

OLIVIER APPERT

President of the French Energy Council and of the French committee of the World Energy Council

Nobuo TANAKA

The first on my list is Olivier Appert.

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In my presentation, I would like to set up the scene of the US and China. Yesterday and today, we discussed the trade battle between those two countries. It is interesting to consider what the impact of this trade war on the energy scene could be. First of all, I would like to highlight the dramatic changes in the landscape, both in China and in the US in the last 10 years. Just consider some figures from 2007 and 2017.

Energy demand in the US is characterised by great stability, but there is a game changer of the shale revolution and I will come back to that afterwards. Total energy consumption as well as oil consumption decreased by around 4%, and refining capacity is almost stable.

On the contrary, the total energy consumption of China increased during this same period by 45%. Oil consumption increased by 54% and refining capacity by 66% in just 10 years. Internal production of oil remained stable in China and increased for gas, but consumption of gas multiplied by a factor of four in just 10 years. China is now the second-biggest importer of LNG, behind Japan. Coal production and consumption grew by 20%. In Western countries, we consider that coal is over, but it is not the case in China, and the consumption increased. However, coal demand peaked in 2013, despite a recent slight increase. China has started to move away from coal, and in those last 10 years, the share of coal in China's primary energy mix declined to 60.4% from 74% just 10 years ago. Electricity consumption almost doubled. It is clear that energy security is the Achilles heel of China. China's oil import dependency ratio rose to 68% in 2017, the highest in its history. Dependency on natural gas imports rose to almost 40%.

I will say a few words on renewable energy, which has been increasing both in China and in the US. While the renewable energy increased by a factor of four in the US, it increased by a factor of 30 in China during the same period. 40% of global investments in the world in renewable energy are done in China. You know that four Chinese companies are amongst the five biggest producers of solar panels, which was not at all the case 10 years ago.

The geopolitics of oil and gas experienced during this period the game changer of non-conventional hydrocarbon in the US. Thanks to the shale revolution, US oil production increased by a factor of two, despite the drop in oil prices. The US is now the first producer of petroleum, ahead of Russia and Saudi Arabia. Gas production increased by more than 40% and the US became a net exporter of gas. Thanks to the shale oil and gas energy revolution, US energy dependence has fallen from 29% in 2007 to only 8% in 2017.

This is opening wide opportunities for US diplomacy, as it is explained clearly in Trump's America First energy plan. The clear objective is to make America energy-independent, and the energy independence of Obama has been replaced by an energy dominance. Let me quote one of Trump's tweets which says, 'American energy dominance is a strategic economic and foreign policy goal for the United States. The US wants to become and stay totally independent of any need to import energy from the OPEC cartel or any nation hostile to our interests'.

Therefore, it is not surprising that energy is also at the core of the Trump-led war with China. I just remind you that it started in March and June 2018, when the US imposed the tariffs and quotas on steel and aluminium. Then in July and August, the US began imposing tariffs on \$50 billion Chinese industrial goods on the grounds of unfair trade practices. As China has retaliated with tit-for-tat measures, President Trump has imposed tariffs of \$200 billion on Chinese goods

and threatened to put tariffs on all Chinese imported goods. During this escalation, energy goods were included by China, such as LNG or coal.

As China's domestic energy consumption has grown, the country has become a significant destination for US energy exports. China has taken a large share of incremental volume of US LTO and emerged as the second-largest buyer of US crude in 2017. However, despite this dramatic increase, the US accounts for less than 3% of Chinese crude imports. As the global market is fungible, China would replace its US barrels for its top sellers, Russia or Saudi Arabia. China will also continue to import Iranian crude despite the US embargo. In the short term, the biggest winners of an oil trade war between the US and China would be OPEC and Russia, which is quite surprising.

China has retaliated to the US tariffs by imposing amongst others a 10% tariff on US LNG. The US is becoming the third-largest energy-exporting country by capacity, but currently, the US is not a major supplier of LNG to China. The US represents less than 4% of total Chinese LNG imports in 2017. The trade conflict could, however, have a significant impact on the new wave of US LNG projects. The Chinese tariffs may delay or even stall some US LNG projects and slow down the expansion of US LNG products. China will not lack alternative sources. A cut in US LNG imports by China will open the door further for cooperation with Russia. Other energy exporters will benefit, such as Qatar, Papua New Guinea, Australia, and Canada, and the recent FID taken by LNG Canada clearly targets the Asian and Chinese market.

Since 23 August, China has imposed an additional 25% import tariff on US coal. In 2017, China imported 3 million tonnes of US coal, representing only 1% of total Chinese imports and almost nothing in its total consumption. Therefore, the impact of the tariffs will be minor. On the US side, China accounted for only 5% of US coal exports, but the effect of China's tariffs on the US coal industry can be seen as a missed opportunity for US miners, as the Chinese market was a potential outlet for US coal.

Trump also decided to impose a quota of 2.5 gigawatts of import-free duty, and on top of that, he added a 30% tariff on solar panels. The objective was to stimulate the creation of new jobs in the US. Some new factories will be built, creating some jobs. However, the impact on the downstream industry will be significant. That is why the Solar Energy Industry Association was opposed to tariffs. Developers have since reported the cancellation or freeze of more than 2.5 billion in large projects. Let us add two additional impacts for the energy industry.

In the US, the imposition of tariffs on imported steel will have an indirect impact on the US oil and gas industry. Prices of US steel products have soared and this has a significant impact for the oil and gas industry. That is why the Oil and Gas Executives expressed their opposition to the tariffs.

However, we cannot ignore the fact that the trade war may have an indirect impact on energy markets. There is a risk that the current tension would escalate further and would have an adverse effect on confidence, asset prices, and investment. It would impact economic growth. Lower economic growth would in turn reduce the pace of increase of crude oil and energy demand. This is the last potential impact of this trade war between China and the US.

Nobuo TANAKA

I have just one small question for you. You said that China will continue to buy oil from Iran. Do you think China will increase the volume of importation or decrease it? This trade war between the US and China may have certain impacts. Will China do a deal to reduce importation or just battle by increasing the importation of oil from Iran? Which do you think China will take?

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I am convinced that China does not really care about the embargo. Due to the trade war between China and the US, they will continue to import and even increase their imports. What could the retaliation measures be? The retaliation measures, as explained by Trichet before, are detrimental for Western companies. That is why Total, for example, decided to drop from South Pars LNG 11 project. What could be the retaliation measures the US Government towards most of the Chinese companies? By the way, I am convinced that the Communist party in Beijing will urge companies to oppose any decision of the US.

