Tipping the energy world off its axis

- Four large-scale upheavals in global energy set the scene for the new Outlook:
  - The United States is turning into the undisputed global leader for oil & gas
  - Solar PV is on track to be the cheapest source of new electricity in many countries
  - China’s new drive to “make the skies blue again” is recasting its role in energy
  - The future is electrifying, spurred by cooling, electric vehicles & digitalisation

- There are many possible pathways ahead & many potential pitfalls if governments or industry misread the signs of change
As China moves global energy markets, again

Change in world energy demand by fuel

Low-carbon sources & natural gas meet 85% of the increase in global demand: China’s switch to a new economic model & a cleaner energy mix drives global trends
US remains undisputed leader of gas production

Rise in US shale gas output versus the steepest ramp-up in gas production in the Soviet Union

United States shale gas output growth, 2008-2023

Soviet Union total gas output growth, 1974-1989

US shale growth between 2008 and 2023 is probably unprecedented in gas markets, exceeding the growth achieved by the Soviet Union between 1974 and 1989
Shale boom is turning US into major energy exporter

The US is set to become the largest LNG exporter by the mid-2020s and a net-exporter of oil in the late 2020s
Asia’s growing gas import requirements are largely met by LNG, with exports from the US accelerating a shift towards a more flexible, liquid global market.
The EU faces a different set of challenges

Even with a flat demand outlook, the European Union’s gas imports increase to 2040 as domestic output continues to decline.
EU is ready to take more LNG

Natural gas imports in the European Union in the New Policies Scenario

EU gas imports grow but so does supplier diversity, not least due to a boost in LNG trade
China a major force in global gas markets

Industrial gas demand leads the way as China accounts for one-quarter of global gas growth to 2040; China’s growing import needs become a major spur for investment in new global supply.