

# ENVIRONMENTAL PRODUCT REPORT

A Self-declared environmental declaration (type II)  
according to SFS-EN ISO 14021:2016+A1:2021



**GWP VALUE: 45,38** KGCO<sub>2</sub>EQ

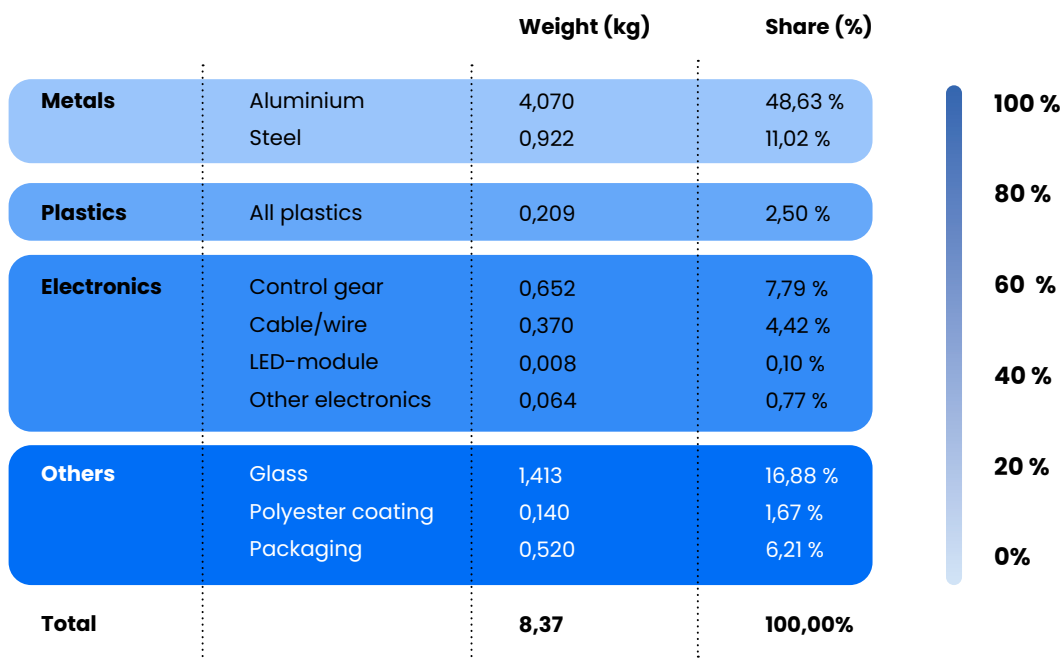
## PRODUCT INFORMATION

<b>Product Name:</b>	Industrial LED luminaire XENRE IP66 221W
<b>Product Number:</b>	XE80M100DJ
<b>Product Description:</b>	A robust, top-quality LED luminaire designed for high installation heights in demanding industrial environments. The XENRE LED highbay luminaire is specifically engineered for critical and heavy industrial applications where exceptional durability and reliability are essential. Typical applications include steel mills, pulp and paper plants, turbine halls, and other high-process areas in power plants, as well as other environments exposed to harsh conditions and continuous operation.

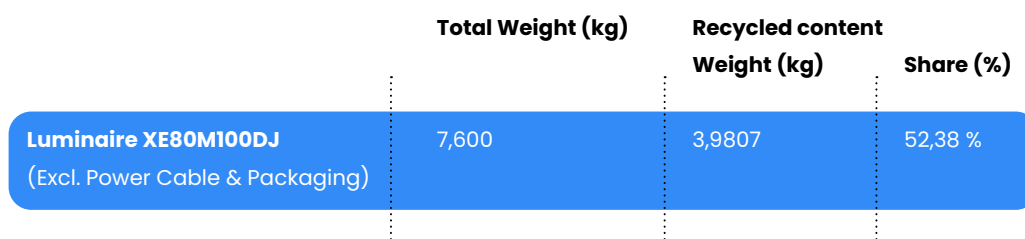
## TECHNICAL INFORMATION

<b>Input power (W)</b>	221	<b>Efficiency of the luminaire Ta +25°C (lm/W)</b>	146
<b>Voltage (V)</b>	220-240	<b>Luminous flux (luminaire) Ta +25°C (lm)</b>	32300
<b>IP rating</b>	IP66	<b>Color temperature</b>	4000K
<b>IK code</b>	IK08	<b>Calculated lifetime Ta +25°C L80 (h)</b>	100000
<b>Weight (kg)</b>	7,6	<b>Country of manufacture</b>	Finland

# STRUCTURE AND CONTENT



# RECYCLED CONTENT

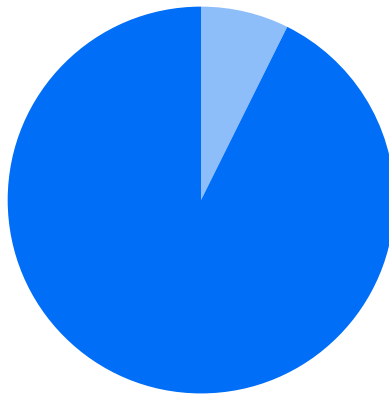


# LUMINAIRES GWP VALUES

<b>GWP value</b>	<b>Luminaires estimated GWP A1-A3</b>
<b>GWP unit</b>	45,38
<b>Notes</b>	KgCO <sub>2</sub> eq The calculation results are based on a set of material emission factors used within the Fagerhult Group. These emission factors represent a combination of data from selected group brands with established LCA databases and data provided by an external consultancy.
<b>Luminaires weight (kg):</b>	7,6

## LUMINAIRES ENVIRONMENTAL IMPACTS

<b>Use phase scenario</b>	The energy consumption during the use phase of the luminaire was calculated as 1 x 221 W x 100,000 h, resulting in a total energy consumption of 22,100 kWh. Emissions associated with the electricity use were assessed using the emission factor for electricity consumed in Finland in 2025, provided by Fingrid.
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	<b>GWP (KgCO<sub>2</sub>eq)</b>	<b>GWP share (%)</b>
<b>Material production &amp; manufacturing</b>	45,38	7,32 %
<b>Use phase</b>	574,6	92,68 %
<b>Total</b>	619,98	

# OUR COMMITMENT TO SUSTAINABILITY

I-Valo luminaires are designed for long service life and minimal environmental impact. Our filtering technology protects the luminaire from dust and humidity, reducing failures and extending lifetime. Majority of our models can be upgraded with retrofit packages, avoiding the need to replace the entire fixture. All products are manufactured in Finland under strict quality and environmental standards, ensuring energy-efficient operation and reduced lifecycle costs.

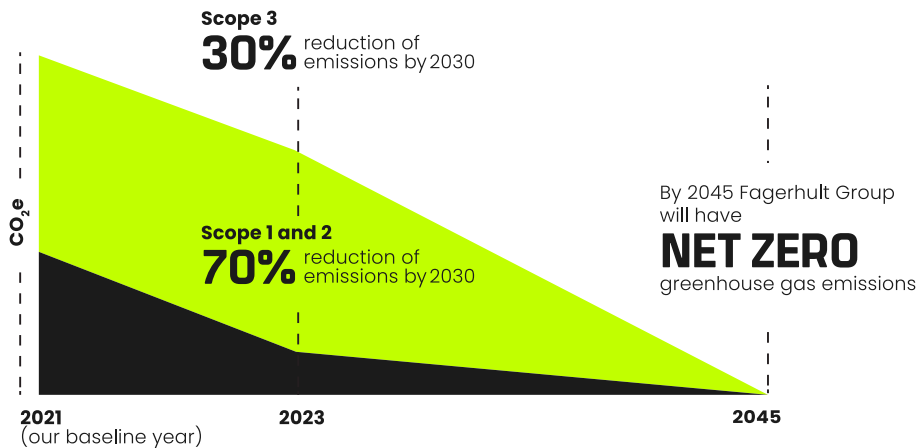
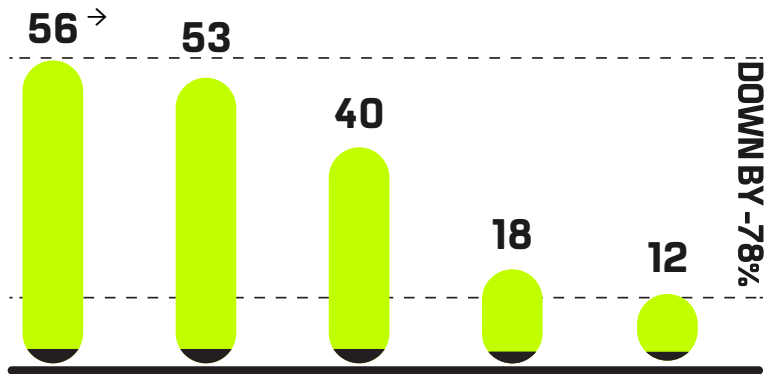
- Durability & long lifetime → less waste.
- Retrofit / upgradability → reuse instead of replacing.
- Energy efficiency → lower power consumption.
- Local, controlled production → smaller environmental footprint.

Where possible, we use non-virgin materials in our luminaires. For example, our die-cast components are made from 100% recycled aluminium, and our extruded aluminium contains up to 75% recycled content. As part of our commitment to continuous improvement, we continuously review and develop ways to maximise the recycled content in all our products.

## I-VALO IS COMMITTED TO SCIENCE-BASED CLIMATE TARGETS

By aligning our operations with internationally recognised standards, we ensure that our lighting solutions support our customers' sustainability goals, reduce environmental impact, and contribute to long-term lifecycle efficiency. Since our base year 2021, we have reduced our emissions by 78%, meaning I-Valo has already achieved the Group's 2030 target in 2025.

**Total CO<sub>2</sub> footprint for I-Valo**  
Kilotonne CO<sub>2</sub>e per year, 2021-2025



# PRIORITISED ACTIVITIES TO REACH NET-ZERO



## OWN OPERATIONS

- + Purchase 100% renewable electricity
- + Switch car fleet to electric
- + Phase-out of natural gas for space heating at our sites and for curing within painting processes



## MATERIALS AND COMPONENTS

- + Develop products with less materials and components
- + Minimise virgin materials where alternatives exist
- + Innovate with alternative materials with lower climate impact
- + Engage with suppliers to identify alternative solutions



## USE PHASE

- + Product and technological development to increase energy efficiency
- + Reach 100% smart lighting to optimise energy use
- + Encourage customers to purchase renewable electricity to lower emissions



## CIRCULAR BUSINESS

- + Reuse products where possible by upgrading existing luminaires with new technology
- + Explore circular business models within the value chain and through partnerships

# UN'S SUSTAINABILITY GOALS SHOW THE WAY

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From the UN's 17 Sustainable Development Goals, Fagerhult Group has identified three where the company can have the most impact as well as the greatest opportunity to make a positive contribution. I-Valo owns the same goals and targets as set on the Group level.



## **NO.7 AFFORDABLE AND CLEAN ENERGY**

The global rate of improvement in energy efficiency needs to accelerate. We can contribute by helping our customers reduce their energy consumption over time. This will result in less electricity needing to be produced and will serve to accelerate the transition to green energy sources and energy for all.



## **NO. 11 SUSTAINABLE CITIES AND COMMUNITIES**

To reduce energy consumption, we manufacture the most efficient luminaires possible, equipped with smart technology – according to the principle of the right light in the right place and at the right time.



## **NO. 12 RESPONSIBLE CONSUMPTION AND PRODUCTION**

We preserve finite resources and choose recycled and renewable materials in order to reduce the environmental impact of materials. We have control across the value chain, and we are transparent with our impact. We shall maintain a high level of conscious and sustainable production. We use renewable energy, reduce resource use and energy consumption, and use materials more circularly.

Read more about our sustainability: <https://i-valo.com/en/company/sustainability/>