Onshore wind

In 2010, China's installed energy network capacity for onshore wind reached 31.3GW. Between 2005-2010, China saw a thirty fold increase in its onshore wind network capacity, with an average annual growth rate of 97%. China's wind energy is entering a phase of wide scale development.

Trajectory 1

In this scenario, the development of wind energy is restricted by power transmission systems. In 2020, 140 GW of onshore wind capacity is installed; by 2030 this reaches a peak of 200 GW. Following this, every year wind turbines with a capacity of around 10GW will be replaced, with the total capacity remaining constant.

Trajectory 2

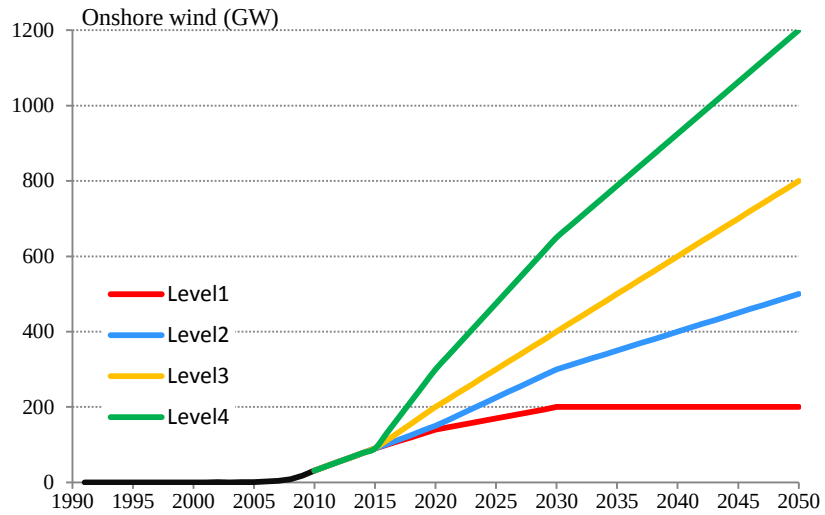
In this scenario, by 2020 installed wind energy capacity reaches 150GW. Between 2020-2030, every year there is an increase in production capacity of around 28 GW, by 2030 total capacity has reached 300 GW and by 2050 this has reached 500 GW; a 16 fold increase on 2010. The annual growth rate is 7%.

Trajectory 3

In this scenario, wind energy becomes a principle technology to enable China to meet its low-carbon energy sourcing for electricity generation strategy. By 2020 wind energy capacity reaches 200 GW, by 2030 it reaches 400 GW and by 2050 it reaches 800GW. On the basis that every wind turbine has a production capacity of 2.5 megawatts, by this stage China will have 320,000 onshore wind turbines.

Trajectory 4

In this scenario, wind energy becomes a key method of energy generation and onshore wind is comprehensively developed. By 2020, China's installed wind energy capacity reaches 300 GW, by 2030 it is 650 GW and by 2050 it reaches 1.8 TW, SOMETHING. At this point China will have 480,000 wind turbines.



China's total installed onshore wind production capacity