



Hydro Extrusions Benelux  
Sustainability Report  
2023



## About the report

This report describes Hydro Extrusions Benelux's management of material environmental and social topics and provides an overview of Hydro's environmental and social policies, strategy, and main results. It has been prepared with reference to the GRI Standards. The topics reflected in this report represent the most significant impacts from Hydro Extrusions Benelux, as identified in its 2023 materiality analysis. The report covers Hydro Extrusions Benelux's performance for the period January 1 to December 31, 2023.

In this report, Hydro refers to Norsk Hydro ASA, Hydro Extrusion Europe (Extrusion Europe) collectively refers to Hydro's group of aluminium extrusion plants in Europe, and Hydro Extrusions Benelux refers to the Extrusion Europe plants in Belgium and The Netherlands.

For a thorough description of Hydro's policies, commitments, goals and targets, responsibilities, resources, and grievance mechanisms related to sustainability, we refer to the sustainability statement section in Hydro's 2023 annual report. Hydro reports in accordance with the GRI Standards and the requirements of the International Council on Mining and Metals (ICMM). Please see the GRI index at [Hydro.com/gri](https://hydro.com/gri). Hydro's annual reports are available on [Hydro.com](https://hydro.com).

## Materiality analysis

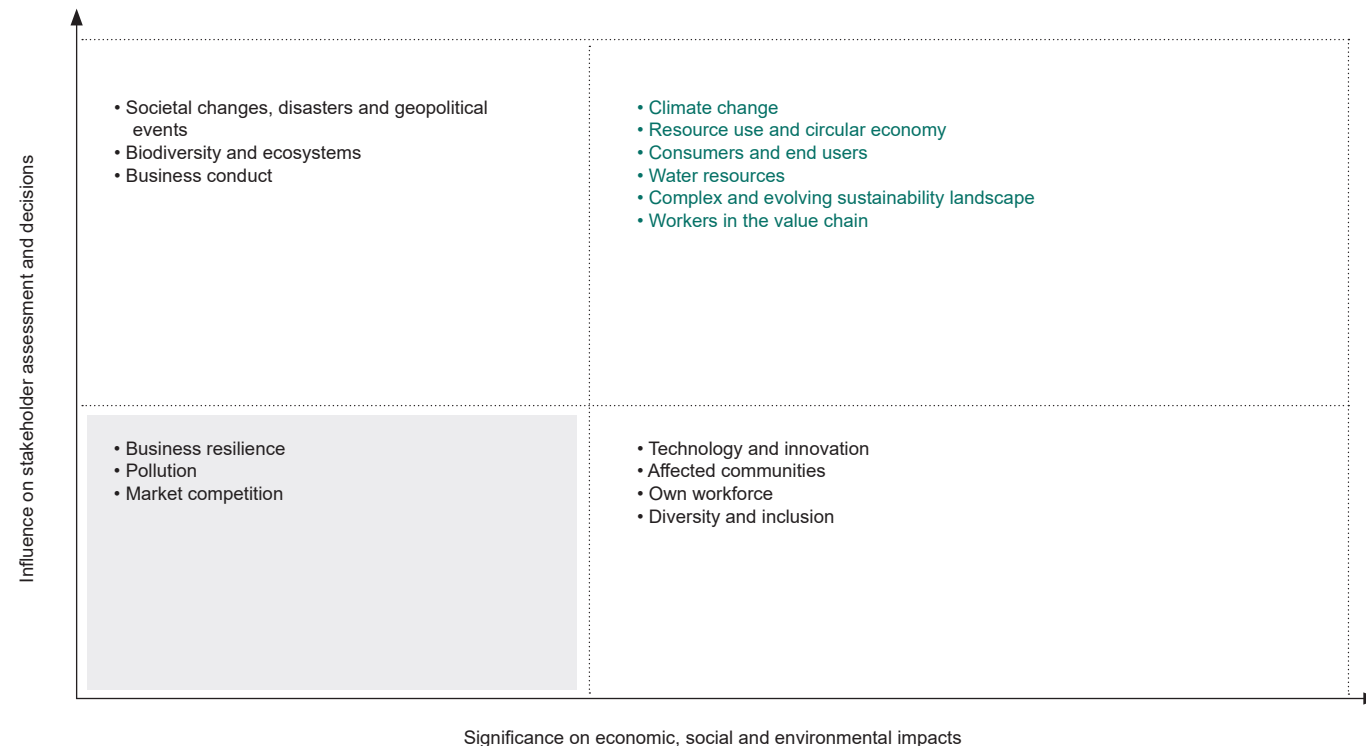
The materiality analysis is prepared based on the European Sustainability Reporting Standards (ESRS) topics. It is based on continuous dialogue with key stakeholders and incorporates feedback from relevant specialists and leaders within Hydro Extrusions Benelux. The analysis reflects internal and external developments, and is approved by the management team. Topics in green represent those that are most material to Hydro Extrusions Benelux, while those in the gray quadrant are less material. A list is provided at the start of each chapter, clearly indicating the material topics that are covered.

## Hydro and the UN Sustainable Development Goals

The UN Sustainable Development Goals (SDGs) drive a global sustainable development agenda, encouraging businesses to innovate and address challenges while emphasizing the need for sustainability reporting. Hydro has impacts on all 17 goals, and focuses on eight goals it deems most important. These are highlighted throughout the report.



## Materiality analysis 2023 – Hydro Extrusions Benelux



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# Letter to stakeholders

The world has set a common ambition to strive for a world that is fair and prosperous with a society where all basic needs are met, and nature is protected and restored. We all play an important part in creating such a world.

Businesses play an important role as we can contribute to a just transition to a low-carbon economy by taking actions that matter, being a positive force in society and improving the lives and livelihoods wherever we operate. Hydro, as market leader in aluminium solutions, wants to offer market-leading low-carbon products.

## More sustainable aluminium

The market for greener aluminium is growing at a high pace. Together with the roadmap we have set out towards 2030 to pioneer the green aluminium transition, we see significant value creation potential for Hydro. Our ability to utilize our integrated value chain delivering low-carbon products with a strong sustainability profile, will create value for our customers and shareholders alike.

## Reducing our environmental impact

We are committed to reducing emissions and the environmental impact of our operations. Our target is to reduce Hydro Extrusions Benelux's total greenhouse gas (GHG) emissions with 15 percent by 2025 and 30 percent by 2030 (compared to the 2018 baseline).

To reduce emissions, we aim to increase the use of electricity from renewable sources for all our production sites. In 2023, we completed the construction work for a second wind turbine at the Ghlin location. The installation phase of the wind turbine is now ongoing. We also expanded our solar panel capacity in Raeren. At all other plants we are looking into the possibilities of using renewable energy on-site.

Additionally, where feasible, our plants are transitioning from natural gas and other fossil fuels to electric equipment. By improving insulation and installing intelligent lighting systems, we are reducing emissions from our buildings. And by better data collection through the Automated Meter Reading (AMR) project, we can detect leakage and improve energy consumption.

Besides improving energy efficiency to reduce GHG emissions, our sites are working to reduce water consumption and waste, and to enhance circularity in auxiliary materials. Our targets for 2030 are reducing specific water consumption by 36 percent and specific waste by 39 percent, both relative to 2018. We are aiming for zero waste to landfill by 2025.

## Responsible supply chain

What is becoming increasingly evident, is that the most ambi-

tious players in the market are now looking beyond aluminium's material properties. The carbon content, nature impact and social profile of the manufacturer are becoming more and more important. All our plants are certified according to the ASI Performance Standard and the ASI Chain of Custody standard, showing our commitment to sustainability in our plants and in the supply chain. Additionally, from 2024 on, we will register all Benelux plants on the EcoVadis platform, following the Hydro Hoogezand plant.

## Safe working environment

Health and safety are our top priorities. It is our responsibility to offer our employees and contractors a safe working environment. Over the past years, Hydro's safety performance has improved significantly, with lower injury rates and fewer high-risk incidents. Structural improvement in safety is only possible when we work together, with the commitment of all employees.

## Our people are the key to success

Our employees are our most important assets. Throughout the company our people, driven by their dedication and determination, use their skills and experience to deliver on our ambitious strategic agenda. Nurturing a diverse and inclusive workplace environment is critical to reach our targets of constantly improving our greener product ranges and practices, our cost positions, and our market positions. Our objective for the coming years is to increase the percentage of women employees, within all the diversity that already exists.

## Hydro Partnership

Having made substantial strides in our regional sustainability endeavors, we are now determined to amplify our impact even further. Hydro Extrusions has introduced a concept called Hydro Partner Packages – a suite of partnership services that help businesses to get ahead, become future-proof, and comply with both increased legal requirements and market demands. This is the new way to purchase products and services from Hydro Extrusions in Europe.

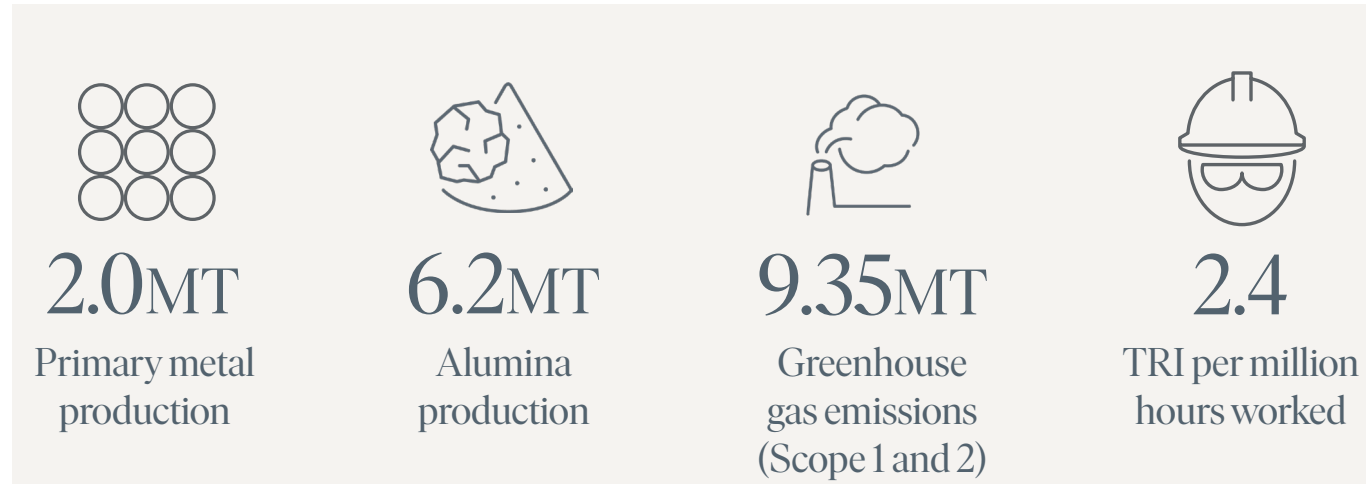
We hope you enjoy the transparency of this report, and we invite you and all of our partners to join us on our path forward.

*Sacha Brandt*

Head of Hydro Extrusions Europe Commercial  
& Vice President Hydro Extrusions West (UK & BNL)



# About Hydro



Innovative and sustainable processing of natural resources has defined Hydro since its establishment in 1905. It started in Norway's Telemark county with the use of hydropower to extract nitrogen from the air for production of mineral fertilizer needed to feed a growing population.

Today, Hydro mines and refines raw materials, produces renewable energy to make low-carbon primary aluminium, and develops advanced aluminium solutions for customers. Hydro also develops recycling technologies to bring as much as possible of the infinitely recyclable aluminium back into the aluminium loop, after serving a life in use. Hydro's history has always been about producing useful products that the world needs, about human creativity and harnessing what nature has to offer, about the ability to see possibilities and to realize limitations.

Hydro's history is characterized by a vital drive, created by people who care for each other and the world around them. More information on Hydro's history is available on [hydro.com](https://hydro.com). Hydro owns and operates its fully integrated global aluminium value chain through four business areas:

- **Hydro Bauxite & Alumina** represents the first two links of the aluminium value chain through bauxite mining and alumina refining.
- **Hydro Energy** is a major renewables producer, market operator and developer of businesses for the energy transition.
- **Hydro Aluminium Metal** is a leading supplier of extrusion ingots, sheet ingots, foundry alloys, wire rods and high purity aluminium with a global production network.

- **Hydro Extrusions** delivers tailored aluminium components and solutions to customers around the world.

Uniting experts is the best way of creating innovation and developing aluminium solutions for the future. Hydro is continuously striving to bring out the best of our people and organization, and to add lasting value through collaboration and partnerships with customers and societies that we are part of.

## Sustainability in Hydro

Sustainability is an integrated part of Hydro's strategy to lift long-term profitability and positioning in the market. By reducing Hydro's environmental footprint, improving relations with stakeholders and neighbors, managing impacts, increasing resource efficiency, producing products needed for the green shift and improving lives and livelihoods wherever we operate, Hydro aims to reduce risks and create business opportunities. Hydro has quantified ambitions towards 2030 and 2050 that will improve the company's performance on climate, environment and social responsibility.

### Climate ambitions

Hydro's target is to be a net-zero company by 2050 or earlier, delivering net-zero products and enabling a net-zero society. Based on a 2018 baseline, Hydro is targeting a 30 percent reduction of total scope 1 and 2 emissions, and a 15 percent reduction in upstream scope 3 emissions by 2030. Hydro also is targeting a 30 percent reduction in specific scope 3 emissions per tonne aluminium delivered to the market by 2030.

### Environmental ambitions

Hydro has a range of targets to protect nature and biodiversity, and to reduce waste. Hydro has a 1-to-1 rehabilitation target for areas impacted by its bauxite mining activities in Paragominas, Brazil, within two hydrological cycles. Hydro also targets no net-loss of biodiversity for its bauxite mine from a 2020 baseline, and no net-loss of biodiversity in new projects. The company is targeting post-consumer scrap recycling capacity of 850-1200 kTonnes by 2030, an increase compared to our 2025 target of 520-670 kTonnes. Hydro aims to eliminate landfilling of all recoverable waste by 2040, to eliminate the need for new bauxite residue storage areas by 2050, and to utilize 10 percent of generated bauxite residue from 2030. Hydro also is targeting a 50 percent reduction in material non-GHG emissions by 2030, against a 2017 baseline.

### Social ambitions

Hydro aims to improve lives and livelihoods wherever it operates by contributing to the protection of human rights and access to equal opportunities, resilient local communities in a changing world, and development of skills and jobs for the future low-carbon economy. Hydro has a goal to equip 500,000 people with new skills and education by 2030.

At Hydro, prioritizing the health and safety of employees is paramount. The company targets zero fatal accidents and life-changing injuries.

Hydro places great importance on fostering diversity in the workforce. The company targets 25 percent women employees in permanent and temporary positions, and 25 percent women in leadership positions, by 2025.





# Hydro Extrusions Benelux



In the Benelux, Hydro has been active in the production of extruded aluminium profiles since the 1960s. The production facilities for small and medium as well as big and wide aluminium profiles are located throughout the Benelux region, ensuring local presence.

Hydro Extrusions Benelux is active in a broad range of market segments. Most of the aluminium profiles extruded in the Benelux are delivered to the transport, machinery and building and construction sector across Europe. The profiles meet the highest quality and environmental standards.

Hydro Extrusions Benelux consists of five extrusion plants, located in Raeren (BE), Lichtervelde (BE), Drunen (NL), Harderwijk (NL) and Hoogezand (NL), offering die manufacturing, standard and customized profiles, mechanical treatment / friction stir welding (FSW) and surface treatment (anodizing and painting). Hydro's recycling units in Drunen (NL) and Ghlin (BE) are also part of the Benelux organization.

The Hydro Drunen location also houses Hydro Pole Products, which offers innovative, intelligent and more sustainable aluminium solutions to its international client base. Using extruded aluminium profiles, they produce light poles, flagpoles and complete systems for mounting traffic lights for public infrastructure projects. These products comply with the European standards EN 40-6, EN 12899-1, EN 12767 and EN 1090-3 and are CE-certified.

The Benelux locations are certified according to ISO 9001, ISO 14001, ISO 45001, the ASI Performance Standard and the ASI Chain of Custody Standard.

## Sustainable Growth, The Benelux Way

Sustainability has become an integral part of the regular business operations and strategy of Hydro Extrusions Benelux. The strategy for Hydro Extrusions Benelux for the coming years has been brought together under the heading 'Sustainable Growth, The Benelux Way.' The strategy includes four important themes: safety, sustainability, customer orientation, and efficiency and innovation.

## Committed to a sustainable future

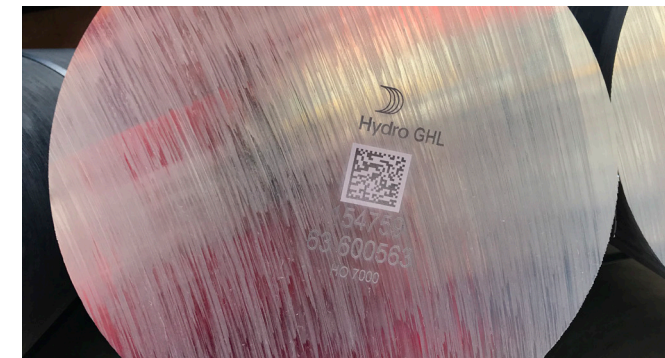
Hydro Extrusions Benelux is committed to a sustainable future. This includes optimizing the circularity of aluminum and stimulating re-use. In addition, together with customers they design and deliver more sustainable aluminium solutions to create a fair society and circular economy. By purchasing and producing locally, using renewable energy, and increasing and improving recycling capacity and technology at its own locations, Hydro Extrusions Benelux aims for net zero in its products by 2050 or earlier.



## Benelux recycling units

The Hydro recycling units in Drunen (NL) and in Ghlin (BE) use advanced remelting technology to recycle aluminium pre-consumer and post-consumer scrap into billets. The unit in Ghlin is able to process aluminium scrap containing contamination (e.g. powder coating, small amounts of plastic) due to an advanced filter installation and multichamber oven. In Drunen, a new filter installation allows the recycling of shredded aluminium scrap.

Hydro Extrusions Benelux is continuously working to improve the technology of the recycling units, to increase its recycling capacity and to seek closed-loop solutions with its customers.



## Closing the loop in the Benelux

In the Benelux recycling units, pre-consumer scrap and post-consumer scrap are given new life in new products. The recycling units use scrap from the Hydro Benelux plants, as well as externally generated process scrap and post-consumer scrap from the market.



## Facilities

- Hoogezand
- Harderwijk
- Drunen
- Lichtervelde
- Ghlin
- Raeren



## Capacities in the Benelux

- 8 extrusion presses  
30 g – 65 kg per Meter  
620 mm maximum width  
26 meter maximum length
- Big and wide profiles  
Lichtervelde and Harderwijk
- Small and medium profiles, standard profiles  
Drunen, Raeren and Hoogezand
- Poles (Pole Products)  
Drunen
- Surface treatment (Anodizing, Painting)  
Raeren and Hoogezand
- Mechanical treatment / friction stir welding  
Raeren and Harderwijk (FSW)
- Recycling  
Ghlin and Drunen
- Die manufacturing  
Hoogezand




Material topics covered in this chapter: Climate change | Renewable energy transition | Resource use and circular economy

# Climate change



To reach the Paris climate agreement and keep the global temperature increase below 1.5 degrees, we need to decarbonize energy systems, produce for circularity and recycle resources already in use. Aluminium is a key enabler in the green transition, but production must become emission free.

 Aluminium is everywhere, from transportation to packaging and lightweight building and construction. Its properties are ideal for a variety of applications that are essential for everyday life. Aluminium is also an attractive material for modern innovations that enable the green transition. Nevertheless, there are challenges involved in making the entire value chain of the light metal more sustainable.

Although the upstream segment of the aluminum value chain accounts for the majority of GHG emissions, the downstream aluminum industry remains important. Given the energy-intensive nature of producing primary aluminium, it is critical to increase the recycled content in products. In addition, energy efficiency improvements are needed as well as decarbonization of the energy supply. Hydro Extrusions Benelux is making a concerted effort to reduce its GHG emissions with these levers.

Hydro Extrusions Benelux' target for 2030 is to reduce specific CO2 emissions by 30 percent (2018 baseline). To achieve our climate ambitions, we follow a life cycle approach, focusing on greener production, greener sourcing and greener products.

## Greener production

### Energy-efficient buildings

The opportunities for improved efficiency in buildings are enormous. Major consumers are heating, ventilation, air conditioning and lighting. All the Benelux plants have installed intelligent lighting (LED and automation).

### More efficient billet heating

Aluminium billets must be pre-heated to a certain temperature (typically 420-500 degrees Celsius) before the extrusion of aluminium profiles can begin. Gas heaters, which are commonplace in the industry for billet heating, are a source of (direct) GHG emissions. Hydro Extrusions Benelux intends to move away from gas heaters and has started the process to replace the conventional heaters with hybrid or induction systems at the plants, to help reduce scope 1 (direct) emissions.

### Waste heat recovery

Machines and processes generate heat which is released to the surrounding environment. This is wasted thermal energy. Recovering this energy is a great way to improve energy efficiency. Hydro Extrusions Benelux uses different heat recovery technologies to capture and transfer waste heat from our processes, so we can re-use the heat elsewhere in our processes or at our locations.

## Reducing process waste and recycling

Process scrap is a natural consequence of the production process. Hydro Extrusions Benelux works continuously to reduce scrap generation by optimizing its production processes. However, a certain amount of process scrap is unavoidable. All process scrap from the manufacturing of the profiles is recycled. In addition, the recycling units use process scrap from other companies and post-consumer scrap from the market. Recycling reduces the need for primary aluminium, and uses just a fraction of the energy required in primary aluminium production, making it the better option for the climate and for conserving resources.



With closing-the-loop systems, Hydro Extrusions Benelux is aiming to recover more post-consumer scrap in the form of end-of-life products. To do so, they have set up partnerships with customers and specialized waste processing companies to bring all materials back in the cycle in a transparent, responsible and sustainable way.

## Greener sourcing

Greener sourcing is critical for reducing the carbon footprint of aluminium. Hydro Extrusions Benelux aims to source aluminium metal with a low carbon footprint, produced with less carbon-intensive electricity. The target is a 22 percent reduction in CO2 emissions by 2030, from a 2018 baseline, through responsible metal sourcing. To reach the target, Hydro Extrusions Benelux is engaging with its metal suppliers with robust screening procedures. They are also working to source more renewable energy.

## Sourcing renewable energy

Hydro Extrusions Benelux intends to supply all its plants with renewable energy by 2025. They will achieve this either by sourcing from the grid via a (bundled) power purchase agreement, or by on-site generation where possible.

## Responsible metal sourcing

The recycling units in Ghlin (BE) and Drunen (NL) are the main sources of supply for the extrusion facilities. The billets produced in Hydro Extrusions Benelux contain a high share of recycled content and some primary aluminium. The type of scrap sourced and how it is produced is important. Aluminium produced with coal power comes with a far higher footprint than hydropower-based aluminium. And there is also a difference between aluminium pre-consumer scrap (industrial scrap) and post-consumer scrap (end-of-life scrap) when it comes to the carbon footprint.

## Carbon footprint aluminium pre-consumer scrap

Life-cycle analysis (LCA) calculations distinguish different allocation approaches for pre-consumer aluminium scrap. According to the mass-based approach in LCA calculations, the carbon footprint of recycled pre-consumer scrap (process scrap) is dependent on its metal origin. The cut-off approach does not make a distinction.

Hydro Extrusions Benelux calculates the carbon footprint of recycled aluminium by modeling physical realities as closely as possible. Hydro follows the acknowledged LCA methodologies.

## Greener products

Hydro offers low-carbon and recycled aluminium products which help their customers to reduce the carbon footprint and/or increase the recycled content of their products. Hydro's sustainable offering contains three greener product brands: Hydro Recycled Aluminium, Hydro Low-Carbon Aluminium and Hydro Recycled Low-Carbon Aluminium.

## Transparency

Hydro's low-carbon and recycled products come with an Environmental Product Declaration (EPD), detailing the environmental footprint, from mining to the final metal, including input materials and transportation (Scopes 1-3). This information is verified by an independent third party.

The EPDs are published in the Dutch Environmental Database (NMD), as category 1 data, and on the International EPD system platform.

## Low-carbon and recycled aluminium

### Hydro Recycled Aluminium

Using recycled aluminium, we significantly reduce energy consumption in the production phase while still offering high-quality aluminium. Hydro Recycled Aluminium is our range of aluminium with a high share of recycled content (pre-consumer scrap and post-consumer scrap) and some primary aluminium. The small amount of primary aluminium in Hydro Recycled Aluminium enables control of the alloy composition and mechanical properties of the aluminium. Hydro Recycled Aluminium is produced locally, in our own recycling units.

### Hydro Low-Carbon Aluminium

Low-carbon is our range of aluminium with a CO2 footprint of approximately 4.0 kg/CO2 per kg of aluminium produced or less. This CO2 footprint can be obtained with the production of primary aluminium using 100 percent renewable energy, or the production of secondary aluminum with a high percentage of post-consumer material.



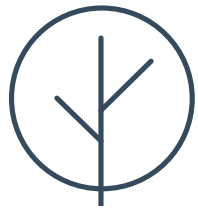


Material topics covered in this chapter: Water resources | Resource use and circular economy | Biodiversity and ecosystems

# Environmental impact management



We recognize the impact of our industry on the environment and that it is our responsibility to minimize that impact. We are committed to promoting sustainability and reducing our environmental footprint by implementing more environmentally friendly practices throughout our business.



All industrial activities and aspects of business can impact the environment, and that impact extends beyond climate change. Hydro Extrusions Benelux is committed to taking action to reduce its environmental impact and promote sustainability in every area. By doing so, we can help to ensure a more sustainable future of the planet and the generations to come. Hydro Extrusions Benelux will continue to implement the principles of a circular economy, design products with a focus on end-of-life disposal, and promote recycling and reuse in all aspects of its business. We will also continue to engage with stakeholders, including employees, suppliers, customers, and communities, to promote environmental responsibility and build a culture of sustainability.

Hydro Extrusions Benelux's ambition for 2030 is to reduce specific water consumption by 36 percent (2018 baseline), and reduce specific waste by 39 percent (2019 baseline). They are also targeting zero waste to landfill by 2025, and are working to improve circularity in auxiliary materials. For non-GHG emissions, the aim is to comply with EU emission regulations and to have zero infractions within local emissions permits.

### Policies and management systems

All Hydro Extrusions Benelux plants follow the Hydro internal policies and procedures, related to environmental management. This is supported by comprehensive HSE management systems, audit programs, and training and awareness initiatives. All Hydro Extrusions Benelux sites are ISO 14001 certified.

### Water management

Hydro's global procedure for water stewardship requires that all operational sites evaluate water-related risks and opportunities at a catchment scale and develop management plans and context-relevant targets to address any material risks identified. Operational sites must also maintain a sufficiently detailed water balance account to reflect the site's water risk exposure and comply with the International Council on Mining & Metals' (ICMM's) requirements for water reporting. Furthermore, it must also manage the quality of water discharges and run-off to fulfill legal permit limits and mitigate potential negative impacts to the environment and harm to the health and livelihoods of affected communities, within the operation's area of influence.

### Waste management

Hydro Extrusions Benelux implements efficient waste management systems that target metal scrap, hazardous waste

and other general waste. They aim to improve waste collection, sorting, storage, and treatment. They strive to reduce the amount of waste we generate, and to re-use or recycle waste that cannot be avoided. Where re-use or recycling is not possible, waste is disposed of responsibly.

### Reducing Waste

To reduce waste further, Hydro Extrusions Benelux will implement a more structural approach according to MUDA. MUDA is a Japanese term used for any activity or process that does not add value or creates waste. By eliminating the wasteful activities, we can improve our productivity and reduce costs and contribute to sustainability. MUDA, as part of Hydro's Extrusion Business System, is being rolled out as a project in the Benelux as a structured way of working.

### Efficient resource use

In the Benelux plants, resources are conserved on multiple fronts. These include standardizing packing methods and materials, focusing on minimizing customer complaints, internal rejections and the return of products, and using precise measurements in production to reduce waste.

### Other emissions to air

Non-GHG emissions are regulated by European and local authorities. Hydro Extrusions Benelux had no breaches with regard to our emissions requirements in 2023.

### Life-cycle assessment

Hydro Extrusions Benelux is committed to responsible management of its products throughout their life cycle, from the design phase to the disposal phase. To determine the environmental impact of its products and to understand and reduce their ecological footprint, a life-cycle analysis (LCA) was conducted by a consultant agency at all Benelux plants.

### Biodiversity and ecosystems

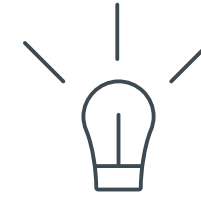
Hydro has implemented a global procedure for biodiversity and ecosystem services, which covers all wholly owned or operated assets. The procedure establishes minimum requirements for biodiversity risk management in operations, new project development, and merger and acquisition processes. The first requirement is to conduct an assessment to identify potential impact on biodiversity and ecosystem services within the operation's area of influence, and assess the materiality of these impacts to the operation, environment and affected communities. This assessment shall also identify and describe any priority biodiversity features or ecosystem services that occur within the operation's area of influence and consider the full life cycle of the operation, including closure.

Material topics covered in this chapter: Innovation and digitalization

# Innovation and technology



Through innovation we can improve our products and processes, reduce greenhouse gas emissions and assist our customers in meeting their commercial and sustainability goals. Aside from technical factors, we attempt to achieve the right balance of safety, environmental, economic and social considerations in our designs.



Innovation and Technology (I&T) is the technology backbone of Hydro Extrusions Benelux. It is the business area-wide research and development group, constituting more than 80 highly educated and experienced employees worldwide, including physicists, metallurgists, chemists, mechanical engineers, metallographers and technicians – all experts in aluminium. Extrusion Europe has its own R&D unit, I&T Extrusion Europe, which supports and adds value to Hydro Extrusions Benelux's plants by maintaining and extending existing technologies and developing new ones. In Hydro Extrusions Benelux, general R&D efforts include:

- Reducing energy consumption, waste, emissions and carbon footprint in line with our sustainability agenda
- Making products and solutions that promote the use of aluminium and sustainable development
- Improving productivity, energy use and emissions by implementing technology elements in our processes
- Ensuring optimal operations in existing assets, including cost factors and HSE
- Investing in recycling technology and setting up infrastructures to increase post-consumer scrap intake
- Increasing the share of value-added products and tailored solutions in collaboration with customers
- Designing with end-of-life scenario in mind to improve the recyclability of our products and the products of our customers, to contribute to a circular economy

### Operational Excellence (OpEx)

The in-house OpEx organization assists Extrusion Europe in enhancing performance and lowering costs, developing people, products and processes, and facilitating business unit networking. OpEx assists with casting, extrusion, surface treatment, fabrication, quality, logistics and flow, and with our Extrusion Business System (EBS). All their actions are driven by business needs, ranging from the technical to the organizational, with the overarching goal of enhancing the business. OpEx works closely with the Benelux plants and encourages plant networking by connecting employees within specific areas to facilitate and improve the sharing of best practices.

### Automated Meter Reading (AMR)

Hydro Extrusions Benelux has rolled out Automated Meter Reading (AMR) systems to provide accurate, real-time consumption data. These allow us to continuously monitor consumption, and with the help of an algorithm, identify

inefficiencies. Using AMR-based predictive maintenance tracking models can result in significant savings, e.g. tracking compressed air leaks. With AMR data, informed decisions can be made that will help optimize operations and reduce environmental impact. The AMR project is a collaboration between Hydro Energy and Hydro Global Business Services – an internal service provider for the Hydro group. The system uses sensors and the Microsoft Azure cloud for data collection.



### Hydro EcoDesign

Most of the costs of a product and the environmental impacts of the product occur early in the design process. This is why Hydro, together with innovation partner Environmental Protection Encouragement Agency (EPEA), has developed a structured method that supports customers in product development. The aim is to make products with more functionality and a smaller ecological footprint.





Material topics covered in this chapter: Own workforce

# Safe working environment

We value human life above all else and will not jeopardize the health and safety of the people who work for us or are affected by our actions. We make every effort to provide a safe, healthy work environment because we want every employee, contractor and visitor to return home in good health.



The safety and well-being of employees, contractors and visitors is of utmost importance, and the priority of Hydro Extrusions Benelux in all our activities. Health, safety and environment (HSE) is vital to Hydro Extrusions Benelux's sustainability journey. It is a fundamental pillar of social responsibility and responsible business practice.

Identification of strong synergies between HSE and Sustainability



Hydro Extrusions Benelux is dedicated to enhancing HSE performance through various measures, including risk reduction, employee training, and regular follow-ups conducted by line management and HSE representatives. All injuries and high-risk incidents are investigated to identify their underlying causes, and lessons learned are shared among the sites. Everyone is engaged in this effort, as responsibility for a secure workspace is shared among all.

Hydro Extrusions Benelux wants to be at the forefront of HSE, with zero injuries, and to achieve this, there is a system in place that features committed and visible leadership and full engagement of all employees and stakeholders.

The locations Raeren, Lichtervelde, Ghlin, Drunen and Hoogezaand are certified according to ISO 45001 which specifies requirements for an occupational health and safety (OH&S) management system.

### Extrusion Business System (EBS)

EBS is a lean working method developed by Hydro to support continuous improvement in its business, including HSE. It is a system describing standard processes, and a philosophy for how to work to improve. It is also a set of tools that helps both improve and sustain those standards for the long-term future. The EBS system is based on the principles of 6S. (See below under "HSE management tools.")

### HSE management tools

#### 6S is implemented in the daily routine

The 6S is a workplace organization methodology to improve safety, quality and productivity. The six principles stand for Sort, Set-in-Order or Simplify Access, Shine, Standardize, Sustain and Safety. These principles are implemented in the daily routine and are supervised by a daily management round which have a clear impact on the reduction of injuries.

#### The Critical 7 (C7)

Hydro has identified seven activities that have the potential to result in fatal accidents. These activities are actively controlled and audited. The C7 are mobile equipment, overhead cranes, energy isolation, confined space entry, fall prevention, contractor management, and molten metal.

#### Work Environment Risk Assessments (WERA)

Continuous improvement of occupational health is based on work environment risk assessments (WERA) and the implementation of risk reduction measures. Follow-up is done by using an associated key performance indicator. WERA is a tool to facilitate a more unified way of performing risk assessment, easier identification of improvement areas, and sharing between similar processes.

#### Walk Observe Communicate (WOC)

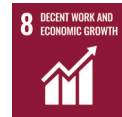
Every Benelux location undertakes a WOC (Walk, Observe, Communicate) program on a regular basis. This is an open, positive and constructive dialogue between two colleagues working together to create a healthy and safe workplace. One goal is to identify areas for improvement that might otherwise be overlooked, as it is easy to have a blind spot when it comes to safety related to the own workplace. Another intention is to compliment and emphasize safe behavior and work methods to the team members.

#### Reporting unsafe situations is rewarded

Employees are encouraged to report unsafe situations, known as injury-free events (IFE), to help create a safer work environment. Safety is the responsibility of everyone. Speaking up can prevent injuries. Every reported unsafe situation is recorded in our Incident Management System and followed up. The best IFE of the month is recognized and rewarded, and communicated at the sites.

#### Learning from high-risk incidents and global incident response

Hydro Extrusions Benelux shares across its plants the insights gained from incident investigations. This is the most



efficient approach to emphasizing the significance of HSE and avoiding future incidents.

### Audits

Hydro's HSE team conducts HSE audits in Hydro Extrusions Benelux's plants to verify compliance with legal and corporate standards and to identify good practices and opportunities for improvement. These audits are managed by the HSE group team and supported by the local HSE staff and line management.

### HSE trainings

To create a safe working environment, Hydro Extrusions Benelux provides HSE trainings to its employees. These trainings promote awareness and encourage safe practices, providing essential knowledge about health, safety, the environment and security to all individuals. Some examples of the HSE trainings are:

- Induction program for new employees
- Fatality prevention
- New line manager training
- Hand injury prevention
- On-boarding and specialized training program
- EBS training

#### DSS+ training program: working and thinking more safely

In the Benelux, a two-year safety improvement pilot is running with the aid of the DSS+ training program. The core of the project is making each other aware of the importance of safety and quickly recognizing risks. The goal is to take every colleague, from management to the shop floor, into a new way of thinking. All employees must be able to ensure their own safety and that of their colleagues. In challenging workshops, one question is central: What change is needed to prevent accidents? This ultimately leads to a long-term strategy.

#### Weekly/monthly HSE calls

On a regular basis, Hydro Extrusions Benelux conducts HSE meetings on-line to examine high-risk incidents and share innovative solutions and best practices.

#### Team up to clean up

Each year, all Hydro Extrusions Benelux locations organize a "Team up to clean up" day. Selected workplaces in production, warehouse and offices are organized in a structured way through the 6S method, with the aim to reduce the risk of incidents, improve machine maintenance, create pleasant and organized workplaces, and reduce losses.

#### Personal protective equipment

To optimally protect our employees during the performance of their duties, work clothing, footwear and personal protective equipment (PPE) are available. All employees working in production and all other employees and visitors entering the production department are obliged to wear the personal protection equipment.

### Emergency response team

Each Benelux location has an emergency response team in place composed of employees from various departments. The emergency response team members are trained for their duties through internal and external training in which both theory and practice are part of the program.

### Ergonomic workplaces

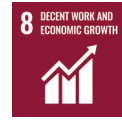
To reduce absenteeism and due to the increasing age of retirement, we focus on sustainable employability. Periodically, a review is done on the shop floor together with a physiotherapist. Together with the employee, a production area is evaluated and advice is given to work as ergonomically as possible. In the office, the workplaces are adjusted to the employee and height-adjustable standing desks allow employees to adopt different postures.



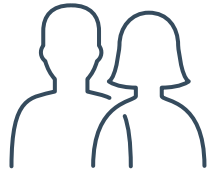


Material topics covered in this chapter: Business conduct | Own workforce | Diversity and inclusion

# Organization and people



We aim to be an employer of choice by providing favorable career prospects, practicing transparency, and employing an open management approach. The strength of our organization is in our individuals. Motivated, proud and well-trained employees advance our organization in a demanding environment.



Hydro Extrusions Benelux recognizes that its employees are the key to success. We provide ample opportunities for personal and professional growth, as we believe that employees who are empowered to develop their skills are better equipped to serve customers. We value open and respectful relationships between colleagues, regardless of their background. Hydro Extrusions Benelux also values teamwork and fosters a supportive work environment.

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### Human resource strategy

Hydro Extrusions Benelux utilizes Hydro’s global human resources procedures to guarantee the necessary skills, capabilities, and organizational culture to achieve its strategic objectives. Within the framework of Hydro’s goals, Hydro Extrusions Benelux is initiating, developing and implementing a strong HR strategy, with the focus on:

- Engagement, by continually working on a positive environment with an external effect towards preferred employership (employer of choice)
- People and organization development, to continuously meet social and market developments
- Sustainable employability, to assure a vital and healthy organization
- Organizational continuity, through succession planning and filling our pipeline with new talents
- Cost and compliance

### Business conduct

Hydro does not tolerate corruption in the private or the public sector. We are committed to complying with all applicable laws and regulations enacted to fight corruption and bribery. We look to gain competitive advantages through our product offering based on innovation, R&D and engineering, and not through unethical or illegal business practices. Hydro maintains a principle of honesty and is responsive when dealing with parties outside Hydro and society at large.

### Personal conduct

We expect all employees to contribute to our ethical culture by understanding the Code of Conduct and embracing our commitment to compliance and integrity, enforcing compliance requirements and avoiding violations. In Hydro, everyone has a responsibility to speak up promptly about ethical issues and suspected violations.

### Learning culture

Hydro Extrusions Benelux’s goal is to have a culture of con-

tinuous learning and competence development to ensure current and future workforce readiness. Learning and competence development is achieved through a combination of on-the-job training and social learning – networking, peer-to-peer and mentoring – as well as through formal learning initiatives, both digitally and in the classroom.

### ONE Learning

ONE Learning is the digital HR platform to support learning and competence development, by making learning more visible, accessible, and easier to follow up on. Employees can find all courses and training provided by Hydro in ONE.

### “Ready To”

Hydro Extrusions Benelux puts extra effort in young talents through “Ready To”, an internal training program in which personal development is central. Focus points are success factors, motives, improvement methods and innovation technology.

### On-boarding new colleagues

All new employees receive an on boarding training related to the organization and to their individual work tasks. This includes required knowledge in health, security, safety and environment (HSE), ethics and compliance, the Code of Conduct, and sustainability.

### Leadership and succession planning

Succession planning for critical positions in the company is one of the strategic people priorities toward 2025. The continuous development of candidates to the succession pipelines helps ensure a steady supply of quality leaders. To build a healthy pipeline of leaders with the required breadth of experience, leaders are rotated in order to gain knowledge from different parts of the organization.

### Diversity, inclusion and belonging

Hydro believes that diverse and inclusive teams lead to higher levels of innovation, support a learning culture, improve cultural awareness and lead to better financial results. Diversity and inclusion are directly linked to Hydro’s profitability and sustainability agenda. The aim of the DIB program is to build an inclusive work culture, strengthen inclusive leadership, lift underrepresented groups, and improve team diversity. Hydro’s diversity and inclusion processes are centered around three pillars.

- Diversity: Seeking multiple perspectives and competencies when solving tasks and meeting customer needs. This includes increasing relevant diversity across

- senior levels, including improved gender balance.
- Equity: Promoting equitable opportunities for everyone to thrive, contribute and succeed, adjusting for the fact that different individuals have different starting points.
- Inclusion: Fostering inclusive leadership and an inclusive culture for all employees to contribute with their full potential.

### Identifying and managing diversity and inclusion risks

Hydro is committed to providing equitable employment opportunities and treating all employees fairly. Hydro has set up a global diversity and inclusion core team to drive execution of the diversity and inclusion agenda. Hydro’s corporate management board, HR leaders and diversity and inclusion core team receive diversity and inclusion safeguarding dashboards each quarter for Hydro overall and for the respective business areas, including Hydro Extrusions Benelux. The dashboards use HR reporting data and employee surveys for quarterly tracking of metrics on gender balance, diversity in the succession pool, inclusive culture, well-being, psychological safety and diversity leadership. The quarterly measurements are used to develop action plans and make continuous improvements and are reported in internal board meetings.

### Gender balance in the workplace

Hydro Extrusions Benelux believes that a more balanced workforce is essential to us achieving our goals. The EU comprises 51 percent women, but in Hydro Extrusions Benelux, women currently account for just 10 percent of our workforce. To attract female talent, the organization needs to prepare itself and create a space where female colleagues feel included and empowered to participate equally from the outset.

### Including people with disabilities

Hydro Extrusions Benelux wants to help to prepare employees with impairments for the real labor market. We are proud of the location Raeren (BE), which has created an opportunity for employees with disabilities to participate in society.



### Sustainable employability – “Hydro Vitaal”

There is a growing social necessity: It is becoming increasingly important, for manufacturing companies in particular, to keep employees healthy. The rising retirement age leads in general to more physical and mental discomfort among employees. One of the keys of sustainable employability lies in improving the work capacity of employees, which is anchored in the program “Hydro Vitaal”. Individual responsibility of employees is of course equally important (healthy lifestyle, exercise, not smoking, work life balance).

### Hydro Monitor

To help us better understand the progress we are making toward becoming a safer and more inclusive, collaborative, stimulating and creative workplace, Hydro runs its global employee engagement survey Hydro Monitor every second year. The feedback provided by this survey gives us valuable insight into many important areas of our organization and helps us prioritize actions and improve.

### Works Council

Hydro Extrusions Benelux has a strong and constructive cooperation with the Works Council and unions. The Works Council consists of Hydro Extrusions Benelux employees who have fixed contracts. Several times a year, the Works Council meets the local management team. The minutes of meetings are communicated by email and on bulletin boards to all employees. Dialogue with employee representatives includes involvement at an early stage in all major processes affecting employees.

### Extrusion Europe Women’s Network

Extrusion Europe has established a women’s network (EWN) to promote workplace gender equality. With the EWN, we hope to create a sense of belonging and increase psychological comfort with the goal to create a better speak-up culture and deeper employee engagement.





# Local community value creation



We want to improve the lives of people in the communities in which we operate. Our commitment to acting responsibly and prioritizing the interests of all stakeholders is fundamental to our purpose, values, and business strategy.

Hydro Extrusions Benelux’s social responsibility approach, as well as Hydro’s CSR strategy, is grounded in its commitment to internationally recognized human rights. Hydro Extrusions Benelux aims to contribute to quality education, promote decent work and economic growth, and strengthen local communities and institutions through capacity building.

### Education and skills development

To equip people with essential skills and training for the future economy, Hydro Extrusions Benelux supports education for up-skilling and re-skilling for future jobs, training and skills development programs directly and via partners, and contributes to strengthening educational institutions. We also offer valuable, hands-on learning opportunities in the form of apprenticeships and internships.

### Employer engagement

Employer engagement is a great way to give back to the community. It strengthens the local community and prepares businesses for the future. Employer engagement establishes a network between education and business and reinforces the up-to-date skills sought by employers. It complements career guidance initiatives by educating young people about various careers and professional pathways, and it helps contextualize classroom learning. To engage with the next generation, Hydro Extrusions Benelux has launched various initiatives, such as school visits, plant tours, and participates in events like career talks and job fairs.



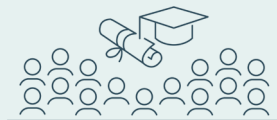
### Support just transition

Hydro Extrusions Benelux’s main contribution to society is the creation of new employment opportunities within its communities. These jobs not only provide individuals with a means of livelihood but also empower them to become active contributors to society.

In addition, by ensuring responsible and inclusive business practices, enabling capacity building through skills development for marginalized groups, supporting local business development and entrepreneurship, and engaging in relevant partnerships, Hydro Extrusions Benelux will contribute to the economic development in the societies where they operate.

### A society for all, including people with disabilities

Hydro Extrusions Benelux wants to offer people with a distance to the labor market the opportunity to be part of the workforce. We therefore collaborate with various local companies for social employment to achieve social and societal goals.

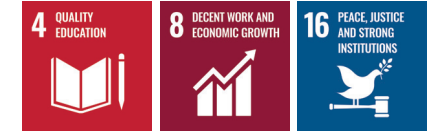


Educational target Hydro: Empowering 500,000 people with education and skills development for the future economy by 2030

167

Contribution Hydro Extrusions Benelux to the Hydro educational target (number of people reached in 2023)

# Responsible supply chain



Businesses have a crucial responsibility to uphold sustainable environmental and social business practices. We interact, influence, and collaborate with our suppliers for continuous improvement and to lessen any detrimental effects on people and the environment within our supply chain.

Hydro Extrusions Benelux aims to assist customers in their pursuit of sustainability, and to contribute to this cause by implementing certified, responsible sourcing practices. The focus here is on meeting specific ESG (Environment, Social, and Governance) criteria not only within our operations but also in our supply chain.

### Responsible sourcing

Hydro Extrusions Benelux is actively striving to lower its upstream emissions, which will decrease downstream scope 3 emissions. Hydro Extrusions Benelux’s ambition is to reduce its metal footprint by 22 percent by 2030 (2018 baseline). The use of post-consumer scrap in our operations can also aid in mitigating scope 3 emissions. We are working to minimize the environmental impact of externally sourced materials by implementing rigorous supplier screening procedures to procure greener metal.

### Supplier Code of Conduct

The Hydro Supplier Code of Conduct sets out the minimum sustainability requirements for its suppliers. Suppliers that have a direct contractual relationship with Hydro Extrusions Benelux have to adhere to the principles set out in Hydro’s Supplier Code of Conduct. The code is based on international recognized standards such as the eight core conventions of the ILO Declaration (International Labour Organization). There are 21 sustainability criteria covered in the Supplier Code of Conduct.

### Due diligence

Hydro Extrusions Benelux has supply chain due diligence requirements as part of its memberships, such as ASI, and because it is the right thing to do. Stakeholders require more and more to confirm that procurement processes adhere to a high ethical standard. Hydro Extrusions Benelux adheres to the Hydro Extrusions procedure for sustainability in the supply chain.

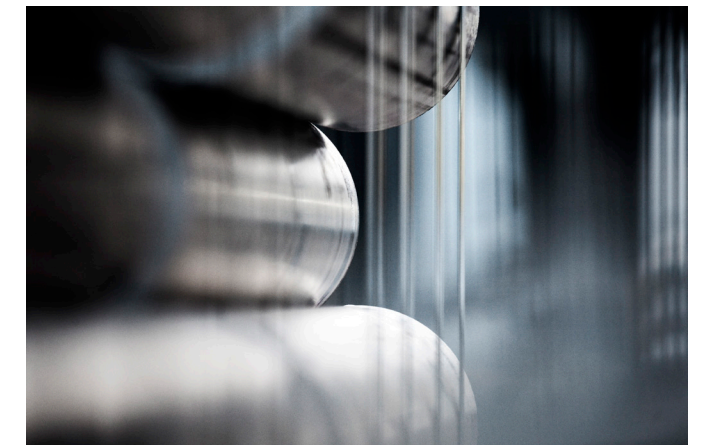
### Aluminium Stewardship Initiative membership

ASI is a global, multi-stakeholder, non-profit standards setting and certification organization. Its mission is to recognize and collaboratively foster the responsible production, sourcing and stewardship of aluminium, following an entire value chain approach. ASI has developed an independent certification system for responsible aluminium production to ensure that sustainability and human rights are increasingly taken into account in the production, use and recycling of aluminium.

All plants in Hydro Extrusions Benelux are certified against the ASI Performance Standard and the ASI Chain of Custody Standard.

### EcoVadis supplier assessment

Hydro has introduced in its procurement process the EcoVadis assessment platform to follow a common approach and to achieve a common rating and scoring scheme. EcoVadis is aligned with the Hydro Supplier Code of Conduct and ensures global good practice and expectations toward Hydro as a provider of aluminium solutions. The EcoVadis scorecard is designed for easy scaling, efficient buyer-supplier collaboration and measurable improvement beyond our Tier 1 suppliers.





# Benelux ESG Performance - Best Practices

This part of the sustainability report gives an overview of the ESG performance and sustainability initiatives and best practices in Hydro Extrusions Benelux and at the specific locations.

## Hydro Extrusions Benelux

Hydro Extrusions Benelux is committed to a sustainable future. Every day we work to improve our Environmental, Social and Governance performance to meet our sustainability targets and to help our customers to meet their sustainability objectives.



### Dedicated sustainability teams

Hydro Extrusions Benelux has set up local sustainability teams to guide the plants towards a more sustainable future. By forming these sustainability teams, Hydro Extrusions Benelux has embraced a structured approach to realizing its sustainability ambitions. The establishment of dedicated sustainability teams allows Hydro Extrusions Benelux to consolidate its sustainability efforts and ensure they are strategically aligned with the plants' overall goals. By defining a clear purpose and objectives, the team is empowered to drive meaningful change and make informed decisions that have a positive impact on the environment and the community.

### Sustainability in sales

Benelux's dedicated sales teams promote the sale of low-carbon and recycled aluminium. Recognizing the importance of equipping the sales teams with the necessary knowledge and skills, they receive comprehensive sustainability training and workshops on a regular basis. These initiatives aim to enhance their understanding of the environmental impact of materials, highlight the benefits of low-carbon and recycled options, and equip them with the tools to effectively communicate these advantages to our customers.

### Create sustainability awareness among all employees

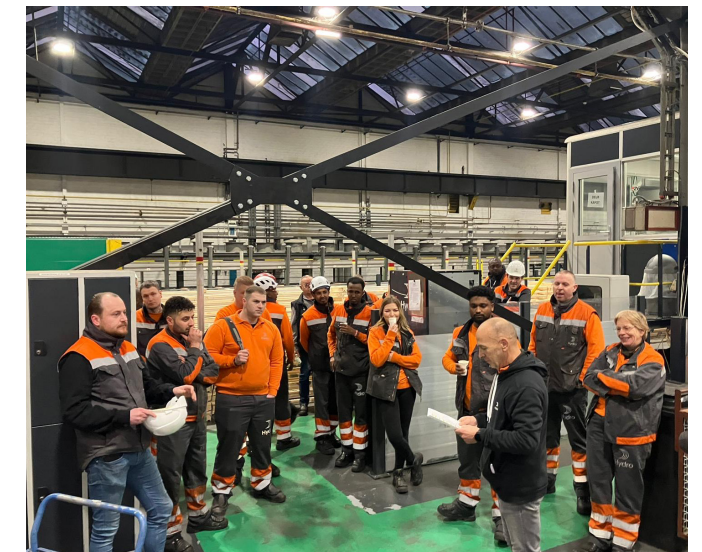
To improve sustainability performance, all employees need to be on board. Internal communication is needed to create awareness and build up knowledge around sustainability. In addition to using its existing communication channels, Hydro Extrusions Benelux has introduced a bi-monthly online sustainability cafe. In each half-hour session, a guest speaker presents a pitch on a particular sustainability topic that is relevant for the Benelux region.

### Diversity, Inclusion and Belonging

Within the Benelux, people work with different backgrounds, gender, nationality, education level and social environment. That diversity makes us stronger. A Benelux Diversity, Inclusion and Belonging (DIB) roadmap was set up in 2023 to ensure that we safeguard DIB even more within our organization. Training and awareness of all employees on DIB is an important part of the roadmap.

### Safety / Team up to clean up day

All Hydro Extrusions Benelux locations organize a yearly Safety or Team up to clean up day. Selected workplaces in production, warehouses and offices are organized in a structured way through the 6S method, with the aim to reduce the risk of incidents, improve maintenance of the machines, create pleasant and organized workplaces, and reduce losses.



### Care for the community - Villa Pardoos

During the Benelux Annual Operations Meeting a total of €15,000 was raised for Villa Pardoos. Villa Pardoos offers Dutch families with a young child who is facing a serious, possibly life-threatening illness, an unforgettable, unique vacation experience. All expenses are covered by fundraising and sponsorship activities.



# Hydro Extrusion Hoogezand

Hydro Hoogezand specializes in extruding long lengths and precision profiles. As a “one-stop shop” they are able to anodize, powder coat and add thermal break to extruded aluminium profiles in-house.



### Hoogezand facts

- Founded in 1971
- 175 employees
- 2 extrusion lines (2200 T – 7” and 2800 T – 9” press)
- Fabrication center
- Extrusion of small and medium profiles
- Surface treatment (anodizing and powder coating)
- Thermal break line
- Die manufacturing

Hydro Hoogezand was the first company within the aluminium extrusion industry worldwide with an ASI certification. The Aluminium Stewardship Initiative label shows that our aluminium products have been produced in a responsible manner.

Last year, the main focus in Hoogezand to improve sustainability was centered around surface treatment processes. Through continual improvement, Hoogezand has been able to reduce the consumption of water to 23 liters per m<sup>2</sup> of anodized surface. This makes Hoogezand’s anodizing plant one of the best performing plants in Hydro Extrusion Europe in terms of water consumption.

### Anodizing improvements

Anodizing is a process that adds a protective layer of aluminium oxide to aluminium parts. This process creates acidic waste due to the use of a sulfuric acid as an electrolyte (a substance capable of carrying an electric charge). The process entails immersing the aluminium profile in a sulfuric acid bath. The chemical reaction that occurs results in an accumulation of aluminium in the acid. When the aluminium level reaches a certain concentration (20 g/l), the acid becomes less effective for anodizing. To solve this, some of the liquid is removed and a mixture of fresh (RO) water with fresh sulfuric acid is added.

### Retardation

The installation of a retardation system (July 2019) which extracts the solved aluminium from the acid, has extended the life of the acid. With this innovation, the amount of acid needed has been reduced from an average use of 246 tons in 2018 to an average use of 138 tons in 2023, an impressive reduction of 44 percent.

### Reuse of caustic soda

Caustic soda is used both in die cleaning and anodizing. In September 2022, Hydro Extrusion Hoogezand started using the “waste” caustic soda from Hydro Extrusion Harderwijk, both for die cleaning and in the anodizing line, and has since phased out the use of fresh caustic soda (50% NaOH). During 2023, Hoogezand reused 670 tons of caustic soda from Hydro Extrusion Harderwijk, which would be the equivalent of about 400 tons of fresh caustic soda of 50 percent.

### Rinse water

Water is used in different stages of the anodizing process. In 2022, a project was started to optimize the flow in the rinsing baths. Later in 2022, the first rinsing bath was connected to the existing cascade and cut off from the main water supply. Since early 2023, the first rinse has been fed solely by water from the next rinsing bath in line, thus saving about 800 m<sup>3</sup> fresh water annually.



### Powder coating improvements

Electrostatic powder coating is the application of an electrically charged, powdered plastic resin to a surface, usually metal. For aluminium surfaces it is used for aesthetic reasons. Powder coating waste goes normally to landfill.

### Reduce powder coating waste

In 2023, Hydro Extrusion Hoogezand started shipping its powder coating waste to a Belgian company that can use this material for useful applications, like acoustic materials for automotive, preventing the waste going into landfill.

### Critical examination of deionized water

Hydro Extrusion Hoogezand has its own installations for the production of de-ionized (DI) water, which is used in the powder coating line. After some time, when the conductivity of the DI water is too high, the installation needs to regenerate. Before 2022, the standard procedure was twice a week. After testing (trial and error) during 2022, Hoogezand has been able to reduce this cycle to twice a month. Every regeneration cycle costs 11 m<sup>3</sup> of fresh water. By reducing this regeneration cycle, Hydro Extrusion Hoogezand saved 750 m<sup>3</sup> of water in 2023.

### Platinum EcoVadis medal

The Hydro Extrusion Hoogezand plant is awarded with a Platinum EcoVadis medal. The platinum score, only achieved by 1 percent of the companies in the aluminium industry, confirms the excellent sustainability performance of Hoogezand.



### Becoming a partner of JINC

In July 2023, Hydro Hoogezand signed a partnership agreement with JINC in which they made a long-term commitment. JINC helps more than 63,500 children every year to get a good start in the labor market. Without the financial support of companies, JINC would not be able to fight for equal opportunities among young people in Groningen.



### Deposit bottles for the food bank

Plastic deposit bottles are collected separately at the Hoogezand location. This promotes better recycling of plastic waste and results in a nice donation to the Food Bank of Midden-Groningen.

### Other projects

- Separate collection of coffee cups to ease recycling
- Lecture about aluminium at Hoornbeek TechCentrum
- Research, with the help of a consultant, into activities that make a positive contribution to the local biodiversity

### Follow up Hydro Monitor 2022

#### Career and development

- A job structure has been developed, and there is more attention for career opportunities.
- There is more focus on developing talent with the aim of sustainability occupation.

#### Me and my manager and integrity

- Managers are trained in their skills to signaling the learning and development needs of employees and to translate these into concrete actions and monitoring.
- There is more time for annual individual development discussions and their outcomes.

#### Performance Excellence

- Scheduled fixed moments are implemented to discuss achieved results.
- Goals about monitoring cooperation and progress are established.

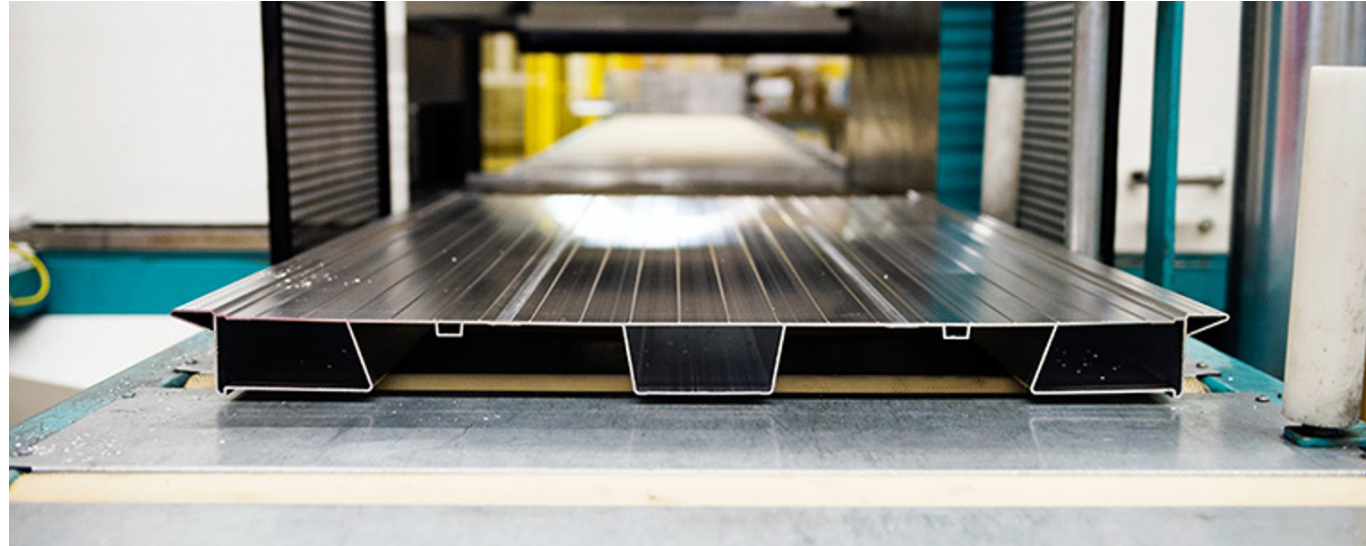
### Certifications

- ISO 9001 (Quality)
- ISO 14001 (Environment)
- ISO 45001 (Health & Safety)
- ASI Performance Standard
- ASI Chain of Custody (CoC) Standard
- Qualanod (Anodizing)
- Qualicoat (Powder Coating)
- GSB Approved Coated Aluminium - Master
- EN 1090-3 (Factory Production Control)
- EN 15088 (Structural products for construction works)



# Hydro Extrusion Harderwijk

Our aluminium manufacturing plant in Harderwijk extrudes profiles with big dimensions, long lengths and as ready-to-use components. The plant also specializes in the technology of friction stir welding (FSW).



### Harderwijk facts

- Founded in 1960
- 93 employees
- 1 extrusion line (5500T - 12" press)
- Fabrication center
- Extrusion of big sized aluminium profiles
- Friction Stir Welding (FSW)

Hydro Extrusion Harderwijk is committed to reducing their environmental impact and being a good neighbor. The plant is strongly involved in the community by supporting local projects and events. In addition, the employees are actively participating in various sports events the location is sponsoring.

### Replace compressed air with blown air

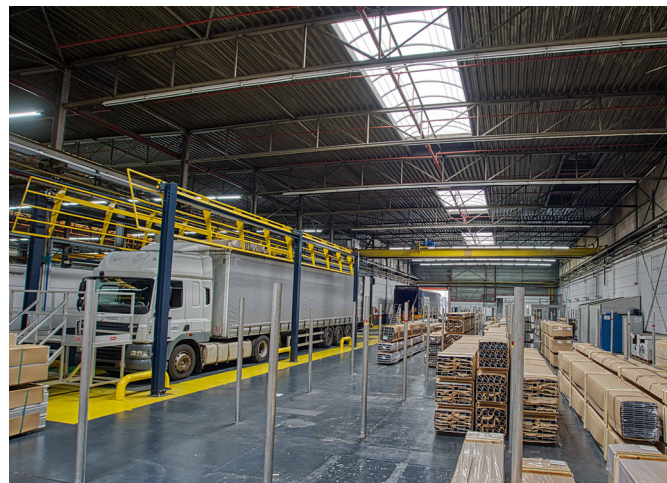
Compressed air requires a relatively large amount of energy to compress. Hydro Extrusion Harderwijk is carrying out tests to cool aluminium profiles on the run-out table with blown air. For that reason an 'air knife' has been installed that uses a less energy-intensive fan. The first results have been positive. The next step is to install the test setup and optimize the process.

### Re-use caustic soda

Harderwijk uses 50 percent caustic soda to clean dies. This can only be used once because of the big dimensions of the dies. However, it is still suitable for die-etching of smaller dies. Since 2023, the location Harderwijk has been sending its "waste" caustic soda to Hoogezand to be re-used for die-cleaning and in the anodizing line, resulting in a reduction of waste.

### Lighting automation

For the last two years, Harderwijk has been working to completely adapt the LED lighting in three halls to an automated switch-off system. Infrared motion sensors are installed on the LED lighting trunks in three of the seven bays where work is done mainly in day shifts. These halls are not continuously used. Before the automated lighting system was in place, the lights were continuously on during working hours. The system also consists of light-sensitive switches to make use of the daylight coming through the roof skylights, and has clock program functions. The whole system is controlled and switched by a programmable logic controller. This has resulted in a reduction on the annual power consumption of approximate 65 percent. More reductions will be reached after the second phase of the project, which is based on the principle of a light intensity astronomical clock. The third and last step will be to expand the system to more bays.



### Electronica recycling UNIS

In the waste station at the Harderwijk location, defective or written-off electronics and equipment are collected separately. UNIS Group, a company focusing on promoting the continuity of industrial production processes, repairs the electronics when possible, or brings the components back in the cycle.

### Business Meeting Day Harderwijk

Every year the Harderwijk Business Circle organizes a Business Meeting Day. Participants have the opportunity to visit three local companies. In 2023, Hydro Extrusion Harderwijk was one of these companies. The event emphasizes business innovation, the power of local collaboration and knowledge sharing. It is a valuable initiative for the growth of the business community in Harderwijk.



### Hydro Athlos Trailrun

Hydro is main sponsor of the Athlos Hydro Trailrun. The third edition took place on November 4, 2023. Colleagues of different Hydro plants participated. The event offers a course of 13 km or 22 km, and can accommodate 300 participants.



### Most vital employee

The National Vitality Week (partner of TNO and the National Platform for Sustainable Employability) held an election in 2023 for the "most vital employee of the year". Daan van Oosten, QA/HSE Manager Harderwijk, was one of the 10 finalists nominated for the title. The nominees were put in the spotlight to set an example and inspire others.



### Other projects

- Installation of clock thermostats on central heating systems
- Sponsor Drakenbootrace
- Sponsor half marathon Harderwijk
- Sponsor local football club

### Follow up Hydro Monitor 2022

#### Involvement

- Better communication with employees through more personal attention and involvement from managers and management.

#### Communication

- Increased presence of managers on the shop floor to engage in individual conversations with employees.
- At least three times a year, team meetings per team to discuss current issues.

#### Career and development

- More attention to broader personal growth and development, and internal exchange programs.
- Employees are more actively involved in projects.

#### Certifications

- ISO 9001 (Quality)
- ISO 14001 (Environment)
- ASI Performance Standard
- ASI Chain of Custody (CoC) Standard
- EN 1090-3 (Factory Production Control)
- EN 15085-2 (Welding of railway vehicles and components)
- EN 15088 (Structural products for construction works)



# Hydro Extrusion Drunen

Hydro Extrusion Drunen has a unique position with a recycling unit, an extrusion department with the facilities to do machining on profiles that have long lengths, and the Hydro Pole Products department for the production of all kinds of light poles and traffic regulation systems. Everything under one roof.



### New log furnace and saw

A new (small) gas-fired furnace, an induction furnace and a hot saw have been installed - the same equipment that is used on other Hydro locations. The main advantage of the new saw is the improvement of the recovery rate as a result of minimal air inclusions in the extruded profile. This investment also reduces the gas consumption by almost 50 percent. The induction furnace generates a better temperature distribution (taper) in the billet and is part of the strategy to electrify new equipment as much as possible. In order to recover the energy from the exhaust gases, the ESU (Eco Shower Unit) pre-heats the log up to 90 °C before it is entered into the gas furnace.



### Drunen facts

- Founded in 1960
- 340 employees
- 2 extrusion lines (2200 T - 8" and 2800 T - 10" press)
- Fabrication
- Extrusion of small and medium profiles
- Hydro Pole Products
- Mechanical treatment
- Recycling unit with 50,000 tonnes annual capacity

The Drunen location is a compact plant where all processes are closely connected to each other – both by organization as well as by physical material transport. Drunen has relatively high energy-consuming equipment, like melting, casting and heat treatment furnaces. Some are electrically powered, but several are powered by natural gas. The biggest project of 2023 was the replacement of the 35-year-old gas-fired log furnace and saw system of the 10" Press.



### Sourcing renewable energy: Photovoltaic roof project

The Drunen site will install photovoltaic (PV) panels on the roof to power part of its production process. In 2023, the engineering work was completed to install approximately 1,400 solar panels in 2024, which will deliver about 5 percent of the electric energy consumption of the plant on sunny days. The Scrap Building 94 has been re-build and scrap-building 93 equipped with a new roof to make them suitable for the PV panels.

### Drunewable gas

The transition from fossil fuel to renewable energy plays an important role in reducing emissions. As Drunen is consuming about 6 million m<sup>3</sup> of natural gas per year, it's a challenge to find alternatives for this fossil fuel. In 2022, the concept of Drunewable gas was born: a renewable gas, made of waste material coming from the automotive industry. Drunen is working together with several external specialists and a waste management company, to install a gas production plant in the former Alcoa-Pyrolysis building on the other side of the Hydro fence. This innovative solution addresses two challenges: reduction of the volume of plastic waste and reduction of the consumption of natural gas. If the tests, done on laboratory scale, can be upgraded successfully to industrial scale and the gas-fired equipment on the location can run on Drunewable gas, operations are to be expected from the beginning of 2026.

### Open door day

To positively impact and strengthen the commitment of our neighbors and the families of our employees, Hydro Extrusion Drunen organized an open door day in May 2023. The location was open for the families of the employees, local residents and retired employees, to give insight in the manufacturing process of our products and to meet (former) colleagues and Hydro staff.



This was the first opening to the larger public, after the relocation of Hydro Pole Products' production to the halls at the Drunen site where the recycling unit and extrusion department are located.

During the open door day the newly designed roundabout in front of the location, sponsored by Hydro Extrusion Drunen, was officially opened.

### Other projects

- Equipment of the parking place and the bicycle storage with 14 charging stations
- New electric forklift truck for the recycling unit replacing the diesel truck
- Briquetting of sanding bench swarf to improve occupational health and safety and environmental performance at recycling partner
- Investment in a dross press with a higher return on aluminium from dross, which will help reduce waste streams
- Increasing of the energy capacity of the site's electric connection from 5 to 8MVA and additionally to 10MVA
- Installation of variable frequency drives (VFDs) for the P4 and P5 press engines
- Hosting meeting of Dutch Aluminium Association (DAA)
- On Road Day for students OMO SG De Langstraat
- Sponsor sports event De Langstraat Klassieker
- Sponsor local culture center Voorste Vennen

### Follow up Hydro Monitor 2022

#### Employment conditions

- With the support of the FME, job descriptions are analyzed and revised where needed.

#### Work stress

- Project group work stress has been created and an action list is in place to reduce and prevent work stress.

#### Communication

- Current matters are put on the agenda during quarterly meetings and work consultations.

### Certifications

- ISO 9001 (Quality)
- ISO 14001 (Environment)
- ISO 45001 (Health & Safety)
- ASI Performance Standard
- ASI Chain of Custody (CoC) Standard
- EN 1024 (Material Manufacture)
- EN 15088 ((Structural products for construction works)



# Hydro Pole Products

Hydro Pole Products uses extruded profiles to manufacture aluminium light poles, flagpoles, traffic regulation installations and other structures in the area of infrastructure. Being located under the same roof as the recycling unit and the extrusion plant offers a tangible closed loop.



Since the 1960s, Hydro Pole Products has been active in developing aluminium solutions for public spaces. This history of experience makes Hydro Pole Products a reliable partner in the markets in which they operate. Its products are delivered worldwide from Drunen (the Netherlands).

Sustainability is a natural part of Hydro Pole Products. Its solutions go far beyond aluminium, into R&D-based concepts and products. Technical, safety, ecological, economic and social aspects are all involved in the design phase. Hydro Pole Products is continually working to improve its products and sub-components, as well as its manufacturing processes.

### Use of recycled aluminium

Hydro Pole Products uses a high share of recycled aluminium (pre-consumer and post-consumer scrap) for its poles. This reduces energy consumption up to 95 percent. The billets are produced at the recycling unit at the same location. There is an efficient system in place to recycle production scrap internally.

### Cradle to Cradle (C2C) Certified® Silver light poles

Hydro Pole Products' aluminium light poles and TRI solutions are Cradle to Cradle Certified® at Silver level, according to V3.1 of the standard. Cradle to Cradle Certified® is a global standard for products that are safe, circular and responsibly made. It assesses the safety, circularity and responsibility of materials and products across five categories of sustainability performance:

- Material health
- Product circularity
- Clean air and climate protection
- Water and soil stewardship
- Social fairness

In 2011, Hydro became the first company in the world to supply Cradle to Cradle Certified® Silver light poles.

### Efficiently closing the loop

Closing the Loop/Take Back is a closed-loop recycling program developed to support customers. Hydro Pole Products has over 10 years of experience in closing the loop together with its customers. Municipalities and contractors carrying out light pole replacement projects can choose the program. When supplying new aluminium light poles, old poles are entirely taken back (including fixtures and cabling), after which all parts are stripped.

The aluminium is then melted into billets in the Benelux' recycling units, and the billets are extruded into aluminium tubes from which Hydro Pole Products produces new light poles. The residual flows that Hydro cannot process are returned to the technical cycle by a waste specialist.

Since last year, the Closing the Loop system gets included in most new governmental frameworks in the Netherlands, to stimulate the recycling of aluminium as an endless resource.



61,000

kg of light poles participated in the Closing the Loop program in 2023

### Contribute to road safety

The extensive knowledge of Hydro Pole Products in the area of passive safety is built through years of experience with crash tests and active participation in the Dutch norm committee EN 40 (the European standard for light poles) and the WG10 (the European working group that is responsible for writing and revising the EN 12767 norm). This has resulted in a range of certified passive safe poles in all performance classes.



In Europe, light poles must comply with the EN 40 standard. In addition, a crash test must have been conducted in accordance with the EN 12767 standard.

### E-charge poles

The fast-growing amount of electrical vehicles generates a demand for e-charging infrastructure and solutions. Hydro Pole Products has developed a multifunctional solution in which an e-charge loading facility is integrated in a light pole. With technical developments moving fast, Hydro Pole Products is continuously improving and expanding its e-charge light column family. In early 2024, the first e-charge light poles were installed at the Hydro location in Drunen and soon more projects will follow.



### Transport with electrical trucks

Each day, Hydro Pole Products delivers dozens of products to its customers all over the world. On request, the transport to the customers is carried out with electrically powered trucks, which reduces scope 3 emissions.

### A society for all, including people with disabilities

Hydro Pole Products entrusts assembly work to 'UW Productie', a social workplace for disabled people, and 'Prisma', an organization that offers employment to people with disabilities. The location Drunen also has a partnership with 'Baanbrekers', a local public company for social employment, for work that is carried out on-site.

### Sustainable employability

Sustainable employability affects organizations and people. We are convinced that attention to and investment in employees must be a spearhead when it comes to organization and personnel policy. Modernizations in the factory ensure that processes require less physical force. For example the installation of new equipment. The offices are equipped with sit/stand desks to encourage variety in posture.

### Transparency on the ecological product footprint

To provide insight into the environmental impact of its products throughout the entire life cycle, Hydro Pole Products performed an LCA (Life Cycle Analysis) study. The LCA study includes the impact of material extraction, production, use phase and the disposal/recycling of the product. The LCA study is validated by an independent third party. Environmental Product Declarations (EPD) are available. The MKI (Environmental Cost Indicator) values are included as category 1 data in the Dutch National Environmental Database (NMD).

### Seeking for collaboration in circularity

Hydro Pole Products is an active participant in the 'knowledge cafes' organized by IGOV (Inter Municipal Consultation Public Lighting). IGOV is a knowledge platform established by various Dutch municipalities to stimulate the exchange of knowledge and experience to give concrete meaning to circularity in public lighting.

### Sustainability day/one point lessons

To build the knowledge level of the sales team when it comes to sustainability, Hydro Pole Products organizes a sustainability day on a yearly basis, and provides monthly one-point lessons. The trainings are related to all kinds of ESG topics, among them sustainability strategy, labels and certifications CO2 reductions and CSR.

### Certifications

ISO 9001 (Quality)	EN 40-6
ISO 14001 (Environment)	EN 12767
ISO 45001 (Health & Safety)	EN 12899
ASI Performance Standard	EN 1090
ASI Chain of Custody (CoC) Standard	
Cradle to Cradle Certified® Silver	



# Hydro Extrusion Raeren

Hydro Extrusions in Raeren runs two aluminium extrusion lines as well as a fully automatic anodizing line, and offers extensive possibilities for mechanical treatment. One of the strengths of the plant is the production of precision profiles.



The new press reduces scope 2 emissions, reduces process waste and increases productivity. In addition, a better layout of the process flow has been achieved for the well-being of the employees.

### Use of renewable energy

The Raeren location is equipped with solar panels on the roof with a capacity of 250kW. A significant expansion of the renewable energy capacity was realized by installing solar panels on the ground, with a capacity of 1MW. With this additional capacity, a yearly reduction of 165 tons of CO2 scope 2 emissions is expected.

### Reduce energy consumption with Beam T control

Since 2023, Hydro Extrusion Raeren started regular temperature measurements and follow-up of the beams in the anodizing line by using a Beam T control during anodizing. As soon as a temperature above x° Celsius is measured, too much electrical energy, needed to anodize the aluminium profiles, is lost in form of heat (due to the Joule effect). To avoid this energy loss, the beam will be replaced at the next opportunity.

### Cooling system for the etching bath

In the summer of 2023, the plant in Raeren changed the cooling system of the two etching baths. The previously open circuit was replaced by a closed system with a heat exchanger.

### Reduce water consumption by modernizing acidic rinse

In the anodizing process we use water at different stages in the process. At the beginning of 2023, the location Raeren adjusted the flow of the rinses after the anodizing baths. Changing the existing 3 cascade system into a 4 cascade system has resulted in a more efficient flow structure, with a yearly 25-30 percent reduction in water consumption.

### Raeren facts

- Founded in 1960
- 228 employees
- 2 extrusion lines (2000 T - 7" and 3200 T - 9" press)
- Fabrication center
- Extrusion of small and medium profiles
- Surface treatment (anodizing)
- Mechanical treatment

The Hydro plant in Raeren is located near a forest. It is surrounded by green areas and does not cause any direct noise pollution to the residents of the city. The plant uses green energy, thanks to the solar panels that have been installed on the plant's roof. The main project in 2023 was been the installation of a new press, offering productivity efficiency and advantages in the field of sustainability.

### New press

In January 2024, a new 20 mega newton press was installed at the Raeren factory. The new press P20 replaces the old press P16, after more than 50 years of service. The new press, which has the same billet diameter as the old press, can produce profiles with an even thinner wall thickness.



### Roof insulation

The opportunities for improved efficiency in buildings are enormous. Though these are not our largest sources of emissions, changes to buildings have huge saving potential. In 2023, parts of the roof of hall 3 of the Raeren plant were insulated to prevent heat loss and to reduce heating oil consumption.

### Combined risk engineering audit

In April 2023, the Raeren plant was the setting for an impressive disaster exercise, carried out as an integral part of a safety audit. Both the Eupen fire brigade and the local firefighters took part in this simulation, under the supervision of the auditors. The aim of the exercise was to train the Hydro internal volunteer firefighters, meet professional firefighters and learn about their state-of-the-art equipment.

### A society for all, including people with disabilities

Hydro Extrusion Raeren works together with the 'Beschützende Werkstätte' (BW) in Eupen, a company that offers suitable work to people with disabilities. Seven BW colleagues work at Hydro Raeren and are fully integrated into the company.



### Support Ocarina Ostbelgien

In 2023, Hydro Extrusion Raeren, together with other companies, sponsored a vehicle for the organization "Ocarina - Jugend & Gesundheit". Ocarina Ostbelgien is a youth organization recognized and subsidized by the German-speaking Community, which offers holiday animations and holiday stays for children and young people (especially from socially weaker classes), as well as youth leader training. It's a great way for Hydro to support the community and contribute to the well-being of children.

### Relay for Life donation

Every year, Hydro Extrusion Raeren participates in Relay for Life, a 24-hour walking event with the aim of raising money for the fight against cancer. With this money, the Foundation Against Cancer finances scientific cancer research and projects that contribute to the well-being of people with cancer and their loved ones through Levensloop Grants. Regional projects receive 15 percent of the proceeds.

### Norway's Youth Politicians visiting Hydro Extrusion Raeren

Hydro Extrusion Raeren welcomed 19 young politicians from Norway to visit Ostbelgien in 21 April 2023. Cross-regional and cross-border networking between business and politics is key to learn from each other, create coalitions and developing tailored solutions for the challenges of our time: Climate and energy crisis, inflation and lack of skilled workers.



### Other projects

- Sponsor KAS Eupen football club
- Local youth sports teams
- Sponsor Lions Club

### Follow up Hydro Monitor 2022

#### Me and my manager

- Individual coaching of new management members with the help of an external coach.
- Improved integration and on-boarding programs.
- More attention to annual performance reviews, including career and training opportunities.

### Certifications

- ISO 9001 (Quality)
- ISO 14001 (Environment)
- ISO 45001 (Health & Safety)
- ASI Performance Standard
- ASI Chain of Custody (CoC) Standard
- Qualanod (Anodizing)
- EN 15088 (Structural products for construction works)



# Hydro Extrusion Lichtervelde

With one of the biggest extrusion presses in Europe, the extrusion plant in Lichtervelde specializes in extruding big, wide, strong and yet thin and light aluminium components. Lichtervelde also has multiple fabrication possibilities in its in-house fabrication center.



Additionally, light poles from Hydro Pole Products, powered entirely by solar energy, are installed at the entrance of the office building. The solar light poles and the charging poles showcase Lichtervelde's dedication to incorporating renewable energy solutions into its infrastructure.

### Reduce energy consumption with infrared furnaces

The location Lichtervelde has replaced three conventional resistor heated furnaces by two new infrared furnaces in 2023. The expected saving on the annual energy consumption related to the heating of the dies is between 60-65 percent.

### Reduction of waste through water dispenser

In 2023, Lichtervelde transitioned from distributing drinking water in plastic bottles to installing water dispensers connected to the main water supply. In total nine dispensers across the site were installed, allowing all employees to fill their personal reusable bottles with chilled still or sparkling water. This initiative has significantly reduced the plastic waste at the location, cutting down the use of single-use bottles by 13,600 per year, and delivered a significant cost reduction.



### Lichtervelde facts

- Founded in 1949
- 152 employees
- 1 extrusion line (8200 T - 14" and 16" press)
- Fabrication center
- Extrusion of big sized aluminium profiles
- CNC-milled extruded profiles

Sustainability is an essential part of Hydro Extrusion Lichtervelde. Over the years, various measurement and analysis projects have been set up to make consumption measurable and visible. This has led to optimizations, such as the purchase and implementation of more energy-efficient motors, and the optimization of the use of motors, lamps, fans and more. The measurements have also helped to justify larger investments, such as the investment of new infrared ovens. These optimizations and investments underline Lichtervelde's ongoing efforts to promote environmental responsibility and reduce its carbon footprint.

### Office renovation

In 2023, the office section has been completely renovated, including installation of HR+++ glass and roof isolation. The new building has significantly improved insulation, resulting in a reduction of scope 1 emissions.

### Charging stations

Hydro Extrusion Lichtervelde installed 18 charging poles at its site, made with Hydro Recycled Aluminium. The charging poles provide charging facilities for electric vehicles, encouraging eco-friendly commuting for employees and visitors.

### Energy saving improvements

An energy audit performed by a third party led to the implementation of energy-saving actions. Among these actions are:

- Replacement of the main motors of the pumps of the press with high-efficiency motors.
- Automatically turning off the cooling fans in the aging oven when the temperature drops below 100 degrees and doors will fully open.
- Replacing auxiliary pumps and filter pumps with energy-efficient models.
- Turning off the cooling fans when the press is inactive.

### HSE in action - Safety day with sustainability workshop

In December 2023, Hydro Extrusion Lichtervelde hosted an HSE action day. The program included hands-on experiences. Employees were given a chance to identify hazards while performing tasks such as operating forklifts and overhead cranes. The exercise was a good opportunity to highlight the importance of HSE and to increase ownership of HSE in the workplace. During the safety day, employees were also tested on their sustainability knowledge through a quiz, while also strengthening their awareness on sustainability.



### Improving safety on-site

Safety is not only important for our own employees, but also for truck drivers and contractors. To ensure that they can all work more safely at the Hydro plants, clear HSE videos are being recorded at the Lichtervelde location. The videos are created in collaboration with DENKie, an information and training platform.

### New on-boarding system

There is a shortage in the labor market, making it difficult to find and retain new people. That's why good on-boarding is important. The new on-boarding system is a logical consequence of building our employer branding. It is a process that goes beyond the first day or even the first weeks. The HSE and HR on-boarding training have now both been converted into e-learning. Sustainability is an integrated part of the training.

### Other projects

- Replacement of single glass with double glass at the maintenance department
- Sponsor sports event Lichtervelde Loopt
- Sponsor sports event Omloop van het Houtland
- Sponsor sports event Nacht van Vlaanderen

### Actions Hydro Monitor 2022

#### Performance Excellence

- Exchange program in production (press and packaging) set up for team leaders to learn from each other.

#### Career and development

- An internal safety trainer has been appointed.
- Improve on-boarding program for new employees.
- Renewed quality training for production employees.

#### Me and my manager

- Training new managers in conducting performance reviews.

### Certifications

- ISO 9001 (Quality)
- ISO 14001 (Environment)
- ISO 45001 (Health & Safety)
- IRIS Certification (Management System)
- ASI Performance Standard
- ASI Chain of Custody (CoC) Standard
- EN 15088 (Structural products for construction works)
- EN 15085-2 (Welding of railway vehicles and components)



# Hydro Extrusion Ghlin

Hydro Extrusion Ghlin works closely together with all the Hydro Extrusion plants in the Benelux. As producer of the main raw material for extrusion, Ghlin ensures that the production of aluminium profiles meet current environmental requirements.



a wind turbine, with a capacity of 2.2 MW, and solar panels with a capacity of 1.7MW (1MW on the ground and 0.7MW on the roof). The construction phase of a second wind turbine in Ghlin has been started, expanding the capacity with 3.6MW. The surplus electricity that the wind turbine generates can be fed back to the grid.

### On the path to ZERO

To become carbon neutral in electricity consumption, Ghlin has a dedicated roadmap in place:

- Install a second wind turbine to expand renewable energy on-site.
- Decrease energy consumption as planned in the branch agreements (accords de branche).
- Carry out a pilot project of energy storage with high efficiency.
- Replace part of the natural gas by biogas in the remelt plant.

### Carbon footprint reduction program

The “Accords de branche” is a voluntary contract between Wallonia and industries with relatively high CO2 emissions in this specific region of Belgium. Through this contract Ghlin, and the other companies involved, commit to reduce their CO2 emissions and improve their energy efficiency for a given time frame. Participating companies are obliged to turn in an annual audit report with the data at year end, a pre-feasibility and feasibility study for the implementation of new projects regarding the reduction of CO2 emissions (like the implementation of renewable energy sources), and signal any change occurring inside the company.



### Ghlin facts

- Founded in 1961
- 73 employees
- Extruded billet casting
- Annual capacity 95,000 tonnes
- 35 scrap storage boxes outside
- 22 scrap storage boxes inside

The recycling unit in Ghlin is committed to sustainability and is on its way to becoming CO2 neutral. Investments in renewable energy on-site, as well as in the last generation multi-chamber furnace, has already reduced the energy consumption and environmental impact of Ghlin’s recycling unit significantly.

The high quality of Ghlin’s alloys is constant and proven over many decades. The plant’s recycling unit produces billets in a maximum length of 7.0 meter, with diameters of 7,8,9,10,12,14 and 16 inches.

The site uses both pre-consumer scrap and post-consumer scrap for billet production. The ultra modern multi-chamber melting furnace allows the processing of contaminated scrap, e.g. shredded and painted. The plant has an online scrap inventory system, monitored and audited by ISO 9001.

### Greener Ghlin

In Ghlin we generate 85 percent of the plant’s electricity consumption on-site. We generate this renewable power through



### Tilting melting furnace facts

- 40t capacity
- 12MW regenerative burners
- 2MW oxyfuel burners
- Electro magnetic stirrer (beneath furnace)
- 9m door opening

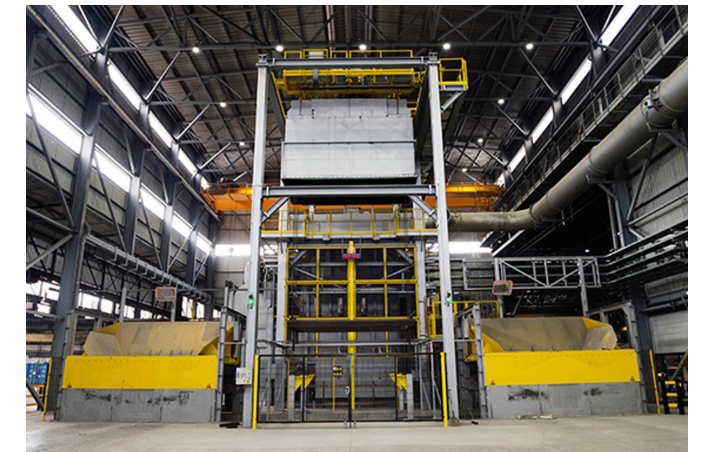
### Improved waste management

To improve waste management at the location, Ghlin entered a partnership with a new subcontractor. The subcontractor helped to gain more insight into the types of waste at the location. As a result, the following improvement measurements were implemented:

- A new central waste processing center has been developed.
- Each work area is provided with a 5s storage facility.
- The waste zones are adapted to the needs of a workplace.
- The procedures surrounding waste processing are changed and aligned with future rules and legislation.

### Recycling unit Ghlin part of regional cooperation project

Ghlin is one of 21 companies in the Ghlin-Baudour industrial zone participating in the “Industrial Symbiosis” project. The project was initiated by IDEA (Agence de développement territorial du coeur du Hainaut) and is subsidized for €500,000 by the Walloon Region. The aim of the project is to work together to share resources and further develop the circular economy.



### Multi-chamber melting furnace facts

- 100t bath capacity
- 5% organic pyrolysis capacity
- 200t/day
- 450kWh/ton (Europe: 800kWh/t)

### Actions Hydro Monitor 2022

#### Career and development

- Training plan in place to better map competences, growth potential and possibilities within the departments.
- Focus on succession plans for foundry and maintenance employees.

#### Me and my manager

- Yearly annual performance reviews are carried out, including career and training opportunities.
- More attention to developing leadership skills after organizational changes.

#### Performance excellence

- Focus on knowledge sharing between departments at the location and between different locations.

### Certifications

- ISO 9001 (Quality)
- ISO 14001 (Environment)
- ISO 45001 (Health & Safety)



## Environmental and social indicators

Hydro Extrusions Benelux	Hydro Extrusions Benelux			GRI Standards reference
	2023	2022	2021*	
<b>Environment</b>				
Direct GHG emissions (kton CO <sub>2</sub> e)	40.6	41.1	44.5	305-1
Indirect GHG emissions (kton CO <sub>2</sub> e)	25.7	28.5	30.5	305-2
Electricity consumption (GWh)	70.5	76.9	83.3	
Electricity consumed per net processed ton of product (MWh/t)	0.34	0.33	0.34	302-4
Gas consumption (thousand Nm <sup>3</sup> )	16 331	17 611	18 967	
Renewable electricity produced from wind and solar (MWh)		5 680		
Water withdrawal for industrial use (thousand m <sup>3</sup> )	254	281	288	
Hazardous waste (thousand tons)	8.3	9.0	9.6	306-4
Non-hazardous waste (thousand tons)	5.3	5.9	7.0	306-2
Total post-consumer scrap recycling (tons)	19 670	20 557	20 349	301-2
Total pre-consumer scrap recycling (tons)	79 826	96 601	94 817	301-2
<b>Health and safety</b>				
TRI	10	8	19	403-2
TRI rate	5.57	4.7	10.46	403-2
LTI	4	5	9	403-2
LTI rate	2.36	2.94	4.95	403-2
HRI	2	1	5	403-2
WOC	2 015	1 722	1 929	403-2
Injury free incident reports	5 967	6 432	6 461	403-2
Sick leave	7.2%	8.1%	6.1%	403-2
Fatal accidents	0	0	0	403-2
<b>Social</b>				
Total number of permanent employees	1 071	986	973	102-7
Total number of temporary employees	34	49	50	102-8
Share of women	10.43 %	10.4 %	11 %	102-7
Share of women in management positions	11.18 %	10.2 %	11 %	

Table 2: Environmental and social indicators

The section "Environmental and social indicators" has been prepared mainly based on information provided in Hydro Extrusions Benelux's registration system HERE. Business unit safety data are retrieved from IMS or Synergi and labor data from ONE.

\*Recalculation data 2021





Hydro Extrusions Benelux

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Hydro is a leading industrial company committed to a sustainable future. Our purpose is to create more viable societies by developing natural resources into products and solutions in innovative and efficient ways.

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