

Longreach Energy Investments LLC

February 2019 Report

Market and Portfolio Commentary

1.1 Macro Industry Commentary

General Market Commentary

BP Energy Outlook 2019

In February BP released its Energy Outlook 2019 providing scenario analysis for supply and demand for global energy out to 2040. The key points from the study are:

- *Despite the increase in energy demand, around two-thirds of the world's population in 2040 will still live in countries where energy consumption per head is relatively low, highlighting the need for "more energy".*
- *Energy consumed within industry and buildings accounts for around three quarters of the increase in global energy demand.*
- *Growth in transport demand slows sharply relative to the past, as gains in vehicle efficiency accelerate. The share of passenger vehicle kilometres powered by electricity increases to around 25% by 2040, supported by the growing importance of fully-autonomous cars and shared mobility services.*

For gas and oil:

- *Natural gas grows robustly, supported by broad-based demand and the increasing availability of gas, aided by the continuing expansion of liquified natural gas (LNG).*
- *Demand for oil and other liquid fuels grows for the first part of the Outlook (roughly until 2030) before gradually plateauing.*

These observations are all consistent with Giant Capital's strategic outlook and the LEI portfolio is being assembled and managed to take advantage of these medium to long-term trends.

The following figures provide an overview of the component data from which these conclusions were derived.

Figure 1: Primary Energy Consumption by Fuel under BP Scenarios, Source BP

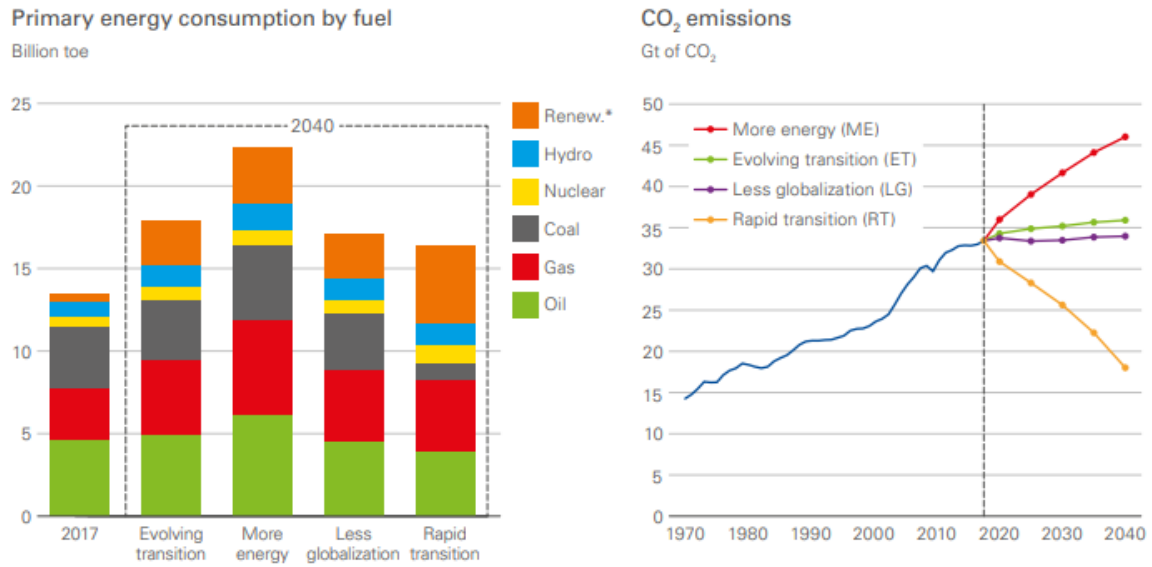


Figure 2: Primary Energy Demand, Source BP

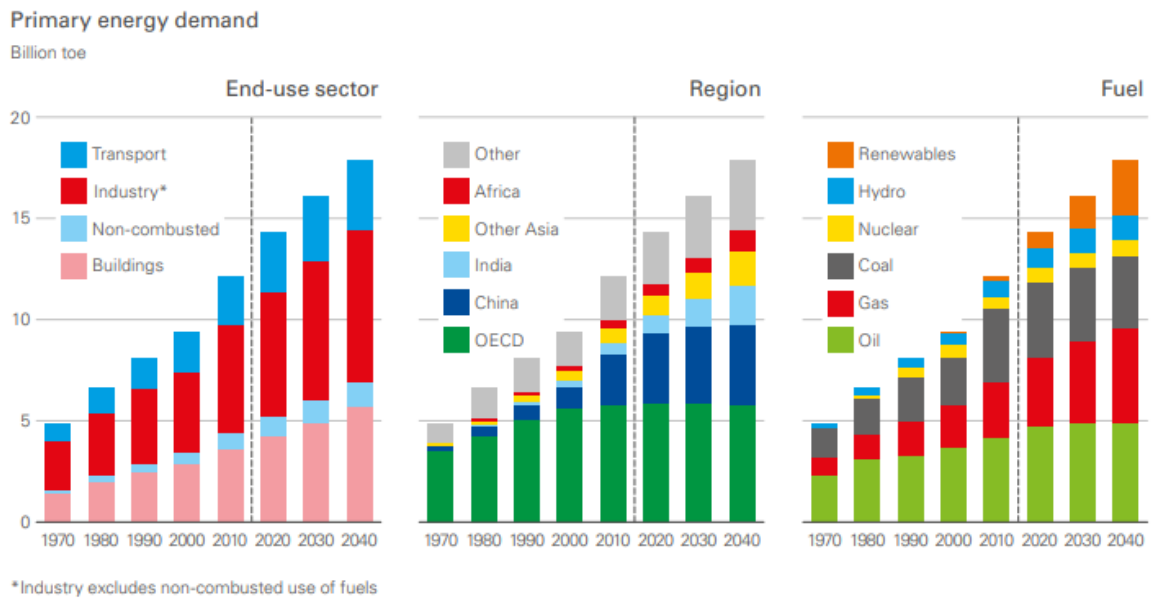


Figure 3: Natural Gas Projections, Source BP

Natural gas grows strongly, with broad-based demand low-cost supplies and increasing global availability

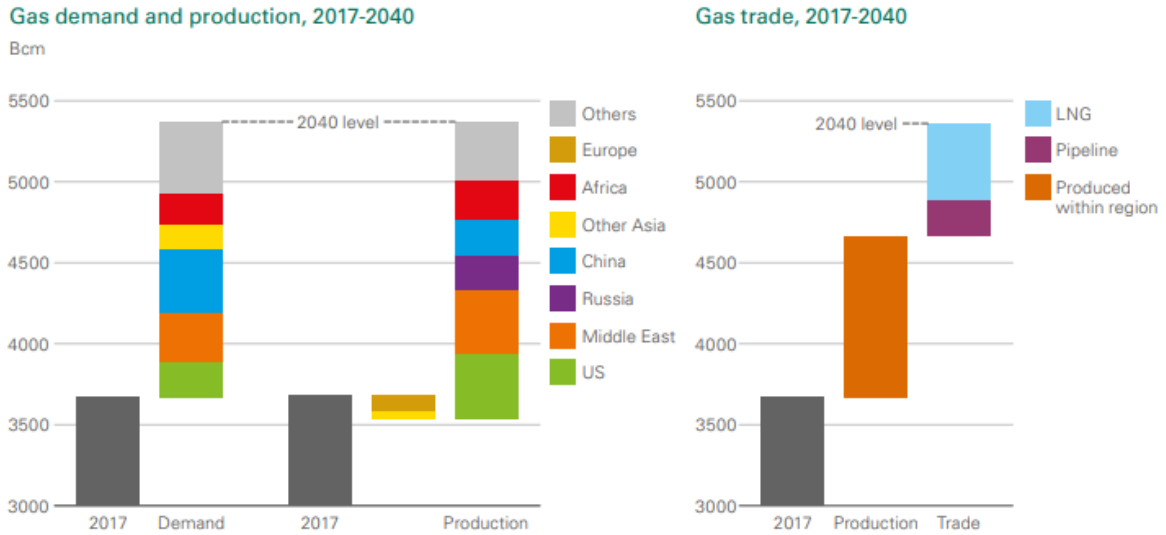


Figure 4: Economic Growth Drivers, Source BP

Global economic growth is driven by increasing prosperity in developing economies, led by China and India

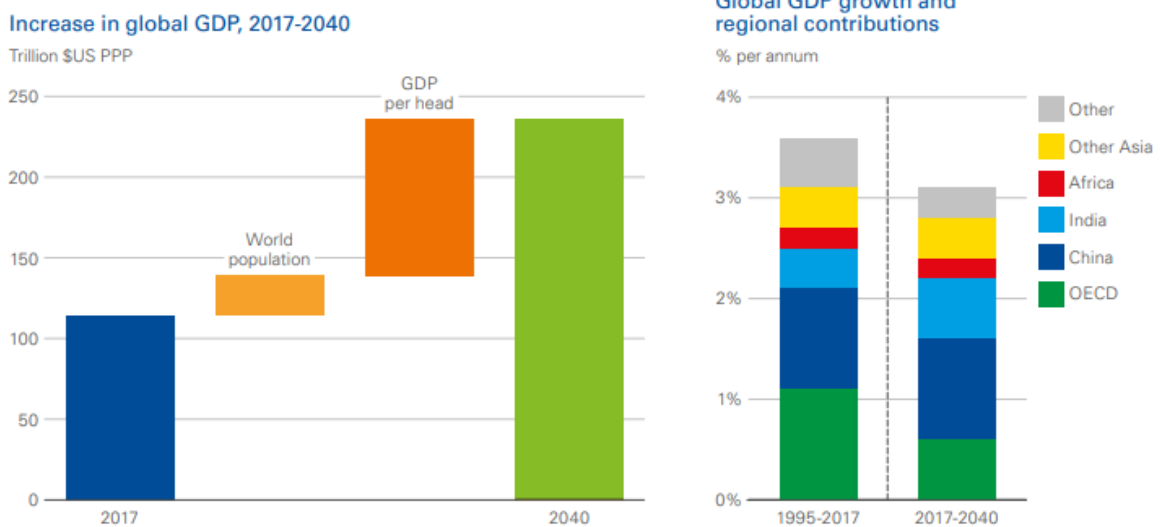
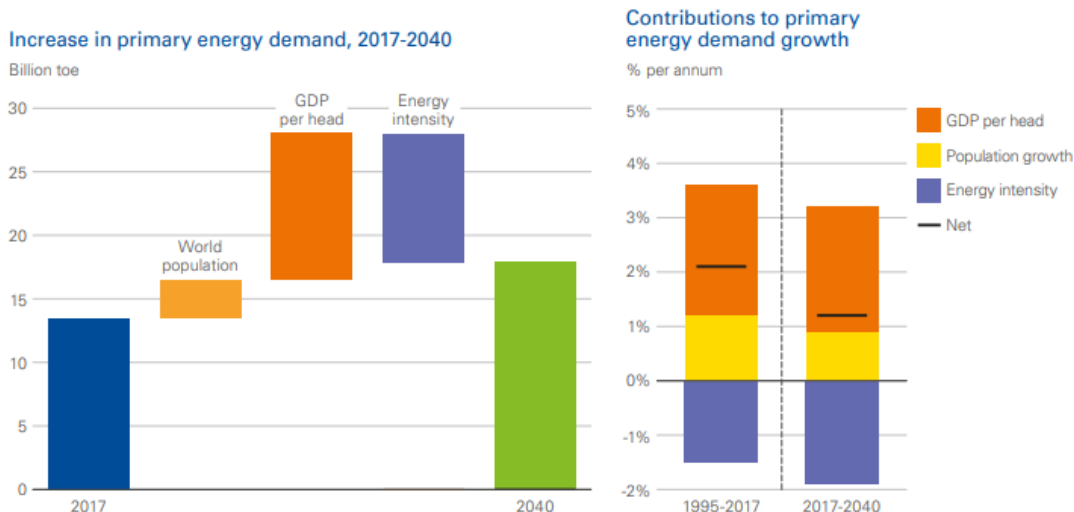


Figure 5: Energy Demand, Source BP

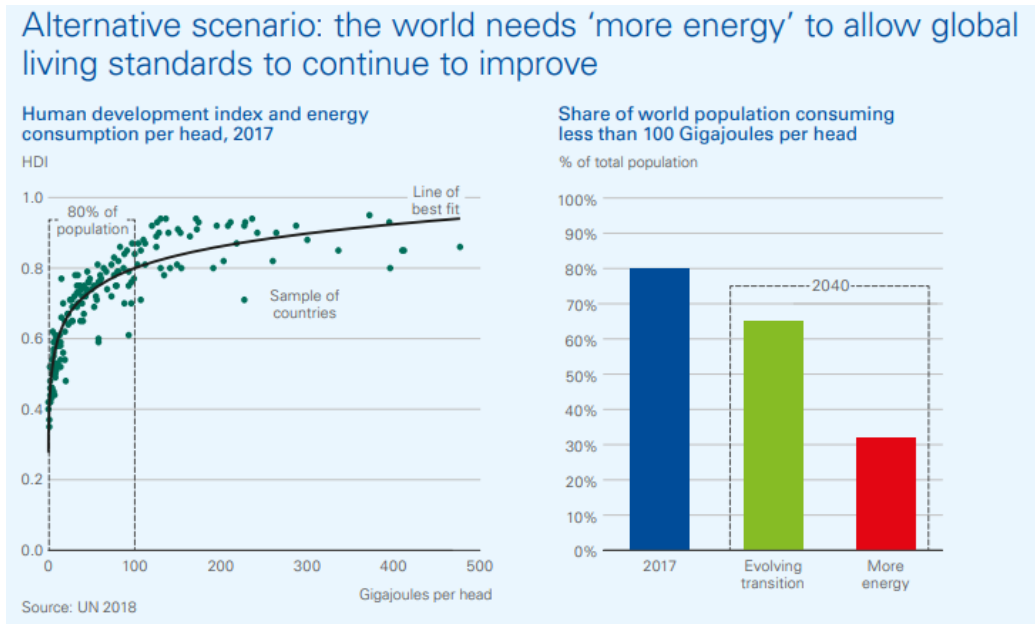
Higher living standards drive increases in energy demand, partly offset by substantial gains in energy intensity



There is a strong link between human progress and energy consumption. The United Nation’s Human Development Index (HDI) suggests that increases in energy consumption, of up to around 100 Gigajoules (GJ) per head, are associated with substantial increases in human development and well-being. Above 100 GJ the relationship flattens out. To establish relativity, Australia’s current energy consumption is 250 GJ/head.

Today around 80% of the world’s population live in countries where the average energy consumption is under 100 GJ/head. Even under the More Energy scenario (with highest energy use and CO2 emissions, see Figure 1), by 2040 one-third of the world’s population will consume less than 100 GJ/head. In the middle-case Evolving Transition scenario two-thirds of the world population will be under the 100 GJ/head benchmark.

Figure 6: Economic Growth Drivers, Source BP

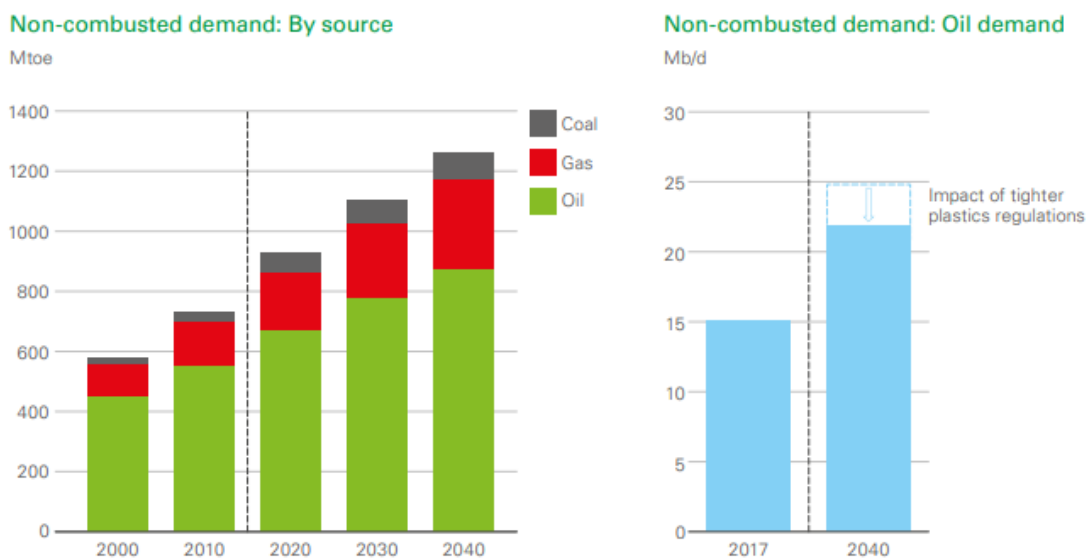


The challenge for the global energy system is to provide both more energy and less carbon. Giant Capital believes that natural gas will have large role to play in meeting these dual objectives.

The BP Outlook identifies that non-combusted uses of hydrocarbons is a driver of growing demand.

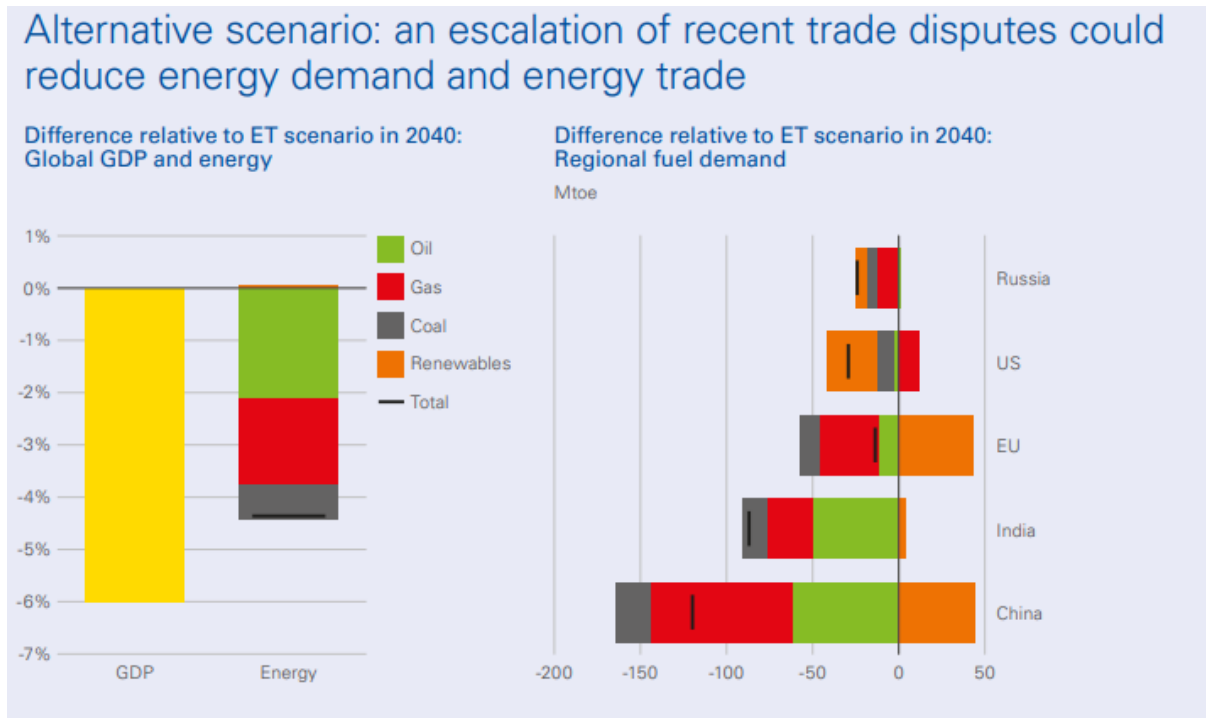
Figure 7: Non-combusted Hydrocarbon Demand, Source BP

Non-combusted use of oil, gas and coal grows robustly, despite increasing regulation on the use of plastics



The BP Outlook supports Giant Capital’s assessment that LNG exports will increase significantly to foster a more competitive and globally-integrated market. Giant Capital’s assessment is that this globally integrated market will provide strong price support for natural gas produced in the domestic United States.

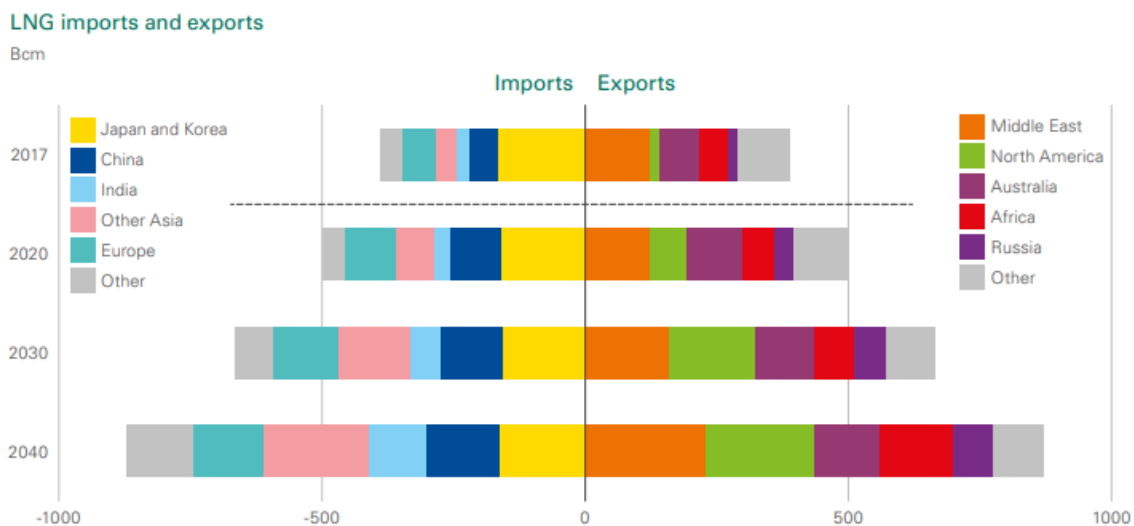
Figure 8: LNG Trade, Source BP



As a note of warning the BP Outlook provides assessment of the potential reduction in energy demand and energy trade if there is an enduring escalation of recent trade disputes. Pleasingly, at time of writing press reports suggest that US and Chinese authorities are making progress towards an agreement that will reduce these tensions and potentially remove recently adopted barriers to trade.

Figure 8: Impact of Trade Disputes, Source BP

LNG exports increase significantly, led by US and Qatar, fostering a more competitive and globally-integrated market

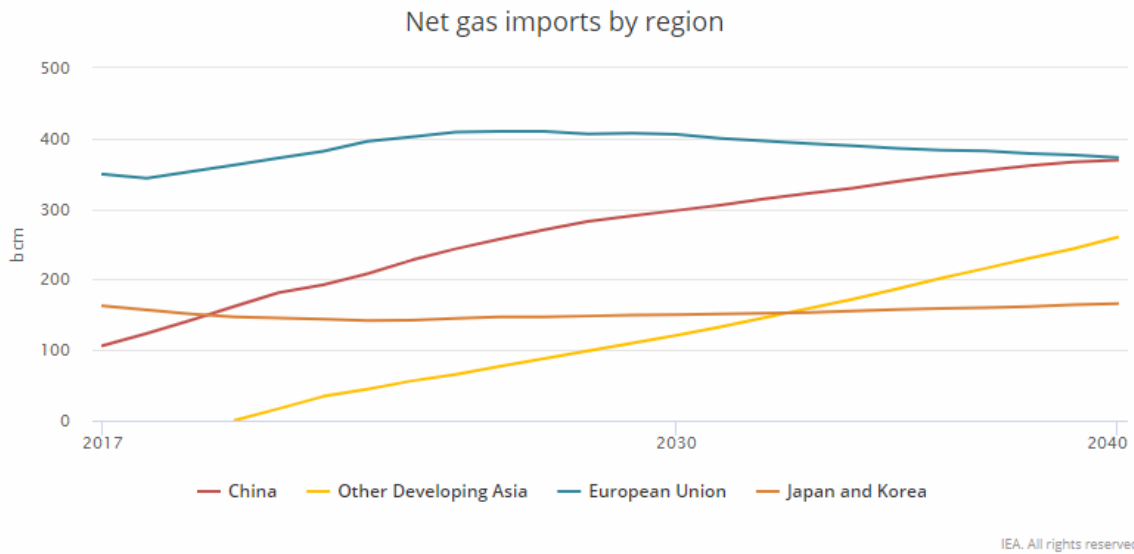


International Energy Agency (IEA): Signposts for the gas outlook

On 7 February the IEA released a review of Chinese gas demand. The commentary noted that:

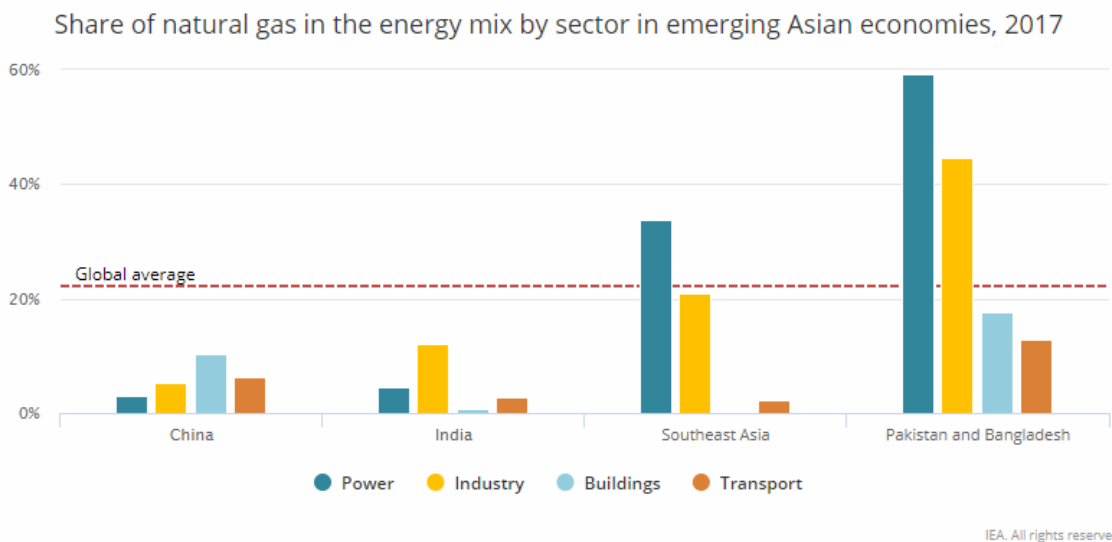
- Gas accounts for 7% of China’s energy mix today, well below the global average of 22%.
- China’s gas demand expanded by a dramatic 15% in 2017, “underpinned by a strong policy push for coal-to-gas switching in industry and buildings as part of the drive to improve air quality”.
- LNG imports grew massively, with China surpassing Korea as the second largest LNG importer in the world.
- Preliminary data for 2018 suggests similarly strong double-digit growth, putting China well on track to become the world’s largest gas-importing country.
- The IEA projects that by 2040 China will account for nearly 30% of global LNG trade flows.

Figure 9: Net Gas Imports by Region, Source IEA



Interestingly natural gas is not forecast to play a meaningful role in India’s energy mix. This is likely caused by a lack of available pipeline infrastructure necessary to supply gas to end consumers.

Figure 10: Natural Gas Share of Energy for selected Asian countries, Source IEA



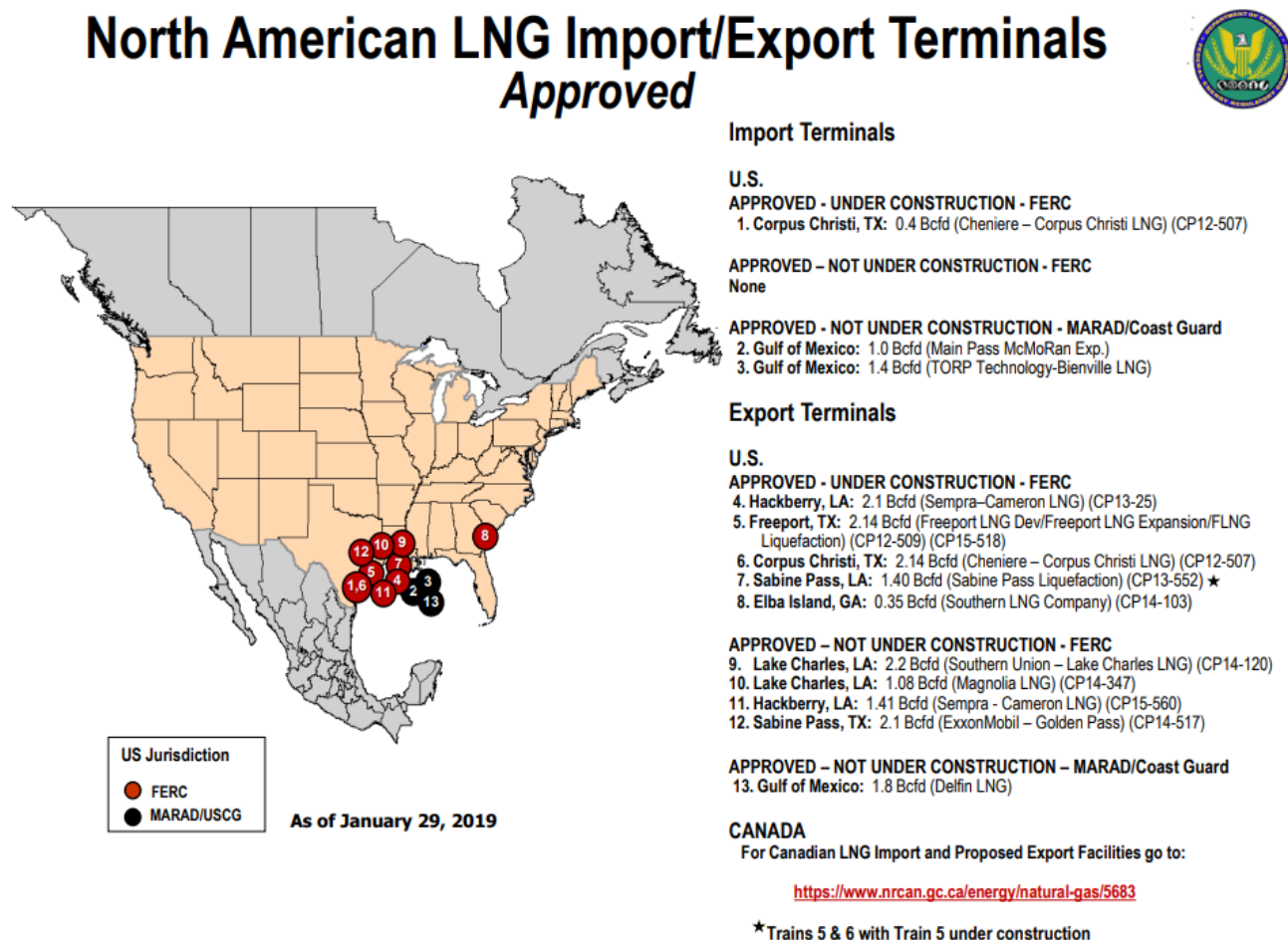
Gas Market

The flow of US LNG export facility news continues:

- Sempra expects the first train at its Cameron LNG terminal to begin production in the second quarter (Platts); and
- Tellurian announced that a final investment decision is expected to be made and construction should begin on Driftwood LNG export terminal by the end of June (Platts).

Figure 11 provides a summary of currently approved US LNG Terminals.

Figure 11: Approved LNG Terminals, Source FERC



Oil Market

The fall in global oil supply has increased prices.

Figure 12: Crude Oil Exports, Source FT

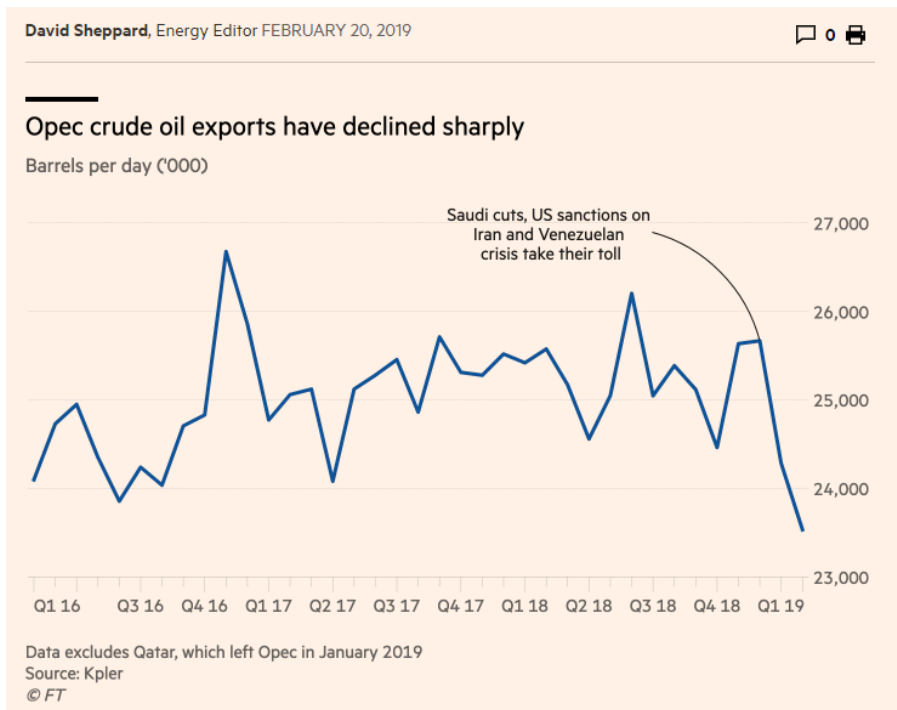
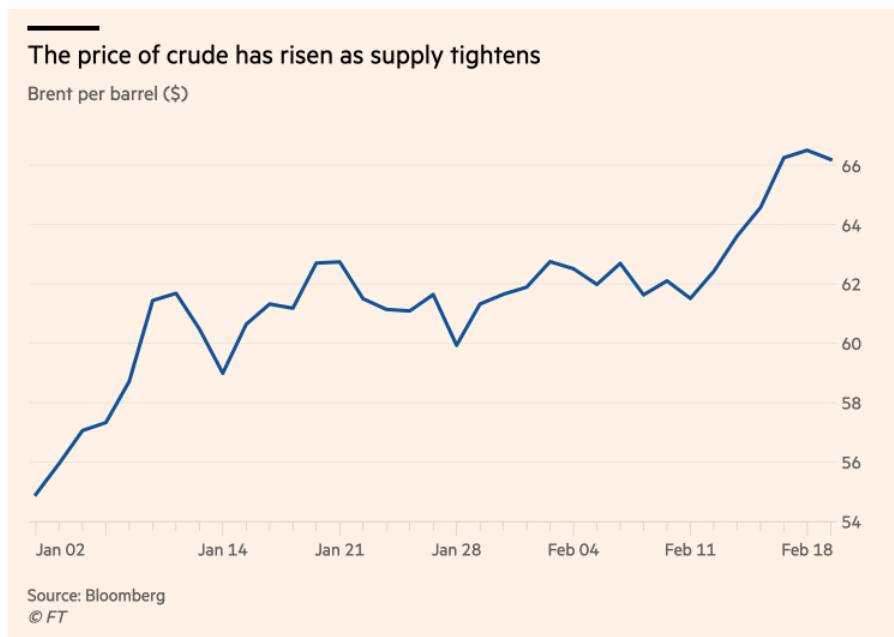
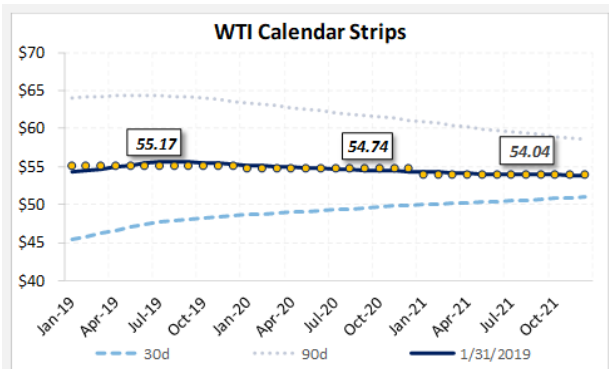


Figure 13: Brent Oil, Source FT



WTI oil prices have also strengthened over the course of February. Henry Hub gas has been stable.

Gas and Oil Prices 1 February 2019

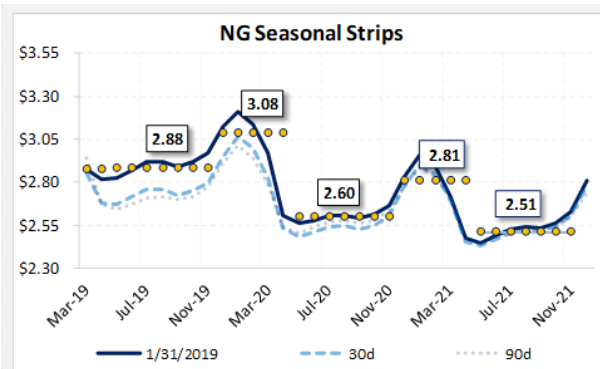


Swap Pricing

	Bal 19	Cal 20	Cal 21	Cal 22
NYMEX WTI Crude	\$ 55.17	\$ 54.74	\$ 54.04	\$ 53.66
ICE Brent Crude	\$ 61.67	\$ 61.04	\$ 60.65	\$ 60.73
Louisiana Light Sweet	\$ 59.59	\$ 57.92	\$ 56.87	\$ 56.49
TM Midland Differential	\$ (1.42)	\$ 0.00	\$ 0.45	
NYMEX Natural Gas	\$ 2.92	\$ 2.75	\$ 2.63	\$ 2.65

Source: Bloomberg LP

Note: Midland diff changed to TM computation Oct 1. All prices indicative only.

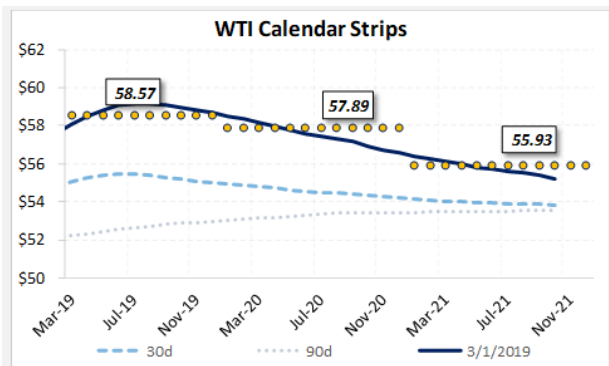


Natural Gas Basis

Location	Spot	Winter '18/'19	Summer '19	Winter '19/'20
Henry Hub Fixed	\$ 3.00	\$ 2.85	\$ 2.87	\$ 3.08
TETCO M3	\$ 4.23	\$ 0.21	\$ (0.32)	\$ 1.25
MichCon	\$ 1.05	\$ (0.07)	\$ (0.23)	\$ (0.19)
CIG	\$ 0.44	\$ (0.43)	\$ (0.68)	\$ (0.52)
Dominion S	\$ (0.04)	\$ (0.27)	\$ (0.43)	\$ (0.40)
NGPL	\$ (0.47)	\$ (0.61)	\$ (0.66)	\$ (0.48)
Waha	\$ (0.57)	\$ (1.62)	\$ (1.61)	\$ (0.93)

All prices as of close yesterday

Gas and Oil Prices 1 March 2019

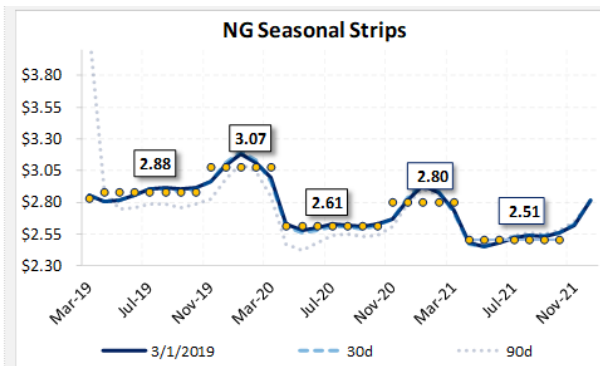


Swap Pricing

	Bal 19	Cal 20	Cal 21	Cal 22
NYMEX WTI Crude	\$ 58.57	\$ 57.89	\$ 55.93	\$ 54.60
ICE Brent Crude	\$ 65.93	\$ 64.47	\$ 62.50	\$ 61.17
Louisiana Light Sweet	\$ 63.61	\$ 61.08	\$ 58.68	\$ 57.35
TM Midland Differential	\$ (1.04)	\$ 0.20	\$ 0.45	
NYMEX Natural Gas	\$ 2.91	\$ 2.75	\$ 2.62	\$ 2.63

Source: Bloomberg LP

Note: Midland diff changed to TM computation Oct 1. All prices indicative only.



Natural Gas Basis

Location	Spot	Winter '18/'19	Summer '19	Winter '19/'20
Henry Hub Fixed	\$ 2.97	\$ 2.86	\$ 2.88	\$ 3.08
TETCO M3	\$ (0.06)	\$ 0.07	\$ (0.27)	\$ 1.25
MichCon	\$ (0.09)	\$ (0.01)	\$ (0.17)	\$ (0.14)
CIG	\$ (0.12)	\$ (0.37)	\$ (0.62)	\$ (0.54)
NGPL	\$ (0.16)	\$ (0.56)	\$ (0.66)	\$ (0.44)
Dominion S	\$ (0.18)	\$ (0.23)	\$ (0.37)	\$ (0.34)
Waha	\$ (1.96)	\$ (1.65)	\$ (1.70)	\$ (0.92)

All prices as of close yesterday

Important Disclaimer.

This report has been issued by Longreach Alternatives Limited ABN 250 828 52364 AFSL 246 747 (“Longreach”). Data is at 31 October 2018 unless stated otherwise. This document is not an offer of securities or financial products, nor is it financial product advice.

As this document has been prepared without taking account of any individual investor’s particular objectives, financial situation or needs, you should consider its appropriateness having regard to your objectives, financial situation and needs before taking any action.

This document has been prepared without taking into account of your objectives, financial situation and needs, you should consider its appropriateness having regard to your objectives, financial situation and needs.

The information stated, opinions expressed and estimates given constitute best judgement at the time of publication and are subject to change without notice. Consequently, although this document is provided in good faith, it is not intended to create any legal liability on the part of Longreach or any other entity and does not vary the terms of a relevant disclosure statement. Past performance is not an indicator of future results. All dollars are US dollars unless otherwise specified.

This document describes some current internal investment guidelines and processes. These are constantly under review and may change over time. Consequently, although this document is provided in good faith, it is not intended to create any legal liability part of Longreach or any other entity and does not vary the terms of a relevant disclosure statement. Past performance is not an indicator of future results. In cases where information contained in this document derives from third parties, Longreach accepts no liability for the accuracy, completeness or appropriateness of such information.