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Spot LNG prices have recently bounced up from three year lows, supported by bullish days on European gas markets and signs of summer demand from Asian buyers. The market has been oversupplied for the past few months, despite China's demand continuing to rise and a jump in deliveries to Europe. Meanwhile, US LNG exports are expected to ramp up over 2H2019. The following is a global view across some of the key importing markets.

Softer summer in China?

Although the spot LNG market into China looks lucrative on paper compared to domestic prices, high LNG terminal stocks and a lack of storage capacity has curtailed spot demand. LNG demand from industrial and chemical sectors has been dented by a raft of month long plant safety inspections. While a mild winter, which capped LNG consumption for heating, has also contributed to high LNG terminal stocks.

Spot LNG prices are lower than even the lowest city gate price. Prices at coastal cities are much higher, with Shanghai at around \$8.7/mn Btu. But most domestic city gas companies are unable to profit from the arbitrage, as they lack access to local terminals. Chinese independent buyers Shenergy Group and Guanghui Energy, however, have the ability to buy incremental spot cargoes.

China remains the leading LNG growth market globally and monthly increases in LNG imports relative to a year ago are likely to continue.

Nuclear impact on South Korea

South Korea's steady drop in LNG imports in 1Q2019 could continue into the summer even as concerns grow about air pollution from coal – fired plants and the government cuts taxes on LNG imports. The country's nuclear generation operated at close to 90% of total capacity in early April, following the restarts of two reactors at the Hanul nuclear power plant in March, reducing demand for LNG in the power mix. Further nuclear additions are expected over 2H2019.

South Korea relies heavily on coal for power generation and because of the sunk costs in existing plants, the country faces hard choices on pushing the wider use of LNG, even as the world's third – largest importer. Last winter, new regulations came in to reduce the level of particulate matter to cut pollution on particularly bad days. This could see oil and coal power plant generation reduced, with gas stepping in.

Japan manages oversupply

Shipments to Japan were down by over 2mn tonnes in 1Q2019 due to mild winter demand and higher nuclear power generation, with local end – users facing high stocks at domestic terminals. Although Japanese buyers may buy incremental cargoes ahead of the summer, spot demand is expected to be capped as some utilities expect their inventories could stay high.

Japanese nuclear availability is expected to be up by about 36% year – on – year, from about 49 TWh in 2018 to almost 67 TWh in 2019.

This year will see Japanese buyers become more prominent in the US LNG market. Chubu Electric and Osaka Gas are the two largest marketers from Train 1 at Freeport LNG, with Mitsui and Mitsubishi each taking a third of supply from the Cameron LNG project.

Slow progress on Indian terminals

Meanwhile, India will remain an important source of spot demand, with buyers keen to absorb gas when the price is competitive relative to oil products. But the domestic gas market has slowed and the outlook for additional demand from new import terminals is limited.

Commissioning of the Mundra terminal remains uncertain, with project partners GSPC and Adani working out a concession agreement before the project can proceed to commissioning. The Ennore LNG terminal on India's east coast was commissioned in March, but is not expected to take more than two to three cargoes this year because of limited pipeline connectivity, according to a source from operator Indian Oil.

Middle East not yet tempted

Middle Eastern LNG buyers have not yet been tempted by lower prices, preferring to meet demand with pipeline supply where possible. Kuwait was the biggest regional LNG importer in both 2018 and the year to date. The second – biggest buyer in 2018 was Egypt, but rising domestic production means the country has been selling cargoes via tender rather than buying them.

Jordan restarted imports from Egypt in September 2018 and in January signed a deal to increase flows to meet around half the country's daily gas demand of 9.3mn cm/d, with the other half coming from the existing 1mn t/y LNG supply deal with Shell and modest domestic production. LNG imports have fallen so far in 2019.

Regional gas consumption tends to peak in the third quarter, so there is still time for spot demand to emerge.

Europe back in the LNG mix

Tight spreads between global LNG markets suggest Europe will remain a preferred option for flexible and spot cargoes over the summer. Recent European gas prices have been volatile, driven up and down by coal and carbon pricing. This, in turn, has influenced sentiment globally on LNG with a correlation between gas and LNG likely to continue.

North – west Europe can absorb LNG but domestic storage sites are well stocked and this could limit demand to move gas into storage over the summer. Terminal utilisation rates, especially in the north – west, have been very high so far this year, with limited scope for further increases in some cases.

Utilisation levels in Spain remain among the lowest in Europe. Strong production from Yamal and a rise in Qatari deliveries to north – west Europe offer stern competition for other suppliers.

Switch to gas generation

Germany's gas – fired power generation is forecast to exceed hard coal power output in 2019.

This is a first for the German recent lower gas prices which have filtered through to the forward curve, in part caused by the level of incoming LNG to European terminals.

Long term, any influence that LNG has on reducing European gas prices could support gas in domestic power mixes. But for this year, in north – west Europe at least, the scope for gas demand to rise substantially is limited.

In southern Europe, early forecasts of a hot summer could support gas demand for power generation in Italy, which may in turn maintain interest in spot supply into the OLT Toscana terminal on the west coast.

Spain has missed out on the surge of LNG seen into other European terminals. Some contract volume with Algeria is now supplied on a flexible basis and has so far this year been absent from the Spanish mix. Possibly this could return, although buyers including Endesa and Iberdrola will soon start to lift from US contractual positions which will offer flexibility. A hot, dry summer could hit hydroelectric generation and bring Spanish gas back into the mix, supporting LNG demand. But Algerian pipe gas flows may also increase.

In the UK, spot opportunities will persist for LNG sellers but the lack of the Rough storage site will limit injection demand over the summer. Longer term, the case for cheap gas and LNG to boost a share in the generation mix is strong.

High Turkish demand, but obstacles

Meanwhile, demand for Turkish LNG could break record levels in 2019, as the country is taking advantage of falling global prices and its expanded import capacity while renegotiating supply contracts with Russia via the upcoming TurkStream corridor. However, Turkey's ability to break the record may be held in check by internal market constraints, in the form of government regulated tariffs.

In addition, even if the US dollar – denominated price of LNG were to fall further this year there is a risk that the depreciation of the Turkish lira would make it unaffordable for the Turkish private sector. On top of that private companies licensed to import spot LNG also have long – term supply contracts with take – or – pay obligations and destination clauses. Unless Turkey succeeds in negotiating the scrapping of these terms in its Russian contracts, Turkish companies could be locked out of the global LNG market.

Argentina enters peak demand

Argentina's state – run gas distributor IEASA season, in 2018 importing 2.53mn tonnes between April and September. Demand in 2019 is expected to be similar to the previous year. The Tango floating LNG export project, under charter by Argentina's state run producer YPF, was recently commissioned and loaded a first cargo. Market sources, however, do not expect regular LNG to be produced until after the end of the southern hemisphere winter, which would be September or October.

Brazil motivated to optimise

State – run Petrobras could have an appetite to import more spot cargoes, given that prices have become low enough to incentivise optimisation.

In 1Q2019, low rainfall and hot temperatures caused a strain on Brazil's power price, as hydropower generation fell. As a result, Brazil's LNG imports were four times higher in 1Q2019 than in 2018.

Increased domestic gas production has enabled Petrobras to become more self – sufficient, although extended production maintenance periods have spurred occasional spot LNG purchase.

Mexico to take pipeline gas

Increased gas pipeline capacity from the US means that LNG demand from Mexico's state – run utility CFE will eventually be displaced infrastructure delays continue, particularly around long – haul transportation projects that have encountered right – of – way issues and technical glitches. This means that LNG could still be relied upon in the short to mid – term given that the terminals still provide supply access to imbalances in Mexico's grid. For the first three months of 2019, Mexico imported 832,000 tonnes of LNG 20% lower than 1Q2018.

LNG imports could be a solution if there are further delays on the construction of the 2.6bn cf/d Sur de Texas Tuxpan submarine pipeline, which is to connect south Texas to Veracruz, Mexico.

Chile incentivised by low prices

Low spot prices in the global market have incentivised demand from some buyers such as the Chilean consortium GNL Chile.

Chile is well supplied with long – term contract volume between portfolio seller Shell and members of the GNL Chile consortium. But the low LNG prices have been attractive enough for the consortium to consider buying on the spot market compared to alternative fuels such as oil – fired generation, coal and hydropower generation.

Natural gas makes up about 19% of installed generation capacity, according to Chile’s National Energy Commission 2018 figures.

Partial cargoes for the Caribbean

Any LNG appetite this year from Caribbean importers is likely to come as smaller deliveries to meet incremental demand, particularly as partial cargoes. Puerto Rico’s EcoElectrica, which typically is supplied by long – term cargoes by Spanish energy company Naturgy and France – based Engie, could be looking for a spot cargo in October, sources have said.

Colombia’s consortium Calamari, which purchase for the Cartagena FSRU, is not likely to need any spot LNG given that the company awarded partial deliveries to Naturgy in late 2018. The terminal was installed to bring in LNG during an El Nino year when the country experiences drought conditions and hydropower generation could be curbed.

In Jamaica, utility Jamaica Public Services contract with US developer New Fortress Energy, which, in turn, secure cargoes on a mid – term basis from UK – based Centrica. Sources say New Fortress Energy could be looking for new supply in 2019.

Other short – term LNG opportunities

The disappearance of Egypt from the short term and spot market has left a demand gap with no equivalent buyer ready to step in. At its peak, Egypt imported almost 7mn tonnes of LNG in 2016, but rising domestic gas production means it has already swung back to being an exporter.

Among new and developing buyers, Bangladesh will provide some opportunity for sellers this year as its second floating import terminal started up in April. The majority of cargoes will be delivered under term deals with Qatar and Oman, but spot demand may emerge.

Meanwhile, Pakistan has tendered for additional cargoes on several occasions but is in discussions with Qatar over a potential increase in term supply. Bahrain joined the importers club in May, but will have limited requirements.

In a major setback for Pakistan’s oil ambitions, the much – awaited Kekra – 1 well in the Arabian Sea has turned out to be a duster. Italian major Eni, as operator, together with US super major ExxonMobil and local players PPL and OGDCL as partners drilled the prospect, which Rystad Energy earlier this year ranked as one of the most promising high – impact wells of 2019.

Canadian oil sands production is yet to enter a period of slower annual production growth compared to previous years. Nevertheless, total production is expected to reach nearly 4mn b/d by 2030 – nearly 1mn more than today, according to a new – 10-year production forecast by IHS Market.

BP is sell its interests in mature Gulf of Suez oil production and exploration concessions in Egypt, including its stake in the Gulf of Suez Petroleum Company to Dubai – based Dragon Oil.

Gazprom Neft (50%), Repsol (25%) and Shell (25%) are to establish a joint venture to develop the Leskinsky and Pukhutsysyakhsky licence blocks on the Gydan Peninsula.

China National Petroleum Corporation (CNPC) and CNOOC are to each take a 10% stake in Novatek's Arctic LNG 2 Project in Russia. The project, which will develop the resources of the Utrenneye field, will comprise three 6.6mn t/y LNG trains. Proved and probable (2P) reserves are put at 7,981mn boe.

Indonesia's Trans Asia Resources is planning to acquire the 6.4mn t/y Fergana oil refinery, Uzbekistan's largest such facility. The Uzbekistan of the oil refinery in April 2019 as part of its plan to open up to economy to foreign investors.

Rising natural gas production in Argentina, coupled with competitive global LNG transportation costs, is expected to position the country as an emerging source of gas supply to Asia during peak demand periods, according to new research from Wood Mackenzie.

Saudi Arabia reported burning an average of 0.4mn b/d of crude oil for power generation in 2018, the lowest amount since at least 2009, the earliest year that data is available from the Joint Organization Data Initiative reports the US Energy Information Administration (EIA).

ExxonMobil and SABIC have announced that they plan to proceed with construction of a chemical facility and a 1.8mn tonne ethane steam cracker in San Patricio County, Texas, US. The 50:50 joint venture, called Gulf Coast Growth Ventures, received final environmental regulatory approval in June 2019 to build an ethane steam cracker, two polyethylene units and a monoethylene glycol unit. Construction will begin in 3Q2019 and start – up is anticipated by 2022.

Total is to take over Toshiba's LNG portfolio in a deal valued at some \$800mn. The arrangement includes a 20-year tolling agreement 2.2mn t/y of LNG from Freeport LNG train 3 in Texas, due corresponding gas transportation agreements on the pipeline feeding the terminal.

China is planning to develop 10 hydrogen refuelling stations (HRS) along four express highways connecting Shanghai with four major cities (Rugao, Suzhou, Huzhou and Ningbo) in the Yangtze River Delta region over the next three years. It's also plans to have more than 500 such sites built by the end of 2030, with more than 200,000 fuel cell vehicles on the road, as part of the three – phase development of the Hydrogen Corridor Construction and Development Plan (H2 Corridor).

Novatek, Total, Siemens and Zarubezhneft have signed a memorandum of understanding to develop an integrated energy – generating project utilising LNG in Vietnam. 'The Vietnamese market is of great interest to us as the country's economy and demand for electricity is forecast to grow at a fast pace, creating favourable conditions for gas – fired power generation and LNG supplies,' said Leonid Mikhelson, Chairman Novatek.

Cameron LNG commissions first train

Cameron LNG has shipped the first commissioning cargo of LNG from the first liquefaction train of the export project in Hackberry, Louisiana, US, bringing the project one step closer to commercial operations.

Phase 1 of the Cameron LNG export project includes the first three liquefaction trains that will enable the export of approximately 12mn t/y (1.7bn cf/d) of LNG.

Cameron LNG is jointly owned by Sempra Energy, Total, Mitsui & Co., and Japan LNG Investment.

Cameron LNG Phase 1 is one of five LNG export projects Sempra Energy is developing in North America. The others are Cameron LNG Phase 2 which will comprise up to two additional liquefaction trains and up to two additional LNG storage tanks; port Arthur LNG in Texas; and Energia Costa Azul LNG Phase 1 and Phase 2 in Mexico. The company has a goal of delivering 45mn t/y of clean natural gas to the largest world markets, which would make it one of North America's largest developers of LNG – export facilities.

Ineos to invest \$2bn in Saudi Arabia

Ineos has signed a memorandum of understanding with Saudi Aramco and Total of France to build three new plants as part of the Jubail 2 complex in Saudi Arabia, at a cost of \$2bn.

The project represent a continuation of Ineos' growth strategy following the announcement of €1bn investment across the UK, acquisitions in China and capacity increases in the US Gulf Coast, Alabama and Chocolate Bayou facilities.

US/China trade war impact on oil and gas

Oil and gas companies based outside the US and China are enjoying potential tariff – based trade advantages in the American and Chinese market because of the deepening trade war between the world's two largest economies, writes Keith Nuthall. US President Donald Trump has authorised an increase in 10% duties to 25% on China – exported refined and crude oils and motor fuels (including Kerosene), natural gas, LNG, LPG and naphtha. The largest tariffs – which entered fully in force on 1 June 2019 – also cover China – made natural gas byproduct sulphur, tarmac, coal gas, water gas, tar, pitch and benzene, as well as steel tubes and pipes.

The increase in duties was designed to put the Chinese government under pressure to negotiate a trade deal. Meetings had been held in March, April and May, but a US government note claimed: 'In the most recent negotiations, China has chosen to retreat from specific commitments agreed to in earlier rounds. [Given] the lack of progress..., the President has directed the [US] Trade Representative to increase the rate of additional duty to 25%. This is to be paid on top of any pre – existing duties Chinese oils and gas sector exports.

In response, China has increased its own duties on US products. Some of these tariffs have also been raised from 10% to 25%, notably on LNG, sulphur, steel oil and gas pipelines. Duties on US – made fuel pumps have risen from 10% to 20%. And tariffs on US hydraulic fluids for brakes and other hydraulic fluids; oils from bituminous minerals; and steel containers containing LNG have risen by 5% to 10%.

'China deeply regrets that the US has decided to increase the tariffs from 10% to 25% on \$200bn worth of China goods exported to the US,' said a China Ministry of Commerce note, adding that it wanted the US – China trade talks to continue – which has happened, although with no real progress.

The world is on an unsustainable path

'There is a growing mismatch between societal demands for action on climate change and the actual pace of progress, with energy demand and carbon emissions growing at their fastest rate for years,' according to Spencer Dale, BP Chief Economist, introducing the latest BP Statistical Review of World is on an unsustainable path,' he stated.

Meanwhile, Bob Dudley, BP Group Chief Executive, noted: 'The longer carbon emissions continue to rise, the harder and more costly will be the necessary eventual adjustment to net zero carbon emissions. As I have said before, this is not a race to renewable, but a race to reduce carbon emissions across many fronts.'

This year's Review highlights the growing divergence between demands for action on climate change and the actual pace of progress on reducing carbon emissions.

Among the key findings, global energy demand increased by 2% in 2018, faster than at any time since 2010/2011. Demand growth was driven largely by China, the US and India, which accounted for over two – thirds of the growth. US energy consumption increased 3.5%, the fastest growth rate in 30 years and in contrast to the declines recorded in the past decade.

Weather effects may account for much of the strength in energy consumption. According to BP there were an unusually large number of both hot and cold days last year, which led to higher energy consumption as the demand for cooling and heating services increased. The increasing frequency of these events may help to explain the demand patterns, suggests the company.

Oil, gas and coal collectively accounted for almost three – quarters of the growth in energy demand in 2018 – their highest share for five years.

Global oil production grew 2.2mn b/d double its historical average, primarily from the US, but also Canada and Russia. The US recorded the largest – ever annual production increases by any country for both oil and natural gas, the vast majority of which came from onshore shale plays.

Natural gas consumption and production was up more than 5% one of the strongest rates of growth for both demand and output for over 30 years, according to BP.

Global power demand grew by 3.7% one of the strongest growth rates seen for 20 years, absorbing around half of the growth in primary energy. On the supply side, the growth in power generation was led by renewable energy, which grew by 14.5% contributing around a third of the growth; followed by coal 3% and natural gas 3.9%. China was the largest contributor to renewable growth, accounting for 45% of the global increase. Despite the increasing adoption and penetration of renewable power, the fuel mix in the global power system remains flat, with the shares of both non – fossil fuels (36%) and coal (38%) in 2018 unchanged from their levels 20 years ago. It hasn't been possible to decarbonise the power sector quickly enough to offset the growth in demand, according to BP.

Latest BP figures show 'worrying' rises in demand and emissions

The oil major places blame for emissions increases on greater global demand for heating and cooling

Oil giant BP has warned of a widening gulf between demands for action on climate change and the sluggish pace of progress on emissions reductions in its 68th annual Statistical Review of World Energy.

The report shows there was a rapid rise in both energy demand and carbon emissions last year – with global energy consumption growing by 2.9% and emissions growing by 2%. The latter figure, equivalent to 0.6 gigatonnes of CO₂, represents the largest year – on – year rise since 2011.

When broken down by – fuel, growth in energy consumption was largely driven by natural gas, which contributed nearly 45% of the increase. Meanwhile, consumption of oil and coal increased by

1.5% and 1.4% respectively. Renewable grew by 14.5% nearing their record – breaking increase in total power generation.

China, the US and India accounted for around two thirds of total rise in energy consumption. According to BP, the most striking growth was seen in the US, where energy consumption increased by a massive 3.5%, the fastest growth seen for 30 years.

Much of the global surge in energy demand can be traced back to extreme weather events, as consumers across the world's major population centres upped their usage of heating and cooling in response to an unusual number of hot and cold days.

In analysis published alongside the report, BP's Group Chief Economist, Spencer Dale, offered two interpretations of the data. If the increased number of heating and cooling days were just random variation, the oil major would 'expect weather effects in the future to revert to more normal levels.'

On the other hand, Dale wrote, if there is a link between growing levels of CO₂ in the atmosphere and the weather patterns observed last year, there is the possibility of a worrying vicious cycle. Under this scenario, increased concentrations of greenhouse gases lead to more extreme weather events, which in turn trigger stronger growth in energy consumption and emissions as household and businesses seek to heat and cool their buildings.

'Even if these weather effects are short lived, such that the growth in energy demand and carbon emissions slow over the next few years, the recent trends still feel very distant from the types of transition paths consistent with meeting the Paris climate goals,' Dale warned.

BP has recently provoked the ire of environmentalists, with campaigners from Greenpeace, pursuing a drilling rig as it is towed from Scotland's Cromarty Firth to a North Sea oil field to drill for oil. Fourteen people have been arrested since the activists first boarded the 27,000 – tonne rig in mid – June.

'We are determined to stop BP drilling new oil wells in the North Sea,' said Greenpeace activist Sarah North. 'We're calling on them to act with leadership by transitioning to 100% renewable energy in response to this escalating global crisis.'

Steep declines in wind, solar and battery technology costs will result in a global power grid nearly half – powered by the two fast – growing renewable energy sources by 2050, according to the latest projection from Bloomberg New Energy Finance (BNEF).

In its New Energy Outlook 2019 (NEO), BNEF sees these technologies ensuring that the power sector contributes its share toward keeping global temperatures from rising more than 2°C, at least until 2030.

According to the report, wind and solar will grow from 7% of generation today to 48% by 2050. Over the same time period, electricity demand is set to increase 62% resulting in global generating capacity almost tripling between 2018 and 2050. This will attract around \$13tn in new investment, of which wind will take \$5tn and solar \$4tn. In addition to the spending on new generating plants, \$840bn will go to batteries and approximately \$11tn to grid expansion.

The costs of solar, wind and battery technologies are set to fall, by '28%, 14% and 18% respectively for energy doubling in global installed capacity,' said Mathias Kimmel, NEO 2019 Lead Analyst.

By 2030, energy generated and stored from these technologies will – undercut electricity generated by existing coal and gas plants almost everywhere,’ he added. These cost reductions, says the report, may negate the need for direct subsidies for existing technologies in many countries.

The overall outlook on global emissions is mixed, though. On the one hand, the build – out of solar, wind and batteries will put the world on a path that is compatible with these objectives at least until 2030. However, the report asserts that a lot more will need to be done with technologies other than solar and wind power – such as nuclear, biogas, hydrogen and carbon capture and storage – beyond 2030 to deep the global temperature increase below 2°C.

Elena Giannakopoulou, Head of Energy Economics at BNEF, said: ‘To achieve this level of transition and decarbonisation, other policy changes will be required – namely, the reforming of power markets to ensure wind, solar, and batteries are remunerated properly for their contributions to the grid.’

BNEF’s NEO director, Seb Henbest added: ‘Governments need to do two separate things – one is to ensure their markets are friendly to the expansion of low – cost wind, solar and batteries; and the other is to back research and early deployment of these other technologies so that they can be harnessed at scale from the 2030s onwards.’

European consortium launches new carbon capture and storage project

A consortium of 11 European stakeholders, including ArcelorMittal, Axens, IFP Energies Nouvelles (IFPEN) and Total, has announced plans for a new industrial carbon capture and storage (CCS) project.

The €20mn DMX Demonstration in Dunkirk (3D) project, which is part of the Horizon 2020 EU research and innovation programme, aims to demonstrate the new DMX process for capturing CO₂ emissions at the industrial level, using the ArcelorMittal steelworks site in Dunkirk as a pilot site.

The pilot, designed by Axens, will begin construction in 2020 and will be able to capture 0.5 tonnes of CO₂ per hour from steelmaking gases by 2021. The DMX process, a patented process stemming from IFPEN’s Research and to be marketed by Axens, uses a solvent that is claimed to reduce the energy consumption for capture by approximately 35%. Additionally, using the heat produced on site will cut capture costs in half, to less than €30 per tonne of CO₂, says the consortium.

The 3D project’s ambition is to validate replicable technical solutions and to achieve industrial deployment of CCS technology around the world. It could play a major role in enabling industries with high energy consumption and CO₂ emissions, such as the steel industry, to reduce their emissions.

Following the pilot, the consortium aims to implement its first industrial unit at the ArcelorMittal site, due to be operational from 2025. It should be able to capture more than 125 tonnes of CO₂ per hour. This unit will be part of the European Dunkirk North Sea cluster, which aims to capture, pack transport and store 10mn tonnes of CO₂ per year once operational by 2035.

Global energy investment stabilises after three years of decline

Oil, gas and coal sectors all saw increased global investment during 2018, with few signs of a reallocation to cleaner sources.

Global energy investment remained relatively stable in 2018 at over \$1.8tn, following three years of decline, according to a new report from the International Energy Agency (IEA).

The World Energy Investment 2019 report shows an increase in capital spending on oil, gas and coal supply. Meanwhile, investment in energy efficiency was stable and renewable spending decreased.

Power was the largest investment sector for the third consecutive year, reflecting the growing importance of electricity, demand for which grew at almost double the rate of growth for overall energy demand in 2018. However, power investment fell by 1% overall due to stable spending on gas in the US and lower solar power and coal investment in China.

The 4% increase in upstream oil and gas spending was driven by a higher oil price, increases in shale spending – particularly in the US – and a focus on shorter cycle projects which limit capital at risk, says the report.

Renewable – based power investment decreased by 1% due to flattening net additions to capacity and the falling costs of renewable technologies, particularly solar power and onshore wind, which experienced 70% and 20% drops in capital costs respectively on 2010 levels.

The most rapid rise in energy investment came from India, which saw a 12% increase from 2015 – 2018. Renewable spending exceeded that of fossil fuel – based power, supported by favourable policies and the rapidly falling costs of solar power. This swift increase, assets the IEA, makes India one of three key drivers of global energy investment alongside China and the US.

China, which remained the largest market for energy investment in 2018, saw investment decline by 7%, a change driven by 60% lower spends on coal – fired plants which outweighed relatively high investments in renewable and nuclear power.

The EU saw similar levels of decline, although the share of spending going towards low carbon energy has risen to nearly 60%.

According to the report, there are few signs of the substantial reallocation of capital towards energy efficiency and cleaner supply sources needed to bring investment in line with the Paris Agreement. The IEA suggests that investment in energy efficiency would need to accelerate quickly while overall investment in low carbon energy should more than double by 2030. If we are to meet the goals of the Paris Agreement.