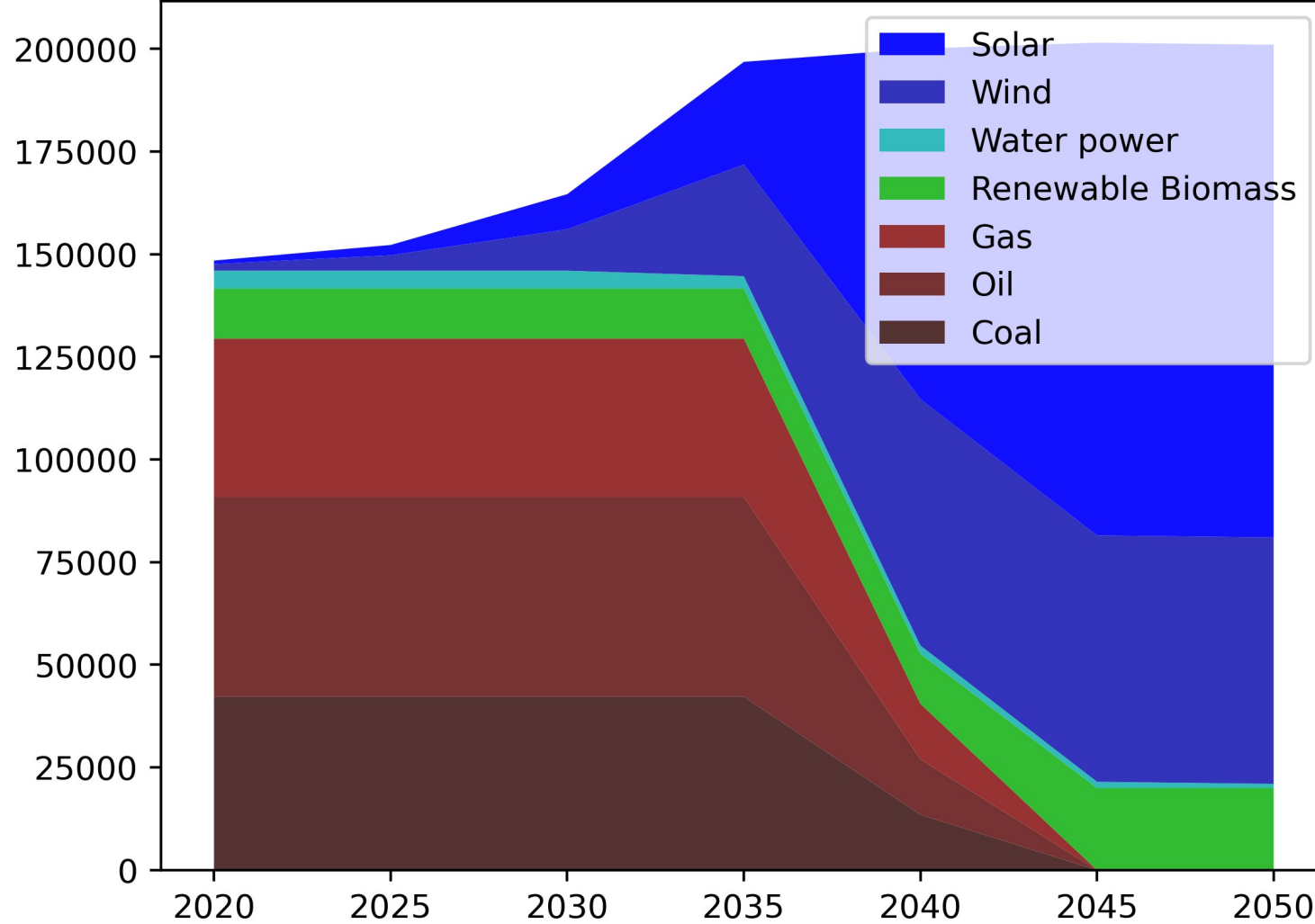


Energiebericht 2050

Fiktiver Bericht zur Energieversorgung 2050

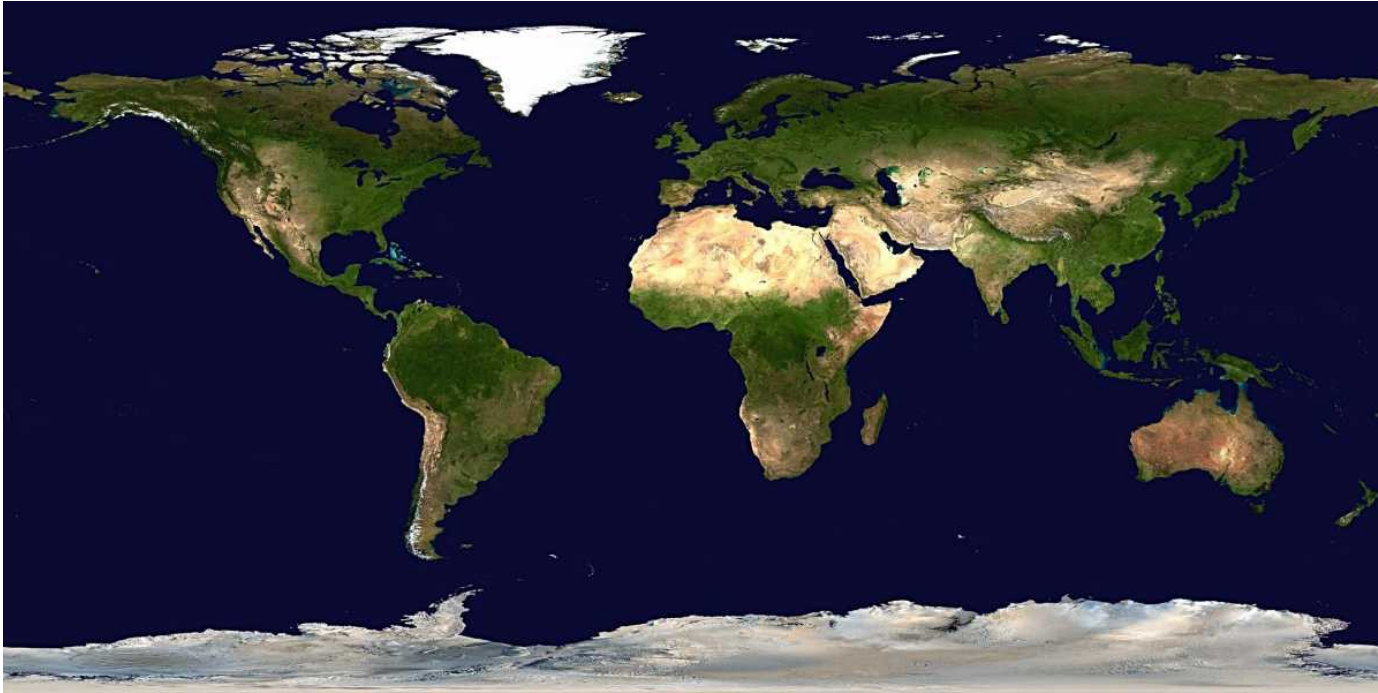
World Energy outlook '2050



Solar energy

- Is going to be really, REALLY cheap
- In aride deserts very reliable
 - > the only source; no storage required; very cheap
- Where people live not so reliable due to weather
 - > Diversification of risk (wind, biomass)
 - Land usage conflicts --> not so cheap

Solar energy – arid land



How to store energy

Multiple methods exist:

- None (consume directly)
- Batteries
- Hydrogen, Biomass, Thermal

Hydrogen and PtL

- Hydrogen is NOT an energy source !!!
- Hydrogen is difficult to deal with
- PtG (Power to Gas) is dangerous (explosions)
- PtL (Power to Liquid) has CARBON bottleneck
- Bottleneck in PtL is CARBON !!!
 - > Actually, PtL is "how to liquify biomass" ("reforming")
- Anyways, only relevant after 2035 or so, when oil stops.
- Oil infrastructure only makes sense if you consume a lot of it.