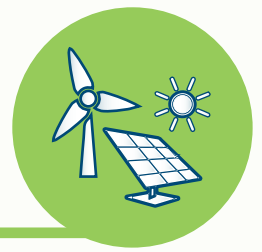
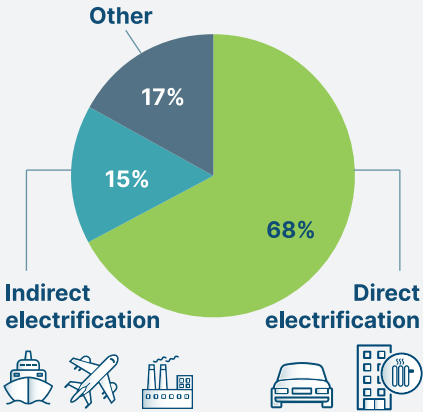


MAKING CLEAN ELECTRIFICATION POSSIBLE



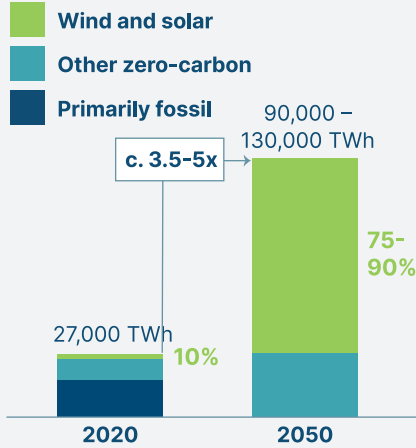
AN ELECTRIFIED ECONOMY

Final energy demand – ETC 2050 Indicative Scenario



A MASSIVE INCREASE IN CLEAN POWER PROVISION

Power generation, TWh



AT NO EXTRA SYSTEM GENERATION COST

All-in generation cost, \$/MWh

2020 fossil fuel-based

Generation: \$59

2030 VRE-based

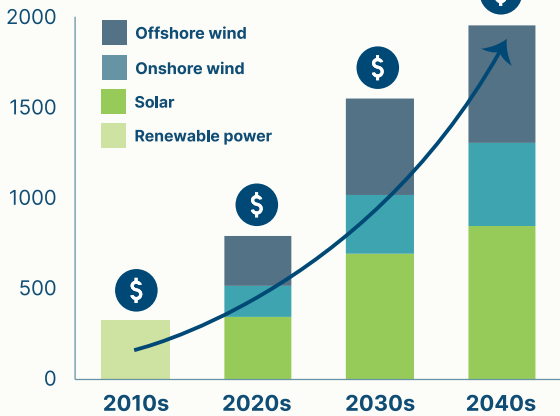
Generation: \$28

Flexibility: \$29

What will it take?

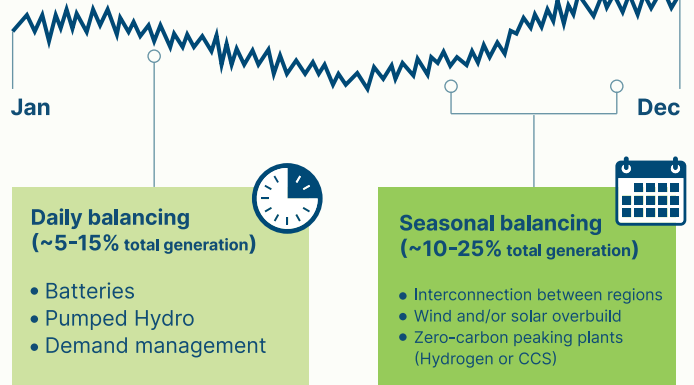
RAPID RAMP-UP IN WIND AND SOLAR INVESTMENT

\$ billion per annum

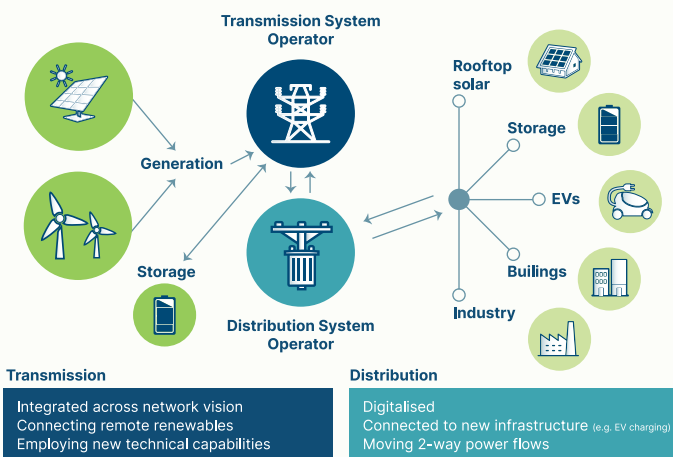


INCREASING FLEXIBILITY PROVISION

Indicative power demand profile



UPGRADING AND DIGITALISING T&D NETWORKS



PHASE OUT OF UNABATED FOSSIL FUELS GENERATION



CLEAN ELECTRIFICATION IN THE 2020S



2030 TARGETS:

ELECTRIFICATION

Global electricity use up 1.5 times

- EVs near 100% of new car sales in developed countries, 50%+ in developing countries
- Heating increasingly electrified, building retrofits under way

WIND AND SOLAR DEPLOYMENT

Wind and solar ~40% global generation

- 5-7x increase in annual wind + solar installations
- Scaling storage and flexibility deployment

FOSSIL PHASE OUT

Grid emissions intensity

Developed countries	Developing countries
<80 gCO ₂ /kWh	<180 gCO ₂ /kWh

- Immediate stop to new coal
- Meet all new electricity growth with wind and solar

6 CRITICAL ACTIONS

KEY EXAMPLES

