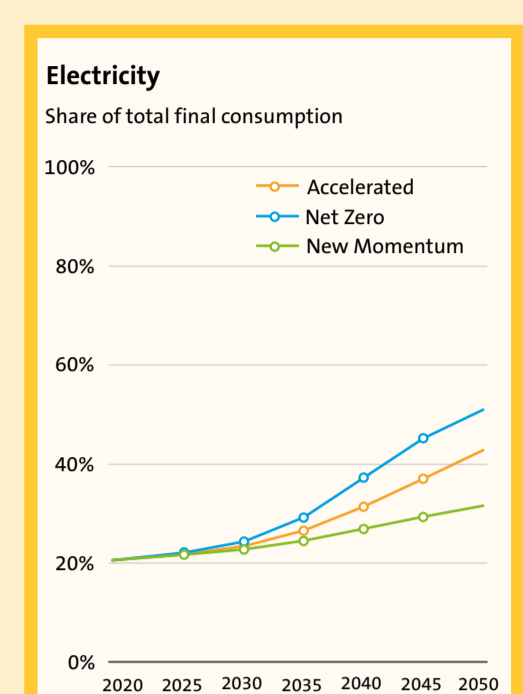
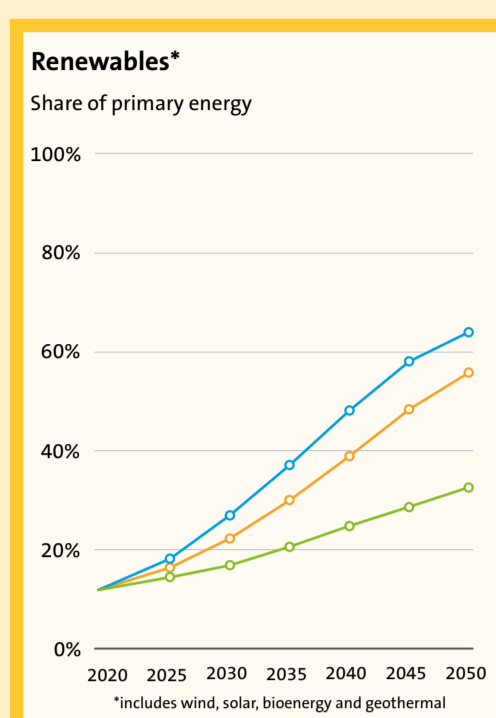
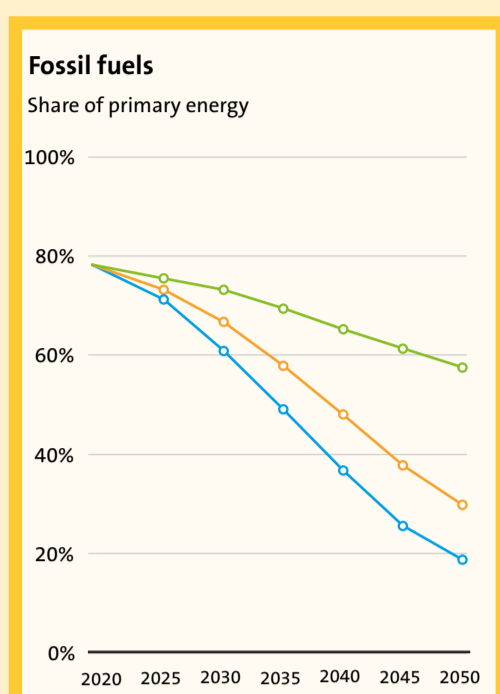


POWER SUPPLY & DEMAND

Power consumption expected to triple as living standards grow by 2050

Gradual shift in energy demand: declining role for hydrocarbons, rapid expansion in renewables and electrification

35% - 65%
of renewable power mix by 2050



FOSSIL FUELS



RENEWABLES



ELECTRICITY



OIL DEMAND

102 MMb/d
to peak in the next 2-5 years

50%
growth chemicals liquid demand by 2050

40%
growth aviation liquid demand by 2050

80-45%
decline in crude oil of total liquids by 2050



HYDROGEN DEMAND

100% shift from grey hydrogen (fossil fuels) → **60%** clean hydrogen by 2035

22 Mt
clean hydrogen capacity to date, expected to triple year on year in 2021

18,000 TWh
add to electricity consumption

~36%
of electric demand growth



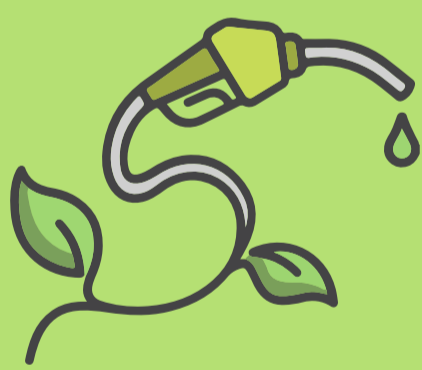
NATURAL GAS DEMAND

10%
growth in the next decade after 2030, to peak by 2035

20-70%
growth by 2050, demand for imported gas supplied by LNG. Particularly in Southeast Asia

SUSTAINABLE FUELS

The demand for sustainable fuels is projected to triple over the next 20 years



\$40 billion - \$50 billion
of investment expected by 2025. Further investments between

\$1 trillion - \$1.4 trillion are needed by 2040 to meet decarbonization commitments and regulated demand

Carbon capture, utilization and storage (CCUS)

~2-4 Gt by 2050, decarbonizing 45% of remaining emissions in the industry sector

~80% of CCUS uptake deployed in cement, iron and steel. H₂ production, subject to sector-specific uncertainties

CO₂ prices up to **\$150-\$205/ton** insufficient to accelerate CCUS uptake towards a net-zero trajectory

