



1 Statistics & targets

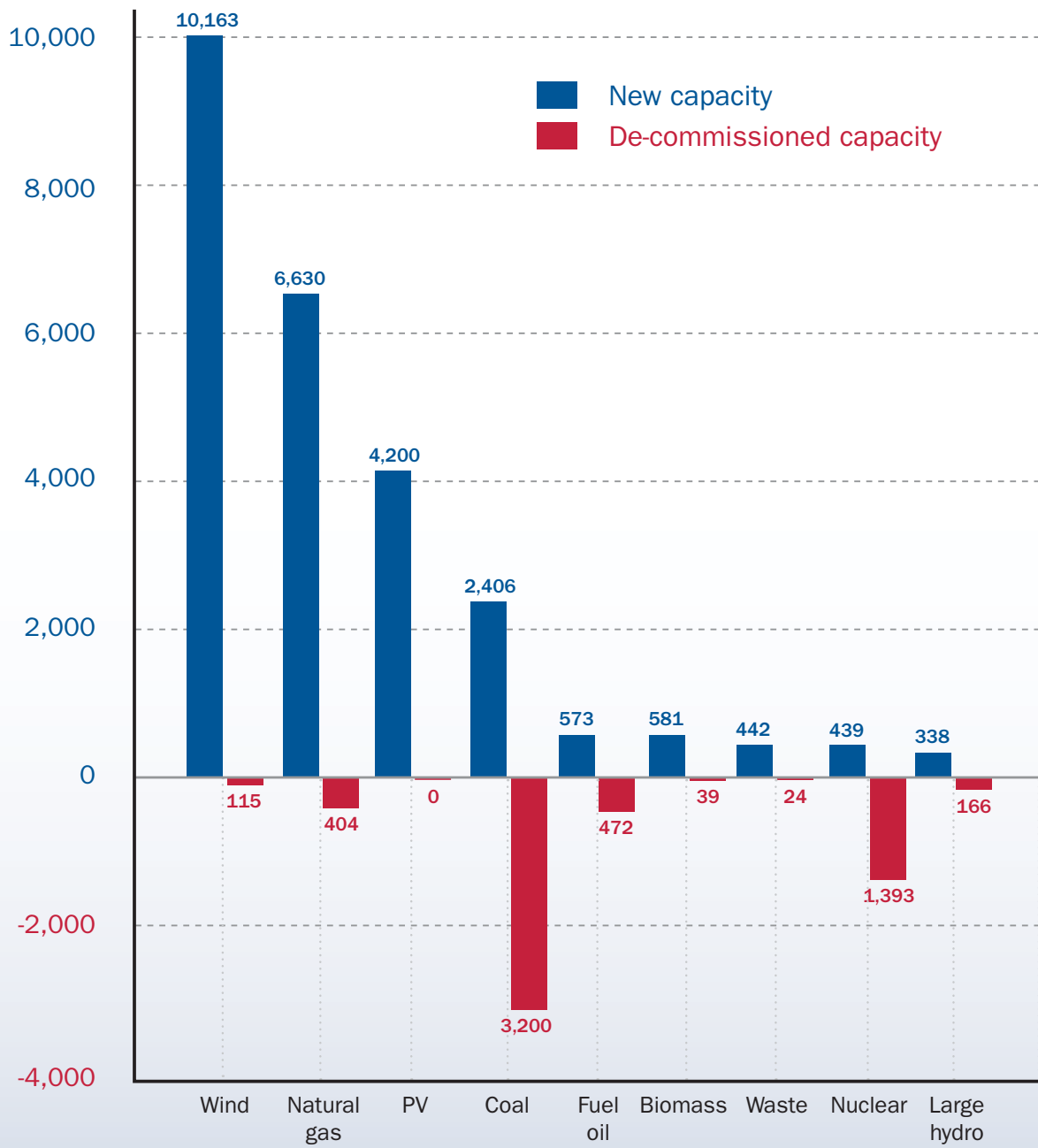
➔ Wind energy is now a mainstream power source. If the right steps are taken, wind energy will be key to meet Europe's 2020 renewables target, tackle climate change, strengthen energy security and create jobs.

Did you know?

- ➔ The wind power capacity installed by the end of 2009 will, in a normal wind year, produce 4.8% of the EU's electricity.
- ➔ In 2009, for the second year running, more wind power was installed than any other power generating technology, accounting for 39% of total new installations.
- ➔ Over 10 GW of wind power capacity was installed in 2009 - 23% more than in 2008.
- ➔ Europe's wind energy in 2009 avoided 106 million tonnes of CO₂ per year, equivalent to taking 25% of cars in the EU off the road.
- ➔ Wind energy saves Europe €6 billion per year in avoided fuel costs.
- ➔ In 2009, 2.8% of Europe's total wind power was offshore.
- ➔ 192,000 people in the EU are employed by the wind industry



New installed capacity and de-commissioned capacity in EU 2009 in MW. Total 25,963 MW



In 2020, EWEA's targets are for:

➔ 230 GW installed wind capacity in Europe: 190 GW onshore and 40 GW offshore

This would:

- ➔ Produce 14-17% of the EU's electricity - depending on total demand.
- ➔ Avoid 333 million tonnes of CO₂ per year.
- ➔ Save Europe €28 billion a year in avoided fuel costs and €8.3 billion a year in avoided CO₂ costs.

In 2030, EWEA's targets are for:

➔ 400 GW installed wind capacity in Europe: 250 GW onshore and 150 GW offshore

This would:

- ➔ Produce 26-35% of the EU's electricity - depending on total demand.
- ➔ Avoid 600 million tonnes of CO₂ per year.
- ➔ Save Europe €56 billion a year in avoided fuel costs¹ and €15 billion a year in avoided CO₂ costs.²

What needs to happen?

- ➔ The 2009 Renewable Energy Directive, which sets a target of 20% renewables in the EU by 2020, must be effectively and rapidly implemented by Member States.
- ➔ To meet the binding energy target, the share of renewable electricity in the EU must increase from 15% to at least 34% by 2020.
- ➔ A European supergrid must be created by extending and upgrading the existing European electricity network.
- ➔ Competition in the electricity market needs to be improved.
- ➔ Polluters must pay for emitting CO₂, either through carbon taxes or an Emissions Trading System with full auctioning of allowances.
- ➔ Research funding for wind energy must be increased substantially.

¹ Assuming IEA 'World Energy Outlook 2008' forecast: fuel cost equivalent to \$110/bbl of oil).

² Assuming €25/t CO₂.





Photo: Siemens

By 2030 wind should produce 26-35% of the EU's electricity and save Europe €56 billion a year in avoided fuel costs.

