



International  
Energy Agency

# *Iraq Energy Outlook*

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*World Energy Outlook Special Report*

# ***Iraq: the energy context***

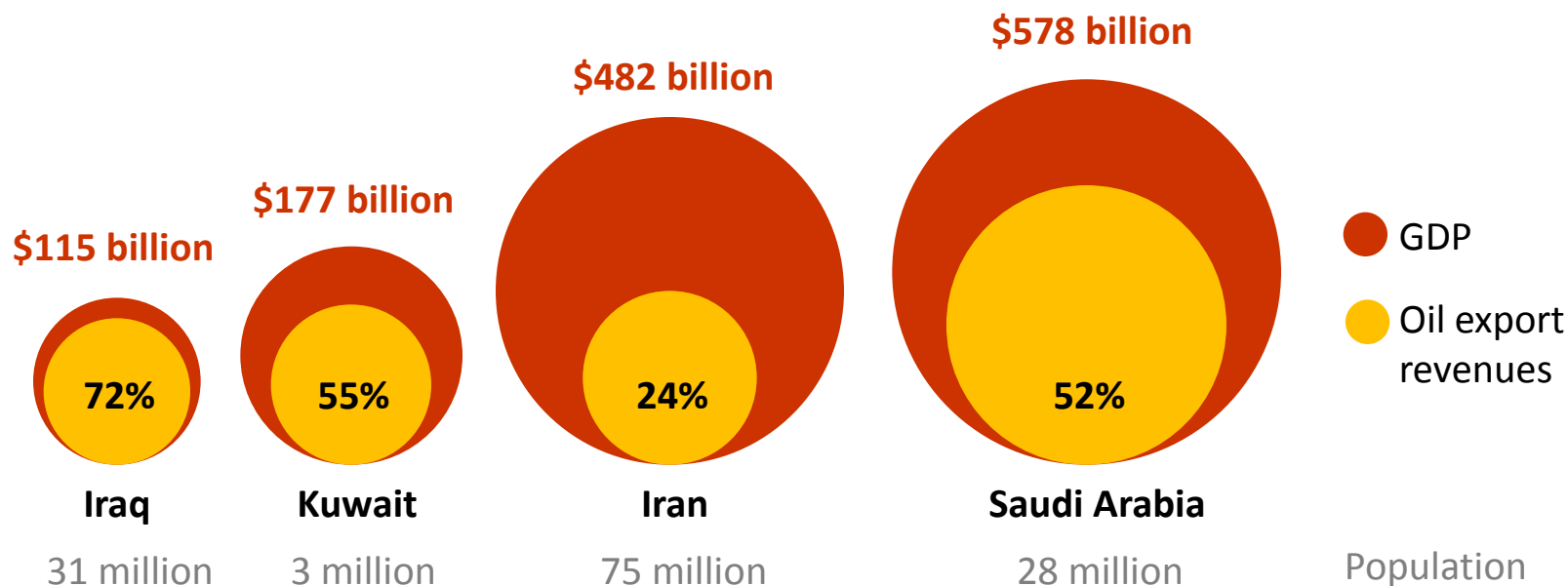
- Oil & natural gas resources are immense & the costs of production are among the lowest in the world
- Already the world's 3<sup>rd</sup> largest oil exporter, with plans to expand oil & natural gas production rapidly
- Natural gas is an under-utilised resource – more than half of the natural gas produced 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

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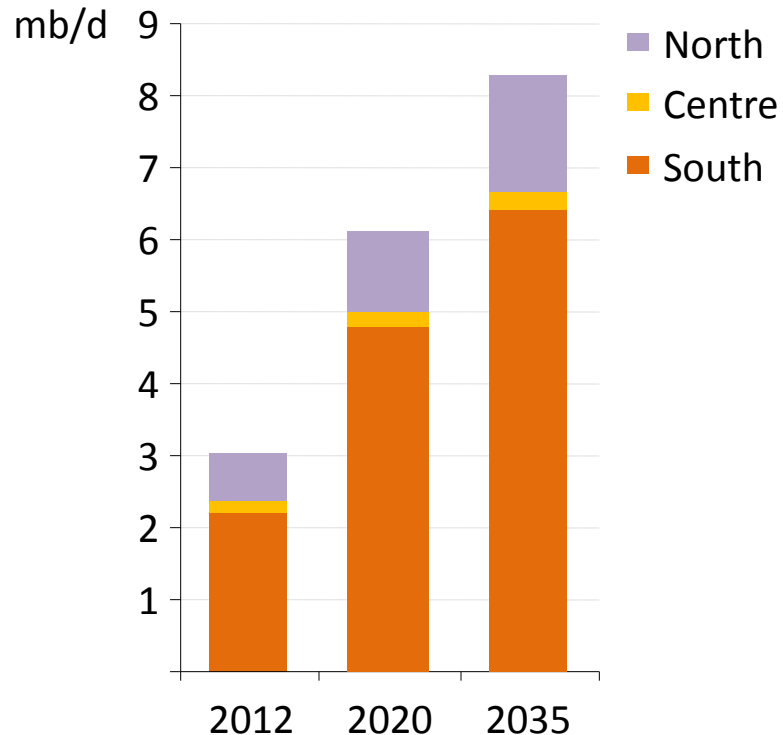
## GDP, share of oil export revenues, population in 2011



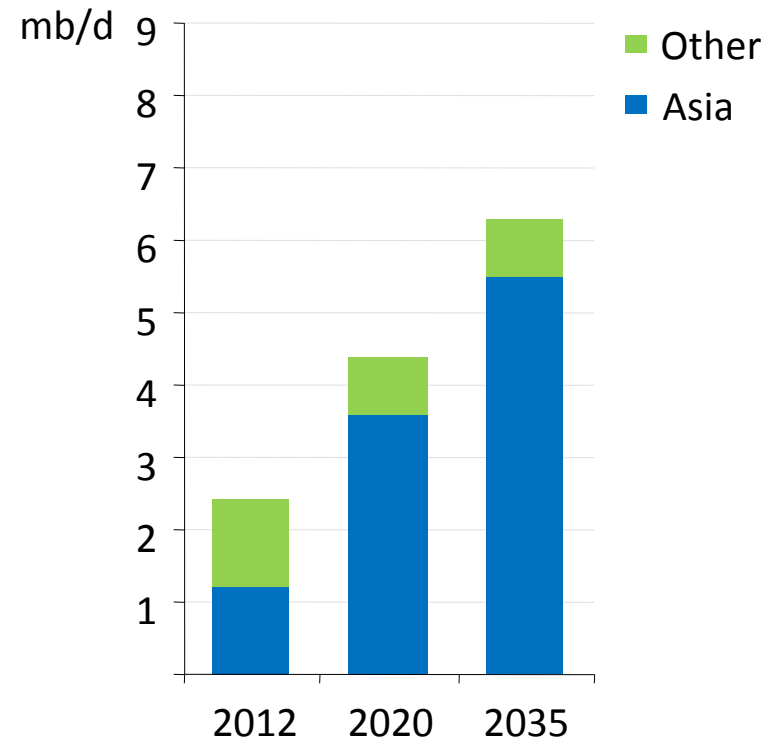
***Twin challenges for Iraq are to increase its oil revenues & then to use them to support greater diversification of its economy***

# 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?

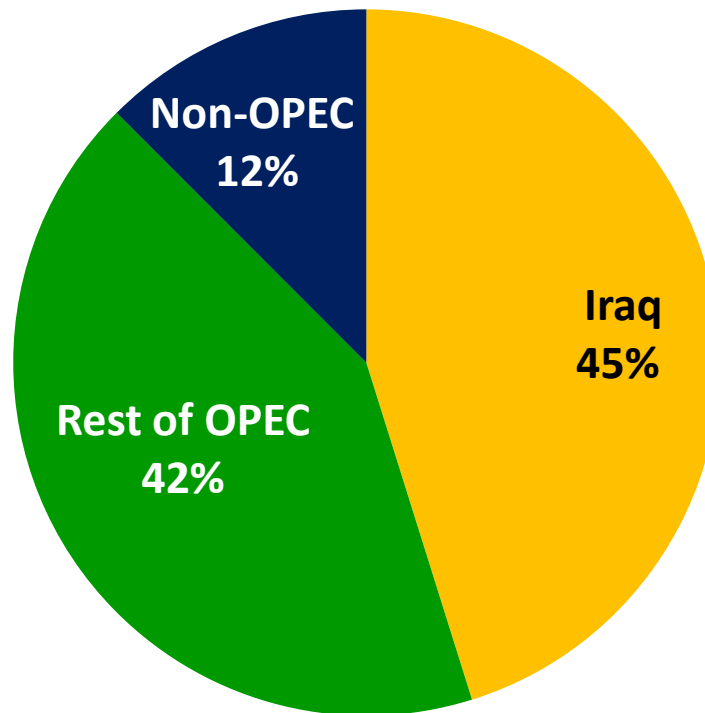
- **Political consensus on oil governance & legal framework**
- **Speed & coordination of investment along the supply chain**
  - *Avoiding bottlenecks in storage & transportation*
  - *Sufficient water to support oil production*
  - *Drilling rigs & expertise*
- **Iraq's long-term oil & natural gas 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***

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## **Growth in oil production, 2011-2035**



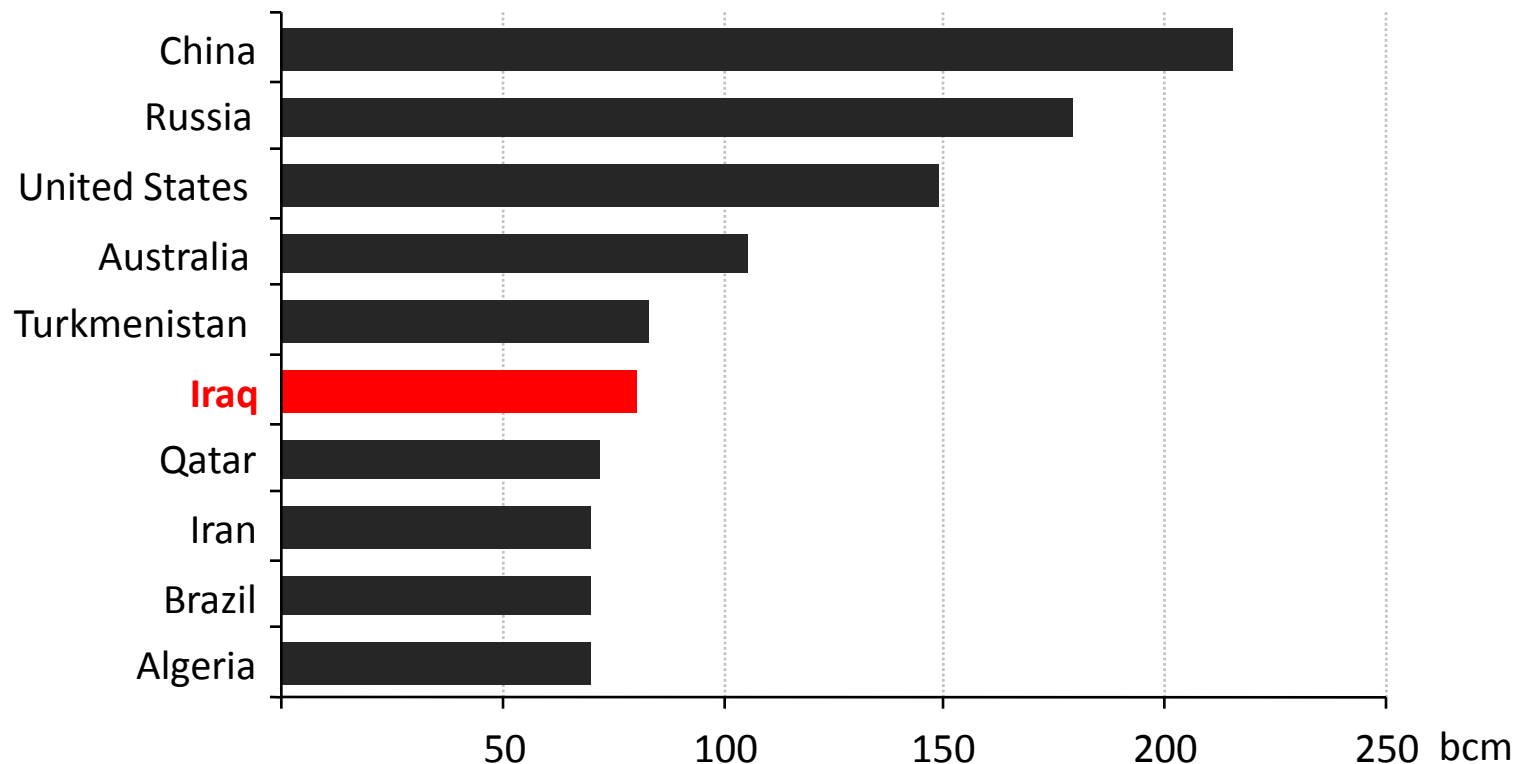
***Iraq accounts for 45% of the growth in global production to 2035;  
by the 2030s it becomes the second-largest global oil exporter, overtaking Russia***

# *Iraq takes its place on the global gas map*

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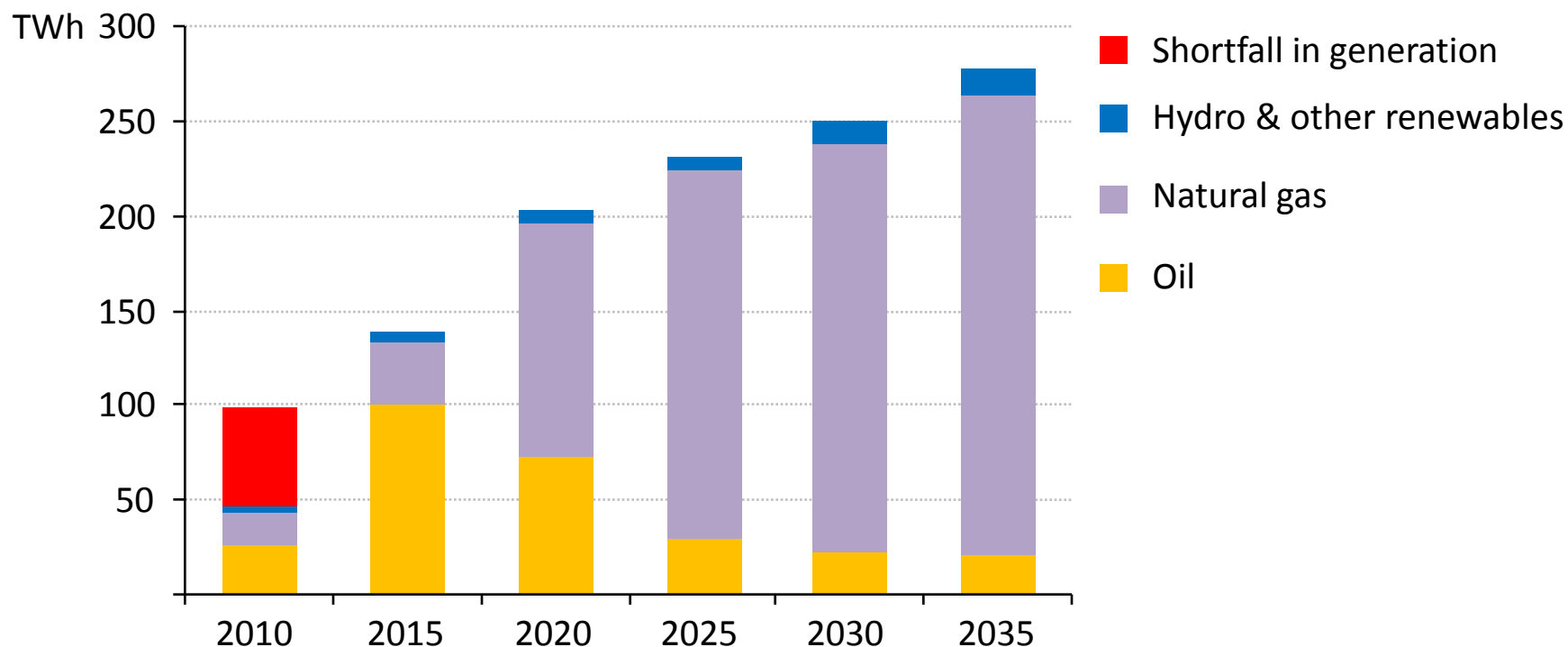
## Growth in key natural gas producers, 2011-2035



***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***

# Catching up with power demand

## Iraq electricity generation



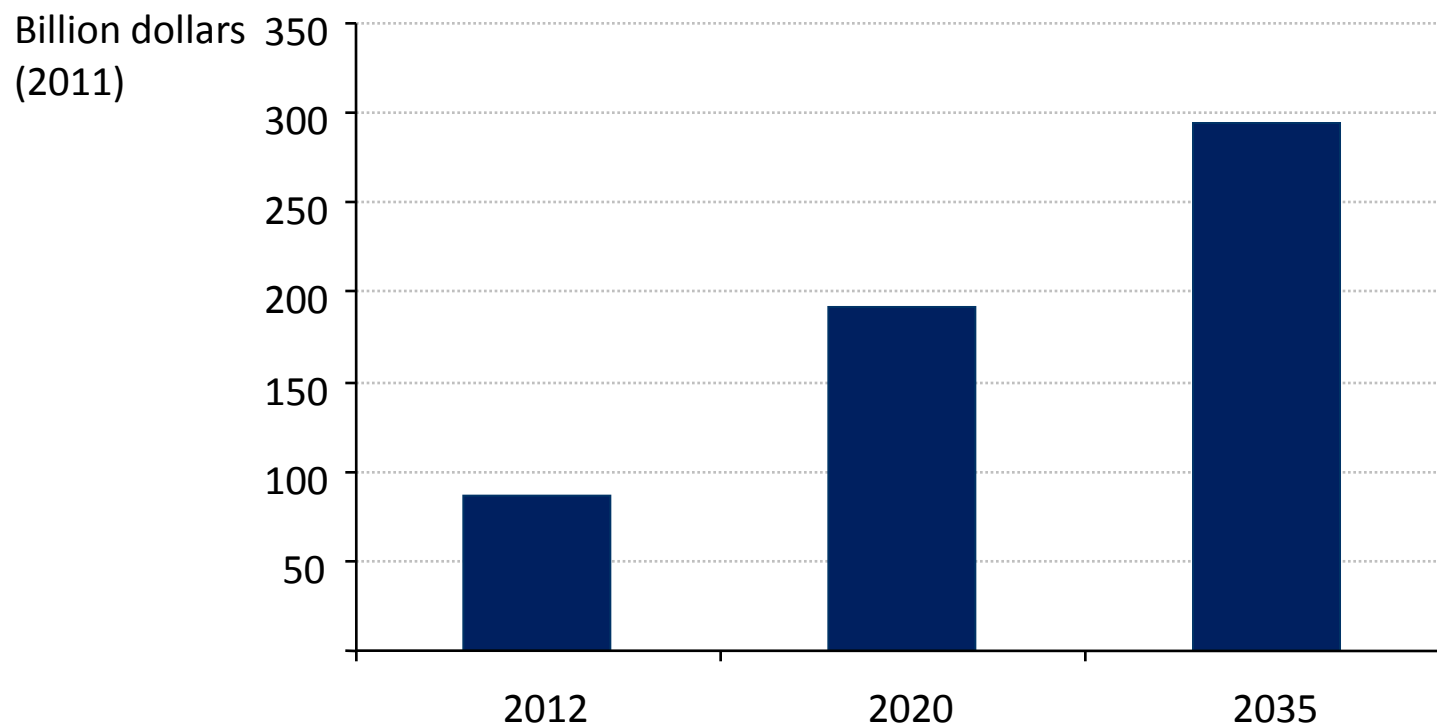
***Oil helps to eliminate the power deficit in 2015. But without a longer-term shift to gas-fired power, Iraq would forego more than \$500 billion in oil export revenue***

# A chance to transform Iraq's prospects

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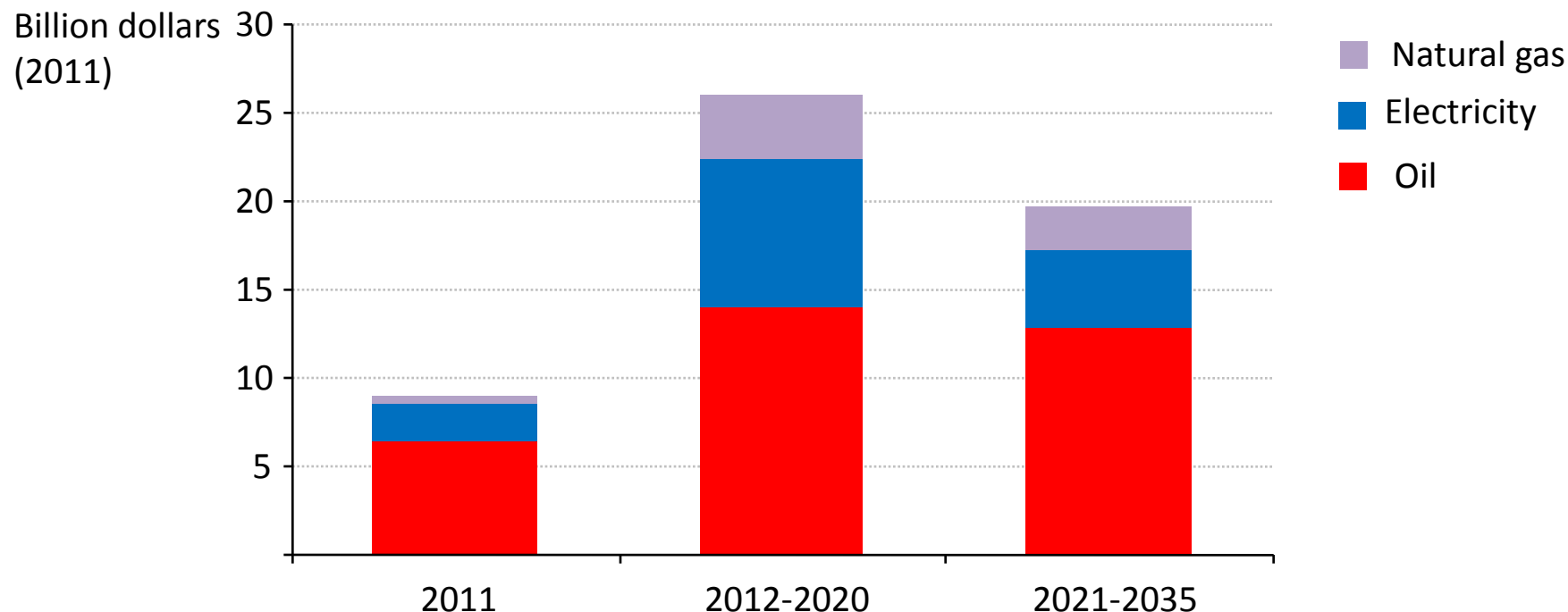
## Iraq annual oil and natural gas revenues



***\$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

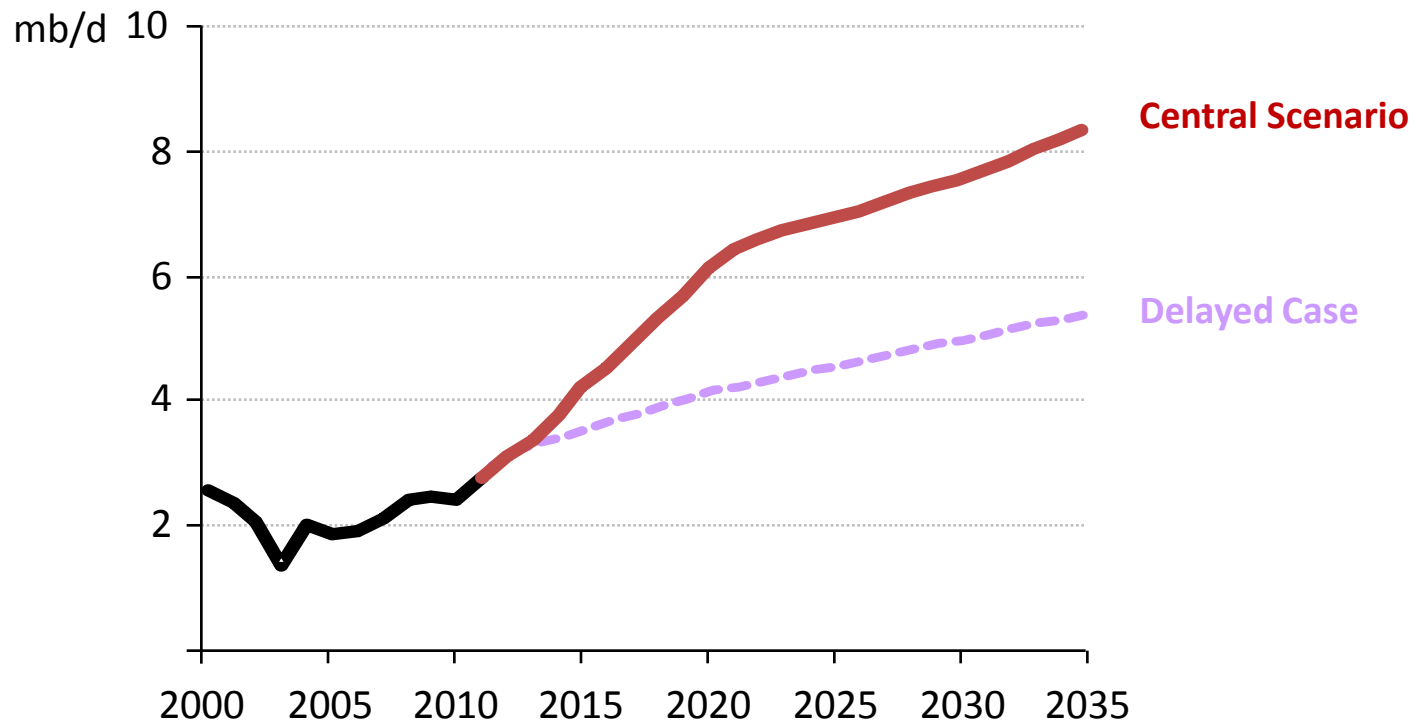
## Iraq annual average requirement for energy investment



***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 prosperous Iraq