

## WORLD ENERGY OUTLOOK 2015 FACTSHEET

### *Oil and a low-oil price world*

- ▶ **The plunge in oil prices has set in motion the forces that will lead the market to rebalance, via higher demand and lower growth in supply.** This may take some time, as oil consumers are not reacting as quickly to changes in price as they have in the past. Although the rise of tight oil has created scope for more short-term flexibility on the supply side, there is still a significant time lag in the response of most sources of production to a change in price.
- ▶ **In the New Policies Scenario, demand initially grows at an average of 900 kb/d per year until 2020, but this subsequently slows, with global demand reaching 103.5 mb/d in 2040, up nearly 13 mb/d on 2014 levels.** By 2040 OECD consumption has fallen by 11 mb/d but this is almost exactly cancelled out by the twin pillars of demand growth: India and China (up 6 mb/d and 5 mb/d respectively). Elsewhere the Middle East sees oil demand climb by 3.5 mb/d, other non-OECD Asian countries by 2.7 mb/d, and Africa by 2.5 mb/d. The transport and petrochemicals sectors add 16.5 mb/d to 2040, offset only partially by slight reductions in the power sector and use in buildings. Oil demand for aviation grows faster than any other sector, with the industry's goal of carbon-neutral growth post-2020 out of reach without offsets from other sectors.
- ▶ **OPEC's decision to maintain its production target has forced non-OPEC producers into the front line of the market rebalancing.** Cuts of more than 20% in upstream investment by many oil companies in 2015 have been compensated only in part by a fall in supplies and services costs. This negatively affects the medium-term outlooks for production from numerous non-OPEC countries, including Brazil, Russia and Canada. Within OPEC, output growth is led by Iraq and Iran, although both face distinct challenges to mobilise the necessary investment. The possibility of sanctions relief in Iran raises long-term projected output up to 5.4 mb/d, while Iraqi production more than doubles to nearly 8 mb/d by 2040.
- ▶ **The short investment cycle of US tight oil and its ability to respond quickly to price signals are changing the way that the oil market operates.** The plunge in prices means US tight oil production is now stumbling: if prices out to 2020 remain under \$60/bbl, without a rapid evolution in drilling efficiency and technology learning, tight oil production in the United States will likely see a substantial decline in output. However, with tighter markets leading to higher mid-term prices in the New Policies Scenario (\$80/bbl in 2020) US tight oil ultimately resumes its upward march, growing by 1.5 mb/d by 2020 to over 5 mb/d.
- ▶ **But the prospect of oil prices remaining low for an extended period cannot be ruled out.** In the Low Oil Price Scenario, a new oil market equilibrium emerges at prices in a \$50-60/bbl range that last until well into the 2020s before edging higher to \$85/bbl in 2040. Key assumptions to bring this scenario about are: sluggish near-term economic growth; a stable Middle East in which key producers look to increase their share of the market; and resilient performance from key non-OPEC producers, particularly US tight oil.
- ▶ **Lower prices stimulate oil use and diminish the case for efficiency investments and switching to alternative fuels.** In the Low Oil Price Scenario, demand is pushed up to over 107 mb/d by 2040, nearly 4 mb/d higher than in the New Policies Scenario, with most of the incremental demand coming from transport. While oil consumers and importers benefit economically, the consequent rise in dependence on supply from the Middle East may raise concerns over oil security. Oil producers and exporters are worse off, as the volume gains from higher output are more than offset by the effect of lower prices. Some \$800 billion in energy efficiency investments from the New Policies Scenario fail to materialise over the period to 2040. Without additional policy efforts, low oil prices could lock in a less efficient and less climate-friendly capital stock that leads to higher long-term emissions.
- ▶ **The strains that the sustained low price would put on the fiscal balances of key OPEC producers make a Low Oil Price Scenario look increasingly unlikely the further it is extended into the future.** By stimulating demand and choking off supply, the Low Oil Price Scenario ultimately contains the seeds of its own demise: indeed, the longer the oil price remains low, the greater the risk of a marked correction and large price upswing in the future.