

Wind Energy seems to be the best choice for the future green electrical energy supply in Denmark as well as many other places in the world. Basic comparisons to other green energy sources will be discussed (solar, biomass), and also the required resources for a 100% energy supply in 2050 (around 50 TWh/year). Wind power has a long history, but is still an emerging and fast developing technology. The on-going development of variable-speed, pitch controlled multi MW turbines with large rotors will have a huge impact on the possibilities for the future wind energy development. This will be illustrated by some comparisons of 'old and new' wind power performance. We also need to consider how to support the wind power in order to keep the power system running in 2050.