Sustainability report for Hydro’s operations in Brazil 2019

About the report

This sustainability report includes Hydro's operations in Brazil in 2019. Information about certain subsequent events up till August 2020 has also been included.

The main report consists of "Our approach", describing our policies, strategy and main results within environmental and social topics, "Case stories" presents examples of how we apply our approach to sustainability. In addition, more detailed underlying information is included in the Environmental and Social statements. Also available is a Country by country report for Hydro's global organization which is prepared according to Norwegian legal requirements due to Hydro's extractive activities in Brazil. This report also fulfills the requirements of the Extractive Industries Transparency Initiative (EITI).

The two principal sections in the report, "Our approach" and "Environmental and social statements", have been prepared mainly based on information provided in Hydro's Annual Report 2019, specifically the "Viability performance" and "Viability performance statements" sections, which have been subject to limited assurance by our external auditor KPMG. The country by country report has also been subject to limited assurance by KPMG and has been approved by Hydro's Board of Directors.

The report is prepared in accordance with the GRI Standards and is self-declared to be in accordance with the "Core" option as described by GRI 101 (2016). The GRI index is available at www.hydro.com/gri

Throughout the report, Hydro refers to Norsk Hydro ASA and its consolidated subsidiaries in Brazil if not otherwise stated. The report is available at www.hydro.com in Portuguese and English.

Key developments Hydro Brazil 2019 and onwards

In 2019, Hydro's operations in Brazil embarked on our new strategic agenda: "Lifting profitability, driving sustainability", aiming to position Hydro as a robust and profitable industry leader, based on innovation and sustainability.

That was also the year in that a malicious and sophisticated cyber-attack hit us hard, but, based in our values: Care, Courage and Collaboration, we handled the situation working day and night to recover.

In 2019 we also achieved a long-awaited milestone: the lifting of the 19-month embargo on our alumina refinery Alunorte in Barcarena municipality in Pará state, in the North of Brazil.
The Covid-19 pandemic has affected Hydro's operations world-wide, created significant market uncertainty, and impacted the communities we operate in. Our top priority is the health and safety of our people and the communities where we operate. We are particularly following the situation in Northern-Brazil, and we are supporting our local communities through a need-based and risk-based approach in collaboration with local authorities.

- Donated funds, food and personal protective equipment to local hospitals and organizations
- Supplying material and products to customers critical to fight Covid-19
- Donated 36.000 food baskets, including hygiene products, and 10,000 test kits to municipalities where we operate in Para state, Brazil
- Supporting the Community Environmental Emergency Brigade in Barcarena, Brazil to provide information to communities on Covid-19 prevention
- Purchasing more than 270.000 face masks for our employees and contractors, prioritizing local producers in Para state, Brazil (per July 2020)
- Donated 4000m2 property for field hospital in Barcarena, Brazil and BRL 10M to build field hospitals in Para state, Brazil
- Donated over 50.000 liters of mineral water to local shelter in Belem, Brazil

Hydro moves forward the Tailing Dry Backfill methodology in Mineração Paragominas

- The application of this methodology in Brazil represents the end of the use of large dams for permanent storage of bauxite tailings.
- The testing will be completed and full-scale implementation could commence by year-end 2020, pending on operational licensing approval from SEMAS – The Pará State Secretariat for the Environment and Sustainability.

Design and Production: Hydro/Artbox

Content

Hydro in brief 2019

Valid to Hydro's consolidated worldwide operations. Most of the figures are impacted by the Alunorte embargo.

48,575
36,310 own employees
12,265 contractors (full time equivalents)

3.0
Total recordable injuries per million hours worked

49.57B BRL
Non-current assets

0.68B BRL
Income taxes paid

9.68M CO2e
Greenhouse gas emissions

48 TWh
Energy consumption

2,871' tons
Tailings deposited by Paragominas

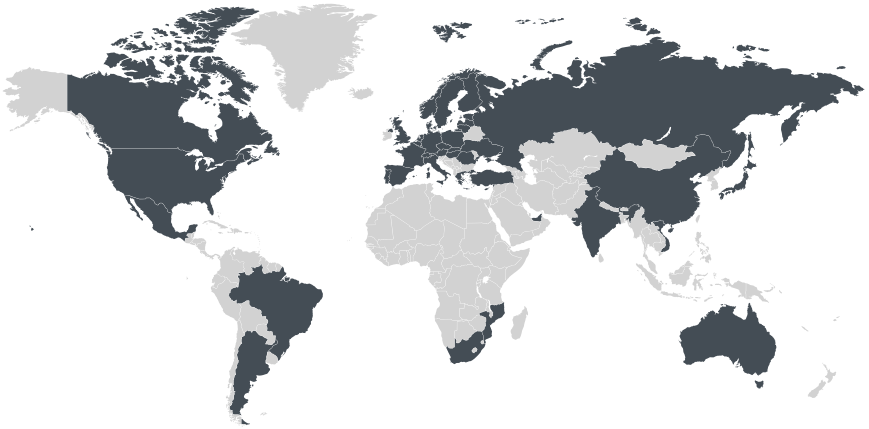
3,871' tons
Bauxite residue deposited by Alunorte

7,360' mt
Bauxite production

4,487' mt
Alumina production

1,675' mt
Primary metal production

1,269' mt
Extrusion sales volume to external market



Hydro is a fully integrated aluminium company with 36,000 employees in 40 countries on all continents, combining local expertise, worldwide reach and unmatched capabilities in R&D

Hydro Brazil in brief 2019

The figures are valid to Hydro's consolidated operations in Brazil. Most of the figures are impacted by the Alunorte embargo.

14,000
6,100 own employees
7,900 contractors (full time equivalents)

1.3
Total recordable injuries per million hours worked

15.19B BRL
Non-current assets

517M BRL
Taxes and fees paid

4.41M CO2e
Greenhouse gas emissions

17.1 TWh
Energy consumption

2,871' tons
Tailings deposited by Paragominas

3,871' tons
Bauxite residue deposited by Alunorte

7,360' mt
Bauxite production

4,487' mt
Alumina production

327' mt
Primary metal production

37.35' mt
Extrusion sales volume to external market

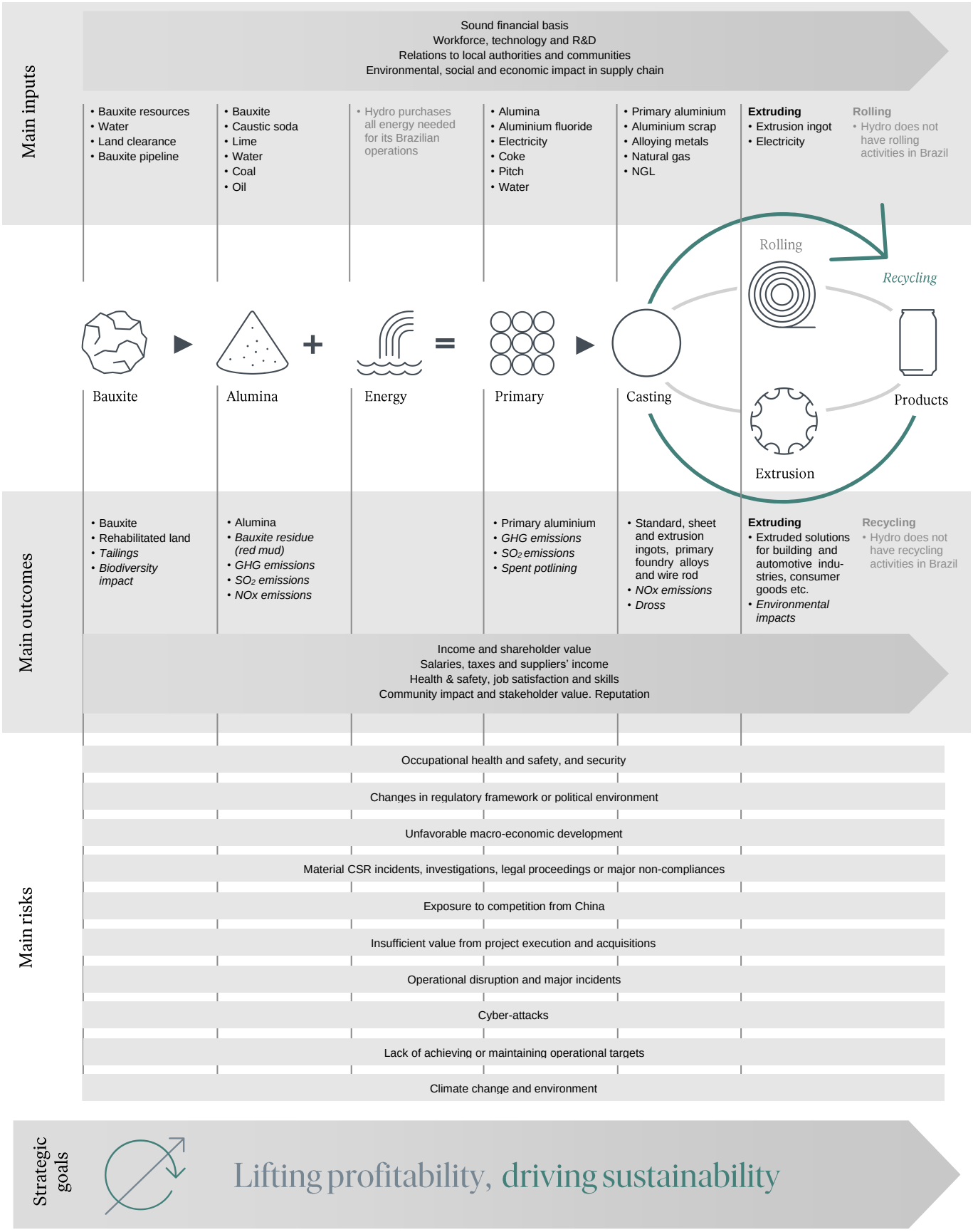
In Brazil we have operations throughout the value chain

This includes all the way from bauxite mining to finished extruded aluminium products and solutions.

The majority of our assets and employees are located in the state of Pará in northern Brazil. In southern Brazil we have three extrusion plants, in addition to sales offices and administrative positions.

- Bauxite & Alumina facility
- Extrusion plant
- Administrative/Sales office
- Aluminium production facility

Hydro's value chain



* Included as part of the relevant topics in the more extensive risk description (see further references below).
For a more extensive and precise overview of Hydro's main risks, see the Risk Review chapter in Hydro's Annual Report 2019.
Text in italics reflects mainly negative impacts.

Hydro's mid-term strategic goals

	Ambitions	Medium-term target	Timeframe	2019 target	2018 target	2018 progress	Status
Better	Improve safety performance, strive for injury free environment	TRI <2	2020	TRI 1.7 [1)] TRI < 2.7 [2)]	TRI 1.7 [1)] TRI < 3.0 [2)]	TRI 1.7 [1)] TRI 1.9 [2)]	●
	Hydro scores in the top 25 percent on the Employee Engangement index in Hydro Monitor	Top 25 percent	2020	Top 25 percent	Top 25 percent	Top 25 percent	●
	All employees participate in the people performance and development process My Way	90 percent	2020	92 percent	95 percent	96 percent	●
	Best available technology or similar implemented for treatment, storage and use of bauxite residue	New press filters in full operation	2019	Ramp-up of press-filters completed	Ramp-up of press-filters completed	Ramp-up behind schedule due to Alunorte embargo	●
	Maintain zero tolerance on corruption	No instance of corruption	Long-term	No instance of corruption	No instance of corruption	No registrered instances of corruption	●
					Revise Hydro's Code of Conduct	Completed	●
				Completion of Code of Conduct e-learning by 90% of staff employees	Strengthen compliance awareness in operations. Provide data privacy training	Completed	●
Bigger							
Greener	Become carbon-neutral from a life-cycle perspective	Zero	2020	Establish climate strategy towards 2030	Review climate risk analysis	On track	●
	Deliver on reforestation ambition	1:1	Continuous	1:1	1:1	On track[3)]	●
	Deliver on reforestation ambition	Eliminate historical rehabilitation gap	2020		Continous process	Completed, historical gap closed	●
	Making a positive difference	Contribute to quality education and capacity building for 500.000[4)]	2030	Implement reporting methodology to track progress	Develop and test reporting system	On track	●
		Supplier development within HSE and human rights issues	Long-term	Develop and test new solution to initiate and track improvements	Identifying improvement needs in existing supplier management systems	On track	●

1) Relates to Bauxite & Alumina.
2) Relates to Hydro's consolidated operations in Brazil. There is no specific target for Hydro's consolidated operations in Brazil, and the targets are the same as for Hydro's global operations.
3) From 2018 the target covers two hydrological seasons. This revised definition takes into account the nature of the mining cycle, and the time lag is necessary to ensure quality rehabilitation to restore biodiversity.
4) While this is a global target, Hydro's operations in Brazil will be a significant contributor to reaching the target.

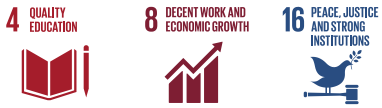
Green light: Ambition on track and on target; Amber light: Ambition behind plan, but on target; Red light: Ambition might not meet the medium-term target

Hydro and the UN Sustainable development goals

The UN Sustainable Development Goals (SDGs) embrace a universal approach to the sustainable development agenda. They explicitly call on business to use creativity and innovation to address development challenges and recognize the need for governments to encourage sustainability reporting. Hydro has an impact on all of the 17 development goals, but some more than others. Of the 17, Hydro has chosen eight goals that are the most important to us, that are highlighted throughout the report.

Improving our footprint

Making a positive difference



Driving innovation

People, Planet and Products: Hydro's sustainability approach in Brazil for a more viable society

As a fully integrated aluminium company in Brazil, from mining to refining and the delivery of full customized solutions to the market, Hydro has a clear vision of its responsibility in delivering its commitment as a "good neighbor" and to be a leading voice in the industry's sustainability agenda.

Aluminium is the metal of the future, a key building block for the low-carbon, circular economy that contribute to a modern and viable society. Nonetheless, as all materials, it also comes with a footprint. We see it as our responsibility to minimize the footprint when producing it, while generating value to society.

Hydro is committed to conducting responsible and safe operations. We have set comprehensive goals to reduce our environmental impacts and emissions in production, develop greener products, strengthen local communities and business partners, and drive positive long-lasting socioeconomical changes, starting with the bauxite and alumina production in the state of Pará, through to our extrusion plants in the states of São Paulo and Santa Catarina.

We aim to manage our impact on biodiversity and promote efficient resource management throughout our operations. We have also made important progresses in our commitment to contribute to the development of local communities, promoting education and capacity building.

Hydro has advanced community dialogues, actively seeking proximity with stakeholders and has increased its transparency efforts. We engaged in more than 200 community dialogues throughout 2019 and have continued implementing an Open-Door program, facilitating systematic visits to our units from main stakeholders with more than 1800 visitors in 2019. Additionally, we seek to have a constructive dialogue with the traditional communities which are neighboring our pipeline in Pará State, maintaining an open channel with the Quilombola communities, including the engagement of Palmares Cultural Foundation for the construction of a sustainable approach to the territory development.

Additionally, we are addressing the recommendations set out in the Human Rights Procedural Due Diligence (HRDD) and Human Rights Impact Assessment (HRIA) performed in 2019-2020 covering our Pará operations, currently implementing action plans with specific targets.

People

We believe that our activities must make a positive difference for people inside and outside our fences. We have a responsibility for the sustainable development of the areas in which we operate. We have learned that we can only succeed as a company if the communities around us also succeed. We work to be a good neighbor for the local communities, choosing to be open, transparent and respectful. We strive to make a positive impact and support social change, and work in alignment with the UN Sustainable Development Goals.

We have made progress in our commitment to support local development through quality education and capacity building. We consistently carry out social programs in education and training for sustainable development that benefited 15,000 people in Pará only in 2018 and 2019; the Embarca 360 Project, entrepreneurship coaching for teenagers ; the *Todos pelo Trabalho,* improvement of working skills*;* and the Sustentar Barcarena Program, capacity building for waste collectors, all of them in Barcarena, are clear examples.

And we are proud to support initiatives that contribute to the sustainable social development, committing to realize R$100 million in community investments through the Hydro Sustainability Fund (HSF) via the Sustainable Barcarena initiative (SBI). SBI had its first Call for Proposals in 2019. We support local cultural initiatives and agricultural fairs that harness tourism and socioeconomical development, such as the Pineapple Festival in Barcarena. Our Volunteers in Action program, that was carried out by more than 1,000 volunteers among employees, contractors as well as their family members, benefited over 23,000 people.

In terms of employment, our operations generate approximately 13,500 direct and indirect jobs. We value each and every member of our workforce. As example of our ongoing efforts, 76% of our workforce in Pará are born within the state. We invest in several initiatives that aim to support local development, such as The Hydro Supplier Development Program, which reached almost 200 local businesses.

Planet

Most of our assets in Brazil, as well as operations and employees are in the Pará, in Northern Brazil. We do not underestimate the challenge of producing aluminum in this critical biome. We work through reducing our environmental footprint (ecological, carbon and water), proactive management of impacts, resources and waste and socio-environmental contribution, aiming at an open and transparent dialogue.

Our most significant impact on biodiversity is at our mine in Paragominas, where the land is cleared for bauxite mining. A rehabilitation program is in place to monitor the flora and fauna and improve the process to rehabilitate the mined areas, with the long-term ambition to achieve no net loss of biodiversity. The program is being supported by local Brazilian universities in partnership with the University of Oslo and Hydro through the Brazil-Norway Biodiversity Research Consortium (BRC).

In order to tackle challenges and based on our belief that sustainability can drive profitability, we are investing in advanced technologies and harnessing sustainable initiatives to make our operations even safer and more responsible. Among our major efforts, we highlight the pioneer use of the press filter technology in Alunorte refinery, the world's most modern residue disposal system, which significantly reduce the humidity of the bauxite residue. This allows dry stacking and then compacting, reducing in relative terms 4x the area used for disposal than for the previously used drum filter; the recent improvements in Alunorte water treatment facility, resulted in one of largest water treatment system in Brazil with an investment of BRL 675 million to increase storage capacity aiming to keep operations well prepared to manage rainwater volumes also due to climate changes.

In 2019 we have initiated the tests of the "Tailing Dry Backfill " at Mineração Paragominas. The methodology eliminates the need for continuous construction or upgrade of new permanent tailings dams. The pioneer application represents the end of the use of large dams for permanent storage of bauxite tailings and we expect to have implemented by the end of this year.

Moreover, in 2020 we have entered into a partnership to change parts of the energy matrix at Hydro Alunorte, which aims to replace a major part of fuel oil consumption at the alumina refinery with natural gas which will reduce the emissions of CO2 and other gases including sulfur oxides. The implementation of this project can also serve as a booster for the local economy.

Products

Our bauxite and alumina operations are certified according to the Performance Standard and Chain of Custody Standard by the Aluminum Stewardship Initiative (ASI), attesting that our plants operate according to defined standards related to governance, policy and management, transparency and reporting, environment and biodiversity, social issues and labor rights, to mention some.

In addition, our Extruded Solutions business area develops several high-performance products, including doors & windows, industrial applications (furniture frames, LED heat sinks and others) and precision tubing products for the automotive market. All products are created and certified according to Brazilian specifications standards of quality and performance.

Sustainability now is the key to our future

Great challenges require answers based on a clear vision, strategy, and above all, implementation of effective solutions. We are moving forward with our sustainability strategy always pursuing our mission to create a more viable society. Our mission expresses our purpose. It sets the standard that we, as a company and as individuals, aspire to live up to.

In this report, we share the relevant information about the impact we have and what we are doing to improve – on climate, on environment and on social responsibility – and we keep track of our efforts and our ability to improve further every day, year over year.

John Thuestad
Hydro's Executive vice-president for Bauxite & Alumina

Our approach

Quick overview

This chapter includes relevant information related to Hydro's approach to environmental and social performance.

More quantitative information is included in the Environmental and social statements.

The information is based on Hydro's global reporting in the Annual Report 2019 which has undergone limited assurance by our external auditor KPMG.

Hydro reports in accordance with the GRI Standards' "Core" option. Please see the GRI index for our Brazilian operations at www.hydro.com/gri

The Hydro Way

The Hydro Way is our approach to business. It's an approach that has lived within Hydro since its foundation in 1905 and guided our development over the years. The Hydro Way originates from our company's identity – our unique set of characteristics – and constitutes a way of doing things that differentiates us from other companies. As part of the integration of Extruded Solutions following the acquisition of Sapa in 2017, The Hydro Way was updated in 2018 to better reflect the new identity of the company.

The Hydro Way explains how we run our business through:

- Our purpose
- Our values
- Our operating model

These principles help us set priorities and serve as a reference point when questions arise. Our purpose is supported by our values and defines how we conduct our business:

Hydro's purpose is to create a more viable society by developing natural resources into products and solutions in innovative and efficient ways.

In order to ensure a uniform high standard, Hydro's constituting documents and global directives lay down requirements for our operations. Some of these are publicly available at www.hydro.com/principles

Our overall approach to social, environmental and governance issues is integrated in Hydro's overall business strategy. In addition, we have specific support strategies e.g. on climate change, environment and CSR - as described in this section.

Hydro has been listed on the Dow Jones Sustainability Indices (DJSI) each year since the index series started in 1999. We are also listed on the corresponding UK index FTSE4Good, and the UN Global Compact 100 stock index.

MEMBER OF
Dow Jones
Sustainability Indices
In Collaboration with RobecoSAM

FTSE4Good

Our reporting approach

This section has been prepared mainly based on information provided in Hydro's Annual Report 2019, specifically the Viability performance and Viability performance statements, which have been subject to limited assurance by our external auditor KPMG.

We use the GRI Standard 101 (2016) in defining which topics and indicators that are material to report upon. The analysis is based on GRI methodology as well as Hydro's overall materiality analysis for 2019; a materiality analysis for Hydro in Brazil prepared by the consultancy ERM in 2017; and the enterprise risk management analysis for B&A for 2019. Based on these, the materiality analysis has been developed in close collaboration with representatives from Hydro's business areas in Brazil, and by using their knowledge of our continuous stakeholder dialogue. Please see page 19.

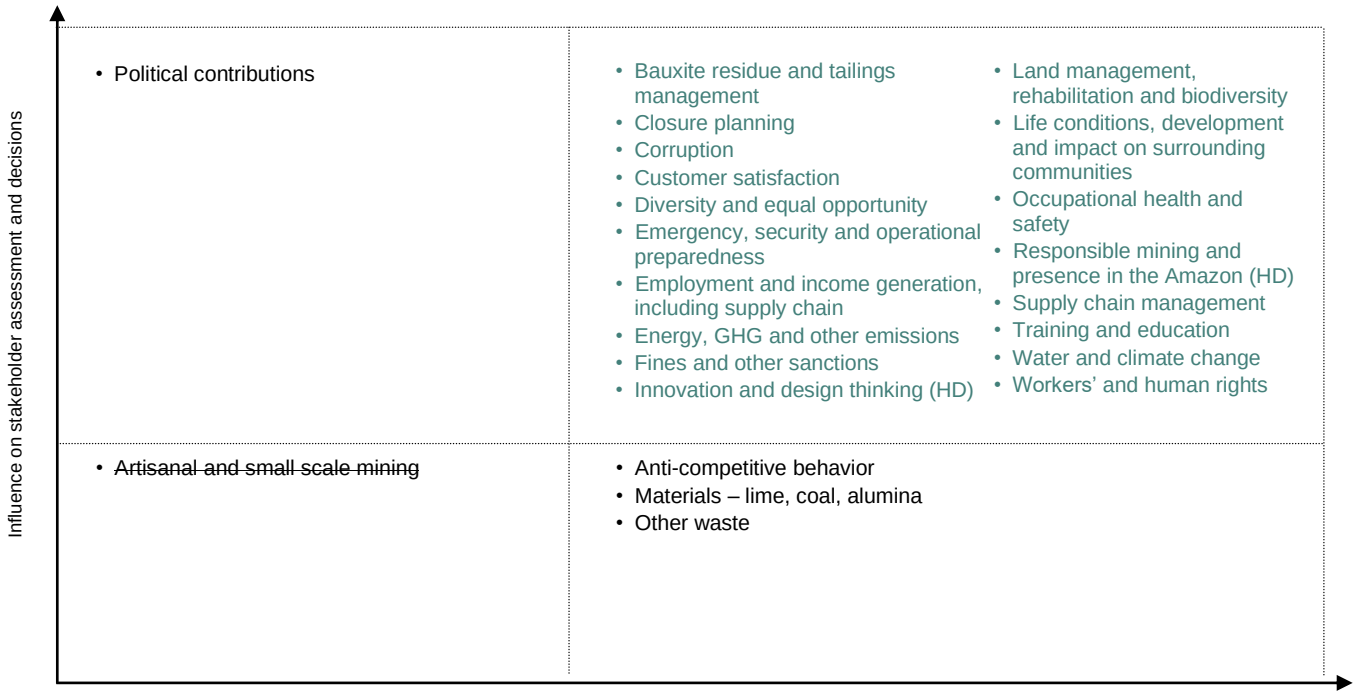
The material topics are reported throughout this report Hydro's GRI index for Brazil at www.hydro.com/gri

The information has been reviewed by a steering committee consisting of the most relevant senior specialists in Brazil and Hydro globally and finally approved by Executive Vice President and Head of Bauxite & Alumina, John Tuestad, and Executive Vice President and Head of Communication & Public Affairs, Inger Sethov. The board of directors of the parent company Norsk Hydro ASA has approved the country-by-country report. Read more about our reporting principles and materiality process on page 46.

The underlying details in the reporting are based on different reporting frameworks that are important to us, including the UN Global Compact, the GRI Standards, the International Council on Mining and Metals' (ICMM) 10 principles and Position Statements, and the Aluminium Stewardship Initiative's (ASI) 11 principles and underlying criteria. The GRI index at www.hydro.com/gri also shows Hydro's adherence to the UN Global Compact, ICMM and how we relate to ASI, the UN Sustainable Development Goals and UN Guiding Principles on Business and Human Rights - and shows how the different frameworks connect with each other.

Materiality analysis 2019 – Hydro in Brazil

Topics are prioritized in four quadrants, but not prioritized internally in each quadrant



The matrix is based on the GRI Standard 101 Foundation 2016 and has been approved by Executive Vice President and Head of Bauxite & Alumina, John Thuestad, and Executive Vice President and Head of Communication & Public Affairs, Inger Sethov. The green topics represent those that are most material to Hydro in Brazil, while topics that are strikethrough, are considered not material. We have chosen to merge and rename certain aspects in the matrix to make the titles more relevant to Hydro and thus also more intuitive to our stakeholders. An overview of these changes can be found on www.hydro.com/gri

The main changes compared to 2018 are:
The topic "Indirect economic impacts" has been merged into the new topic "Employment and income generation, including supply chain"
The topic "Impact on local communities" has been merged into the new topic "Life conditions, development and impact on surrounding communities".
The topic "Waste (including tailings and bauxite residue) is now the new material topic "Other waste", and the new most material topic "Bauxite residue and tailings management".
The topic "Emergency preparedness" is renamed to "Emergency, security and operational preparedness".
The topic "Responsible mining and presence in the Amazon" is added as a most material topic.
Topics marked (HD) are defined by Hydro in addition to the GRI defined topics.

Energy and climate change

Alumina refining and electrolysis of primary aluminium are energy-intensive processes, and constitute the majority of Hydro's greenhouse gas (GHG) emissions. The energy source is a decisive factor on relative as well as total emissions. On the other hand, aluminium can save significant amounts of energy and GHG emissions in the use phase.

Climate change

Hydro launched a new climate strategy towards 2030 in 2019, as our carbon neutral strategy is coming to an end in 2020. Hydro's overarching ambition towards 2030 is to reduce the global climate impact of our value chain through greener sourcing, greener production and greener products. We aim to reduce our own emissions by 30 percent in 2030 and explore different paths towards further significant emissions reductions by 2050. Through greener sourcing and greener production, we also aim to help our customers in reducing their emissions through providing greener products.

Our new strategy puts more emphasis on reducing own emissions. Changes in our production portfolio might influence these targets, but our aim is still to reduce our specific emissions. We have set targets to reduce greenhouse gas 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). The baseline emissions equal 13.3 million tonnes CO2e and includes direct emissions and indirect emissions from electricity generation (scope 1 and scope 2 emissions).

The timing is dependent on implementation of specific projects and the reduction is thus not anticipated to be linear from year to year. In order to have a greener production, we are looking into projects for significant emissions reductions at Alunorte through a greener energy mix. We are also looking into improvement potentials throughout our organization.

The element greener sourcing in the new climate strategy, refers to Hydro's position as a purchaser of raw materials and energy. Hydro has the opportunity to source less carbonintensive electricity and cold metal with a lower carbon footprint. We also have the opportunity to increase the use of post-consumer scrap in metal production.

Innovation and technology development are key enablers towards reducing CO2 emissions. We have initiated a significant R&D program towards 2030 to look into different alternatives to achieve CO2-free processes. We will explore different paths such as carbon capture and storage, biomass anodes and carbon-free processes. By 2030 we expect to have a clearer view on a path to further significant emission reductions by 2050.

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 the updated climate strategy.

Since 2013. Hydro's ambition has been to be carbon neutral in a life cycle perspective. Carbon neutrality can be defined in many ways, and we define it as a balance between the direct and indirect emissions from our own operations, and the savings of applying our metal in the use phase.

Hydro's climate strategy is an integral part of our overall business strategy, aiming at driving improvements and development within the company. Consequences to 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.

The key focus areas of our carbon neutral 2020 strategy have been:

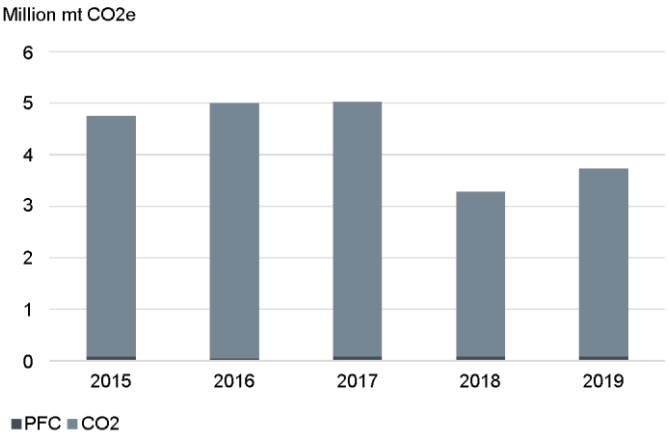
- Increased production of primary aluminium in Norway, which is based on hydropower
- Increased recycling
- Increased deliveries to the automotive sector

Hydro became carbon neutral in a life cycle perspective in 2019.

For more information about Hydro's climate model, see https://www.hydro.com/globalassets/04-sustainability/hydroclimatemodel2019.pdf

On December 12, 2019, Norsk Hydro ASA signed a USD 1,600 million revolving multi-currency credit facility with the margin linked to Hydro's greenhouse gas emission target. The margin under the facility will be adjusted based on Hydro's progress to meet its target to reduce greenhouse gas emissions by 10 percent by the end of 2025.

Direct greenhouse gas emissions from Hydro's consolidated activities in Brazil



Emissions in 2018 decreased due to the embargo at Alunorte, and curtailment at Albras and Paragominas. This is partly reversed in 2019 due to lifting of the embargo and ramp-up of production.

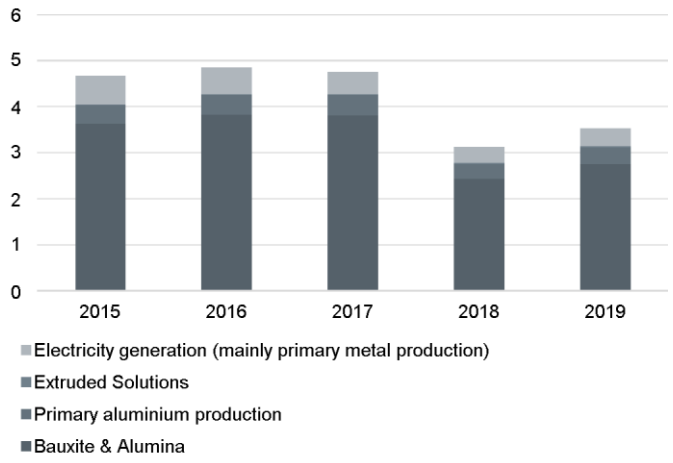
Hydro is a signatory to the Task Force on Climate-Related Financial Disclosures (TCFD). See page 262 in Hydro's Annual report 2019 for more information.

Increasing recycling of aluminium

The inherent properties of aluminium make recycling attractive. It can be recycled infinitely without degradation in quality, and recycling requires 95 percent less energy than primary aluminium production.

Hydro is a large remelter and recycler of aluminium, mainly in Europe and USA. We remelt process scrap from our own production and from other companies, as well as post-consumer scrap from the market. Currently, Hydro does not have recycling facilities in Brazil.

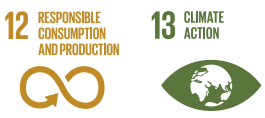
Greenhouse gas emissions from Hydro's ownership equity in Brazil



Emissions in 2018 decreased due to the embargo at Alunorte, and curtailment at Albras and Paragominas. This is partly reversed in 2019 due to lifting of the embargo and ramp-up of production.

Product stewardship

Hydro engages 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. We also assess other aspects such as energy and material consumption, toxicity and recyclability.



Hydro is an active member of the Aluminium Stewardship Initiative and has started certification of its value chain. In May 2019, Hydro's Bauxite & Alumina business area, including the bauxite mine in Paragominas and the alumina refinery Alunorte, became ASI certified as the first company in Brazil, see page 77.

Environmental impact management

The goal of our new 2030 environmental strategy is to minimize our impact along the aluminum value chain by addressing the industry's key environmental challenges. We aim to do so by driving rehabilitation at our bauxite mine, developing and implementing sustainable management solutions for our tailings and bauxite residue streams while reducing our waste to landfill from our downstream operations and significantly reducing our non-GHG emissions to air.

Hydro's bauxite mining and alumina refining activities in Pará in Brazil include open pit mining and the handling of significant amounts of tailings and bauxite residue, the latter also known as red mud. Preserving biodiversity is important related to our activities in Pará. Hydro has primary aluminium production at Albras, in Barcarena in the state of Pará in northern Brazil.

For information related to the Alunorte situation, see the section "The Alunorte situation" in Hydro's annual report 2018.

In addition to the existing climate and recycling strategies, we prioritize the following areas:

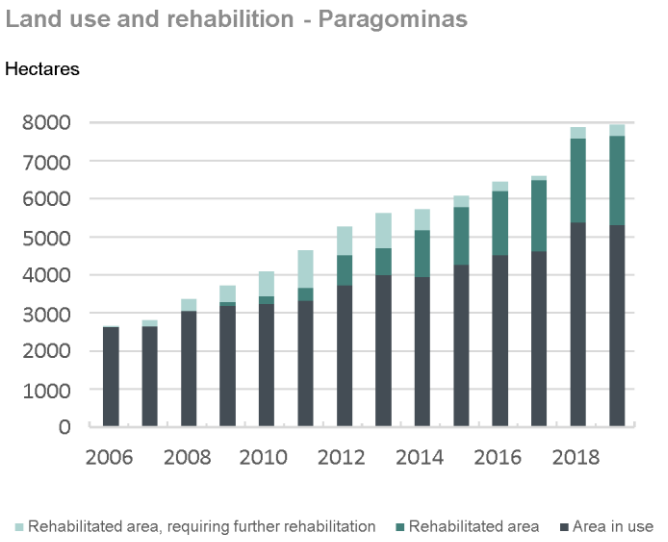
- Ecosystems and biodiversity
- Water stewardship
- Waste and efficient resource use
- Product stewardship

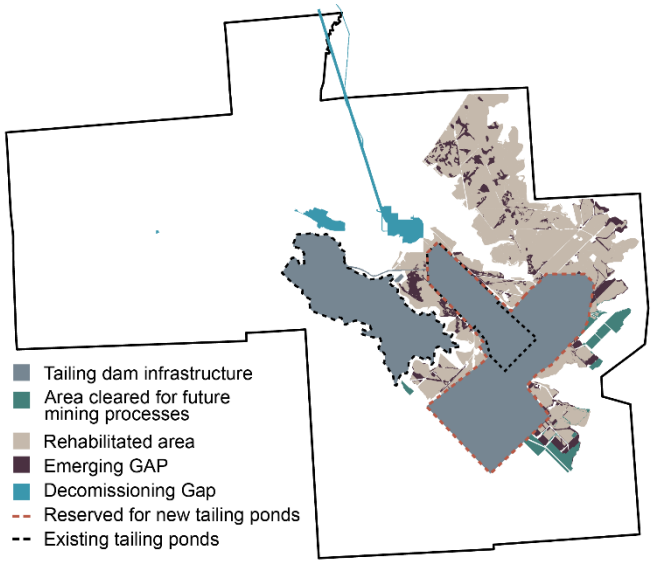
Ecosystems and biodiversity

When developing new projects, we perform an environmental risk analysis as part of our impact assessment, following internationally recognized guidelines (e.g. International Finance Corporation) and identify mitigating actions that will facilitate our ambition of achieving no net loss of biodiversity. This is an area under development internationally, and we participate in the Cross Sector Biodiversity Initiative (CSBI), which is a joint effort between ICMM (the mining industry), IPIECA (the petroleum industry) and the Equator Principles Association.

Hydro's bauxite mine, Paragominas, is located in the state of Pará in Northern-Brazil, in the Amazon Basin. The rehabilitation target in our mining areas provides a driver for

rehabilitation. It is a rolling target, aiming for a 1:1 rehabilitation of mined areas available for rehabilitation over two hydrological seasons after release. This definition takes into account the nature of the mining and rehabilitation cycles, and the time lag necessary to ensure quality rehabilitation to restore biodiversity. It also takes into account that land periodically needs to be set aside for temporary infrastructure, e.g. roads, in order to safely operate the mine.





The 2020 target of closing the historical rehabilitation gap inherited from the former operator was achieved in 2018. See note E6.2 to the Environmental statements for further information.

When tailings dams are closed, they need to settle for at least five years before they will be available for rehabilitation. We will then get a new rehabilitation gap. This will differ from the rehabilitation gap that Hydro adds to on a daily basis as a result of its mining (due to the specific nature of tailings) and will require a tailor-made rehabilitation strategy.

To increase our knowledge and secure a science-based approach to rehabilitation, the Biodiversity Research Consortium Brazil-Norway (BRC) was established in 2013, learn more about our partnerships on page 20.

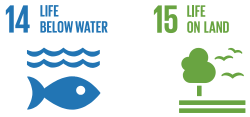
Hydro uses three different methods for rehabilitation in Paragominas, based on different needs:
- Traditional rehabilitation
- Natural vegetation
- Nucleation method

Since 2013, Hydro has used the nucleation method in Paragominas for rehabilitation. Topsoil is unevenly distributed to simulate natural landscape and trap rainwater. Piles of cut wood are distributed, creating shelters for animals and improving growing conditions for some plant species. The ambition is to establish a forest system of the same structure that is typical of the forest in the area and to secure as much biodiversity as possible. The method has been approved for testing in MRN and Paragominas by the relevant environmental authorities and is showing encouraging results.

Two new insect species have been recorded by the Hydro-supported biodiversity project in the Amazon; one parasitic wasp and a true bug that lives inside rotten wood. The research project is part of Hydro's work in Brazil with reforestation after bauxite mining.

Water

Our main impact on waterways comes as a result of discharges to external water bodies. Where the authorities deem it appropriate, these discharges are regulated by relevant permits. Water withdrawal of groundwater from our own wells and through public water works may in addition have an effect on life below water.



Hydro use the WRI Aqueduct water tool to perform an annual review of water withdrawal from water-stressed areas. According to the definition by WRI Aqueduct, Hydro's sites in Brazil are not located in water stressed areas.

In 2017, Hydro developed a basic water risk analysis tool, covering water use and discharge, to be applied across key operations. Preliminary findings supported the results of the WRI Aqueduct tool - operating in water-stressed areas is not a material risk for Hydro's key operations. Instead, the more material risks are linked to the management of excess water and the quality of the external bodies into which Hydro discharges process water. As a first step towards implementing risk-based water management targets and increased local stakeholder engagement, Hydro is strengthening current water reporting and management practices. We aim to have implemented industry best practice water reporting by 2021.

Our alumina refinery Alunorte obtains an important part of its water supply through the bauxite slurry that is transported from the Paragominas bauxite mine by pipeline. Paragominas' and Alunorte's water use is close to their current regulatory limits. To learn more, see note E4.2 to the environmental statements. Based on new hydrological studies of the Parariquara river, Paragominas' water extraction permits were revised in 2018. However, water collection can still be an issue if a new third-party user requests water extraction from the same watershed. If so, a new license will be needed for an additional extraction point.

Waste and efficient resource use

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

Our goal is to minimize the amount of waste produced when technically and economically feasible and then reuse or recycle it. When this is not possible, we shall deposit it in a secure way to minimize adverse effects to people and the environment.

Tailings and bauxite residue
Tailings from bauxite extraction consist of mineral rejects from the extraction process mixed with water and flocculants. The tailings at Paragominas are stored in dedicated tailings dams, where the particles settle. Run-off water is collected in a separate water pond and reused. The water pond prevents overflow to the river during heavy precipitation. The run-off water is monitored, and the water quality meets the requirements set by the authorities.

In Paragominas, a new tailings system was completed in 2017. The new tailings dam is situated on a plateau where mining has been finalized. The old tailings system is constructed in a shallow valley. When tailings dams are closed, they need to settle for at least five years before being available for rehabilitation.

Bauxite residue is a waste product of the alumina refining process. Its disposal is challenging due to large volumes and the alkaline nature of the liquid component of the residue. The residue is washed with water to lower the alkalinity and to recover caustic soda for reuse. Hydro uses an enhanced dry stacking technology for disposing of bauxite residue which allows for residue storage at steeper slopes, reducing the disposal area requirements. This reduces the relative environmental footprint. The new bauxite residue deposit area at Alunorte includes more advanced press filters. These are capable of reducing the residue moisture content to 22 percent, down from 36 percent achieved with the previous drum filters technology.

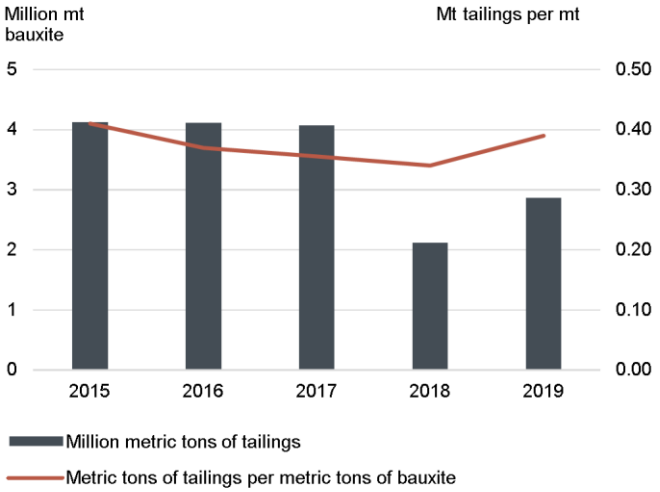
Alunorte will perform a socioeconomic study on possible impacts of the new bauxite residue storage area. If the study indicates a need for compensatory measures, such measures shall aim to contribute to sustainable and long-term improvements in potentially affected communities. Moreover, Alunorte is committed to involve Ministério Público Federal in the potential necessary updates of the environmental license.

The dams and waste solids deposits are regularly inspected by Hydro and the Brazilian authorities. They have also been reviewed against international standards by external international geomechanical consultants NGI and Geomecanica. The last site visit by NGI and Geomecanica took place in 2016. The resulting actions points were prioritized and are currently in the process of being closed. The majority have been closed successfully, with a smaller number still outstanding.

The tailings storage facilities at Paragominas are raised exclusively using the downstream elevation method, with the exception of one relatively short and low centerline raising at the very top of the dam. The downstream elevation method provides the greatest level of structural integrity and safety. In addition, the tailings stored in our Tailings Storage Facilities are of a higher solids content (ca 55-60 percent solids content) than that generally found in the iron ore industry (e.g. Samarco and Brumadinho).

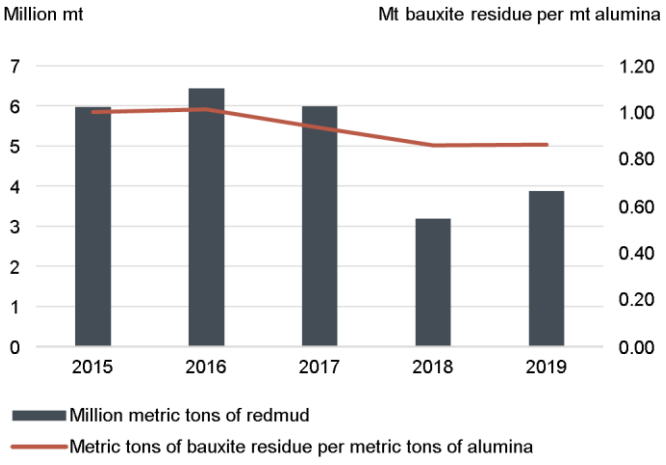
Safe operations in compliance with regulatory requirements are crucial for Hydro. The Paragominas dams are stable and regularly monitored and audited by external experts. The dams meet all parameters of current environmental and mining legislation.

Tailings from bauxite production



Tailings production decreased significantly in 2018 due to the Paragominas curtailment. This is partly reversed in 2019 due to lifting of the embargo and ramp-up of production.

Bauxite residue from alumina production



Bauxite residue production decreased significantly in 2018 due to the Alunorte embargo. This is partly reversed in 2019 due to lifting of the embargo and ramp-up of production.

Hydro is also a 5 percent shareholder in Mineração Rio do Norte (MRN)[1], where the tailings disposal process is designed to allow tailings to achieve a final solids content similar to that of Paragominas. MRN is the operator of the mine and is responsible for the management of its tailings system. Hydro works with MRN and the other shareholders through the board of directors and relevant technical committees to require the safe operation of MRN's tailings ponds in accordance with applicable laws and standards.

Hydro's tailings storage facilities and bauxite residue storage areas are operated in line with all relevant regulations; however following the extreme rain event in February 2018, the free board levels at DRS1 were exceeded for a few days, leading to a production embargo at Alunorte. No leakage from the bauxite residue storage areas were found after several inspections performed by local and national authorities. We also follow voluntary best practice and audits are conducted by international third parties. Following the Brumadinho tragedy in January 2019, Hydro reviewed its tailings storage facilities to ensure continued safe operations and management. Hydro continues to work on improving its tailings management practices and collaborate with relevant stakeholders. Hydro participated in the tailings storage facilities disclosure request initiated by investors and cochaired by the Church of England pension board in the first half of 2019. Hydro is also participating in the drafting of a new International Standard for Tailings Storage Facilities through our membership in ICMM, which is one of the three co-conveners of the International Standard alongside UN Environment Program (UNEP) and PRI, an investor initiative in partnership with UNEP Finance Initiative and UN Global Compact.

Hydro participates in international collaboration projects investigating possibilities to use bauxite residue as a resource. See the section Innovation and Design Thinking later in this report. Hydro has launched a new target to utilize 10 percent of bauxite residue generated from 2030. In addition, we are supporting a PhD candidate in advanced closure management of bauxite residue deposits.

Other waste

Spent potlining (SPL) – or anode waste – from the electrolysis cells used in primary aluminium production is defined as hazardous waste. The production of SPL varies with the relining of smelter cells, which is normally done every 4-7 years for established aluminium plants. For information about SPL production, see note E5.2 to the environmental statements.

Albras has a significant stock of SPL. This is being reduced according to the annual plan and target, and being delivered as a raw material to the cement industry in Brazil. This agreement is an example of efficient and safe resource use that is sound for the environment by substituting fuel or raw materials while reducing landfill and saving landfill costs. Since 2016, Albras has reduced its stock of dross from 1,319 to 36 metric tons. In September 2018, the plant also implemented a program to reduce generation of this hazardous waste based on process control. Promising results have been achieved since the start-up.

Following a mass balance of mercury at Alunorte, which was concluded in 2017, Hydro decided to install four mercury condensers on the digestor lines. The first condenser was installed in 2018 as a pilot and, based on the technical performance, the remaining three were planned to be installed and commissioned in 2020. The process is delayed, and we expect it to be installed and commissioned in 2021.

Ensuring a culture of compliance and integrity

Hydro's board-sanctioned Code of Conduct creates the foundation that supports our efforts to do the right things and to always act with integrity throughout our global organization wherever we operate and conduct business on behalf of Hydro. It requires adherence with laws and regulations as well as internal steering documents and is systematically implemented and followed up through our compliance system.

Our compliance system is based on a clear governance structure defining roles and responsibilities with regard to compliance and all compliance-related activities undertaken throughout the company.

The management of compliance risks, including risks related to corruption and human rights violations, are integrated in our business planning, enterprise risk management and follow-up process, including relevant risk-mitigating actions and key performance indicators.

Combating corruption and respecting human rights are integral to our supplier requirements. Procedures are in place relating to assessing the integrity risk of business partners

[1] Hydro has a five percent ownership interest and off-take agreements with Vale for a further 40 percent of the volume produced by MRN.

and detecting fraud. Regular transaction-based screening of customers and suppliers is also carried out. In 2020, Hydro continues to evaluate its integrity risk management approach to ensure adequate management of relevant risks.

An integrity index has been introduced in Hydro's employee engagement survey, and will be part of the survey taking place in 2020. The index will benchmark the employee perception of our integrity culture. It aims to identify weaknesses and provide us with a good basis for specific and tailored compliance activities going forward.

Hydro aims to strengthen sanctions and trade compliance awareness by e-learning and tailored classroom training for exposed functions. The roll-out of e-learnings in Hydro was impacted by the cyber-attack, and will continue in 2020. The enhanced sanctions and trade compliance framework was established during the end of 2018.

We are committed to building a culture of trust where employees are comfortable to ask questions, seek guidance, raise concerns, and report suspected violations. Normally, concerns and complaints should be raised with the employee's superior. However, if the employee is uncomfortable with that, he or she may raise the issue with human resources, HSE (health, safety and environment), a union/safety representative, compliance, legal or internal audit. The employee can also use Hydro's whistle-blower channel, AlertLine, where concerns can be reported anonymously. All employees and on-site contractors can use the AlertLine in their own language at all times via toll-free phone numbers, Hydro's intranet or through a dedicated address on the internet. In certain countries, e.g. Spain, there are, however, legal restrictions on such reporting lines.

All cases reported through the AlertLine were assessed, and investigations were performed where relevant. In total, 1 person was dismissed in our operations in Brazil as a result of reported breaches of Hydro policy in 2019, please see note S10.1 for more information.

The head of internal audit reports to the company's board of directors through the board audit committee. Every quarter, she informs the board audit committee and periodically the corporate management board about matters reported through the AlertLine. Hydro's internal audit has a department in Brazil, with presence in Rio de Janeiro and Belém, being responsible for audits and investigations in South America.

For more information about Hydro's performance on compliance, see note S10 to the Social statements in this report.

Transparency

Transparency is key to creating a global level playing field as well as to safeguard the company's reputation. Hydro supports the Extractive Industries Transparency Initiative (EITI) and, since 2005, we have reported payments to host governments related to exploration and extraction activities for bauxite. We also comply with the Norwegian legal requirements on country-by-country reporting, see page 83. The report has been approved by Hydro's board of directors.

For information about collaboration with civil society, see Partnership section on page 20.

Stakeholder dialogue

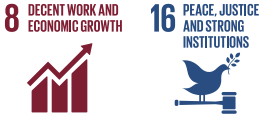
Engaging with our stakeholders helps us understand what is expected of us, what is important to our stakeholders and how we can solve common challenges. As a global company, Hydro participates in a wide range of activities, from local community meetings to national and international multi-stakeholder and industry association discussions. We are committed to interacting with all our stakeholders in an ethical and transparent manner. We strive to demonstrate integrity in everything we do.

Our dialogue and engagement covers a large number of stakeholders and individuals, such as unions, works councils, academia, customers, suppliers, business partners, authorities, industry associations, non-governmental organizations and local communities, including vulnerable groups. See figure on page 20.

We will consult with interested and affected parties in the identification, assessment and management of all significant social, health, safety, environmental and economic impacts associated with our activities. For more information regarding stakeholder dialogue and human rights, see page 21.

When planning new projects, we map the environmental and social impact when relevant. Before major developments or large expansions are undertaken, it is a requirement to conduct an impact assessment, in line with internationally accepted standards. Both follow standards such as the International Finance Corporation Performance Standards, Equator principles and UN Guiding Principles on Business and Human Rights. This includes the principle of free, prior and informed consent when indigenous and traditional peoples are involved. The assessments follow the requirements regarding information, consultation and investigation of the project's environmental and social impact, including human rights, as well as action plan and proposed initiatives.

Dialogue with affected groups gives input to plans, detailing our environmental and social responsibilities. We strive to act in an open and credible manner, and gather views from interested parties, aiming for a common understanding of the decisions that are made.



Dialogue with the employees' representatives includes involvement at an early stage in all major processes affecting employees, and we have a tradition for open and successful collaboration between management and unions.

All business areas have a forum for dialogue between the management and union representatives. Hydro's Global

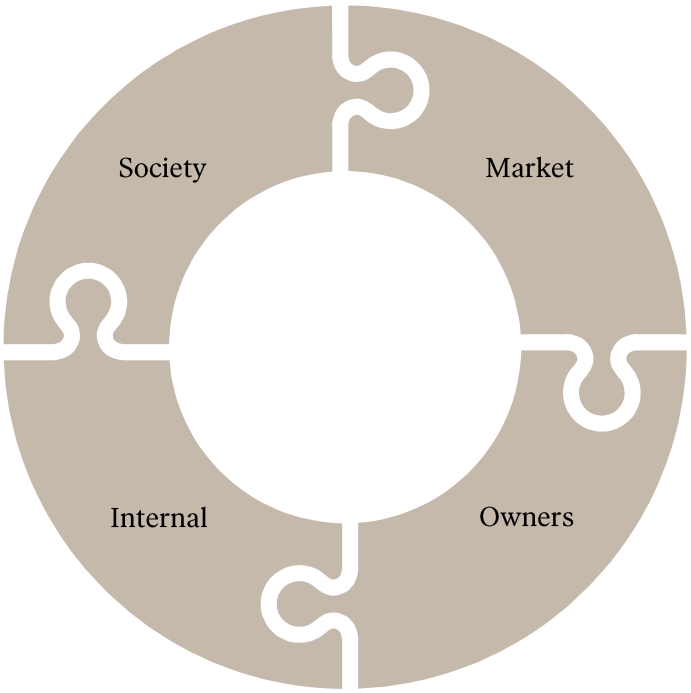
Framework Agreement was last updated in 2016. The parties are currently negotiating a new agreement.

Grievance, or complaint, mechanisms are important to understand the impact of Hydro's operations, and the impact on the rights of individuals and groups affected by our operations. Grievances may be of any kind, including social and environmental issues, and can be made anonymously to Hydro through various mechanisms. For more information on human rights and grievance mechanisms, see page 21.

Hydro will not tolerate retaliation against anyone who speaks up in good faith to ask a question, raises a concern, reports a suspected violation or participates in an internal company investigation.

Stakeholder mapping in Hydro

- Academia
- Authorities
- Industry associations
- Lobby groups
- Local communities
- Media
- National and international unions
- NGOs
- Politicians
- Public offices
- R&D funding bodies



- Commodity and stock exchanges
- Competitors
- Customers
- End users
- Insurers and banks
- Partners/joint ventures
- Suppliers
- Other business relations

- Board of Directors
- Corporate Assembly
- Employee representatives
- Employees

- Owners/shareholders
- The Norwegian government
- Financial markets
- Analysts
- Traders
- Brokers
- Ratings agencies

Partnerships

Hydro works through industry and aluminium associations to establish a level playing field for global aluminium production. We support the development of international frameworks on climate change and greenhouse gas emissions and participate actively in organizations such as the World Business Council for Sustainable Development (WBCSD) and the International Emissions Trading Association, to provide business solutions to the climate change challenge. In addition, we engage actively in initiatives fostering increased recycling and material stewardship and are a member of the Aluminium Stewardship Initiative.

The ongoing loss of biodiversity and degradation of ecosystems represent long-term risks for the industry and society at large. We see a need for more sustainable frameworks and participate in several initiatives, including the WBCSD's Ecosystem Program. 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.

To increase our knowledge and secure a science-based approach to rehabilitation, the Biodiversity Research Consortium Brazil-Norway (BRC) was established in 2013. BRC consists of the University of Oslo and its Brazilian partners Museu Paraense Emílio Goeldi, Federal University of Pará and Federal Rural University of the Amazon, in addition to Hydro. The scope of the consortium is to create a research program connected to our mining operations. The aim is to strengthen Hydro's ability to preserve natural biodiversity and to better rehabilitate the areas where we mine bauxite. Thirteen research projects are progressing, while more projects are in the pipeline.

To join forces in collective action is critical in the fight against corruption. Hydro is a long-standing corporate member of Transparency International (TI) and participates regularly in seminars with TI and by providing content to TI publications. Hydro is also a member of the Maritime Anti-Corruption Network (MACN), which provides valuable insight into the maritime industry - an important part of our supply chain. In 2018, Hydro through Alunorte, Albras, Mineração Paragominas and Norsk Hydro Brazil, became signatory of the Business Pact for Integrity and Against Corruption. The Pact is developed by the Ethos Institute in

partnership with global organizations such as the United Nations and the World Economic Forum, seeking to unite companies with the objective of promoting a more ethical market and to eradicate bribery and corruption in Brazil. In 2019, we further strengthened our relationship with Instituto Ethos by becoming an associate partner. Hydro is also a signatory to the World Economic Forum's Partnering Against Corruption Initiative (PACI).

Hydro has had a long-standing partnership with Amnesty International Norway since 2002. The partnership is based on human rights education and dialogue meetings on relevant human rights dilemmas. We also cooperate with the Danish Institute for Human Rights for external expertise to further develop, maintain and strengthen our approach to human rights. To contribute to the strengthening of human rights frameworks, we also participate in relevant forums, such as ICMM, ASI and UN Forum on Business and Human Rights.

In 2019, we continued our partnership with Save the Children to contribute to quality education for children. The partnership will not be extended beyond 2019. From 2020, Hydro is a Signature Partner of UNICEF Norway.

In addition, we collaborate with global and local industry organizations, NGOs and other organizations. See www.hydro.com for an overview of important partnerships. For information about how we collaborate with other institutions within R&D, please see the section Innovation and Design Thinking later in this report.

Public affairs and lobbying

Given the nature of our industry, Hydro is particularly involved in policies dealing with climate change, recycling, viable production and consumption, trade, energy efficiency, energy markets and infrastructure, health and safety in the workplace, competition and other framework conditions pertaining to our industry.

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 in which we have significant operations, such as Brazil. These interactions are mainly related to securing favorable, stable and predictable industry framework conditions, taxes and legislation that might have considerable consequences for 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. These include the International Aluminium Institute, the Brazilian Aluminium Association, the World Business Council for Sustainable Development, and more, see GRI Standards 102-12 and 102-13 at www.hydro.com/gri

Most resources are dedicated to advocacy activities through business associations, and direct dialogue with authorities and decision makers.

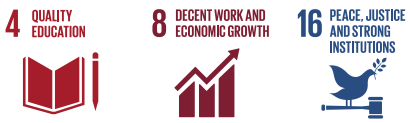
Hydro supports the principles of free trade and open market, and efforts to create a global level playing field. In addition, in our advocacy we support the climate targets set in the Paris Agreement.

For information on spending on public affairs and lobbying, see note S12 to the Social statements in this report.

According to our Code of Conduct, Hydro may not make financial contributions to political parties.

Human rights and community impact

As a global aluminium company with mining interests, ensuring responsible conduct in relation to society at large is important throughout Hydro's value chain. We have to consider our impact on society, spanning from construction to divestment activity, as well as the exposure to corruption and human rights violations, both within our own operations, the communities we are part of, and in the supply chain.



Respecting human rights

We are committed to respecting and promoting the human rights of all individuals potentially affected directly or indirectly by our operations. As an employer, owner and purchaser, an important contribution toward respecting human rights is to secure decent working conditions in our organization, in minority-owned companies and with our suppliers. Information pertaining to Hydro's human rights policies and compliance is regularly discussed with the board of directors, the Corporate Management Board, business area management teams, and relevant parties such as union representatives.

As an employer, owner and purchaser, an important contribution toward respecting human rights is to secure decent working conditions in our organization, in minority-owned companies and with our suppliers. Information pertaining to Hydro's human rights policies and compliance is regularly communicated to the board of directors, the Corporate Management Board, business area management teams, and relevant parties such as union representatives. Hydro's policy on human rights is publicly available at www.hydro.com/principles

We do not tolerate any form of harassment or discrimination, including but not limited to gender, race, color, religion, political views, union affiliation, ethnic background, disability, sexual orientation or marital status. And we do not tolerate any form of forced labor or child labor abuse. We support the principle of freedom of association and collective bargaining. Hydro also supports key frameworks that define human rights principles and is committed to following these, including the UN Guiding Principles on Business and Human Rights and ILO's eight core conventions. For a full overview, see GRI Standards general disclosure 102-12 and 102-13 at www.hydro.com/gri. Hydro reports according to the UK Modern Slavery Act and Australia Modern Slavery Bill, see the Appendices to Board of Directors report.

Hydro's human rights management is based on the OECD Due Diligence Guidance for Responsible Business Conduct.

8 DECENT WORK AND ECONOMIC GROWTH

Hydro's framework for human rights management was reviewed in 2019. The identified necessary improvements include revision of the Human rights policy and strengthening of due diligence and risk mapping procedures. The improvement work will continue in 2020.

Hydro's human rights management

Hydro's human rights management

Policy commitment and governance

Hydro's Human Rights Policy was developed in 2013 through a multi-stakeholder process. The policy was updated in 2016 and outlines the company's commitment to respecting and promoting human rights. The commitment is integrated in key procedures, including supply chain management, new projects, portfolio management, and risk management. The policy is approved by the Corporate Management Board and is governed by the Executive Vice President of Corporate Development.

Implementation of the Human Rights Policy is a line management responsibility. Human rights risk can be addressed in the business areas' Sustainability committees or similar fora. The committees typically include senior members or members of the management team of the business area. Information pertaining to Hydro's most severe human rights risks is communicated to the board of directors, the Corporate Management Board, business area management teams, and relevant parties such as union representatives.

We expect our suppliers and business partners to follow the Universal Declaration of Human Rights, ILO's eight core conventions and other related UN documents and instruments. The minimum requirements to our suppliers are stated in Hydro's Supplier Code of Conduct.

Human rights responsibilities are part of Hydro's Code of Conduct, which is translated into 18 languages. Training in the Code of Conduct is mandatory for all employees. In addition, more specific training on relevant human rights topics is given to functions involved in procurement and social responsibility on a regular basis. E-learnings on Hydro's Social responsibility, including human rights, is available to all employees.

Due diligence: Identifying, assessing, acting, monitoring and communicating impacts

Human rights due diligence is integrated in Hydro's processes. As part of the enterprise risk management process, risk of adverse human rights impacts is discussed. Based on this, mitigating actions or activity plans are developed and included in business plans in the business areas. Business plans are monitored, followed up and evaluated through the year in regular performance review meetings. Human rights and other sustainability related issues are discussed when relevant.

Based on our process for integrity due diligence, we assess all new business partners against human rights criteria. We conduct risk-based audits and reviews of business partners and work to improve business partner performance through corrective action plans or supplier development programs.

We consult with interested and affected parties in the identification, assessment and management of significant impacts associated with our activities. This includes communicating findings and addressing mitigating actions. We also consult with human rights experts knowledgeable about the local territories where we operate or through established partnerships. For more information about our partnerships, see page 20.

Hydro's human rights management is risk-based. In countries with higher risks for adverse human rights impact, we aim to conduct stand-alone human rights impact assessments and mitigating action plans.

Before new projects, major developments or large expansions are undertaken, we conduct environmental and

social impact assessments when relevant, which includes evaluating risks for adverse human rights impacts.

Rightsholder and stakeholder engagement

We engage with rightsholders and stakeholders both internally and externally to help inform about the effectiveness our human rights management.

We are committed to the principles of non-discrimination and to respecting the rights of vulnerable individuals and groups. We aim to include vulnerable individuals and groups in our dialogues and to pay particular attention to these groups in terms of impact and remediation.

Dialogue with the employees' representatives includes involvement at an early stage in all major processes affecting employees, and we have a tradition for open and successful collaboration between management and unions.

Hydro has regular dialogue with communities, and more frequent and structured dialogue in communities with higher risk of adverse human rights impact. We develop and plan community dialogues in collaboration with affected communities, based on their needs and expectations. Community members in Brazil and at several other major sites are invited to plant visits on a regular basis. We also have regular dialogue with non-governmental organization, academia and other civil society actors to discuss our human rights management. For more information about stakeholder dialogue, see page 2.

Grievance mechanisms and remediation

Grievance, or complaint, mechanisms are important to understand the impact of Hydro's operations on the rights of individuals and groups affected by our operations. Grievances may be of any kind, including social and environmental issues, and can be communicated anonymously. In situations where we identify adverse human rights impact, we work to mitigate, prevent, address and remedy potential adverse impacts as recommended in the UN Guiding Principles on Business and Human Rights. Hydro will not tolerate retaliation against anyone who speaks up in good faith to ask a question, raises a concern, reports a suspected violation or participates in an internal company investigation.

We have several grievance mechanisms depending on stakeholder groups:

- Employees and contractors
  Employees and contractors can use Hydro's whistle-blower channel, AlertLine, where concerns can be reported anonymously. For more information about AlertLine, see page 1.
- Community members
  Channels for submitting grievances may vary depending on local needs.
  - At many of our sites, we collect information and complaints through community dialogue
  - In Brazil, we use several channels, including Canal Direto (toll-free phone number and email) and dedicated, specially trained field workers.
  - Online contact forms are also available and can be used anonymously
- Supplier and business partner employees
  Suppliers and business partners can contact us with complaints through online contact forms, which can be used anonymously.
- Customers
  Customers can contact us through online contact forms, which can be used anonymously. They can also bring complaints to their Hydro key contact person.

Managing human rights risks

Hydro recognizes that there are potential risks of adverse impacts concerning our operations, mainly in Brazil and in the Middle East, as well as in our supply chain in general. For more information about sustainability in the supply chain, see page 24. Below are some examples of how we manage human rights risks in Brazil.

The Brazilian consultancy Proactiva is currently conducting a thorough human rights due diligence (HRDD) and human rights impact assessment (HRIA) of operations in Pará state, Brazil. The due diligence covers Alunorte alumina refinery, Albras primary aluminium producer and the Paragominas bauxite mine, including the pipeline. The due diligence was high on the agenda of the Corporate Management Board in 2019, and part of their key performance indicators (KPIs). We are addressing the recommendations set out in the HRDD and HRIA, and currently implementing action plans with specific targets. We are further increasing our engagement with central Brazilian human rights stakeholders.

The relationship with institutions and local traditional communities has improved through a more structured social dialogue. In 2019, over 200 community dialogue meetings were conducted with communities next to our operations in Pará state.

Unresolved issues remain related to individuals and communities impacted by the construction of a 244-km-long bauxite pipeline that crosses areas inhabited by traditional Quilombola groups in the Jambuaçu Territory in Pará. These issues relate back to the time before Hydro became owner, and the former owner of the pipeline is still the legal party to these disputes. Hydro maintains its relations with Quilombola representatives through dedicated staff and is cooperating with Fundação Cultural Palmares to foster the dialogue and establish a positive agenda within the Quilombola territory. The Palmares foundation is the Brazilian agency in charge of Quilombolas affairs. Currently, Hydro is working together with different stakeholders, including, but not limited to, Palmares, Quilombola communities and the State of Pará, to establish an agreement that seeks to remedy impacts.

Through the Moju Sustainable Territory Program in the Jambuaçu Territory, we have taken actions to support local associations along the pipeline to strengthen their legal, administrative and governance structure. The program currently consists of several associations, with plans to expand to other interested Jambuaçu associations in 2020.

Addressing the issues in the Jambuaçu Territory was high on the agenda of the Corporate Management Board in 2019 and part of their KPIs.

In Barcarena, also in Pará, in an area surrounding Hydro's operations and regulated for industrial purposes, illegal

logging and irregular settlements have accelerated since 2016. Neither the authorities nor Hydro want settlement in the area. In addition, allegations have been made by local groups about potential environmental impacts. See Note S10.2 Legal Claims to the Viability Performance Statements.

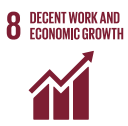
In the municipality of Oriximiná in Pará, Brazil, where the MRN[2] bauxite mine is located, there is an ongoing dispute between Quilombola communities and Brazilian authorities regarding title to land owned by the federal government. The territory claimed by these communities encompasses certain areas that are planned to be mined by MRN in the future, but MRN is not a legal party in this conflict.

Concerns have been raised about traditional peoples' rights during the process for the mine expansion. Hydro engages with MRN through the Board of Director's Committee to request that the scope of the planned environmental and social impact assessment (ESIA) and Quilombola consultation processes for the expansion project comply with local, national and international standards. MRN is currently engaged in understanding and responding to local stakeholder expectations regarding concerns over the impacts of MRN's operations on local communities.

MRN also supports the Sustainable Territories Program, a social program to promote long-term development of traditional communities in Oriximiná.

Responsible supply chain

Hydro's Brazilian operations have more than 2,000 active suppliers. Most are located in Brazil.



Hydro's supplier and business partner requirements regarding social and environmental responsibility are, as stated in our global directives and procedures, an integral part of all stages of the procurement process. The requirements cover issues related to environment, human rights, anti-corruption and bribery and working conditions, including work environment.

These requirements set out in Hydro's Supplier Code of Conduct are based on international standards, including UN Global Compact, the ILO core conventions, UN Guiding Principles on Business and Human Rights and other UN documents and instruments. The Supplier Code of Conducted will be updated in 2020.

The principles 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's responsibility to actively promote the principles with its own suppliers/contractors and sub suppliers/subcontractors of any tier that have a material contribution to the supply of goods and services to Hydro under the contract.

Group Procurement was established as a global function in Hydro in 2019 to ensure better coordination and more efficient procurement processes, including risk management.

Hydro's procedure for integrity risk management of business partners includes suppliers and customers, strategic partners and intermediaries/agents. It sets requirements for risk assessments and integrity due diligence when entering into a new business relationship or renewing an existing contract. Implementation is risk-based and takes into consideration contractual value, sector specific risk, human rights risk, corruption risk and more.

Suppliers, customers and other business partners registered in our main accounting systems are screened on a weekly basis against recognized international sanction lists. Furthermore, supplier audits and site visits are performed by Hydro personnel and external auditors based on risk analyses.

A non-compliance with or breach of the principles in Hydro's Supplier Code of Conduct that is not able to be corrected within a reasonable period may lead to termination of the supplier contract.

Examples of monitored risks in Hydro's supply chain include business practices, environmental risks and risks to people. These risks are integrated in Hydro's Supplier Code of Conduct, integrity risk management and supplier audits.

The risk of incidents of child labor abuse, compulsory or forced labor in our supply chain is low in the majority of Hydro's business areas. We do, however, recognize a risk of forced or compulsory labor among suppliers in the Middle East, South America and Asia. This is addressed in our supplier audits.

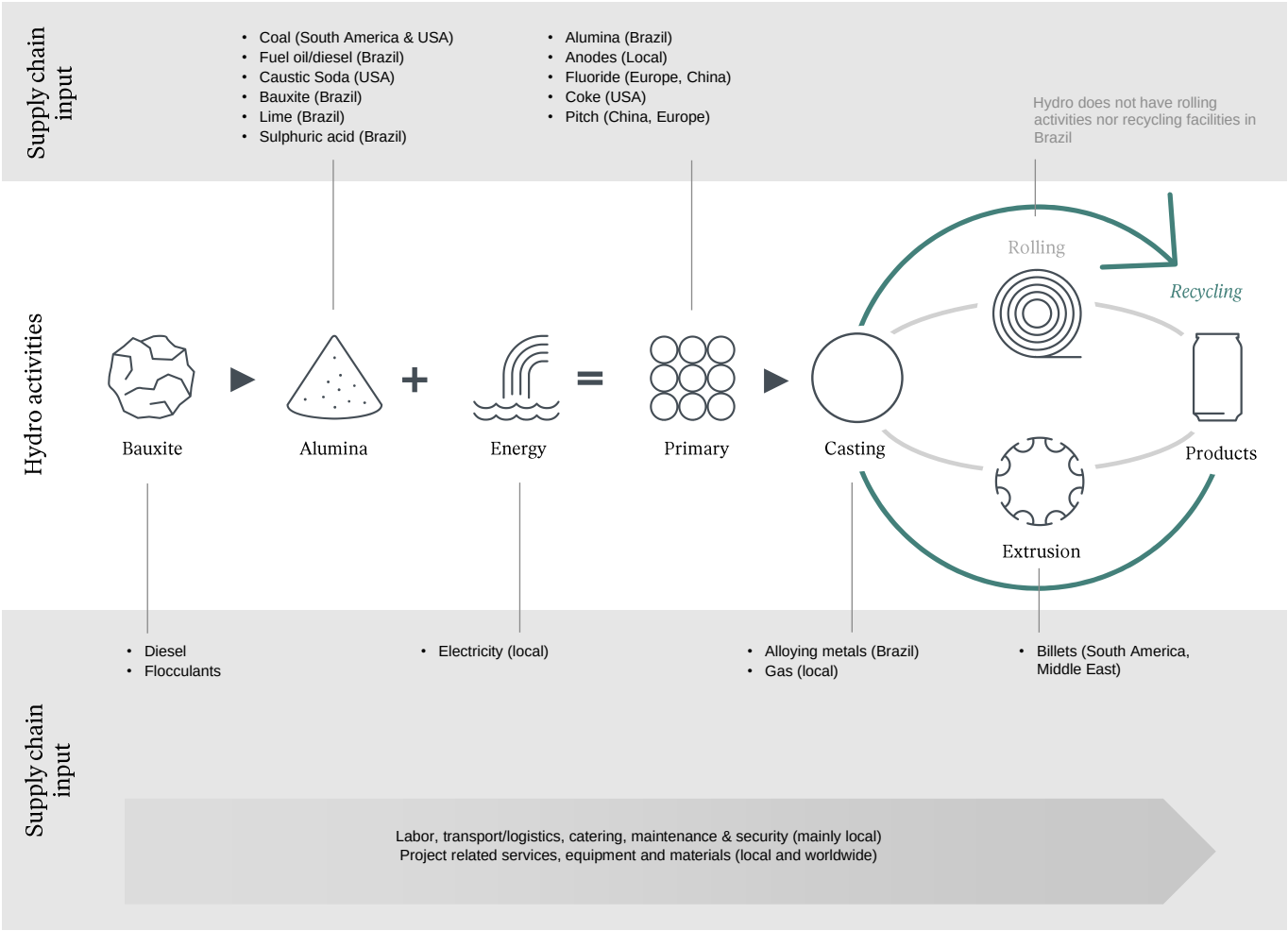
Hydro works to strengthen and improve suppliers' sustainability performance. This may be done through dialogue, sharing of knowledge, innovation processes, incentives or supplier development programs.

In Brazil, suppliers can apply to participate in a comprehensive, year-long supplier development program. In 2019, 26 supplier companies participated in the program.

Hydro is a founding member of the Aluminium Stewardship Initiative (ASI). See page 79 for more information.

[2] Hydro has a 5 percent ownership interest and off-take agreement with Vale for a further 40 percent of the volume produced by MRN

Hydro's supply chain



The figure shows Hydro's supply chain related to its value chain, and does not reflect the current organizational structure.

Social responsibility – strategy and targets

Hydro's social responsibility ambition is to make a positive difference by strengthening our business partners and the local communities where we operate. To deliver on this, we target the fundamental drivers of long-term development. In line with local stakeholder expectations and needs, and through strong partnerships, we aim to:

- Contribute to quality education in our communities
- Promote decent work throughout the value and supply chain
- Foster economic growth in our communities
- Strengthen local communities and institutions through capacity building on human rights and good governance

We have committed to contribute to quality education and capacity building for 500,000 people in our communities and for business partners from 2018 until end of 2030.

In 2019, we reached over 26,000 people. Continuous improvement of current initiatives and development of new effective, high-impact initiatives will be important going forward.

The insight from quantitatively measuring the people reached and the impact of our initiatives makes us better equipped to select and execute future initiatives with a positive impact. We have developed a methodology to measure the target to ensure consistency across the company.

Community investments and social programs

A key element in Hydro's social responsibility strategy is to strengthen the societies and communities where we operate. The way we do this differs from community to community. The main contribution is generated from our operations through production and purchase of goods and services, direct and indirect job creation, and tax payments. We engage in capacity building through targeted programs, and we have partnerships aiming to further enhance the public's knowledge about Hydro and its operations. Hydro has

corporate requirements on management of community investments, charitable donations and sponsorships.

Some of our community programs are based in mining license requirements, while others are voluntary commitments. The programs target education, economic growth, decent work, capacity building and strengthening of institutions. To support local communities, we organize volunteer programs at many of our production sites. The volunteer activities are based on local customs and needs. Many sites also support local communities through a range of sponsorships and charitable donations. Extruded Solutions has a broad range of sponsorships and support programs. These activities are not yet included in Hydro's reporting on community investments, charitable donations and sponsorships.

Another important contribution is the transfer of competence that takes place through our cooperation with universities and research institutions. This includes the cooperation with three academic institutions in Pará, Brazil, and the University of Oslo through the Biodiversity Research Consortium Brazil-Norway. See page 4 for more information. In addition, we provide scholarships to selected PhD candidates doing research relevant for our business areas.

Many programs from 2018 continued in 2019. We have introduced new programs in Brazil following the restructuring of programs in 2018 and strengthened other programs. Several programs are also linked to partnerships. See more about our partnerships on page 20. Below are some examples of the programs currently running.

Brazil
Hydro has significant operations in Barcarena, Brazil, including the Alunorte alumina refinery and Albras aluminium plant. Local social conditions are challenging, with high levels of unemployment and general poverty. To read more about the situation related to the extreme rain event in Barcarena in February 2018, please see Hydro's Annual Report 2018.

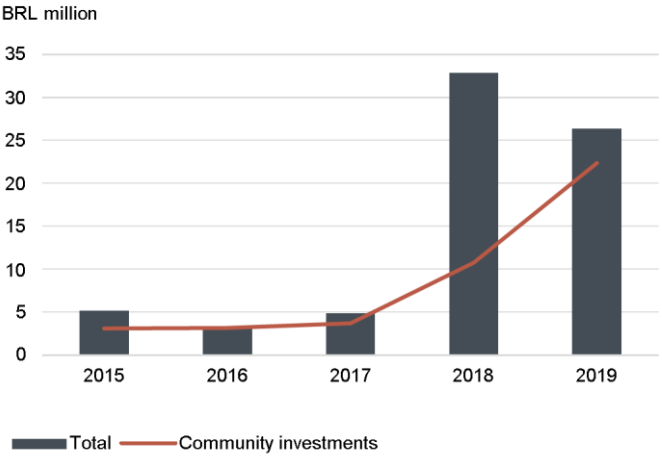
In Pará state, Hydro currently has more than 10 social programs across the seven municipalities where we have operations. For each of these projects, we have an implementation partner. The implementation partners met several times in 2019 to share knowledge and identify synergies to strengthen our partners and contribute towards the common goal of local development.

We initiated the Sustainable Barcarena Initiative in 2018 and have continued developing it in 2019. The initiative is an independent platform for sustainable development in Barcarena in Pará state. The overall aim is to bring local stakeholders together to discuss challenges and opportunities, strengthen capabilities and ultimately invest in the social initiatives they plan and develop together. In 2019, we established the Hydro Sustainability Fund, which serves as a financing mechanism for the Sustainable Barcarena Initiative. The first round of financing is currently underway.

Hydro is contributing BRL 100 million to the fund over a 10-year period. The fund will also seek funding from other sources. In 2020, we will continue supporting the development of the Sustainable Barcarena Initiative. In August 2020, Hydro Sustainability Fund has established partnerships with USAID and PPA Solidarity to strengthen initiatives in the Amazon region in Brazil.

In Pará state we also engage with regional initiatives to preserve the Amazon. We run several programs that emphasize entrepreneurship and strengthening of traditional livelihood. This also includes environmental efforts and collaborations such as the Biodiversity Research Consortium Brazil-Norway. See page 90 for more information.

Community investments, charitable donations and sponsorships in Brazil



In 2018, around 45 million NOK relates to emergency relief and TAC-agreement following the extreme rainfall and subsequent flooding of Barcarena. Extruded Solutions has a wide range of sponsorships and support programs based on local needs. These activities are not yet included in Hydro's reporting.

Organization and work environment

Through Hydro's global people processes we ensure the right competence, capabilities and organizational culture to be able to deliver on our overall strategic agenda – lifting profitability, driving sustainability.

Hydro's new people strategy, launched during 2020, sets global strategic priorities, ambitions, targets and activities, in addition to a defined process for annual update and revision. The global priorities cover learning and competence development, leadership and succession as well as diversity and inclusion. These priorities are supported by every business area with targets and activities based on their specific needs, addressing challenges in regions where they operate.

A new people platform is being rolled out in 2020 to enable standardized and digitalized global human resources processes throughout the employee's career path.

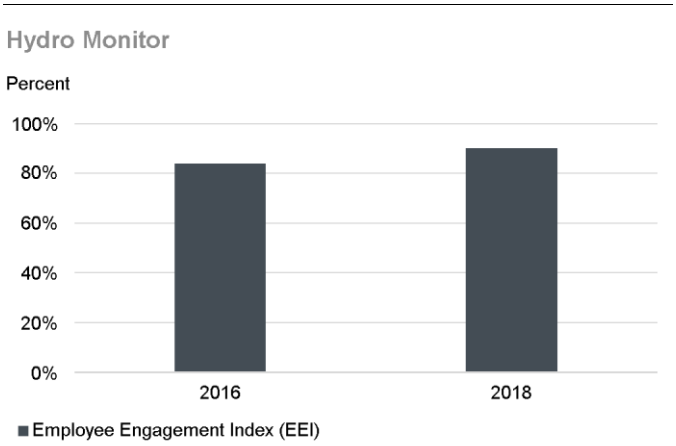
Hydro's common process for people performance and development includes an appraisal dialogue, individual development plan and follow up, as well as talent planning and succession management.

Hydro has a global engagement survey, normally run every second year. The last survey took place in 2018 and reached the top 10 percent according to the IBM External Norm on the Employee Engagement Index. The 2018 survey did not include the business area Extruded Solutions, which will be included 2020. A new survey for the entire organization was to be conducted for all employees in 2019, but was postponed to third quarter 2020 due to the cyber-attack. Maintaining employee engagement is a key priority going forward. All units have action plans based on their results.

Our philosophy is that 70 percent of competence building is direct on-the-job training, while 20 percent is acquired via networking and mentoring and 10 percent via traditional training. We have a common platform for learning and development for employees. It is also the umbrella for all other faculties and academies in Hydro, such as the business systems, HSE, compliance, digitalization and leadership. One important goal is to make training more visible and easily accessible to leaders and employees. This includes an overview of available training and mandatory training modules that each employee should complete or has completed.

We offer new employees introductory training related to the organization and to their individual work tasks. This includes required knowledge within health, security, safety and environment. The most important development takes place locally, primarily with on-the-job training. A special training course, Hydro Fundamentals, targets leaders and specialists, giving them insight into Hydro's history, values, diversity, competitive landscape and businesses. A digital version is under development to significantly extend the reach of the program.

In order to have a healthy pipeline of leaders with the required breadth of experience, we strive to rotate leaders so that they gain knowledge from different parts of the organization. Through the succession and talent processes, we work with the leadership and specialist pipeline and identify required development. We have a portfolio of learning programs that supports development for leaders as well as specialists.



Hydro Monitor did not include employees from Extruded Solutions in 2018. A new Hydro Monitor will be performed for all employees in 2020.

Diversity and inclusion

Hydro's organization around the world represents significant diversity in education, experience, gender, age and cultural background. We see this diversity as a source of competitive advantage, as it encourages innovation, learning and better customer understanding.

Our ambition is to have a high-performing and sustainable work environment, based on diversity and inclusion. We want all employees to know they are valued for their differences and that they contribute to the success of our business strategy. A part of the new people strategy is to identify measures and quantifiable targets to support our ambition.

We are continuously adjusting working conditions so that all employees have the same opportunities in their workplace. In Brazil, we are required to employ at least 5 percent employees with disabilities. 4.5 percent of the employees in Paragominas were disabled by the end of 2019, and Alunorte employed 4.5 percent at the end of 2019, while the level at Albras was 3.5 percent. While the absolute number for employees with disabilities was constant in 2019, decreases in share compared to 2018 are due to an increase in permanent employees. We are working to increase the share of disabled employees. Just as important as achieving the legal requirements, Alunorte, Paragominas and Norsk Hydro Brasil are working on the career development of employees with disabilities.

Occupational health and safety

Hydro shall be a leading company in our industry in the area of occupational health and safety. This will be achieved through consistent implementation of the management system, with committed and visible leadership, and full engagement of all employees.

Our ambition is to prevent all injuries and ill health to avoid human suffering and we will work continually to avoid damage to property and loss of production.

We continue to see high-risk incidents with a potential for fatality or permanent injuries or ill health, but at a lower level than previous years. From 2020, our emphasis will be the closing rate of actions related to high-risk incidents in our operations in 30 days. We consider this the main leading indicator for our safety performance.

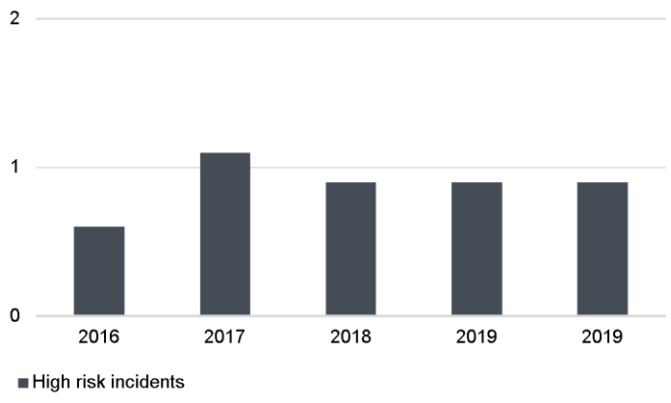
All our operations in Brazil are active in identifying risks, and our performance indicator related to risk is important in helping monitor and manage processes and tasks with high inherent risks. Despite that the high-risk incidents rate, which is a leading indicator, remained stable in 2019, the development is still of concern.

The number of total recordable injuries and associated rates improved over 2019 levels to a total recordable injury rate of 1.3. All business areas are active in identifying risks, and our performance indicator related to risk is important in helping monitor and manage processes and tasks with high inherent risks.

Hydro's most important target is no fatal accidents. Since 2011, there have been no accidents in our Brazilian operations that have resulted in fatalities.

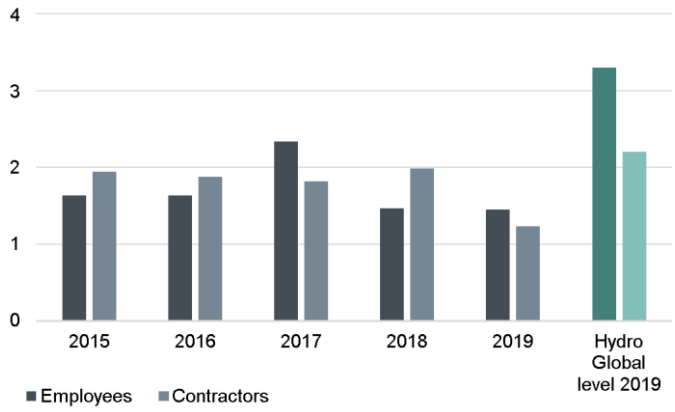
High risk incidents in Brasil

Per million hours worked (employees and contractors combined)



Total recordable injuries in Brazil

Per million hours worked



In 2019, all business areas supported the development and deployment of fatality prevention procedures and associated life-saving rules and behaviors. Fatality prevention and the elimination of high-risk incidents will continue into 2020 and builds upon the processes developed in 2019.

In addition, we are strengthening our behavioral tools using human performance techniques and the consistent use of peer-to-peer job observations.

Existing health and well-being programs have been expanded to include psychosocial risk and the creation of a global health team.

Since 2012, the CEO HSE Committee has been the strategic decision-making committee for all main HSE-related matters in Hydro. The committee is led by President & CEO Hilde Merethe Aasheim and consists of the members of the Corporate Management Board.

Hydro is monitoring the development of the Coronavirus disease (COVID-19) and assessing current and potential impact on employees and operations. Mitigating actions have been implemented and further mitigating actions are evaluated on a continuous basis, see page 41.

Security and emergency preparedness

Increased exposure in risk-filled areas and the global volatile risk picture in general, has made us intensify our preventive efforts. We are committed to the protection of people, environment, physical assets, data and information, anticipating and preparing for potentially adverse incidents with crisis potential in order to maintain business and operational continuity.

To prepare for and respond to intentional, unintentional and/or naturally caused disasters, and to protect people and critical assets, we adapt and initiate mitigation measures depending on the evolving risk picture.

Security guards are employed on a regular basis to protect our personnel and assets. No armed guards were engaged in our activities in 2019, and there were no significant incidents

reported in connection with the use of security guards. Hydro is committed to the Voluntary Principles on Security and Human Rights.

Hydro is responsible for infrastructure and functions on local and regional levels that might be critical to society's operability, and we operate large-scale production sites where a crisis could influence community interests and safety in general. Hence, we are subject to control and follow-up by relevant national authorities. We have emergency plans in place at the plant and business area level, and we train with these regularly. Lessons identified indicate that a standardized approach to emergency planning, more closely linked to risk mapping, will improve our ability to deal with emergency situations.

In December 2019, a power transmission tower along the pipeline from Paragominas to Alunorte overturned, ceasing power supply to Paragominas and temporarily halting production at the mine. In June 2020, three power transmission towers overturned, cutting the power supply to Hydro's Paragominas bauxite mine and temporarily halting production. The transmission towers has been repaired, and the power connection resumed. There were no personnel injuries or damage to other production assets related to the power outage. Hydro is cooperating with local authorities to determine the cause of the incident.

In 2019, we began a program of conducting emergency and crisis management workshops to help link the process of emergency response, crisis management and recovery from the plant through to business area level and above. This program of workshops is aligned with the risks identified through the plant and business area risk management process and is aligned with Hydro's enterprise risk management program. In 2019, we conducted seven workshops covering 45 plants.

Secure information handling is important to ensure Hydro's business continuity and reputation. Crucial computer systems are subject to surveillance and regulations. All personnel with access to sensitive information are bound to secrecy and required to handle information according to corporate guidelines and requirements.

On March 19, 2019, Hydro was hit by an extensive cyberattack, please see the Risk Review chapter in Hydro's Annual Report 2019 for more information.

Innovation and design thinking

We believe that the key to Hydro's 114-year-long stretch of industrial progress is the combination of production and innovation, where research and development have gone hand in hand with full-scale production.

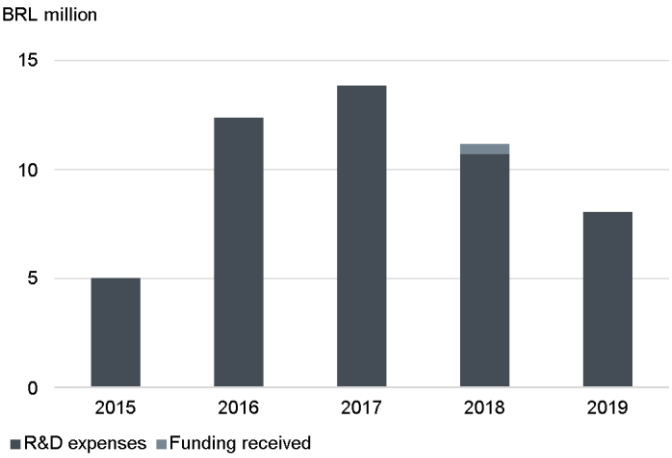
While our R&D efforts are global, some of the most relevant topics for our Brazilian operations include

- 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
- Increasing the share of value-added products and tailored solutions in collaboration with the customer
- Utilizing the opportunities of Industry 4.0 to improve process stability, productivity, cost and safety
- Improving environmental impact in Bauxite & Alumina, such as biodiversity, rehabilitation and utilization of bauxite residue

In our mature industry, the development cycles are long, with a need for highly skilled technology competence. This includes smelter technology, new aluminium alloys with special properties, lighter transportation, better packaging to reduce cooling needs and food spoilage, and aluminium façades that lead to lower operating costs and enable buildings to generate as much energy as they use during operation. At the same time, our downstream activities are continuously developing new solutions, together with customers. More and more, this collaboration reflects design thinking, bridging the gap from idea to solution.

The greater part of our R&D expenses goes to our in-house research and application development organization, while the remainder supports work carried out at external institutions. A significant research and development department for bauxite and alumina has been built at Alunorte in Barcarena, Brazil.

R&D Expenses in Brazil



A major advantage for Hydro from an innovation perspective is our broad knowledge and control of the entire value chain from bauxite mining, alumina refining, electrolysis of primary aluminium and alloy technology to finished products and recycling.

Bauxite residue is a challenge in our industry due to its alkalinity and large volumes. Hydro participates in international collaboration projects investigating possibilities to use bauxite residue as a resource. An important example is with the Norwegian University of Technology and Science

(NTNU), Sintef, Norcem/Heidelberg and Veidekke to develop a new type of concrete using bauxite residue as a resource to improve quality. We are also working with other aluminium companies through the International Aluminium Institute to solve this industry challenge. In addition, we are investing in R&D to reduce the total alkalinity of the bauxite residue.

Case stories

Quick overview

These case stories represent examples on how we work to implement our policies as described in “Our approach” earlier in this report.

To learn more about our sustainability strategies, please see www.hydro.com/sustainability.

To learn more about our corporate policies, please see www.hydro.com/principles

Providing quality education to the people in Pará

Born and raised in a riverside community from Igarapé-Miri, Pará state, Maurício Pantoja found in science an opportunity to make a positive transformation in his community. He now studies Biology at Federal University of Pará, in Abatetuba, and has created an activated carbon produced from buriti residues, a native plant of the region. That innovation was one of the highlights of MCTEA, the Açaí School Science and Technology Exhibition, an international science event that happens every year in Abaetetuba, Pará, that has Hydro and Albras, our joint venture of primary aluminium, among the sponsors.

The sponsorship of the technology exhibition is a way to contribute to local sustainable development, through the investment in quality education. The event got together projects presented by students of elementary, middle and higher level, from Pará and other Brazilian states, as well as from other countries, such as Argentina, Colombia, Spain, Ecuador and Mexico. Therefore, it not only brings the community closer to scientific reality, but also promotes an internship of knowledge and expand the possibilities of those interested in a scientific career, as Maurício. The young scientist presented his creation in the MCTEA 2018 edition and in 2019 he participated as a coordinator helping other students to show their work. “I believe that the young student who comes here wants to share his stories and to share a whole movement that he creates within a community and what he was able to change within it”, says Maurício. In 2019, MCTEA reunited 170 projects that valued science in the Amazon, and in the Hydro and Albras stands we had more than 12.000 visitors.

We also have our eyes turned into the professional qualification of education professionals in the municipal network in the city of Paragominas, with the social program “Território do Saber” (Territory of Knowledge). This initiative started in July 2019 and has a duration of 5 years. It is a partnership with the Municipal Secretariat of Education of Paragominas (SEMEC), operating with three main areas: Management, Portuguese and Mathematics and Youth and Adult Education.

The program provides free training to the participants for innovative practices in EJA (Youth and Adult Education), AJA (Youth and Adult Literacy), Portuguese Teaching and Mathematics Teaching. Also, it has the purpose of strengthening the management of SEMEC and its professionals, including the provision of training in Education Management, monitoring of schools by a specialized team and literacy of youth, adults and the elderly. As it is still in its initial phase of assessment, the indicators and goals are being built with the subjects of the territory. Classes started on February 2020.

Professional training and development

Doing research in high school, Izabella Rendeiro found a passion that would follow her: Hydro. “I searched for Hydro’s operations in the state and I fell in love. I was so impressed about not only the mining itself, but also the values and history. At that moment I knew what I wanted to do for the rest of my life: Chemistry Engineering”, remember Izabella. Since then, she started to study hard, so she could have a career in Hydro. Izabella was an intern at Alunorte in 2019, and was awarded as “Best Intern” in Pará State, by the Euvaldo Lodi Institute, because of her project of internship.

She was one of the over 60 students that became part of “Talento Infinito” (Infinite Talent), the Hydro and Albras internship program. It is developed in all units from Pará and Rio de Janeiro and gives a series of opportunities of professional growth for university students.

Izabella, for example, was a Chemistry Engineering student at the time and could put the knowledge obtained at the university into practice. “For me, the best part is that I always felt I was heard: “I could share my university knowledge and the whole team listened, even though I was an intern. I felt that I was an important part of the process and I felt confident of working on several projects that could help in the operational area. My experience even served as the basis for my Graduation Course Work”, says Izabella.

To support the admission of new talents to Hydro we also develop the Young Talent, our Young Apprentice program, that offers opportunity to young people that has finished high school, from Barcarena, Abaetetuba and Paragominas, in Pará State. Renata Torres was one of more than 200 youths that joined at Albras and Alunorte in 2019. She, unlike Izabella, was not quite sure of what she wanted as a career but found out through that experience her passion. In Albras, she had the opportunity to develop new knowledges. “It was much more than I expected. It's not just job, it is studies. And besides, I grew as a person, because I received many responsibilities while I was at the plant. This made me also learn to position myself, to have attitudes and to have more initiative”, she says. When she joined Albras, Renata was already taking a degree in Social Service, but her experience at Jovem Talento led her to glimpse new paths: now she plans to take a course in Chemical or Production Engineering, so she can continue growing within the company, where today she has already been hired as a Production Operator.

Developing sustainable local communities

To encourage the sustainable development in the regions where we operate, Hydro has been working to change local conditions, through initiatives that increase income and opportunities for people in communities where the access to decent work is limited.

In Barcarena we developed the "Ativa Barcarena" (Active Barcarena) program aimed at family farming in the municipality. The first stage, in 2018, consisted in a diagnosis of the soil conditions in several communities to better understand the agricultural scenario and identify the potential production chains in the municipality. This diagnosis brought enough information to help local farmers to optimize resources and expand the possibilities of generating income, through the development of sustainable agriculture.

That was what happened with Paula Ferreira, from Arienga Estrada Community, a local producer of cassava flour. After the diagnostic, with the support of the Active Barcarena team, she found another value-adding product: the tucupi soap, an innovative product. "Hydro is inside our community and we received them, as we use to say 'with open heart'. The result could not be better. It strengthened our community and it was important to position ourselves as protagonists of the action. Soil analysis, for example, has enabled us to plant with dignity, with more knowledge and assertiveness", Paula says.
In 2019, Ativa Barcarena continued with the mapping of local production chains and took technical assistance to hundreds of family farmers in nine communities in Barcarena, in partnership with the local government, the Peabiru Institute and the Federal Rural University of the Amazon (UFRA).

Family farming was also the focus of "Amesa" (Family Farming and Sustainable Markets) project, that was established both in Barcarena and Paragominas. The main objective was to connect local family farmers with private entities to increase consumption of local agricultural products. The project first mapped the current supply of products from local family farmers, as well as the demand from private entities. Based on this, it worked together with local family farmers to increase productivity, improve production management and access for buyers from private entities. To better connect buyers and sellers, the project also created a free app. Through Amesa, 25 deals (17 in Barcarena and 8 in Paragominas) were stablished by signing a term of commitment between the parties.

Partnership with public authorities strengthening employability
In Barcarena, Hydro also implements programs in partnership with the City Hall, other private companies, non-governmental organizations and civil society. "Todos Pelo Trabalho" (All for Work), an investment from Albras and Alunorte, started in 2019, through a set of activities based on what was discovered in a study of the labor scenario and income generation in the municipality. The main objective is to strengthen the local workforce and to help professionals to find job opportunities and develop knowledge about income generation, especially those from the neighboring communities of the industrial area. The best way to achieve this objective is part of a document called work plan, that is being developed in partnership with a network of organizations, from civil society, local companies, government and other institutions.

Another social productive inclusive initiative is the Sustentar program, a partnership between Alunorte, Albras and the Municipality of Barcarena, whose aim is to promote the social organization and training of waste collectors. The program has been implemented since 2018 and has three lines of action:
i) project to organize and strengthen waste collectors;
ii) environmental education program for the municipality;
iii) project to implement the Barcarena Recyclable Waste Sorting Unit.

In 2019, one of the most important results was to start the collaborative process to formalize the social organization of waste collectors in a cooperative as decided by them after several capacity building sessions on associations and cooperatives models. A change that the waste collector Olivia Lima da Cunha never had imagined before start to be supported by Sustentar program. "Until then, I didn't even dream of work in a cooperative system, we were not confident that our working condition could improve in this way", said Olivia, who started to work close to the Bom Futuro landfill in 2016 as a snack seller, but just a few months became a waste collector. "Now, we can seek more credibility as a group and seek more dignified wages and working conditions", she believes.

In addition, several environmental education actions were carried out in the municipality, including Cine Clube Sustentar, meetings of Technical Centers that discuss the opportunities and challenges of solid waste management in the municipality. A proposal to the municipality to develop an environmental policy was also welcome by the partners. The executive engineering project for the Sorting Unit has started and is expected to be delivered by first quarter of 2021.

Investment in sustainable and positive changes
Another important step to improve the quality of life was the Sustainable Barcarena Initiative (SBI). The SBI started in 2018 as a community-based forum, with its own autonomous organization, financed by Hydro.

The goal of the SBI is to become an agent for positive changes in the territory, by encouraging its members to discuss problems, define priorities and propose solutions for Barcarena. The SBI began with working groups composed by individuals and members of local associations and Non-Governmental Organizations. They voluntarily got together to understand and debate over their most relevant issues,

such as environment, income generation, health and education.

As the initiative got stronger, Hydro, Alunorte and Albras committed R$ 100 million, over a ten-year period, to invest on the priorities defined by the SBI. In the end of 2019, the companies created the Hydro Sustainability Fund (HSF) as a non-profit organization to manage the investments and to provide technical support for the local organizations.

The Fund launched its first call for projects in December 2019. A total funding line of up to R$ 730 thousand was open for local organizations to support local associations, increase the capacity of community business and promote cultural events

Being a good neighbor

Rosenilda Santana Evangelista lived her whole life in Barcarena, Pará state, in the north of Brazil. As time passed, she saw the transformations of the municipality, which was increasingly moving from an essentially agricultural profile to the inclusion of other business, such as industrial as well. For her, the city's growth also drew attention to the need of strengthening the community centers – which are the public places in the communities where residents meet for group activities, social support, public information and other purposes – as well as the need to establish partnerships with other institutions, such as Hydro.

"The center is important to strengthen the community and it is gaining more credibility and adherence from the people who live here, and part of this change is a result of the partnership with Hydro", explains Rosenilda, currently president of the Vila Nova Community Center.

Through social dialogue, Hydro is able to approach the community and support the center, helping to build relationships and trust, strengthening bonds and promoting engagement with our neighbors. Community members meet our employees and discuss topics of interest, ranging from safety processes within the company to general themes, such as social projects, environmental aspects, job and income generation in the communities, education and many other, always in a participatory way.

In 2019, there were 151 social dialogues in Barcarena, 42 in Paragominas and 35 in communities in the area of influence of the pipeline and the transmission line between Paragominas and Alunorte. "The community now has the opportunity to ask questions and clarify any doubts, and talk to Hydro directly, face to face. It is not just filling out a form, making a phone call, it is a relationship", says Rosenilda.

Visitors are also welcome at the plants

Another way to come closer to our neighbors is to open our doors so the communities can visit our operations. In Alunorte, our alumina refinery in Barcarena, we keep a schedule of community visits through the year. It gives the communities an opportunity to learn about operational improvements, the company's socio-environmental impacts, safety of the bauxite residue deposits and social investments.

In order to reach the larger community and raise awareness and competence of our operations, we also invite students and the family of employees to visit Paragominas, Albras and Alunorte on a regular schedule. And we have occasional visits from representatives of the press, public authorities and others. In total, approximately 1,800 people visited our operations in Pará in 2019, and we conducted more than 100 visits.

Volunteering that makes a positive difference

Another example of our relationship with the communities is the "Voluntários em Ação" (Volunteers in Action) program, where our employees devote time, abilities and resources to develop initiatives aligned with local needs and our social investment strategy. In 2019, we had more than 30 initiatives in Pará and Rio de Janeiro, involving more than one thousand volunteers and benefiting more than 23 thousand people.

The non-governmental organization (NGO) Prisma in Barcarena, for example, was an important partner in 2019. The organization promote social inclusion and environmental education for children and teenagers. Our volunteers has worked with Prisma providing painting, retrieving toys and organizing a library. To Irene Gomes, Prisma's president, this is a dream coming true. "20 years ago, when we started Prisma, we dreamed of having a group of volunteers willing to dedicate themselves to our activities. Today, we are very happy to see Hydro's volunteers here, willing to do their best", she points out.

Reducing social vulnerability of children and adolescents

We are committed to build a positive agenda for the sustainable development of the municipalities where we operate. And through Trilhando Caminhos (Treading Paths) we offer sports and cultural activities for children and adolescents between 6 and 17-year-old, in socially vulnerable situation. The project offers ballet, capoeira, football and theater classes during the school shift, in 9 communitarian spaces in the municipality.

Little Eysa dreams of being a ballerina and feels her dream is day by day a bit closer to becoming a reality. When it is ballet class' day, she promptly grabs her ballet slipper, pantyhose and bottle of water and packs her backpack.

For Eysa's mother, Eliana Leão, a saleswoman from Barcarena, this opportunity in Trilhando Caminhos brought life prospects that she did not imagine in the near future. "She always wanted to have ballet classes, but I couldn't afford it. Since she got this opportunity, everything changed. Ballet helped her a lot, she learned to better communicate with others", says Eliana. The project underwent a pilot phase between December 2018 and August 2019 and will run for five years, until 2024.

In addition to cultural and sports classes, the project offers psychosocial support to students to strengthen family bonds and to defend and promote the rights of children and adolescents.

Sponsorship to local support and culture

In 2019, we sponsored several cultural projects to people of the neighborhood of our plants in Pará. The choir Carlos Gomes, for example, is a 25 years old institution, composed of professionals from the Foundation of the same name, one of the most traditional public music education institutions in operation in Brazil. The sponsorship of the choir started in 2019 and has already taken free presentations to the

population of Barcarena and the capital of Pará, Belém, as in the 404th anniversary of the capital.

In 2019 we also supported the Agricultural Fair (Paragominas) and Pineapple Festival (Barcarena). The Agricultural Fair is considered the largest agricultural event in the Northern Brazilian and has been held in Paragominas since 1966 and has been sponsored by Hydro for 15 years. The Pineapple Festival has been held for 39 years in Barcarena and has concerts and a gastronomic contest, among other activities. It is the largest cultural event in the municipality and generates movement in the local economy. In 2019, the event was sponsored by Hydro and Albras, that set up interactive stands visited by more than 24,000 people.

Finding new ways to become more sustainable

Every time she passes by the elevation of the PA-483 highway, in Barcarena municipality (Pará state), the Alunorte's agronomist engineer Adriana Chaves observes how nature is taking over the area towards the original bauxite residue deposit (DRS1). Since mid-May 2019, bird families started to nest in the place and more species of fauna and flora have been appearing over there.

This is the result of the DRS1 decommissioning project. DRS1 is approaching the end of its useful life, and the project foresees the revegetation of areas previously used to deposit solid waste from the Alunorte refinery. It ensures sustainability in the business and is part of the asset retirement obligation (ARO).

To Adriana, who has been part of the project since the beginning of the building phase, seeing this landscape changing daily, gives a gratifying feeling. In February 2019, vegetables and forage were planted and, thousands of trees have also been planted there during the year. This already caused a visual impact and attracted diverse species of animals, from small insects to birds including hawks.

Constantly, the team monitors new species, as well as the quality of the water in the area. "Sustainability is to think about future generations, ensuring that in the future there are the same environmental conditions that we have today and in the past. It is what we are doing with this project", emphasizes the engineer.

Clean energy for the future

Revegetation is just one of the fronts of the DRS1 decommissioning project. The area has been divided into 11 zones that will be gradually rehabilitated over an estimated period of up to 20 years. According to Paschoal Cataldi, head of Disposal Area, the project also aims to eliminate liquid waste, to better control the dust, improve visual impact and revegetation. But, in addition, it came up an idea to make an intermediate use, before completely rehabilitating the area. Therefore, the possibility of installing photovoltaic panels to generate electricity in this zone is being studied. Besides thinking about our present needs, we are working to have more sustainable energy sources in the future. This is also the concern that underlies the Alunorte Fuel Switch (AFS) project, which will make the refinery the first in the state of Pará to substitute heavy fuel oil by natural gas.

Therefore, Alunorte will have a more sustainable energy mix, by reducing emissions while bringing financial savings to the company. André Campos Terra, the project interface maintenance manager, highlights the benefits it will bring to the region's development. "The consumption of natural gas in our processes will make Alunorte an even cleaner company in terms of emissions to the atmosphere and will place us at an important level of competitiveness in the market, furthermore", explains the manager. The great advantage of natural gas is that, unlike other fuels, it emits less carbon dioxide (CO2), sulfur and carbon monoxide (CO) than other fossil fuels.

Our values in practice

We act with Care for the environment and Courage to innovate and find new ways to become more sustainable. In Pará, we have been investing on the improvement of our water management system. As a result, Alunorte's new water treatment system, a project of around R$ 670 million, prepares the plant for future climate change.

The new water treatment station (ETEI as it is called in Portuguese) integrates the modernization project of the refinery's effluent management system and has new wastewater and rainwater containment basins, new piping and repowering pumps for drainage of the material to the treatment stations. This investment reinforces the robustness of the refinery operation, contributing to the unit being even safer.

In Mineração Paragominas, our bauxite mine in Paragominas municipality, in Pará state, we are developing the Dry Backfill, an investment of R$ 30 million seeking to give a more sustainable destination for the bauxite tailings. Dry Backfill is a project that has been developed and tested since July 2019. After drying in a temporary deposit for 60 days, with this technology the bauxite tailings is ready to be returned to the mined areas, before the area is rehabilitated and reforested. Thus, it provides a significant reduction in the environmental footprint of bauxite mining and more operational safety. The tailing from bauxite mining is chemically and physically similar to what was removed during the mining process. Therefore, it is returned to nature without any impact on the environment.

Collaboration to discover new solutions

Seeking new sustainable solutions for our operations, we use our value Collaboration towards partnerships with other organizations. With the Federal University of Pará (UFPA), we signed an agreement, in 2019, to develop technologies aiming to increase operations performance, training programs, and social projects to improve the living conditions of neighboring communities in Barcarena and Paragominas. So far, there are 10 potential projects to be developed in 2020 and a post-graduation course in Geotechnics, which also is planned to start in 2020. The partnership will also include periodic visits by UFPA teachers and students to Hydro's operations in Pará.

Hydro has also a partnership with SENAI Institute of Innovation in Mineral Technologies. Alunorte and SENAI will conduct a study for the reuse of bauxite residue. The project will last until 2022, and Alunorte will invest R$ 5 million, in total.

In Paragominas, the partnership for sustainability counts on local and international partners. The Brazil-Norway Biodiversity Research Consortium (BRC) was created in 2013 and brings together researchers from the Federal University of Pará (UFPA), the Federal Rural University of the Amazon (UFRA), the Emilio Goeldi Museum, Norwegian University of

Oslo (UiO) and Hydro professionals, both in Brazil and Norway. “Mining is certainly one of the main activities in the region and for us, researchers, it is very important that Hydro sought us out to restore the ecosystem”, resumes Leonardo Sena, UFPA’s teacher and BRC researcher. Main results so far are the discovery of six new species and the improvement of Hydro's environmental restoration process. Besides the interaction between institutions and the recognition from the international scientific community, BRC promotes science and expands knowledge of Amazonian biodiversity.

Providing opportunities for entrepreneurs and suppliers

We are developing our suppliers, providing opportunities of training to entrepreneurs and promoting a bond between employment networks and work institutions. For the development of entrepreneurship in the region, we are training those who have innovative ideas and want to launch themselves in the market or increase their potential.

One good example is Amanda Pinheiro, a Biology student, who had already been thinking of owning her own business, but did not imagine how much she could combine financial return with innovation and sustainability. Together with the university students Priscila Vilhena and Raíssa Costa, Amanda was one of the winners of the first edition of the Embarca project. Initiated by Hydro and implemented by the Centro de Empreendedorismo da Amazônia (Entrepreneurship Center of the Amazon), Embarca aims to awaken the interest in socio-environmental entrepreneurship among young people in Barcarena and Abaetetuba municipalities, in Pará state, through the formation of sustainable businesses. Amanda's startup is Natcocos, which reuses coconut waste in the manufacture of sustainable products, such as pillows. “Natcocos, in fact, was born in Embarca. There, we met business models from the region, which was very inspiring, and we joined many trainings until we made our project”, says Amanda. In Embarca's workshops, 300 young people participated, of which, at the end, 6 teams were awarded as the most outstanding projects.

In addition to the financial incentive they received as an award, Natcocos gained a lot of knowledge, learning and confidence to continue taking larger flights. In September 2019, the startup was awarded first place in Sustainable Business by the biggest university challenge in the North, called “Inove +”. “Today, we only collect victories, gaining more partnerships and gaining maturity. I am very grateful to Hydro for the opportunity, it was something that changed my life”, she concludes.
In 2019, Embarca had the support of the Municipality of Barcarena, SDG -Network Barcarena, Secretariat of Industry, Commerce and Tourism (Seicomtur), Pará State University (UEPA), IEPAM Educational Group and Cruzeiro do Sul Virtual - Distance Education.

Increase the potential of local entrepreneurs
Those who are already entrepreneurs can also get Hydro’s support to develop themselves. Alexandre Bezerra, founder of the startup Amachains, for example, has found this opportunity through the Shark River , an initiative that aims to foster innovation in Pará by developing startups as suppliers of digital solutions for the industry. Alexandre came from a family involved with agribusiness and chose to follow the same direction, but focusing on innovation. With his wife and his managing partner, the startup was created, specialized in agricultural traceability - in other words, the monitoring of each stage of agricultural production. One of the company's purposes is to offer the traceability system free of charge to family farmers in the region.

The company was still establishing itself in the market when the Shark River opportunity appeared, and they accepted the challenge. The Shark River was carried out by Hydro, in partnership with the Paraense Technology & Innovation Association - Açai Valley, and brought together startups from different segments face-to-face with leaders and professionals from Hydro's Bauxite & Alumina (B&A) business area.

The event connected startups with the real demands of the industry, where they had the chance to generate business. Amachains, for example, managed to close a contract with Hydro and is developing an innovative work in the traceability of the aluminum chain. “The things we have learned from working with Hydro has made us to upgrade our way of work. We had to have well-established compliance concepts from the beginning, for example, and this has given us a tremendous evolution. Being prepared to serve at the level of a worldwide company is a great satisfaction”, declared Alexandre.

Another company that grew a lot after exchanging experiences with Hydro was Fontaim, created by Vitor Fontaim, a company that has been providing Hydro with services such as construction, electromechanics and heavy machinery leasing. Fontaim was one of 26 companies selected to participate at Supplier’s Development Program, in 2019. "Hydro realized that we could improve and get better at what we do today", said Vitor.

In partnership with the Redes FIEPA Initiative, Hydro has developed training in several modules and in 130 class hours focusing on contract management, compliance, health and safety, among others. The results are already noticeable: "When we first started in the program, we had around 100 employees. Currently we have 167. We became more competitive in our processes", report Vitor Fontaim.

In 2020, the Supplier’s Development Program is being held in Paragominas, with some new activities, such as the production of a business census in the region to benefit not only the companies participating in the 2nd edition, but also the others in the municipality and its surroundings.

Preventing and combating the Covid-19 pandemic

Care is one of Hydro values and an important part of the Hydro Way. As a responsible company, we have the safety, health and well-being of our employees, contractor employees and the people around us as a top priority.

In the face of the Covid-19 pandemic hitting in 2020 as the aluminium chain is among the essential activities in the fight against the virus - with an important role in the production of pharmaceutical packaging, medical supplies, vaccine formulas and water treatment - we kept our operations ensuring a safe work environment, following all the health protocols and join the local and international efforts to prevent and contain the corona virus transmission.

Our primary actions aim to ensure that people have access to necessary information and resources to be protected and to support and join the authorities' efforts against Covid-19. In March, we donated mineral water to supply the shelter created by the Government of Pará at the Mangueirão Stadium, in Belém, in Pará state, aimed at social vulnerable people.

We have also developed initiatives to stimulate the local economy, reaching out to suppliers such as Liz Vieira, owner of a knitwear shop in Paragominas. Her main source of income is usually the sale of school uniforms, so she felt the commercial impact of Covid-19. But she felt relieved when she became one of the suppliers of homemade masks to Hydro.

Hydro prioritize the purchase of masks made by suppliers from Paragominas and Barcarena for distribution to employees and contractor employees at the Mineração Paragominas, Alunorte and Albras units. "It was a new demand and the masks should meet the specifications requested by Hydro, but this challenge brought us agility, professionalism and innovation of our product portfolio," says Liz Vieira.

Local suppliers were involved as well in the assembly of the 36 thousand food basic baskets donated by Hydro, in April and June to seven municipalities in Pará, where Hydro is present. "As suppliers, it's good to see that Hydro has triggered local commerce at this time when everyone needs help", said Marcos Pantoja, owner of a supermarket in Barcarena. In addition to food, the baskets had hygiene materials.

Hydro also donated 500 food baskets, 4,600 hygiene kits, and medical equipment to the cities of Itu and Utinga, in São Paulo, and Tubarão, in Santa Catarina, where its Extruded Solutions operations are located.

Access to public health care
Supporting the access to medical care for those who need, the company has donated a total amount of BRL 10 million, for the construction and maintenance of state field hospitals, and contributed in Barcarena and Paragominas with more than 100 thousand items, between healthcare equipment and materials. Besides, Hydro has donated test kits for the detection of the new coronavirus to all the seven municipalities in Pará where we operate.

In Barcarena, Albras, a company that belongs to Hydro and NAAC, Nippon Amazon Aluminum Co., donated to the City Hall a building where one of the old employees' quarters operated, where a field hospital has been installed.

Internal measures to protect employees
One of our first internal measures was to keep at home those identified as part of Covid-19's risk groups and all employees who could carry out their activities online. In addition, to reduce the number of people in the units, apprentices and interns were temporarily removed from work, without prejudice to their salaries.

From March to May, Hydro adopted around 260 prevention measures at the units in Pará and Rio de Janeiro, including the offer of quick tests for Covid-19 and vaccine against influenza and pneumonia, besides cleaning of internal streets, continuous cleaning /disinfection of environments and equipment, as well as reduction of the capacity of restaurants and in transportation vehicles and distribution hygiene kits and masks.

In parallel, medical teams were rigorously monitoring the health of employees and we created toll-free lines for medical support related to coronavirus symptoms and for psychological, social support and finance advice.

For those who were in home office system, a dedicated committee was focused in analyze and improve the work conditions, such as helping with ergonomic guidelines. IT items, such as computers, monitors and keyboards, were provided to promote a more ergonomic environment for carrying out remote activities.

Our employees, employees of contractors and communities around us received educational games to involve also family members in raising awareness about the importance of prevention and individual care at home.

Support to communities
Following the social distance recommendations of the international and local health authorities, our Sustainability area suspended the face-to-face activities and started to work in search of solutions to continue supporting communities.

In April, some of our social projects and programs started to offer online classes and guidance, including, in Barcarena, "Trilhando Caminhos" (Treading Paths) - a project that offers sports and cultural activities for children and adolescents in socially vulnerable situation, as well as psychosocial monitoring to strengthen family bonds and to defend and promote their rights, that started to produce

video classes teaching physical exercises to share with the participants and their families.

While the “Sustentar” program suspended its face-to-face activities with waste collectors, it has adapted its schedule to continue the environmental education activities, weekly promoting debates broadcasted live, about solid waste management and offering an online course about the subject, both open to the general public.

In Paragominas, “Território do Saber” (Territory of Knowledge), partnership between Hydro and the Secretariat of Education of Paragominas for the improvement of basic education in the municipality, resumed classes on specialization and improvement courses also through video conferences.

Our volunteering program renewed itself as well and has developed several of initiatives to continue supporting communities, including an online platform that collected donations in benefit of 11 non-profitable organizations from Pará and Rio de Janeiro states, among other activities.

Our Community Environmental Emergency Brigade, in Barcarena, has worked on actions to prevent and combat Covid-19 as well. Through sound-equipped vehicles, the Brigade brought education and sensibilization about the disease to several communities.

Environmental and social statements

About the reporting

Principles for reporting on Environmental and social statements
The purpose of this report is to provide stakeholders with a fair and balanced picture of relevant aspects, engagements, practices and results for Hydro's operations in Brazil in 2019. We believe that the reporting in total satisfies this purpose. This report is aligned with the main reporting principles of the GRI Standards (2018) and the requirements of the International Council on Mining and Metals. The selection of elements reported is based on extensive dialogue with stakeholders. In addition, the reporting builds on processes that are part of our daily operations. Important stakeholders include authorities, investors and financial analysts, employees and their representatives, potential employees, customers, non-governmental organizations and local communities affected by our operations. Reporting is not necessarily the target of the dialogue process, but when relevant, we use the outcome to improve our reporting, see page 19.

We have endeavored to provide information that is in accordance with the principles of sound reporting practice. The absence of generally accepted reporting standards and practices in certain areas may nevertheless make it difficult to compare results with reports compiled by other companies, without the availability of further data, analyzes and interpretations.

For more information about the Alunorte situation, please see the section "The Alunorte situation" in Hydro's annual report 2018.

Reporting scope and limitations
The scope of this report is Hydro's operations in Brazil for the period January 1 to December 31, 2019. Certain subsequent events up till the final approval of this report has also been included based on a qualitative basis. Operations sold or demerged during the year have in general not been included. Health and safety data for all previously consolidated operations are, however, included in the historical data for the period the unit was owned by Hydro. Regarding environmental data (emissions, energy consumption etc.), operations acquired during the reporting year are included for the complete year. Data from operations that have been closed down, are included for the part of the reporting period it was under operation unless otherwise stated. Minority-owned operations is not included in the reported data except from data based on ownership minority (certain greenhouse gas emissions data).

Environmental data relating to acquired operations are included in our statistics, and historical data have been recalculated to reflect current operations. Correspondingly, historical data of divested activities are taken out of our reported data. Employee, safety and work environment data are included from/to the closing date of acquisitions/divestments unless otherwise stated.

Data has been prepared from individual reports in accordance with corporate procedures. Data compiled at each operational unit according to local management systems applicable at the respective operational units are typically based on process data systems, measurements, calculations and/or purchasing data. The data are then aggregated at corporate level, and is not intended to include detailed information that is primarily of significance for individual sites, processes, activities and products.

The reporting is based on input from many units and sources of data. Emphasis has been placed on ensuring that the information is neither incomplete nor misleading. However, the scope of the reporting, and varying certainty of data may result in some inherent uncertainties. Please see "Reporting principles" for the specific note to the environmental or social statements for more details.

Financial data has normally been collected in NOK and has been converted to BRL using the 12 months conversion rate of The central bank of Norway.

Assurance
This report is mainly based on information provided in Hydro's Annual Report 2019, specifically the sections Viability performance and Viability performance statements. These sections have been subject to limited assurance by our external auditor KPMG in accordance with the international audit standard ISAE 3000 – Assurance Engagements other than Audits or Reviews of Historical Financial Information issued by the International Auditing and Assurance Standards Board (IAASB). The country by country report has also been subject to limited assurance by KPMG and has been approved by Hydro's Board of Directors. The auditor's limited assurance report is found on page 268 in Hydro's Annual Report 2019.

The case stories starting from page 32 have not undergone external assurance.

Environmental statements

The table below shows Hydro's main quantitative indicators related to its environmental performance for the operations in Brazil. More detailed information is, where indicated, available in the notes to the environmental statements.

Environmental performance

	Notes	%-change 2018-2019	**2019**	2018	2017	2016	2015	GRI Standards reference[5]
GHG emissions								
Direct GHG emissions from consolidated operations (Million tons CO2e) (equal to scope 1)	E1.1	13%	**3.73** [3]	3.29 [3]	5.03	5.00	4.75	305-1
Indirect GHG emissions from consolidated operations (Million tons CO2e) (equal to scope 2)	E1.1	10%	**0.69** [3]	0.63 [3]	0.88	1.04	1.14	305-2
Direct GHG emissions from Hydro's ownership equity (Million tons CO2e) (equal to scope 1)	E1.3	13%	**3.14** [3]	2.77 [3]	4.26	4.27	4.04	305-1
Indirect GHG emissions from Hydro's ownership equity (Million tons CO2e) (equal to scope 2)	E1.3	9%	**0.39** [3]	0.36 [3]	0.49	0.59	0.64	305-2
GHG intensity								
Alumina refining (mt CO2e per mt alumina)	E1.4	-10%	**0.71** [3]	0.79 [3]	0.69	0.69	0.69	305-4
Electrolysis in Primary Metal (mt CO2e per mt aluminium)	E1.5	7%	**1.89** [3]	1.76 [3]	1.70	1.60	1.70	305-4
Energy production and consumption								
Energy consumption (TWh)	E3.1	14%	**17.08** [3]	14.99 [3]	22.59	22.55	21.74	302-1/302-4
Energy intensity								
Alumina refining (GJ per mt alumina)	E3.2	-9%	**8.16** [3]	8.95 [3]	7.94	8.07	8.01	302-3
Electrolysis process (MWh per mt aluminium)	E3.2	4%	**15.20** [3]	14.56 [3]	14.60	14.45	14.45	302-3
Other resource use								
Alumina (Thousand mt)	E4.1	11%	**643**[3]	582[3]	866	854	833	301-1
Total water withdrawal from water stressed areas (million m3)	E4.2	0%	**0**[3]	0[3]	0	0	0	303-1/303-2
Waste (Thousand mt)								
Bauxite tailings	E5.1	36%	**2,871** [3]	2,116 [3]	4,067	4,117	4,128	MM3
Bauxite residue (red mud)	E5.1	21%	**3,871** [3]	3,191 [3]	5,979	6,426	5,973	MM3
Hazardous waste[1]	E5.2	-41%	**66** [3]	78 [3]	111	83	82	306-4
Other waste[1]	E5.2	1%	**177** [3]	83 [3]	175	135	171	306-2
Hazardous waste to landfill (percent)[1]	E5.3	-14pp.[2]	**25%**[3]	38%[3]	52%	58%	52%	306-2
Biodiversity in mining								
Accumulated area disturbed (hectares)[4]	E6.2	1%	**7,955**	7,879	6,621	6,442	6,076	MM1
Accumulated area rehabilitated (hectares)	E6.2	6%	**2,339**	2,203	1,872	1,689	1,509	MM1
Accumulated endangered species observed	E6.3	4%	**93**	89	75	65	57	102-11

Figures in brackets indicate a decrease.

1) 2019 figures are not comparable to historical figures due to change in methodology
2) Values are given as percentage points
3) Results impacted by the embargo on Alunorte, and curtailment of Albras and Paragominas.
4) Accumulated area disturbed since construction of the mining area started. The mine started its production in 2006
5) All GRI references below refers to the GRI Standards (2016) except MM1 and MM3 which refer to the GRI G4 Mining and Metals Sector Supplement

Notes to the environmental statements

Environment, energy and resource data are reported through the corporate data reporting tool HERE on an annual basis covering all consolidated operational units (defined as Hydro's ownership share exceeding 50 percent). Data reported to HERE should be based on specific environmental, energy and resource data reporting processes that have been established for management purposes at site, business unit, business area, and corporate level within Hydro. Data are reported on a 100 percent basis for all consolidated operational units if not otherwise stated. All environmental emissions include historical emissions from current operations and are recalculated annually to reflect Hydro's current portfolio, and secure comparability.

Data reported in HERE are in accordance with Hydro's corporate procedure "Registration of environment, resource and energy data". The procedure provides definitions and factors for estimating emission values. Data are compiled at each operational unit according to local environmental management systems and typically based on process data, measurements, calculations and/or purchasing data.

Where applicable, we have indicated to which GRI Standards disclosure the different notes or parts of the notes are relevant.

Note E1 – Greenhouse gas emissions

Reporting principles
GHG emissions have been calculated based on the principles of the WRI/WBCSD GHG Protocol. Direct emissions from production in Bauxite & Alumina, metal production and downstream operations as well as from the remelters, are comparable to Scope 1 emissions as defined by WRI/WBCSD GHG Protocol.

Indirect emissions, emissions from electricity generation, are calculated based on electricity consumption and emissions factors from the IEA CO_2 Emissions from Fuel Combustion (2019) and are comparable to scope 2 emissions from purchased electricity. For Hydro’s Annual Report 2019 we have updated the factors back to 2015, and historical figures have been updated accordingly.

We report indirect emissions according to the location-based method in the revised GHG Protocol Scope 2 Guidance. However, we have chosen not to report indirect emissions according to the market-based approach, as this method does not give the correct picture of physical realities.

As Hydro is an integrated company, with ownership along the whole aluminium value chain, the majority of Hydro’s emissions are covered within scope 1 and 2 emissions.

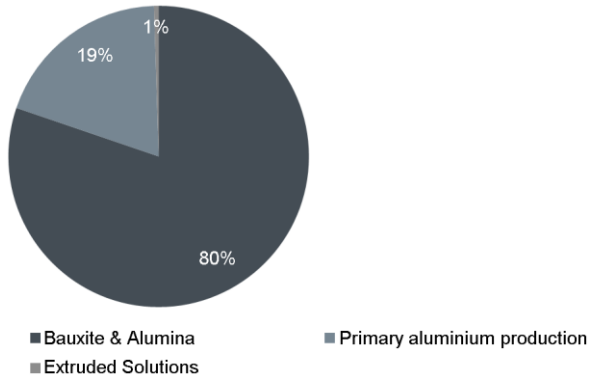
Hydro has a long position in alumina, but due to the production embargo at Alunorte in 2018 and 2019, we have to source more alumina from external sources. Sourced alumina was 2.8 million metric tons in 2019 and 4.0 million mt in 2018, this compares to 2.5 million tons in 2017. As Alunorte’s greenhouse gas emissions performance level is quite close to the global average, we assume that purchased alumina during 2018 and 2019 has a similar GHG intensity as Alunorte.

Scope 3 emissions cover other greenhouse gas emissions from e.g. external transport, purchasing of cold metal and other input materials. As part of Hydro’s new climate strategy we are evaluating the size of our scope 3 emissions in order to establish targets on greener sourcing.

E1.1 Total greenhouse gas emissions in consolidated activities

Reporting principles
Greenhouse gas emissions are reported per process step. For information purposes we have indicated in which business area (financial segment) the emissions mainly take place.

Hydro's consolidated direct greenhouse gas emissions per business area in Brazil



Greenhouse gas emissions - consolidated activities

Million tons CO2e	**2019**	2018	2017	2016	2015
Direct GHG emissions	**3.73**	3.29	5.03	5.00	4.75
Bauxite & Alumina	**2.99**	2.64	4.14	4.16	3.94
Primary aluminium production	**0.72**	0.63	0.87	0.83	0.80
Extruded Solutions	**0.02**	0.02	0.01	0.01	0.01
Indirect GHG emissions	**0.69**	0.63	0.88	1.04	1.14
From electricity generation (mainly primary aluminium production)	**0.69**	0.63	0.88	1.04	1.14
Total GHG emissions	**4.41**	3.92	5.90	6.03	5.89

GRI-reference: GRI Standards 305-1 (2016) and GRI Standards 305-2 (2016)

Hydro's direct and indirect emissions decreased significantly in 2018 due to the embargo at Alunorte, and curtailment at Albras and Paragominas. This is partly reversed in 2019 due to lifting of the embargo and ramp-up of production.

E1.2 Direct GHG emissions per GHG type in consolidated activities

Reporting principles
CO_2 emissions are calculated based on anode consumption during the electrolysis process and use of other fossil fuels. PFC (perfluorocarbon) emissions consist of the two greenhouse gases CF_4 and C_2F_6 which are formed during anode effect situations in the aluminium electrolytic cells. Anode effect is mainly a result of production instability, e.g. in connection to power outages. Emissions are calculated based on automatic process measurements.

Direct GHG emissions per GHG type - consolidated activites

Million tons CO2e	**2019**	2018	2017	2016	2015
CO_2	**3.65**	3.22	4.95	4.95	4.67
PFC	**0.08**	0.07	0.08	0.05	0.08
Total GHG emissions	**3.73**	3.29	5.03	5.00	4.75

Hydro's direct and indirect emissions decreased significantly in 2018 due to the embargo at Alunorte, and curtailment at Albras and Paragominas. This is partly reversed in 2019 due to lifting of the embargo and ramp-up of production.

E1.3 Total greenhouse gas emissions based on ownership equity

Reporting principles
In addition to the GHG emissions referred to above, we also report GHG emissions based on our ownership equity as per year end. This data includes Hydro's share of emissions from all operations including non-consolidated operations where Hydro has a minority interest. This figure is comparable to scope 1 according to the GHG protocol. Electricity generation covers indirect GHG emissions from purchased. This figure is comparable to scope 2 according to the GHG protocol. Emissions from electricity generation are based on electricity consumption and IEA CO_2 emissions from Fuel Combustion 2019 factors for indirect emissions.

Greenhouse gas emissions - ownership equity

Million tons CO2e	**2019**	2018	2017	2016	2015
Direct GHG emissions	**3.14**	2.77	4.26	4.27	4.04
Bauxite & Alumina	**2.75**	2.43	3.81	3.83	3.62
Primary aluminium production	**0.37**	0.32	0.45	0.42	0.41
Extruded Solutions	**0.02**	0.02	0.01	0.01	0.01
Indirect GHG emissions	**0.39**	0.36	0.49	0.59	0.64
Electricity generation (mainly primary metal production)	**0.39**	0.36	0.49	0.59	0.64
Total GHG emissions	**3.53**	3.13	4.75	4.85	4.68

GRI-reference: GRI Standards 305-1 (2016) and GRI Standards 305-2 (2016)

Hydro’s direct and indirect emissions decreased significantly in 2018 due to the embargo at Alunorte, and curtailment at Albras and Paragominas. This is partly reversed in 2019 due to lifting of the embargo and ramp-up of production.

E1.4 GHG intensity – Alunorte alumina refinery

Reporting principles
The GHG intensity is calculated based on total greenhouse gas emissions from Alunorte divided by total alumina production. All alumina refining in Hydro is included.

E1.5 GHG intensity – Electrolysis

Reporting principles
The GHG intensity is calculated based on greenhouse gas emissions from the electrolysis process. This is an operational target that excludes extraordinary emissions, e.g. during start-up of curtailed capacity. The methodology for calculation is site specific, and historical figures may be subject to change.

Note E2 – Other emission related indicators

E2.1 Other emissions

Reporting principles
Dust and particles include measured and estimated stack emissions and roof emissions from electrolysis. Other diffuse emissions are not included.

Fluorides cover emissions to air of gaseous and particulate fluorides from production of primary aluminium.

Sulfur dioxide to air is primarily from the use of coal as an energy source in Alunorte, and from the aluminium electrolysis process.

Other Emissions

Metric tons	**2019**	2018	2017	2016	2015
Dust and particles	**2,218**	1,814	3,745	3,378	3,873
Fluorides to air	**368**	231	314	300	366
Nitrogen oxide	**5,867**	5,375	7,628	7,648	7,199
Sulphur dioxide (SO_2)	**19,612**	13,044	28,521	27,535	26,326

GRI-reference: GRI Standards 305-7 (2016)

Hydro's emissions of dust and particles, nitrogen oxide and sulphur dioxide decreased significantly in 2018 due to the embargo at Alunorte, and curtailment at Albras. This is partly reversed in 2019 due to lifting of the embargo and ramp-up of production.

The increase in emissions of fluorides to air is due to the ramp-up of production at Albras, and is consistent with the process.

Hydro uses ozone depleting substances in certain applications in its Brazilian operations. In 2019, Hydro used in total 6.2 metric tons of such substances in its operations. The reported value corresponds to the purchased amount of such substances and can vary significantly according to the need of refilling existing cooling devices. In Brazil, such substances are registered and reported according to Brazilian legal requirements (GRI 305-6).

Methane (CH_4) and N_2O emissions from Hydro's operations are negligible compared to the other GHG emissions.

The emissions of mercury to air has been calculated to be around 3 metric tons per year at full production.

E2.2 Spillages and leakages

Reporting principles
Spillages and leakages to the external environment (ground, water or air) are registered in Synergi and in IMS, our reporting tools for incidents regarding health, safety, security and environment. According to Hydro's definition, any incident resulting in a spill or leak shall be reported, including significant spillages with short-term reversible damage. Leakages categorized as high severity, i.e. uncontained but reversible impact or uncontained and irreversible impact, and emissions to external environment categorized as high severity, i.e. unintended and sustained, are reported in the table below. A spillage or leakage can be reclassified according to changes in the actual consequence of the spillage or leakage, and historical figures are updated. Several reported incidents can be closely related and therefore classified as the same spillage.

Following a harmonization of reporting on environmental incidents and permit breaches between Extruded Solutions and other business areas in Hydro, we identified a difference in the severity of cases being included. This has been adjusted for in the reporting for 2019.

Spillages and leakages to the external enviroment

	2019	2018	2017	2016	2015
Spillages, leakages	**1**	1	0	0	0

GRI-reference: GRI Standards 306-3 (2016)

One is an onsite leakage of inert tailings (400m^3) at Paragominas, between the beneficiation area and tailings storage facility. The impact was reversible. There was an accident at the port area in Barcarena, where the caustic soda pipeline was damaged by a truck driver working for a different company. The pipeline was not in use, but the residual caustic soda in the pipe was released into the Para River. Alunorte performed an investigation, in coordination with the authorities, and found no lasting impact on the river. This incident was not our responsibility and we acted beyond our legal obligation to assist the authorities, and thus not included in the statistics above.

Ibama (Brazilian Institute of the Environment and Renewable Natural Resources) and Semas (the Secretary of State for Environment and Sustainability in Pará) concluded there were no overflow or leaks from Alunorte's bauxite residue deposits following the heavy rainfall in February 2018. For more information see the section "The Alunorte situation" in Hydro's Annual Report 2018.

E2.3 Permit breaches

Reporting principles
Permit breaches are based on monthly monitoring, and reported in Synergi and IMS. Hydro's definition of permit breaches, any incident that in any way relates to an environmental permit, is in certain cases more strict than the legal definition. Permit breaches categorized as high severity, requiring regulator contact or permit breaches with possible fine or suspension, are included in the table below. The reported permit breaches may be related to spillages and leakages covered in the table above. Several reported incidents can be related to the same permit and will be reported as one breach. Historical figures may be subject to change due to time lag in administrative procedures.

Following a harmonization of reporting on environmental incidents and permit breaches between Extruded Solutions and other business areas in Hydro, we identified a difference in the severity of cases being included in the report. This has been adjusted for in the reporting for 2019.

Permit breaches

	2019	2018	2017	2016	2015
Permit breaches	**0**	4	5[1)]	0	0

1) All five permit breaches relate to water withdrawal above the permit limit in Paragominas, Brazil

In 2018, there were four permit breaches in Bauxite & Alumina, of which three at Alunorte: the use of Canal Velho; rainwater from the roof of a coal shed; and the leakages through a disused pipe. For more information see the section “The Alunorte situation” earlier in this report.

E2.4 Provisions for environmental clean-up and future asset retirement obligations

Reporting principles
When Hydro, at acquisition of an asset or start of a business activity, has an obligation to remove, dismantle or remediate the asset or site used, that obligation is included in the cost of the asset with the present value of estimated remediation costs. The same treatment is applied if an obligation to remove, dismantle or remediate the asset is introduced at a later date, through new legislation or other means. For Hydro’s accounting policy for provisions and asset retirement obligations, see note 4.1 “Uncertain assets and liabilities” to the consolidated financial statements, in Hydro’s Annual Report 2019.

Note E3 – Energy

E3.1 Energy consumption and energy production

Reporting principles
Energy consumption includes purchased energy in Hydro's consolidated activities. Hydro in Brazil does not purchase heating, cooling or steam, which is produced internally and is reported as "other" energy consumptions.

Energy consumption per energy carrier - consolidated activites

Petajoule (PJ)	**2019**	2018	2017	2016	2015
Coal	**13.4**	13.2	15.2	15.2	13.5
Coke	**5.4**	5.1	6.8	6.4	6.5
Electricity	**21.1**	19.3	27.0	27.1	25.9
Gasoline	**0.0**	0.0	0.0	0.0	0.0
Natural gas	**0.4**	0.3	0.2	0.2	0.2
Oil	**19.1**	15.0	30.7	30.9	30.7
Other	**2.1**	1.1	1.4	1.3	1.4
Total energy consumption in PJ	**61.5**	53.9	81.3	81.2	78.2
Total energy consumption in TWh	**17.1**	15.0	22.6	22.5	21.7

Energy consumption per sector - consolidated activities

PJ	**2019**	2018	2017	2016	2015
Bauxite & Alumina	**35.5**	30.2	48.2	48.9	46.4
Electrolysis/Carbon/Casting	**25.5**	23.2	32.9	32.0	31.6
Extruded Solutions	**0.6**	0.6	0.2	0.3	0.3
Total energy consumption	**61.5**	54.0	81.3	81.2	78.3

Energy consumption in 2018 has been affected by the embargo on Alunorte, and the subsequent curtailment of production on the primary aluminium smelter Albras and the bauxite mine Paragominas. This is partly reversed in 2019 due to lifting of the embargo and ramp-up of production.

E3.2 Energy intensity

Reporting principles
Energy intensity in Alunorte is calculated based on total energy consumption in Alunorte divided by total alumina production.

Energy intensity at the smelter Albras is direct current consumption in the electrolysis process per kg aluminium.

Note E4 – Other resource use

E4.1 Materials

Reporting principles
Covers major raw materials used in the alumina refining process and electrolysis process beyond what is included in the energy consumption data.

Alumina and aluminium fluoride are primarily used in the electrolysis process, whilst lime, caustic soda (NaOH), sulfuric acid and flocculants are primarily used in the alumina refining process. Flocculants are also used at Paragominas.

The use of lime, caustic soda and sulfuric acid varies with the production of alumina, see note E7. The use of sulfuric acid depends also on the amount of rainfall and management of caustic soda at Alunorte.

Materials

1 000 metric tons	**2019**	2018	2017	2016	2015
Alumina	**643**	582	866	854	833
Aluminium fluoride	**7**	6	9	9	9
Lime	**39**	35	62	60	57
Caustic soda	**423**	363	649	640	592
Sulphuric acid	**15**	23	21	20	12
Flocculants	**4**	3	7	6	5

GRI Reference: GRI Standards 301-1 (2016)

E4.2 Water

Reporting principles
Some water loss to the external environment will occur as evaporation and/or steam. This water loss is not included in the figures below, which assume that water discharged is equal to water withdrawn. The quality of water discharge generally complies with local or site-specific permits before discharge to local water recipients and is of a high quality, as per the definition from International Council on Metals and Mining.

The majority of Extruded Solutions' sites has a closed loop water management system, and the water use is marginal compared to the rest of Hydro.

Total water withdrawal by site

million m3	**2019**	2018	2017	2016	2015
Albras	**0.77**	0.95	1.30	1.17	0.96
Alunorte	**26.72**[1)]	31.52	12.63	11.62	11.83
Extruded Solutions[2)]	**0.15**	0.16	0.03	0.03	0.04
Paragominas	**19.60**	17.34	21.89	20.46	19.98
Total water withdrawal	**47.24**	49.97	35.85	33.28	32.81

1) Includes 21.9 million m3 of rainwater not used in the process, but it is treated and discharged. Alunorte has improved the monitoring of rainwater, and the figure may not be comparable to historical figures. The figure varies with annual precipitation.
2) Extruded Solutions include Itu, Tubarao, and Utinga

Total water withdrawal by source

Million m3	High quality	Low quality	**Total 2019**	2018	2017[1)]	2016	2015
Surface water (fresh water)	15.33	0.00	**15.33**	15.31	16.50	17.04	16.82
Surface water (sea water)	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00
Ground water	9.96	0.00	**9.96**	11.01	12.72	11.58	11.49
Municipal water	0.00	0.03	**0.03**	0.04	0.03	0.03	0.03
Rain water	21.92	0.00	**21.92**[2)]	23.49	6.60	4.63	4.46
Total water withdrawal	47.21	0.03	**47.24**	49.85	35.85	33.28	32.80

1) Excluding Extruded Solutions.
2) Includes 21.9 million m3 of rainwater not used in the process, but it is treated and discharged. Alunorte has improved the monitoring of rainwater, and the figure may not be comparable to historical figures. The figure varies with annual percipitation.

GRI-reference: GRI Standards 303-3 (2018)

Around 6 percent of Hydro's total water withdrawal comes from the Parariquara river in Brazil and is used to supply the mine in Paragominas. Based on new hydrological studies of the Parariquara river, Paragominas' water extraction permits were revised in 2018. However, water collection can still be an issue if a new third-party user requests water extraction from the same watershed. If so, a new license will be needed for an additional extraction point.

Our alumina refinery Alunorte in Pará in norther Brazil, obtains an important part of its water supply through the bauxite slurry that is transported from Paragominas by pipeline. Paragominas' and Alunorte's water use is close to their current regulatory limits.

There has been a water tax within the state of Pará since 2015.

The GRI Standard 303-3 was updated in 2018, and since then reused water is not a reporting requirement. Hydro's reporting is updated accordingly.

Withdrawal from water-stressed areas

Million m3	**2019**	2018	2017	2016	2015
Total water withdrawal from water-stressed areas[1)]	0	0	0	0	0

GRI reference: GRI Standards 303-3 (2018)

From 2019, Hydro uses the WRI Aqueduct tool to analyze water withdrawal from water stressed areas, and historical data may not be comparable. Baseline water stress measures the ratio of total water withdrawals to available renewable surface and groundwater supplies. Areas categorized as high and extremely high with regard to water stress is included in the figure above. According to the tool none of Hydro's sites in Brazil are categorized as water stressed.

Total water discharge by destination

Million m3	High quality	Low quality	**Total 2019**	2018	2017[1)]	2016	2015
River (surface water)	30.51	0.00	**30.51**	29.37	25.24	19.61	20.14
Sewage (third-party water)	0.00	0.03	**0.03**	0.04	0.00	0.00	0.00
Other	8.55	7.71	**16.25**	16.29	10.58	13.63	12.63
Total water discharge by destination	39.06	7.74	**46.80**	45.70	35.82	33.24	32.77

1) Excluding Extruded Solutions

GRI Reference: GRI Standards 303-4 (2018)

Note E5 – Waste

Note E5.1 Tailings and bauxite residue

Reporting principles
Tailings from bauxite extraction consist of mineral rejects from the extraction process mixed with water. The tailings at Paragominas are stored in dedicated tailings dams, where the particles settle. Paragominas is Hydro's only consolidated mine. For more information see the section on Waste and efficient resource use on page 17 in this report.

Bauxite residue, also known as red mud, 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 (for more information see page 17).

Tailings and bauxite residue

1 000 metric tons[1)]	**2019**	2018	2017	2016	2015
Tailings	**2,871**	2,116	4,067	4,117	4,128
Bauxite residue (red mud)	**3,871**	3,191	5,979	6,426	5,973

1) On a dry basis

GRI Reference: G4-MM3

The significant decrease in 2018 is due to the Alunorte embargo (bauxite residue) and the corresponding Paragominas curtailment (tailings). This is partly reversed in 2019 due to lifting of the embargo and ramp-up of production.

The tailings generated in the bauxite's beneficiation process have no hazardous chemical properties, thus it is not necessary to line the tailing dams.

As a control measure, static water pressures within the walls of our tailings dam at Paragominas are monitored through the use of dedicated instrumentation (piezometers).

E5.2 Hazardous waste and other waste

Reporting principles
Waste is reported as specified according to the EU waste directive/waste catalog. Bauxite & Alumina improved its waste reporting in 2016 and 2015.

All sites in Extruded Solutions report according to the EU waste catalog from 2019. Compared to last year, data quality on waste figures has improved, and is expected to improve further going forward.

Spent potlining (SPL) from the electrolysis cells used in primary aluminium production is defined as hazardous waste. The production of spent potlining varies with the relining of smelter cells which is normally done every 4-7 years for established smelters.

A significant amount of Extruded Solutions hazardous waste is in the form of spent caustic produced following the die cleaning process with a large proportion of this recycled.

Hazardous and other waste

1 000 metric tons	**2019**	2018	2017	2016	2015
Spent potlining	**19.1**	16.6	15.6	8.9	11.6
Other hazardous waste	**46.6**	61.5	95.6	74.3	70.5
Total hazardous waste	**65.6**	78.1	111.2	83.2	82.1
Other waste	**177.3**	83.4	175.3	135.0	171.3
Total waste	**243.0**	161.5	286.4	218.3	253.4

GRI Reference: GRI Standards 306-4 (2016)

E5.3 Waste treatment

Reporting principles
Waste sorted by treatment includes external and internal treatment. Tailings and bauxite residue are deposited in appropriately engineered and managed on-site landfills and are not included in the table below. Combustion without energy recovery is included under Other treatment.

Treatment of hazardous waste

	2019	2018	2017	2016	2015
Energy recovery	**17%**	11%	6%	5%	11%
Landfill	**25%**	38%	52%	58%	52%
Other	**36%**	31%	18%	18%	19%
Reuse/recycling	**22%**	20%	24%	19%	18%

Treatment of other waste

	2019	2018	2017	2016	2015
Energy recovery	**3%**	1%	3%	2%	3%
Landfill	**87%**	81%	90%	84%	84%
Other	**3%**	5%	2%	3%	4%
Reuse/recycling	**6%**	13%	5%	11%	9%

GRI-reference: GRI Standards 306-2 (2016)

The majority of non-hazardous waste to landfill is related to coal fly and ash from the steam generation process at Alunorte. This material is preferably used in the access roads in the bauxite residue deposits to increase stability troughout the humidity reduction (blending). Sand from the Bayer process has previously been categorized separately from bauxite residue and is a part of the non-hazardous waste to landfill figure above. Following the introduction of press filters, this is no longer necessary, and the sand is no longer produced since the start of the press filter operation in 2018. For 2018 the sand is categorized as bauxite residue.

Note E6 – Biodiversity

E6.1 Overburden moved

Reporting principles
Total volume (in metric tons) of overburden moved in Hydro's mine in Paragominas. This is the only mine within Hydro's consolidated operations.

Overburden moved

Million metric tons	**2019**	2018	2017	2016	2015
Overburden moved	**45**	48	83	83	70

GRI Reference: G4-MM3

The volume reduction in 2019 and 2018 is due to the curtailment in Paragominas.

Hydro uses strip mining in Paragominas, a technique that avoids the formation of an overburden stockpile. Thus, all overburden moved for mining purpose is used to reconstruct the topography of the strip previously mined, prior to rehabilitation of the mined areas. Part of the overburden (laterite) is also used for paving roads and for raising the heights of existing tailing dams and constructing new ones.

The sterile soil is untreated and has no dangerous properties. Leaching potential due to overburden removal is negligible. There is a water resource management program in place to mitigate silting from the plateau areas.

E6.2 Land use and rehabilitation

Reporting principles
Hydro's only consolidated mining operation is in Paragominas in Brazil. Areas are measured using the ArcGIS Platform. The rehabilitation data are reported to ANM (the Brazilian National Mining Agency) and Semas (the Secretary of State for Environment and Sustainability in Pará), as part of the clearing permit renewal process.

In our mining operation we strive for a year-on-year balance between the area that we mine and make available for rehabilitation every year and the area that we succeed in rehabilitating every year. From 2018, this target is a rolling average across two hydrological seasons, and the categories for land-use have been redefined.

The 2020 target of closing the historical rehabilitation gap was achieved in 2018.

The mining cycle is made up of several steps. When a given area of land is to be developed, the first step is clearing, when vegetation and soil are removed. The area is then classified as area cleared for future mining. After an area is mined, it is either classified as tailings dams and other mining infrastructure or area available for rehabilitation. All areas available for rehabilitation will be rehabilitated as soon as possible and subsequently classified as an ongoing rehabilitation area.

When tailings dams are closed, they will become available for rehabilitation after settling for minimum five years. We will then get a significant increase in the tailings dam infrastructure available for rehabilitation. There may be additional movements between different statuses from year to year due to reclassification.

During 2019, we cleared 346 hectares (ha) for future mining. We mined 215 ha of which 124 ha were then dedicated to mining infrastructure. As a result, a total of 84 ha were mined and subsequently made available for rehabilitation during 2019. This area must be completely rehabilitated by the end of 2021 in order to meet the 1:1 rehabilitation target.

Of the 151 ha made available for rehabilitation in 2017, 88 percent was rehabilitated in 2018. The remaining 12 percent was completed in 2019, and we met the 1:1 rehabilitation target. Of the 113 ha that were made available for rehabilitation in 2018, 98 percent were rehabilitated in 2019, and the remaining two percent need to be rehabilitated in order to reach the 1:1 rehabilitation target for 2020.

The clearing, mining and rehabilitation cycles are constantly ongoing and are not synchronized. Clearing and mining are at their peak in the dry season, whilst rehabilitation happens primarily in the wet season. The three cycles are also influenced by different drivers such as permits for the clearing cycle, land available for rehabilitation, and rainfall for the rehabilitation cycle. As a result, there is no direct link between the area cleared each year and the area mined or rehabilitated that same year (e.g. an area cleared in 2017 may be mined late 2018 and then rehabilitated in the 2019 wet season). Due in large part to this complexity, the figures presented above for 2018 and 2019 can not be directly deducted from the figures in the land use and rehabilitation table below.

All areas stated in the table below give a snapshot of Paragominas' land use at year end.

Land use and rehabilitation - Paragominas

Hectares given per point in time	**2019**	2018	2017	2016	2015
Permanent infrastructure[1)]	**2,397**	2,397	2,447	2,446	2,447
Tailings dam and other mining infrastructure[1)]	**2,472**	2,472	1,918	1,705	1,397
Area cleared for future mining	**346**	380	257	364	424
Ongoing rehabilitation areas[1)]	**2,339**	2,203	1,872	1,689	1,509
Rehabilitation gap[1)]	**317**	296	119	238	299
Historical gap[2)]	**-**	-	8	-	-
Mined area available for rehabilitation[3)]	**84**	131	-	-	-
Total area affected	**7,955**	7,879	6,621	6,442	6,076

1) The definition is updated, and historical data may not be comparable
2) The historical rehabilitation gap refers to the one inherited from Vale. Historical figures are not available
3) New category from 2018

GRI Reference: G4-MM3

The rehabilitation gap is a result of ongoing operations, i.e. areas set aside for infrastructure being reclassified, or missed/failed/poor previous rehabilitation. In 2018, 170 ha were reclassified as failed rehabilitation, and 105 ha of former infrastructure became available for rehabilitation.

The Hydro Paragominas property measures in total 18,763 hectares (ha), while the land use at the end of 2019 was 7,955 ha, including 2,339 ha under rehabilitation.

There are specific closure plan requirements for the Paragominas mine (rehabilitation of mine and tailings ponds). In addition, there is a similar requirement for the bauxite residue disposal areas at Alunorte. Hydro has a dedicated corporate function which oversees legacy issues and addresses closure issues. For the time being such plans are further developed on an ad hoc basis when relevant, and a strategy is under development.

E6.3 Endangered species

Reporting principles
Hydro uses a federal database updated by ICMBio researchers to classify species. The conservation status of species registered in the reference databases can change. As a result, the species list is updated and species added, removed and/or moved from one status to another. Reported species are cumulative and represent all species observed within the premises of Hydro's mining activities in Paragominas, Brazil, since monitoring and registration started in 2003. Some species included in the overview are covered by more than one database and the numbers can therefore not be summed across the columns. In addition, each database is stand alone and they are therefore not comparable.

Endangered species registered within the influence area of Hydro's mining activities (Paragominas)

Conservation status	MMA[1)]		Semas [2)]		IUCN [3)]	
	Fauna	Flora	Fauna	Flora	Fauna	Flora
Critically endangered	3	2	2	1	2	1
Endangered	8	1	9	0	3	1
Vulnerable	27	2	9	8	17	15
Threatened	0	0	0	0	0	0
Near threatened	1	1	0	0	15	2
Data deficient	1	0	0	0	3	1
Total according to each red list classification	40	6	20	9	40	20

1) Federal Brazilian red list
2) Pará state red list
3) International Union for Conservation of Nature red list

GRI-reference: GRI Standards 304-4 (2016)

In total 93 different species, including 62 fauna and 31 flora, are covered by the overview. The total number increased by 4 in 2019, mainly due to the research effort by the Biodiversity Research Consortium Brazil-Norway, see page 20. We are expecting the number of new, unique species to increase going forward as we move into new territory.

Note E7 – Production volumes

Reporting principles
The figures reported below are total production volumes (100 percent) from consolidated activities only (Hydro's ownership share exceeding 50 percent). Alumina production includes thus 100 percent of the production at Alunorte while primary aluminium production includes 100 percent of production at Albras. Alumina and primary aluminium production are by far the most energy and GHG intensive processes in Hydro.

Production volumes consolidated activites

1 000 metric tons	**2019**	2018	2017	2016	2015
Bauxite production	**7,360**	6,214	11,435	11,132	10,060
Alumina production	**4,487**	3,712	6,397	6,341	5,962
Primary aluminium production	**327**	308	447	446	435

Production volumes ownership equity

1 000 metric tons	**2019**	2018	2017	2016	2015
Bauxite production	**7,969**	6,937	12,249	12,042	10,979
Alumina production	**4,084**	3,378	5,821	5,770	5,425
Primary aluminium production	**167**	157	228	228	222

Production volumes decreased significantly in 2018 due to the embargo at Alunorte (alumina), and curtailment at Albras (primary aluminium) and Paragominas (bauxite). This is partly reversed in 2019 due to lifting of the embargo and ramp-up of production.

Social statements

The table below shows Hydro's main indicators related to social performance. For geographical distribution of total assets, investments and revenues, see note 7 to the consolidated financial statements in Hydro's Annual Report 2018.

Social performance

	Notes	% change 2018-19	**2019**	2018	2017	2016	2015	GRI Standards reference
Employees								
Number of permanent employees	S1.1	17%	**6,108**	5,658	5,227	4,743	4,830	102-7 (2016)
Share of women	S1.1	1 pp[1)]	**14%**	13%	12%	13%	12%	
Number of temporary employees[2)]	S1.2	-10%	**295**	327	306	308	231	102-8 (2016)
Full-time equivalents for contractor employees	S1	9%	**7900**	8,100	7,400	8,100	6,700	102-8 (2016)
New employees	S1.3		**861**	415	393[4)]	595	736	401-1 (2016)
Turnover	S1.3	5 pp[1)]	**9%**	11%	6%	6%	7%	401-1 (2016)
Hydro Monitor Employee Engagement Index	S4	6 pp[1)]		90%		84%		
Payroll (NOK million)	S1.1		**570**	518	450[4)]	407	370	201-1 (2016)
Health and safety	S5							
Sick leave	S5.1	-0,1 pp[1)]	**2.2 %**	2.0 %	2.2 %	2.2 %	2.3 %	403-2 (2018)
Total recordable injuries (TRI) rate[3)]	S5.1	-34%	**1.3**	1.8	2.0	1.8	1.8	403-2 (2018)
Employees		-1%	**1.5**	1.5	2.3	1.6	1.6	
Contractors		-38%	**1.2**	2.0	1.8	1.9	1.9	
Number of fatal accidents	S5.1		**0**	0	0	0	0	403-2 (2018)
Employees			**0**	0	0	0	0	
Contractors			**0**	0	0	0	0	
High risk incidents	S5.2	-4%	**23**	21	24	13	17	403-2 (2018)
Current income tax (NOK million)	S7	-20%	**130**	140	164	352	162	
Research and Development (BRL million)								
R&D funds received[4)]	S8	100%	**0**	0	0	0	0	201-4 (2016)
R&D expenses	S8	-25%	**8**	11	14	12	5	
Social investments								
Community investments, charitable donations and sponsorships (BRL million)[4)]	S9	-20%	**26**	33	5	3	5	
Compliance	S10							
Cases reported through AlertLine	S10.1	-	**166**	192	-	-	-	102-3 (2016)
Confirmed instances of corruption	S10.1	0%	**0**	0	0	0	0	205-3 (2016)
Confirmed human rights breaches	S10.1	0%	**0**	0	0	0	0	406-1/407-/408-1/409-1 (2016)
Relocation of people	S10.3		**0**	**0**	**0**	**0**	**0**	G4-MM9
Training in business ethics Hydro	S10.4	-	**475**	533	[4)]			412-2/205-2 (2016)
Supplier audits	S10.5	-24%	**83**	109	123	129	61	HDD-01

Figures in brackets indicate a decrease.

1) Values are given as percentage points compared to previous year
2) There may be uncertainties related to data from Extruded Solutions, please see section on Uncertainties related to data from Extruded Solutions in About the reporting
3) Per million working hours. The numbers include discontinued operations, but not Utinga and Tubarao
4) Excluding Extruded Solutions

Notes to the Social Statements

Data relating to health, safety and work environment have been prepared by individual reporting units in accordance with corporate procedures. This applies to all Hydro's operations, including consolidated subsidiaries, if not otherwise stated. Such data are based on the corporate reporting system for incident reporting, IMS for Extruded Solutions and Synergi for the other business areas in Hydro. The units report incidents to the systems on a regular basis in accordance with a corporate procedure on HSE incidents and sick leave data. Employee data are reported based on Hydro's SAP system.

The reporting methodology will follow Hydro's principles, unless otherwise stated.

Where applicable, we have indicated to which GRI Standards disclosure the different notes or parts of the notes are applicable. Please also see the social statements on the previous page for more such information.

Note S1 – Employees

Reporting principles
Data for Hydro's permanent and temporary employees are based on Hydro's human resources SAP system. Data presented represent status at year end, December 31**.** Payroll is based on Hydro’s consolidated financial statements. Payroll, as provided in the table below, does not include pension costs.

Temporary employees include among others apprentices, but exclude contractor employees. Legal requirements and customs may vary from country to country, making direct comparison difficult.

Number of full-time equivalents of contractor employees as included in the social statements is estimated based on the total hours worked by contractor employees (reported in Hydro's incident reporting system Synergi and IMS as basis for calculation of injury frequency) divided by 1,850 working hours per year. Contractor employees represented in total about 7,900 full-time equivalents during 2019. The majority relates to Hydro's Bauxite & Alumina activities.

S1.1 Permanent employees by gender, age and payroll

Permanent employees by gender

	2019	2018	2017	2016	2015
Albras	**1,223**	1,184	1,206	1,166	1,260
Women	6%	6%	5%	6%	7%
Men	94%	94%	95%	94%	93%
Alunorte	**2,085**	1,963	2,008	1,939	1,986
Women	13%	12%	11%	12%	12%
Men	87%	88%	89%	88%	88%
Belem office	**275**	236	205	173	82
Women	41%	47%	44%	48%	38%
Men	59%	53%	56%	52%	62%
Itu	**361**	374	368	-	-
Women	16%	15%	13%	-	-
Men	84%	85%	87%	-	-
Paragominas	**1,528**	1,357	1,371	1,399	1,434
Women	13%	12%	13%	14%	13%
Men	87%	88%	87%	86%	87%
Rio de Janeiro office	**79**	64	62	57	60
Women	47%	50%	47%	51%	53%
Men	53%	50%	53%	49%	47%
Tubarão	**271**	232	-	-	-
Women	14%	17%	-	-	-
Men	86%	83%	-	-	-
Utinga	**263**	239	-	-	-
Women	14%	13%	-	-	-
Men	86%	87%	-	-	-
Other locations in Brazil	**23**	9	7	9	8
Women	36%	11%	14%	22%	25%
Men	64%	89%	86%	78%	75%
Total Brazil	**6,108**	5,658	5,227	4,743	4,830
Women	14%	13%	12%	13%	12%
Men	86%	87%	88%	87%	88%

GRI reference: GRI Standards 201-1 (2016) and 102-8 (2016)

Payroll

	2019	2018	2017	2016	2015
Payroll (BRL million)	**570**	518	450	407	370

GRI Reference: GRI Standards 405-1 (2016) and G4-EU15

Age distribution permanent employees

Age distribution

	2019	2018	2017	2016	2015
Under 30	**21%**	16%	17%	18%	22%
30-49	**67%**	71%	68%	67%	63%
50 +	**12%**	13%	15%	15%	15%

GRI Reference: GRI Standards 405-1 (2016) and G4-EU15

S1.2 Employees by employment type and part-time employees

Total employees by employment type

Employment category	**2019**	2018	2017	2016	2015
Permanent - total[1)]	**6,109**	5,658	5,227	4,743	4,830
Temporary - total	**343**	344	295	327	306
Women	**36%**	35%	48%	31%	40%
Men	**64%**	65%	52%	69%	60%

1) For gender of permanent employees see Note S1.1

GRI Reference: GRI Standards 405-1 (2016) and G4-EU15

Part-time employees include all persons being employed in positions that are not full-time (less than 100 percent).

Part-time employees

	2019	2018	2017
Part-time employees[1)]	**0.2 %**	0.2 %	0.1 %
Women	**0.2 %**	0.4 %	0.3 %
Men	**0.1 %**	0.1 %	0.1 %

1) Data prior to 2017 is not available

GRI Reference: GRI Standards 102-8 (2016)

Hydro employees normally work full-time. The opportunity to work part-time is considered a benefit for which a special application must be made.

S1.3 New employees and turnover

New employee hires by age group and gender

	Age								
	2019				2018				2017
Gender	Total	Under 30	30-49	50+	Total	Under 30	30-49	50+	Total[1)]
Brazil	**861**	**337**	**490**	**34**	415	170	232	13	393
Women	8%	13%	6%	0%	22%	26%	19%	8%	9%
Men	92%	87%	94%	100%	78%	74%	81%	92%	91%

1) Extruded Solutions are not included for 2017

GRI-references: GRI Standards 401-1 (2016), G4-EU15

The employee turnover rate includes resignations, retirements and manning reductions, but excludes closures and divestments.

Employee turnover by age group and gender

	Age								
	2019				2018				2017[1)]
Gender	**Total**	**Under 30**	**30-49**	**50+**	**Total**	**Under 30**	**30-49**	**50+**	Total
Brazil	**9%**	**10%**	**7%**	**15%**	**11%**	**2%**	**7%**	**2%**	6%
Women	11%	11%	10%	18%	14%	5%	8%	1%	9%
Men	8%	9%	7%	15%	11%	1%	7%	3%	6%

1) Extruded Solutions not included

GRI-references: GRI Standards 401-1 (2016), G4-EU15

Note S2 – Remuneration

Reporting principles
Data on gender related salary differences and "highest paid employee" is based on local salary systems in Brazil.

Please see note 9 to the Consolidated financial statements in Hydro's Annual Report 2019 for more information.

S2.1 Gender related salary differences

All employees shall receive a total compensation that is competitive and aligned with local industry standard (but not market leading). The compensation should also be holistic, performance oriented, transparent, fair and objective. Salaries in the organization are reviewed on a regular basis. There is no significant gender-pay differentials for employees earning collective negotiated wages in Brazil.

S2.2 Highest paid employee

Highest paid employee includes fixed salary, pension, health insurance and other benefits, but excludes bonuses. Any severance pay is excluded from the highest paid employee calculation to ensure consistency.

Highest paid employee

BRL thousand	% change, 2017-18	**2018**	2017	2016
Highest paid employee	-59%[1)]	**5,334**	**13,104**	**10,646**

GRI-reference: GRI Standards 102-38 (2016) and GRI Standards 102-39 (2016)

S2.3 Standard entry level wage

Entry level wages have been checked for some significant locations of operation. In Brazil, entry level wages are controlled by the labor agreement. The ratio compared to national minimum wage was in 2018 both for women and men 1.25 in Barcarena and 1.89 in Paragominas.

GRI reference: GRI Standards 202-1 (2016)

Note S3 – Diversity

S3.2 Local representation in senior management

Reporting principles
Senior management is defined as the management group at each site (site managers and those reporting to them) in addition to business area management teams. Local is defined at state level for Brazil.

Local representation in senior management					
Share of senior management hired from local community	**2019**	2018	2017	2016	2015
Paragominas, Pará	**9%**	8%	9%	11%	18%
Barcarena, Pará	**17%**	13%	15%	21%	26%
Bauxite & Alumina management team	**0%**	0%	0%	0%	0%

GRI-reference: GRI Standards 202-2 (2016)

Of the ten members of the Bauxite & Alumina management team in Brazil, half are Brazilian citizens.

S3.3 Diversity in workforce – people with disabilities

Brazilian Legislation requires that companies with more than 100 employees must have between 2 percent and 5 percent people with disabilities (PCD) in its workforce (depending on the number of employees). We aim at meeting the required quota, but we are aware that we still have challenges to overcome.

Diversity in workforce - people with disabilities in 2019	Employees with disabilities 2019	Legal requirement 2019	Employees with disabilities 2018	Legal requirement 2018
Belém office	13	11	12	8
Rio de Janeiro office	N/A	N/A	N/A	N/A
Albras	51	61	39	59
Alunorte	92	102	90	94
Paragominas	70	71	67	63
Energy	N/A	N/A	N/A	N/A
Itu	12	9	11	12
Utinga	7	7	8	8
Tubarão	10	7	10	8

Note S4 – Employee engagement

Reporting principle
Hydro Monitor is normally carried out for all employees every second year.

The Employee Engagement Index (EEI) measures the extent to which employees are motivated to contribute to organizational success, and are willing to apply discretionary effort to accomplishing tasks important to the achievement of organizational goals. The Performance Excellence Index (PEI) measures among other things to which degree systems and processes are in place.

The long-term ambition is to be among the top 25 percent companies worldwide on EEI.

Hydro Monitor

	2019	2018	2017	2016
Employee Engagement Index (EEI)	**N/A**	90%	N/A	84%

The engagement survey is a tool to work with organizational development, therefore the most important part is follow-up of agreed actions. All units that participated in the survey in 2018 had action plans by 1 October 2018, based on their survey results. In 2018, the survey was run without Extruded Solutions. A new Hydro Monitor for the entire organization was to be conducted for all employees in 2019, but was postponed to third quarter 2020 due to the cyber-attack.

Note S5 – Health and Safety

Reporting principles
Standardized statistics are prepared and reported to management on a monthly basis. Data covers all organizational units within Hydro, including sales offices and administrative functions

Workers (own employees and contractor employees as defined in note S5.1) are included during the period they are employed by or otherwise in service for Hydro.

S5.1 Total recordable injuries (TRI), Lost time injury (LTI) and sick leave

Total recordable injuries (TRI) index is calculated as the number of TRI per one million hours worked. TRI include LTI + RWC + MTC.

Lost time injury (LTI) is a personal injury at work leading to unfitness for work and absence beyond the day of the accident.

Restricted work case (RWC) is a personal injury at work that does not lead to absence beyond the day of the accident, because of alternative job assignment.

Medical treatment case (MTC) is treatment, other than first aid, administered by a physician or registered professional personnel under the standing orders of a physician.

Employees are workers under direct supervision of Hydro.

Contractors are workers who are under contract to execute work for Hydro, and who are under the direct supervision of the contractor, but at Hydro premises under Hydro's indirect supervision.

Sick leave absence due to injuries, work related and other illness, measured as number of hours lost due to sick leave as percent of number of hours worked plus number of hours lost due to sick leave.

There are challenges in ensuring consistent reporting practice on sick leave across the company due to legislative and cultural differences between countries.

Data from the Utinga and Tubarao are not included.

Total recordable injuries, lost-time injuries, fatal accidents and sick leave [1)]

	2019	2018	2017[2)]	2016	2015

Total recordable injuries (TRI)	**34**	44	45	42	43
Employees	16	14	20	14	19
Contractors	18	30	25	28	24
Total recordable injuries rate (TRI)[3)]	**1.3**	1.8	2.0	1.8	1.8
Employees	1.5	1.5	2.3	1.6	1.6
Contractors	1.2	2.0	1.8[4)]	1.9	1.9
Lost-time injuries (LTI)	**8**	25	9	2	3
Employees	5	9	4	1	3
Contractors	3	16	5	1	0
Lost-time injuries rate (LTI)[5)]	**0.3**	1.0	0.4	0.1	0.1
Employees	0.5	0.9	0.5	0.1	0.3
Contractors	0.2	1.1	0.4[4)]	0.1	0.0
Total number of fatal accidents	**0**	0	0	0	0
Employees	0	0	0	0	0
Contractors	0	0	0	0	0
Sick leave, percent	**2.2**	2.0	2.2	2.2	2.3

1) The numbers include discontinued operations.
2) Extruded Solutions are included from 2 October 2017.
3) Number of recordable injuries per million working hours.
4) Excluding Extruded Solutions. Working hours for Extruded Solutions in 2017 can not be split between employees and contractor workers.
5) Number of lost-time injuries per million working hours.
6) 2014 figures are not available

GRI-reference: GRI Standards 403-9 (2018)

In 2019, we deployed fatality prevention protocols and associated lifesaving rules and behaviours across all business areas. We also identified and shared best practices more effectively through a revised HSE auditing process and use of digital tools.

The fatality prevention protocols, also known as the "critical seven", are:
- Energy Isolation (Lockout, Tagout and Verify, LOTO etc)
- Fall Prevention (working at height, below floor level, falling objects etc)
- Mobile Equipment (free moving vehicles such as forklift trucks, traffic management)
- Overhead Crane Safety (overhead travelling crane, mobile crane, tower crane etc)
- Confined Space Entry (entering tanks, pits etc)
- Molten Metal Safety (preventing explosion)
- Contractor Management (preventing injury during projects and other work to contractors and those providing contracted services)

The most dominant types of injuries in 2019 were damages to fingers and hands, representing over half of all recorded injuries. Injured legs, knees, ankles and feet represent around 20 percent while arms, elbows, shoulder and wrists represent 10 percent. Damages to face, eyes and head accounted for 10 percent of the recorded injuries. Hydro is not reporting these figures per gender as this can be in conflict with privacy protection considerations.

S5.2 High risk incidents (HRI)

High risk incidents include major accidents and incidents with major potential.

High risk incidents (HRI) rate is calculated as the number of high risk incidents per million hours worked, employees and contractors combined.

High risk incidents (HRI)

	2019	2018	2017	2016	2015
High risk incidents	**23**	21	24	13	17
HRI rate	**0.9**	0.9	1.1	0.6	0.7

GRI-reference: GRI Standards 403-9 (2018)

S5.3 Wellness

Hydro is concerned about the wellness of our employees, and offers a variety of initiatives, that promote good physical and mental health.

The majority of Hydro's sites have wellness initiatives in place. Some examples of initiatives range from nutrition and weight management, tobacco cessation to managing work-life balance. The different sites offer wellness initiatives that address issues relevant for that site or region.

Note S6 – Labor rights

Reporting principles
Hydro's major sites Brazil are unionized. Learn more about dialogue with the employee representatives under Dialogue with affected parties on page 19.

No strikes exceeding one week and no lock-outs took place in 2019.

Note S7 – Current income tax

Reporting principles
Current income tax is based on Hydro's financial statements.

Current income tax

BRL Million	**2019**	2018	2017	2016	2015
Current income tax	**130**	140	164	352	162

GRI-reference: GRI Standards 201-4 (2016)

The general corporate income tax rate in Brazil is 34 percent. Hydro's bauxite, alumina and aluminium operations in Brazil have been granted income tax incentives encouraging investments in the northern provinces of Brazil, reducing the tax rate on operating income to between 20 and 34 percent. In addition, Hydro's operations in Brazil are subject to a number of significant indirect taxes.

Hydro reports according to the Extractive Industries Transparency Initiative and Norwegian legal requirements, see Hydro's Country by country report on page 83. We also report on financial assistance from public organization related to R&D activities, see note S8.

In total, Hydro paid almost 1.2 billion NOK in taxes and fees to Brazilian authorities in 2019.

Note S8 – Research & Development (R&D)

Reporting principles
R&D expenses are collected through Hydro's financial reporting. R&D funding is gathered from Hydro's R&D centers.

Research & Development

BRL Million	**2019**	2018	2017	2016	2015
Research & Development expenses	**8.1**	10.7	13.9	12.4	5.0
Funding received	**0.0**	0.4	0.0	0.0	0.0

Note S9 – Social responsibility

S9.1 Community investments, charitable donations and sponsorships

Reporting principles
All sites, except Extruded Solutions, report annually on all community investments, charitable donations, sponsorship and other related initiatives. The reporting includes monetary amounts and time spent and benefits to the company as well as to the communities. Outcomes for Hydro and the society are also included in the reporting requirements.

Community investments

BRL million	**2019**	2018	2017	2016	2015
Community investments[1)]	**22**	11	4	3	3
Total community investments, charitable donations and sponsorships	**26**	33	5	3	5

1) Excluding Extruded Solutions.

The increase in 2018 includes NOK 35 million related to emergency relief following the extreme rainfall and subsequent flooding in Barcarena in 2018. It also includes around NOK 10 million to foodcards as part of the TAC agreement. These are included as Charitable Donations. See the section “The Alunorte situation” in Hydro’s annual report 2018.

Extruded Solutions has several community investments at its sites. The nature of such projects varies with local customs and business needs. We do no currently have consolidated information about these.

S9.2 Social responsibility target

Reporting principles
Hydro has committed to contribute to quality education, and capacity and competence building for 500,000 people in our communities and for business partners from 2018 until end of 2030.

We have established a framework and methodology for counting the people impacted by our programs and initiatives to ensure consistency across the company.

Education refers to initiatives within the formal educational system, from elementary school to university. Examples of initiatives include training of teachers and external scholarships.

Capacity, or competence, building refers to all training and competence building outside formal educational systems. Examples includes trainees and Hydro’s supplier development program established in Brazil.

Social responsibility target

Number of people	**2019**
Education and capacity building	**26600**

Continuous improvement of current initiatives and development of new effective, high-impact initiatives will be important going forward. Education, and capacity and competence building initiatives contribute equally to the total.

Note S10 – Compliance

Reporting principles
Compliance data have mainly been collected from Internal Audit Corporate’s overview of alerts reported to line management, to supporting staff functions, and through Hydro's AlertLine. In addition, compliance data has been obtained from quarterly compliance reporting by business areas, and a self-assessment filled in by each business area at year-end. Some information has also been collected through other sources including Hydro's Legal department and Procurement Network.

S10.1 Reported and confirmed cases of non-compliance

Non-compliance cases are normally reported to line management and/or supporting staff functions including Compliance, Internal Audit, HR, Legal, HSE, Finance and Accounting. Non-compliances can also be reported through Hydro's AlertLine, which offers the possibility of anonymous reporting, unless otherwise prohibited by local law.

The number of dismissals due to breach of Hydro policy is limited to cases reported to Hydro's Internal Audit.

In 2019, Hydro received 22,000 notices in Canal Direto, the grievance mechanism in Brazil. The majority were related to questions about the food card distribution process. Distribution of food cards was part of the TAC agreement with the Government of Parà and Ministèrio Pùblico in relation to the Alunorte situation in 2018. A review of the Canal Direto and plans for improvements are underway. "Term of Adjustment of Conduct" is an agreement between Alunorte, Ministério Público and the Government of Pará/Semas and regulates certain technical studies and improvements, audits, payments of fines, and payments for food cards to families living in the hydrographic area of the Murucupi river.

Cases reported regarding breaches of Hydro policy

	2019	2018
Number of cases reported through AlertLine (or similar)	**166**	192
Dismissals due to breaches of Hydro policy	**1**	4
Alleged cases of harassment	**49**	31
Alleged cases of discrimination	**4**	4
Confirmed cases of harassment	**24**	2
Confirmed cases of discrimination	**1**	0
Alleged cases of corruption, fraud, corruption and/or conflict of interest	**24**	19
Confirmed cases of corruption	**0**	0
Confirmed cases of fraud	**0**	0
Confirmed cases of conflict of interest	**1**	1

GRI-reference: GRI Standards GRI 406-1 (2016) and 205-3 (2016)

S10.2 Legal claims

The legal claims stated below are cases related to Brazil. For more information about other legal proceedings in Hydro, including the case related to Sapa Profiles Inc., a Portland, Oregon based subsidiary to Hydro Extruded Solutions AS, please see the section Legal proceedings on in Hydro's Annual Report 2019.

Cases related to the Alunorte situation

February 28, 2018: The State Public Prosecutor's Office filed in the State Criminal Court of Barcarena, State of Para, Brazil, a criminal lawsuit against Alunorte alleging a leakage/overflow of the bauxite residue deposits to the external environment and environmental damage. An injunction was granted, and the court determined the prohibition on the use of the new bauxite residue deposit DSR2 and the reduction of the production to 50 percent. The case was referred to the Federal Court which maintained the injunction. On May 20, 2019, the Federal Court lifted the production embargo on the Alunorte alumina refinery allowing Alunorte to ramp up towards normal production. On September 2, 2019, a joint petition was filed (Federal Public Prosecutors, Alunorte and Norsk Hydro Brasil) requiring the court to lift the embargo on DRS2 to resume the installation and commissioning activities. A termination of the criminal lawsuit was also requested. On September 26, 2019 the court lifted the DRS2 embargo and terminated the lawsuit.

March 03, 2018: The trade unions of workers in the chemical industries of Barcarena, State of Para, requested an injunction to avoid Alunorte to conduct any dismissals of employees without first negotiating with the labor union. The Labor Court of the district of Abaetetuba, State of Para, granted such injunction but the decision was overturned by the Court of Appeal. In respect of the merits of the case, on February 28, *2019* the Labor Court of Abaetetuba maintained its previous decision. The Court of Appeal accepted the request for the supervening loss of the object, with the extinction of the lawsuit. In essence, the judgment excluded the obligation to reintegrate workers being dismissed during the production embargo and excluded any fines. The labor union did not appeal, and the decision is final. The case is now dismissed.

March 16, 2018: CAINQUIAMA – Associação dos Caboclos, Indigenas e Quilombolas da Amazônia (an association of local communities from Barcarena) filed a lawsuit in the State Court in Belém against Norsk Hydro Brasil, Alunorte and the State of Pará, claiming that chemical waste was intentionally discharged and that the bauxite residue deposits were in operation subject to a fraudulent license granted by the State of Pará. Furthermore, the plaintiff alleged that the bauxite residue deposits (DRS 1 and 2) are located on an ecological reserve area. With reference to these allegations the plaintiff requested the defendants to carry out medical examinations of allegedly impacted communities. On March 22, 2018, the State Court partially granted the injunction and determined that the companies cover the cost of health tests on people allegedly affected by the claimed pollution. On August 2, 2019 the companies filed an interlocutory appeal in order to suspend the injunction granted by the State Court. On August 7, 2019 the Court of Appeal granted the companies' request and suspended the effects of the injunction decision until a definitive decision of the case.

March 27, 2018: A collective lawsuit was filed by IBS (Barcarena's Social and Environmental Institute) against Norsk Hydro Brasil, Albras, Alunorte, Imerys, Alubar, the Municipality of Barcarena and the State of Pará to seek remediation of the environment and compensation for material and moral damages. On August 02, 2018, the lawsuit was referred to the Federal Court.

April 3, 2018: The State of Pará filed a civil class action seeking to recover environmental damages allegedly caused by Alunorte, as well as indemnification for alleged material and moral damages. On April 9, 2018, the Court ordered Alunorte to present a guarantee of BRL 150 million. On December 12, 2018, Alunorte and the State of Pará entered into a settlement agreement to end the lawsuit with reference to the Term of Adjusted Conduct (TAC) and Term of Commitment (TC) signed on September 5, 2018. In addition, Alunorte agreed to cover the public expenses related to inspections carried out following the heavy rainfall in February 2018. On October 14, 2019 the Court issued a decision homologating the agreement and extinguishing the lawsuit.

April 5, 2018: The State and Federal Public Prosecutor's Offices (Ministerio Público) filed a lawsuit against Alunorte, Norsk Hydro Brasil and the State of Pará. As a preliminary injunction, the plaintiffs requested partial suspension of Alunorte's production activities (50 percent reduction) and prohibition of using the bauxite residue deposit DRS2 until the license to operate was obtained, and the company could demonstrate operational stability and efficiency. On April 30, 2018, the Federal Court partially granted the injunction, determining a similar embargo previously granted by a State Criminal Court. The State of Pará and the State Public Prosecutor's Office were excluded from the lawsuit. On May 15, 2019 the Federal Court lifted the production embargo on Alunorte. On September 20, 2019 the Federal Court issued a decision homologating the agreement between Federal Public Prosecutors, Alunorte and Norsk Hydro Brasil to resume DRS2 installation and commissioning activities.

May 15, 2018: A new lawsuit was filed by CAINQUIAMA against Mineração Paragominas (MPSA), Albras, Norsk Hydro Brasil, Alunorte, INMETRO (National Institute of Metrology), BVQI -CERTIFICADORA LTDA; Federal Union of Brasil, National Department of Mineral Production ("DNPM"), in the Federal Court in Paragominas, alleging that MPSA's tailings contain hazardous substances. CAINQUIAMA also claimed that the bauxite residue has been illegally dumped in Alunorte's bauxite residue deposits (DRS1 and DRS2) and that these deposits are located in an ecological reserve area requesting an injunction to stop the operation of MPSA. On July 18, 2018 the Federal Court denied the request for injunction. On October 23, 2018, the case was referred to the Federal Court in Belém pending further decisions. On August 30, 2019 the companies filed an

interlocutory appeal against the decision that referred the lawsuit to the 9th Federal Court of Belém and requested that the lawsuit stays in Paragominas Federal Court.

September 12, 2018: ADECAM (Association of Education, Culture, Protection and Defense of Consumers, Taxpayers and Environment of Brazil) filed a lawsuit in the Federal Court in Belém against Alunorte, Norsk Hydro Brasil, the Federal Union and Ibama (the Federal Environmental Agency) seeking compensation for alleged collective moral damages to the people of Pará, having the rainfall in February 2018 as the main ground for the claim. The association accuses the companies of pollution, including overflow and leakage of the bauxite residue deposits, discharge of contaminated effluents through clandestine/hidden pipes, in addition to what has already been claimed in other lawsuits involving the February incident. On June 13, 2019 Alunorte and Norsk Hydro Brasil were summoned to present their defences which they did on July 7, 2019.

October 31, 2018: CAINQUIAMA filed a similar lawsuit as the one filed in March 16, 2018 against Mineração Paragominas (MPSA), Albras, Norsk Hydro Brasil, Alunorte, State of Pará, BVQI - Certificadora Ltda in the State Court of Belem, requesting the suspension of the operation of the companies. On June 17, 2019, the court issued a decision that denied the injunction request and summoned the defendants to present defense. On September 3rd, 2019 the companies presented their defenses.

On May 3rd, 2019: CAINQUIAMA filed a new lawsuit, with an injunction request, before the 5th Public Treasury Court of Belem against (i) the State of Pará; (ii) Norsk Hydro Brasil.; (iii) Mineração Paragominas; (iv) Alunorte. and (v) Albras. In short, the complaint states that the products used in Brazil in order to refine bauxite are more toxic than the ones used in Norway. Further, it argues that the amount of coal and heavy fuel oil consumed per year by Alunorte released into the atmosphere is harmful to the environment (as it can cause, e.g., acid rain and contamination of soil and water) and to humans (as it can cause respiratory illness and premature death). Lastly, it mentions that the ICMS tax deferral given to defendants must be lifted, because Alunorte has not changed the energy source from fuel oil to natural gas as agreed with the government through one of the commitments in the ICMS agreement. On June 10, 2019 the Court issued a decision that denied the injunction request and summoned the defendants to present defense. On August 1st, 2019 the companies presented their defenses.

On August 1, 2019: The people from Abaetetuba (State of Pará) filed a lawsuit before the Federal Court in Belém against Alunorte, State of Para and Federal Union. The case relates to 2018 rainfall incident. Following this, fourteen other lawsuits were filed (total of 15) by other people from Barcarena and Abaetetuba. In total, the lawsuits now relate to about 1.500 individuals. The plaintiffs claim that Alunorte contaminated the environment, and due to this they are not able to sustain their livelihoods as farmers and fishermen. For the first cases Alunorte presented manifestation regarding the injunction requests informing that there is no proof of the alleged damages, and also it was not demonstrated by the plaintiffs the urgency to justify the concession of the injunction requests.

On *August 20, 2019*, the Agrarian State Public Prosecutor Office issued a “recommendation” alleging that: (i) DRS1 and DRS2 were built in an area designated as “ecological reserve” as defined in the purchase agreement from 1982 and according to environmental legislation; (ii) restoration of agricultural area as defined in the 1982 agreement was not implemented and; (iii) Taua community was wrongfully evicted in the 1980s and later eviction cases, and should be granted land rights. The main requests from the Agrarian State Public Prosecutor Office are: (i) the demolishment of parts of DRS1 and DRS2; (ii) the agricultural area should be re-established; and (iii) Taua community should be recognized as a traditional community and granted their community and land rights.

Other cases

From 2008 there is a legal dispute between five of the 120 relocated families and the alumina refinery project CAP in Barcarena in Brazil. Their requests have been denied by the Court. The case is still waiting for decision of the Court of Appeals. Following an overflow of storm water from the bauxite residue deposits at Alunorte in 2009, there are still legal issues pending. In 2012, more than 5,400 claims related to the overflow were filed in the local court. By the end of 2019, a total of 4,488 cases have been decided by the first level civil court in Barcarena, Pará, all in Alunorte's favor. 3,321 of these decisions have been appealed to the second level civil court, located in Belem, Pará, which rendered decisions in 2,702 appeal cases, all in favor of Alunorte. The second level civil court upheld the first instance decisions on the basis that there is no evidence that the plaintiffs suffer or have suffered from the alleged damages related to the spillage of bauxite residue contaminated water. As of 31st December 2019, 1,162 plaintiffs have filed appeals to the Superior Court of Justice, with a decision rendered in 42 cases, all in favor of Alunorte.

A civil class action was filed by the Municipality of Ulianópolis against Albras and Alunorte and several other companies in September 2011 to seek remediation of environment damage and the condemnation of the companies for collective moral damages, considering their alleged contribution to environmental damages related to previous disposal of waste through Companhia Brasileira de Bauxita (CBB). Albras and Alunorte are parties in the class action, as both delivered waste to CBB prior to 2003. The class action was filed after an attempt from the Municipality of Ulianópolis together with the State Environmental Agency - Semas, to negotiate a settlement with all the companies involved. Albras and Alunorte did not agree to the terms of the proposed settlement as they had already removed their waste from the site.

The Federal and State Public Prosecutors, in a joint initiative, filed a Public Class Action against Albras, Alunorte, Imerys, Votorantim, Oxbow, Yara (companies located in the industrial district of Barcarena) and the Municipality of Barcarena, the

State of Pará and the Federal Union (Brazilian Government). The purpose of the lawsuit is to protect the rights of the local people of Barcarena that allegedly consume contaminated water due to the industrial activities in the municipality.

In 2017, Cainquiama, an association of Caboclos, an indigenous people to the Amazon, filed a lawsuit against Norsk Hydro Brasil, Alunorte and Albras, the State of Pará, Bureau Veritas Brasil and Inmetro. They claim part of the bauxite residue deposits for Alunorte (DRS1 and DRS2) was established on an area designated as an ecological reserve, and that they have suffered social and environmental damages.

March 13, 2014 (“CBB case”): Three similar labor claims were filed before the Labor Court of Paragominas, Pará, against Companhia Brasileira de Bauxita ("CBB"), Alunorte, Albras and 81 other companies by former CBB employees. The plaintiffs claimed that they worked under unhealthy and hazardous conditions, that the employer (CBB) did not provide them with appropriate personal protective equipment, and as consequence, they developed serious illnesses that prevented them from working. They claim payment for moral and material damages. The defendants other than CBB (including Albras and Alunorte), were sued because the alleged toxic materials came from their waste (as processed by CBB). At the hearings held on 20 August 2015, all plaintiffs argued that they started having medical problems after providing services to CBB, but they were not able to identify the type of disease they suffer from. They confirmed that CBB granted personal protection equipment, and they further claimed that they never received any directions from management/employees of Alunorte or Albras.

On December 7, 2015, 16 former employees of CBB filed three new similar lawsuits. Alunorte and Albras were notified on January 22, 2016. On July 19, 2018, the accused presented their defenses and on December 16, 2019, the Labor Court of Paragominas determined the production of medical expert examination to be carried out, so that it can be evaluated whether the plaintiffs have any disease as result of their working conditions. There are 6 lawsuits in total, 3 physical lawsuits and 3 digital lawsuits. For the physical lawsuits, MPT manifestation is awaited and the hearing is scheduled for 08/04/2021. For digital lawsuits, the hearing is scheduled for 29/10/2020. It was not possible to carry out a medical examination in the cases since the plaintiffs did not attend the designated examination.

February 2017 (“Commuting Hours Case”): The union at Paragominas filed in February 2017 a claim for all employees to be compensated for hours spent commuting. Following the labor law reform in November 2017, the obligation to compensate for commuting if the place of work is not served by regular public transportation or if the public transportation is not satisfactory to meet the demand is not valid. Due to this change, the period in question is February to November 2017. The case is now suspended, as the Labor Court of Appeals and Superior Labor Court of Appeals has different understanding of the subject.

April 2019 (“Night shift case”): Mineração Paragominas (“MPSA”) employees Union filed a Collective Labor Lawsuit on behalf of all employees asking for additional salary differences related to night shift work for employees working on rotating shifts (and when the shifts were overnight), as well as weekly rest payments for those working for seven consecutive days. Paragominas changed the calculation for night shift compensation in February 2018, and the period in question is from February 2014 to February 2018. The case is now suspended, as the Labour Court of Appeals and Superior Labor Court of Appeals have different understanding related to the subject.

S10.3 Relocation of people

Relocation of people may at times be necessary in connection with our operations. No voluntary or involuntary relocation of people with legal or prescriptive rights to their dwellings, took place in Hydro's operations in 2019. In Barcarena in Pará, Brazil, in an area surrounding Hydro’s operations and regulated for industrial purposes, illegal logging and settlements have accelerated since 2016. Neither the authorities nor Hydro want settlement in the area.

S10.4 Compliance training

In 2019, 475 employees in Brazil participated in classroom training on the topics compliance risks, Code of Conduct, Anti-corruption, sanctions and integrity. The e-learning course “Hydro’s Code of Conduct” was mandatory for employees with access to PCs and optional for operators without own PC in 2019. In total employees in Brazil 1637 completed the course.

S10.5 Screening of business partners and supplier audits

As part of the integrity risk management process, approximately 18.000 of Hydro's potential or existing counter-parties were screened for human rights violations, corruption, money-laundering, politically exposed persons and violations relating to sanctions using the RDC integrity risk tool. This mostly relates to suppliers, but also some customers, agents and other business partners were included. New business partners related to most Norwegian and Brazilian operations are screened before registered in our ERP system.

All suppliers, customers and other business partners registered in our main accounting systems are screened on a weekly basis against recognized international sanction lists.

In Brazil, Bauxite & Alumina performed 18 supplier audits in 2019, all included HSE and CSR related topics and resulted in a corrective action plan for the supplier. 10 suppliers with corrective action plans in place showed improved performance in 2019.

Key CSR and HSE findings from the audits relate to lack of management systems, environmental awareness, compliance controls and emergency preparedness.

In 2018, we launched the strategic target to contribute to quality education skills development for 500,000 people in our communities and for business partners by the end of 2030.

S10.6 Cyber security training

Hydro continue to emphasize security awareness for end-users, and provide e-learnings for all users with access to Hydro Academy. Guidelines are published in relevant channels for all users.

A security awareness program is being established, which targets end users and roles with a particular need for further education. The ambition is to make this training mandatory.

Note S11 - Spending on local suppliers

Reporting principles
Selection of local partners and suppliers/contractors shall be based on competitive bidding to the extent feasible, and in compliance with competition laws and regulations as well as Hydro's requirements. A local supplier is here defined as a supplier situated in the same country as the operational site.

Data on local purchasing is gathered by the business units, in addition to Hydro's project organization, and covers consolidated activities.

Spending on local suppliers vary from site to site depending on which goods and services are available. Local spend in our Brazilian Bauxite & Alumina operations was estimated to be 80 percent in 2019. Hydro's Projects' procurement organization carries out major projects mainly in Brazil and Norway. Local spend in projects carried out in Brazil is very high. Across the different projects, local spend by Hydro's project organization was 85 percent of total spend.

Note S12 – Public affairs and lobbying

Reporting principles
Data on public affairs and lobbying is gathered from Hydro's Communication & Public Affairs department in Norway, EU, Germany and Brazil and covers consolidated activities. We are currently mapping the extent of public affairs and lobbying in Extruded Solutions.

In total ten full-time equivalents (FTE) are dedicated to public affairs and lobbying. This includes three FTEs in Brazil. To get a full overview of all Hydro's memberships in different industry associations see Hydro.com.

According to our global directives, Hydro may not make financial contributions to political parties. We have no indications that such contributions took place in 2019.

Note S13 – Certifications

Reporting principles
According to Hydro's policy, all operational sites shall comply with, but not necessarily be certified according to, ISO 9001 and ISO 14001 and - within 2020 - with OHSAS 18001. Certification according to these standards is a decentralized responsibility based on identified business needs.

In addition to the mentioned ISO and OSHAS standards below, our sites are also certified according to different industry and customer specific standards. Examples of such certifications are the Aluminium Stewardship Initiative and the IATF 16949 for the automotive industry.

Sites certified	ISO 9001	ISO 14001	OHSAS 18001	ASI
Albras	Yes	Yes	Yes	No
Alunorte	Yes	Yes	Yes	Yes
Itu	Yes	Yes	Yes	No
Paragominas	No	No	No	Yes
Utinga	Yes	Yes	Yes	No
Tubarão	Yes	Yes	Yes	No

Of our sites delivering to the automotive industry in Brazil, all are certified according to the IATF 16949. Hydro’s most energy intensive sites and operations comply with the ISO 50001 Energy Management systems.

Partnerships and commitments

GRI Standards

Hydro uses the GRI Standards for voluntary reporting of sustainable development. The standards comprise economic, environmental and social dimensions relating to an enterprise's activities, products and services. GRI collaborates with the United Nations Environment Programme and UN Global Compact. Hydro has reported according to GRI since 2003.

We believe that our reporting practice is consistent with GRI's reporting principles in all material respects. We report in adherence to "Core" as defined by the GRI Standard 101: Foundation 2016, and include the GRI G4 Mining & Metals sector supplement and certain relevant aspects of the G4 Electric Utilities sector supplement in our reporting.

Our GRI report for Brazil is based on Hydro's global GRI report which is externally assured by KPMG, see page 264 in Hydro's Annual Report 2019. The external 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.

The GRI indexes (for Hydro global and Hydro in Brazil), including the full definition of each indicator and references to specific sections in this report as well as additional information, can be found on www.hydro.com/gri

UN Global Compact Communication on progress

We support the principles of the UN Global Compact. 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 Global Compact since its formation. Our commitment is expressed by the President & CEO in his letter to shareholders on page 8 in Hydro's Annual Report 2019. Our Communication on progress (COP) in relation to the Compact's 10 principles is at the Advanced level and thus also reflects the Global Compact's 21 advanced criteria. It encompasses Hydro's global activities including in Brazil. The consistency of the information in Hydro's Annual Report 2019 with the information in the Hydro Communication on Progress 2019 has been reconciled by our auditors, see page 264 in Hydro's Annual Report 2019. A complete report can be found at www.hydro.com/globalcompact

UN Sustainable Development Goals

The UN Sustainable Development Goals (SDGs) embrace a universal approach to the sustainable development agenda. They explicitly call on business to use creativity and innovation to address development challenges and recognize the need for governments to encourage sustainability reporting. Hydro has an impact on all of the 17 development goals, but some more than others. Of the 17, Hydro has chosen eight goals that are the most important to us, that are highlighted throughout the report.

Hydro uses the SDG Compass, a tool built in a partnership between GRI, UN Global Compact and the World Business Council on Sustainable Development, to make a high-level review on how we relate to the UN Sustainability Development Goals. This review is included in the GRI index 2019 and is also included in external auditor's consistency check of Hydro's GRI index 2019.

A more complete overview of Hydro's positive and negative impacts on each of the 17 SDGs, can be found at www.hydro.com

UN Guiding Principles on Business and Human Rights

The United Nations (UN) Guiding Principles on Business and Human Rights (hereafter Guiding Principles) were endorsed by the UN Human Rights Council in June 2011. They have provided a clear global understanding of governmental duties and corporate responsibilities for human rights. The Guiding Principles articulate that wherever and however a company operates, it must refrain from violating human rights. Companies are expected to be fully aware of their human rights impacts, take concrete steps to address them and implement measures to mitigate negative impacts in the future.

Hydro uses the GRI document "Linking G4 and the UN Guiding Principles" document as basis for how we report on our adherence with the guiding principles, and report on this in the GRI indexes 2019, globally and for Brazil. This is also included in external auditor's consistency check of Hydro's GRI index 2019. The most salient human rights issues are defined through our materiality analysis on page 13 in this report and include:

- Diversity and equal opportunity
- Human and workers' rights
- Occupational health and safety
- Supply chain management (including child and forced labor)

Hydro has nothing to report for 2019 on the guiding principle B4 "Additional severe impacts".

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 Viability Performance 2019 reporting is prepared in line with the requirements found in the ICMM 10 principles and position statements. The complete Viability Performance 2019 reporting is – according to the ICMM requirements – assured by our external auditor, please see page 264 in Hydro's annual report 2019.

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). 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, around half of production sites have been certified 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 indexes 2019 (globally and for Brazil) 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 2019. For the full GRI indexes, see www.hydro.com/gri

TCFD - Task Force on Climate-related Financial Disclosures

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 that takes into account scenario analysis. These include

- *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

The table below shows an overview of Hydro's initial approach to the recommendations. Page references relate to the Sustainability report for Hydro’s operations in Brazil 2019, or Hydro's Annual Report 2019 where this is specified.

TCFD recommendations

Recommendation	Disclosure	Reference
Governance: Disclose the organization's governance around climate-related risks and opportunities		
a) Describe the board's oversight of climate-related risks and opportunities	Board developments	Page 32 in AR19
	Risk review	Page 105 in AR19
	Key developments and strategic direction / Creating value by becoming	Page 13 in AR19
	Performance and Targets	Page 69 in AR19
Strategy: Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material		
a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term	Risk review	Page 21-113, 106-
	Energy and climate change	116, 81-83 in AR19
		14-15
b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning	Risk review	Page 21-113, 106-
	Energy and climate change	116, 81-83 in AR19
		14-15
c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario	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.	14
Risk management: Disclose how the organization identifies, assesses, and manages climate-related risks		
a) Describe the organization's processes for identifying and assessing climate-related risks	Energy and climate change	14-15
b) Describe the organization's processes for managing climate-related risks	Environment	Page 27 in AR191)
	Energy and climate change	14-15
c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organizations' overall risk management	Business planning and risk management	Page 124 in AR191)
Metric and targets: Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material		
a) Disclose the metrics used by the organization to assess climaterelated risks and opportunities in line with its strategy and risk management process	Board of Directors' report: Environment	Page 27 in AR191)
	Hydro's materiality analysis 2019	13
	Environmental statements	47
	Note E1 to the environmental statements: Greenhouse gas emissions	48-50
	Note E3 to the environmental statements: Energy	52-54
	Note E4.2 to the environmental statements: Water	54-
	Note E4.3 to the environmental statements: Recycling	Note E4.3 on page
	Note E6.2 to the environmental statements: Land use and rehabilitation	233 in AR191)
		58
b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks	Environmental statements	47
	Note E1 to the environmental statements	48-50

AR 19 refers to Hydro's Annual report 2019 available at Hydro.com/reporting2019

Country by country report

Quick overview

This Country by country report for Hydro's global organization has been prepared according to Norwegian legal requirements due to Hydro's extractive activities in Brazil. This report also fulfills the requirements of the Extractive Industries Transparency Initiative (EITI).

According to the Norwegian Accounting Act, the country-by-country reporting should be on a project level, and payments should be reported per public authority.

Hydro's exploration and extractive activities are covered by Paragominas and Norsk Hydro Brasil. On a voluntary basis, and in line with our EITI reporting since 2005, we also include the alumina refinery Alunorte. Hydro's primary aluminium production facility Albras is also included to better illustrate the tax contribution from Hydro's aluminium value chain in Pará.

We have also chosen to include information about other tax contributions to authorities in Brazil not covered by the country by country reporting requirements. These include ICMS, PIS/COFINS and IPTU.

We are also required to report on certain information related to all legal entities worldwide. This information is also included in the report.

The report has been subject to limited assurance by KPMG and has been approved by Hydro's Board of Directors.

Country by country report

Hydro's country by country report has been developed to comply with legal requirements as stated in the Norwegian Accounting Act §3-3d and the Norwegian Security Trading Act §5-5a, valid from 2014, and updated in 2017, and replaces our former reporting on payments to host governments according to the Extractive Industries Transparency Initiative (EITI). Our reporting includes, and goes beyond, the EITI requirements. According to the Norwegian Accounting Act, the country-by-country reporting should be on a project level, and payments should be reported per public authority. Following a thorough evaluation, we have defined "project" as legal entity in the report, and "public authority" as the three levels federal; state(s); and municipality(-ies).

The reporting requirement applies to Hydro as a Norwegian listed company with exploration and extractive activities. Currently, this includes Hydro's consolidated operations in Brazil, through exploration and extractive activities in Paragominas, in the state of Pará. On a voluntary basis, and in line with our EITI reporting since 2005, we also include the alumina refinery Alunorte. Alumina is refined from bauxite and is the commercial product from Hydro's Bauxite & Alumina business area.

Hydro’s primary aluminium production facility Albras is also closely linked to the extraction of raw materials in Pará. In order to better illustrate the tax contribution from Hydro’s aluminium value chain in Pará, Albras is included on a voluntary basis in the country-by-country report. In addition, Hydro voluntarily report on indirect tax contributions not covered by the requirements in the country by country report.

To comply with the Norwegian country-by-country regulation, Hydro is required to report on certain information at corporate level related to legal entities, where they are registered, number of employees, and interest paid to other legal entities in Hydro within another jurisdiction. From 2017, it is also required to give a short description of each legal entity's activities, revenue, income before tax, tax accrued and paid in the reporting year, and accumulated earnings.

The Country-by-country report is approved by the board of directors and included in their responsibility statement[3].

[3] In the Country by country report, all financial values are reported in NOK. The average exchange rate for 2019, on a 12 months basis, was 2.2341 NOK/BRL.

Payments to authorities per project and authority (exploration and extractive activities, alumina refining and aluminium production) in 2019

Extractive related activities (all in Brazil)[1]	Taxes and fees[2]	Royalties	License fees[3]	Infrastructure, contractual[4]	Infrastructure, voluntary[4]	Investments	Revenue[5]	Production volume	Total expenses[5] [6]
	NOK million	NOK million	NOK million	NOK million	NOK million	NOK million	NOK million	1 000 mt	NOK million
Mineracao Paragominas SA, total	**200**	**83**	**2**	**7**	**1**	**276**	**2,696**	**7,360**	**2,246**
Federal	146	8	2						
Pará State	54	25	-						
Paragominas municipality	-	50	-						
Norsk Hydro Brasil Ltda, total	**15**	**-**	**-**		**-**	**9**	**4**	**-**	**40**
Federal	15	-	-						
Rio de Janeiro State	-	-	-						
São Paulo Municipality	-	-	-						
Alunorte - Alumina do Norte do Brasil SA, total	**55**	**-**	**-**		**31**	**2,009**	**13,425**	**4,487**	**13,016**
Federal	48	-	-						
Pará State	7	-	-						
Barcarena Municipality	**-**	-	-						
Albras - Alumínio Brasileiro SA, total	**1**	**-**	**-**		**5**	**641**	**5,793**	**241**	**6,812**
Federal	-	-	-						
Pará State	1	-	-						
Barcarena Municipality	-	-	-						
Total[7]	**271**	**83**	**2**	**7**	**37**	**2,936**	**21,918**	**12,089**	**22,114**

1) In 2019, Hydro's extractive activities did not have the following types of payments to host authorities:
   - production entitlements
   - dividends
   - signature, findings and production bonuses
   - stocks, shares or other ownership rights
2) Taxes and fees (income, profit and production) except taxes and fees on consumption such as VAT, withholding taxes on behalf of employees, sales tax. Figures are not directly comparable to the further country by country report.
3) License, lease or access fees or other payments for licenses or commissions.
4) Payments on improved infrastructure, either contractual based on exploration or operational licenses, or voluntary are based on Hydro's reporting on social investments, please see note S9 to the social statements.
5) Including power procurement and sales.
6) Costs at Alunorte include purchase of bauxite from Paragominas. Costs at Albras inlcude purchase of alumina from Alunorte.
7) Only figures where a total is presented can be consolidated.

Other tax contributions to authorities in Brazil

The Brazilian tax system is complex and volatile. In addition to the direct taxes reported above on income, profit and production, Brazil has several indirect taxes levied at the federal and state levels, and other taxes levied at the municipal level.

For Hydro, there are three relevant indirect tax mechanisms not covered by the country-by-country requirements, i.e ICMS and PIS/COFINS.

ICMS is a Brazilian state tax on the sale of goods, freight and certain services, similar to VAT. ICMS is intended to be a non-cumulative tax, which means that sales are generating ICMS debits with the seller, and purchases are generating ICMS credits with the buyer. However, as export transactions are exempt from ICMS and not generating ICMS debits, exporters accumulate ICMS credits that cannot be offset with any other taxes. Since ICMS in an indirect tax, the net ICMS effect is reported as a cost in Hydro's financial accounts instead of as a tax item.

In the state of Pará, Hydro is subject to a tax regime that aims at preventing the accumulation of ICMS recognized credits, and reduces net payable ICMS. From our operations, we generate ICMS tax revenue to Pará when purchasing diesel and fuel oil, when Albras acquires electricity, and also on sales of products to customers located outside the state.

The ICMS regime Hydro is subject to requires Hydro to comply with certain conditions related to vertical integration of aluminium production in Pará. It also requires Hydro to contribute to the development in the region and enable sustainable growth in Pará.

The ICMS deferral is subject to approval by Brazil's National Council of Finance Policy (CONFAZ). In 2018, the Public Auditing Prosecutors for the State of Pará (MP-C/PA) initiated a general process before the State Accounting Court to better understand approvals, compliance and transparency of tax incentives established by the State of Pará.

PIS and COFINS are two social contribution taxes charged on gross income, in most cases at the rate of 9.25 percent. Hydro's group companies in Brazil are charged under a non-cumulative system that resembles VAT. Similar to ICMS, export transactions are not subject to this tax. As a result, Brazilian exporters, like Alunorte and Albras, accumulate credits that can be either reimbursed or offset against debts of other federal taxes.

In addition to the indirect taxes described above, Brazilian municipalities levy a property tax. The property tax, IPTU, is a tax levied on the ownership or possession of urban land and property located in the urban area within the municipality. IPTU is due yearly based on the value of the property, according to rates and conditions foreseen in each municipality's legislation.

The table below includes Hydro entities involved in extractive activities as well as other Hydro entities in the state of Pará.

Other taxes paid to authorities in Brazil*

Extractive related activities	ICMS	PIS	COFINS	IPTU	Total contribution
	NOK million	NOK million	NOK million	NOK million	NOK million
Mineracao Paragominas SA, total	**30**	**1**	**3**	**-**	**33**
Federal	-	1	3	-	3
Pará State	30	-	-	-	30
Paragominas municipality	-	-	-	-	-
Norsk Hydro Brasil Ltda, total	**0**	**2**	**7**	**0**	**9**
Federal	-	2	7	-	9
Rio de Janeiro State	-	-	-	-	-
São Paulo Municipality	-	-	-	-	-
Alunorte - Alumina do Norte do Brasil SA, total	**467**	**2**	**10**	**18**	**497**
Federal	-	2	10	-	12
Pará State	467	-	-	18	485
Barcarena Municipality	-	-	-	-	-
Albras - Alumínio Brasileiro SA, total	**327**	**1**	**3**	**14**	**345**
Federal	-	1	3	0	3
Pará State	327	-	-	14	342
Barcarena Municipality	-	-	-	-	-
Total	**824**	**5**	**22**	**33**	**884**

*Tax off-sets are not included

Further country by country information for all consolidated legal entities

The Norwegian country by country reporting requirement as stated in the Norwegian Accounting Act and the Country by Country Regulation also require reporting on certain information at corporate level related to legal entities, as included in the table below.

Hydro's subsidiaries have both external revenue derived from sale to Hydro's end customers, and internal revenue derived from sale to other Hydro entities. In the table below both revenue streams are included per legal entity, but in Hydro's consolidated financial statements all internal transactions have been eliminated to arrive at Hydro's revenue. The sum of the different items for Hydro's subsidiaries will therefore not add up to the respective consolidated figures.

In order to present a Grand Total in the country by country report that is comparable to Hydro's consolidated financial statements, we have included all group eliminations as a separate line. These include, but are not limited to, eliminations of internal revenue and cost, internal receivables and payables, distributed profit such as dividends within the group, goodwill and excess values not attributable to individual legal entities, accumulated profits allocated to non-controlling interests and all joint operations and joint ventures.

Assets and liabilities in subsidiaries that have been acquired have been remeasured to fair value in Hydro's financial statements. This value adjustment, often referred to as excess value, represents the difference between the fair value of the company as paid by Hydro, and the carrying value of assets and liabilities as recognized by the subsidiary at the time of purchase. This premium is not reflected in the subsidiaries local statutory reporting. Due to this, figures reported in Hydro's country by country report are not necessarily comparable to the entities' local statutory reporting. Acquired entities are included from the date of acquisition. As a result of rounding adjustments, the figures in one or more of the columns in the table below may not add up to the total of that column.

The information is included in the independent auditor's assurance report.

Further country by country information for all consolidated legal entities

Jurisdiction	Legal entity	Description of the entity's activity	Owner-ship 31.12	Number of permanent employees[1]	Number of temporary employees[1]	Interest paid to Hydro legal entities in another jurisdiction, NOK million	Revenue, NOK million[2]	Income before tax, NOK million[3]	Income taxes, NOK million[4]	Income taxes paid, NOK million[5]	Retained earnings, NOK million[6]
Argentina	Hydro Extrusion Argentina SA	Extrusion production	100%	103	-	2	195	15	2	7	40
Total Argentina				**103**	**-**	**2**	**195**	**15**	**2**	**7**	**40**
Australia	Hydro Aluminium Australia Pty. Limited[7]	Local holding company	100%	-	-	-	1,246	-44	0	0	265
	Hydro Aluminium Kurri Kurri Pty. Limited	Real estate	100%	6	-	-	18	-9	0	0	-1,972
Total Australia				**6**	-	**-**	**1,264**	**-53**	**0**	**0**	**-1,707**
Austria	Hydro Building Systems Austria GmbH	Sales company	100%	34	-	-	227	2	1	0	56
	Hydro Components Nenzing GmbH	Fabrication of extruded products	100%	110	14	-	118	-8	-2	0	12
	Hydro Extrusion Nenzing GmbH	Extrusion production	100%	309	10	-	1,958	159	40	0	340
	Hydro Holding Austria GmbH	Local holding company	100%	-	-	-	0	79	-1	54	264
Total Austria				**453**	**24**	-	**2,303**	**231**	**38**	**54**	**672**
Bahrain	Hydro Building Systems Middle East WLL[8]	Building systems production	100%	63	-	-	262	189	0	0	185
Total Bahrain				**63**	-	**-**	**262**	**189**	**0**	**0**	**185**
Belgium	Hydro Allease NV	Support services	100%	-	-	-	4	-1	0	0	18
	Hydro Aluminium Belgium BVBA	Support services	100%	-	-	-	0	0	0	0	0
	Hydro Building Systems Belgium NV	Building systems production	100%	216	3	-	470	-28	0	0	-199
	Hydro Extrusion Lichtervelde NV	Extrusion production	100%	391	4	-	1,558	35	-5	4	369
	Hydro Extrusion Raeren S.A.	Extrusion production	100%	183	22	-	730	5	1	1	150
	Norsk Hydro EU Sprl	Public affairs	100%	2	1	-	5	0	0	0	1
	Hydro Extrusion Eupen SA	Dies production	100%	50	-	-	62	-48	-15	0	76
	Hydro Precision Tubing Lichtervelde NV	Precision tubing production	100%	-	-	1	518	-29	-15	0	70
	Sapa Precision Tubing Seneffe S.A.	*Company is dormant*	100%	-	-	-	0	0	0	0	10
Total Belgium				**842**	**30**	**1**	**3,347**	**-65**	**-34**	**6**	**493**
Brazil	ALBRAS - Alumínio Brasileiro SA	Primary aluminium production	51%	1,223	75	-	5,793	-1,089	-369	8	1,946
	ALUNORTE - Alumina do Norte do Brasil S.A.	Alumina refinering	92.1%	2,085	117	37	13,425	-440	-126	111	2,013
	Ananke Alumina SA	Local holding company	100%	-	-	-	30	30	10	9	1,619
	Atlas Alumínio SA	Local holding company	100%	-	-	-	304	266	67	63	590
	Calypso Alumina SA	Local holding company	100%	-	-	-	0	0	0	0	-2
	CAP - Companhia de Alumina do Pará SA	Planned alumina refinery	81%	-	-	-	0	-27	2	1	-415
	Hydro Extrusion Brasil S.A.[9]	Extrusion and precision tubing production	100%	897	26	14	1,516	-102	6	0	-149
	Mineração Paragominas SA	Bauxite mining	100%	1,528	83	-	2,696	500	139	157	880
	Norsk Hydro Brasil Ltda.	Local holding company	100%	363	37	-	11	-27	15	18	-448
	Norsk Hydro Energia Ltda.	Power trading & Energy services	100%	7	4	-	841	1	0	0	7
Total Brazil				**6,103**	**342**	**51**	**24,617**	**-888**	**-256**	**367**	**6,040**
Canada	Hydro Aluminium Canada & Co. Ltd.[10]	Local holding company	100%	1	-	2	2,087	86	35	45	1,453
	Hydro Aluminium Canada Inc.	Local holding company	100%	-	-	-	0	0	0	0	26
	Hydro Extrusion Canada Inc.	Extrusion production	100%	547	4	3	2,358	99	13	-19	753
Total Canada				**548**	**4**	**5**	**4,445**	**185**	**48**	**26**	**2,233**
China & Hong Kong	Hydro Aluminium Beijing Ltd.	Sales company	100%	10	-	-	948	-17	-4	0	58
	Hydro Building Systems (Beijing) Co. Ltd.	Sales company	100%	27	1	-	59	-8	0	0	-78

	Hydro Extrusion (Shanghai) Co. Ltd (previously Sapa Extrusion (Shanghai) Co. Ltd)	Fabrication of extruded products	100%	240	-	-	298	44	12	14	174
	Hydro Precision Tubing (Shanghai) Co. Ltd. (previously Sapa Precision Tubing Shanghai Co. Ltd.)	Precision tubing production	100%	51	-	-	94	5	4	0	12
	Hydro Precision Tubing (Suzhou) Co. Ltd.	Extrusion and precision tubing production	100%	350	-	-	833	37	11	5	-7
	Sapa Asia Limited	*Company is in liquidation*	100%	-	-	-	1	0	0	0	-5
	Sapa Extrusion (Jiangyin) Co. Ltd.	Extrusion production	100%	-	-	-	0	0	0	0	-27
	Sapa (Shanghai) Management Co. Ltd.	*Company dissolved in 2019*	100%	-	-	-	0	0	0	0	0
Total China & Hong Kong				**678**	**1**	**-**	**2,233**	**60**	**22**	**19**	**128**
Croatia	Hydro Building Systems Croatia d.o.o.	Building systems production	100%	11	-	-	5	0	0	0	0
Total Croatia				**11**	**-**		**5**	**0**	**0**	**0**	**0**
Czech Republic	Hydro Building Systems Czechia sro	Sales company	100%	8	-	-	7	0	0	0	1
Total Czech Republic				**8**	**-**	-	**7**	**0**	**0**	**0**	**1**
Denmark	Hydro Aluminium Rolled Products Denmark A/S	Sales company	100%	2	-	-	4	1	0	0	6
	Hydro Extrusion Denmark A/S	Extrusion production	100%	291	-	1	1,298	45	10	0	206
	Hydro Holding Denmark A/S	Local holding company	100%	-	-	4	0	-5	-1	38	1,408
	Hydro Precision Tubing Tønder A/S	Precision tubing production	100%	411	-	1	1,288	49	11	0	582
Total Denmark				**704**	**-**	**6**	**2,590**	**90**	**20**	**38**	**2,203**
Estonia	Hydro Extrusion Baltics AS	Extrusion production	100%	13	-	-	88	4	1	0	13
Total Estonia				**13**	**-**	**-**	**88**	**4**	**1**	**0**	**13**
Finland	Hydro Extrusion Finland Oy	Sales company	100%	10	1	-	153	2	1	1	21
Total Finland				**10**	**1**	-	**153**	**2**	**1**	**1**	**21**
France	Extrusion Services S.a.r.l	Local holding company	100%	41	-	-	575	45	13	-1	188
	Hydro Aluminium France S.A.S.	Sales company	100%	8	-	-	15	5	1	0	12
	Hydro Aluminium Sales and Trading s.n.c.	Sales company	100%	3	-	-	6	0	0	0	2
	Hydro Building Systems France Sarl[11)]	Building systems production	100%	942	44	-	3,107	209	77	18	550
	Hydro Extrusion Albi SAS[12)]	Extrusion production	100%	266	6	-	966	28	4	0	125
	Hydro Extrusion Lucé/Châteauroux SAS	Extrusion production	100%	342	6	1	1,010	-29	2	4	9
	Hydro Extrusion Puget SAS	Extrusion production	100%	276	5	1	608	-143	9	2	-206
	Hydro Holding France SAS	Local holding company	100%	-	-	9	0	-365	-68	-2	-652
	Hydro Tool Center SAS	Tool and spare parts services	100%	5	-	-	38	1	0	0	5
	Hydro Shared Services France (previously Sapa Shared Services France)	IT shared services	100%	13	-	-	19	1	0	1	2
Total France				**1,896**	**61**	**11**	**6,344**	**-248**	**40**	**22**	**35**
Germany	Eugen Notter GmbH	Building systems production	100%	27	1		18	-3	-1	0	11
	Hydro Aluminium Deutschland GmbH	Local holding company	100%	67	1	-	26	33	211	26	2,791
	Hydro Aluminium Dormagen GmbH	Recycling	100%	24	20	-	48	2	0	0	5
	Hydro Aluminium Gießerei Rackwitz GmbH	Remelter	100%	61	7	-	1,057	104	-2	0	32
	Hydro Aluminium High Purity GmbH	High-purity aluminium production	100%	61	8	-	297	-7	-6	0	50
	Hydro Aluminium Recycling Deutschland GmbH	Remelter	100%	24	6	-	48	-4	0	0	79
	Hydro Aluminium Rolled Products GmbH	Rolling mills and primary alumnium production	100%	3,397	206	-	21,921	-1,195	-132	15	4,474
	Hydro Building Systems Coating GmbH[13)]	Building systems production	100%	-	-		48	0	-3	0	6
	Hydro Building Systems Germany GmbH	Building systems production	100%	457	36	1	1,608	20	4	0	133

	Hydro Energy GmbH	Energy sourcing	100%	-	-	-	6	-39	0	0	64
	Hydro Extrusion Deutschland GmbH	Extrusion production	100%	457	-	5	1,587	23	-11	0	117
	Hydro Extrusion Offenburg GmbH	Extrusion production	100%	209	-	-	629	2	0	0	107
	Hydro Holding Offenburg GmbH	Local holding company	100%	44	-	5	48	0	-8	-1	20
	Hydro Precision Tubing Remscheid GmbH	Precision tubing production	100%	134	-	-	184	-24	0	0	37
	Norsk Hydro Deutschland Verwaltungs GmbH	*Company is in liquidation*	100%	-	-	-	0	0	0	0	-2
	Sapa Germany GmbH (previously Hydro Holding ULM GmbH)	Local holding company	100%	-	-	10	0	-11	11	32	118
	SEGN Standort-Entwicklungs-Gesellschaft Nabwerk mbH	Real estate	100%	-	-	-	0	0	0	0	0
	VAW-Innwerk Unterstützungs-Gesellschaft GmbH	Pension fund	77.5%	-	-	-	0	-2	0	0	214
Total Germany				**4,962**	**285**	**21**	**27,524**	**-1,099**	**62**	**72**	**8,256**
Greece	Hydro Building Systems A.E.	*Company is in liquidation*	100%	-	-	-	0	-2	0	0	-35
Total Greece				**-**	**-**	-	**0**	**-2**	**0**	**0**	**-35**
Hungary	Hydro Extrusion Hungary Kft	Extrusion production and support services	100%	1,617	**-**	1	3,091	84	41	41	91
Total Hungary				**1,617**	**-**	**1**	**3,091**	**84**	**41**	**41**	**91**
India	Sapa Extrusion India Pvt. Ltd.[14)]	Extrusion, precision tubing and building systems production	100%	485	3	-	470	-28	-1	1	-456
Total India				**485**	**3**	**-**	**470**	**-28**	**-1**	**1**	**-456**
Italy	Hydro Aluminium Metal Products S.r.l.	Sales company	100%	2	-	-	9	1	0	0	17
	Hydro Building Systems Italy S.P.A.	Building systems production	100%	328	8	-	1,325	11	14	0	181
	Hydro Extrusion Italy S.r.l.	Extrusion production	100%	318	11	-	1,286	-5	13	6	305
	Hydro Holding Italy S.P.A.	Local holding company	100%	-	-	-	0	0	-2	-4	878
Total Italy				**648**	**19**	**-**	**2,620**	**7**	**25**	**2**	**1,381**
Japan	Hydro Aluminium Japan KK	Sales company	100%	6	-	-	192	9	3	2	61
Total Japan				**6**	**-**	**-**	**192**	**9**	**3**	**2**	**61**
Lithuania	Hydro Building Systems Lithuania UAB	Sales company	100%	-	-	-	82	5	1	1	15
	Hydro Extrusion Lithuania UAB	Extrusion production	100%	182	-	-	144	9	2	0	34
Total Lithuania				**182**	-	-	**226**	**13**	**3**	**1**	**49**
Luxembourg	Hydro Aluminium Clervaux S.A.	Remelter	100%	50	6	-	1,256	96	28	38	232
Total Luxembourg				**50**	**6**	**-**	**1,256**	**96**	**28**	**38**	**232**
Mexico	Hydro Aluminium Metals Mexico S. de R.L	Sales company	100%	-	-		0	0	0	0	0
	Hydro Precision Tubing Monterrey S. de R.L. de C.V.	Precision tubing production	100%	129	1	-	82	2	1	4	129
	Hydro Precision Tubing Reynosa S. de R.L. de C.V.	Extrusion and precision tubing production	100%	225	4	-	87	8	4	4	25
	Hydro Precision Tubing Services Monterrey S. de R.L. de C.V.	Support services	100%	-	-	-	35	2	2	1	-1
Total Mexico				**354**	**5**	-	**205**	**11**	**7**	**9**	**153**
Netherlands	Hydro Albras B.V.	Local holding company	100%	-	-	-	0	0	0	0	0
	Hydro Aluminium Brasil Investment B.V.	Local holding company	100%	-	-	-	0	-9	0	0	895
	Hydro Aluminium Investment B.V.	Local holding company	100%	-	-	-	0	0	0	0	0
	Hydro Aluminium Netherlands B.V.	Local holding company	100%	-	-	-	0	51	0	0	269
	Hydro Aluminium Pará B.V.	Local holding company	100%	-	-	-	0	0	0	0	-124
	Hydro Aluminium Qatalum Holding B.V.	Local holding company	100%	-	-	-	0	195	0	0	924
	Hydro Aluminium Rolled Products Benelux B.V.	Sales company	100%	4	-	-	6	1	0	0	2
	Hydro Alunorte B.V.	Local holding company	100%	-	-	-	0	0	0	0	0

	Hydro Building Systems Netherlands B.V.	Building systems production	100%	-	-	-	47	6	4	0	0
	Hydro CAP B.V.	Local holding company	100%	-	-	-	0	0	0	0	-400
	Hydro Extrusion Drunen B.V.	Extrusion production	100%	426	10	-	1,402	-114	26	0	707
	Hydro Extrusion Holding Netherlands B.V.	Real estate	100%	-	-	-	0	16	3	0	-13
	Hydro Extrusion Hoogezand B.V.	Extrusion production	100%	166	1	-	625	22	2	6	204
	Hydro Holding Netherlands B.V.	Local holding company	100%	-	-	5	0	-6	-1	0	52
	Hydro Paragominas B.V.	Local holding company	100%	-	-	-	0	225	15	15	87
	Norsk Hydro Holland B.V.	Local holding company	100%	4	-	-	15	775	8	0	9,787
	Sapa Holdings (Nederland) B.V.	*Company dissolved in 2019*	100%	-	-	-	0	0	0	0	0
Total Netherlands				**600**	**11**	**5**	**2,095**	**1,162**	**56**	**21**	**12,392**
Norway	Hycast AS	Development and design of casting tecnology and related sales	100%	55	2	-	291	14	4	11	115
	Hydro Aluminium AS	Primary aluminium production	100%	2,390	519	327	46,022	1,449	23	873	21,239
	Hydro Aluminium Rolled Products AS	Rolling mill	100%	640	41	8	4,420	160	35	0	815
	Hydro Energi AS	Power production	100%	177	13	-	8,254	-707	114	520	-1,884
	Hydro Energi Invest AS	Local holding company	100%	-	-	-	0	-2	0	0	0
	Hydro Extruded Solutions AS	Local holding company	100%	96	1	81	-1	347	85	78	1,388
	Hydro Extrusion Norway AS	Extrusion production	100%	105	8	1	342	-3	-1	0	51
	Hydro Invest Porsgrunn AS	*Company dissolved in 2019*	100%	-	-	-	0	0	0	0	0
	Hydro Kapitalforvaltning AS	Local holding company	100%	-	-	-	10	0	0	0	0
	Hydro Vigelands Brug AS	High-purity aluminium production	100%	34	4	2	89	7	1	0	95
	Hydro Vigelandsfoss AS	Power production	100%	-	-	-	73	41	19	26	187
	Industriforsikring AS	Insurance	100%	-	-	-	153	52	-3	1	500
	Norsk Hydro ASA	Parent company	-	319	13	-	250	4,688	19	136	32,448
	RSK Holding AS[15)]	Local holding company	100%	-	-		457	339	167	0	77
	Røldal-Suldal Kraft AS	Power production	91.3%	-	-	-	532	389	202	160	121
	Svelgfos AS	*Company is dormant*	100%	-	-	-	0	0	0	0	1
	Sør-Norge Aluminium AS	Primary aluminium production	100%	320	95	5	2,311	245	54	0	1,400
	Vækerø Gård Barnehage ANS	Company kindergarden	100%	-	-	-	0	0	0	0	0
Total Norway				**4,136**	**696**	**424**	**63,203**	**7,019**	**719**	**1,804**	**56,552**
Poland	Hydro Aluminium Rolled Products Polska Sp. z o.o.	Sales company	100%	5	-	-	4	1	0	0	2
	Hydro Building Systems Poland Sp. z o.o.	Building systems production	100%	59	-	1	158	1	0	1	-6
	Hydro Extrusion Poland Sp. z o.o.	Extrusion production	100%	1,407	4	2	2,307	102	34	44	780
Total Poland				**1,471**	**4**	**3**	**2,469**	**104**	**35**	**45**	**776**
Portugal	Hydro Aluminium Extrusion Portugal HAEP S.A.	Extrusion production	100%	99	24	-	297	-4	-1	0	66
	Hydro Building Systems Portugal (HBSPT) SA	Building systems production	100%	74	-		239	1	5	20	18
Total Portugal				**173**	**24**	**-**	**536**	**-3**	**4**	**20**	**83**
Romania	Hydro Extrusion S.R.L.	Extrusion production	100%	217	-	1	498	-8	1	0	-168
Total Romania				**217**	-	**1**	**498**	**-8**	**1**	**0**	**-168**
Singapore	Hydro Aluminium Asia Pte. Ltd.	Trading company	100%	16	-	-	7,583	105	10	15	642
	Hydro Aluminium Asia Rolled Products Pte. Ltd.	*Company dissolved in 2020*	100%	2	-	-	0	0	0	0	0
	Hydro Holding Singapore Pte. Ltd.	Sales and local holding company	100%	20	-	-	69	0	1	0	-417
Total Singapore				**38**	**-**	**-**	**7,652**	**105**	**10**	**15**	**225**
Slovakia	Hydro Extrusion Slovakia a.s.	Extrusion production	100%	374	-	-	539	1	0	3	-33
	Slovalco a.s.	Primary aluminium production	55.3%	490	-	-	3,711	-505	-93	3	320

	ZSNP DA, s.r.o.	Transportation	55.3%	-	-	-	9	1	0	0	1
Total Slovakia				**864**	**-**	**-**	**4,260**	**-503**	**-93**	**6**	**289**
South Africa	Technal Systems South Africa (Pty) Ltd.	*Company is in liquidation*	100%	-	-	**-**	0	0	0	0	-13
Total South Africa				-	-	-	**0**	**0**	**0**	**0**	**-13**
Spain	Hydro Aluminium Iberia S.A.U	Remelter	100%	50	5	-	801	81	19	7	304
	Hydro Aluminium Rolled Products Iberia S.L.	Sales company	100%	6	-	-	10	4	1	0	9
	Hydro Building Systems Spain S.L.U.	Building systems production	100%	246	3	-	655	0	28	0	-5
	Hydro Extruded Solutions Holding S.L.U.	Local holding company	100%	43	-	-	27	-3	-8	0	26
	Hydro Extrusion Spain S.A.U.	Extrusion production	100%	266	33	-	1,313	-64	-9	0	459
Total Spain				**611**	**41**	**-**	**2,807**	**19**	**31**	**7**	**792**
Sweden	Hydro Building Systems Sweden AB	Building systems production	100%	122	2	-	646	33	0	0	13
	Hydro Extruded Solutions AB[16)]	Local holding company and R&D	100%	53	-	13	78	18	22	53	1,571
	Hydro Extrusion Sweden AB	Extrusion production	100%	869	19	5	2,191	-19	2	14	657
	Sapa China Holding AB	Local holding company	100%	-	-	-	0	0	0	0	0
Total Sweden				**1,044**	**21**	**18**	**2,914**	**32**	**25**	**67**	**2,241**
Switzerland	Hydro Aluminium International SA	Sales company	100%	13	-	9	16,910	-245	-51	0	-39
	Hydro Aluminium Walzprodukte AG	Sales company	100%	3	-	-	4	1	0	0	4
	Hydro Building Systems Switzerland AG	Sales company	100%	41	1	-	282	43	8	2	73
Total Switzerland				**57**	**1**	**9**	**17,196**	**-201**	**-42**	**3**	**38**
Turkey	Hydro Yapi Sistem Sanayi VE Ticaret AS	Sales company	100%	32	-		58	-7	-1	0	28
Total Turkey				**32**	**-**	**-**	**58**	**-7**	**-1**	**0**	**28**
Ukraine	Sapa Profiles UA	*Company is in liquidation*	100%	-	-	-	0	0	0	0	-1
Total Ukraine				-	-	-	**0**	**0**	**0**	**0**	**-1**
United Arab Emirates	Hydro Building Systems Middle East FZE	Sales company	100%	17	-	-	103	4	0	0	49
Total United Arab Emirates				**17**	**-**	-	**103**	**4**	**0**	**0**	**49**
United Kingdom	Hydro Aluminium Deeside Ltd.	Remelter	100%	46	1		669	48	9	0	116
	Hydro Aluminium Rolled Products Ltd.	Sales company	100%	6	-		13	2	0	0	5
	Hydro Building Systems UK Ltd.	Building systems production	100%	153	1		589	-31	-6	0	321
	Hydro Components UK Ltd.	Fabrication of extruded products	100%	349	1	6	628	-97	-18	0	56
	Hydro Extrusion UK Ltd.	Extrusion production	100%	514	1	1	1,442	15	1	2	18
	Hydro Holdings UK Ltd.	Local holding company	100%	-	-		1	-228	0	2	-304
	Sapa UK Ltd.	*Company dissolved in 2019*	100%	-	-		0	0	0	0	0
Total United Kingdom				**1,068**	**4**	**7**	**3,341**	**-290**	**-13**	**4**	**212**
USA	EMC Ashtabula Inc	Local holding company	100%	-	-		0	-144	-32	0	-2,112
	EMC Metals Inc	Local holding company	100%	-	-		0	24	8	0	465
	Hydro Aluminium Metals USA, LLC	Remelters and sales	100%	143	3		6,974	184	-2	0	-1,393
	Hydro Aluminium Tomago Inc.	*Company dissolved in 2019*	100%	-	-		0	0	0	0	0
	Hydro Building Systems North America Inc[17)]	*Company is in liquidation*	100%	-	-		0	0	0	0	0
	Hydro Building Systems North America LLC[17)]	Sales company	100%	-	-		1	-17	0	0	-17
	Hydro Extruder LLC	Extrusion production	100%	1,160	21	28	5,865	90	-10	0	518
	Hydro Extrusion Delhi LLC	Extrusion production	100%	289	18		1,549	17	-7	0	74
	Hydro Extrusion North America LLC	Extrusion production	100%	1,007	4		6,051	-1	-11	5	-2,153
	Hydro Extrusion Portland Holding Inc.	Local holding company	100%	567	-	19	0	-19	0	0	233
	Hydro Extrusion Portland Inc.	Extrusion production	100%	-	-		1,655	-465	1	0	-45
	Hydro Extrusion USA LLC	Extrusion production and support services	100%	2,666	8	254	12,724	874	-12	1	1,980
	Hydro Holding North America Inc.[18)]	Local holding company	100%	-	-	7	0	-5	315	213	1,234

	Hydro Metals Holding US LLC	*Company dissolved in 2019*	100%	-	-		0	-1,333	0	5	-35
	Hydro Precision Tubing Adrian Inc.	*Company is dormant*	100%	-	-		0	1	4	0	-313
	Hydro Precision Tubing Louisville Inc.	*Company is dormant*	100%	-	-		0	0	0	0	-70
	Hydro Precision Tubing Monterrey Central LLC	Precision tubing production	100%	-	-		0	0	0	0	0
	Hydro Precision Tubing Monterrey LLC	Precision tubing production	100%	-	-		506	84	-16	-2	281
	Hydro Precision Tubing USA LLC	Precision tubing production	100%	176	4		1,024	-15	3	0	22
	Norsk Hydro North America LLC	*Company dissolved in 2019*	100%	-	-		0	-766	0	-2	-29
Total USA				**6,008**	**58**	**308**	**36,349**	**-1,490**	**241**	**220**	**-1,357**
Vietnam	Sapa Ben Thanh Aluminium Profiles Co. Ltd	Extrusion production	65%	232	6		161	-21	-3	2	-6
Total Vietnam				**232**	**6**		**161**	**-21**	**-3**	**2**	**-6**
Total Eliminations, non-controlling interests and goodwill and excess values not attributable to specific legal entities							-80,576	-6,197	-216	-18	-36,871
Total joint operations and joint ventures							**3,263**	**103**	**10**	**80**	**-2,603**
Grand total				**36,310**	**1,647**	**875**	**149,766**	**-1,556**	**813**	**2,981**	**52,745**

1) Number of employees is based on the legal entity each employee is employed by
2) Revenue consists of external and internal revenue from sales of products and services, and realized and unrealized results from derivatives related to sale of products. Elimination of sale to other Hydro companies is presented on a combined basis in “Eliminations”. Revenue in this report equals revenue in Hydro’s consolidated income statements
3) For the composition of income before tax, please refer to consolidated income statements and related notes
4) For a description and the composition of income taxes, please refer to consolidated income statements and related notes
5) Income taxes paid represents the actual payments made during the year independent of which year the tax relates to. In some tax regimes including Brazil, tax payments include settlement of tax liabilities with tax credits generated from other payments to federal authorities
6) Retained earnings consists of accumulated gains and losses, net of distributed profits from the point of view of the legal entity. Retained earnings existing in the companies at the time of Hydro’s acquisition is deducted in “Eliminations”. In addition, “Eliminations” consists of unrealized gains in transactions between Hydro companies
7) Hydro Aluminium Australia Pty Ltd is the owner of Hydro's ownership share in Tomago aluminium smelter, a joint operation
8) Hydro Extruded Solutions AS purchased the remaining 50% of Technal Middle East WLL with closing in May 2019. The company was renamed to Hydro Building Systems Middle East WLL (TMI) in Q4, 2019. The reported numbers also include its subsidiary in Oman
9) Hydro Extrusion Ltda. was merged into Hydro Extrusion Brasil S.A. in Q1 2019
10) Hydro Aluminium Canada & Co. Ltd. is the owner of Hydro's ownership share in Aluminerie Alouette Inc, a jointly owned aluminum smelter
11) Hydro Buildex Sarl was merged into Hydro Bulding Systems France SARL in 2019
12) Hydro Albi SNC was dissolved into Hydro Extrusion Albi SAS in Q1 2019
13) Hydro Extrusion Deutschland GmbH purchased all the shares in the powder coating company Metallbeschichtung Gerstungen GmbH in Q1, the comany changed name to Hydro Building Systems Coating GmbH
14) Sapa BS India Pvt. Ltd., Sapa Building Systems Pvt. Ltd. and Sapa Precision Tubing Pune Private Ltd was merged into Sapa Extrusion India Pvt. Ltd. in Q3 2019
15) RSK Holding AS was established in Q4 2019
16) Hydro Aluminium Rolled Products Sverige AB was dissolved into Hydro Extruded Solutions AB in Q4 2019
17) New legal entity to replace Hydro Building Systems North America Inc
18) Norsk Hydro North America LLC and Hydro Metals Holding LLC were dissolved and included in Hydro Holding North America Inc. in Q4 2019

Entity descriptions

Short description	Main activities
Alumina refining	Refining of bauxite to alumina. Hydro operates the Alunorte alumina refinery
Bauxite mining	Mining of bauxite, the raw material for aluminium productions. Hydro has only one consolidated bauxite mine
Building systems production	Production of building systems where aluminium is used
Company kindergarden	Kindergarden for children of employees or tenants
Dies production	Production of dies for extrusion of aluminium profiles
Energy sourcing	Sourcing of energy for Hydro operations
Fabrication of extruded products	Added value processing of extruded profiles
Extrusion production	Includes one or more extrusion production lines and is normally also responsible for sales and marketing of its products. May also have R&D activities
Recycling	Sorting of aluminium scrap for supply to remelters
High-purity aluminium production	Production of aluminium of minimum 99.99 percent purity
Insurance	In-house (captive) insurance
IT shared services	IT shared services for Hydro operations
Local holding company	Holding & Financing. Holding shares or other equity instruments. Administrative, management or support services
Pension fund	Employee pension fund
Power production	Production of hydro-power
Power trading	Trading of power and energy services
Precision tubing production	Production of extruded aluminium tubes, micro-port aluminium tubes, and welded alumnium tubes
Primary aluminium production	Includes one or more primary aluminium plant(s), and may also include casting, anode production and/or R&D activities
Public affairs	Hydro's Brussels office
Real estate	Property management and development. Owner of land and infrastructure
R&D	Research and development activities
Remelter	Facility remelting standard ingots, process scrap and/or post-consumer scrap
Rolling mill	Production of rolled products
Sales company	Sales, marketing and distribution offices
Support services	Administrative and other support services
Tool and spare parts services	Provides tool and spare parts services, in addition to administrative and management support
Trading company	Sales, marketing and distribution of casthouse aluminium products
Transportation	Transport of raw materials by railway train

Additional information

Terms and definitions

Alunorte	The world's largest Alumina refinery outside China, situated in Barcarena in Northern Brazil. Hydro owns 92 percent
BRC	Biodiversity Research Consortium Brazil-Norway
BRL	Brazilian reals
B&A	Hydro's Bauxite & Alumina business area
CO_2 equivalents (CO2e)	A measure used to compare the emissions from various greenhouse gases based upon their global warming potential
Company	Norsk Hydro ASA, a Norwegian public company limited by shares, or Norsk Hydro ASA and its consolidated subsidiaries, as the context requires
Consolidated Financial Statements	The consolidated financial statements and notes included in the Company's annual report 2018 to shareholders
Corporate Management Board	The corporate management board established by the Company's President and Chief Executive Officer to assist him in discharging his responsibilities
CSBI	The Cross-Sector Biodiversity Initiative is a joint effort between ICMM (the mining industry), IPIECA (the petroleum industry) and the Equator Principles Association.
CSR	Corporate Social Responsibility
DRS1	The old bauxite residue deposit area at Alunorte, still being used to deposit bauxite residue, processed by state-of-the-art press filters
DRS2	The new bauxite residue deposit area at Alunorte, which was under commissioning when Barcarena was flooded following extreme rainfalls in February 2018
EU	European Union
GHG	Greenhouse gas emissions
GRI Standards	Globally recognized standards for sustainability reporting
HSE	Health, security, safety and environment
Hydro	Norsk Hydro ASA and its consolidated subsidiaries in Brazil, unless otherwise stated
Hydro Aluminium	The aluminium business of Hydro, comprising the sub-segments Metals, Rolled Products, and Extrusion and Automotive
Hydro Monitor	Hydro's global employee engagement survey, normally performed for all employees every second year
Ibama	Brazilian Institute of the Environment and Renewable Natural Resources is a federal environmental agency under the Ministry of Environment
ICMM	International Council on Mining and Metals
IFC	International Finance Corporation
ILO	International Labor Organization
IPIECA	International Petroleum Industry Environmental Conservation Association. Global non-profit oil and gas industry association for environmental and social issues
MACN	Maritime Anti-Corruption Network
Mt (or mt)	Metric tonne (1,000 kilograms)
My Way	The process we use at Hydro for employee feedback and development. This process consists of regular dialogues between employee and leader, as well as a system tool.
NOK	Norwegian kroner
PACI	World Economic Forum's Partnering Against Corruption Initiative
Semas	The Secretary of State for Environment and Sustainability is the environmental agency in the state of Pará
TAC	"Term of Adjustment of Conduct" is an agreement between Alunorte, Ministério Público and the Government of Pará/Semas and regulates certain technical studies and improvements, audits, payments of fines, and payments for food cards to families living in the hydrographic area of the Murucupi river
TC	"Term of Commitment" is a social agreement, in addition to TAC, between Alunorte and the Government of Pará. The agreement addresses efforts and investments related to the social development of communities in Barcarena
TI	Transparancy International
TWh	Terawatt hour (one billion kilowatt hours)
WBCSD	World Business Council for Sustainable Development
Worker	Person that performs work directly or indirectly for the company. It includes, but is not limited to, employees

We are aluminium

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Hydro is a fully integrated aluminium company with 36,000 employees in 40 countries on all continents, combining local expertise, worldwide reach and unmatched capabilities in R&D. In addition to production of primary aluminium, rolled and extruded products and recycling, Hydro also extracts bauxite, refines alumina and generates energy to be the only 360° company of the global aluminium industry. Hydro is present within all market segments for aluminium, with sales and trading activities throughout the value chain serving more than 30,000 customers. Based in Norway and rooted in more than a century of experience in renewable energy, technology and innovation, Hydro is committed to strengthening the viability of its customers and communities, shaping a sustainable future through innovative aluminium solutions.