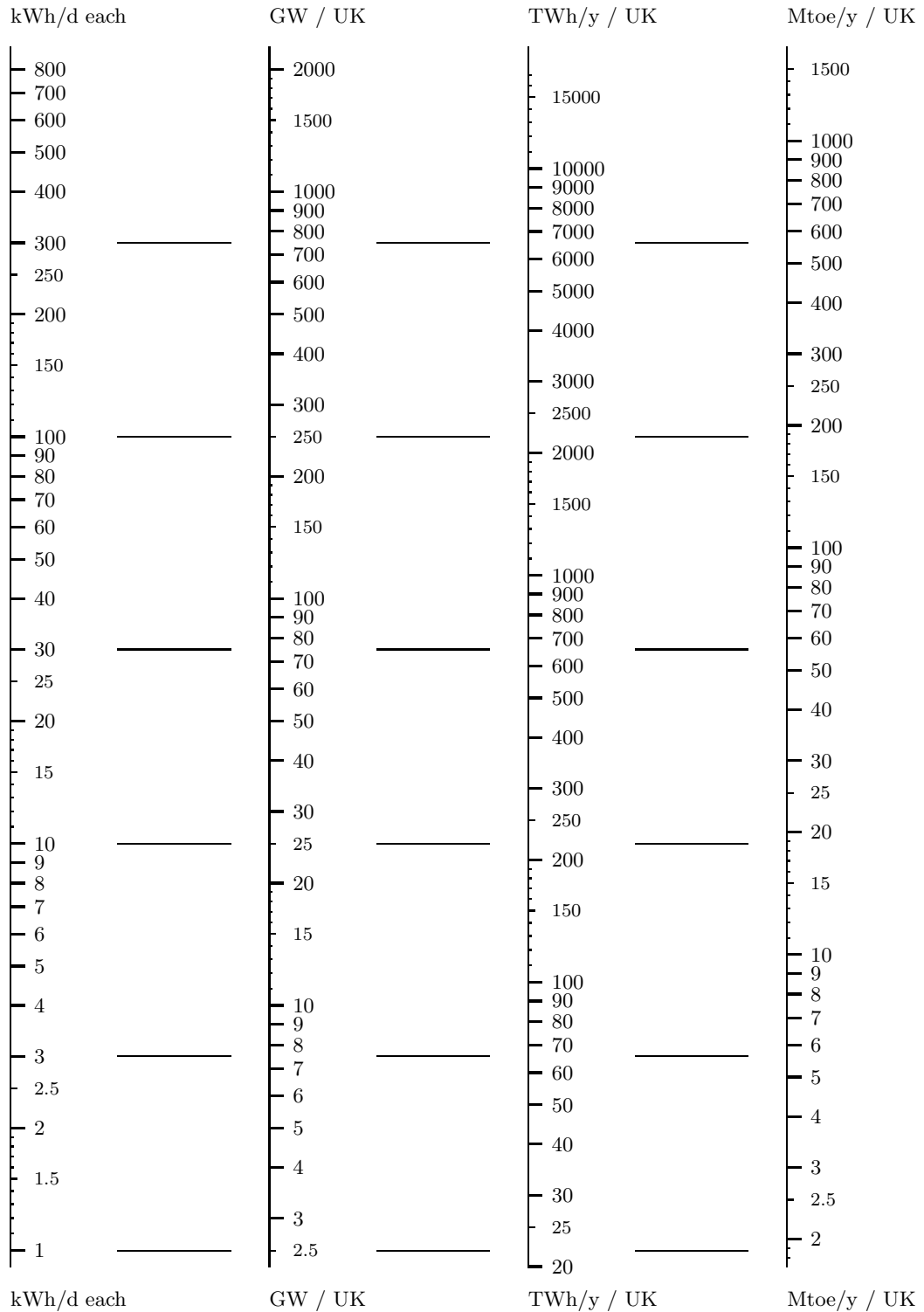


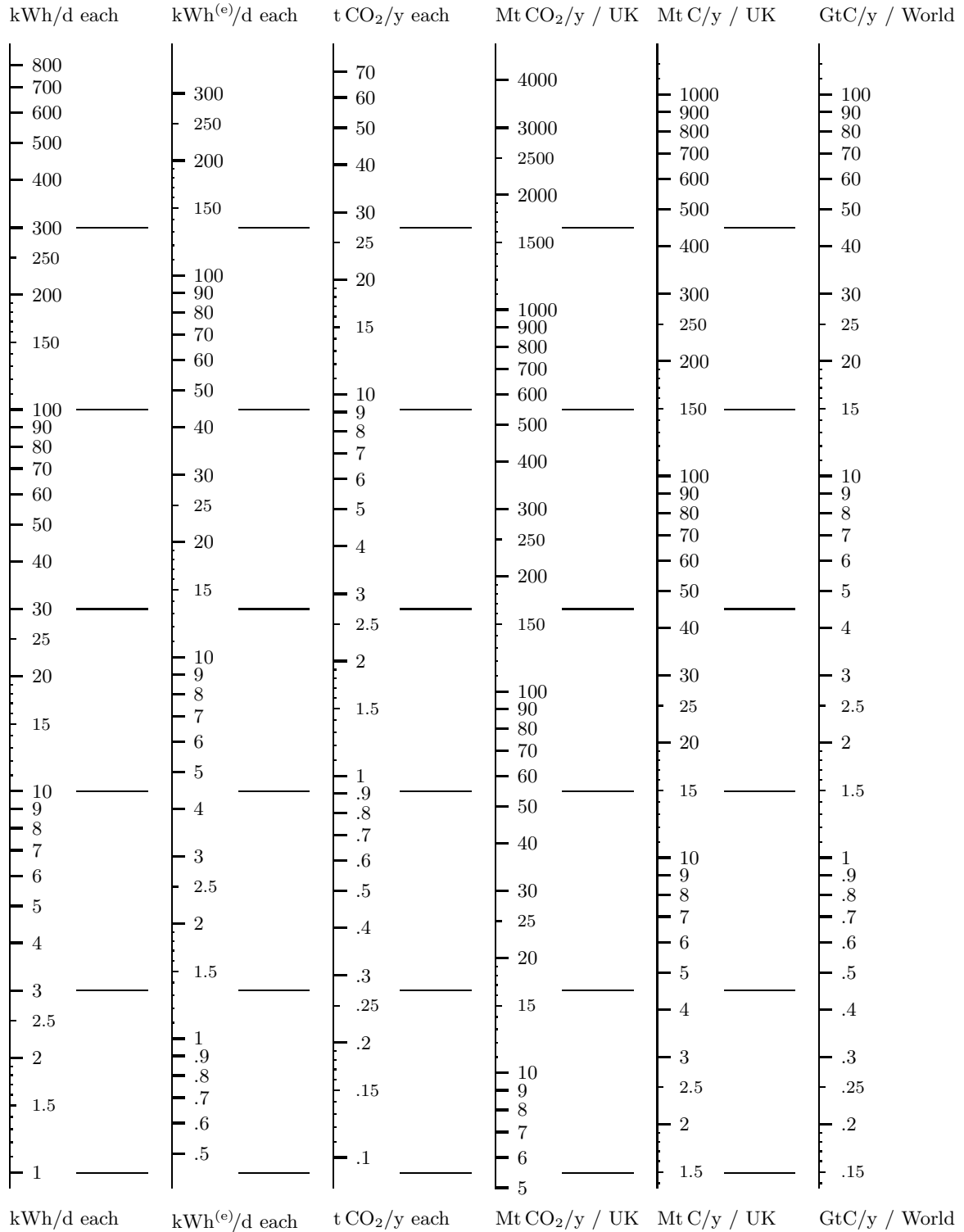
Power Crisis Quick Conversion Sheet



1 kWh/d the same as 1/24kW
 GW often used for 'capacity' of a power facility
 TWh/y often used for actual energy output
 1 Mtoe 'one million tonnes of oil equivalent'

'UK' = 60 million people
 USA: 300 kWh/d each
 Europe: 120 kWh/d each

Carbon Crisis Quick Conversion Sheet



1 kWh/d thermal energy exchange rate:
 1 kWh ↔ 250 g of CO₂ (oil, petrol)
 1 kWh^(e)/d electrical energy is more costly:
 1 kWh^(e) ↔ 445 g of CO₂ (gas)
 tCO₂ tonne of CO₂
 MtCO₂ million tonnes of CO₂
 GtCO₂ billion tonnes of CO₂

‘UK’ = 60 million people
 ‘World’ = 6 billion people
 UK: 150 MtC per year (2000)
 USA: 20 tCO₂/y each (1.5 GtC/y total)
 World: 7 GtC per year (2005)
 To avoid 2 C global warming, need < 2–3 GtC/y