

# Electrical Supply



This has probably been the biggest success story so far in terms of CO<sub>2</sub> emission reductions. The reduction in use of fossil fuels in this area has primarily been achieved by investing in:-

- Offshore & Onshore Wind Turbines
- Solar Farms
- Hydroelectricity
- Nuclear
- Biomass
- Geothermal

Every country has a different challenge and different solutions here.

The challenge varies dependent on a country's access to renewable resources and its population i.e. it's much easier for a country like New Zealand to move to zero carbon than it would be for the Netherlands

In north western Europe, Onshore Wind has proved to be the most cost-effective solution. In southern Europe, Solar farms are the better option. In Iceland, Geothermal supplies most of their energy.

The use of renewables for electrical supply continues to increase as a percentage, but the pie is getting bigger. We need renewables to start to encroach on fossil fuel energy demand, and not just prevent further increase as is the current situation.

**World net electricity generation, IEO2019 Reference case (1990-2050)**  
trillion kilowatthours

