

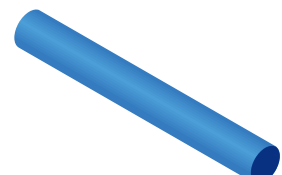
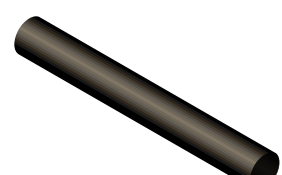
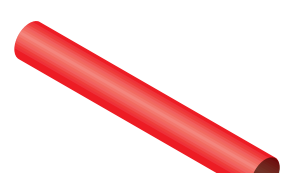

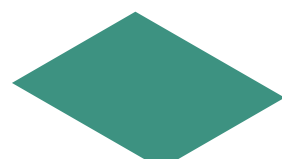
# Solar Energy

Solar power is the most abundant of all energy resources, requiring only daylight and limited cloud cover to generate output (although the sun's intensity and equipment quality will impact the amount). Installations are on both grid-scale and on commercial & domestic levels.

The UK had an installed solar capacity of 16.8 gigawatts (GW), as of May 2024, with plans to increase four-fold by 2035. Other European countries with multi-Gigawatt scale installations include Germany, Spain, Italy, Poland and the Netherlands. Internationally, Solar power is highly utilised in China and the USA, with plenty of other nations also investing in solar energy too.

- Key considerations for installations include:**
- UV resistance grade
  - Degree of water resistance
  - CPR classification (Pan-European requirement where entering/terminating inside building or construction)
  - Earthing requirements

## Cables

-  PV cable – (H1Z2Z2-K)
-  LV Cable DC combiner cable to inverter/transformer
-  33kV cable – transformer to energy management system to substation via metering device
-  132kV transmission cable
-  Perimeter earthing – bare copper conductor

