

# WOODEN PLATFORMS

- a greener choice for wind turbine production



Resolux Group

A Gexpro Services Company |  **Gexpro**  
Services


# WHY CHOOSE WOODEN PLATFORMS

Wooden platforms are the best choice for a fast, light and sustainable construction – It is an ideal material for floor applications and reduces CO<sub>2</sub> emissions at the same time.


It is possible to install wooden platforms throughout the entire wind turbine, including the tower and nacelle.

## ADVANTAGES BY USING WOODEN PLATFORMS


Easy, and enables fast construction 


Lighter weight, without compromising strength and durability 

Lower CO<sub>2</sub>-footprint on materials 

Captures CO<sub>2</sub> in the wood 

More robust risk-averse supply chain;  
for wood vs. steel/aluminum 

Cost out possibilities; for serial production 

Easy ramp-up for serial production 

Cost competitive solution (vs. galvanized steel/alu platform) 



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» The geopolitical challenges of recent years have highlighted the importance of developing renewable energy sources, and the visions for wind energy are high on the political agenda.

» At Resolux, our objective is to mitigate the climate impact of wind energy production. To achieve this goal, we are intensifying our efforts to prioritize environmentally sustainable product development.

» We actively work on reducing our climate impact, and our GHG protocol is an important tool for developing data-driven climate initiatives. As a primary distribution, kitting, and assembly company, Resolux has looked at its product portfolio and developed CO<sub>2</sub>-reduced products.



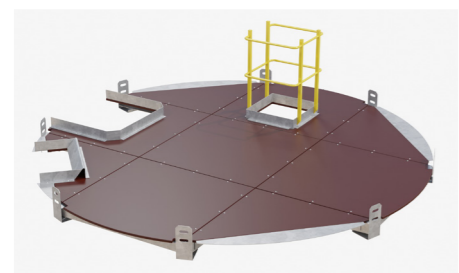
» The platform consists of veneers assembled into a stable and strong construction.

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## The function of the Wooden Platforms

- » **STRUCTURE:** Incredibly strong and dimensionally stable derived from its homogeneous bonded structure.
- » **SERVICE LIFE:** Considered to be as long as the lifetime of the wind turbine with a target of 100 years.
- » **MANUFACTURING:** Made of 3 mm thick rotary peeled and strength graded softwood veneers, bonded with weather and boil-resistant phenol formaldehyde adhesive. Parts of the veneers are oriented in crosswise direction to enhance the transverse strength and stiffness of the products.
- » **RAW MATERIAL:** Originated from sustainable forests and it is 100% PEFC and FSC certified.
- » **RESOLUX GROUP** is committed to use non-conflict materials in our supply chain including Russian veneer and birch product.
- » **WOOD** meets the performance requirements of the platform and is therefore an ideal alternative to steel and aluminum.



» Certifications:  
The trees are CE marked according to the EN 14374 standard.



## SUSTAINABILITY

- » Wood is a sustainable material. Wood emits less carbon during the production process.
- » Carbon storage – Our wooden platforms ensure a long carbon storage.
- » Wood is a renewable, recyclable, and reusable building material. CO<sub>2</sub> is naturally captured by sustainably managed forest.
- » End of Life. Our wooden platforms ensure a long carbon storage time, and at the end of the turbine service time, they can be recycled or utilized into bioenergy.



## PEFC and FSC certified wood – Sustainable wood

- » Wooden Platforms only use wood from PEFC and FSC certified forests to ensure a sustainable product through responsible and sustainable forest management. Wood is a renewable natural resource as long as forests are managed sustainably, which is why it is important for us that our material is certified.

PEFC and FSC certified forests have an obligation to maintain the forest stock, where new trees can absorb the CO<sub>2</sub> emissions that bioenergy releases. Certifications ensure good conditions for biodiversity, water environment, and the people affected by forest management.

» **PRODUCT**



» **ENERGY** » **REUSE**



» The wind power sector now makes it possible to reduce CO<sub>2</sub> emissions.



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## UN's Sustainable Development Goals (SDGs)



### #12 Responsible consumption and production

With Wooden Platforms, Resolux supports Sustainable Development Goal 12 "Responsible Consumption and Production".

Sustainable Development Goal 12 focuses on securing the earth's resources that are running out.

By using renewable natural resources such as wood, we can reduce the risk of exhausting the earth's natural resources while also reducing CO<sub>2</sub> emissions.

By incorporating responsible production and materials into an existing product, the aim of Wooden Platforms is to mitigate the effects of climate change.

## Climate

» Our CO<sub>2</sub> calculations show that the direct CO<sub>2</sub> emissions can be reduced by up to 94% per m<sup>3</sup> compared to the use of new aluminum and steel.

When using recycled steel and aluminum, the reduction will likely be less, and the total reduction in CO<sub>2</sub> emissions will vary depending on the previously used material.

In addition to a significant reduction in CO<sub>2</sub> emissions, wood also serves as a carbon sink throughout its life cycle. Wood stores CO<sub>2</sub> from the atmosphere, thereby reducing the concentration of greenhouse gases that contribute to harmful effects on the climate.

» When the wood can no longer serve this function, the End-Of-Life product can be converted into bioenergy by combustion.

» **Savings:** The savings may reach up to 94% by using wood instead of new steel and new aluminum.



Today, Frontier Technologies,  
Resolux Group & Gexpro Services  
go a step further



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» *Let's innovate together for a better future . . .*



Resolux Group



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