

# **Natural Gas Demand: Outlooks and Implications**



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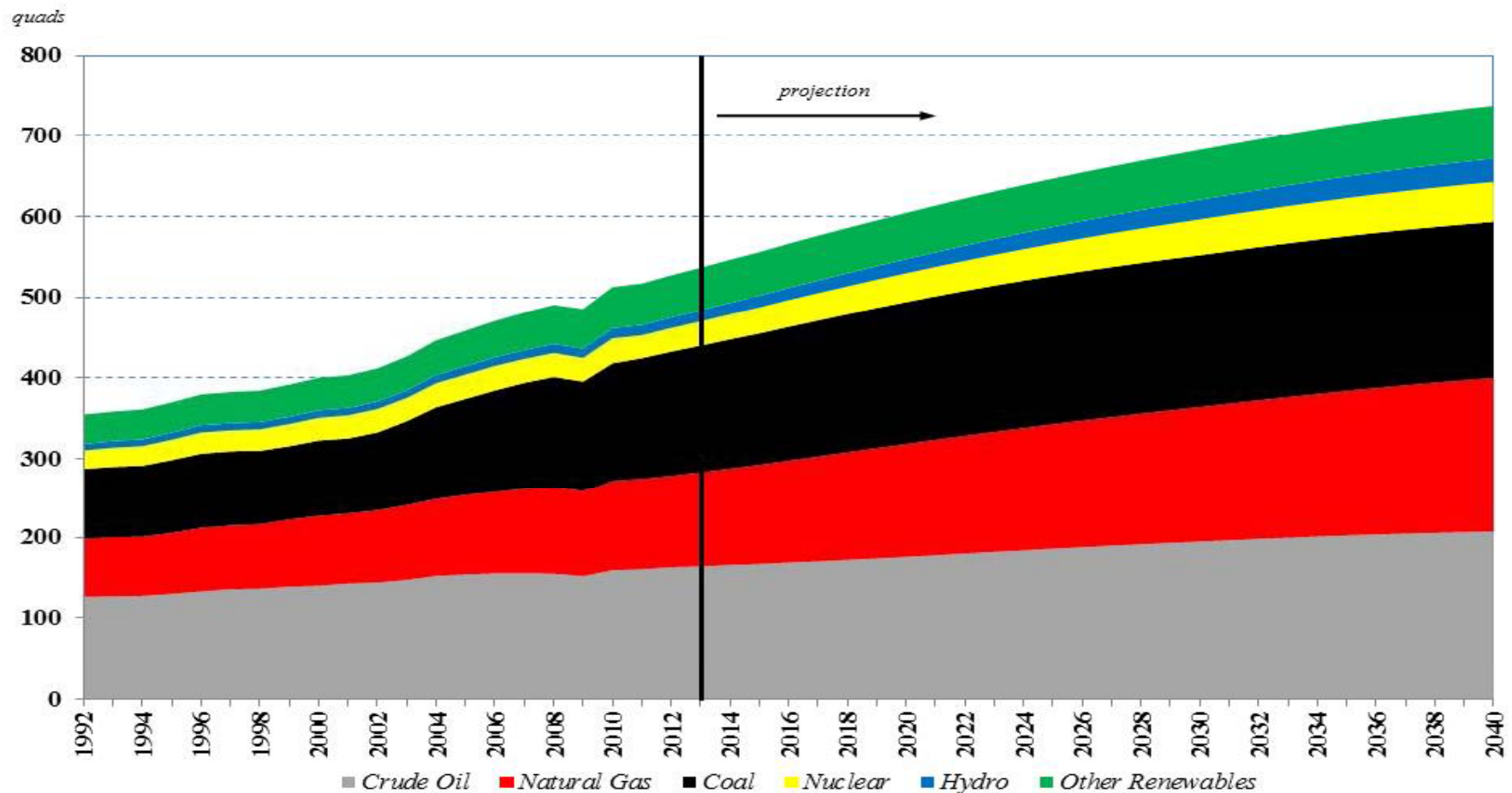
**November 19, 2014**

# The Earth at Night and Energy Insights



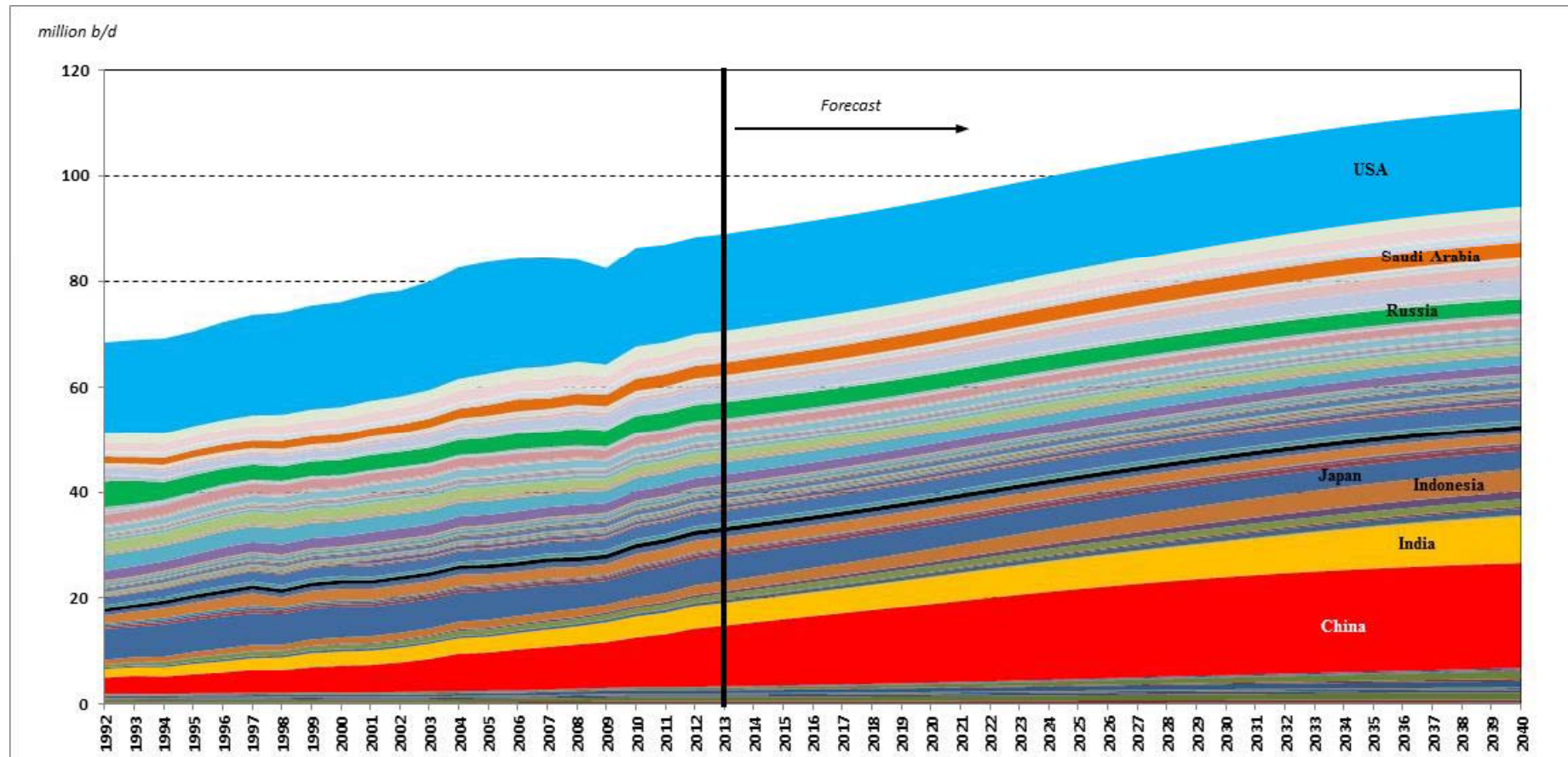
# Global Total Primary Energy Requirement

- Baker Institute CES forecast of TPER by fuel, 1992-2040



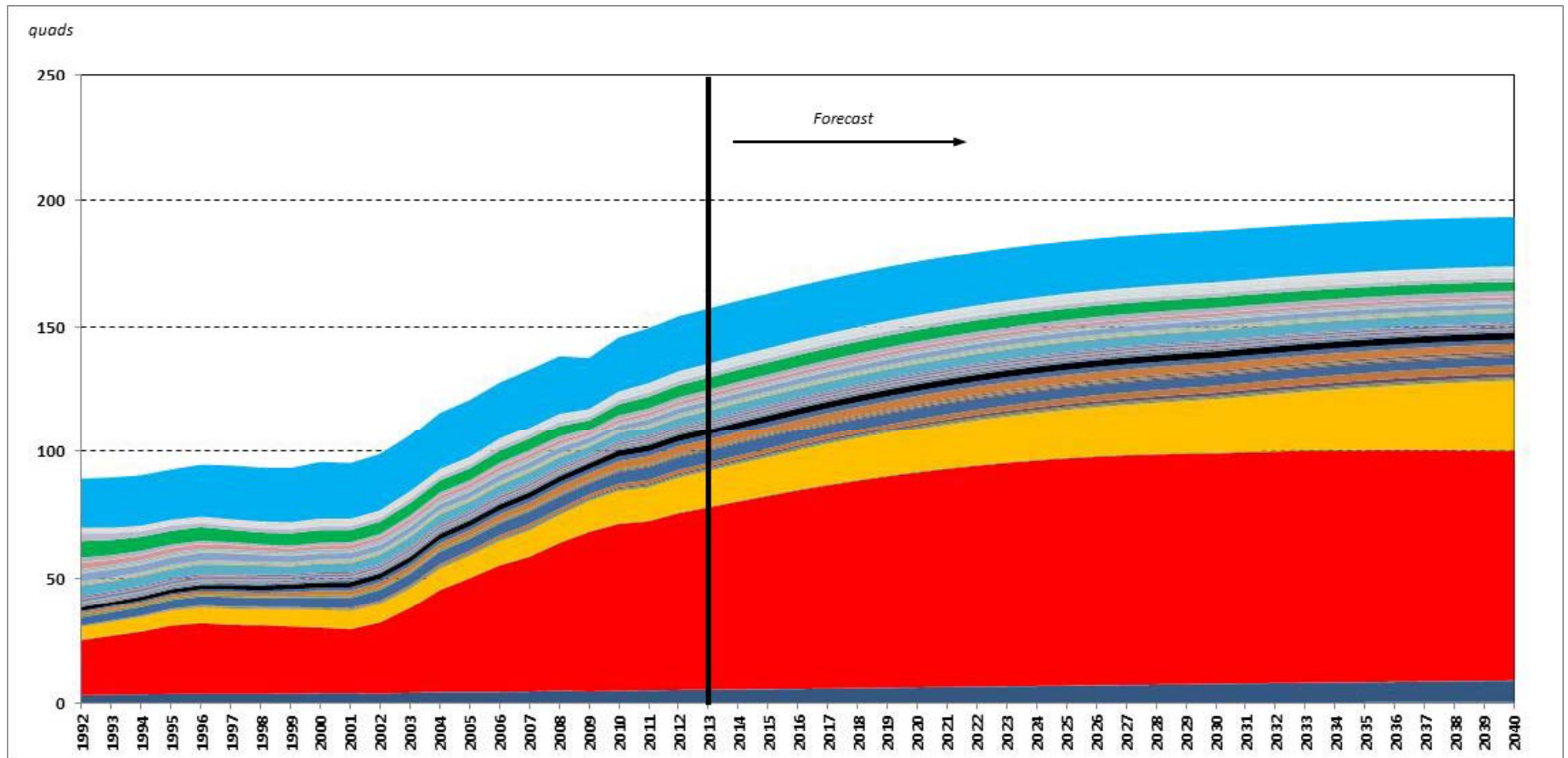
## Global Oil Demand

- Baker Institute CES forecast of petroleum demand by country, 1992-2040
  - Demand will continue to grow, driven largely by very populous developing economies such as China and India.



## Global Coal Demand

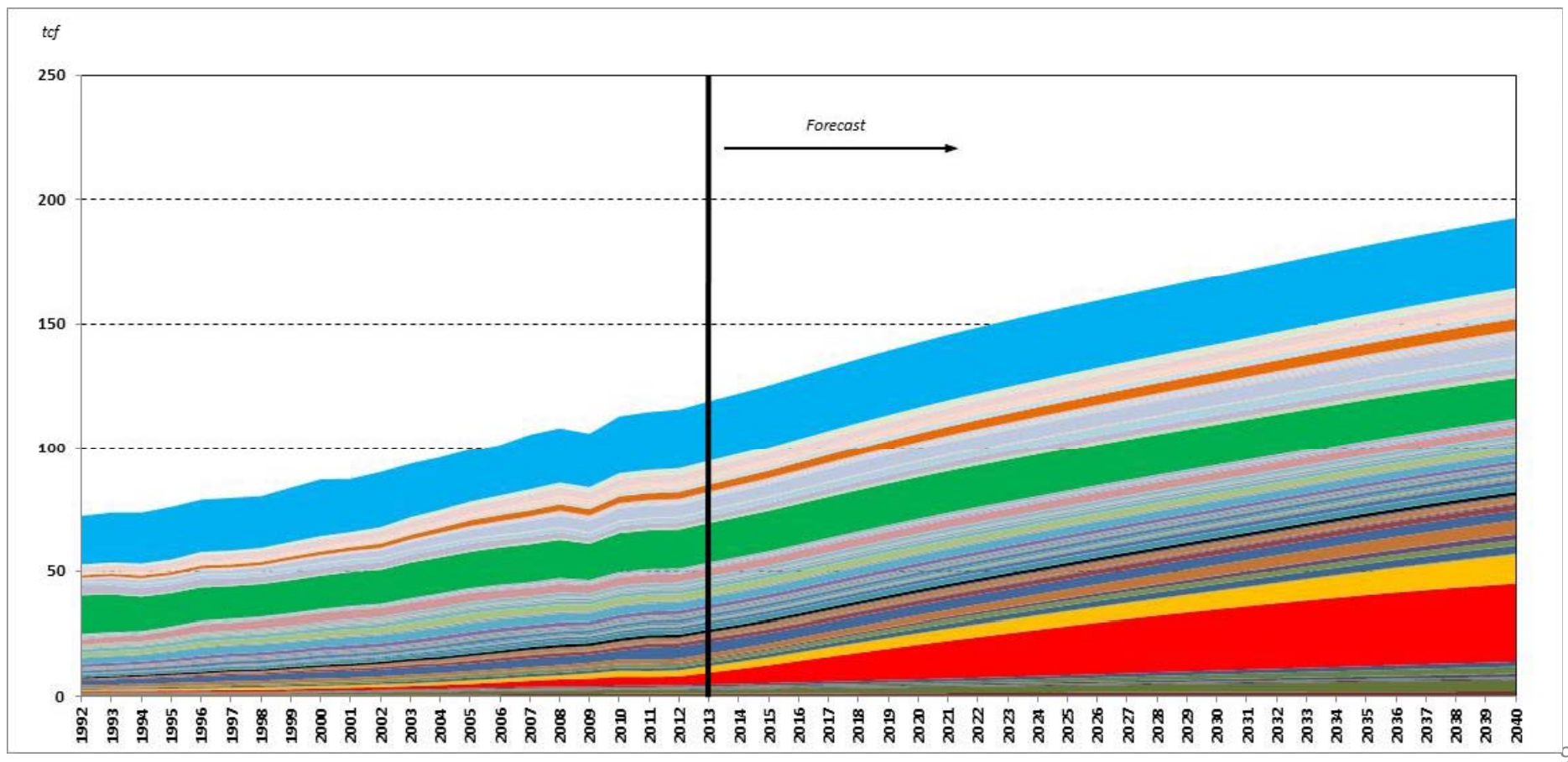
- Baker Institute CES forecast of coal demand by country, 1992-2040
  - Infrastructure in China has been developed around coal... will China switch away, or upgrade environmental controls?





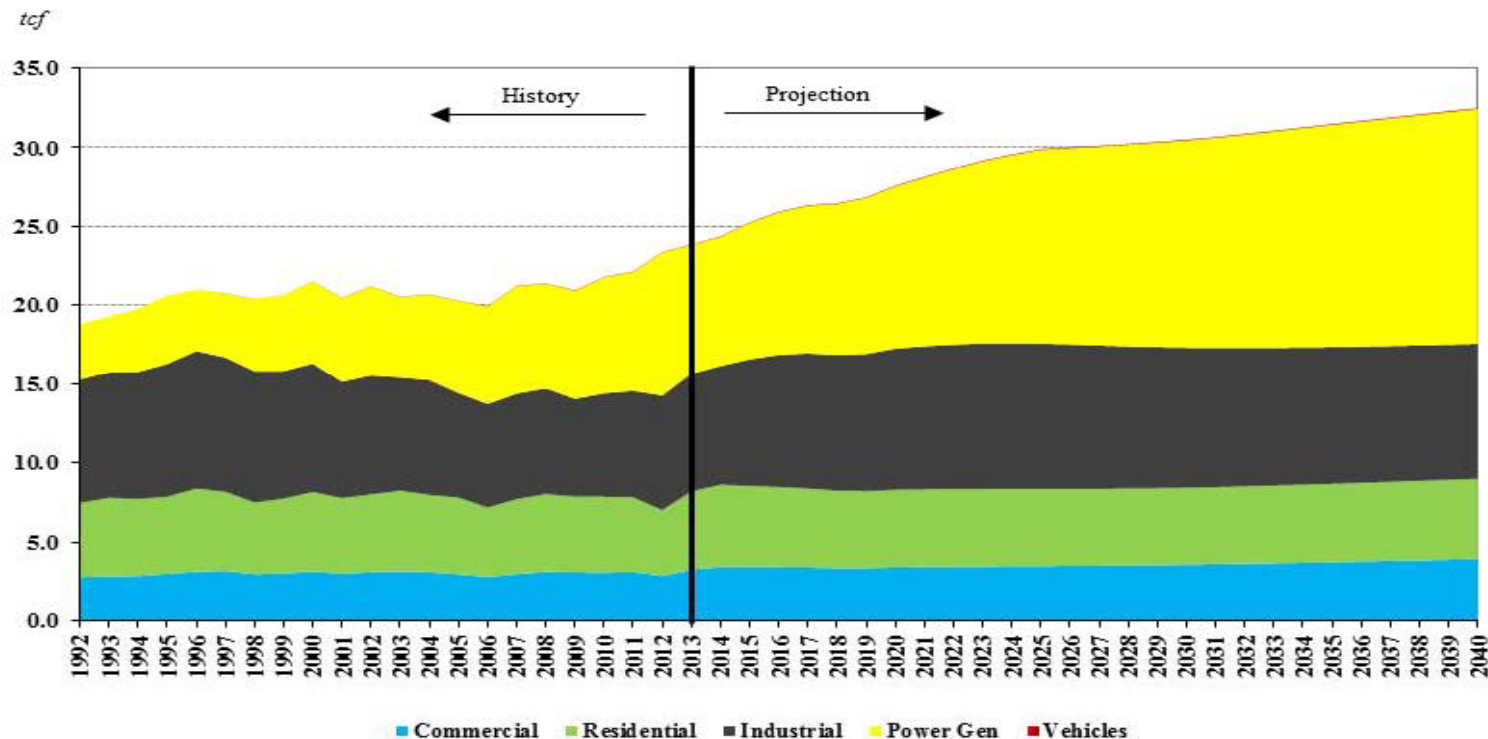
## Global Natural Gas Demand

- Baker Institute CES forecast of natural gas demand by country, 1992-2040
  - Similar patterns as with oil... demand driven by Asia



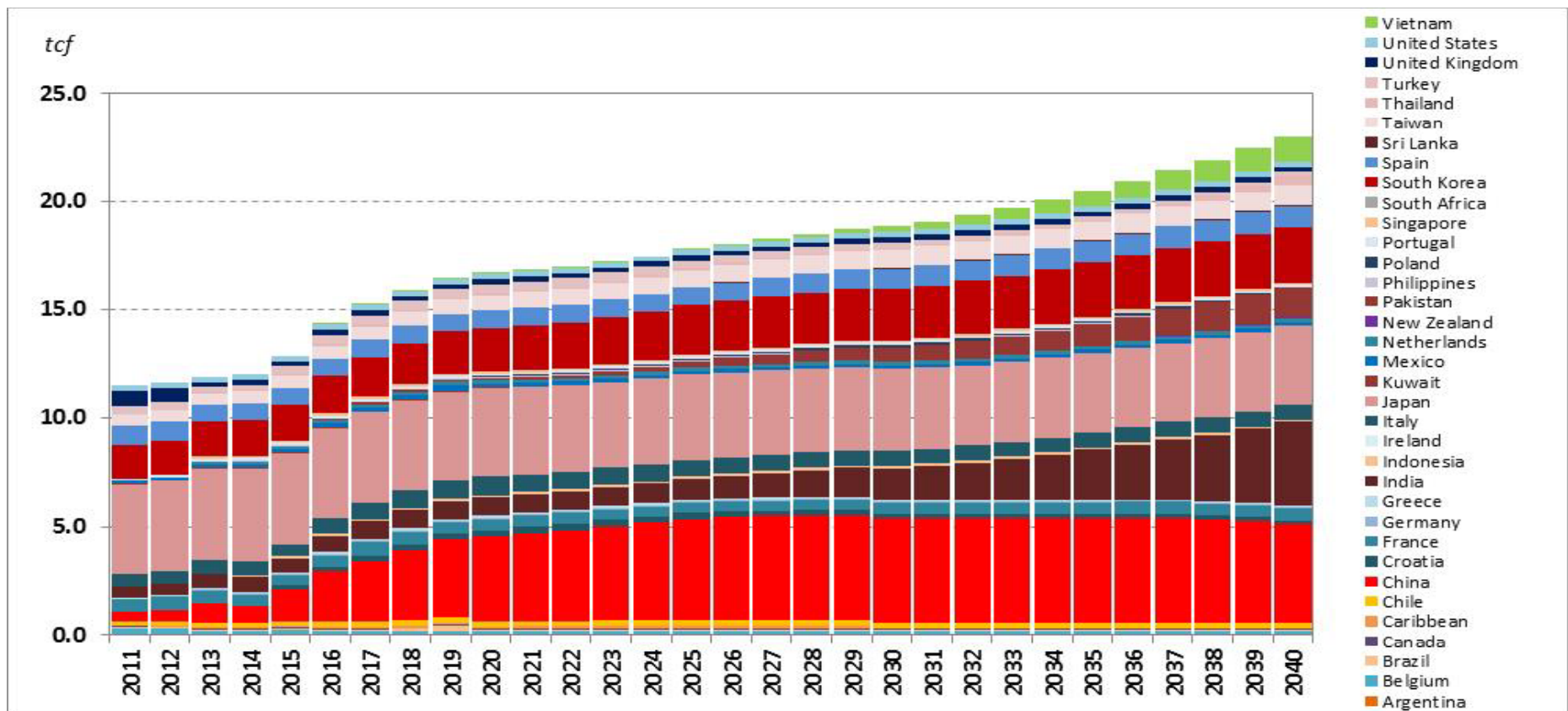
## U.S. Natural Gas Demand, 2010-2040

- Natural gas demand is expected to grow by 1.7% p.a. from 2010-2030, largely driven by power generation and industrial demands.
  - Driven by policy, power generation demand grows at 2.9% p.a.
  - Industrial demand grows at 1.6% p.a., largely from 2010 to 2020.



## LNG Imports by Country, 2011-2040

- Diversity in the LNG import picture, with China surpassing Japan in the mid 2020s, and India emerging in the 2030s.

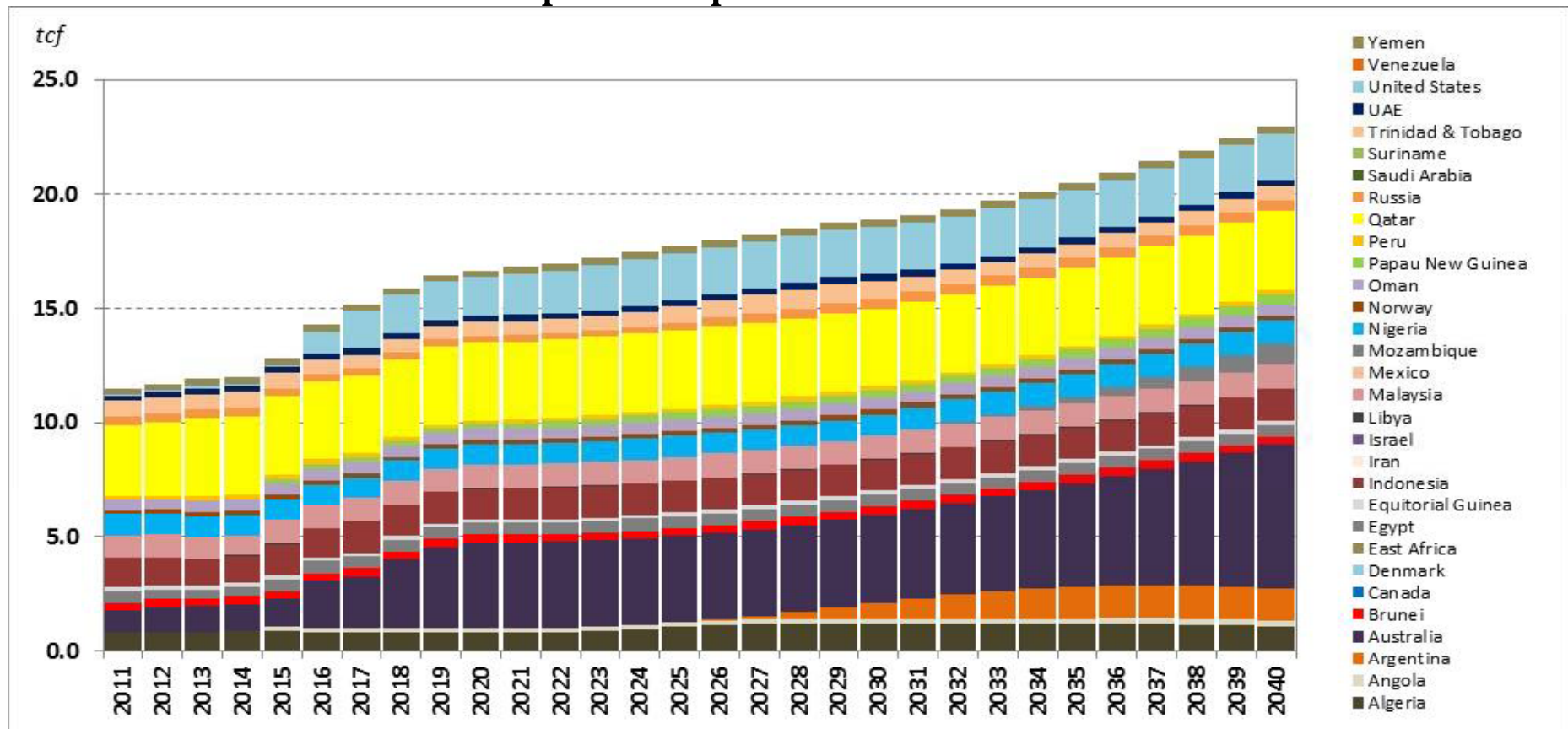


**Source:** Baker Institute RWGTM February 2014,. The RWGTM was developed by Kenneth Medlock and Peter Hartley of Rice University and utilizes the Deloitte MarketPoint software platform to execute.



## LNG Exports by Country, 2011-2040

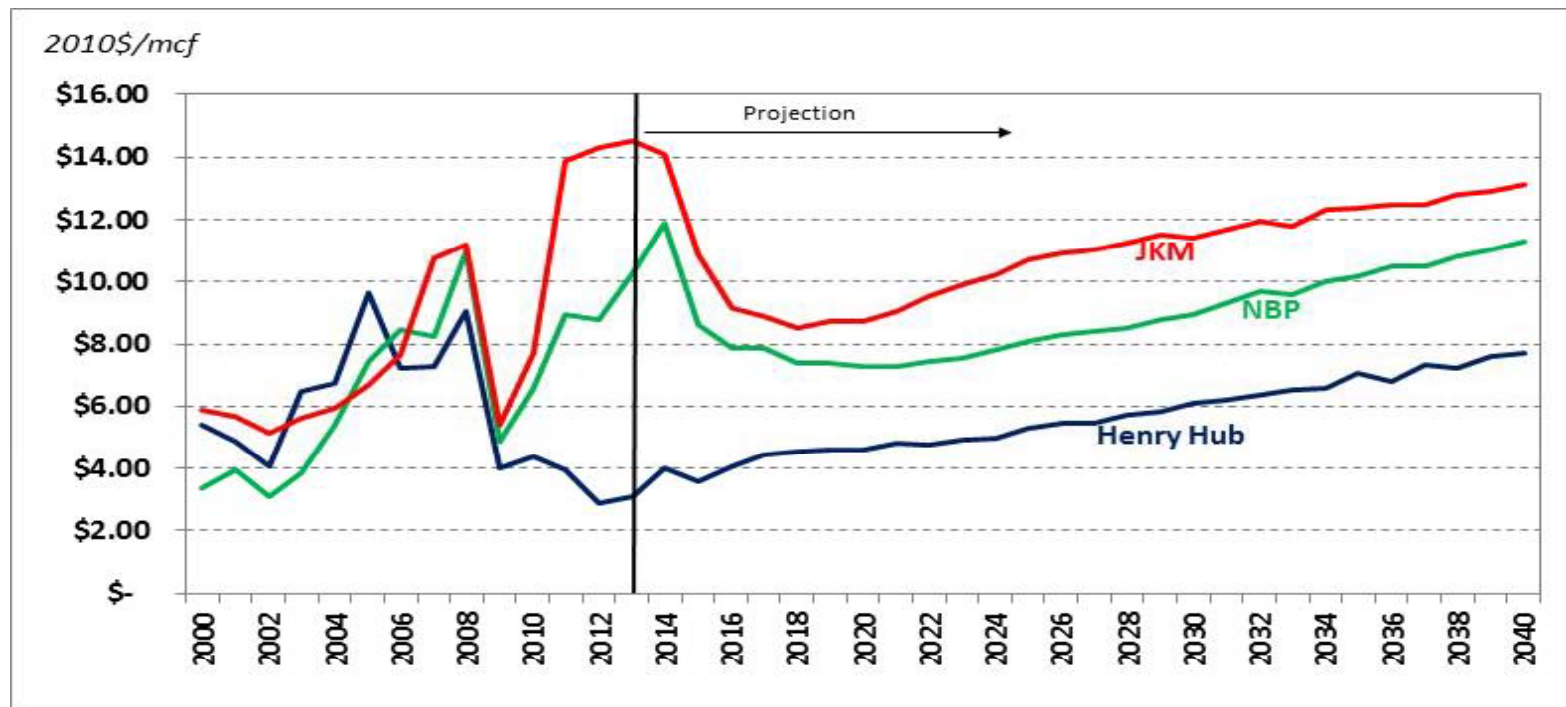
- Qatar and Australia account for over 40% of global *LNG* exports, and the US enters in 2016 which helps drive price decline in Asia.



**Source:** Baker Institute RWGTM February 2014,. The RWGTM was developed by Kenneth Medlock and Peter Hartley of Rice University and utilizes the Deloitte MarketPoint software platform to execute.

## Global Marker Prices, 2011-2040

- The prices indicated are *spot* prices; *contract* prices may be different, but short term trade will continue to expand.
- Global prices remain above the US price, but trade closes the spread.



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