

Wind resources¹ at 50 metres above ground level for five different topographic conditions

| | Sheltered terrain ² | | Open plain ³ | | At a sea coast ⁴ | | Open sea ⁵ | | Hills and ridges ⁶ | |
|--|--------------------------------|------------------|-------------------------|------------------|-----------------------------|------------------|-----------------------|------------------|-------------------------------|------------------|
| | m s^{-1} | Wm^{-2} | m s^{-1} | Wm^{-2} | m s^{-1} | Wm^{-2} | m s^{-1} | Wm^{-2} | m s^{-1} | Wm^{-2} |
| | > 6.0 | > 250 | > 7.5 | > 500 | > 8.5 | > 700 | > 9.0 | > 800 | > 11.5 | > 1800 |
| | 5.0-6.0 | 150-250 | 6.5-7.5 | 300-500 | 7.0-8.5 | 400-700 | 8.0-9.0 | 600-800 | 10.0-11.5 | 1200-1800 |
| | 4.5-5.0 | 100-150 | 5.5-6.5 | 200-300 | 6.0-7.0 | 250-400 | 7.0-8.0 | 400-600 | 8.5-10.0 | 700-1200 |
| | 3.5-4.5 | 50-100 | 4.5-5.5 | 100-200 | 5.0-6.0 | 150-250 | 5.5-7.0 | 200-400 | 7.0-8.5 | 400-700 |
| | < 3.5 | < 50 | < 4.5 | < 100 | < 5.0 | < 150 | < 5.5 | < 200 | < 7.0 | < 400 |

1. The resources refer to the power present in the wind. A wind turbine can utilize between 20 and 30% of the available resource. The resources are calculated for an air density of 1.23 kg m^{-3} , corresponding to standard sea level pressure and a temperature of 15°C . Air density decreases with height but up to 1000 m a.s.l. the resulting reduction of the power densities is less than 10%, see Table B.1 in Appendix B.
2. Urban districts, forest and farm land with many windbreaks (roughness class 3).
3. Open landscapes with few windbreaks (roughness class 1). In general, the most favourable inland sites on level land are found here.
4. The classes pertain to a straight coastline, a uniform wind rose and a land surface with few windbreaks (roughness class 1). Resources will be higher, and closer to open sea values, if winds from the sea occur more frequently, i.e. the wind rose is not uniform and/or the land protrudes into the sea. Conversely, resources will generally be smaller, and closer to land values, if winds from land occur more frequently.
5. More than 10 km offshore (roughness class 0).
6. The classes correspond to 50% overspeeding and were calculated for a site on the summit of a single axisymmetric hill with a height of 400 metres and a base diameter of 4 km. The overspeeding depends on the height, length and specific setting of the hill.