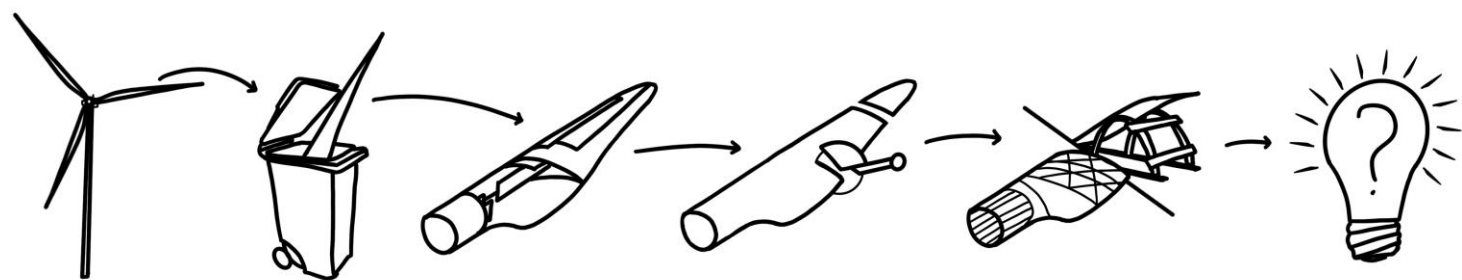


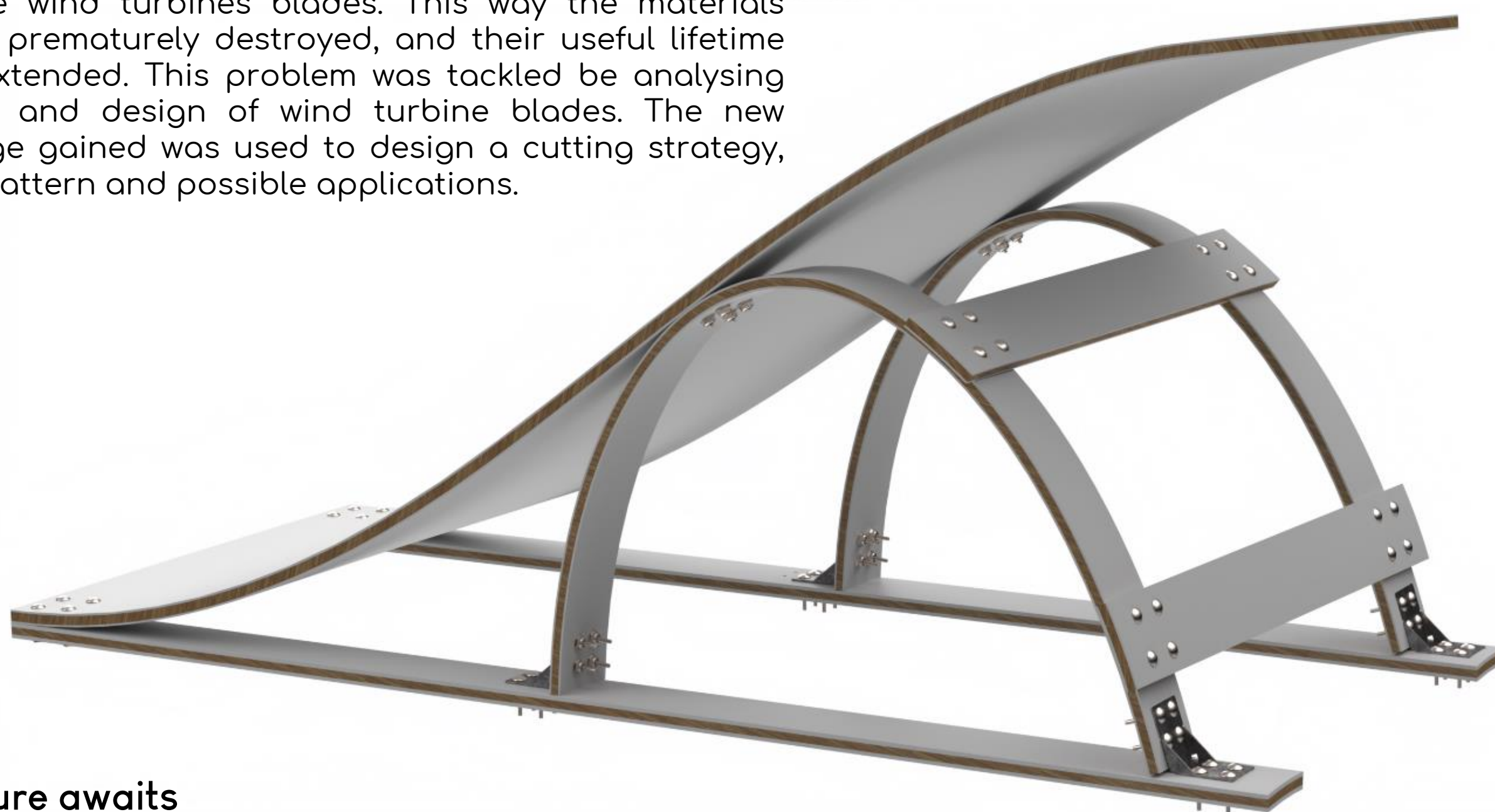
STRUCTURAL REUSE APPLICATIONS OF WIND TURBINE BLADES



The project

Windmills and their modern counterparts the wind turbine have been a staple of our landscape for decades and with more effort being put into renewable energy their numbers will only rise. But there is a problem, turbines can almost fully be recycled, but the blades present some difficult challenges.

This thesis presents possible structural reuse applications for these wind turbine blades. This way the materials won't be prematurely destroyed, and their useful lifetime will be extended. This problem was tackled by analysing the EOL and design of wind turbine blades. The new knowledge gained was used to design a cutting strategy, cutting pattern and possible applications.



Adventure awaits

The proposed concept, an adventure park, combines the shape, materials and scale needed to tackle the EOL problems surrounding wind turbine blades. The application is showcased by designing bike park features that are made from rectangular segments and beams cut from wind turbine blades.



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of wind turbine blades
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Integrated Product Design

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