

# David Brown

## Head of Markets & Transitions – Americas, Energy Transition Practice

David is the Americas lead for our Markets and Transition practice, based in Houston.

He began his career with Wood Mackenzie in 2011 as an analyst covering European markets. From 2014-2016, he was posted in our Beijing office where he was responsible for research delivery, product development and career planning for our gas and power teams. Crucially, he led the integration of our China energy research across 20+ analysts to develop cross-commodity analysis on major trends in China's energy sector. He was a regular presenter on global energy trends, China gas market outlooks and global LNG markets to major entities working in China.

After nearly 10 years abroad, David transitioned to Wood Mackenzie's Houston office in 2016. Initially, he contributed to our US LNG coverage, focusing on pre-FID LNG projects on the US Gulf Coast. During this time, he regularly advised banks, project developers and LNG buyers.

Leveraging his global experience across multiple areas of the energy industry, he is a key author on Wood Mackenzie's Energy Transition Outlook, Accelerated Energy Transition and 2-Degree Scenarios. He regularly advises strategy groups, company leadership teams, and sustainability teams on major long-term questions facing energy markets.

### Education

Masters of Science, International Political Economy, London School of Economics.

Bachelor of Arts, History, University of California, Santa Barbara.



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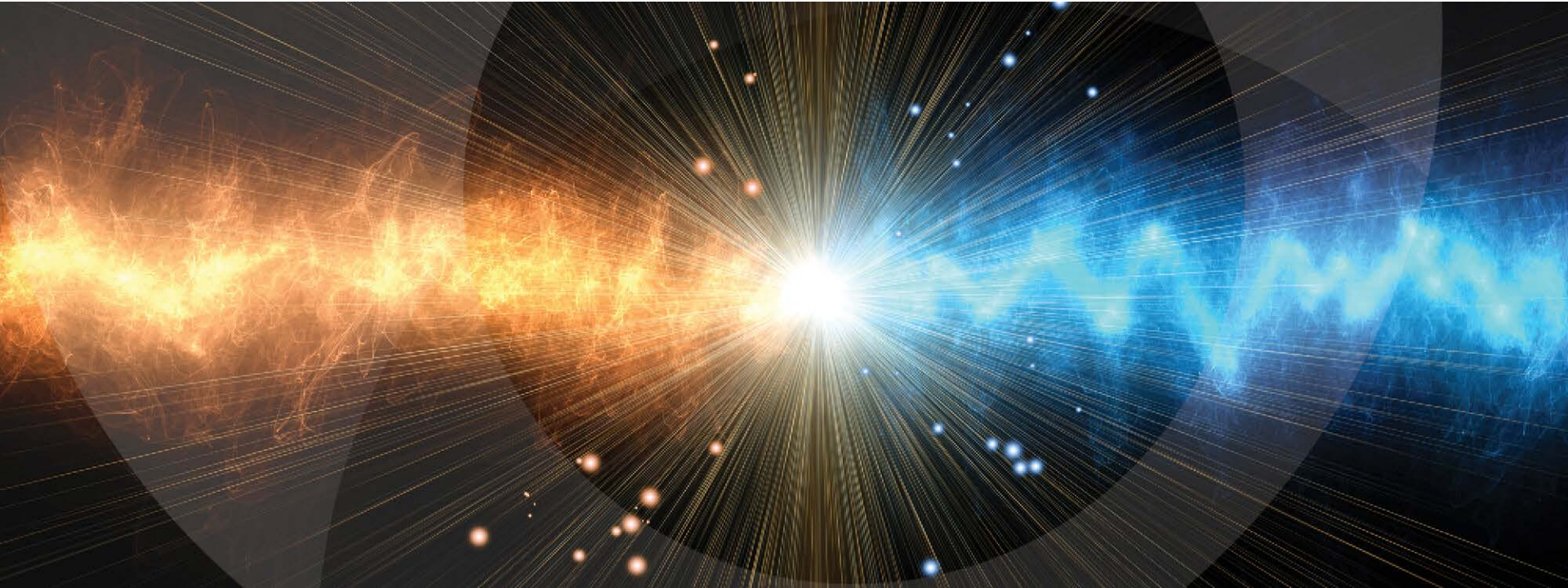


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# Wood Mackenzie Energy Transition Outlook

## The scalability challenge





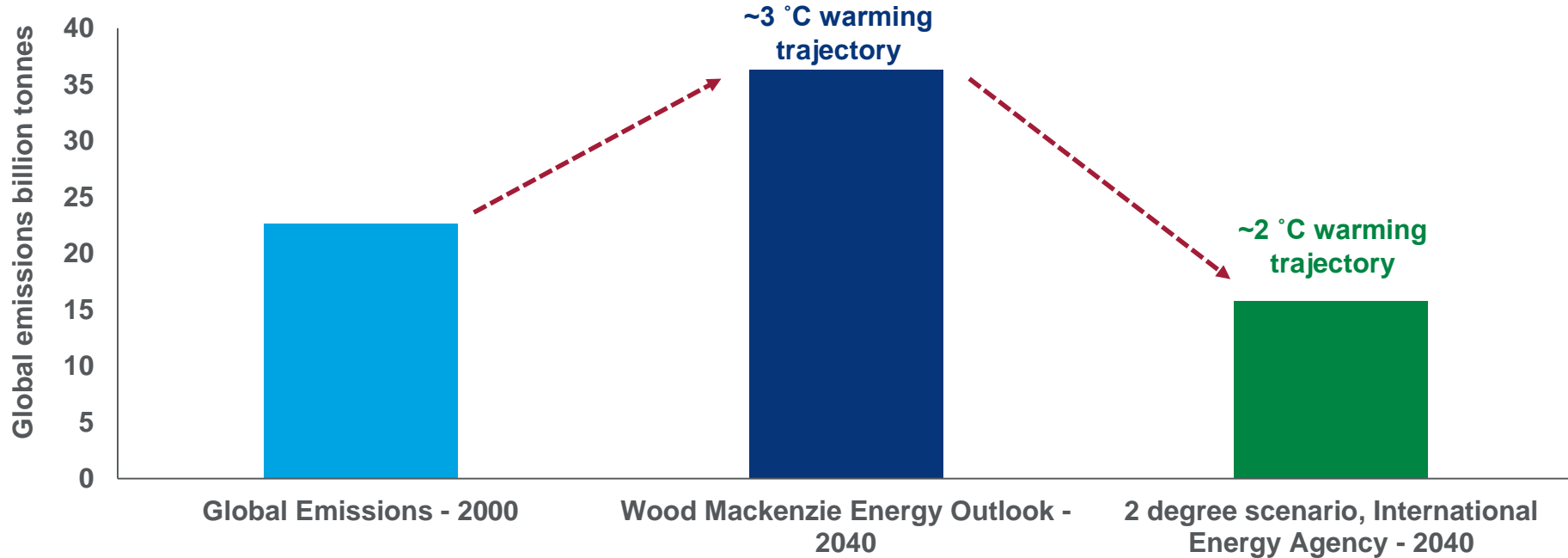
# What is the energy transition?



# The energy transition boils down to carbon emissions

Global climate cooperation has cooled since the Paris agreement in 2015

## Global carbon emissions

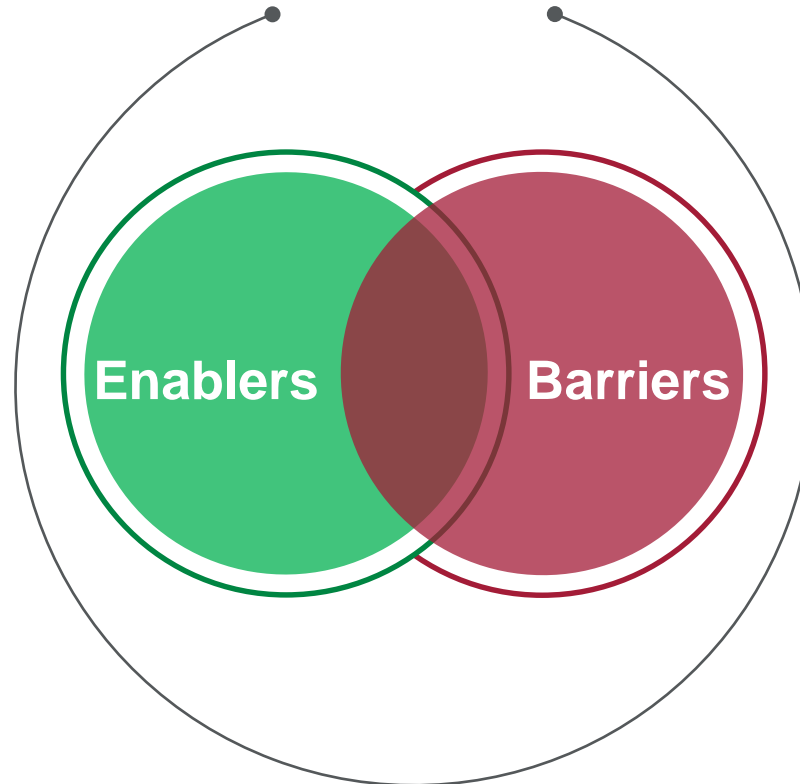




# Several factors influence the energy transition

Our outlook incorporates a realistic assessment of how these factors will impact investment, demand, and supply

- **Social values**
- **Technology**
- **Investors**



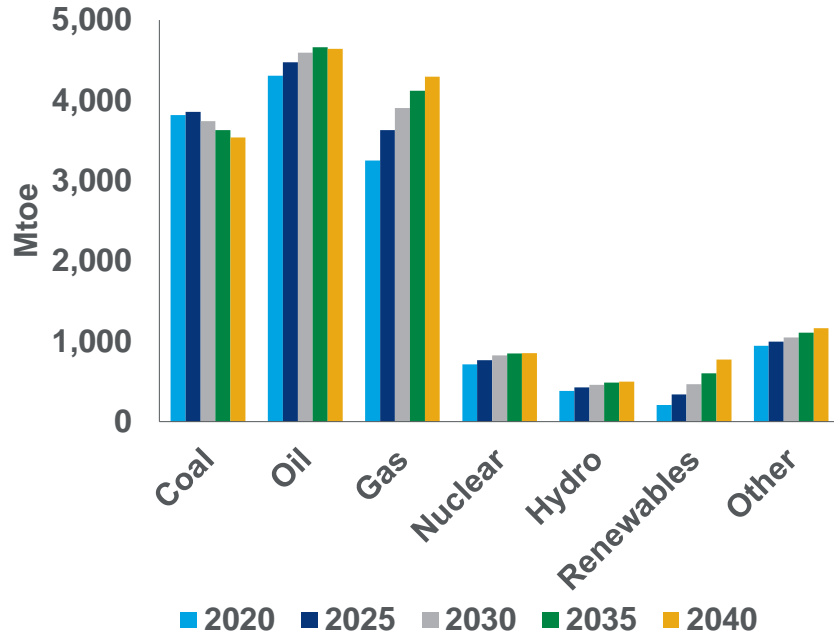
- **Policy**
- **Technology maturity**
- **Market inertia**



# Hydrocarbons will dominate the energy mix long term

Zero carbon fuels face a challenge of scale, especially in Asia Pacific markets

Total primary energy demand by fuel



**85%**  
Hydrocarbons  
by 2040



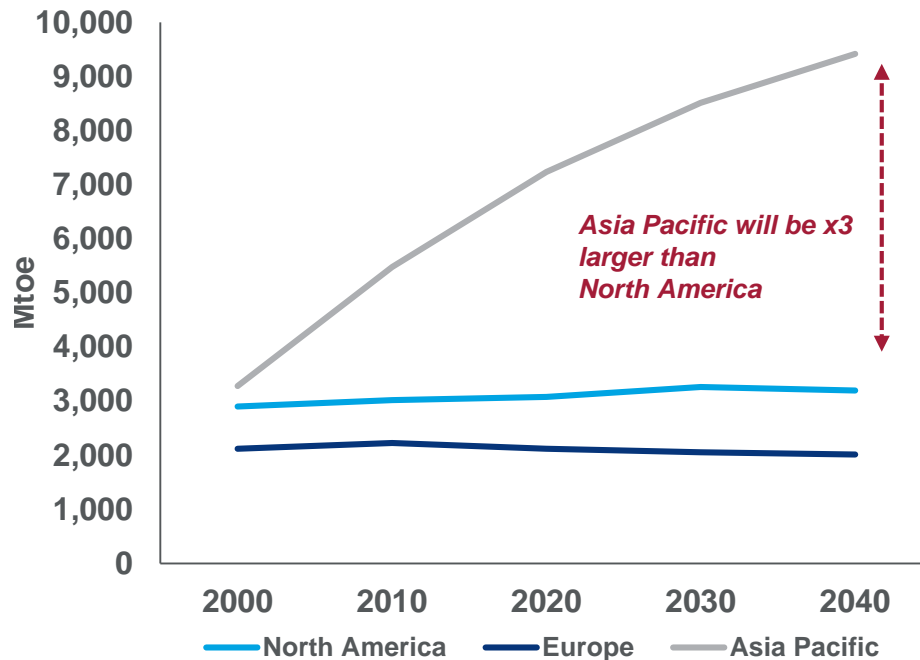
# Asia sustains the role of hydrocarbons

Urbanization is a major factor behind total energy demand growth in Asia Pacific



**60%**  
Share of urban  
population  
globally

Total energy demand by region



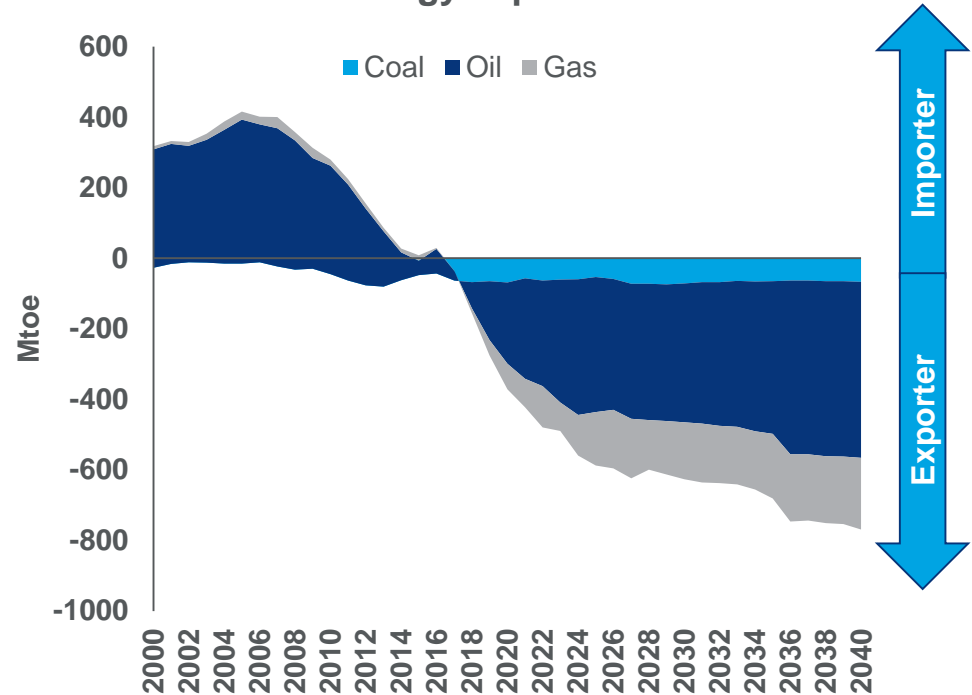


# North American energy exports become critical to global markets

US-China: trade truce is a positive sign



### North America net energy exports







# The upstream industry will become more differentiated

By 2040, our base case outlook is for ~55 mb/d gap between demand and onstream production

# Conclusions

- The Energy Transition is occurring...
- ...but the pace is not fast enough for climate goals
- Hydrocarbons will drive long term demand expectations
- Company strategies will evolve



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