After the rapid rise in investment in the 2000s, a pause

$1.6 trillion was invested in 2013 to provide consumers with energy, a figure that has more than doubled in real terms since 2000
Renewables come of age, but fossil fuel investment still dominant

Investment in renewables rose from $60 billion in 2000 to a high point approaching $300 billion in 2011, before falling back since
States hold many of the cards

Ownership of worldwide power plants, hard coal production, and oil & gas reserves

Alongside investment by the private sector, the objectives, corporate culture & financing of state-owned companies are critical to future energy investment flows
Governments, not market signals, are driving power sector investment

With current market designs, competitive parts of markets require less than $1 trillion of cumulative investment to 2035 out of total power sector needs of $16.4 trillion
Will Europe keeps the lights on?

- Over the past decade, four-fifths of investment in European power generation went to renewables, 60% just to wind and solar PV.

- Europe needs to invest $2.2 trillion (2nd largest after China) to 2035 to replace ageing infrastructure & meet decarbonisation goals.

- This investment won’t happen with current market rules: wholesale power prices are 20% (or 20$/MWh) below cost-recovery levels.

- Current overcapacity offers some breathing space, but 100 GW of new thermal plants is needed before 2025 to safeguard reliability.

- Higher wholesale prices could increase end-user bills, adding to the strain on households & on competitiveness of EU industry.
A new investment landscape for a 2 °C world

Investment in the New Policies and 450 Scenarios, 2014-2035

Efficiency spending is $6 trillion higher & the composition of supply investment changes: CCS is widely deployed, $300 billion of fossil fuel investment is left stranded
Committing capital in a fast-changing energy world

- The role of governments in energy markets is on the rise, while private investors are wary of political and regulatory risks.

- Energy investments are moving to areas with high up-front costs, complicating the task of securing finance.

- Without reform to power markets, the reliability of Europe’s electricity supply is under threat.

- Credible policy & pricing signals, plus new financing vehicles, are essential to re-direct capital flows towards a 2 °C target.