Energy Markets and Climate Change

The new landscape

Cyprus Economic Society

11 November 2021

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Climate change

What I will be presenting to you today comes from two key events this month. COP26 in Glasgow and FLAME, Europe's biggest natural gas/LNG conference in Amsterdam

- The joint US/China declaration is giving COP26 the support it needs
- Clean energy technology has not scaled-up yet to replace gas. While this is the case, increasing renewables and reducing gas for flexible power generation will lead to increased price volatility
- Politicians need to be honest about the cost implications of dealing with climate change. Their actions are making energy transition a costly and volatile process
- Oil&gas: COP26 and growing climate change pressure is introducing uncertainty and short-termism, affecting longer-term investments
- Uncertainties and regulatory risk discourage investment. Industry needs clarity and stability to invest

Impact

- Governments and activists become too hanged-up on net-zero and forget about getting there in an orderly manner - practicalities and social impact of climate change matter
- Consumers are price-sensitive and will react if prices stay high. It is essential to do cost-benefit analysis of each and every solution, otherwise it could backfire
- Security of energy supply does not come automatically. As we go further and further into renewables, intermittency will become more challenging until new technology becomes available to address it
- In response to the energy crisis and COP26 we need the energy market to be reformed and the right regulatory framework to deal with it. Clear policy and regulations are essential

Some sobering thoughts

- The often-repeated statement that ‘renewables is good – gas is bad' is too simplistic. Intermittency challenges this
- The claim by politicians that “decarbonisation will not be costly” is turning out to be nonsense. It is facing intermittency and the costs to deal with it
- We need a transition that deals with security of energy supplies and decarbonisation simultaneously and in a balanced way – this is an inconvenient truth for environmentalists who prefer to ignore it
- Producers of fossil fuels reduced production last year due to Covid-19 and are holding back now leveraging their advantage for higher prices
- Any claim that they were unprepared for the rapid economic recovery this year or that there are insufficient reserves does not stuck-up

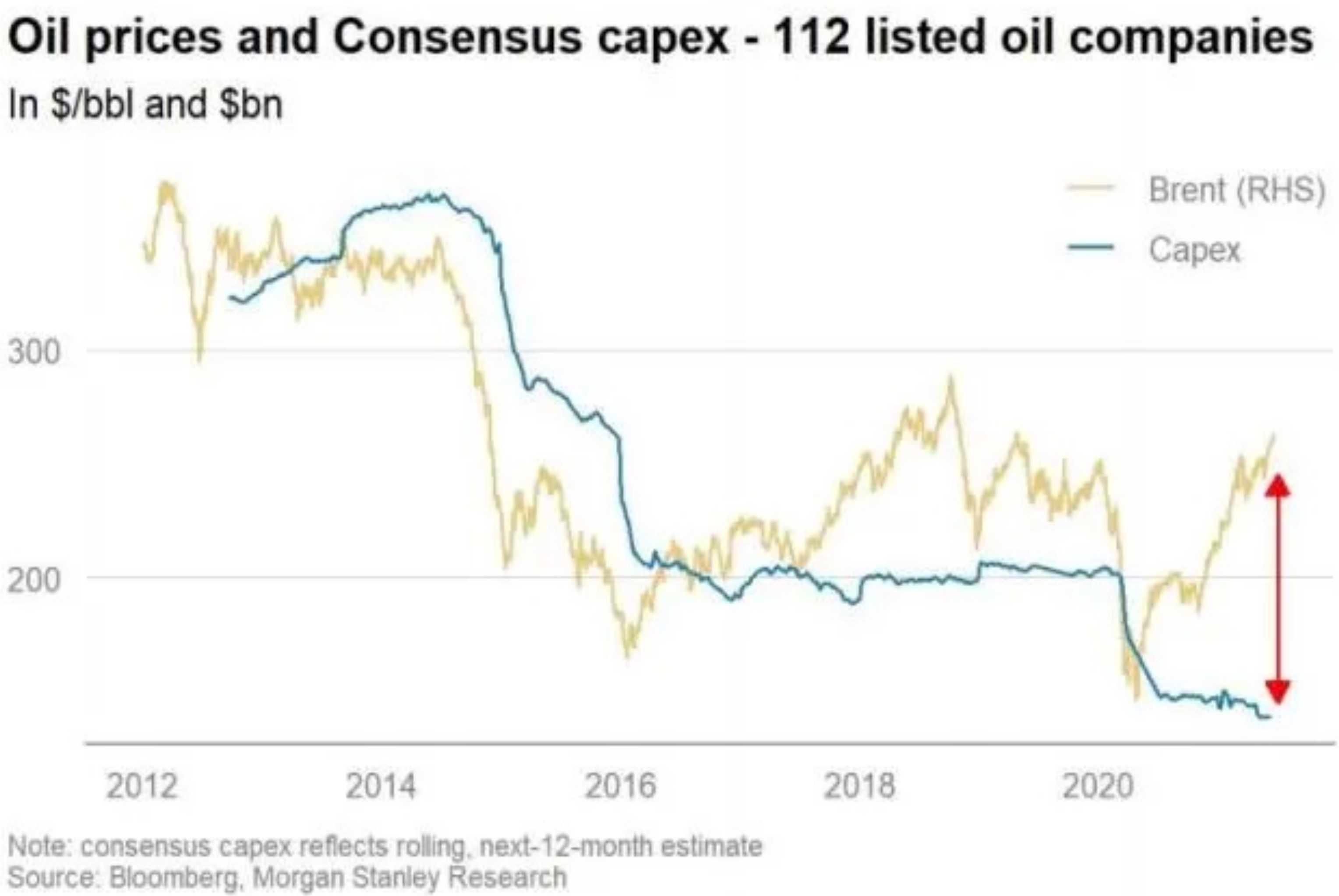
International Energy Agency views

- The IEA says that natural gas has an important role to play as a partner to renewables in supporting orderly energy transition
- Gas is important for energy security until renewable generation scales-up and hydrogen is ready to play a serious role. But the gas industry must move fast to low-carbon and eliminate methane leakage
- A word of caution: batteries are playing an increasingly important role in dealing with intermittency and as capacities increase inevitably they limit the role of gas as back-up
- There is a lot of pressure on oil companies to curtail investment in new oil&gas, coming from investors, environmental and climate activists and governments
- The IEA supports this, saying that current oil&gas investment is now broadly in line with net-zero requirements and does not expect the level of future investment to change significantly

More from IEA

- Indeed, majors like ExxonMobil and Chevron are not planning any significant increase in capital spending in the foreseeable future, beyond the current massively reduced levels – down by 60%-70% compared to the highs of 2014 – that must also include spending on low-carbon projects
- In fact ExxonMobil is considering abandoning some of its biggest future oil&gas projects. This does not bode well for the East Med.
- Available oil&gas reserves are sufficient to cater for future demand as this adjusts in response to pledges made at COP26 – the world does not need more oil&gas
- The IEA said that the European majors are influenced by their investors who are pushing them further towards clean energy and net-zero by 2050. US majors rely heavily on external finance and are under increasing pressure to decarbonise while maintaining high dividends

Listed oil company capex 2012-2021



Gas demand, production and trading

- Gas buyers and consumers were traumatised by high prices last winter and they see a repetition now, but worse. This is not helping gas. It encourages users to look for alternatives and accelerates the drive for energy efficiency
- With the world needing even more energy, oil&gas producers are in a strong position and are leveraging this to keep prices high. This unsettled situation will icontinue as transition progresses, leading to increased volatility
- Green hydrogen, bioLNG and other green technology will have to become price-competitive against other fuels if they are to gain energy market share. That will take time

Future demand

- Optimism seems to prevail with LNG producers. Most expect LNG demand to carry on growing, with some forecasting by as much as 50% by 2040, with Asia being the main destination. But this largely ignores COP26 and net-zero and their impact, even though increasingly customers are asking for green LNG
- The expectation is that most future natural gas demand will be in Asia, displacing coal and enabling renewables
- High gas prices in Europe are due to ‘sentiment’ caused by the currently very low liquidity in gas supply. However, the expectation is that they will drop down to normal levels by spring, especially with Gazprom filling European gas storages
- Without a plan to deal with this, it may become a recurring theme during energy transition, causing future disruption and price volatility

Natural gas prices

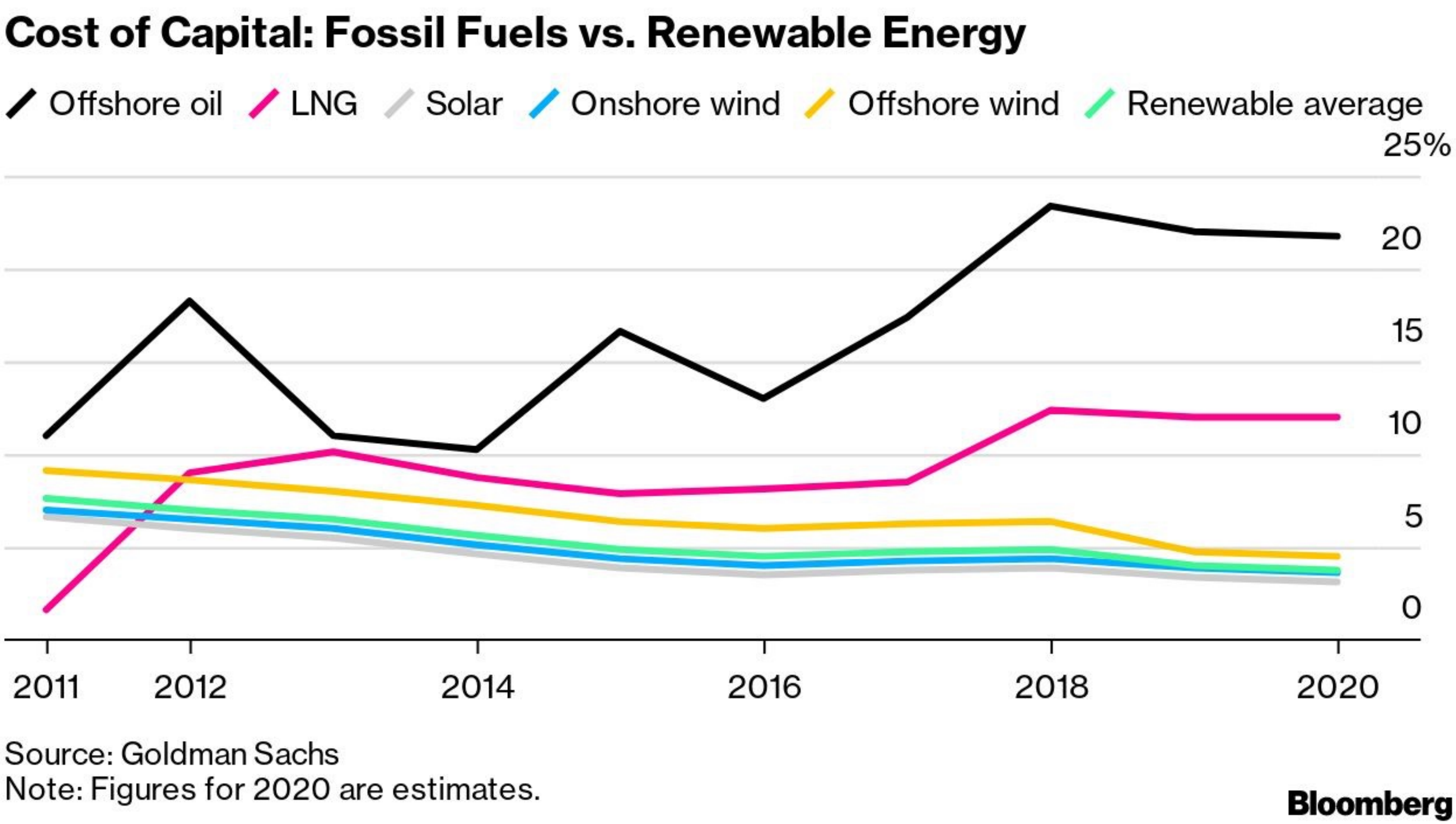
The Russian factor

- Russia sees its gas exports growing in the future but mostly to Asia in the form of LNG – about 150mtpa is being planned. Not planning any new pipelines, except to China
- Combined with Qatar’s plans, new LNG from the two– the cheapest in the world – is likely to capture any new markets
- Gazprom said that it has met its contractual obligations in Europe in full, and that in fact from January to October supplies to its European partners actually increased by more than 13%
- Gazprom stressed that it prefers long-term gas contracts, saying that they make the market balanced and predictable, and warned against hub indexation and short-term trading - not interested in record low or record high gas prices and prefers a balanced and predictable market that only long-term contracts can provide. It needs this to justify and support its long-term investment plans

Investment climate

- Oil-indexed LNG contracts have come down to 10%-11% Brent. Given the energy crisis and high gas price volatility, future contracts are expected to be mostly oil-indexed
- Despite the current energy crisis, competition for long-term contracts remains intense due to high level of supply
- Financing new oil&gas is becoming increasingly difficult as climate change pressure on fossil fuels grows. The cost of capital is up
- Goldman Sachs says that this year will mark the first time in history that renewable power will be the largest area of energy investment
- Natural gas has a role in energy transition, particularly in Asia, displacing coal and enabling renewables. But price volatility and uncertainty about the future and prices make investment decisions that much more difficult

Cost of capital



East Med energy – a change of direction?

- At a meeting end October at European Commission's (EC) EAAS I was asked for my views on the future of drilling for hydrocarbons offshore Cyprus. Are we heading for another crisis?
- First, Cyprus must act according to its contractual obligations to the oil companies (IOCs) and vice-versa.
- But, as I explained, IOC interests have now changed and are even less likely to proceed with development of East Med gas, unless the global markets undergo a major change and prices stay high for the longer-term – not likely.
- Completion of appraisal drilling by ExxonMobil end of year, and other contractual obligations, may be followed by a long period of inactivity

New long-term strategy needed

- Cyprus must review its strategy for exploration and development of hydrocarbons in its EEZ, taking into account the latest developments, including the inexorable and rapid shift from fossil fuels to clean energy, especially given the outcome of COP26
- The future is renewables, with natural gas discovered in Cyprus' EEZ to be used during transition as back-up to expanding renewables in Cyprus and the region. Cyprus should aim for at least 50% renewable electricity by 2030
- It is time to ask IRENA to renew the energy roadmap it prepared for Cyprus in 2015 - and this time to use it

New long-term strategy needed

- The IOCs are not likely to be interested in regional development. It is not their immediate priority. They are interested in immediate, easy and high returns - not long-term performance. Something that is a challenge for the East Med
- One approach would be that once the IOCs complete their immediate contractual obligations, Cyprus refrains from further drilling and further licensing, on the basis of a new strategy as I indicated earlier
- Cyprus NECP must be updated asap to reflect these developments. Following elections in 2023, the new government must review and develop a long-term strategy and policies, with a pro-active response to the shift from fossil fuels to clean energy, in line with the outcome of COP26 and EU’s Fit-for-55, but also net-zero by 2050