

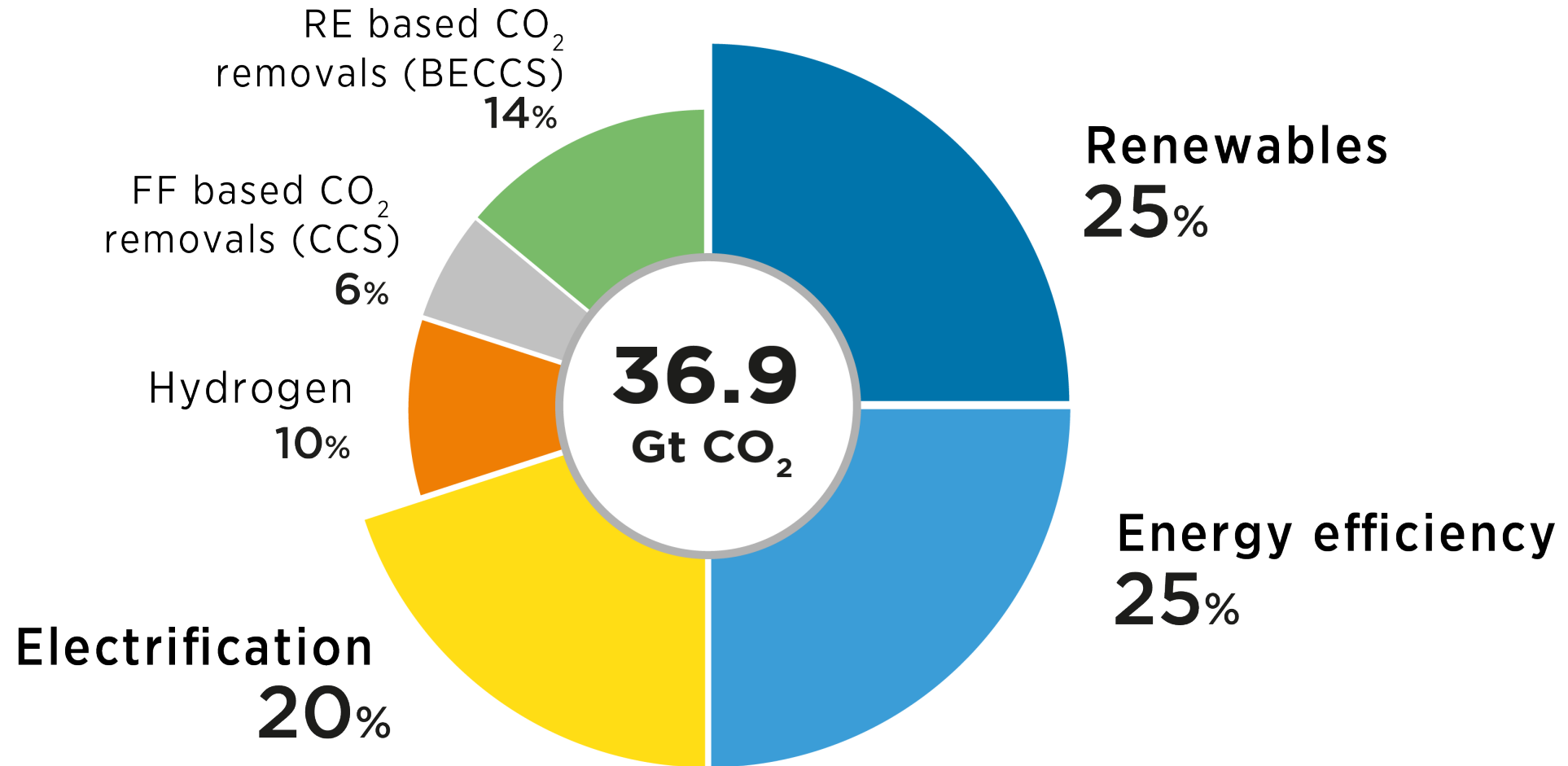


WORLD ENERGY TRANSITIONS OUTLOOK

1.5°C Pathway

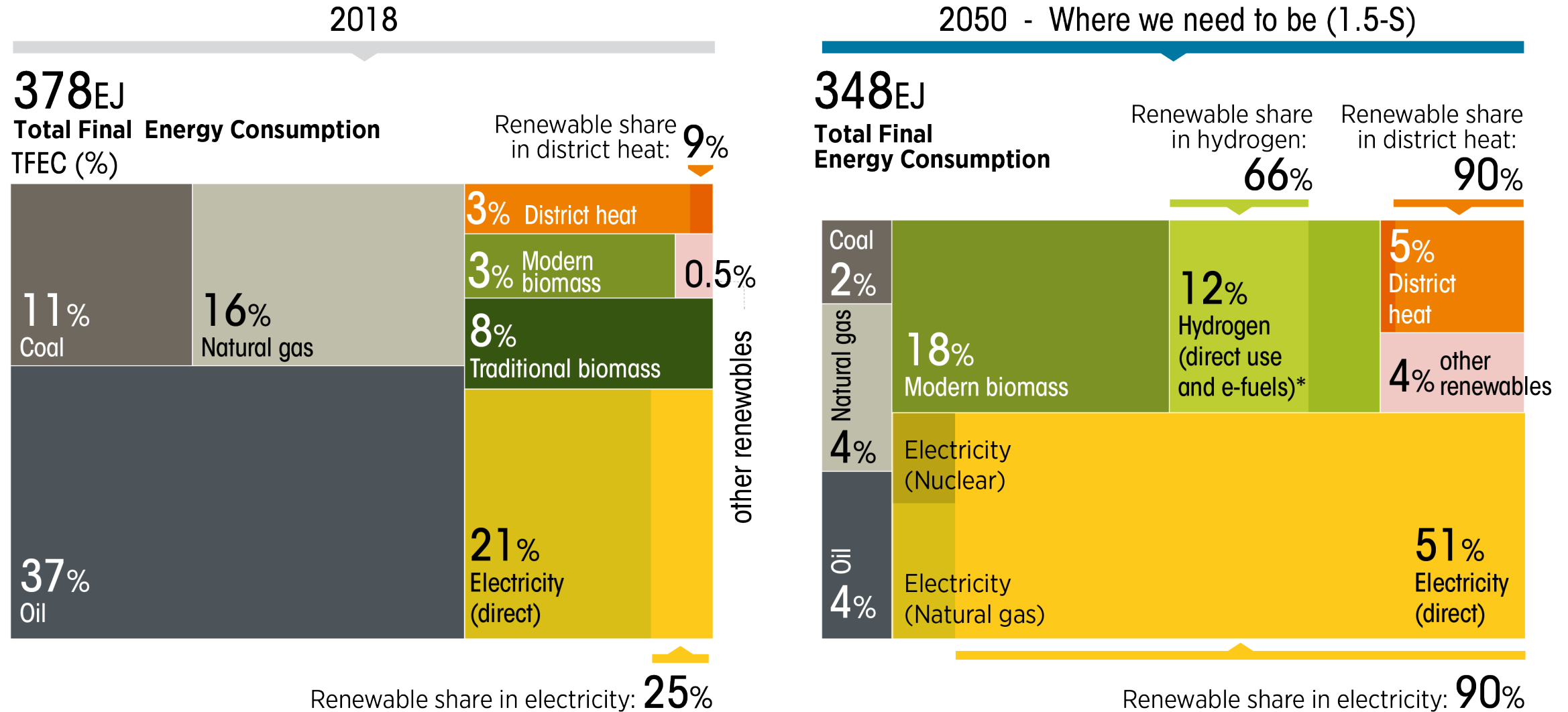
***Fast-Track Energy Transitions Pathways
to Win the Race to Zero and Emerging Information Needs***

Six components of the energy transition strategy



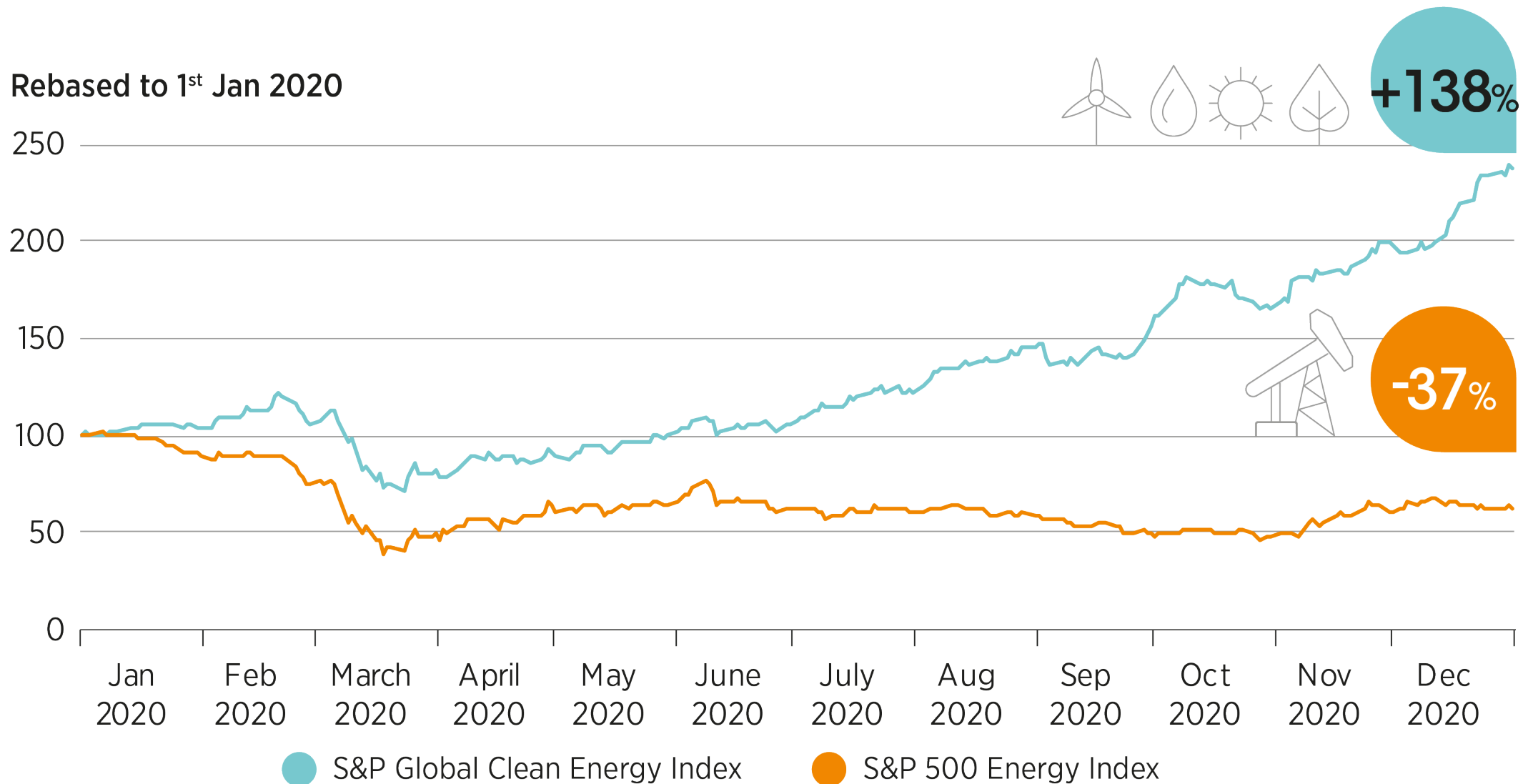
90% of all decarbonisation in 2050 will involve renewable energy through direct supply of low-cost power, efficiency, electrification, bioenergy with CCS and green hydrogen.

Electricity becomes the main energy carrier in 2050



90% of total electricity needs will be supplied by renewables by 2050.

Recent trends in financial markets



Investors and financial markets are anticipating energy transition and allocating capital away from fossil fuels towards energy transition technologies, such as renewables.

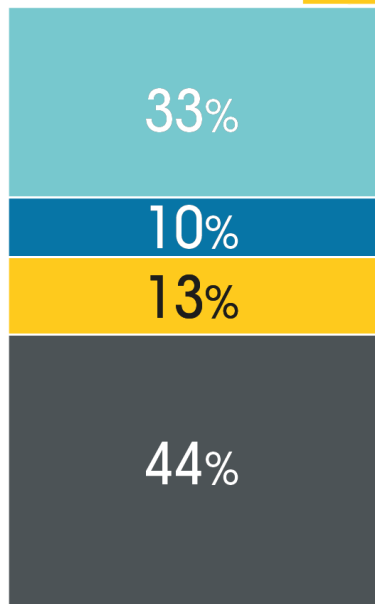
New investment priorities: renewables, efficiency and electrification

Where we are heading (PES)

Where we need to be (1.5-S)

3.4
trillion USD
per year

98
trillion USD



2021-2050

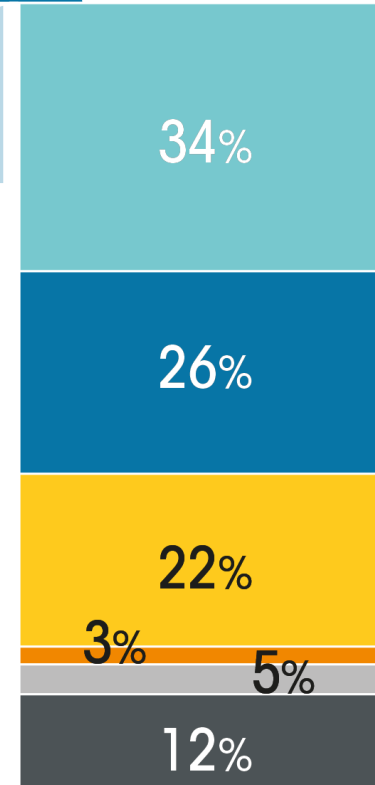
131
trillion USD

4.4
trillion USD
per year

Total additional
33 trillion USD

+1
trillion USD

Annual
additional

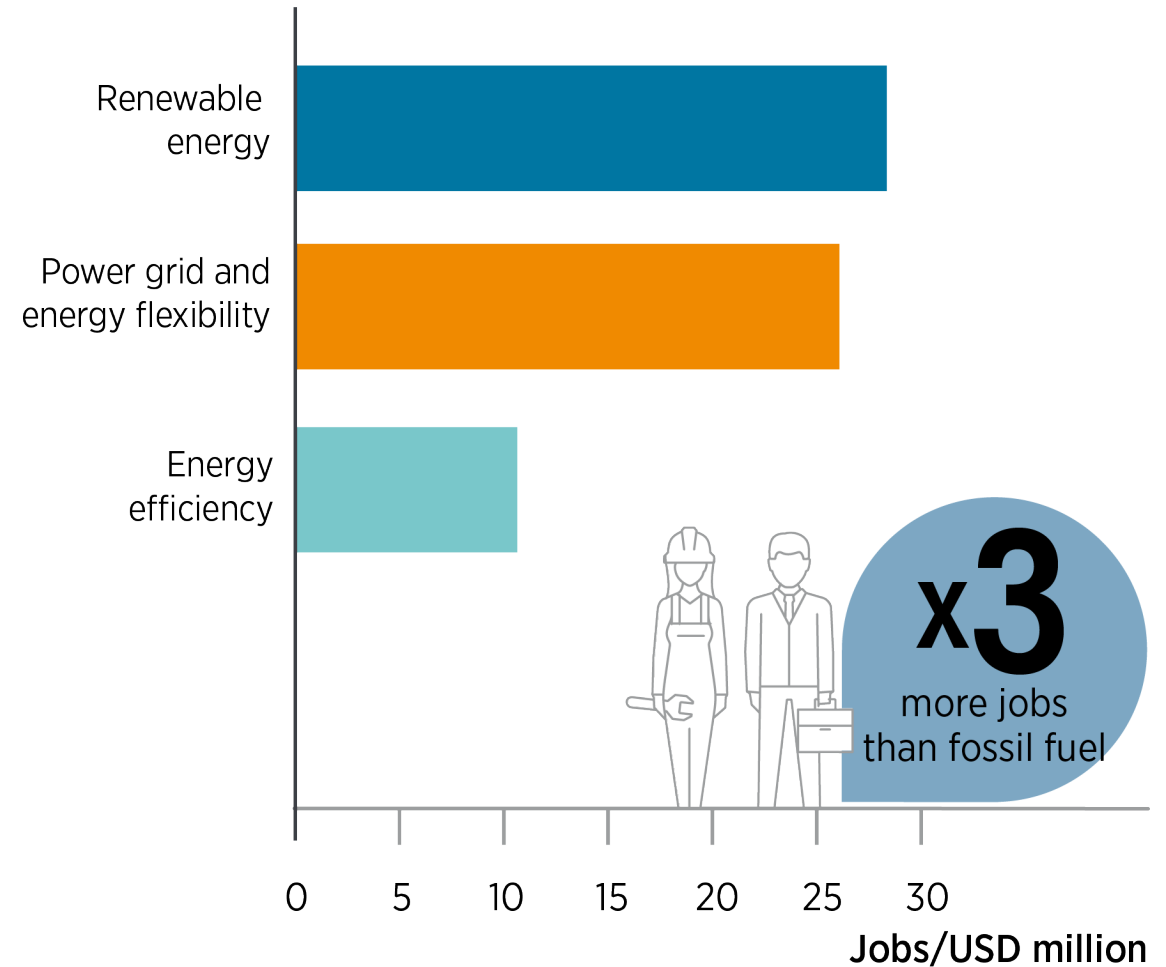
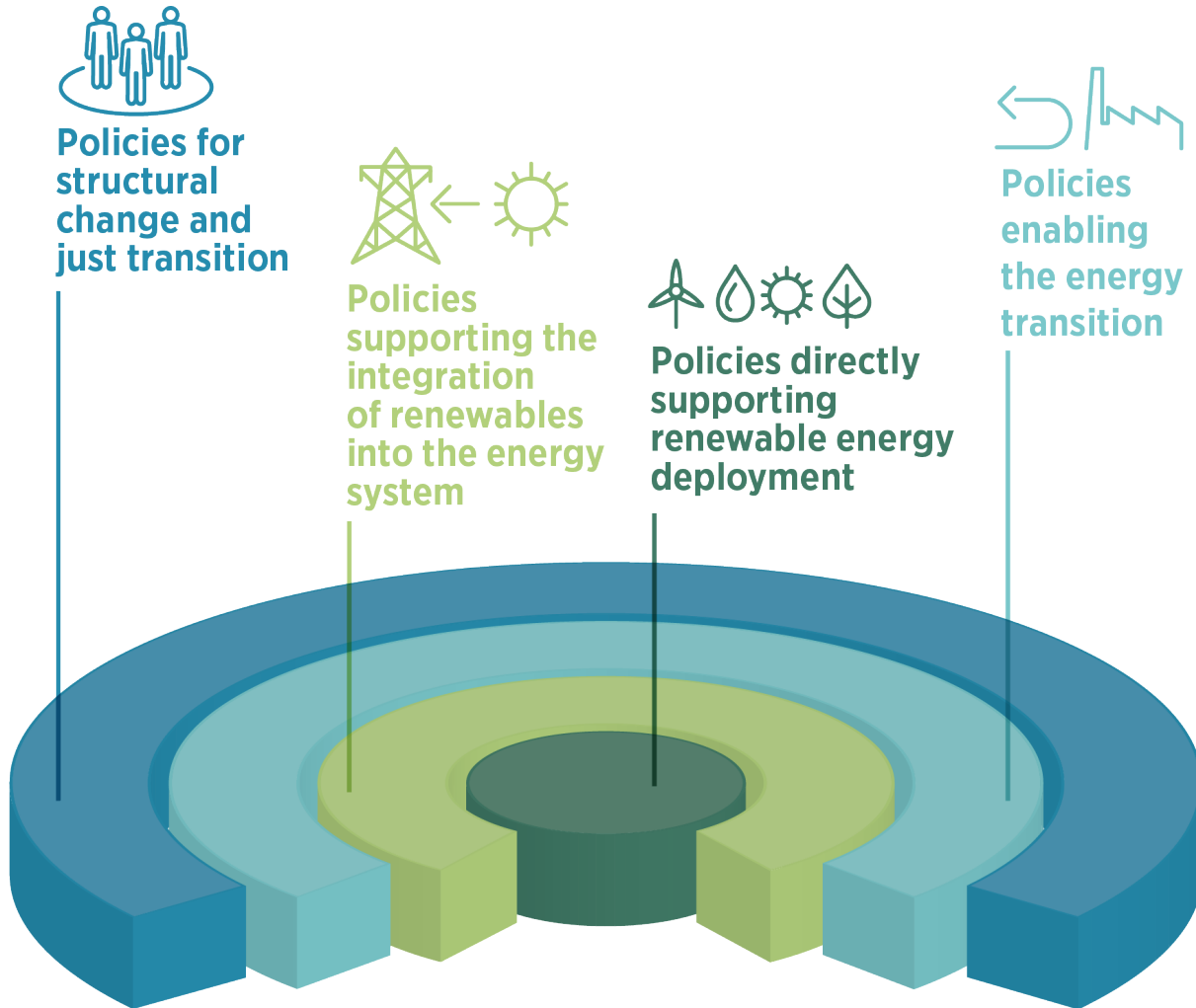


2021-2050

- Energy efficiency
- Renewables (power and direct use)
- Electrification and infrastructure
- Innovation
- Others (carbon removals and circular economy)
- Fossil fuel and nuclear

A climate-safe future calls for the scale-up and redirection of investments towards energy transition technologies, away from fossil fuels.

Broad set of policies required for a just transition





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