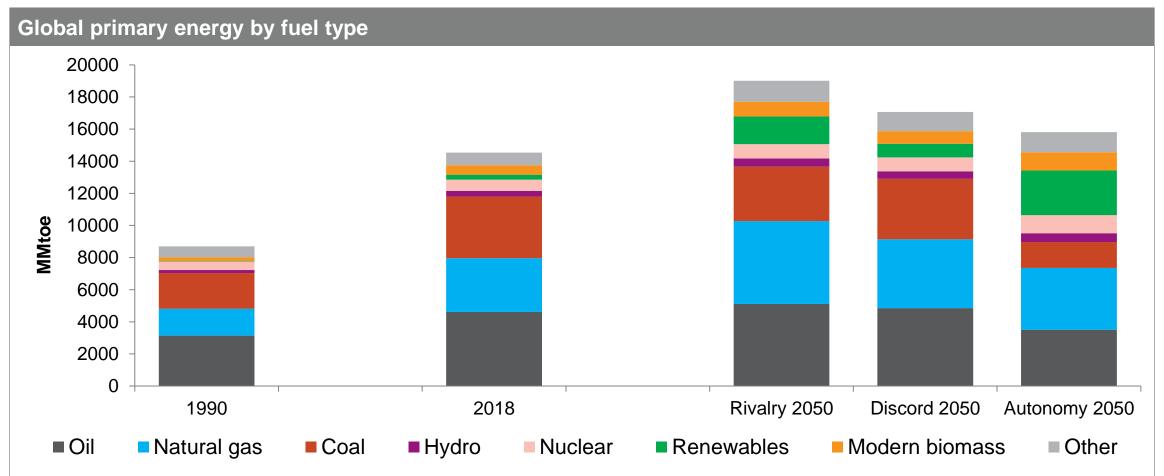


## **LNG PRODUCER—CONSUMER CONFERENCE 2019**

26 September 2019

Michael Stoppard, Chief Strategist Global Gas

#### Fossil fuels will remain the dominant part of the global energy mix...

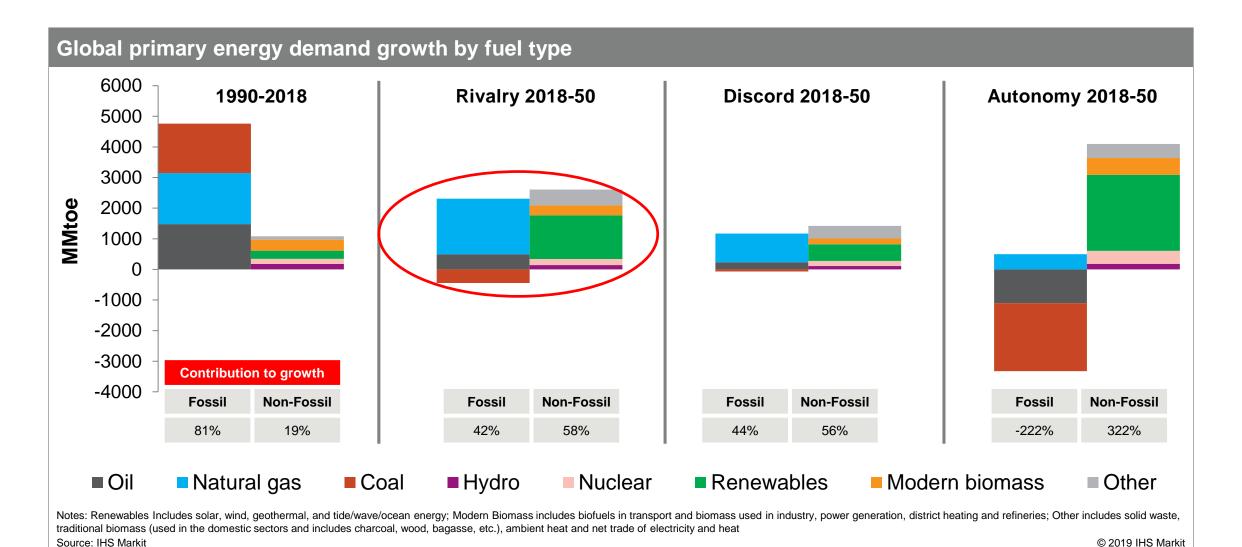


Notes: Renewables Includes solar, wind, geothermal, and tide/wave/ocean energy; Modern Biomass includes biofuels in transport and biomass used in industry, power generation, district heating and refineries; Other includes solid waste, traditional biomass (used in the domestic sectors and includes charcoal, wood, bagasse, etc.), ambient heat and net trade of electricity and heat

Source: IHS Markit

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#### ..but renewables and natural gas will provide most of the growth

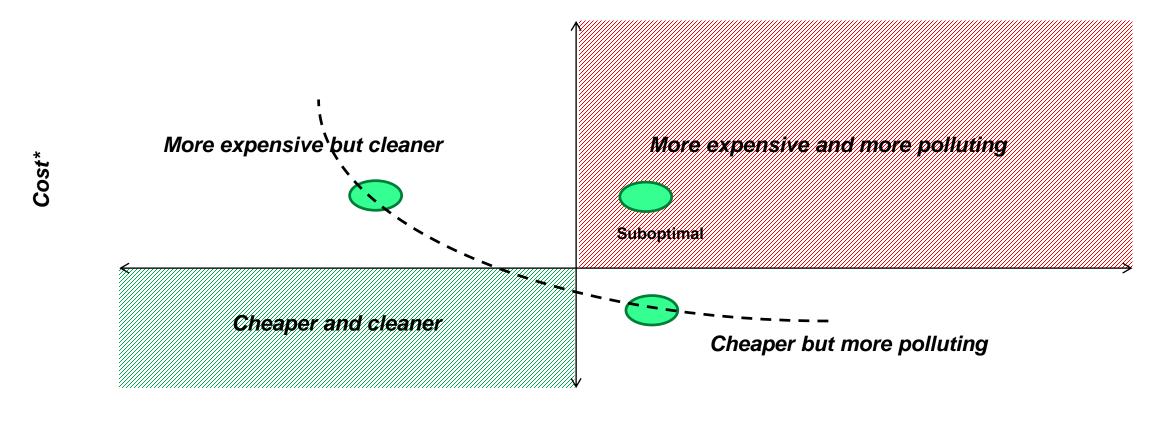


### The seven advantages for gas and renewable partnerships

The Economic Advantage	The more renewables, the more economic gas-fired power
The Emissions Advantage	Minimise both pollutants and GHG emissions
The Operational Advantage	Flexible complementary generation for renewable power
The Optionality Advantage	Lower regret costs in the energy transition
The Security Advantage	Security of supply advantages and reduced strain on local resources
The Coupling Advantage	'Sector coupling' between renewables and gas beyond power applications
The Decentralized Advantage	Renewable and gas combinations to meet small-scale off-grid solutions

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# 'The Efficient Frontier': Natural gas and renewables can offer the best trade-off between cost and emissions reductions



Environment<sup>^</sup>

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<sup>\*</sup>Defined as average 2017 – 40 relative to 2017 on cost per MWh % change

<sup>^</sup>Defined as average 2017 – 40 relative to 2017 emissions tonnes CO2 % change

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