro is a resource rich, fully integrated aluminium company with operations in all major activities along the aluminium industry's value chain. Our operations include one of the world's largest bauxite mines and the world's largest alumina refinery, both located in Brazil. We have primary metal production facilities in Europe, Canada, Australia, Brazil and Qatar. We are a leading worldwide supplier of value-added casthouse products, such as extrusion ingots, sheet ingots and foundry alloys.

We are an industry leader as a supplier to a range of downstream markets in particular the packaging, lithographic, building, automotive and transport sectors. We deliver high-quality, energy-saving aluminium products and solutions, and have strong positions in markets that provide opportunities for good financial returns.

With more than 100 years of experience in hydropower, Hydro is the second-largest operator of power production in Norway. We have substantial, self-generated power capacity to support our production of primary metal, and are engaged in a number of initiatives to secure competitive power supplies for our aluminium operations.



Since 2021, Hydro has the following approach to our CDP related reporting:

- We continue to submit the CDP Climate Change, Water and Supply Chain questionnaires, but will only fill in the information we believe is relevant to our activities (including referring to where such information can be found in our annual reports and other publicly available sources) and that is particularly requested by our main stakeholders – knowing that this will further reduce our CDP scores

- We continue to include information on climate change and water in our annual report based on the following reporting frameworks:

- o TCFD (Task Force on Climate Related Financial Disclosures)

- o GRI Standards (all applicable)

- o ICM (International Council on Mining & Metals) Water reporting guidelines

All relevant quantitative information is also available at www.hydro.com in excel

format: <https://www.hydro.com/Document/Doc/2022%20Sustainability%20statements.xlsx?docId=589829>

Please also see <https://www.hydro.com/en-EE/sustainability/sustainability-reporting/hydro-cdp-response/> for more information about Hydro's approach to CDP.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data and indicate whether you will be providing emissions data for past reporting years.

Reporting year

Start date

January 1, 2022

End date

December 31, 2022

Indicate if you are providing emissions data for past reporting years

Yes

Select the number of past reporting years you will be providing Scope 1 emissions data for

4 years

Select the number of past reporting years you will be providing Scope 2 emissions data for

4 years

Select the number of past reporting years you will be providing Scope 3 emissions data for

2 years

C0.3

(C0.3) Select the countries/areas in which you operate.

Argentina

Australia
Austria
Bahrain
Belgium
Brazil
Canada
China
Croatia
Czechia
Denmark
Estonia
Finland
France
Germany
Greece
Hungary
India
Italy
Japan
Lithuania
Luxembourg
Mexico
Netherlands
Norway
Poland
Portugal
Qatar
Singapore
Slovakia
South Africa
Spain
Sweden
Switzerland
Turkey
United Arab Emirates
United Kingdom of Great Britain and Northern Ireland
United States of America

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

NOK



C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Equity share

C-MM0.7

(C-MM0.7) Which part of the metals and mining value chain does your organization operate in?

Row 1

Mining

Bauxite

Processing metals

Aluminum

Alumina

C0.8

(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, an ISIN code	NO0005052605

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual or committee	Responsibilities for climate-related issues

Other C-Suite Officer	The Executive Vice President and Head of Corporate Development has the responsibility for overseeing climate change and sustainability. Hydro has a two tier board structure, comprising Board of Directors and Corporate Management Board (CMB). Climate change is an important part of the responsibility of both boards.
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C1.1b

(C1.1b) Provide further details on the board’s oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – some meetings	Reviewing and guiding annual budgets Overseeing acquisitions, mergers, and divestitures Reviewing and guiding strategy Overseeing the setting of corporate targets Reviewing and guiding the risk management process	Risk management is an integral part of all our business activities and decisions, and Climate-related issues are integrated in Hydro's strategy processes, annual business planning, enterprise risk management and other relevant processes. The Board of Directors (BoD) sets expectations, oversees Hydro’s system of risk management and reviews key risks through biannual updates which serve as an important foundation for the strategy and business planning processes. In addition, specific topics will be subject to more frequent updates. Progress on risk mitigation is reflected in the remuneration schemes of the Chief Executive Officer (CEO) and Corporate Management Board (CMB). The Board Audit Committee supports the BoD’s supervisory role. The CMB is responsible for Hydro’s risk management framework at group level and assists the CEO in its execution.

C1.1d

(C1.1d) Does your organization have at least one board member with competence on climate-related issues?

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues
Row 1	Yes	Some of our board members have high competence on climate-related issues based on climate-related expertise and previous experiences from working with climate-related issues in other companies or at Board Level.

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Position or committee

Other C-Suite Officer, please specify
EVP and head of Corporate Development

Climate-related responsibilities of this position

Managing value chain engagement on climate-related issues
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line

Half-yearly

Please explain

Risk management is an integral part of all Hydro's business activities and decisions, and Climate-related issues are integrated in Hydro's strategy processes, annual business planning, enterprise risk management and other relevant processes. Hydro's Executive Vice President and Head of Corporate Development has the highest management position with responsibility for climate-related issues. He is a member of the Corporate Management Board (CMB) and reports to the President and CEO.

The Corporate Management Board (CMB) is responsible for Hydro's risk management framework at group level, including assessing and monitoring climate-related risks. The CMB assists the CEO in its execution. The Board of Directors (BoD) sets expectations, oversees Hydro's system of risk management and reviews key risks through biannual updates which serve as an important foundation for the strategy and business planning processes. In addition, specific topics will be subject to more frequent updates. The Board Audit Committee supports the BoD's supervisory role.

In addition to this, the further attribution of risk management process in Hydro is supported by the development of a three lines of defense (3LoD) governance model. The first line of defense resides with managers at all levels in business areas and corporate functions.

The second line comprises governance owners and subject matter experts in different risk areas. They develop policies and procedures for managing risk and coordinate an annual risk assessment with a biannual status update. The third line comprises Group

Internal Audit & Investigation. This department independently evaluates whether Hydro's risk management, control and governance processes, as designed and implemented by management, are adequate and contribute to the achievement of the organization's objective.

Through the 3LoD model, major risks are managed according to Hydro's risk appetite and consolidated at group level through the annual strategy process, with a status update provided in the business planning process, while mitigating plans progress on an ongoing basis.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	The President and CEO's bonus scheme includes strategic, operational, financial and organizational goals, including climate related goals.

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive

Chief Executive Officer (CEO)

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s)

Reduction in absolute emissions

Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

Further details of incentive(s)

The President and CEO's bonus scheme includes strategic, both short and long-term performance measures and are closely linked to the Lifting profitability, Driving sustainability agenda.

Hydro's strategic direction toward 2025 focuses on two main areas: the Company will strengthen its position in low-carbon aluminium and create growth in new areas within

renewable energy. The climate strategy is also integrated in the Corporate Management Board's remuneration and followed up as a KPI on the CEO's balanced scorecard.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

In Hydro, variable remuneration shall be linked to results and plans for variable remuneration shall motivate the CEO and members of the Corporate Management Board (CMB) to achieve performance goals that are closely linked to the Company's long-term interests and sustainability. The plans shall be designed so that they are simple and easy to understand in order to encourage appropriate behavior and achieve the desired results. The Company's strategic agenda of "lifting profitability and driving sustainability" lays the foundation to position the Company as a robust and profitable industrial leader based on innovation and sustainability.

Hydro is determined to maintain and further strengthen our industry leading sustainability position. This will not only secure our long-term license to operate, but will also allow Hydro to capture the opportunities the sustainability megatrend presents, including access to attractive markets, new talent and capital.

Read more about this in Hydro's Remuneration report 2022:
<https://www.hydro.com/Document/Doc/Norsk%20Hydro%20ASA%20Remuneration%20Report%202022ENG.pdf?docId=589937>

Entitled to incentive

Corporate executive team

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s)

Reduction in absolute emissions

Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

Further details of incentive(s)

The Corporate Management Board (CMB)'s bonus scheme includes strategic, both short and long-term performance measures and are closely linked to the Lifting profitability, Driving sustainability agenda. Hydro's strategic direction toward 2025 focuses on two main areas: the Company will strengthen its position in low-carbon aluminium and create growth in new areas within renewable energy. The climate strategy is also integrated in the Corporate Management Board's remuneration and followed up as a KPI on the CEO's balanced scorecard.

Explain how this incentive contributes to the implementation of your organization’s climate commitments and/or climate transition plan

In Hydro, variable remuneration shall be linked to results and plans for variable remuneration shall motivate the CEO and members of the Corporate Management Board (CMB) to achieve performance goals that are closely linked to the Company’s long-term interests and sustainability. The plans shall be designed so that they are simple and easy to understand in order to encourage appropriate behavior and achieve the desired results. The Company’s strategic agenda of “lifting profitability and driving sustainability” lays the foundation to position the Company as a robust and profitable industrial leader based on innovation and sustainability.

Hydro is determined to maintain and further strengthen our industry leading sustainability position. This will not only secure our long-term license to operate, but will also allow Hydro to capture the opportunities the sustainability megatrend presents, including access to attractive markets, new talent and capital.

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C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	1	We evaluate short-term risk within one year.
Medium-term	1	8	We evaluate medium-term risk towards 2030 (technical, commercial, regulatory and reputational risks).
Long-term	8	28	We evaluate long-term risk towards 2050 (physical risks and transition risks).

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

Risk management is an integral part of all our business activities and decisions. Business risks including climate change legislation, price impact and financial consequences as well as opportunities are mapped and mitigating actions defined in the Hydro group and business areas risk management and strategy processes. The business sites identify their risks, which are reported to the responsible staff. The main Company risks are identified at the corporate level. For investment proposals we evaluate specific risks, covering both project and country risks. Sensitivity and scenario analyses are included mapping different risk aspects. Risk management is a dedicated topic on the board agenda annually. Further, review of climate change risks and opportunities are an integrated part of Hydro's strategy process, all new projects and investments, the annual business planning process and the financial and extra-financial reporting process. Sustainability performance is addressed in every board meeting (GRI 102-30 and 102-31a).

Business risks are typically ranked according to probability and impact. Risk management in Hydro is based on the principle that risk and opportunities evaluation is an integral part of all business activities. Consequently, the business areas have the main responsibility for risk management, utilizing established policies and procedures. Their work is coordinated by staff units at the corporate level. The board of directors regularly reviews and evaluates the overall risk management system and environment within Hydro. (Annual Report 2022 page 40-55) <https://www.hydro.com/globalassets/06-investors/reports-and-presentations/annual-report/jenincharge22/annual-report-2022eng2.pdf>

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered

Direct operations
Upstream
Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

Annually

Time horizon(s) covered

Short-term
Medium-term
Long-term

Description of process

Business risks including climate change legislation, price impact and financial consequences as well as opportunities are mapped and mitigating actions defined in the Hydro group and business areas risk management and strategy processes. The

business sites identify their risks, which are reported to the responsible staff. The main Company risks are identified at the corporate level. For investment proposals we evaluate specific risks, covering not only financial risk but also topics related to climate-change and sustainability. Sensitivity and scenario analyses are included mapping different risk aspects. Risk management is a dedicated topic on the board agenda annually. Further, review of climate change risks and opportunities are an integrated part of Hydro's strategy process, all new projects and investments, the annual business planning process and the financial and extra-financial reporting process. Sustainability performance is addressed in every board meeting (GRI 102-30 and 102-31a).

Business risks are typically ranked according to probability and impact. Risk management in Hydro is based on the principle that risk and opportunities evaluation is an integral part of all business activities. Consequently, the business areas have the main responsibility for risk management, utilizing established policies and procedures. However, the annual ERM process provides Hydro with an overview of key risks and documentation to ensure that these are managed in the best possible way, within the predefined risk appetite, to achieve goals. The board of directors regularly reviews and evaluates the overall risk management system and environment within Hydro. (Annual Report 2022 page 40-55) <https://www.hydro.com/globalassets/06-investors/reports-and-presentations/annual-report/jenincharge22/annual-report-2022eng2.pdf>

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	<p>Description</p> <p>The growing pressure to meet our climate goals is driving the pace of new regulations and their increased scope regarding all aspects of sustainability. As being in the aluminium industry, we are subject to multiple local and global regulatory frameworks, including mining regulations, tariffs, labor laws and power industry regulations. Additionally, climate related regulations in the European Union (EU) such as the implementation of national and regional CO2 taxes and increased attention on similar regulations in the United States of America (US) are at the forefront of the current uncertainty.</p> <p>Consequences</p> <p>The sustainability driven developments in regulatory frameworks largely represent an opportunity for Hydro. There might however be unintended consequences associated with complexity and unequal impacts of legislation which may affect aluminum's competitiveness versus other materials, the economic viability of our operations and/or ability to conduct business in certain markets. A failure to comply with such laws and regulatory frameworks could expose Hydro to</p>

		<p>investigations and sanctions impacting our operations and financial results.</p> <p>Developments The proposed "Fit for 55" climate legislative package, introduced in 2021, includes a review of the emissions trading system (ETS). In December 2022, the EU agreed to revise the ETS and introduce a Carbon Border Adjustment Mechanism (CBAM). This implies a gradual phasing out of free emission allowances for aluminum production from 2026 to 2034. The Commission will also evaluate the replacement of the indirect CO2 cost compensation scheme with a CBAM for Scope 2 emissions by 2025. The US has been considering similar mechanisms, but so far focused on investment support through the Inflation Reduction Act (IRA).</p> <p>Mitigation Hydro continues to actively engage with regulators and industry associations, where appropriate, to ensure that aluminium's position is taken into consideration. We contribute to the development of international frameworks on climate change and emissions, supporting the establishment of a level playing field for the industry. For power industry regulations, Hydro engages in various activities to support and promote sustainable energy policies in the regions in which it operates, in addition to securing competitive energy supplies for our own operations.</p> <p>See page 42-57 in Hydro's annual report 2022.</p>
<p>Emerging regulation</p>	<p>Relevant, always included</p>	<p>Description The growing pressure to meet our climate goals is driving the pace of new regulations and their increased scope regarding all aspects of sustainability. As being in the aluminium industry, we are subject to multiple local and global regulatory frameworks, including mining regulations, tariffs, labor laws and power industry regulations. Additionally, climate related regulations in the European Union (EU) such as the implementation of national and regional CO2 taxes and increased attention on similar regulations in the United States of America (US) are at the forefront of the current uncertainty.</p> <p>Consequences The sustainability driven developments in regulatory frameworks largely represent an opportunity for Hydro. There might however be unintended consequences arising from the complexity and uneven impact of legislation, potentially impacting aluminium's competitiveness versus other materials, the economic viability of our operations and/or our ability to conduct business in certain markets.</p>

		<p>Developments</p> <p>In Europe, the EU has reacted to the energy security challenges arising from the Russian invasion of Ukraine by increasing its drive towards renewable power, launching its sweeping 'REPowerEU' legislative package in May 2022, aiming to reduce consumption, increase renewable production and diversify energy supplies. The US passed "The Inflation Reduction Act", a landmark federal law which includes investments in clean energy production, reducing emissions and improving energy security.</p> <p>Mitigation</p> <p>Hydro continues to actively engage with regulators and industry associations, where appropriate, to ensure that aluminium's position is taken into consideration. We contribute to the development of international frameworks on climate change and emissions, supporting the establishment of a level playing field for the industry. For power industry regulations, Hydro engages in various activities to support and promote sustainable energy policies in the regions in which it operates, in addition to securing competitive energy supplies for our own operations.</p> <p>See page 42-57 in Hydro's annual report 2022.</p>
Technology	Relevant, always included	<p>Description</p> <p>Hydro is exposed to disruptive technological developments by our direct competitors or by other competing materials and industries. Materials produced with technologies giving lower sustainability footprints could have a significant advantage and could challenge aluminium in key application areas.</p> <p>Consequences</p> <p>The successful industrialization of competing metals with lower sustainability footprints could increase the risk of substitution and potentially lower demand for aluminium. The successful commercialization of breakthrough technological developments such as inert anodes would impact Hydro's comparative advantage as an aluminium producer with one of the lowest CO2 footprints. Our new business ventures into growth markets such as hydrogen, batteries, and solar energy also expose Hydro to the increased risks associated with immature technologies.</p> <p>Developments</p> <p>The increasing focus on sustainability is part of a long-term trend and expected to continue going forward. Hydro sees research and development activities across relevant industries concerning CO2-free production methods and competing material, such as production of steel</p>

		<p>using hydrogen. Within the aluminium industry, several research initiatives are looking into inert anode technology to reduce direct process emissions.</p> <p>Mitigation Hydro views technology as a key enabler in delivering on the dual profitability and sustainability strategy. Hydro conducts research and development in house and participates in joint partnerships and projects with other leading industrial companies, universities and research institutions. We also follow external developments closely. Hydro has identified and are executing a number of technology based roadmaps to producing aluminium with near-zero to zero footprint, including recycling of post-consumer scrap, carbon capture, and CO2-free primary production through a chloride based process called HalZero. Within renewable energy, risks related to immature technologies are mitigated through entering selective partnerships with established leaders and by taking limited positions to gain experience while restraining the potential downside.</p> <p>See page 42-57 in Hydro's annual report 2022.</p>
<p>Legal</p>	<p>Relevant, always included</p>	<p>Description While Hydro has a strong commitment to act in compliance with applicable laws and regulations, the company could still be negatively affected by criminal or civil proceedings or investigations related, but not limited to, alleged anticompetitive or corrupt practices, product quality, environment, health and safety, data privacy, market regulation or trade sanctions.</p> <p>Consequences Potential consequences range from fines or penalties, litigation and reputational risk, withdrawal of licenses and suspension or operational shutdowns thereby causing material adverse impacts on Hydro's operating results, cash flow and financial condition.</p> <p>Developments Risks arising from regulatory developments within the various compliance areas are mitigated by continuous improvements of Hydro's compliance structures and processes. For instance, the risk of potentially breaching trade sanction laws has been given special attention since the invasion of Ukraine. One compliance incident involving a US subsidiary is still in progress.</p> <p>Hydro Extrusion USA, LLC executed a plea agreement under which it admitted to a federal misdemeanor violation of the Clean Air Act at its cast house in The Dalles, Oregon. An initial sentencing hearing is set</p>

		<p>for January 2023, with a second hearing to be scheduled in the second quarter of 2023. The company is continuing to proactively work with the U.S. Environmental Protection Agency Suspension and Debarment Division. Hydro Extrusion USA, LLC is also engaged in discussions with the EPA's Suspension and Debarment Division with respect to this matter.</p> <p>Mitigation Hydro's Code of Conduct requires adherence to laws and regulations as well as global directives and procedures. It is systematically implemented and maintained through our compliance system, which is based on a clear governance structure defining roles and responsibilities to manage the relevant compliance risks. Business Areas have a clear responsibility to act in a compliant manner, while being supported by Group Compliance and competent staff in other functions to help safeguarding compliance. While the system includes controls and activities to prevent, detect, report and respond to compliance failures, the core focus is on the prevention of non-compliance incidents.</p> <p>See page 42-57 in Hydro's annual report 2022.</p>
Market	Relevant, always included	<p>Hydro operates in a highly competitive market where operational excellence in all parts of the value chain is required to reach and maintain a competitive position. This includes each step of the business process from the sourcing of raw materials, to physical operations of each plant, and the commercial optimization of the product portfolio.</p> <p>Failure to create an environment and competence which enables the organization to continuously achieve stretched operational targets will reduce the competitiveness of our business and result in the failure to meet our long-term financial targets.</p> <p>See page 42-57 in Hydro's annual report 2022.</p>
Reputation	Relevant, always included	<p>There is a risk that Hydro is not pursuing sustainability improvements at the same speed as our peers in the aluminium industry. Deviation from external expectations could undermine Hydro's reputation. Hydro could also be negatively affected by criminal or civil proceedings or investigations related to, but not limited to product liability, environment, health and safety, alleged anticompetitive or corrupt practices or commercial disputes.</p> <p>Violation of applicable laws and regulations could result in substantial fines or penalties, costs of corrective work, the suspension or shutdown of our operations and substantial damage to the company's reputation. Hydro's business is subject to a number of risks and hazards which could result in disruptions to operations, damage to properties and</p>

		<p>production facilities, personal injury or death, environmental damages, monetary losses and possible legal liability. Some of our operations are located in close proximity to sizable communities. Major accidents could result in substantial claims, fines or significant damage to Hydro's reputation.</p> <p>See page 42-57 in Hydro's annual report 2022.</p>
Acute physical	Relevant, always included	<p>Climate change related risks comprises climate related physical events that may impact the integrity of our assets (physical risks), as well as strategic challenges arising from climate related policies, regulations and customers' demand for zero or low-emission solutions (transition risks).</p> <p>Physical climate-risks could result from climate related acute and/or chronic changes in rainfall patterns, flooding, shortages of water or other natural resources, variations in sea levels, storm patterns and intensities as well as temperatures. These changes can lead to operational and environmental incidents within our operations, for example by flooding of containment basins, increasing temperatures leading to increased emissions from processes etc and is considered in our business strategy.</p> <p>Operational performance and the occurrence of environmental incidents are also affected by other factors than physical climate change. Mining and processing equipment failures, unexpected maintenance problems and interruptions, and critical failures to infrastructure integrity can lead to environmental spills and danger to surrounding communities.</p> <p>Hydro could be adversely affected by disruptions or major incidents in our operations and may not be able to maintain sufficient insurance to cover all risks related to its operations. The potential physical impacts of climate change on Hydro's facilities and operations is highly uncertain and may cause disruptions in our operation. Hydro's operations and facilities are subject to risks arising from physical climate change, that may impact Hydro's operations. Effects of climate change could include changes in rainfall patterns, flooding, shortages of water or other natural resources, changing sea levels, changing storm patterns and intensities, and changing temperature levels.</p> <p>See page 42-57 in Hydro's annual report 2022.</p>
Chronic physical	Relevant, always included	<p>Climate change related risks comprises climate related physical events that may impact the integrity of our assets (physical risks), as well as strategic challenges arising from climate related policies, regulations and customers' demand for zero or low-emission solutions (transition risks).</p> <p>Physical climate-risks could result from climate related acute and/or chronic changes in rainfall patterns, flooding, shortages of water or</p>

		<p>other natural resources, variations in sea levels, storm patterns and intensities as well as temperatures. These changes can lead to operational and environmental incidents within our operations, for example by flooding of containment basins, increasing temperatures leading to increased emissions from processes etc and is considered in our business strategy.</p> <p>Operational performance and the occurrence of environmental incidents are also affected by other factors than physical climate change. Mining and processing equipment failures, unexpected maintenance problems and interruptions, and critical failures to infrastructure integrity can lead to environmental spills and danger to surrounding communities.</p> <p>Hydro could be adversely affected by disruptions or major incidents in our operations and may not be able to maintain sufficient insurance to cover all risks related to its operations. The potential physical impacts of climate change on Hydro's facilities and operations is highly uncertain and may cause disruptions in our operation. Hydro's operations and facilities are subject to risks arising from physical climate change, that may impact Hydro's operations. Effects of climate change could include changes in rainfall patterns, flooding, shortages of water or other natural resources, changing sea levels, changing storm patterns and intensities, and changing temperature levels.</p> <p>See page 42-57 in Hydro's annual report 2022.</p>
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C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Chronic physical

Changing precipitation patterns and types (rain, hail, snow/ice)

Primary potential financial impact

Increased capital expenditures

Company-specific description

Hydro reviews climate-related risks and opportunities regularly. This includes our risk exposure toward transition risks, such as policy and legal, technology, market and reputation risk, in addition to physical risks and market opportunities. Physical risks can for example result from climate related acute and/or chronic changes in rainfall patterns, flooding, shortages of water or other natural resources, variations in sea levels, storm patterns and intensities as well as temperatures.

Physical climate risk, such as extreme weather, might impact our operations, we utilize the Alunorte situation in Brazil as example to understand the potential magnitude. In February 2018 the region of Barcarena in northern Brazil suffered from flooding following two days of extreme rainfall. The areas flooded included Hydro’s Alunorte alumina refinery. Based on allegations, Brazilian authorities ordered several measures against Alunorte while reviewing the situation.

The consequences of physical risks on Hydro’s facilities and operations are highly uncertain and could include the flooding of containment basins, interruptions to production processes, infrastructure failures and the potential for major accidents. Furthermore, to mitigate and understand physical climate risk, we have modelled the probability of occurrence of climate related events, such as flooding, draughts, landslides etc

Time horizon

Short-term

Likelihood

Virtually certain

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

2,500,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Hydro has previously provided an estimate of 2.5 billion NOK lost EBIT from such risk (See Q3 report 2018).

Cost of response to risk

1,350,000,000

Description of response and explanation of cost calculation

Hydro reviews climate-related risks and opportunities regularly. This includes our risk exposure toward transition risks, such as policy and legal, technology, market and reputation risk, in addition to physical risks and market opportunities. Furthermore, to mitigate and understand physical climate risk, we have modelled the probability of occurrence of climate related events, such as flooding, draughts, land-slides etc. Hydro has established a new strategic direction, building on our profitability and sustainability agenda to mitigate climate-related risks.

Hydro has initiated several investments related to the wastewater handling and treatment systems at Alunorte, totaling 675 MBRL (1 350 MNOK). These aim at increasing the wastewater treatment capacity by 50 percent and the water reservoir capacity by 350 percent as well as strengthening the infrastructure related to the water management system and enhancing robustness and flexibility of the system. Please see the section "Operational upgrades to Alunorte" in Hydro's Annual Report 2018 for more information

(<https://www.hydro.com/Document/Doc/2018%20Annual%20report.pdf?docId=8525>).

Comment

Hydro has previously provided an estimate of 2.5 billion NOK lost EBIT (See Q3 report 2018). Moreover, to mitigate climate change risk, Hydro has invested 675 MBRL (1350 MNOK) in a water treatment facility and wastewater and rainwater containment basins. This will make the facility better equipped to handle future extreme weather conditions.

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Opp1

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Resource efficiency

Primary climate-related opportunity driver

Use of recycling

Primary potential financial impact

Reduced direct costs

Company-specific description

Opportunities related to climate change arise from new market opportunities and the products Hydro deliver as a leading provider of low-carbon aluminium products and solutions. Moreover, stricter climate regulations, on for example emissions cars and increased demand for energy neutral buildings provide, provide opportunities to deliver low-carbon aluminium and other products consistent with the Paris agreement.

Aluminium, with its properties that include lightweight and ease of recycling, represents a growing opportunity in an increasingly carbon constrained world. More and more customers are requesting aluminium that has been produced with lower climate footprint. Still small in number, some of them represent interesting business opportunities. In 2019, Hydro launched two new greener brands: Hydro REDUXA with one of the world's lowest carbon footprint (less than 4 kg CO₂ per produced kg aluminium) and Hydro CIRCAL produced on minimum 75 percent post-consumer scrap. We see large opportunities in these brands and potential to reduce climate-related risks. In 2018, Hydro started production at the Karmøy Technology Pilot in Norway, which will produce the world's most climate- and energy-efficient primary aluminium. The pilot has a capacity of 75,000 metric tons. During 2020 we performed a strategic review of our recycling activities, and we set a growth ambition to double the post consumer scrap recycling capacity to more than 600 thousand tonnes per year by 2025.

In 2020 we also started construction of a pilot plant for the recycling of electric vehicle batteries, via HydroVolt, a 50/50 joint venture with Swedish Northvolt with a promising future.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

2,300,000,000

Potential financial impact figure – minimum (currency)**Potential financial impact figure – maximum (currency)**

Explanation of financial impact figure

One pathway to zero-carbon aluminium and realizing this opportunity, is by recycling post-consumer scrap. Using only post-consumer scrap, we will be able to produce a near-zero carbon product at a competitive cost. Hydro Recycling initiative is estimated to generate 2.3 BNOK by 2025, and the associated total investment cost is estimated to be 4 BNOK. Another climate related opportunity is related to batteries, where we invest approximately 2.75 BNOK and expect to receive 3x value uplift (See Capital Markets Day 2021, 39-40 & 56).

Cost to realize opportunity

4,000,000,000

Strategy to realize opportunity and explanation of cost calculation

One pathway to zero-carbon aluminium and realizing this opportunity, is by recycling post-consumer scrap. Using only post-consumer scrap, we will be able to produce a near-zero carbon product at a competitive cost. Hydro Recycling initiative is estimated to generate 2.3 BNOK by 2025, and the associated total investment cost is estimated to be 4 BNOK. Another climate related opportunity is related to batteries, where we invest approximately 2.75 BNOK and expect to receive 3x value uplift (See Capital Markets Day 2021, 39-40 & 56).

Comment

C3. Business Strategy

C3.1

(C3.1) Does your organization’s strategy include a climate transition plan that aligns with a 1.5°C world?

Row 1

Climate transition plan

Yes, we have a climate transition plan which aligns with a 1.5°C world

Publicly available climate transition plan

Yes

Mechanism by which feedback is collected from shareholders on your climate transition plan

We have a different feedback mechanism in place

Description of feedback mechanism

We publicly report on our transition plan and engage with relevant stakeholders to get feedback.

Frequency of feedback collection

Annually

Attach any relevant documents which detail your climate transition plan (optional)

Please see our annual report 2022 for details on Hydro's sustainability strategy and our Technology roadmap towards net-zero emissions in 2050 (p. 86-91).

 Norsk Hydro ASA_annual-report-2022eng.pdf

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

Use of climate-related scenario analysis to inform strategy	
Row 1	Yes, qualitative and quantitative

C3.2a

(C3.2a) Provide details of your organization’s use of climate-related scenario analysis.

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Transition scenarios IEA B2DS	Company-wide		<p>In order to understand and mitigate the risks for our operations and potential consequences related to climate change, we have performed comprehensive climate risk assessments, evaluating both physical and transition risks. In 2018, Hydro modelled future weather patterns and their impact on our facilities based on climate models and scenarios from the Intergovernmental Panel on Climate Change (IPCC). In 2023, our ambition is to update the physical climate risk assessment and integrate the findings and management of such risk into our system of risk management.</p> <p>Hydro uses the IEA B2DS for transition risks where this is available for the relevant risks and opportunities assessed. The B2DS scenario especially applies to technology and market risk.</p> <p>Climate change adaptation and the transition to a 1.5 degree economy poses both opportunities and risks to Hydro. We have assessed scenarios for policy and legal risks, technology, market and reputation risks consistent with a 1.5 degree scenario. We have also included</p>

		<p>international aluminium institute (IAI) emission projection pathways of Tonnes CO₂e/t primary aluminium toward 2050 in our analysis.</p> <p>The outcome of this is integrated into Hydro's climate strategy, our advocacy work on future climate-related legislation, and our technology and market strategies. As a result, Hydro's long term positioning, operational and financial planning reflect our assessment of transition risks in a 1.5 degree scenario.</p> <p>Hydro's ambitions are based on a successful transition to a 1.5 degree economy. The transition may lead to stricter regulations and more ambitious climate targets that may drive costs within parts of our asset base. The overall portfolio will likely benefit from such trends, as it will affect demand for and valuation of Hydro's low-carbon products and portfolio.</p>
<p>Physical climate scenarios RCP 4.5</p>	<p>Company-wide</p>	<p>In order to understand and mitigate the risks for our operations and potential consequences related to climate change, we have performed comprehensive climate risk assessments, evaluating both physical and transition risks. In 2018, Hydro modelled future weather patterns and their impact on our facilities based on climate models and scenarios from the Intergovernmental Panel on Climate Change (IPCC). In 2023, our ambition is to update the physical climate risk assessment and integrate the findings and management of such risk into our system of risk management.</p> <p>Hydro uses RCP 4.5 and RCP 8.5 for physical risk assessment.</p> <p>Climate change adaptation and the transition to a 1.5 degree economy poses both opportunities and risks to Hydro. We have assessed scenarios for policy and legal risks, technology, market and reputation risks consistent with a 1.5 degree scenario. We have also included international aluminium institute (IAI) emission projection pathways of Tonnes CO₂e/t primary aluminium toward 2050 in our analysis.</p> <p>The outcome of this is integrated into Hydro's climate strategy, our advocacy work on future climate-related legislation, and our technology and market strategies. As a result, Hydro's long term positioning, operational and financial planning reflect our assessment of</p>

		<p>transition risks in a 1.5 degree scenario.</p> <p>Hydro's ambitions are based on a successful transition to a 1.5 degree economy. The transition may lead to stricter regulations and more ambitious climate targets that may drive costs within parts of our asset base. The overall portfolio will likely benefit from such trends, as it will affect demand for and valuation of Hydro's low-carbon products and portfolio.</p>
<p>Transition scenarios IEA 2DS</p>	<p>Company-wide</p>	<p>In order to understand and mitigate the risks for our operations and potential consequences related to climate change, we have performed comprehensive climate risk assessments, evaluating both physical and transition risks. In 2018, Hydro modelled future weather patterns and their impact on our facilities based on climate models and scenarios from the Intergovernmental Panel on Climate Change (IPCC). In 2023, our ambition is to update the physical climate risk assessment and integrate the findings and management of such risk into our system of risk management.</p> <p>Hydro uses the IEA 2DS for transition risks where this is available for the relevant risks and opportunities assessed. The 2DS scenario applies to regulatory risk, market risk, technology risk and reputation risk.</p> <p>Climate change adaptation and the transition to a 1.5 degree economy poses both opportunities and risks to Hydro. We have assessed scenarios for policy and legal risks, technology, market and reputation risks consistent with a 1.5 degree scenario. We have also included international aluminium institute (IAI) emission projection pathways of Tonnes CO₂e/t primary aluminium toward 2050 in our analysis.</p> <p>The outcome of this is integrated into Hydro's climate strategy, our advocacy work on future climate-related legislation, and our technology and market strategies. As a result, Hydro's long term positioning, operational and financial planning reflect our assessment of transition risks in a 1.5 degree scenario.</p> <p>Hydro's ambitions are based on a successful transition to a 1.5 degree economy. The transition may lead to stricter regulations and more ambitious climate targets that may drive costs within parts of our asset base. The</p>

			overall portfolio will likely benefit from such trends, as it will affect demand for and valuation of Hydro's low-carbon products and portfolio.
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C3.2b

(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.

Row 1

Focal questions

What potential risks and consequences does Hydro's operation face related to climate change?

Results of the climate-related scenario analysis with respect to the focal questions

In order to reduce the risks for our operations and potential consequences related to climate change, we have performed comprehensive climate risk assessments, evaluating both physical and transition risks. This includes modeling of future weather patterns and their impact on Hydro's facilities based on existing climate models and scenarios from the Intergovernmental Panel on Climate Change (IPCC). We have also assessed scenario analysis for policy and legal risk, technology, market and reputation risk.

The results of these analysis with respect to the focal questions is represented in our climate strategy. Hydro's ambition is to reach net-zero GHG emissions in 2050 or earlier, and we have established a roadmap to reduce our absolute direct and indirect GHG emissions by 10 percent by 2025 and 30 percent by 2030, based on a 2018 baseline. The climate strategy is integrated in the Corporate Management Board's remuneration and followed up as a KPI on the CEO's balanced scorecard. Changes in our production portfolio might influence these targets, but our aim is still to reduce our specific emissions, i.e. emissions per metric tonnes of aluminium produced.

In addition to this, Hydro has also taken part in the International Aluminium Institute's work to develop greenhouse gas pathways toward 2050 consistent with the Paris Agreement. These are in-line with the International Energy Agency's 1.5 degree scenario, combined with IAI's analysis of demand in the aluminium market and material flows. These pathways are integrated in Hydro's strategy, hence Hydro's climate strategy is aligned with climate science. Hydro is considering to verify our climate strategy against the Science Based Target Initiative when they have developed a sectoral decarbonization approach (SDA) for the aluminium sector.

In 2018, Hydro concluded a review of its climate-related risks, including physical, technological, commercial, legal and reputational risk. The review forms the basis for scenario analyses and an update of the climate strategy. Hydro's ambitions are based

on a successful transition to a 1.5 degree economy. The transition may lead to stricter regulations and more ambitious climate targets that may drive costs within parts of our asset base. The overall portfolio will likely benefit from such trends, as it will affect demand for and valuation of Hydro's low-carbon products and portfolio.

See Climate change chapter in Hydro's annual report 2022 (page 86-91).

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	<p>Climate-related risks and opportunities have influenced our strategy within our products and services, including a short-, medium- and long time horizon. Hydro's climate strategy is an integral part of our overall business strategy, with the overall ambition for the company to reduce GHG emissions by 30% by 2030, and to be net zero by 2050. We will do this through greener sourcing and greener production. We are also helping our customers reduce their footprint through our greener products.</p> <p>Recycling post-consumer scrap is an important way we reduce costs, increase capacity utilization and reduce the carbon footprint of our products. Hydro's casting and alloy expertise, working closely with our customers, enables us to produce products that can be recycled and used as raw materials for high quality semi-finished products. Developing products that optimize the use of recycled material is another focus area.</p> <p>An example of a substantial strategic decision related to this, is the creation of the REDUXA and CIRCAL product brands. These brands represents one way to make customers aware of our capabilities to offer products with a lower carbon footprint. REDUXA is produced by renewables-based aluminium plants, and has a guaranteed maximum carbon footprint of 4 kg CO2/kg aluminium. This includes emissions from the bauxite/alumina and energy sources as well as the smelter emissions (Scope 1, 2 and 3). Hydro's recycling plant in Clervaux, Luxembourg recently</p>

		produced 130 tonnes of near-zero carbon aluminium with 100 % post-consumer aluminium scrap.
Supply chain and/or value chain	Yes	<p>Climate-related risks and opportunities have influenced our strategy related to our value- and supply chain, including a short-, medium- and long time horizon. Hydro is present throughout the global aluminium value chain, from energy to bauxite mining and alumina refining, primary aluminium, aluminium extrusions and aluminium recycling.</p> <p>Hydro’s overarching ambition toward 2050 is to reduce the climate impact of our value chain through greener sourcing, greener production and greener products. We aim to source less carbon-intensive energy and aluminium metal with a lower carbon footprint and to increase the use of post-consumer scrap in our metal production. In 2020, Hydro established a new strategic direction to strengthen our position in low-carbon aluminum and grow within renewable energy. Hydro is committed to reduce its GHG emissions by 30 percent by 2030.</p> <p>An example of a substantial strategic decision related to this, is our fuel switch plan which includes projects to reduce CO2 emissions in the value chain such as a fuel switch to LNG and the electrification of boilers at our alumina refinery in Brazil, Alunorte. In addition to this, research on the use of hydrogen or other zero emissions processes in the cast-houses is being developed.</p>
Investment in R&D	Yes	<p>Climate-related risks and opportunities have influenced our strategy related to investments in R&D, including a short-, medium- and long time horizon.</p> <p>Hydro is committed to achieving net-zero emissions by 2050 or earlier and the ambition is to take the lead in delivering industrial- scale zero-carbon aluminium by 2030. To deliver on our commitment and ambition, we need new technologies that enable us to deliver net-zero products and achieve netzero operations. Our efforts are concentrated along three main pathways to zero:</p> <ol style="list-style-type: none"> 1. Carbon capture and storage (CCS) – decarbonizing existing smelters 2. HalZero chloride process – decarbonizing greenfield smelters 3. Zero aluminium through scaling up volumes of postconsumer scrap (PCS) <p>Examples of substantial strategic decision related to our</p>

		<p>R&D efforts are centered around the following:</p> <ul style="list-style-type: none"> - Reducing energy consumption, waste, emissions and carbon footprint in line with Hydro's sustainability agenda. - Making products and solutions that promote the use of aluminium and sustainable development. - Using R&D and technology to ensure optimal operations in existing assets, including cost and HSE. - Improving environmental impact in Hydro Bauxite & Alumina, such as biodiversity, rehabilitation and utilization of bauxite residue. - Developing recycling technology and low-carbon products based on post-consumer scrap, e.g. Hydro CIRCAL. - Increasing the share of value added products and tailored solutions in collaboration with the customer. - Utilizing the opportunities of digitalization to improve process stability, productivity, cost and safety. - Building competence in batteries and hydrogen.
Operations	Yes	<p>Climate-related risks and opportunities have influenced our strategy related to our operations, including a short-, medium- and long time horizon.</p> <p>Hydro has an environment strategy to minimize impact across our operations by addressing environmental challenges. We aim to do so by driving rehabilitation at our bauxite mine, developing and implementing viable management solutions for tailings and bauxite residue streams, while reducing waste to landfill from our downstream operations and significantly reducing our non-GHG emissions to air. We have set longer-term ambitions to eliminate the need for permanent bauxite residue storage from 2050 and eliminating landfilling of all other recoverable waste by 2040. Targets for land rehabilitation and reduced waste to landfill will be included in the CEO's KPI scorecard for 2023. We also have the ambition to achieve no net loss of priority biodiversity in all new projects.</p> <p>All of Hydro's operations shall follow our own internal policies and procedures, related to environmental management, supported by comprehensive health, safety and environment (HSE) management systems, audit programs, training and awareness initiatives. In addition, the large majority of our sites are ISO 14001 certified and many have received certification to ASI's Performance and Chain of Custody standards.</p>

		<p>An example of a substantial strategic decision related to this, is our target to eliminate all recoverable waste generated by our operations, by 2040. In 2022, the company recycled 71 percent of our waste and has started to develop specific roadmaps to eliminate the landfilling of the remaining recoverable waste. In 2022, our rehabilitation target was also met for our mining site in Paragominas, Brazil and a Global Procedure on biodiversity and ecosystem services management was established.</p>
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C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	<p>Direct costs Capital allocation Access to capital</p>	<p>Risk assessment is a key element of a sound financial planning process. Our direct costs, capital allocation and access to capital are example of financial planning elements which have been influenced by climate-related risks and opportunities.</p> <p>Hydro is exposed to physical climate related risks, risks related to the transition to a low-carbon economy and other environmental risks. Climate-driven changes in consumer behavior, such as substitution of aluminium by other materials is also a risk to Hydro.</p> <p>All acquisitions and new investment decisions are stress-tested for alternative climate scenarios, including different carbon cost regimes, for assessing net present value and project risk. Physical risk caused by climate change needs as well to be evaluated.</p> <p>Supported by an increasing interest from the regulators, customers and financial markets, Hydro believes that leading in sustainability is a strong foundation for long-term license to operate and a key driver for long-term profitability. By emphasizing climate, environment and social responsibility, as well as by developing greener product offerings, Hydro will reduce risks, including financial risk, and create new profitable opportunities for the future.</p> <p>A strong liquidity position is considered critical to support operations and investments through the industry cycle. In addition to a robust cash position, our liquidity is supported by a USD 1.6 billion revolving credit facility that expires in 2026. The margin on the facility is linked to Hydro's</p>

		CO2 emission reduction target, thereby linking financing costs to the progress on Hydro's main climate target and highlighting the important connection between sustainability and profitability. Additional sources of liquidity include overdraft facilities and short-term liquidity lines.
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C3.5

(C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's climate transition?

Identification of spending/revenue that is aligned with your organization's climate transition	
Row 1	Yes, we identify alignment with our climate transition plan

C3.5a

(C3.5a) Quantify the percentage share of your spending/revenue that is aligned with your organization's climate transition.

Financial Metric

Revenue/Turnover

Type of alignment being reported for this financial metric

Alignment with our climate transition plan

Taxonomy under which information is being reported

Objective under which alignment is being reported

Amount of selected financial metric that is aligned in the reporting year (unit currency as selected in C0.4)

208,000,000,000

Percentage share of selected financial metric aligned in the reporting year (%)

29

Percentage share of selected financial metric planned to align in 2025 (%)

Percentage share of selected financial metric planned to align in 2030 (%)

Describe the methodology used to identify spending/revenue that is aligned

Out of the activities currently eligible in the EU taxonomy, three apply to Hydro; The manufacture of primary aluminium, The manufacture of secondary aluminium and

Electricity generation from hydropower.

The method we use to determine whether eligible activities is aligned with the Taxonomy criteria. Hydro's primary aluminium production that is based on renewable electricity meets the substantial contribution criteria for manufacture of aluminium, defined as smelters' energy efficiency below 15.5 MWh/t Al and carbon intensity for the electricity used below 100g CO_{2e}/kWh. All aluminium remelting activity qualifies for substantial contribution under the taxonomy's manufacture of secondary aluminium activity. Operations in Europe meet the DNSH criteria for all environmental objectives as long as they are within normal, lawful operations, comply with emission permits to air and water, have performed environmental impact assessments and taken necessary action required. Hydro's major production sites have performed a climate risk and vulnerability assessment.

For Hydro's operations outside of Europe it is more challenging to determine if the DNSH criteria are met as they reference EU law. Based on our assessment, the most challenging criteria to meet is the DNSH criteria for pollution prevention and control, which are linked to achievable emission levels associated with application of the best available techniques (BAT-AEL). Our primary smelters outside of Europe do not meet the emission ranges in EU Best Available Technique Reference (BREF) Documents, and remelters without a bag house filter do not meet criteria for pollution prevention and control. The remaining DNSH criteria are met for our two remelters that operate with bag houses.

All of our hydropower operations are located in Norway. We have been working together with the Norwegian Energy Association ("Energi Norge") and other Norwegian hydropower producers to establish a guidance for interpreting and reporting on the Taxonomy criteria for electricity generation from hydropower in Norway.

A range of the products we manufacture contribute to climate change mitigation as constituent parts of technologies, infrastructure and complex products needed in a lowcarbon society. Examples are battery casings used in them manufacture of electric vehicles, window frames contributing to energy-efficient buildings, and aluminium frames for solar panels. The taxonomy does not provide clear guidance yet on how to define eligibility in the supply chain of taxonomyeligible activities. Consequently, we have chosen to report for 2022 based on the taxonomy-eligible activities of primary and secondary aluminium production, rather than on end-use of the aluminium we produce.

Please see page 245-251 in Hydro's annual report for more details.

Financial Metric

CAPEX

Type of alignment being reported for this financial metric

Taxonomy under which information is being reported

Objective under which alignment is being reported

Amount of selected financial metric that is aligned in the reporting year (unit currency as selected in C0.4)

11,600,000,000

Percentage share of selected financial metric aligned in the reporting year (%)

25

Percentage share of selected financial metric planned to align in 2025 (%)

Percentage share of selected financial metric planned to align in 2030 (%)

Describe the methodology used to identify spending/revenue that is aligned

Out of the activities currently eligible in the EU taxonomy, three apply to Hydro; The manufacture of primary aluminium, The manufacture of secondary aluminium and Electricity generation from hydropower.

The method we use to determine whether eligible activities is aligned with the Taxonomy criteria. Hydro's primary aluminium production that is based on renewable electricity meets the substantial contribution criteria for manufacture of aluminium, defined as smelters' energy efficiency below 15.5 MWh/t Al and carbon intensity for the electricity used below 100g CO₂e/kWh. All aluminium remelting activity qualifies for substantial contribution under the taxonomy's manufacture of secondary aluminium activity. Operations in Europe meet the DNSH criteria for all environmental objectives as long as they are within normal, lawful operations, comply with emission permits to air and water, have performed environmental impact assessments and taken necessary action required. Hydro's major production sites have performed a climate risk and vulnerability assessment.

For Hydro's operations outside of Europe it is more challenging to determine if the DNSH criteria are met as they reference EU law. Based on our assessment, the most challenging criteria to meet is the DNSH criteria for pollution prevention and control, which are linked to achievable emission levels associated with application of the best available techniques (BAT-AEL). Our primary smelters outside of Europe do not meet the emission ranges in EU Best Available Technique Reference (BREF) Documents, and remelters without a bag house filter do not meet criteria for pollution prevention and control. The remaining DNSH criteria are met for our two remelters that operate with bag houses.

All of our hydropower operations are located in Norway. We have been working together with the Norwegian Energy Association ("Energi Norge") and other Norwegian hydropower producers to establish a guidance for interpreting and reporting on the Taxonomy criteria for electricity generation from hydropower in Norway.

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Please see page 245-251 in Hydro's annual report for more details.

Financial Metric

OPEX

Type of alignment being reported for this financial metric

Taxonomy under which information is being reported

Objective under which alignment is being reported

Amount of selected financial metric that is aligned in the reporting year (unit currency as selected in C0.4)

8,700,000,000

Percentage share of selected financial metric aligned in the reporting year (%)

25

Percentage share of selected financial metric planned to align in 2025 (%)

Percentage share of selected financial metric planned to align in 2030 (%)

Describe the methodology used to identify spending/revenue that is aligned

Out of the activities currently eligible in the EU taxonomy, three apply to Hydro; The manufacture of primary aluminium, The manufacture of secondary aluminium and Electricity generation from hydropower.

The method we use to determine whether eligible activities is aligned with the Taxonomy criteria. Hydro's primary aluminium production that is based on renewable electricity meets the substantial contribution criteria for manufacture of aluminium, defined as smelters' energy efficiency below 15.5 MWh/t Al and carbon intensity for the electricity used below 100g CO₂e/kWh. All aluminium remelting activity qualifies for substantial contribution under the taxonomy's manufacture of secondary aluminium activity. Operations in Europe meet the DNSH criteria for all environmental objectives as

long as they are within normal, lawful operations, comply with emission permits to air and water, have performed environmental impact assessments and taken necessary action required. Hydro's major production sites have performed a climate risk and vulnerability assessment.

For Hydro's operations outside of Europe it is more challenging to determine if the DNSH criteria are met as they reference EU law. Based on our assessment, the most challenging criteria to meet is the DNSH criteria for pollution prevention and control, which are linked to achievable emission levels associated with application of the best available techniques (BAT-AEL). Our primary smelters outside of Europe do not meet the emission ranges in EU Best Available Technique Reference (BREF) Documents, and remelters without a bag house filter do not meet criteria for pollution prevention and control. The remaining DNSH criteria are met for our two remelters that operate with bag houses.

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A range of the products we manufacture contribute to climate change mitigation as constituent parts of technologies, infrastructure and complex products needed in a lowcarbon society. Examples are battery casings used in them manufacture of electric vehicles, window frames contributing to energy-efficient buildings, and aluminium frames for solar panels. The taxonomy does not provide clear guidance yet on how to define eligibility in the supply chain of taxonomyeligible activities. Consequently, we have chosen to report for 2022 based on the taxonomy-eligible activities of primary and secondary aluminium production, rather than on end-use of the aluminium we produce.

Please see page 245-251 in Hydro's annual report for more details.

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Absolute target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number

Abs 1

Is this a science-based target?

Yes, we consider this a science-based target, but we have not committed to seek validation of this target by the Science Based Targets initiative within the next two years

Target ambition

1.5°C aligned

Year target was set

2019

Target coverage

Company-wide

Scope(s)

Scope 1

Scope 2

Scope 2 accounting method

Location-based

Scope 3 category(ies)

Base year

2018

Base year Scope 1 emissions covered by target (metric tons CO2e)

Base year Scope 2 emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)

Base year total Scope 3 emissions covered by target (metric tons CO2e)

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

11,280,000

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO₂e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO₂e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO₂e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO₂e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO₂e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO₂e)

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO₂e)

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO₂e)

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO₂e)

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO₂e)

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

Target year

2030

Targeted reduction from base year (%)

30

Total emissions in target year covered by target in all selected Scopes (metric tons CO₂e) [auto-calculated]

7,896,000

Scope 1 emissions in reporting year covered by target (metric tons CO₂e)

Scope 2 emissions in reporting year covered by target (metric tons CO₂e)

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO₂e)

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO₂e)

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO₂e)

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO₂e)

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO₂e)

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO₂e)

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)

Total emissions in reporting year covered by target in all selected scopes (metric tons CO₂e)

10,500,000

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]

23.0496453901

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

Hydro's ambition is to reach net-zero GHG emissions in terms of Scope 1 and 2 in 2050 or earlier, and we have established a roadmap to reduce our absolute direct and indirect GHG emissions by 10 percent by 2025 and 30 percent by 2030, based on a 2018 baseline (2017 for Paragominas, Alunorte and Albras due to the production embargo at Alunorte and curtailment at Albras and Paragominas in 2018). The climate strategy is integrated in the Corporate Management Board's remuneration and followed up as a KPI on the CEO's balanced scorecard.

Changes in our production portfolio might influence these targets, but our aim is still to reduce our specific emissions, i.e. emissions per metric tonnes of aluminium produced. The baseline emissions equal 11.3 million tonnes CO₂ equivalents (CO₂e), including direct emissions and indirect emissions from electricity generation (scope 1 and 2 emissions).

Hydro has taken part in the International Aluminium Institute's work to develop greenhouse gas pathways toward 2050 consistent with the Paris Agreement. These are in-line with the International Energy Agency's 1.5 degree scenario, combined with IAI's analysis of demand in the aluminum market and material flows. These pathways are integrated in Hydro's strategy. Note that, our technology roadmap depends on major investments and R&D. Hence, reductions are expected to occur stepwise and SBTi does not have scenarios for the aluminium industry. Hydro is considering to verify our climate strategy against the Science Based Target Initiative when they have developed a sectoral decarbonization approach (SDA) for the aluminium sector.

The indirect (scope 2) emissions in the baseline for the RCF and Hydro's climate strategy is based on supplier-specific emission factors from power purchasing agreements, as we believe this incentivizes our plants to implement greener energy sourcing. This creates a deviation of 500 thousand tons between the baseline and our location-based GHG emissions reported in note E1 to our sustainability statements and question C6.1 and C6.3 in CDP. For the RCF and Hydro's climate strategy baseline indirect emissions in Norway are set to zero, and the performance reported here are consistent with that methodology.

Plan for achieving target, and progress made to the end of the reporting year

Hydro’s overarching ambition toward 2050 is to reduce the climate impact of our value chain through greener sourcing, greener production and greener products. A crucial step in this direction is to explore different paths toward achieving net zero goals emissions toward 2050 or earlier and reduce our own emissions by 30 percent by 2030. Hydro undertakes research and development activities to deliver on its strategic direction, including meeting its sustainability ambitions. Hydro’s climate strategy is an integral part of our overall business strategy, aiming at driving improvements and development within the company. Impact on the climate strategy is also a criterion for all significant investment decisions. The strategy includes reducing the climate impact of our operations as well as taking advantage of business opportunities by enabling our customers to do the same.

Hydro’s direct emissions decreased in 2022 compared to 2021. The emissions reductions in primary aluminium is primarily linked to the production stop at our Slovalco plant in 2022. The implementation of electric boilers for steam generation at Alunorte and process improvements resulted in improvements to specific emissions (ie. emissions per tonne product produced) compared to 2021, while the curtailments announced in the fourth quarter 2022 has resulted in less stable production and a consequent increased PFC emissions at the associated primary aluminium smelters.

List the emissions reduction initiatives which contributed most to achieving this target

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

- Net-zero target(s)
- Other climate-related target(s)

C4.2b

(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.

Target reference number

Oth 1

Year target was set

2020

Target coverage

Company-wide

Target type: absolute or intensity

Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Other, please specify

Other, please specify

620-770 thousand tonnes of recycled post-consumer scrap per year by 2027

Target denominator (intensity targets only)

Base year

2021

Figure or percentage in base year

335,000

Target year

2027

Figure or percentage in target year

770,000

Figure or percentage in reporting year

321,000

% of target achieved relative to base year [auto-calculated]

-3.2183908046

Target status in reporting year

Underway

Is this target part of an emissions target?

The target is part of Hydro's sustainability strategy and thus a crucial part of reaching our net-zero ambition.

In addition, recycling will play a vital role in the transition towards a low-carbon economy. For Hydro, recycling represents an opportunity for new profitable growth. Furthermore, recycling of post-consumer scrap is reducing the carbon content in the products we bring to the market. In 2022, Hydro produced its first near-zero aluminium based on 100 percent recycled post-consumer scrap.

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain target coverage and identify any exclusions

2021 is the first year we have consolidated recycling data from Hydro Extrusions, making the 2021 results not directly comparable to previous years' data. We have adjusted historical data on recycling to exclude volumes processed by Rolling which was sold in 2021, which accounted for approximately 840,000 metric tonnes of pre-consumer and post-consumer scrap in 2020.

Extrusions applies additional levers to improve its carbon footprint, including sourcing

aluminium with a carbon footprint that is lower than the average, increasing the use of recycled post-consumer scrap and reducing the emissions from our operations.

Hydro recycled 321,000 tonnes of post-consumer aluminium scrap, enabling the production of 100 tonnes of Hydro CIRCAL with 100 percent post-consumer scrap, and 50,000 tonnes of Hydro CIRCAL with a minimum of 75 percent recycled post-consumer scrap.

Plan for achieving target, and progress made to the end of the reporting year

Recycling post-consumer aluminium, is an important strategic direction and development for pathway to zero-carbon aluminium. Using 100 percent postconsumer scrap, Hydro will be able to produce near-zero carbon products at a competitive abatement cost.

In 2022, Hydro produced its first near-zero aluminium based on 100 percent recycled post-consumer scrap.

List the actions which contributed most to achieving this target

C4.2c

(C4.2c) Provide details of your net-zero target(s).

Target reference number

NZ1

Target coverage

Company-wide

Absolute/intensity emission target(s) linked to this net-zero target

Abs1

Target year for achieving net zero

2050

Is this a science-based target?

Yes, we consider this a science-based target, but we have not committed to seek validation of this target by the Science Based Targets initiative within the next two years

Please explain target coverage and identify any exclusions

We are committed to reducing emissions in our own operations, and helping our customers and society to do the same. We are on track to reduce our own emissions by 10% by 2025 and 30% by 2030 from a 2018 baseline. We are committed to net-zero emissions by 2050 or earlier.

We define our ambition and role in decarbonization based on three pillars:

1. Becoming a net-zero company
2. Deliver zero-carbon aluminium products to customers

3. Enabling the removal of carbon from the broader industry and society through our renewable energy, hydrogen and battery businesses.

Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?

No

Planned milestones and/or near-term investments for neutralization at target year

Planned actions to mitigate emissions beyond your value chain (optional)

We are developing zero-carbon greener aluminium to meet market expectations and enable customers to reduce their carbon footprint.

Our main pathways to achieving our goals are more recycling of post-consumer scrap aluminium and technological advances in primary aluminium production, such as carbon capture and storage and our proprietary HalZero technology. This is a technology where carbon and chloride are kept in closed loops, resulting in a fully decarbonized process.

In 2022, we produced 100 tonnes of CIRCAL100 from 100% post-consumer scrap with a carbon footprint below 0.5 tonne CO2 per tonne aluminium. This is a significant improvement, compared with the current 2.3 kg CO2/kg aluminium in Hydro CIRCAL extrusion ingot based on 75 percent post-consumer aluminium scrap, and the world average of 16.6 kg CO2/ kg aluminium. Hydro will make key capacity investments over the medium term to ensure our recycling portfolio can facilitate the increasing demand for Hydro CIRCAL.

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	0
To be implemented*	0	0
Implementation commenced*	0	0
Implemented*	2	1,100,000

Not to be implemented	0	0
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C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Other, please specify

Other, please specify

Fuel switch projects which will replace heavy fuel oil with natural gas

Estimated annual CO2e savings (metric tonnes CO2e)

700,000

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

Investment required (unit currency – as specified in C0.4)

2,893,000,000

Payback period

Estimated lifetime of the initiative

Comment

The Alunorte fuel switch project will replace heavy fuel oil with natural gas at the Hydro Alunorte alumina refinery in Brazil. The fuel switch will reduce the refinery’s annual CO2 emissions by 700,000 tonnes when completed. The project started in the first quarter of 2022, and is expected to be in operation during the second half of 2023. The natural gas is expected to come from a liquified natural gas (LNG) regasification terminal, which will be located near the Hydro Alunorte refinery in Barcarena. Hydro’s use of LNG will not only enable more sustainable operations for Hydro, the project is also in line Hydro’s commitment to the Government of Pará to support the use of natural gas in the region, including access to other regional consumers.

This project is a key enabler for Hydro’s climate strategy and global commitment to reduce greenhouse gas emissions by 30% by 2030.

The investment to carry out the fuel-switch project at Alunorte alumina refinery in Brazil

is BRL 1.3 billion which accounts for approximately 2 893 000 000 NOK.

Read more about the emission reduction initiative here:

<https://www.hydro.com/en/media/news/2021/hydro-makes-final-build-decision-on-alunorte-fuel-switch-project/>

Initiative category & Initiative type

Other, please specify

Other, please specify

Installing three electrical boilers at Alunorte powered by renewable energy to replace the current coal fired boilers

Estimated annual CO2e savings (metric tonnes CO2e)

400,000

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

Investment required (unit currency – as specified in C0.4)

93,637,000

Payback period

Estimated lifetime of the initiative

Comment

Hydro is installing three electrical boilers at Alunorte powered by renewable energy to replace the current coal fired boilers. The first boiler was operational in 2022, and the second and third boilers are expected to be operational in 2024. The new electric boiler, with more modern technology and greater capacity, is starting to operate at Alunorte, which is in the municipality of Barcarena, in Pará State. The nominal generation capacity is about 95 tonnes of steam per hour, consuming 60 megawatts and with the potential to reduce around 100,000 tonnes of CO2 emissions per year.

The investment on this was BRL 42 million which accounts for approximately 93 637 000 NOK.

Investments in renewable energy through joint ventures and long-term purchases are already being studied. In addition, the company is studying the addition of two more electric boilers, expected to start operating in 2024.

The initiatives with electric boiler and fuel switch will result in a reduction of around 1.1 million tonnes CO2 emissions from the Alunorte alumina refinery.

Read more about the emission reduction initiative here:

<https://www.hydro.com/en/media/news/2022/alunorte-alumina-plant-fires-up-first-electric-boiler>

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Dedicated budget for low-carbon product R&D	Most of our product development supports products that can help the customers to reduce their GHG emissions. Examples are lighter vehicles, buildings with reduced energy consumption and packaging that efficiently protects food and thus reduce food waste while reducing the need for cooling. Recycling of metal is another way of producing high quality metal with only 5 percent of the energy required to produce primary metal.
Compliance with regulatory requirements/standards	From 2013 the aluminium industry became part of the EU/ETS quota system. The aluminium industry has been allocated free quotas for part of its direct emissions according to a benchmark starting at 1,514 ton CO2e/ton aluminium in 2013. However, the number of free quotas allocated has been reduced by 5,6% from 2013 and thereafter with an annual linear reduction factor of 1,74 percent. EU has also decided to open for compensation for the CO2 element in the power price for the aluminium industry. The compensation might be given by member states based on a benchmark for energy efficiency (kWh/kg aluminium).
Dedicated budget for energy efficiency	Most of our R&D budget related to primary metal production is dedicated to energy efficiency. R&D activities within recycling have also overall energy efficiency as the ultimate consequence. Aluminium can be recycled infinitely without degradation of quality, and recycling requires 95 percent less energy than primary aluminium production.
Partnering with governments on technology development	Hydro works through industry and aluminium associations to improve the ESG standards within our industry and to establish a level playing field for global aluminium production.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products.

Level of aggregation

Product or service

Taxonomy used to classify product(s) or service(s) as low-carbon

No taxonomy used to classify product(s) or service(s) as low carbon

Type of product(s) or service(s)

Aluminum

Other, please specify

Aluminum industry

Description of product(s) or service(s)

Hydro launched two new low-carbon aluminium brands in 2019, Hydro CIRCAL and Hydro REDUXA. Hydro CIRCAL is a range of products made with recycled post-consumer scrap. By using recycled content, we reduce energy use substantially while still being able to offer high-quality products. CIRCAL contains a minimum of 75 percent post-consumer scrap. Hydro REDUXA is our series of certified, low-carbon primary aluminium. REDUXA is produced with renewable energy, and guarantees a maximum carbon footprint of 4.0 kg CO₂ per kg aluminium – 25 percent of the global average.

A range of the products we manufacture contribute to climate change mitigation as constituent parts of technologies, infrastructure and complex products needed in a lowcarbon society. Examples are battery casings used in the manufacture of electric vehicles, window frames contributing to energy-efficient buildings, and aluminium frames for solar panels. The taxonomy does not provide clear guidance yet on how to define eligibility in the supply chain of taxonomy-eligible activities. Consequently, we have chosen to report for 2022 based on the taxonomy-eligible activities of primary and secondary aluminium production, rather than on end-use of the aluminium we produce.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

No

Methodology used to calculate avoided emissions

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Functional unit used

Reference product/service or baseline scenario used

Life cycle stage(s) covered for the reference product/service or baseline scenario

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

Explain your calculation of avoided emissions, including any assumptions

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

C5. Emissions methodology

C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?

No

C5.1a

(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

Row 1

Has there been a structural change?

No

C5.1b

(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

Change(s) in methodology, boundary, and/or reporting year definition?	
Row 1	No

C5.2

(C5.2) Provide your base year and base year emissions.

Scope 1

Base year start

January 1, 2018

Base year end

December 31, 2018

Base year emissions (metric tons CO2e)

8,149,000

Comment

The difference from the Annual report is only a reclassification of Qatalum's indirect emissions (mainly a gas-fired plan on the site) from Scope 2 to Scope 1 emissions.

Scope 2 (location-based)

Base year start

January 1, 2018

Base year end

December 31, 2018

Base year emissions (metric tons CO2e)

2,057,000

Comment

The difference from the Annual report is only a reclassification of Qatalum's indirect emissions (mainly a gas-fired plan on the site) from Scope 2 to Scope 1 emissions.

Scope 2 (market-based)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 1: Purchased goods and services

Base year start

January 1, 2018

Base year end

December 31, 2018

Base year emissions (metric tons CO2e)

18,830,000

Comment

Scope 3 category 2: Capital goods

Base year start

Base year end

Base year emissions (metric tons CO₂e)

Comment

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

Base year start

January 1, 2018

Base year end

December 31, 2018

Base year emissions (metric tons CO₂e)

1,030,000

Comment

Scope 3 category 4: Upstream transportation and distribution

Base year start

January 1, 2018

Base year end

December 31, 2018

Base year emissions (metric tons CO₂e)

360,000

Comment

Scope 3 category 5: Waste generated in operations

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 6: Business travel

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 7: Employee commuting

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 8: Upstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 9: Downstream transportation and distribution

Base year start

January 1, 2018

Base year end

December 31, 2018

Base year emissions (metric tons CO2e)

330,000

Comment

Scope 3 category 10: Processing of sold products

Base year start

January 1, 2018

Base year end

December 31, 2018

Base year emissions (metric tons CO2e)

10,930,000

Comment

Scope 3 category 11: Use of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 12: End of life treatment of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 13: Downstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 14: Franchises

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 15: Investments

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3: Other (upstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3: Other (downstream)

Base year start

Base year end

Base year emissions (metric tons CO₂e)

Comment

C5.3

(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO₂e?

Reporting year

Gross global Scope 1 emissions (metric tons CO₂e)

9,057,000

Start date

January 1, 2022

End date

December 31, 2022

Comment

The difference from the Annual report is only a reclassification of Qatalum's indirect emissions (mainly a gas-fired plan on the site) from Scope 2 to Scope 1 emissions.

Past year 1

Gross global Scope 1 emissions (metric tons CO₂e)

9,454,000

Start date

January 1, 2021

End date

December 31, 2021

Comment

The difference from the Annual report is only a reclassification of Qatalum's indirect emissions (mainly a gas-fired plan on the site) from Scope 2 to Scope 1 emissions.

Past year 2

Gross global Scope 1 emissions (metric tons CO2e)

8,833,000

Start date

January 1, 2020

End date

December 31, 2020

Comment

The difference from the Annual report is only a reclassification of Qatalum's indirect emissions (mainly a gas-fired plan on the site) from Scope 2 to Scope 1 emissions.

Past year 3

Gross global Scope 1 emissions (metric tons CO2e)

8,581,000

Start date

January 1, 2019

End date

December 31, 2019

Comment

The difference from the Annual report is only a reclassification of Qatalum's indirect emissions (mainly a gas-fired plan on the site) from Scope 2 to Scope 1 emissions.

Past year 4

Gross global Scope 1 emissions (metric tons CO2e)

8,149,000

Start date

January 1, 2018

End date

December 31, 2018

Comment

The difference from the Annual report is only a reclassification of Qatalum's indirect emissions (mainly a gas-fired plan on the site) from Scope 2 to Scope 1 emissions.

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We have operations where we are able to access electricity supplier emission factors or residual emissions factors, but are unable to report a Scope 2, market-based figure

Comment

Although Hydro has operations in regions where green certificates like Guarantees of Origin is traded, we have chosen not to report indirect emissions according to the market-based approach.

We do not believe that a market based approach gives a correct picture of our emissions, as trading of these certificates has no physical connection to our production. In our opinion, this virtual trading of "green" electricity is thus only an administrative improvement, and does not reflect actual physical improvements.

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO₂e?

Reporting year

Scope 2, location-based

1,975,000

Start date

January 1, 2022

End date

December 31, 2022

Comment

The difference from the Annual report is only a reclassification of Qatalum's indirect emissions (mainly a gas-fired plan on the site) from Scope 2 to Scope 1 emissions.

Past year 1

Scope 2, location-based

2,008,000

Start date

January 1, 2021

End date

December 31, 2021

Comment

The difference from the Annual report is only a reclassification of Qatalum's indirect emissions (mainly a gas-fired plan on the site) from Scope 2 to Scope 1 emissions.

Past year 2

Scope 2, location-based

1,803,000

Start date

January 1, 2020

End date

December 31, 2020

Comment

The difference from the Annual report is only a reclassification of Qatalum's indirect emissions (mainly a gas-fired plan on the site) from Scope 2 to Scope 1 emissions.

Past year 3

Scope 2, location-based

1,991,000

Start date

January 1, 2019

End date

December 31, 2019

Comment

The difference from the Annual report is only a reclassification of Qatalum's indirect emissions (mainly a gas-fired plan on the site) from Scope 2 to Scope 1 emissions.

Past year 4

Scope 2, location-based

2,057,000

Start date

January 1, 2018

End date

December 31, 2018

Comment

The difference from the Annual report is only a reclassification of Qatalum's indirect emissions (mainly a gas-fired plan on the site) from Scope 2 to Scope 1 emissions.

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure?

No

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

13,120,000

Emissions calculation methodology

- Supplier-specific method
- Hybrid method
- Average data method
- Average product method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Hydro's upstream Scope 3 emissions are dominated by emissions from cold metal and aluminium scrap provided from external suppliers. Hydro regards the carbon footprint of process scrap as equal to its metal origin, Hydro's Scope 3 upstream emissions are significant when including externally sourced metal. Industry players who do not take the inherent carbon footprint of process scrap input into account will report significantly lower Scope 3 emissions. Hydro believes that this method of accounting is inaccurate, as it accounts for process scrap being carbon neutral, when in reality the process scrap has the same inherent carbon footprint as its metal origin. Hydro believes that we need to focus on what drives real change towards the green transition and we need to exercise our role as a responsible supplier and customer to influence the right development. If Hydro were to regard process scrap as carbon neutral, Hydro's upstream Scope 3 emissions would be significantly lower.

Capital goods

Evaluation status

Not relevant, explanation provided

Please explain

Hydro has done a materiality assessment by the International Aluminium Institute (IAI) which shown that only 5 categories are material for scope 3 reporting in the aluminium industry: purchased goods and services, fuel and energy related activities, upstream transportation and distribution, downstream transportation and distribution and processing of sold products. We have therefore prioritizes these categories in our reporting.

Fuel-and-energy-related activities (not included in Scope 1 or 2)**Evaluation status**

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

970,000

Emissions calculation methodology

Fuel-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

The emissions from this category is calculated based on relevant emission factors related to fuel consumption.

Hydro's upstream Scope 3 emissions are dominated by emissions from cold metal and aluminium scrap provided from external suppliers. Hydro regards the carbon footprint of process scrap as equal to its metal origin, Hydro's Scope 3 upstream emissions are significant when including externally sourced metal. Industry players who do not take the inherent carbon footprint of process scrap input into account will report significantly lower Scope 3 emissions. Hydro believes that this method of accounting is inaccurate, as it accounts for process scrap being carbon neutral, when in reality the process scrap has the same inherent carbon footprint as its metal origin. Hydro believes that we need to focus on what drives real change towards the green transition and we need to exercise our role as a responsible supplier and customer to influence the right development. If Hydro were to regard process scrap as carbon neutral, Hydro's upstream Scope 3 emissions would be significantly lower.

Upstream transportation and distribution**Evaluation status**

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

320,000

Emissions calculation methodology

Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

The emissions from this category is calculated based on relevant distances and mode of transportation related to our upstream transportation and distribution.

Hydro's upstream Scope 3 emissions are dominated by emissions from cold metal and aluminium scrap provided from external suppliers. Hydro regards the carbon footprint of process scrap as equal to its metal origin, Hydro's Scope 3 upstream emissions are significant when including externally sourced metal. Industry players who do not take the inherent carbon footprint of process scrap input into account will report significantly lower Scope 3 emissions. Hydro believes that this method of accounting is inaccurate, as it accounts for process scrap being carbon neutral, when in reality the process scrap has the same inherent carbon footprint as its metal origin. Hydro believes that we need to focus on what drives real change towards the green transition and we need to exercise our role as a responsible supplier and customer to influence the right development. If Hydro were to regard process scrap as carbon neutral, Hydro's upstream Scope 3 emissions would be significantly lower.

Waste generated in operations

Evaluation status

Not relevant, explanation provided

Please explain

Hydro has done a materiality assessment by the International Aluminium Institute (IAI) which shown that only 5 categories are material for scope 3 reporting in the aluminium industry: purchased goods and services, fuel and energy related activities, upstream transportation and distribution, downstream transportation and distribution and processing of sold products. We have therefore prioritizes these categories in our reporting.

Business travel

Evaluation status

Not relevant, explanation provided

Please explain

Hydro has done a materiality assessment by the International Aluminium Institute (IAI) which shown that only 5 categories are material for scope 3 reporting in the aluminium industry: purchased goods and services, fuel and energy related activities, upstream transportation and distribution, downstream transportation and distribution and processing of sold products. We have therefore prioritizes these categories in our reporting.

Employee commuting

Evaluation status

Not relevant, explanation provided

Please explain

Hydro has done a materiality assessment by the International Aluminium Institute (IAI) which shown that only 5 categories are material for scope 3 reporting in the aluminium industry: purchased goods and services, fuel and energy related activities, upstream transportation and distribution, downstream transportation and distribution and processing of sold products. We have therefore prioritizes these categories in our reporting.

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

Hydro has done a materiality assessment by the International Aluminium Institute (IAI) which shown that only 5 categories are material for scope 3 reporting in the aluminium industry: purchased goods and services, fuel and energy related activities, upstream transportation and distribution, downstream transportation and distribution and processing of sold products. We have therefore prioritizes these categories in our reporting.

Downstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

230,000

Emissions calculation methodology

Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

The emissions from this category is calculated based on relevant distances and mode of transportation related to our downstream transportation and distribution.

Hydro's downstream Scope 3 emissions are dominated by processing of sold alumina. As this processing happens at aluminium smelters outside of Hydro's control, our ability to influence these emissions are limited. Nevertheless, reporting of these emissions contributes in giving a holistic perspective on the total emissions of the value chain of our sold products.

Processing of sold products

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

13,280,000

Emissions calculation methodology

Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Hydro's downstream Scope 3 emissions are dominated by processing of sold alumina. The emissions from this category is calculated based on the country specific average of processing and production emissions. As this processing happens at aluminium smelters outside of Hydro's control, our ability to influence these emissions are limited. Nevertheless, reporting of these emissions contributes in giving a holistic perspective on the total emissions of the value chain of our sold products.

Use of sold products

Evaluation status

Not relevant, explanation provided

Please explain

Hydro has done a materiality assessment by the International Aluminium Institute (IAI) which shown that only 5 categories are material for scope 3 reporting in the aluminium industry: purchased goods and services, fuel and energy related activities, upstream transportation and distribution, downstream transportation and distribution and processing of sold products. We have therefore prioritizes these categories in our reporting.

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Please explain

Hydro has done a materiality assessment by the International Aluminium Institute (IAI) which shown that only 5 categories are material for scope 3 reporting in the aluminium industry: purchased goods and services, fuel and energy related activities, upstream transportation and distribution, downstream transportation and distribution and processing of sold products. We have therefore prioritizes these categories in our reporting.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

Hydro has done a materiality assessment by the International Aluminium Institute (IAI) which shown that only 5 categories are material for scope 3 reporting in the aluminium industry: purchased goods and services, fuel and energy related activities, upstream transportation and distribution, downstream transportation and distribution and processing of sold products. We have therefore prioritizes these categories in our reporting.

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

Hydro has done a materiality assessment by the International Aluminium Institute (IAI) which shown that only 5 categories are material for scope 3 reporting in the aluminium industry: purchased goods and services, fuel and energy related activities, upstream transportation and distribution, downstream transportation and distribution and processing of sold products. We have therefore prioritizes these categories in our reporting.

Investments

Evaluation status

Not relevant, explanation provided

Please explain

Hydro has done a materiality assessment by the International Aluminium Institute (IAI) which shown that only 5 categories are material for scope 3 reporting in the aluminium industry: purchased goods and services, fuel and energy related activities, upstream transportation and distribution, downstream transportation and distribution and processing of sold products. We have therefore prioritizes these categories in our reporting.

Other (upstream)

Evaluation status

Not relevant, explanation provided

Please explain

Not relevant

Other (downstream)

Evaluation status

Not relevant, explanation provided

Please explain

Not relevant

C6.5a

(C6.5a) Disclose or restate your Scope 3 emissions data for previous years.

Past year 1

Start date

January 1, 2021

End date

December 31, 2021

Scope 3: Purchased goods and services (metric tons CO₂e)

14,090,000

Scope 3: Capital goods (metric tons CO₂e)

**Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)
(metric tons CO₂e)**

980,000

Scope 3: Upstream transportation and distribution (metric tons CO₂e)

320,000

Scope 3: Waste generated in operations (metric tons CO₂e)

Scope 3: Business travel (metric tons CO₂e)

Scope 3: Employee commuting (metric tons CO₂e)

Scope 3: Upstream leased assets (metric tons CO₂e)

Scope 3: Downstream transportation and distribution (metric tons CO₂e)

230,000

Scope 3: Processing of sold products (metric tons CO₂e)

13,220,000

Scope 3: Use of sold products (metric tons CO₂e)

Scope 3: End of life treatment of sold products (metric tons CO₂e)

Scope 3: Downstream leased assets (metric tons CO₂e)

Scope 3: Franchises (metric tons CO2e)

Scope 3: Investments (metric tons CO2e)

Scope 3: Other (upstream) (metric tons CO2e)

Scope 3: Other (downstream) (metric tons CO2e)

Comment

Past year 2

Start date

January 1, 2018

End date

December 31, 2018

Scope 3: Purchased goods and services (metric tons CO2e)

18,830,000

Scope 3: Capital goods (metric tons CO2e)

**Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)
(metric tons CO2e)**

1,030,000

Scope 3: Upstream transportation and distribution (metric tons CO2e)

360,000

Scope 3: Waste generated in operations (metric tons CO2e)

Scope 3: Business travel (metric tons CO2e)

Scope 3: Employee commuting (metric tons CO2e)

Scope 3: Upstream leased assets (metric tons CO2e)

Scope 3: Downstream transportation and distribution (metric tons CO2e)

330,000

Scope 3: Processing of sold products (metric tons CO2e)

10,930,000

Scope 3: Use of sold products (metric tons CO2e)

Scope 3: End of life treatment of sold products (metric tons CO2e)

Scope 3: Downstream leased assets (metric tons CO2e)

Scope 3: Franchises (metric tons CO2e)

Scope 3: Investments (metric tons CO2e)

Scope 3: Other (upstream) (metric tons CO2e)

Scope 3: Other (downstream) (metric tons CO2e)

Comment

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

No

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure

0.0000531

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

11,032,000

Metric denominator

unit total revenue

Metric denominator: Unit total

207,929,000,000

Scope 2 figure used

Location-based

% change from previous year

29.8

Direction of change

Decreased

Reason(s) for change

Change in revenue

Please explain

This intensity figure is calculated by using total Scope 1 and 2 emissions in 2022 and divide it by the total revenue in 2022. This gives the calculation of 11 032 000 tCO₂e / 207 929 Million NOK = 0.0000531 tCO₂e/revenue (NOK). In 2021, this intensity figure was 0.0000756 which gives a decrease of 29.8%. The main reason for the decrease is due to increased revenues in 2022.

Intensity figure

6.1

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO₂e)

11,032,000

Metric denominator

metric ton of aluminum

Metric denominator: Unit total

1,805,000

Scope 2 figure used

Location-based

% change from previous year

3.5

Direction of change

Increased

Reason(s) for change

Change in physical operating conditions

Please explain

This intensity figure is calculated by using total Scope 1 and 2 emissions in 2022 and divide this by the total production volume in 2022. This gives the calculation of 11 032

000 tCO₂e / 1 805 000 metric ton of aluminium = 6.11 tCO₂e/mt aluminium. In 2021, this intensity figure was 5.9 which gives an increase of 3.5%. The main reason for the increase is that production volumes decreased in 2022, primarily due to curtailment of production at Svalco in Slovakia. Production volumes increased significantly in 2019, 2020 and 2021 compared to 2018, due to the embargo at Alunorte (alumina), and curtailment at Albras (primary aluminium) in Brazil in 2018.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO ₂ e)	GWP Reference
CO ₂	6,998,317	IPCC Fifth Assessment Report (AR5 – 100 year) ☞ ₁
CH ₄	0	IPCC Fifth Assessment Report (AR5 – 100 year)
N ₂ O	0	IPCC Fifth Assessment Report (AR5 – 100 year)
PFCs	166,777	IPCC Fifth Assessment Report (AR5 – 100 year) ☞ ₂

☞₁The breakdown of direct GHG emissions per GHG type is reported per consolidated activities. The total sum of GHG emissions in C7.1a does therefore not match with the total Scope 1 emissions reported in C6.1.

☞₂The breakdown of direct GHG emissions per GHG type is reported per consolidated activities. The total sum of GHG emissions in C7.1a does therefore not match with the total Scope 1 emissions reported in C6.1.

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/area/region.

Country/area/region	Scope 1 emissions (metric tons CO ₂ e)
---------------------	---

Australia	146,000
Brazil	3,728,000
Canada	260,000
Norway	1,974,000
Slovakia	80,000
Qatar	2,288,000
Other, please specify United Kingdom, Poland, Italy, France, USA, Netherlands and Belgium	580,000

¹The difference from the Annual report is only a reclassification of Qatalum's indirect emissions mainly a gas-fired plan on the site) to Scope 1 emissions.

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By facility

C7.3b

(C7.3b) Break down your total gross global Scope 1 emissions by business facility.

Facility	Scope 1 emissions (metric tons CO2e)	Latitude	Longitude
Alunorte, Brazil	3,176,000	-1.54	-48.73
Albras, Brazil	426,000	-1.54	-48.73
Alouette, Canada	228,000	50.16	-66.44
Husnes, Norway	314,000	59.87	5.77
Høyanger, Norway	109,000	61.22	6.07
Karmøy, Norway	397,000	59.31	5.31
Qatalum, Qatar	2,288,000	24.97	51.57
Slovalco, Slovakia	78,000	48.58	18.87
Sunndal, Norway	670,000	62.67	8.56
Årdal, Norway	480,000	61.31	7.82
Tomago, Australia	146,000	-32.82	151.72
Rest of Hydro	740,000		

C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization’s total gross global Scope 1 emissions by sector production activity in metric tons CO₂e.

	Gross Scope 1 emissions, metric tons CO ₂ e	Comment
Metals and mining production activities	9,057,000	Scope 1 emissions related to Hydro's ownership equity in metals and mining production activities, i.e. bauxite mining, alumina refining and primary aluminium production.

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/area/region.

Country/area/region	Scope 2, location-based (metric tons CO ₂ e)	Scope 2, market-based (metric tons CO ₂ e)
Australia	670,000	
Brazil	607,000	
Canada	221,000	
Norway	70,000	
Slovakia	87,000	
Qatar D ¹	0	
Other, please specify Belgium, Italy, Poland, UK, France, USA, Luxembourg, Netherlands	321,000	

D¹The difference from the Annual report is only a reclassification of Qatalum's indirect emissions mainly a gas-fired plan on the site) to Scope 1 emissions.

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By facility

C7.6b

(C7.6b) Break down your total gross global Scope 2 emissions by business facility.

Facility	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Alunorte, Brazil	137,000	
Albras, Brazil	414,000	
Alouette, Canada	217,000	
Husnes, Norway	12,000	
Høyanger, Norway	4,000	
Karmøy, Norway	14,000	
Qatalum, Qatar	0	
Slovalco, Slovakia	84,000	
Sunndal, Norway	25,000	
Tomago, Australia	670,000	
Årdal, Norway	15,000	
Rest of Hydro	383,000	

C7.7

(C7.7) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

No

C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7

(C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7) Break down your organization’s total gross global Scope 2 emissions by sector production activity in metric tons CO2e.

	Scope 2, location-based, metric tons CO2e	Scope 2, market-based (if applicable), metric tons CO2e	Comment
Metals and mining production activities	1,975,000		Scope 2 emissions related to Hydro's ownership equity in metals and mining production activities, i.e. bauxite mining, alumina refining and primary aluminium production.

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Decreased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change in emissions	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption				
Other emissions reduction activities				
Divestment				
Acquisitions				
Mergers				
Change in output	185,720	Decreased	2	<p>Hydro's direct emissions decreased in 2022 compared to 2021. The emissions reductions in primary aluminium is primarily linked to the production stop at our Slovalco plant in 2022. This change in output led to an decrease in emissions of 185 720 tCO2e.</p> <p>In 2021, the total Scope 1 and 2 emissions was 11 462 008 tCO2e. This gives the calculation of emission value as $(-185\,720/11\,462\,008)*100=-2\%$.</p>
Change in methodology				
Change in boundary				

Change in physical operating conditions				
Unidentified				
Other	244,281	Decreased	2	<p>Hydro's direct emissions decreased in 2022 compared to 2021. The emissions reductions in primary aluminium is primarily linked to the production stop at our Slovalco plant in 2022.</p> <p>Other reasons for the emission reductions is related to the implementation of electric boilers for steam generation at Alunorte and process improvements resulted in improvements to specific emissions (ie. emissions per tonne product produced) compared to 2021, while the curtailments announced in the fourth quarter 2022 has resulted in less stable production and a consequent increased PFC emissions at the associated primary aluminium smelters. This led to an decrease in emissions of 244 281 tCO₂e.</p> <p>In 2021, the total Scope 1 and 2 emissions was 11 462 008 tCO₂e. This gives the calculation of emission value as $(-244\ 281/11\ 462\ 008)*100=-2\%$</p>

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Location-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

Don't know

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)	0	29,732,484	29,732,484
Consumption of purchased or acquired electricity		15,200,138	3,677,738	18,877,876
Consumption of self-generated non-fuel renewable energy		7,664,000		7,664,000
Total energy consumption		22,864,138	33,410,222	56,274,360

C-MM8.2a

(C-MM8.2a) Report your organization's energy consumption totals (excluding feedstocks) for metals and mining production activities in MWh.

	Heating value	Total MWh
Consumption of fuel (excluding feedstocks)	LHV (lower heating value)	29,732,484
Consumption of purchased or acquired electricity		18,877,876
Consumption of self-generated non-fuel renewable energy		7,664,000
Total energy consumption		56,274,360

C8.2b

(C8.2b) Select the applications of your organization’s consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	No
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	Yes
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

Comment

Other biomass

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

Comment

Other renewable fuels (e.g. renewable hydrogen)

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

Comment

Coal

Heating value

LHV

Total fuel MWh consumed by the organization

3,385,075

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

Comment

Oil

Heating value

LHV

Total fuel MWh consumed by the organization

7,077,191

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

Comment

Gas

Heating value

LHV

Total fuel MWh consumed by the organization

15,523,826

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

Comment

Other non-renewable fuels (e.g. non-renewable hydrogen)

Heating value

LHV

Total fuel MWh consumed by the organization

5,530,826

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

Comment

Total fuel

Heating value

LHV

Total fuel MWh consumed by the organization

31,516,915

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

Comment

C8.2d

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	7,664,000	7,664,000	7,664,000	7,664,000
Heat	0	0	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

C-MM8.2d

(C-MM8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed for metals and mining production activities.

	Total gross generation (MWh) inside metals and mining sector boundary	Generation that is consumed (MWh) inside metals and mining sector boundary
Electricity	7,664,000	7,664,000
Heat	0	0
Steam	0	0
Cooling	0	0

C8.2g

(C8.2g) Provide a breakdown by country/area of your non-fuel energy consumption in the reporting year.

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

Description

Waste

Metric value

664,000

Metric numerator

Metric tons excluding tailings and bauxite residue

Metric denominator (intensity metric only)

% change from previous year

9

Direction of change

Decreased

Please explain

Waste is measured and reported according to a harmonized categorization within Hydro, based on the common names of key waste streams relevant to our operations (e.g. bauxite residue, SPL, waste caustic soda). This facilitates aggregation of data at a group level and avoids the use of multiple waste codes for the same waste category. Operations maintain more detailed waste registries that align with local requirements and legislation.

Description

Land use

Metric value

7.51

Metric numerator

Hectares of area affected by mining operations

Metric denominator (intensity metric only)

% change from previous year

7

Direction of change

Increased

Please explain

The Hydro Paragominas property measures in total 18,764 hectares (ha), while the total land use at the end of 2022 was 7,512 ha, including 2,905 ha under ongoing rehabilitation.

In our mining operation, we strive to rehabilitate the total mined area that is available for rehabilitation, within two hydrological cycles. This is what we refer to as our 1:1 rehabilitation target.

Description

Waste

Metric value

4,455

Metric numerator

1000 Metric tons of bauxite tailings

Metric denominator (intensity metric only)

% change from previous year

5

Direction of change

Increased

Please explain

This includes tailings from bauxite extraction which consist of mineral rejects from the extraction process mixed with water.

Description

Waste

Metric value

5,270

Metric numerator

Metric tons of bauxite residue

Metric denominator (intensity metric only)

% change from previous year

2

Direction of change

Decreased

Please explain

Bauxite residue is a by-product of the alumina refining process. The residue is washed with water to lower the alkalinity, and recovered caustic soda is recycled for use in the production process. Residue is dry-stacked as a claylike substance with a low moisture content.

C-MM9.3a

(C-MM9.3a) Provide details on the commodities relevant to the mining production activities of your organization.

Output product

Bauxite

Capacity, metric tons

11,012,000

Production, metric tons

11,012,000

Production, copper-equivalent units (metric tons)

Scope 1 emissions

108,946

Scope 2 emissions

49,811

Scope 2 emissions approach

Location-based

Pricing methodology for copper-equivalent figure

We do not have a copper-equivalent figure available.

Comment

C-MM9.3b

(C-MM9.3b) Provide details on the commodities relevant to the metals production activities of your organization.

Output product

Alumina

Capacity (metric tons)

6,193,000

Production (metric tons)

6,193,000

Annual production in copper-equivalent units (thousand tons)

Scope 1 emissions (metric tons CO2e)

3,176,318

Scope 2 emissions (metric tons CO2e)

137,280

Scope 2 emissions approach

Location-based

Pricing methodology for-copper equivalent figure

We do not have a copper-equivalent figure for this available.

Comment

Production volumes decreased in 2022, primarily due to curtailment of production at Slovalco. Production volumes increased significantly in 2019, 2020 and 2021 compared to 2018, due to the embargo at Alunorte (alumina), and curtailment at Albras (primary aluminium) in 2018.

Reported production volumes are based on total production volumes (100 percent basis) from Hydro's consolidated activities and does not include Hydro's share of production in minority-owned plants or joint ventures. For Alumina production this includes Alunorte, for primary aluminium this includes Hydro's primary aluminium plants in Norway, Slovalco in Slovakia and Albras in Brazil. The volumes are not directly comparable to the volumes reported in the financial statements.

Output product

Aluminum

Capacity (metric tons)

2,248,775

Production (metric tons)

2,137,000

Annual production in copper-equivalent units (thousand tons)

Scope 1 emissions (metric tons CO2e)

5,141,000

Scope 2 emissions (metric tons CO2e)

1,455,000

Scope 2 emissions approach

Location-based

Pricing methodology for-copper equivalent figure

We do not have a copper-equivalent figure for this available.

Comment

C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

	Investment in low-carbon R&D	Comment
Row 1	Yes	Innovation and technology transition are key to meeting our sustainability ambitions and delivering on Hydro's strategic direction. Innovation allows us to improve our aluminium products and processes, develop cutting edge technology to use less energy, cut GHG emissions, and help our customers meet their commercial and sustainability goals. Hydro is committed to achieving net-zero emissions by 2050 or earlier and the ambition is to take the lead in delivering industrial- scale zero-carbon aluminium by 2030. To deliver on our commitment and ambition, we need new technologies that enable us to deliver net-zero products and achieve net-zero operations. Our technology roadmap is our pathway to zero emissions and a more fair and circular economy. We aim to produce better and greener aluminium, and work closely with our customers early in the product cycle, to help them meet their goals for their market and the climate.

C-MM9.6a

(C-MM9.6a) Provide details of your organization's investments in low-carbon R&D for metals and mining production activities over the last three years.

Technology area

Other, please specify

HalZero chloride process – decarbonizing new smelter capacity

Stage of development in the reporting year

Pilot demonstration

Average % of total R&D investment over the last 3 years

R&D investment figure in the reporting year (unit currency as selected in C0.4) (optional)

Average % of total R&D investment planned over the next 5 years

Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

Through utilizing our proprietary HalZero chloride process, we can convert alumina to aluminium chloride prior to electrolysis in a process where chlorine and carbon are kept in closed loops, resulting in a fully decarbonized process. We have been working on lab-scale for more than five years on this technology and have developed a roadmap for translating this to industrial scale before 2030. This way we can fully decarbonize the smelting process by eliminating emissions for both electrolysis and anode baking. Hydro's HalZero technology will be relevant for new capacity post-2030.

Technology area

Other, please specify

Zero aluminium through scaling up volumes of postconsumer scrap (PCS)

Stage of development in the reporting year

Pilot demonstration

Average % of total R&D investment over the last 3 years

R&D investment figure in the reporting year (unit currency as selected in C0.4) (optional)

Average % of total R&D investment planned over the next 5 years

Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

We plan to improve our recycling capacity to sort and utilize more difficult PCS aluminium. We already produce Hydro CIRCAL, a certified recycled and low-carbon product of more than 75 percent post-consumer scrap.

We have demonstrated our ability to produce this also with 100 percent post-consumer



scrap, but to do this in a profitable way at scale requires utilizing greater amounts of difficult, unsorted and contaminated scrap. In order to achieve this we will utilize advanced laser-based sorting (LIBS). In order to have a fully decarbonized scrap based product we also need to use direct electricity or hydrogen in our remelting furnaces at the recyclers

Technology area

Other, please specify

Carbon capture and storage (CCS) – decarbonizing existing smelters

Stage of development in the reporting year

Pilot demonstration

Average % of total R&D investment over the last 3 years

R&D investment figure in the reporting year (unit currency as selected in C0.4) (optional)

Average % of total R&D investment planned over the next 5 years

Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

Through capturing off-gases at smelters, we aim to reduce electrolysis emissions for existing smelters. We have evaluated more than 50 CCS technologies and developed a roadmap for testing and piloting the most promising up to industrial scale. The most likely outcome will be a combination of off-gas capture and direct air capture to eliminate 100 percent of the emissions. Upstream emissions at the Alunorte alumina refinery in Brazil will be reduced via fuel switch and electrification, and we will pilot hydrogen for calcination of alumina.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place

Scope 3	Third-party verification or assurance process in place
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C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

 KPMG CDP Letter_signed 030723.pdf

Page/ section reference

Please see KPMG's separate assurance engagement to the Carbon Disclosure Project, page 1-2.

You can also see KPMG's Independent Auditor's Assurance Report to Norsk Hydro ASA at page 252-253 (<https://www.hydro.com/globalassets/06-investors/reports-and-presentations/annual-report/jenincharge22/annual-report-2022eng.pdf>).

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach

Scope 2 location-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

 KPMG CDP Letter_signed 030723.pdf

Page/ section reference

Please see KPMG's separate assurance engagement to the Carbon Disclosure Project, page 1-2.

You can also see KPMG's Independent Auditor's Assurance Report to Norsk Hydro ASA at page 252-253 (<https://www.hydro.com/globalassets/06-investors/reports-and-presentations/annual-report/jenincharge22/annual-report-2022eng.pdf>).

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category

- Scope 3: Purchased goods and services
- Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)
- Scope 3: Upstream transportation and distribution
- Scope 3: Downstream transportation and distribution
- Scope 3: Processing of sold products

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

 KPMG CDP Letter_signed 030723.pdf

Page/section reference

Please see KPMG's separate assurance engagement to the Carbon Disclosure Project, page 1-2.

You can also see KPMG's Independent Auditor's Assurance Report to Norsk Hydro ASA at page 252-253 (<https://www.hydro.com/globalassets/06-investors/reports-and-presentations/annual-report/jenincharge22/annual-report-2022eng.pdf>).

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C0. Introduction	Other, please specify All high Level information	ISAE3000	All high Level information as included in Hydro's Annual Report 2022 have been verified.  1
C1. Governance	Other, please specify All high Level information	ISAE3000	All high Level information as included in Hydro's Annual Report 2022 have been verified.  1
C8. Energy	Energy consumption	ISAE3000	Please see KPMG's separate assurance engagement to the Carbon Disclosure Project, page 1-2.  2

 1Norsk Hydro ASA_annual-report-2022eng.pdf

 2KPMG CDP Letter_signed 030723.pdf

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

Yes

C11.1a

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.

EU ETS

C11.1b

(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.

EU ETS

% of Scope 1 emissions covered by the ETS

24

% of Scope 2 emissions covered by the ETS

0

Period start date

January 1, 2022

Period end date

December 31, 2022

Allowances allocated

1,960,144

Allowances purchased

1,960,144

Verified Scope 1 emissions in metric tons CO₂e

2,152,921

Verified Scope 2 emissions in metric tons CO₂e

0

Details of ownership

Facilities we own and operate

Comment

ETS data for Hydro's Norwegian smelters is publicly available from the Norwegian government (please tick the tab "Klimavoter per virksomhet", all five entities starting

with "Hydro" as well as "Sør-Norge Aluminium" are Hydro entities):
<https://www.norskeutslipp.no/no/Komponenter/Klimakvoter/Klimakvote/?ComponentType=klimakvote&ComponentPageID=1102&SectorID=600>

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

Hydro's aluminium operations are subject to a broad range of environmental laws and regulations, both inside and outside the EU. These laws and regulations impose stringent environmental protection standards related to air emissions, water management, hazardous materials and waste management.

Hydro's strategy for complying with these, is to actively engage with regulators and industry associations, where appropriate, to ensure that aluminium's position is taken into consideration. Hydro has been involved in the development of international frameworks on climate change and greenhouse gas emissions, supporting the establishment of a level playing field for the industry. For power industry regulations, Hydro engages in various activities to support and promote sustainable energy policies in the regions in which it operates, in addition to securing competitive energy supplies for our own operations.

The aluminium industry is included in the EU Emissions Trading System (ETS) and is therefore affected by the scheme directly and indirectly by the pass through of CO₂ allowance costs by power producers into the power prices ("indirect effects"). Aluminium production is qualified as an industrial sector exposed to a significant risk of "carbon leakage" (i.e. risk of European operations losing market share to less carbon efficient installations outside the EU). Aluminium producers therefore receive a higher percentage of free emission allowances compared to sectors not exposed to carbon leakage. Aluminium producers are also eligible to apply for indirect carbon cost compensation for the indirect effects of ETS in the power prices under the state aid guidelines adopted according to the ETS Directive.

Hydro supports market-based solutions for pricing of carbon emissions. A decisive part of the EU regulation is the ability to compensate for the extra cost occurring within the EU, in order to maintain competitiveness for global industries like aluminium. In December 2022, the EU Commission, the European Council and the European Parliament finalized negotiations on a revision of the ETS Directive, accompanied by a new carbon leakage mechanism called the Carbon Border Adjustment Mechanism (CBAM) Regulation. As a result, pricing of emissions from imported products through a Carbon Border Adjustment Mechanism (CBAM) is scheduled to replace existing carbon leakage measures with a phase-in starting in 2026. For the aluminium industry, it's important that CBAM is reviewed and tested before implemented, and that indirect cost compensation remains as an important carbon leakage instrument.

C11.2

(C11.2) Has your organization canceled any project-based carbon credits within the reporting year?

No

C11.3

(C11.3) Does your organization use an internal price on carbon?

Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Type of internal carbon price

Other, please specify

We are currently using actual carbon prices where a carbon regulations are in place. In areas where CO2 regulation is planned or due to be implemented, we have our predictions which we implement in our business cases.

How the price is determined

Alignment with the price of allowances under an Emissions Trading Scheme

Alignment with the price of a carbon tax

Objective(s) for implementing this internal carbon price

Change internal behavior

Drive energy efficiency

Drive low-carbon investment

Identify and seize low-carbon opportunities

Navigate GHG regulations

Stress test investments

Scope(s) covered

Scope 1

Scope 2

Scope 3 (upstream)

Scope 3 (downstream)

Pricing approach used – spatial variance

Differentiated

Pricing approach used – temporal variance

Evolutionary

Indicate how you expect the price to change over time

We put together a long-term EU ETS (EUA) price forecast internally, which we update each year. This runs through to 2045. This forecast is based on expectations for the supply and demand balance as well as policy and regulations. The great challenge related to EU ETS price forecasts are future and unexpected changes in policies and regulation that directly and indirectly influence the demand and supply balance.

We expect that the EU ETS price will increase over time, largely due to policy

intervention and the cost of emissions abatement technologies for ETS industry.

Actual price(s) used – minimum (currency as specified in C0.4 per metric ton CO2e)

Actual price(s) used – maximum (currency as specified in C0.4 per metric ton CO2e)

Business decision-making processes this internal carbon price is applied to

- Capital expenditure
- Operations
- Risk management
- Opportunity management

Mandatory enforcement of this internal carbon price within these business decision-making processes

No

Explain how this internal carbon price has contributed to the implementation of your organization's climate commitments and/or climate transition plan

The cost of carbon is integrated in all financial and operational decisions, and Hydro uses the EU ETS carbon price in internal decision making processes also outside of EU/EEA.

By including a carbon cost in our analysis, costs related to CO₂ emissions become a variable operational cost at plant level and CO₂ price expectations influence future investment decisions.

Some of the challenges related to CO₂ price forecasts are unexpected changes in policies and regulation that directly and indirectly influence the demand and supply balance. A large amount of our aluminium operations fall within scope of the EU Emissions Trading System (EU ETS). We purchase and surrender allowances (EUAs) to fulfill our compliance obligations under the EU ETS (in Norway, Germany, Luxembourg, Slovakia). We also receive a proportion of free EUAs. The amount of EUAs that we purchase as well as the amount of free EUAs we receive is publicly available information (made available at a national level).

Hydro supports market-based solutions for the pricing of CO₂. We follow the ETS market closely and have a long-term EUA price forecast (put together internally) which we review each year and is part of Hydro's long-term assumptions used for business decision making purposes.

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers

Yes, our customers/clients

Yes, other partners in the value chain

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement

Innovation & collaboration (changing markets)

Details of engagement

Invest jointly with suppliers in R&D of relevant low-carbon technologies

% of suppliers by number

100

% total procurement spend (direct and indirect)

% of supplier-related Scope 3 emissions as reported in C6.5

52

Rationale for the coverage of your engagement

All significant suppliers are assessed either by using desk assessment or by third-party assessment. With more than 25,000 suppliers, we have a significant indirect impact on society and the environment through our supply chain, and our suppliers are all important contributors to the success of our strategies. We engage, influence and work with our suppliers for continuous improvement and to mitigate potential negative impacts to people and the environment in our supply chain.

In order to successfully deliver on our decarbonization strategies and achieve our ambitions on shaping the market for low and near-zero carbon aluminium, we have teamed up with frontrunners in the value chain and entered into strategic partnership with customers and suppliers in order to develop and creative innovative and sustainable solutions. The objective with these collaborations with suppliers and customers is to drive innovation and accelerate technology developments needed to reduce emissions for our customers by utilizing the full potential of aluminium as a low-carbon solution.

Impact of engagement, including measures of success

The Aluminium we produce has inherent properties of durability, light-weight and recyclability makes the metal well positioned for the circular economy. Hydro’s industrial experience can also be a benefit to other sectors trying to decarbonize their products and value chains, and make them more circular.

Currently, Hydro offers two types of lowcarbon aluminium for our customers through our Hydro CIRCAL and Hydro REDUXA material brands. Hydro CIRCAL is a range of products made with a minimum of 75 percent recycled, post-consumer scrap aluminium. Aluminium recycling requires 95 percent less energy than primary aluminium production and reduces the CO2 footprint from the production phase and can be recycled infinitely without degradation in quality. Hydro REDUXA is our low-carbon aluminium. Using renewable energy sources like hydro and wind power during production, Hydro has reduced the carbon footprint per kg of aluminium to just 4.0 kg (less than a quarter of the global average).

There is an increased demand and engagement for our low-carbon brand products, and sales of our two low-carbon brands Hydro CIRCAL and Hydro REDUXA have grown by 65 percent since 2021. Hydro has the capacity to triple Hydro CIRCAL sales volumes and double volumes of Hydro REDUXA in the mid-term.

Comment

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement & Details of engagement

Collaboration & innovation
 Collaborate with customers in creation and review of your climate transition plan

% of customers by number

0

% of customer - related Scope 3 emissions as reported in C6.5

0

Please explain the rationale for selecting this group of customers and scope of engagement

In order to successfully deliver on our decarbonization strategies and achieve our ambitions on shaping the market for low and near-zero carbon aluminium, we have teamed up with frontrunners in the value chain and entered into strategic partnership with customers and suppliers in order to develop and creative innovative and sustainable solutions. The objective with these collaborations with suppliers and customers is to drive innovation and accelerate technology developments needed to

reduce emissions for our customers by utilizing the full potential of aluminium as a low-carbon solution.

Hydro serves more than 30 000 customers across industries such as transportation, construction, packaging and electrical which are setting ambitious decarbonization targets. Aluminium with a lower-carbon footprint is seen as an important enabler for the green transition and a key to reduce Scope 3 emissions for such industries. In 2022, Hydro formed a new strategic partnership with Mercedes-Benz which will enable smarter design and solutions with a lower-carbon footprint, ultimately reducing their emissions.

Impact of engagement, including measures of success

The Aluminium we produce has inherent properties of durability, light-weight and recyclability makes the metal well positioned for the circular economy. Hydro's industrial experience can also be a benefit to other sectors trying to decarbonize their products and value chains, and make them more circular.

Currently, Hydro offers two types of lowcarbon aluminium for our customers through our Hydro CIRCAL and Hydro REDUXA material brands. Hydro CIRCAL is a range of products made with a minimum of 75 percent recycled, post-consumer scrap aluminium. Aluminium recycling requires 95 percent less energy than primary aluminium production and reduces the CO2 footprint from the production phase and can be recycled infinitely without degradation in quality. Hydro REDUXA is our low-carbon aluminium. Using renewable energy sources like hydro and wind power during production, Hydro has reduced the carbon footprint per kg of aluminium to just 4.0 kg (less than a quarter of the global average).

There is an increased demand and engagement for our low-carbon brand products, and sales of our two low-carbon brands Hydro CIRCAL and Hydro REDUXA have grown by 65 percent since 2021. Hydro has the capacity to triple Hydro CIRCAL sales volumes and double volumes of Hydro REDUXA in the mid-term.

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

Hydro does also engage in dialogue with customers and other stakeholders regarding the environmental impact of our processes and products. We perform life-cycle assessments (LCAs) for all major product groups to identify improvement potential. With other aluminium producers, we have developed a pan-European network of national initiatives to promote and recycle aluminium packaging. Many of these national activities emphasize education and have developed projects with primary and secondary schools and universities to stimulate the next generation to make their contribution to a better environment.

Hydro works through industry and aluminium associations to improve the ESG standards within our industry and to establish a level playing field for global aluminium production. Hydro is a member of the International Council on Mining and Metals (ICMM), which gives us the

opportunity to participate in the development of industry practices on the environment and to share best practices. We are also a founding member of the Aluminium Stewardship Initiative (ASI).

We commit to best practice tailings management to protect the health and safety of people, host communities and the environment. We plan, design, construct, operate, maintain, close, and relinquish our tailings facilities in accordance with regulatory compliance requirements, internal company standards, the International Council on Mining and Metal (ICMM) framework, and the Aluminium Stewardship Initiative (ASI) practices.

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization’s purchasing process?

Yes, climate-related requirements are included in our supplier contracts

C12.2a

(C12.2a) Provide details of the climate-related requirements that suppliers have to meet as part of your organization’s purchasing process and the compliance mechanisms in place.

Climate-related requirement

Complying with regulatory requirements

Description of this climate related requirement

With more than 25,000 suppliers, we have a significant indirect impact on society and the environment through our supply chain, and our suppliers are all important contributors to the success of our business. We engage, influence and work with our suppliers for continuous improvement and to mitigate potential negative impacts to people and the environment in our supply chain.

The Hydro Supplier Code of Conduct was last updated in 2020 to be more specific on several requirements, especially on environmental and climate impact, human rights, conflict minerals and working conditions. The changes are based on international standards to which Hydro is committed, including the International Council on Mining and Metals (ICMM) and Aluminium Stewardship Initiative (ASI).

The principles set out in Hydro’s Supplier Code of Conduct are made binding through contractual clauses to ensure suppliers and business partners reflect the values and principles that Hydro promotes. Standard contracts also include clauses on auditing rights and the supplier’ responsibility to actively promote the principles with its own suppliers/contractors and sub-suppliers/sub-contractors of any tier that have a material contribution to the supply of goods and services to Hydro under the contract. Failure to comply with the principles may result in a termination of the contract.

Furthermore, supplier audits and site visits are performed by Hydro personnel and external auditors based on risk analyses.

% suppliers by procurement spend that have to comply with this climate-related requirement

100

% suppliers by procurement spend in compliance with this climate-related requirement

100

Mechanisms for monitoring compliance with this climate-related requirement

- First-party verification
- Second-party verification

Response to supplier non-compliance with this climate-related requirement

Exclude

C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

Row 1

External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

- Yes, we engage directly with policy makers
- Yes, our membership of/engagement with trade associations could influence policy, law, or regulation that may impact the climate
- Yes, we fund organizations or individuals whose activities could influence policy, law, or regulation that may impact the climate

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?

Yes

Attach commitment or position statement(s)

All strategies and positions of Hydro on policy issues shall be aligned with the objectives of the Paris Agreement. Please see Hydro's Government Affairs Global Procedure, page 3.

Please also see our climate strategy and our net zero ambitions in line with the Paris Agreement on page 86-87.

-  Government Affairs Global Procedure.pdf
-  Norsk Hydro ASA_annual-report-2022eng.pdf

Describe the process(es) your organization has in place to ensure that your external engagement activities are consistent with your climate commitments and/or climate transition plan

Hydro recognizes the value of engaging with public authorities and other stakeholders in relation to the development of various policy initiatives that impact our industry. We interact primarily with decision makers in countries where we have significant operations, such as Norway, Brazil and the US, as well as with regional structures like the European Union institutions. These interactions are mainly related to securing competitive, stable and predictable industry framework conditions, taxes and legislation that affect our activities.

In 2022, a total of 14 full-time equivalents (FTE) are dedicated to public affairs and lobbying. This includes seven FTEs in Brazil and four in the EU (Brussels office). In Norway three FTE are dedicated to public affairs and lobbying. Within the EU, lobbying activities are publicly reported through the EU Transparency Register. According to our global directives, Hydro may not make financial contributions to political parties. We have no indications that such contributions took place in 2022.

Hydro recognizes the need to limit global warming to 1.5 degrees above pre-industrial levels, as set out in the Paris agreement from 2015. To understand the impact of climate change and the implications of the Paris Agreement for the aluminium industry, Hydro has taken part in the International Aluminium Institute's work to develop greenhouse gas pathways toward 2050 consistent with the Paris Agreement. These are in-line with the International Energy Agency's 1.5 degree scenario, combined with IAI's analysis of demand in the aluminium market and material flows. These pathways are integrated in Hydro's strategy, hence Hydro's climate strategy is aligned with climate science. Hydro is considering to verify our climate strategy against the Science Based Target Initiative when they have developed a sectoral decarbonization approach (SDA) for the aluminium sector.

C12.3a

(C12.3a) On what policy, law, or regulation that may impact the climate has your organization been engaging directly with policy makers in the reporting year?

Specify the policy, law, or regulation on which your organization is engaging with policy makers

The EU's Carbon Border Adjustment Mechanism (CBAM).

Hydro supports market-based solutions for pricing of carbon emissions, like the EU Emissions Trading System (ETS). A decisive part of the EU regulation is the ability to compensate for the extra cost occurring within the EU, in order to maintain competitiveness for global industries like aluminium. Pricing of emissions from imported products through a Carbon Border Adjustment Mechanism (CBAM) is scheduled to replace existing carbon leakage measures with a phase-in starting in 2026. CBAM is a tool to put a fair price on the carbon emitted during the production of carbon intensive

goods that are entering the EU, and to encourage cleaner industrial production in non-EU countries. CBAM aims to work in conjunction with the EU ETS to achieve two main objectives; Reduce emissions in the EU industry and prevent carbon leakage.

Category of policy, law, or regulation that may impact the climate

Carbon pricing, taxes, and subsidies

Focus area of policy, law, or regulation that may impact the climate

Other, please specify

Reduce emissions in the EU industry and prevent carbon leakage

Policy, law, or regulation geographic coverage

Global

Country/area/region the policy, law, or regulation applies to

Your organization's position on the policy, law, or regulation

Support with major exceptions

Description of engagement with policy makers

Hydro recognizes the value of engaging with public authorities, policy makers and other stakeholders in relation to the development of various policy initiatives that impact our industry. We interact primarily with decision makers in countries where we have significant operations, such as Norway, Brazil and the US, as well as with regional structures like the European Union institutions. These interactions are mainly related to securing competitive, stable and predictable industry framework conditions, taxes and legislation that affect our activities.

We promote our views on issues of importance either through direct interaction with public authorities and other stakeholders, or through various industry associations. Most resources are dedicated to advocacy activities within the EU, Brazil, the US and Norway, through business associations, and to direct dialogue with authorities and decision makers. When relevant, we are in dialogue with applicable tax authorities in Norway, the EU and Brazil. We may also discuss fundamental tax developments and issues with other enterprises.

Hydro's advocacy through associations and engagement with policy makers:

- We participate in drafting position papers relating to the most important topics for our company and industry.
- We take a central role in setting the priorities in the various associations in which we are a member, as well as providing support for these associations when they are advocating towards the European Commission and European Parliament.

Hydro supports market-based solutions for pricing of carbon emissions, like the EU Emissions Trading System (ETS). A decisive part of the EU regulation is the ability to compensate for the extra cost occurring within the EU, in order to maintain competitiveness for global industries like aluminium. Pricing of emissions from imported

products through a Carbon Border Adjustment Mechanism (CBAM) is scheduled to replace existing carbon leakage measures with a phase-in starting in 2026.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

For the aluminium industry which Hydro operates in, it's important that CBAM is reviewed and tested before implemented, and that indirect cost compensation remains as an important carbon leakage instrument. For CBAM to fulfill its purpose as a carbon leakage and climate instrument, it is of vital importance that CBAM manages to mirror the full ETS carbon costs and rules of Monitoring, Reporting and Verification (MRV) that EU/EEA companies are subjected to.

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

Due to the internal expertise that we have at Hydro, we are invited to speak at different conferences and events hosted by external parties, in our own capacity as Hydro e.g. Bloomberg conference, Miljøforum (an environmental forum organized by Norsk Industri and the Norwegian Environmental Agency).

Hydro continues to actively engage with regulators and industry associations, where appropriate, to ensure that aluminium's position is taken into consideration. We support the principles of free and fair trade, and efforts to create a global level playing field. Hydro has been involved in the development of international frameworks on climate change and greenhouse gas emissions. For power industry regulations, Hydro engages in various activities to support and promote sustainable energy policies in the regions in which it operates, in addition to securing competitive energy supplies for our own operations. In our advocacy, we also support the climate targets set in the Paris Agreement.

C12.3b

(C12.3b) Provide details of the trade associations your organization is a member of, or engages with, which are likely to take a position on any policy, law or regulation that may impact the climate.

Trade association

International Council on Mining & Metals (ICMM)

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

No, we did not attempt to influence their position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

Hydro is a member of the International Council on Mining and Metals (ICMM), which gives us the opportunity to participate in the development of industry practices on the environment and to share best practices. We are also a founding member of the Aluminium Stewardship Initiative (ASI).

Through our membership in ICMM, we are committed to comply with ICMM's Performance Expectations. For 2022, we have made a self-assessment of our fulfillment of the performance expectations for Hydro Paragominas, Alunorte and Albras, all in Brazil, and Hydro's five fully-owned primary aluminium production plants, all in Norway.

All the operations are certified according to the ASI Performance and Chain of Custody standards. ICMM indicators that are aligned with ASI certified indicators are, according to the ICMM methodology, regarded as externally validated. Remaining indicators have been subject to a self-assessment. The self-assessments of the Brazilian sites have been reviewed by our external auditor KPMG as part of their limited assurance of Hydro's ESG reporting 2022, please see the external auditor's limited assurance report.

In accordance with ICMM requirements, we also need to prioritize the self-assessments of each operation for third party validation required from the financial year 2023 within a three year cycle. Our prioritization is risk based (industry and geography) and in the following order:

1. Bauxite and alumina production in Brazil (Paragominas and Alunorte)
2. Primary aluminium production in Brazil (Albras)
3. Primary aluminium production in Norway (Husnes, Høyanger, Karmøy, Sunndal, Årdal)

In order to be more aligned with the ICMM requirements, the Hydro's Annual Report 2022 has also been restructured so that the sustainability chapter corresponds to the material sustainability topics identified in the Materiality assessment. Information on Ethics and compliance has been moved from the Governance chapter to the Sustainability chapter. Other changes to the sustainability reporting are minor and described in the Materiality assessment.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

C12.3c

(C12.3c) Provide details of the funding you provided to other organizations or individuals in the reporting year whose activities could influence policy, law, or regulation that may impact the climate.

Type of organization or individual

Non-Governmental Organization (NGO) or charitable organization

State the organization or individual to which you provided funding

The Bellona Foundation is an international environmental NGO headquartered in Oslo, Norway, with branches in Europe and North America. Bellona is an independent, non-profit foundation that works to solve the world's climate and environmental problems. Bellona's approach is technologically optimistic and based on systems thinking, with the aim of developing and promoting solutions for politicians, public administration and business.

Funding figure your organization provided to this organization or individual in the reporting year (currency as selected in C0.4)

1,000,000

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate

Hydro has a cooperation agreement with Bellona on green industry development and better framework conditions for technologies for zero emissions and negative emissions.

Hydro works together with the Bellona Environmental Foundation and other industry players to put forward proposals for the government's work with carbon capture and storage (CCS). Industrial players who plan, pilot or carry out carbon capture and storage (CCS) projects have gathered around eight recommendations for the government's further work with CCS in the roadmap for green industry promotion. The outcomes of such sponsorships and collaborations are highly relevant since CCS is a central part of Hydro's climate strategy.

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).



Publication

In mainstream reports

Status

Complete

Attach the document

Norsk Hydro ASA_annual-report-2022eng.pdf

Page/Section reference

Please see our Annual report 2022 on page 79-92 and 207-2019

Content elements

- Governance
- Strategy
- Risks & opportunities
- Emissions figures
- Emission targets
- Other metrics

Comment

C12.5

(C12.5) Indicate the collaborative frameworks, initiatives and/or commitments related to environmental issues for which you are a signatory/member.

	Environmental collaborative framework, initiative and/or commitment	Describe your organization’s role within each framework, initiative and/or commitment
Row 1	Global Reporting Initiative (GRI) Community Member Task Force on Climate-related Financial Disclosures (TCFD) UN Global Compact Other, please specify Aluminium Stewardship Initiative (ASI), International Council on Mining and Metals’ (ICMM)	UN Global Compact: Hydro supports the principles underlying the Universal Declaration of Human Rights, the International Covenant on Economic, Social and Cultural Rights, and the International Covenant on Civil and Political Rights, the UN Global Compact and ILO’s eight core conventions, and we expect our suppliers to do the same. This includes UN Global Compact and the principles within human rights, international labor standards, working against corruption and environmental considerations are fundamental to our approach to corporate responsibility. Hydro has played an active role in the UN Global Compact since its formation. Our commitment is expressed by the Chair of the Board of directors and the CEO in their letter to stakeholders. Our Communication on progress (COP) in relation to the Compact’s 10 principles is at the Advanced level and thus also reflects the

		<p>Global Compact's 21 advanced criteria. The consistency of the information in Hydro's annual report 2022 with the information in the Hydro Communication on Progress 2022 has been reconciled by our auditors.</p> <p>TCFD: Hydro is a signatory to the TCFD recommendations. TCFD was formed by the Financial Stability Board in 2015. The recommendations were made public in June 2017. Hydro launched a new climate strategy in 2019 that takes into account scenario analysis. These include:</p> <ul style="list-style-type: none"> • New policies: similar to a 2°C scenario in line with the Paris agreement • Current policies: similar to a 4°C scenario and in line with already adopted measures • Physical risks: stress testing of physical risks under a 6°C scenario <p>GRI: Hydro uses the GRI Standards for voluntary reporting of sustainable development. GRI collaborates with the United Nations Environment Program and UN Global Compact. Hydro has reported according to GRI since 2003. We believe that our reporting is in accordance with GRI's reporting principles in all material respects as defined by the GRI Universal Standards (2021). Hydro's GRI Content Index 2022 can be found at Hydro.com/gri. The sustainability reporting's adherence to the GRI Standards is subject to limited assurance by our external auditors, KPMG. The assurance, as outlined in the Independent Auditor's Assurance report, concludes that the report is presented, in all material respects, in accordance with the GRI Standards.</p> <p>ASI: The Aluminium Stewardship Initiative (ASI) is a global, multi-stakeholder, non-profit standards setting and certification organization. The ASI works toward responsible production, sourcing and stewardship of aluminium following an entire value chain approach. Hydro is an active member of the Aluminium Stewardship Initiative. ASI's mission is to recognize and collaboratively foster the responsible production, sourcing and stewardship of aluminium. We have been involved at all stages in the multi-stakeholder development of ASI standards to date. We have participated in developing ASI's certification program. The third-party certification platform was launched in December 2017. Until publication of this report, 65 production sites have been certified</p>
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		<p>according to the ASI Performance Standard, covering Hydro’s value chain from bauxite mining to finished products. Hydro has also certified several sites according to the Chain of Custody standard, and delivered the first ASI certified metal to a customer in July 2019. Hydro reports in the GRI index 2021 on how we relate to ASI’s 11 principles and underlying criteria. This is also included in external auditor’s consistency check of Hydro’s GRI index 2021.</p> <p>ICMM: Hydro is a member of the International Council on Mining and Metals and reports according to the ICMM requirements. That includes Hydro’s reporting in accordance with the GRI Standards, see the section about GRI above. The Environment and social responsibility 2021 reporting is prepared in line with the requirements found in the ICMM 10 principles and position statements. The complete Environment and social reporting is – according to the ICMM requirements – assured by our external auditor. As part of our ICMM commitments, we disclose mineral development contracts granted or entered into from 1 January 2021 that we have signed with host governments.</p>
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C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity
Row 1	Yes, both board-level oversight and executive management-level responsibility	<p>The ongoing loss of biodiversity and degradation of ecosystems represent long-term risks for the industry and society at large, and the global awareness and attention toward sustainability continues to trend upwards.</p> <p>The Board of Directors (BoD) sets expectations, oversees Hydro’s risk management framework, approves related directives/procedures and monitors key risks through biannual updates which serve as an important foundation for the strategy and business planning processes. In addition, specific areas will be subject to more frequent updates. Progress on risk mitigation</p>

		<p>is reflected in the remuneration schemes of the Chief Executive Officer (CEO) and Corporate Management Board (CMB). The Board Audit Committee supports the BoD’s supervisory role, primarily with respect to strategic and financial reporting risks. The CMB is responsible for Hydro’s risk management framework at group level and assists the CEO in its execution.</p>
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C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments
Row 1	Yes, we have made public commitments only	Commitment to No Net Loss

C15.3

(C15.3) Does your organization assess the impacts and dependencies of its value chain on biodiversity?

Impacts on biodiversity

Indicate whether your organization undertakes this type of assessment

Yes

Value chain stage(s) covered

Direct operations

Upstream

Tools and methods to assess impacts and/or dependencies on biodiversity

BISI – Biodiversity Indicators for Site-based impacts

ENCORE tool

GBS – Global Biodiversity Score

IBAT – Integrated Biodiversity Assessment Tool

Natural Capital Protocol

ReCiPe

SBTN materiality tool

STAR – Species Threat Abatement and Restoration metric

TNFD – Taskforce on Nature-related Financial Disclosures

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)

Dependencies on biodiversity

Indicate whether your organization undertakes this type of assessment

Yes

Value chain stage(s) covered

Direct operations

Upstream

Tools and methods to assess impacts and/or dependencies on biodiversity

BISI – Biodiversity Indicators for Site-based impacts

ENCORE tool

GBS – Global Biodiversity Score

IBAT – Integrated Biodiversity Assessment Tool

Natural Capital Protocol

ReCiPe

SBTN materiality tool

STAR – Species Threat Abatement and Restoration metric

TNFD – Taskforce on Nature-related Financial Disclosures

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)

C15.4

(C15.4) Does your organization have activities located in or near to biodiversity-sensitive areas in the reporting year?

Yes

C15.4a

(C15.4a) Provide details of your organization’s activities in the reporting year located in or near to biodiversity -sensitive areas.

C15.5

(C15.5) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity- related commitments
Row 1	Yes, we are taking actions to progress our biodiversity-related commitments	Land/water protection Land/water management Education & awareness Law & policy

C15.6

(C15.6) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	Yes, we use indicators	State and benefit indicators Pressure indicators Response indicators

C15.7

(C15.7) Have you published information about your organization’s response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
In mainstream financial reports	Content of biodiversity-related policies or commitments Impacts on biodiversity Details on biodiversity indicators Biodiversity strategy	 1, 2, 3

 ¹Hydro_Position-statement-on-biodiversity-and-ecosystem-services.pdf

 ²Norsk Hydro ASA_annual-report-2022eng.pdf

 ³Hydro_Biodiversity-and-ecosystem-services.pdf

C16. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	VP & ESG Adviser to the CFO	Other, please specify VP & ESG Adviser to the CFO