

Siemens Gamesa RecyclableBlade

January 25, 2024

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Senior Business Developer

Agenda

1

**Siemens Gamesa
Renewable Energy**

2

**Japan strong
track record**

3

RecyclableBlade

Three business units strongly positioned in the market



112.5 GW

installed since 1979

The **technological partner of choice** for onshore wind power projects.



24.5 GW

installed since 1991

Most experienced offshore wind company with the most reliable product portfolio in the market.



82 GW

maintained

Commitment beyond the supply of the wind turbine **to reach profitability goals.**

The offshore wind turbine manufacturer with the longest, most extensive history in the industry

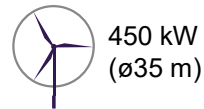
1991

#leadingtheoffshorerevolution for over 30 years

Laying the groundwork for every single offshore wind project in the world



- The world's very first offshore wind power project installed in 1991 in Vindeby (Denmark)



- The 4.95 MW project featured 11 Bonus turbines with a 450 kW capacity and 35-meter rotor

Today



Over 2,000
Direct Drive offshore
turbines installed



+24.5 GW
Installed¹



Ishikari
Japan's 1st Offshore wind farm
with offshore turbine

20+ years of operational excellence in Japan since 1999



Onshore

889 MW installed
Backlog of +796 MW



Offshore

First firm order: 112 MW
Ishikari Project, using a
dedicated offshore turbine



Service

790 MW maintained
Growth to 970 MW in FY24

- Locally established **legal entity** in Feb 2022 showing our **long-term commitment** to Japan
- **A growing local team** of close to **100 staff** building and operating the wind farms
- **Excellent track record** with the **METI** certification process



Ishikari
112 MW



Tokyo

Instrumental Ishikari

- First firm offshore wind power order for Siemens Gamesa **in Japan**
- **112 MW** project signed with Green Power Investment
- **14 x SG 8.0-167 DD** offshore wind turbines and 15-year full-scope service agreement
- **SG 8.0-167 DD** becomes first offshore wind turbine to receive ClassNK certification

Commercial operation started on 1st Jan 2024

14 turbines for Ishikari project were successfully installed in mid-September 2023

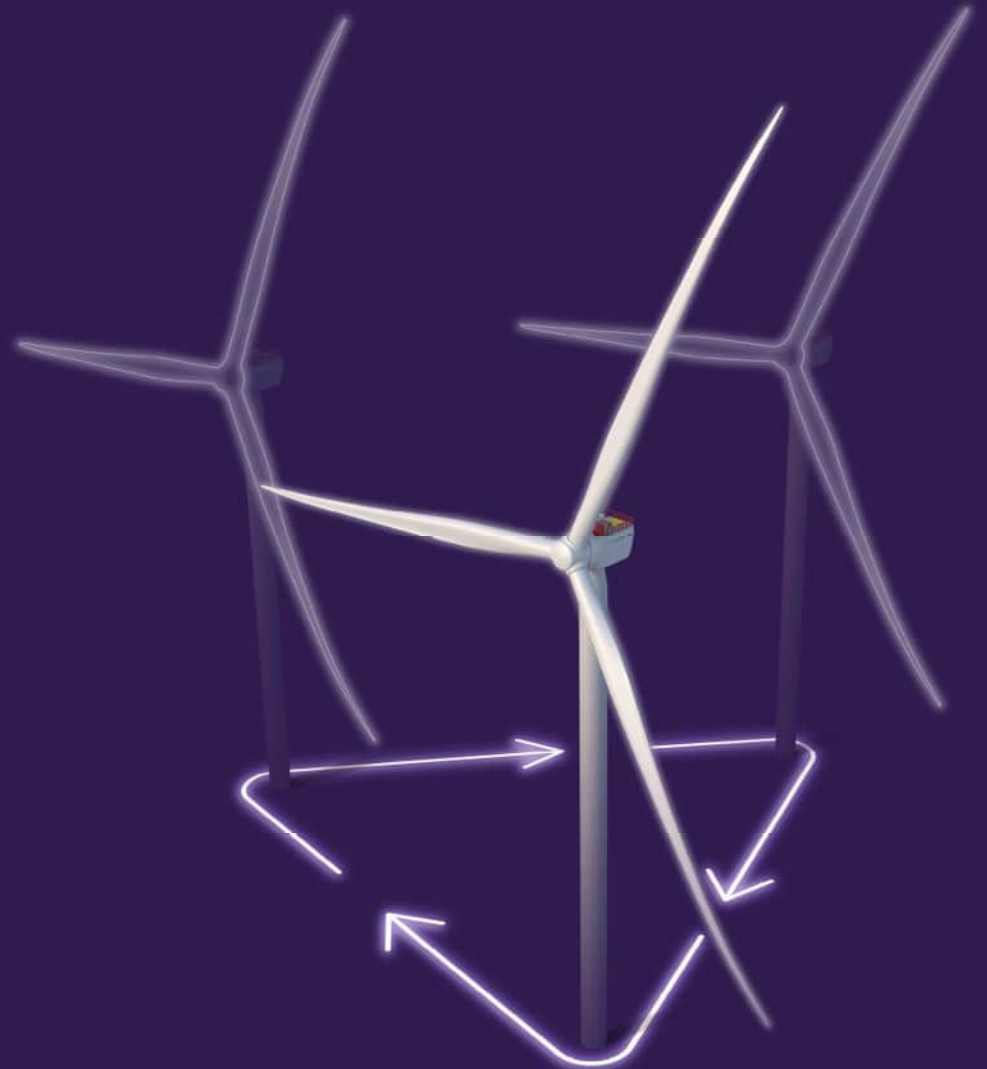


Last turbine installation



Pre-assembly site in Ishikari Bay,
Hokkaido, Japan

Taking responsibility.
Blade by blade.



RecyclableBlade is a pioneering blade solution that enables blade materials to be recovered and recycled

SIEMENS Gamesa
RENEWABLE ENERGY

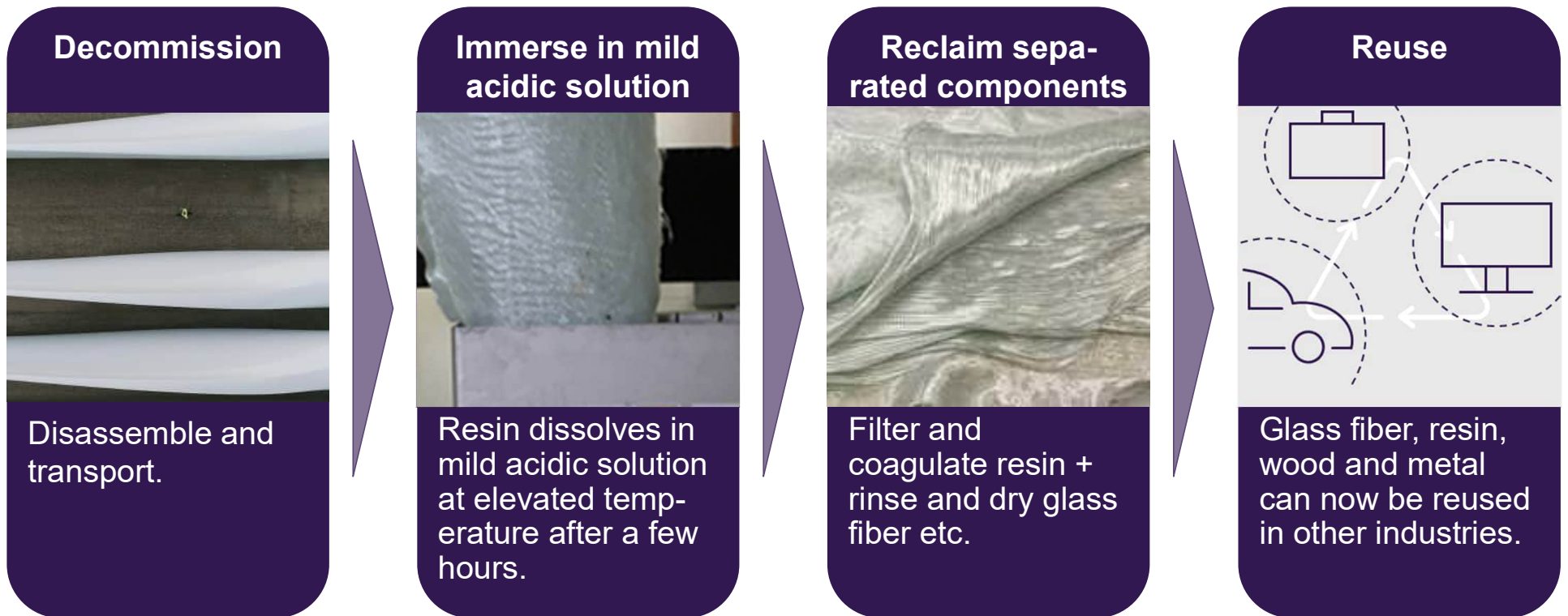


The first blades were produced in early 2021. The first installation at an offshore wind power plant was at Kaskasi, Germany, in Summer 2022.



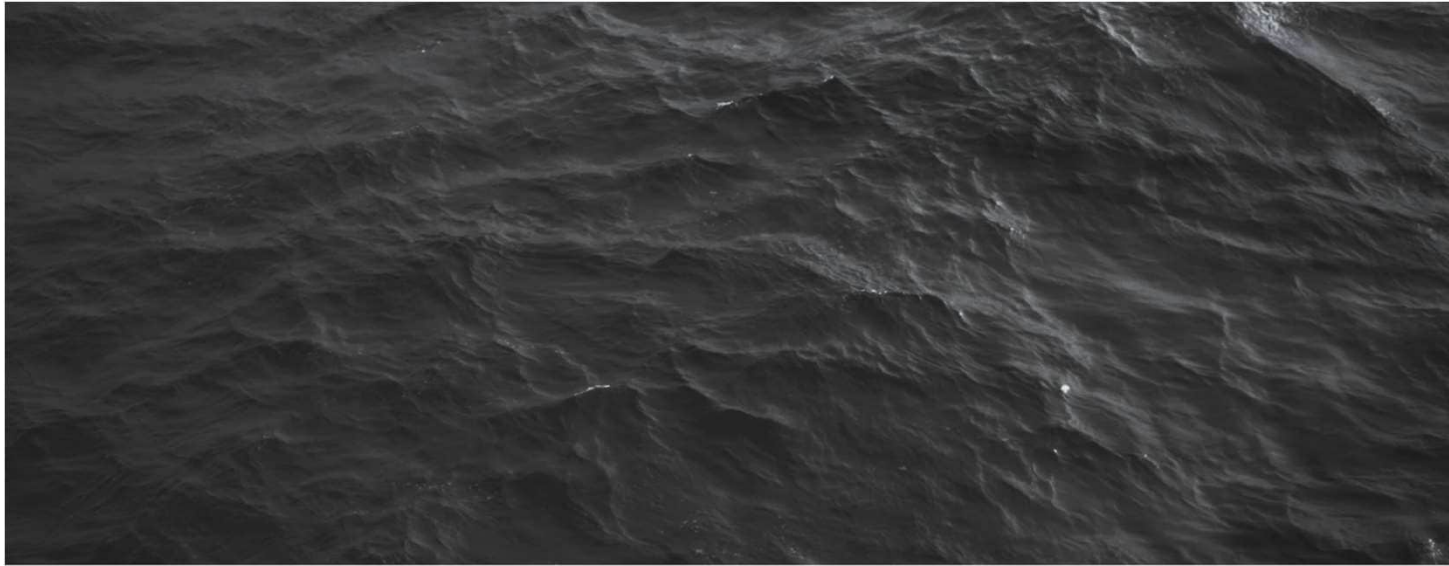
Ramp up of industrialized RecyclableBlade production is ongoing. This is aimed to increase towards deliveries to bigger projects in 2024.

The recycling process for our pioneering RecyclableBlade is simple and fast



RecyclableBlade – A proven process

RecyclableBlade video



RecyclableBlade

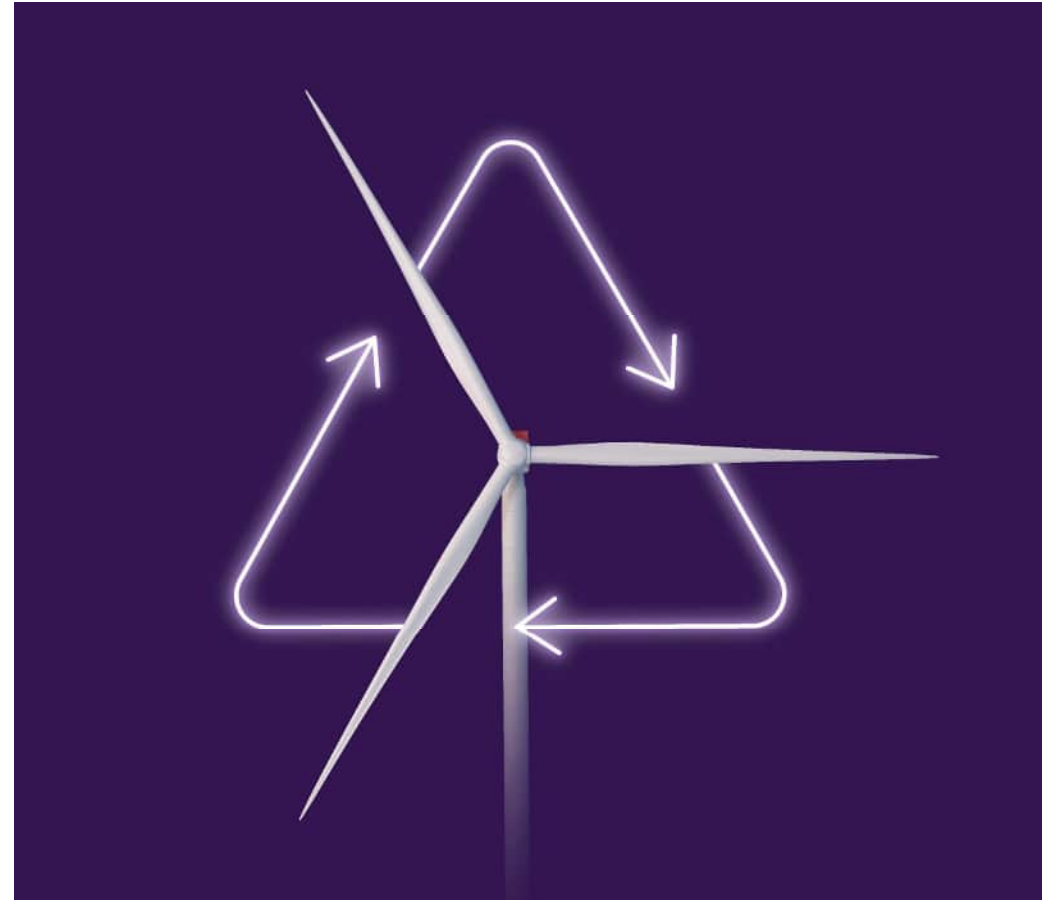
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RENEWABLE ENERGY

Background

From concept to reality

A proven process

The future is recyclable



RecyclableBlade

The advantages are clear and lay the foundation for a recyclable future

Available now!
Same product quality,
same strength, same
warranties, same service
process.

The reclaimed blade
components are of high
quality due to relative low
recycling temperature.



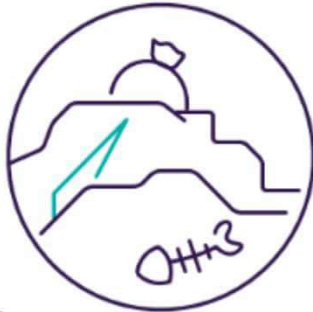
Recycled materials can be
sold to offset some of the
decommissioning cost
instead of paying to get rid
of them.

Environmental Social
Governance is positive for
financing.

Imagine if we could apply the SG 14-222 DD with the RecyclableBlade to all new offshore project until 2050

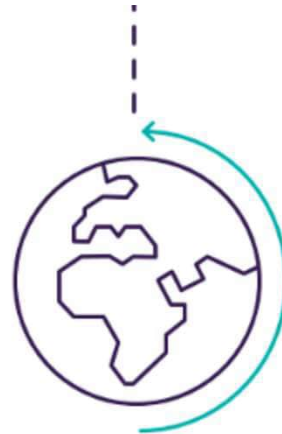
+200,000

blades would be recycled and avoid ending their life as e.g., landfill.



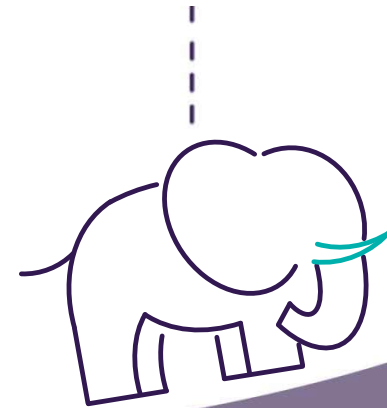
+22,000 km

is the length of all blades stretched out in a line, reaching more than halfway around the world.



+10,000,000 t

of recyclable blade material, or the weight similar to 1,600,000 African elephants.



Thank you!

