



POWER

Indicators for energy use in the Power sector



RENEWABLE ENERGY SHARE IN TOTAL ELECTRICITY GENERATION

RENEWABLE ENERGY INDICATORS



HYDROPOWER



WIND



SOLAR PV

CSP



BIOENERGY



GEOTHERMAL

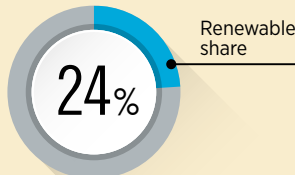
OTHERS (incl. marine, hybrid)

2015



20 204 TWh/yr

Electricity demand



1 248 GW
155 GW of which pumped hydro

411 GW
399 GW Onshore
12 GW Offshore

223 GW

5 GW

119 GW

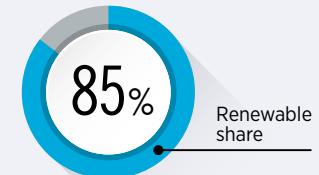
10 GW

0.3 GW

REmap Case 2050



41 508 TWh/yr



1 828 GW
325 GW

5 445 GW
4 923 GW Onshore
521 GW Offshore

7 122 GW

633 GW

384 GW

227 GW

881 GW

ENERGY RELATED CO₂ EMISSIONS

12.4 Gt CO₂/yr

1.9 Gt CO₂/yr

Avoided CO₂ emissions in 2050 compared to Reference Case: 8.8 Gt CO₂/yr

INVESTMENT

Total investments for decarbonisation for the period 2015-2050



→ POWER GENERATION
24.6 USD trillion

→ POWER SYSTEM FLEXIBILITY AND GRID*
18 USD trillion

STRANDED ASSETS

for the period 2015-2050

Delayed Policy Action
1.4 USD trillion

REmap Case 2050
1 USD trillion

* This includes investments needed for transmission and distribution grid expansion, increased generation flexibility, electricity storage.