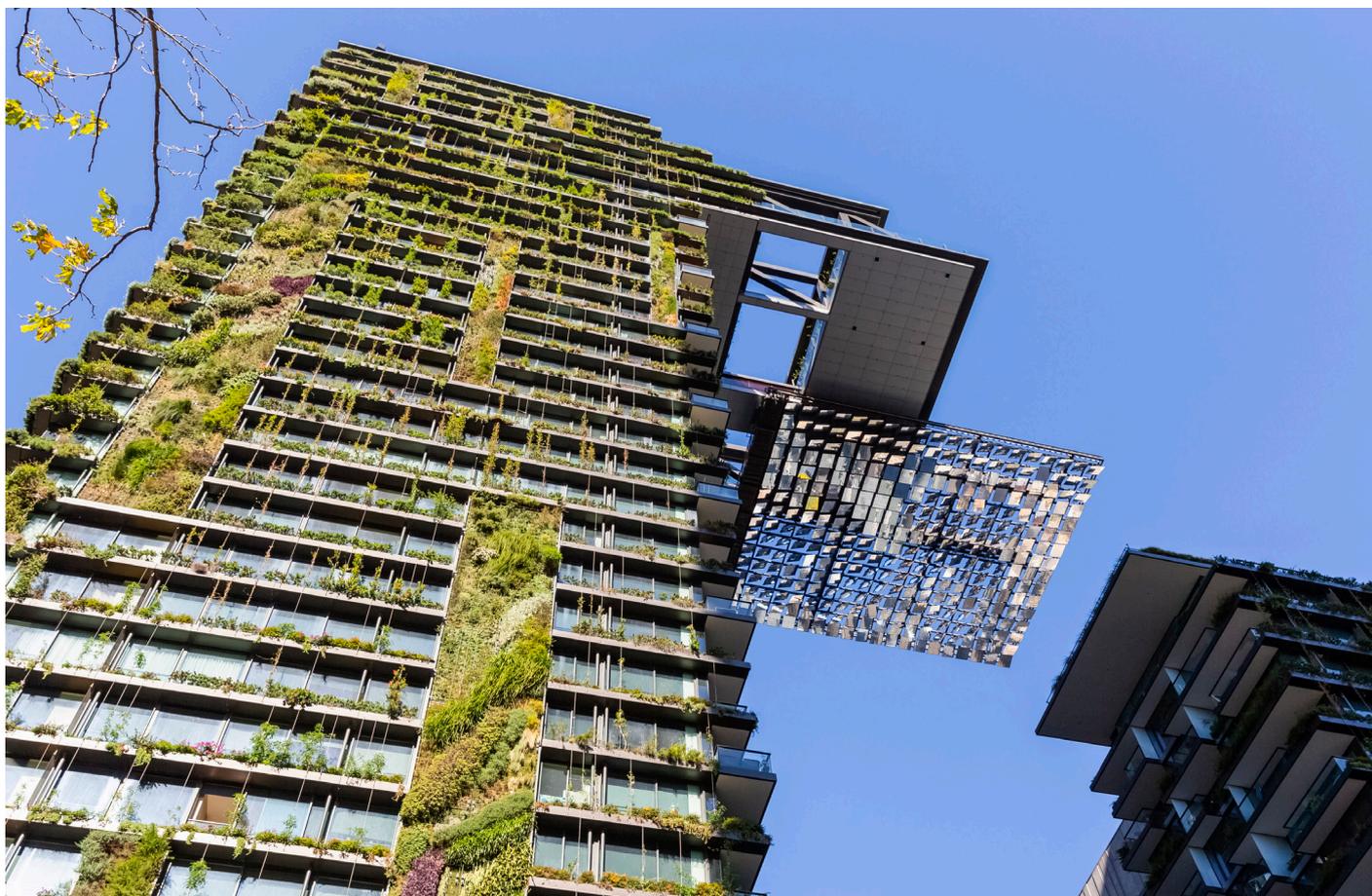




How Hydro EcoDesign can help you
make your products greener

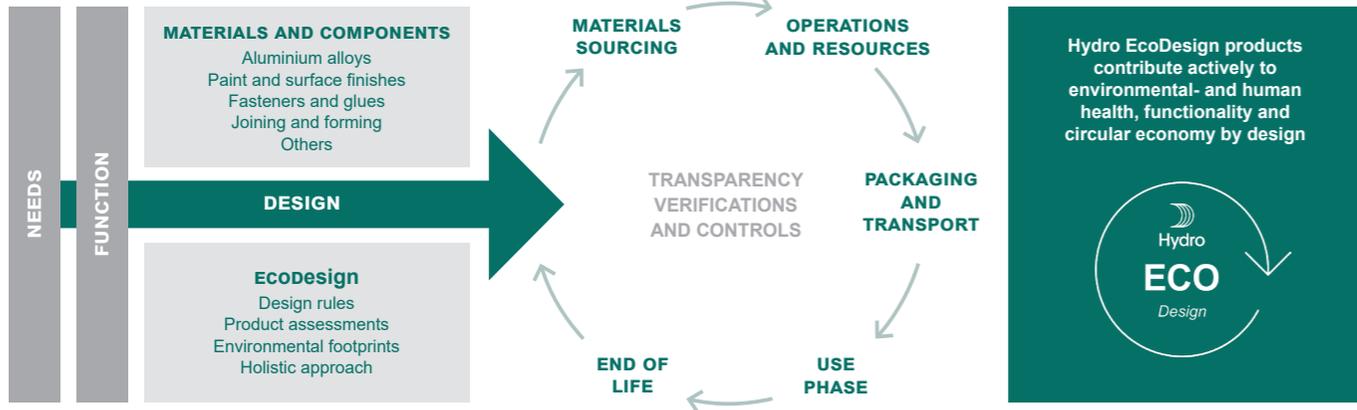


All products have an environmental impact, starting with material extraction, then to production, transportation, usage, disposal and recycling. Some products that appear the same may show different numbers and varying impacts. Why?

We know that most of the costs of a product and the environmental impacts of the product are committed early in the design process. With more than 1,000 engineers, aluminium design expertise is one of our strengths. This is why we ask to take this role when collaborating with customers, to reduce the impact of our aluminium solutions on the environment as much as possible. Right from the design stage.

Now we are offering you a new concept. A more structured service. A dedicated methodology that we developed in collaboration with the consultants Environmental Protection Encouragement Agency (EPEA), part of Drees & Sommers. We call it Hydro EcoDesign.

Hydro EcoDesign can help you make products with increased functionality and a smaller environmental footprint.



Hydro is committed to developing products with higher performance and lower environmental impact, and Hydro EcoDesign is a way to reach these goals



Read more: www.hydro.com/ecodesign

What is Hydro EcoDesign?

The framework of Hydro EcoDesign is based on procedures and requirements. We do this to ensure the examination of multiple courses in the work toward making products more sustainable.

Our community of specially trained colleagues will take the lead and bring their expertise in material selection,

alloy performance, life cycle analysis, surface treatment and lightweighting. In addition, they tend to topics such as designing for disassembly, disruptive business models, take-back systems, supplier engagement, packaging and enhanced recycling. Several proven and efficient concepts from the circular economy community have also been implemented.



The Norwegian furniture company Vestre produces outdoor furniture that is built to last. For its Folk series, Vestre chose Hydro CIRCAL – aluminium with 75% post-consumer recycled content.

How does it work?

The Hydro EcoDesign process starts with an ideation exercise between you and us. This creative brainstorm will spark multiple ideas and identify the most relevant ones. We then follow up with continuous communication. The holistic working model will ensure that we choose the best paths toward developing a better product, while keeping economics at the forefront.

Teaming with EPEA allowed us to build a framework with a partner experienced in material health, sustainable design and product certification. The key point is to make sure all steps and criteria have their purpose, while at the same time we minimize the risk of greenwashing.



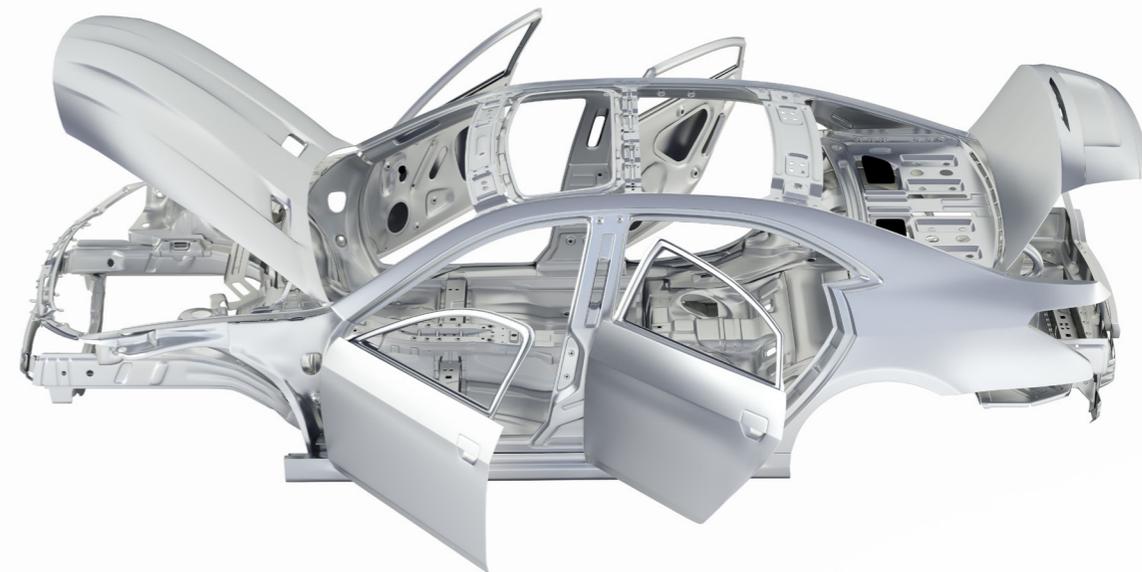
The Hydro EcoDesign process starts with an ideation exercise between you and Hydro.



The Swedish furniture company Green Furniture Concept achieved its ambitious circular goals with Hydro CIRCAL, aluminum guaranteed to contain no less than 75% recycled content, for its newest seating series Ascent.

How can Hydro EcoDesign benefit you?

- You receive support in developing greener solutions that are ready for the circular economy, from expert and passionate discussion partners
- You receive aluminium solutions from Hydro with carbon footprints lower than the norm, and/or higher recycled content, longer durability, better performances
- You receive a safe material that complies with international norms and regulations
- You can achieve better results in sustainable product certification standards, concepts such as Cradle to Cradle (C2C), and green building rating systems
- You participate in an ideation process to develop innovative solutions with added features, focused on circular economy
- You can get access to material that is certified across the full value chain of aluminium (ASI certification*)
- You benefit from collaborating with a global group that has strong local presence, because working close to the customer is a key element of the circular economy
- You will work with a dedicated partner, which includes sustainability as one of its pillars



* More than 40 of Hydro's manufacturing sites are ASI certified, and more site processes are ongoing. Contact your representative for more information.

What types of products can be EcoDesign-ed?

In principle, all aluminium solutions can be EcoDesign-ed. Applications in some industries are particularly well suited, such as building and construction, home durables and design, and automotive.



What is your next step?

Reach out to your Hydro contact, who can explain more about Hydro EcoDesign and how we can collaborate.

www.hydro.com/ecodesign

Hydro EcoDesign – ‘9 rules charter’



TRANSPARENCY

Transparency with the stakeholders about our products' characteristics, impacts, performances and costs



COMMUNICATION

Continuously communicate with customers and suppliers alongside the process to find the best solutions, and explain the choices being made



SUSTAINABLE MATERIALS

Ensure that the choice of materials is considering environmental and social criteria throughout their life cycle



RESPONSIBLE SUPPLY CHAIN

Have due diligence in the supply chain with focus on the respect of environmental, social and governance conditions in the choice of suppliers and industrial operations



END OF LIFE AND WASTE

Maximize the recyclability of the products and components while minimizing waste and packaging



RESPONSIBILITY

Understand stakeholder concerns and make necessary efforts to find mitigating solutions



CONTINUOUS IMPROVEMENT

Follow a process of continuous improvement, questioning and innovation



ACCOUNTABILITY

Provide required documents and evidence with respect to national and international regulations



MONITORING

Monitor relevant metrics, such as performance and carbon footprint, during the product design phase and variant comparisons

How Buzon benefited from Hydro EcoDesign

Buzon Pedestal International, a European company headquartered in Belgium, took advantage of Hydro EcoDesign to improve the gutter profiles used in their product package. Architects and designers use the products to raise terraces, pool decks and other similar building applications.

An innovative brand with sustainability in mind, Buzon already manufactures fully recyclable systems. So why take an additional step and choose Hydro EcoDesign to improve its gutter profiles?

“We have to innovate, we have to bring more quality, we have to be greener,” says company CEO Laurent Buzon. “We need to be sure that the terrace applications raised with our products will remain so for the total life of the building. As such, we need to be sure the materials are of the highest quality, including mechanical characteristics and resistance to weathering. And finally, we need to be sure our products can be easily recycled or re-used once the building or application reaches end of life.

“We were impressed by the ideation process in the Hydro EcoDesign concept and the preparation done by the Hydro team. This will allow us to trigger ideas and improvements for the future.”

Besides adding new features and functions to Buzon’s gutter profile, Hydro EcoDesign suggested:

- Using the Hydro CIRCAL aluminium alloy, containing minimum 75% post-consumer scrap
- Using Hydro’s local ASI-certified manufacturing site
- Optimizing the weight and length of the profiles
- Adding anti-slip protection, possibly with 3D branding
- Integrating LED strips, thereby adding a safety feature on doorsteps
- Increasing corrosion resistance when used in pool environments
- Optimizing fasteners and connections, for faster assembly and for increased security in public areas



“We have to innovate, we have to bring more quality, we have to be greener.”

Laurent Buzon, CEO



Buzon Pedestal International utilized Hydro EcoDesign to improve the gutter profiles in its product package, used here for the Hammersmith project in London.





We are aluminium

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Hydro is a fully integrated aluminium company with 35,000 employees in 40 countries. Rooted in more than a century of experience in renewable energy, technology and innovation, Hydro is engaged in the entire aluminium value chain, from bauxite, alumina and energy to primary aluminium, rolled and extruded products and recycling.