REPOWERING

Upgrade your farms and plants to enhance production!

VSB
énergies nouvelles

By capitalising on its all-round expertise, the company provides technical and economic solutions for repowering your power stations reaching the end of their life cycle.

KEY DATA.

160 MW
audited.

100 MW
developed (or in progress).

80 MW
having received authorisation (or in progress).

WHAT IS REPOWERING?

When a farm reaches the end of its life cycle (20 to 30 years of operation for wind farms), questions arise regarding its future. There are two options: dismantling the farm and returning the land to its natural state, or carrying out a repowering process.

The latter consists in dismantling the farm in order to renew it. This usually means installing more powerful and quieter turbines, as well as optimising production (with at least 20 years' worth of hindsight regarding production data and wind intensity). With new regulations adding further constraints to wind energy development, repowering is an effective solution to achieving national energy transition goals.

THE BENEFITS OF REPOWERING:

→ Increasing the amount of energy generated by the farm.

→ Reducing maintenance costs with more advanced technologies.

→ Quieter wind turbines.

→ A very low cost price: an even more competitive source of energy.

OUR REPOWERING OFFER

#1
Technical-economic auditing

VSB offers you advice and analyses the options available to sustain and optimise electrical energy production:

→ Identifying issues and easements and studying the wind or solar potential.

→ Design and production simulations.

→ Technical audit of existing installations.

→ Economic analysis of the various scenarios for "Revamping" the installations.

#2
Development and implementation

VSB carries out the administrative procedures and studies to get the necessary authorisations for the repowering of your site.

#3
Dismantling and construction

VSB deals with the dismantling of existing installations and the construction of the "new farm" for you.

→ Ensuring accesses and platforms are compliant.

→ Dismantling the turbines and the delivery station.

→ Recycling, reusing, transport.

→ Dismantling foundations, platforms and power cables for site restoration.

→ Building the new farm.

#4
Technical management of the new farm.

DID YOU KNOW? A WIND TURBINE IS 96% RECYCLABLE!

What type of waste is generated by dismantling?

→ Concrete.

→ Scrap (steel, cast iron) 80% of the wind turbine.

→ WEEE (waste from electrical and electronic equipment).

→ CIW (common industrial waste).

→ Oil.

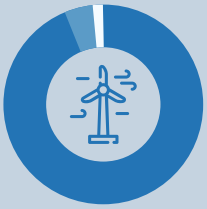
→ Miscellaneous waste (aerosols, grease, construction waste).

→ Composite materials (glass/epoxy) 15% of the wind turbine.

→ Copper.

All of this waste is currently processed through conventional channels and is close to 100% recycle-d/reused (except for final CIW). *(Sources: ORTEC, ADEME, CEMATER)*.

Recyclable material balance (with blades).



1% Material disposed of
3% Material reused
96% Recycled

(Source: CEMATER)

What do we do with the blades?

Composite materials are recycled and used for new applications such as boat hulls, kayaks, sailboards, aeronautical parts, etc.

Several solutions are used:

→ Shredding and use as a fuel in place of fossil fuels.

→ Manufacture of new composite materials.

→ Reuse in street furniture.