



International
Energy Agency

Iraq Energy Outlook

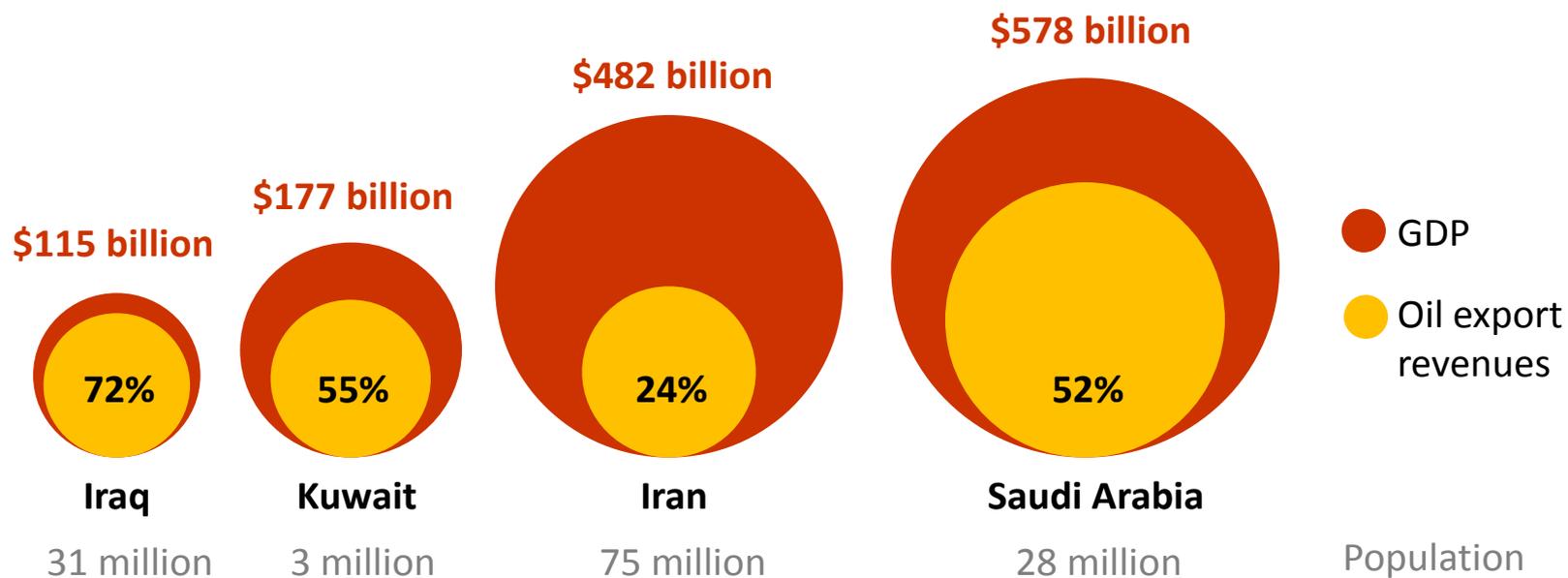
9 October, London

World Energy Outlook Special Report

- Oil & natural gas resources are immense & the costs of production are among the lowest in the world
- Already the world's 3rd largest oil exporter, with plans to expand oil & natural gas production rapidly
- Natural gas is an under-utilised resource – more than half of the natural gas produced is flared
- Catching up & keeping pace with rising demand for electricity is critical to national development
- Energy infrastructure & institutions, while improving, continue to be a serious constraint:
 - *Legacy of damage & poor maintenance*
 - *Lack of consensus on governance of the hydrocarbons sector*

Oil is the cornerstone of Iraq's economy

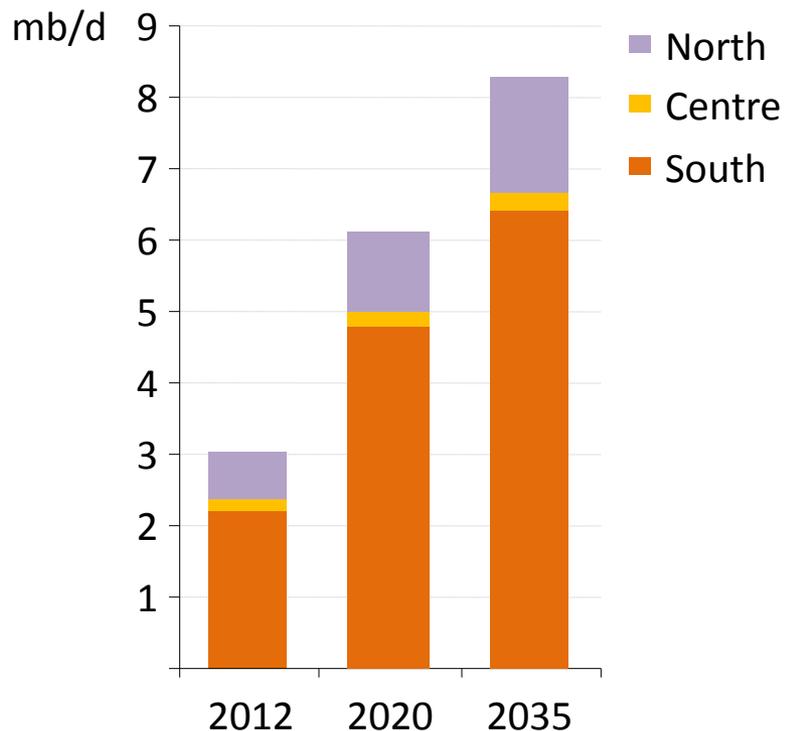
GDP, share of oil export revenues, population in 2011



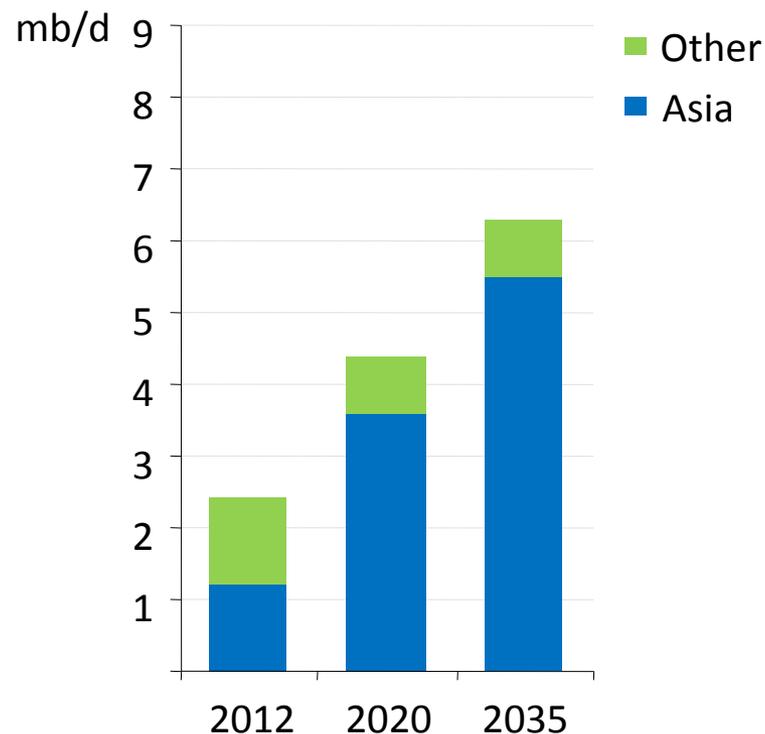
Twin challenges for Iraq are to increase its oil revenues & then to use them to support greater diversification of its economy

Oil is poised for a major expansion

Iraq oil production



Iraq oil exports



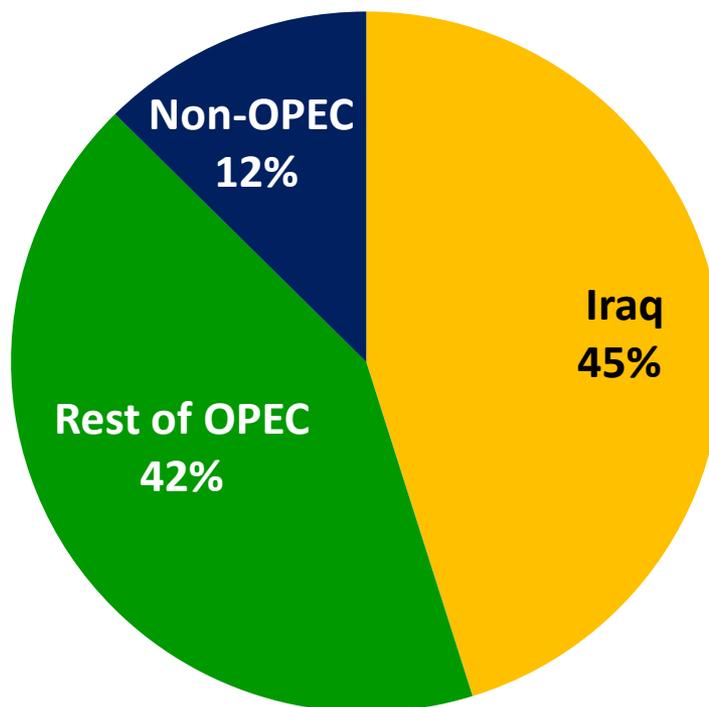
Production more than doubles by 2020 & reaches more than 8 mb/d by 2035, with Iraq becoming a major supplier to Asian markets, especially to China & India

What will determine the pace of growth?

- **Political consensus on oil governance & legal framework**
- **Speed & coordination of investment along the supply chain**
 - *Avoiding bottlenecks in storage & transportation*
 - *Sufficient water to support oil production*
 - *Drilling rigs & expertise*
- **Iraq's long-term oil & natural gas development strategy**
 - *Our High Case of 9 mb/d by 2020 would equal the highest sustained growth in the history of the oil industry*
- **International market conditions**

Iraq leads global oil production growth

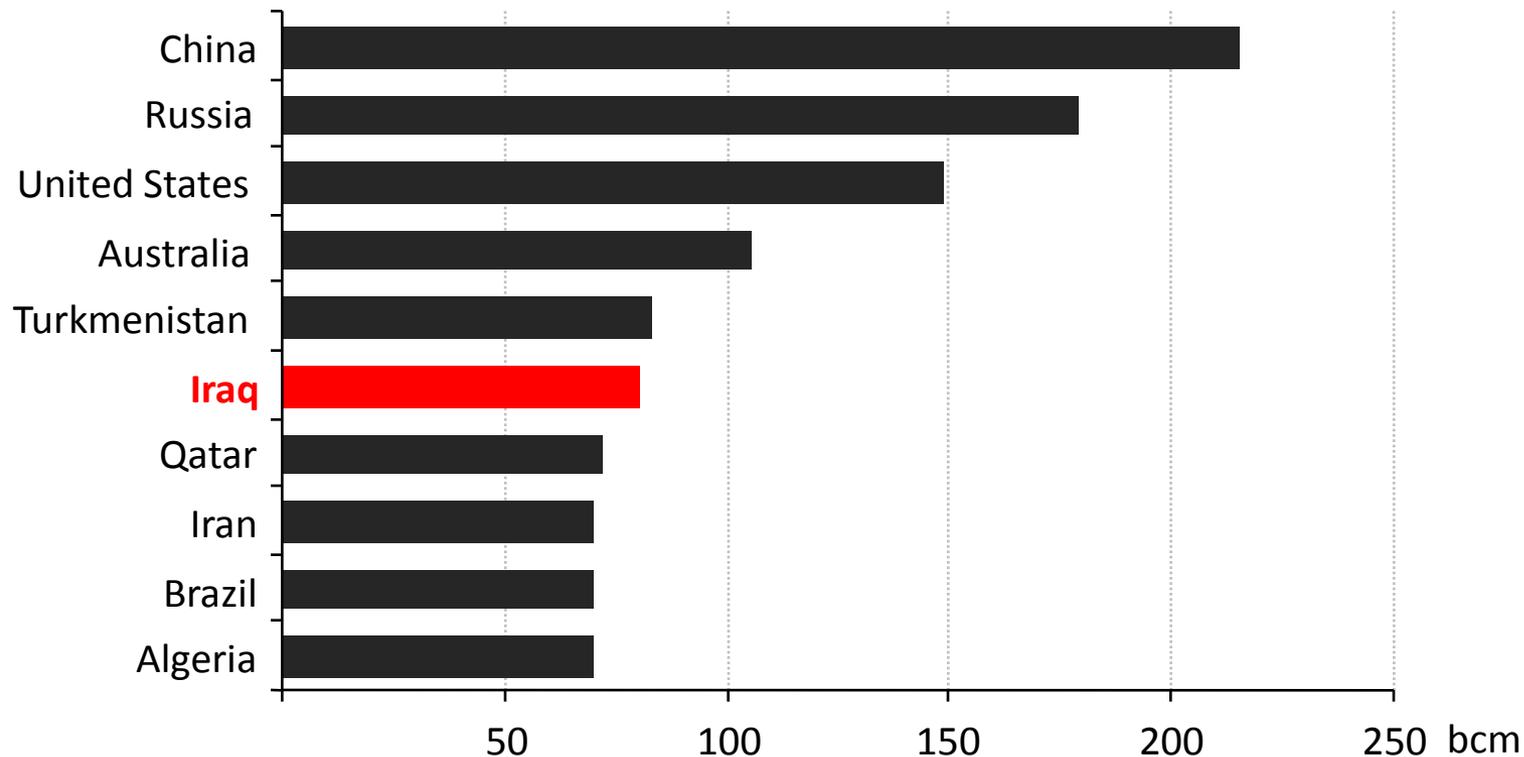
Growth in oil production, 2011-2035



Iraq accounts for 45% of the growth in global production to 2035; by the 2030s it becomes the second-largest global oil exporter, overtaking Russia

Iraq takes its place on the global gas map

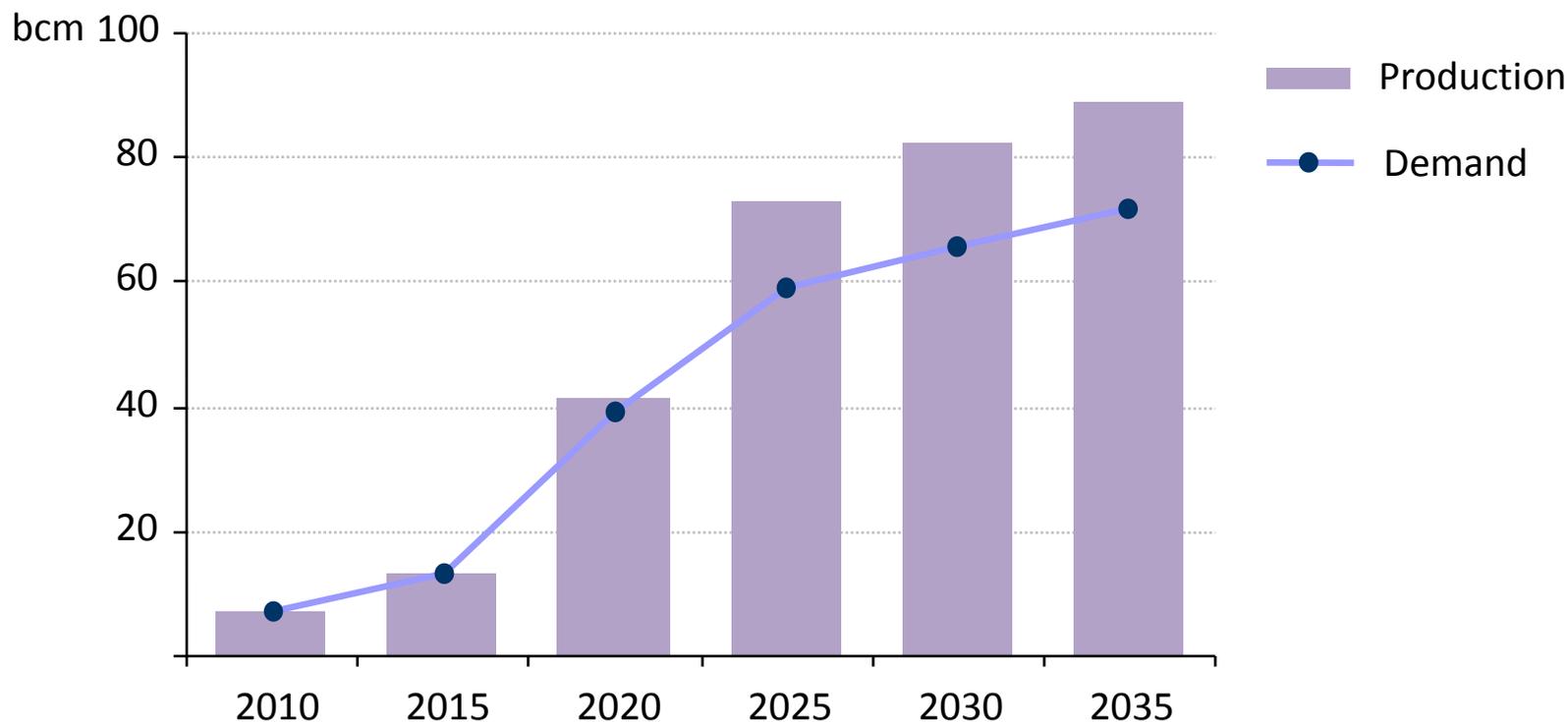
Growth in key natural gas producers, 2011-2035



Iraq can potentially provide a very cost-competitive gas supply by pipeline to neighbouring countries or to Europe and – via liquefied natural gas – to Asia

Gas moves from sideshow to centre stage

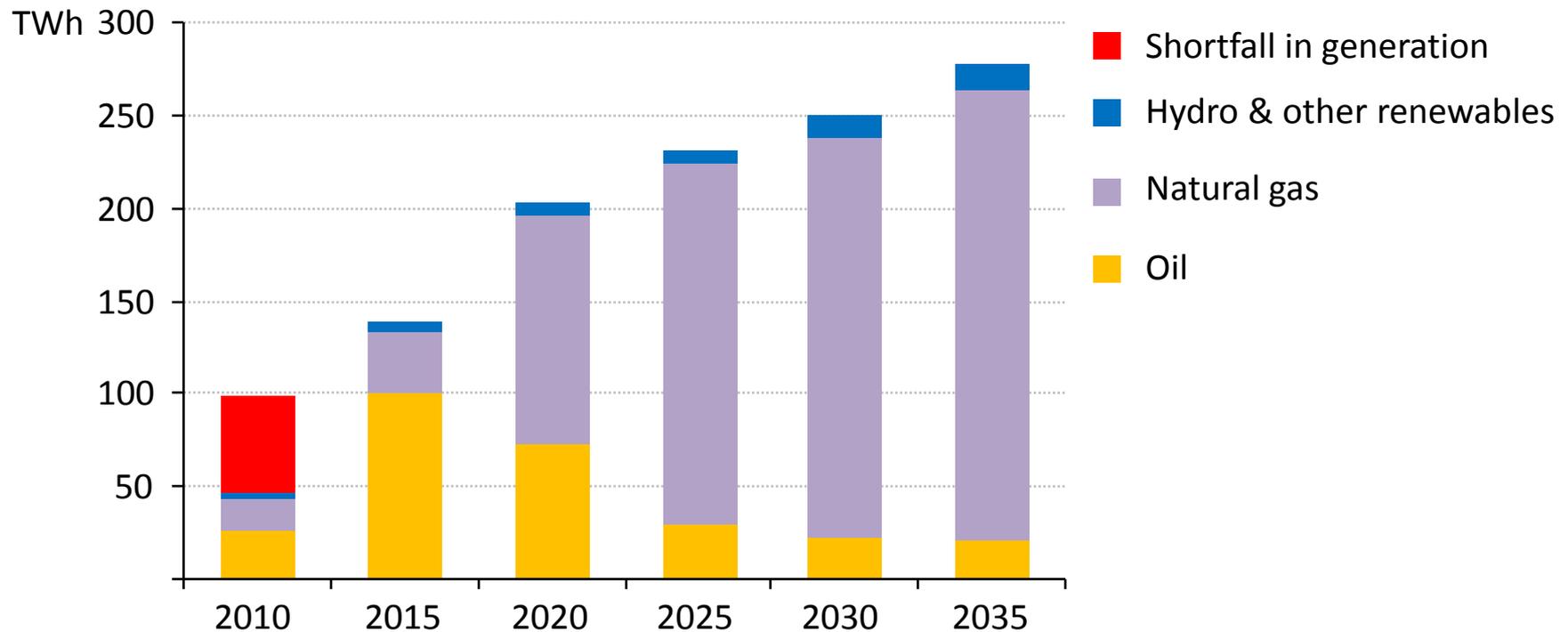
Iraq's natural gas balance



Reductions in gas flaring & development of new gas fields will be needed to meet Iraq's growing domestic needs & its export ambitions

Catching up with power demand

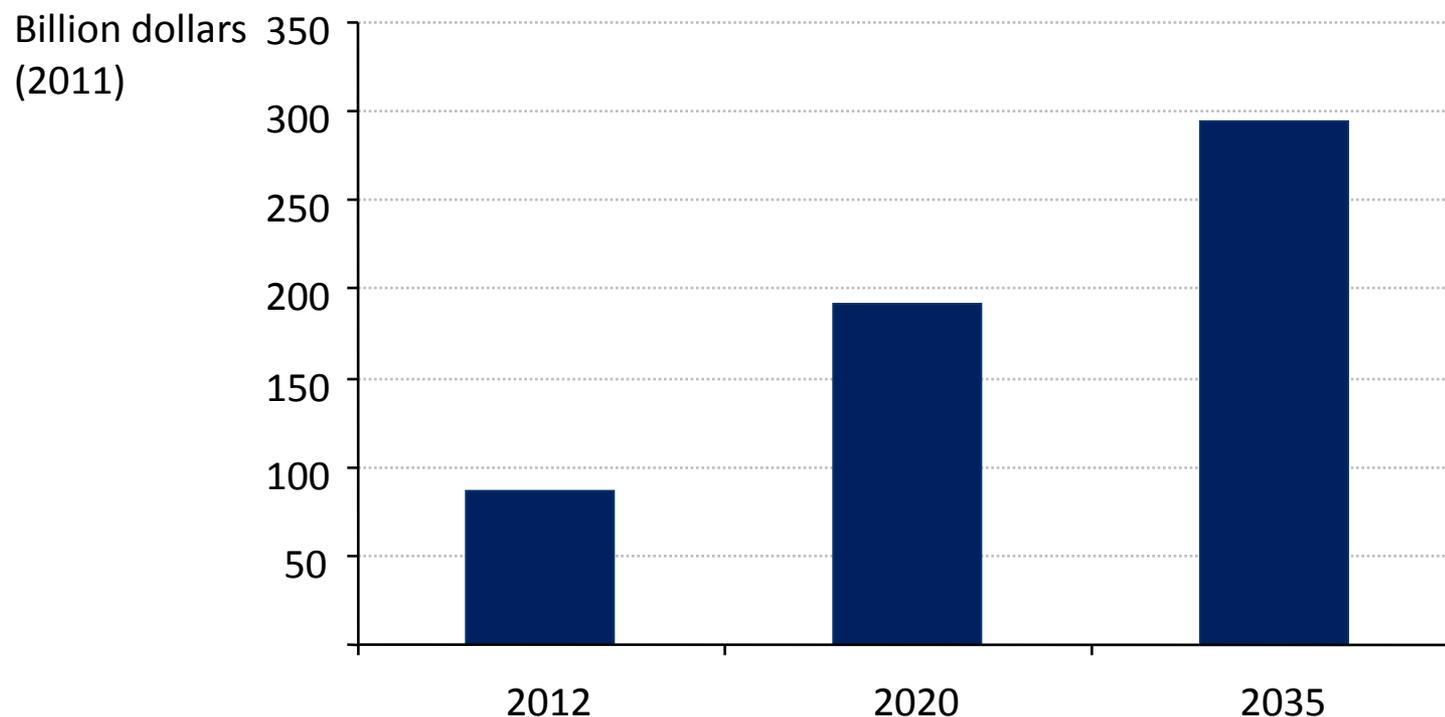
Iraq electricity generation



Oil helps to eliminate the power deficit in 2015. But without a longer-term shift to gas-fired power, Iraq would forego more than \$500 billion in oil export revenue

A chance to transform Iraq's prospects

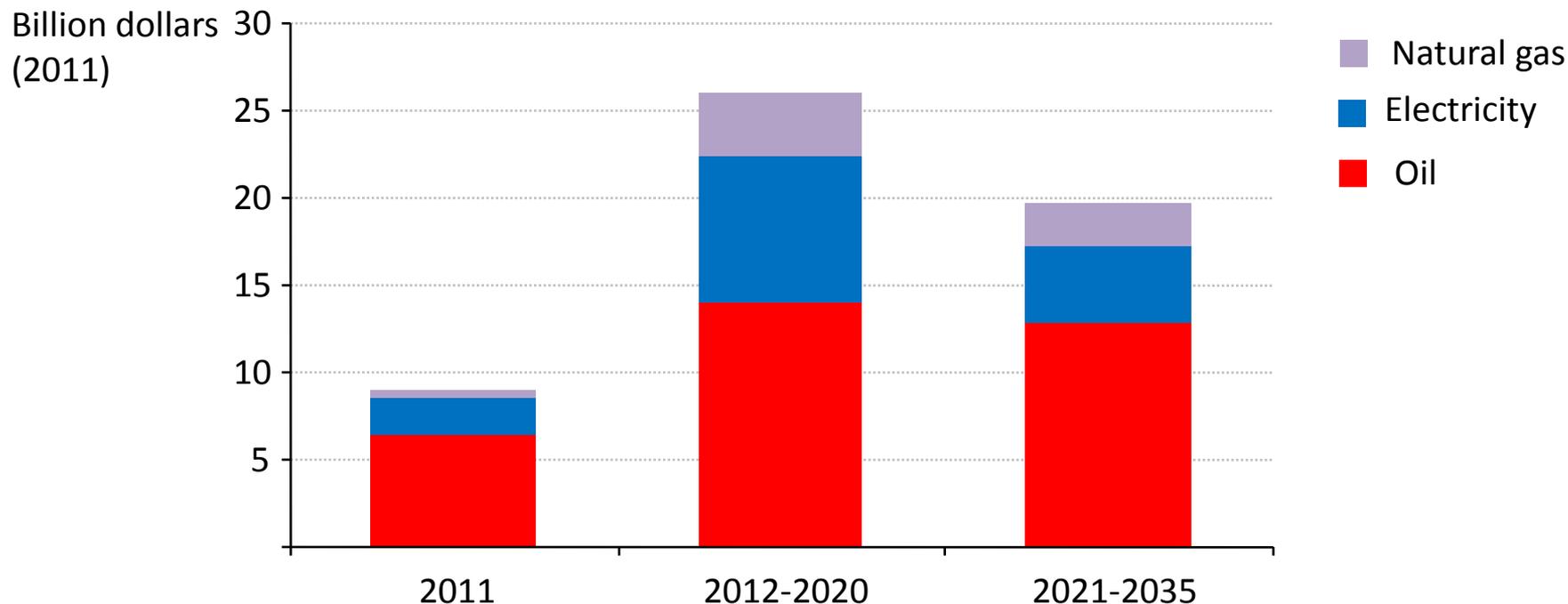
Iraq annual oil and natural gas revenues



\$5 trillion in cumulative export receipts is 10% of all revenues from global oil trade; Iraq's GDP in 2035 rises to the level of Saudi Arabia today

A step-change in energy investment

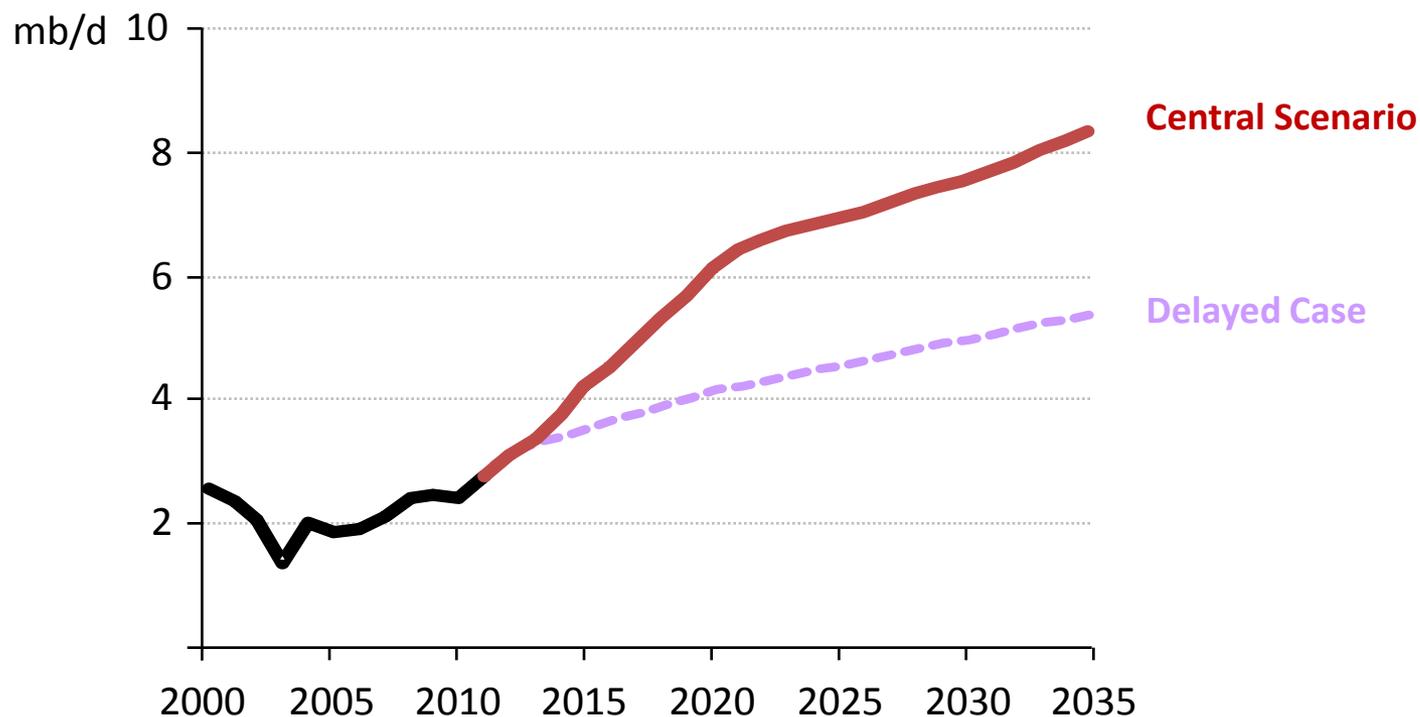
Iraq annual average requirement for energy investment



The overall investment bill of \$530 billion is 10% of oil export revenues, but annual spending needs to increase quickly over the current decade

Delay would come at a high price

Iraq oil production profiles



If investment & oil production growth is delayed then global oil markets tighten, with prices \$15 higher in 2035, & Iraq's cumulative GDP would be \$3 trillion lower

Iraq's transformation has global implications

- **With 45% of the anticipated growth in global production to 2035, Iraq is key to the long-term outlook for oil markets**
- **Successful oil & gas development requires a shared vision for the sector & efforts to coordinate investment all along the supply chain**
- **Delay would come at a high cost to Iraq and to international markets**
- **Productive use of natural gas is critical to a healthy domestic balance**
- **Oil export revenues can provide the foundations for a modern and prosperous Iraqi economy**