More power with a proven concept

Further increasing energy production without compromising safety and lifetime expectations of the wind turbine. The evolution of the Power Boost Function allows an earlier activation with regard to wind speed, further increasing the power production of the wind turbine*.

The Extended Power Boost Function is based on the Power Boost Function. The activation of the Extended Power Boost Function compared to the Power Boost Function occurs by enlarging the window of activation. Thereby, more hours are possible with the boost function activated.

The Extended Power Boost Function (including Power Boost Function) can increase annual energy production by up to 2.3%.

To reduce strain on the turbine, the Extended Power Boost Function is only activated when certain operating conditions are fulfilled.

*Approx. 20%–30% additional energy compared to Power Boost Function improvement
Key benefits of the Extended Power Boost function

- Increased power production
- Increased revenues
- Approx. 20%–30% additional energy compared to Power Boost function improvement
- Design lifetime unchanged; 20 years for G4 platform and 25 years for D6, D7, and D8 platforms

Turquoise and yellow curves are the binned kw-wind speed point for Power Boost and Extended Power Boost, respectively. We refer here to three wind turbines with Power Boost and three wind turbines with Extended Power Boost that are similarly positioned.

Black lines are the linearized power above 3.6 MW.

Due to curtailment, the saturated power lies at approx. 120 kW instead of 180 kW.