

CO<sub>2</sub> SAVINGS  
UP TO  
**67%**  
CO<sub>2</sub> SAVINGS

# GREENFLEX

**Sustainable Signage System**

The world's first fully recyclable  
illuminated letter



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UP TO  
**67%**  
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# FULLY RECYCLABLE AND SUSTAINABLE

## ILLUMINATED WOOD LETTERS



Up to 80% produced from renewable raw materials



The wooden material used is made from already recycled wood



Acrylic used can optionally be designed with a closed product life cycle

### COMPARISON CALCULATION

How much Co<sub>2</sub> does **GREENFLEX** save compared to typical solid acrylic letters?

	GREENFLEX	Solid Acrylic Letter
Acrylic	2.28 kg	9.4 kg
Renewable raw materials	2.4 kg	0.0 kg
LEDs	0.2 kg	0.2 kg
Co <sub>2</sub> emissions	8.85 kg	26.82 kg

\* values based on letterset pictured (right)

**GREENFLEX** is a brand new illuminated sign system. Developed with sustainability in mind it is the first product of its kind and fits perfectly within the Maas+Roos 360° sustainability framework.

Made from up to 80% renewable material the sign can be disassembled into individual components and recycled at the end of its life cycle!

## GREENFLEX

is the first fully recyclable illuminated sign system on the market. If desired, the minimum acrylic content required can also be produced in a closed product life cycle.



# CONVINCING FACTS AT A GLANCE

The entire approach of **GREENFLEX** is designed for maximum protection of the environment and sustainable production.



## Fully recyclable

**GREENFLEX** is neither cast, potted or sealed with resin-like compounds. It can be disassembled into individual components and recycled at the end of its life cycle.



## Durable

For interior applications **GREENFLEX** is just as durable as letters made out of acrylic.



## Raw materials-CO2 savings of up to 67%\*

**GREENFLEX** is produced from already recycled wood. The total wood content is as much as 80% depending on design and lighting style.

Optionally the little acrylic used can also be taken from recycled sources.

\*Example: front lit compared to full acrylic letters



## Easy to handle. Inexpensive to ship

**GREENFLEX** weighs up to 50%\* less than a typical solid acrylic letters. The light weight makes the product easy to handle. It can be also be packaged lighter which results in lower shipping cost.

\*Example: front lit compared to full acrylic letters

# THE MAAS+ROOS 360° SUSTAINABILITY APPROACH

Sustainability has always been a high priority at **MAAS+ROOS** and it is part of our corporate culture. We see it as our entrepreneurial duty to protect our resources and the environment.

We do not primarily focus on the trading of emissions. Instead, we lower our emissions and use of raw materials in production and logistics.

We complete this approach by recycling everything from aluminium and steel to packaging materials like cardboard and plastic wrapping.



## Production

State-of-the-art production facilities  
Solvent free powders and waterbased paints  
Certification: ISO 9001 and ISO 14001



## Recycling

We separate over 25 materials and return them into the circulation

Fine-particle dust extraction throughout entire production area

ISO 14001 certification underlines a comprehensive environmental policy

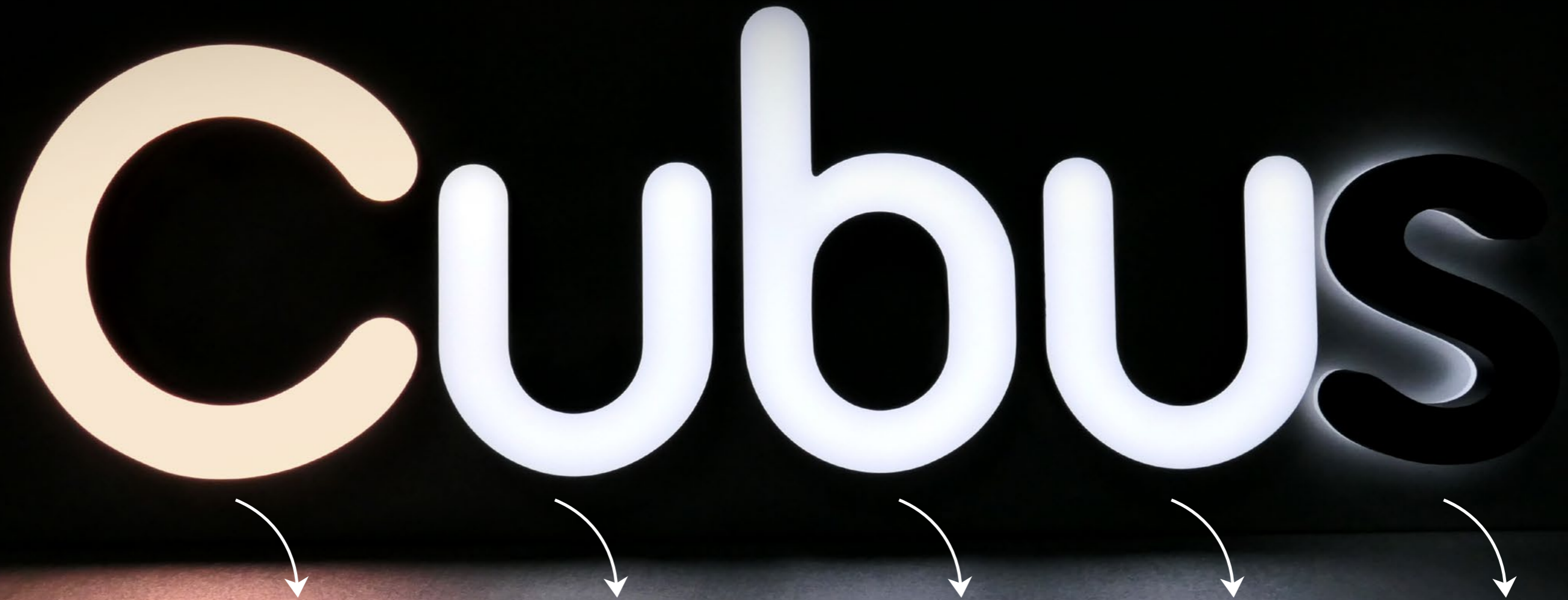
## Logistics







Co2 savings through production closer to the customer - in Germany, Dubai and India

CO2 savings through optimized logistics routes and group transports

Reduction of packaging materials through delivery to many markets with own means of transport

# GREENFLEX – SUSTAINABLE. FLEXIBLE. INNOVATIVE.



<b>Front-lit</b>  	<b>Front-lit</b> 	<b>Front-lit</b> 	<b>Front-lit</b> 	<b>Back and partially side lit</b> 
Tuneable white illuminated	White illuminated	White illuminated	White illuminated	White illuminated
Secured using vinyl. This allows for easy separation on site	Secured using vinyl. This allows for easy separation on site	Directly glued for extremely smooth surfaces and edges	Directly glued for extremely smooth surfaces and edges	Can be completely dismantled and separated
Click-light for easy installation	Click-light for easy installation	Click-light for easy installation	Click-light for easy installation	Click-light for easy installation
Can be completely dismantled and separated	Can be completely dismantled and separated			
Color adjustment via Smartphone: 3.000-6.500 Kelvin				



## LED Certifications (extract)

- Typical Luminous Flux of up to 1127 lm/m
- 120° Beam Angle
- High Efficiency 147lm/W
- High brightness & low temperature rise
- Different white color range available
- RGB LEDs available
- Tunable white LEDs available
- Dimmable



## Wood Certifications (extract)



### FSC-CERTIFIED

Of the various responsible forestry programs available, the Forest Stewardship Council (FSC®) is considered the leading and most comprehensive certification program. This program not only focuses on good environmental performance, but also protects the social interests of all stakeholders involved.



### NL GREEN LABEL

The used wood has received an "A" classification, the highest possible rating. This is due to its extremely high durability, low maintenance requirements and excellent recyclability.



### CRADLE TO CRADLE GOLD

The used wood is one of the very few building products to achieve Cradle to Cradle certification at the exclusive Gold level. Cradle to Cradle (C2C) provides a way to concretely and credibly measure achievements in environmentally smart design, including the use of environmentally friendly and healthy materials and the adoption of social responsibility strategies.



### NORDIC ECOLABEL

The Nordic Ecolabel, or Nordic Swan, is a voluntary ecolabel program that assesses the environmental impact of a product over its lifetime. It has been awarded to the used wood in Norway, Finland, Denmark and Sweden and guarantees that climate requirements are taken into account and CO2 emissions (and other harmful gases) are limited -where it is most relevant.