KEY GRAPHS
World energy demand expands by 45% between now and 2030 – an average rate of increase of 1.6% per year – with coal accounting for more than a third of the overall rise.
The increase in China’s energy demand to 2030 – the result of its sheer market size & stronger economic growth prospects – dwarfs that of all other countries & regions.
All of the growth in global oil demand comes from non-OECD, with China contributing 43%, the Middle East 20% and other emerging Asian economies most of the rest.
Cumulative investment in energy-supply infrastructure of $26.3 trillion is needed, but the credit squeeze could delay spending – especially in the power sector.
Most of the incremental oil & gas comes from national companies in non-OECD countries, resulting in major structural changes in the energy industry & increased imports in the OECD.
The production-weighted average decline rate worldwide is projected to rise from 6.7% in 2007 to 8.6% in 2030 as production shifts to smaller oilfields, which tend to decline quicker.
Production reaches 104 mb/d in 2030, requiring 64 mb/d of gross capacity additions – six times the current capacity of Saudi Arabia – to meet demand growth & counter decline
Close to 80% of the projected increase in output of both oil & gas comes from national companies – on the assumption that investment is forthcoming
97% of the projected increase in emissions between now & 2030 comes from non-OECD countries – three-quarters from China, India & the Middle East alone.
While technological progress is required to achieve some emissions reductions, increased deployment of existing low-carbon technologies accounts for most of the CO₂ savings.
While energy-related CO₂ will continue to dominate, there is strong potential to reduce other emissions through improved efficiency, better farm management & reduced gas flaring.