

Flying Whales

What's the context?

As towns and cities expand, we need resources to create new infrastructure. However, heavy raw materials such as timber are found far from where they are needed. This has created a logistical and environmental nightmare. It is believed up to **17% of deforestation in tropical and sub-tropical countries is caused by infrastructure projects** such as road building. In the Amazon alone, road projects over the next five years are forecast to lead to **5.9 million acres of deforestation**. We must urgently minimise the environmental impact of industries such as forestry and mining, with transport a key contributor to pollution and wildlife disruption.

What did we do?

Flying Whales is reshaping the transport of materials through flight. With Expleo's support, the company has designed a safe, quiet and green airship **capable of carrying 60 tonnes of heavy charge**. The electric propeller-powered airship requires no additional infrastructure such as roads or landing pads to operate, allowing it to serve remote locations without disrupting the local environment or wildlife. Expleo has led the stress testing of the project, proving its viability in real-world deployments.

What's the impact?

Expleo's experience in the aero field, as well as its mechanical engineering heritage, has been a key driver in the progression of this project beyond proof of concept with prototypes scheduled for launch in the next two years. The project has generated significant interest across the globe with investment from the French and Canadian governments, plus investors from across Europe and Asia.

What's next?

Originally designed to support logging in the Amazon rainforest, **the scope of the project is being widened to other sectors and environments**. Work is underway to optimise Flying Whales performance to reach and transport materials in harsh weather conditions. As the project progresses, Expleo's will support Flying Whales as it moves to the manufacturing phase of its project.

