The Telegraph

Energy price war spreads to gas as US shale storms global market, stalks Russia



The emergence of the US as a gas superpower is a geopolitical earthquake, said the US energy secretary

• Ambrose Evans-Pritchard, in houston

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The US has exported its first shipment of natural gas in a historic move that shifts the balance of power in the global energy market and kicks off a struggle with Russia for market share.

Surging US supply over the next five years threatens to break the Kremlin's dominance over Europe's gas market, and is already provoking talk of a "Saudi-style" counter attack by Moscow to drive US shale gas frackers out of business before they gain a footing.

At the very least, it sharpens a global price war as liquefied natural gas (LNG) bursts onto the scene, and closes the chapter on the 20th century system of pipeline monopolies. Gas is starting to resemble the spot market for crude oil, with the same wild swings in prices and boom-bust cycles.



A seven-year, \$11.5bn project by Cheniere Energy finally came to fruition this week as the first LNG cargo left Sabine Pass in Louisiana - in a special molybdenum-hulled ship at -160 degrees Centigrade - destined for Petrobras in Brazil. "It is a big day for our natural gas revolution," said <u>Ernest Moniz</u>, the US energy secretary.

Speaking at the <u>IHS CERAWeek summit in Texas</u>, he said the emergence of the US as a gas superpower is a geopolitical earthquake, though he has always been coy about the exact intention. "It is a change in the energy security picture," he said.

The US is ramping up LNG exports to almost 130bn cubic metres a day (BCM) by the end of the decade, roughly equal to Russia's gas exports to Europe. This may rise to 200 BCM and possibly beyond as the shale industry keeps finding once unthinkable volumes of gas.

\$/MMBtu



Natural gas spot prices

Mr Moniz said the world had been expecting the US to be a huge importer of LNG before the shale shock. The mere fact that this is no longer the case turns the market upsidedown, and is a key reason why LNG prices have been in free-fall across the world.

The shift to net exports is something that almost nobody expected. Mr Moniz predicted that the US will match Qatar, and possibly exceed it to become the world's biggest exporter of LNG by 2020.

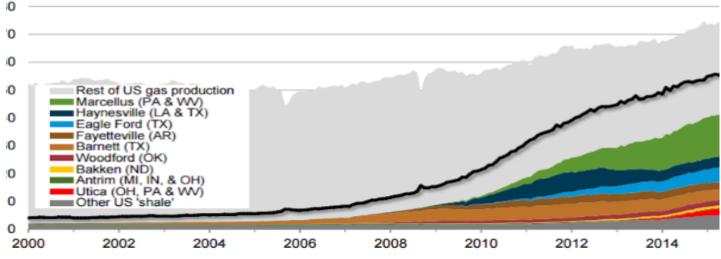
The US is still a net importer of natural gas but that is because Canadian pipelines supply New York and Detroit. However, it does not alter the overall picture.

Martin Houston, chairman of Parallax Energy, said the US may account for a quarter of the world's LNG market within a decade, and is so efficient that it can deliver gas to Europe for as little as \$5 per million British thermal unit (Btu) despite the high cost of liquefaction and shipping.

I.S. shale gas production was 5% of total U.S. dry gas production in 200 0% in 2007, and is now 56% in 2015

atural gas production (dry) lion cubic feet per day

Shale gas producti percent of total gas pro



urces: EIA Natural Gas Monthly data through December, STEO through May2015 and Drilling Info.

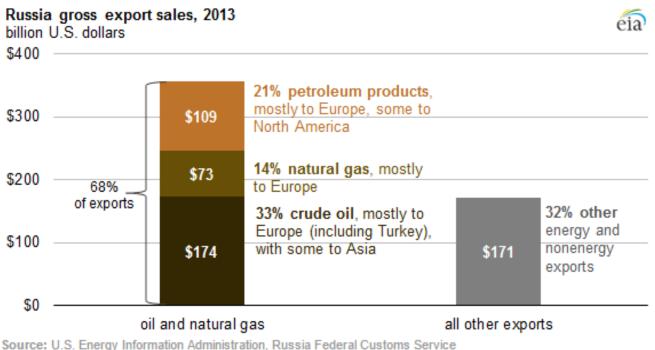
The Americans are now in a race for leadership with Australia as its offshore Gorgon field cranks into gear, but the two countries feed different markets.

The US shipments are aimed directly at Europe, where there is a large and unused infrastructure of LNG terminals, including Lithuania's new "Independence" plant designed to end reliance on Russian pipelines. The mere prospect of American LNG deprives Russia of its pricing power and political leverage in Europe, spoiling its gas cash cow.

Just as US shale oil has turned global crude markets upside-down, LNG from shale is now doing the same to the gas markets - beaching countless projects around the world launched in the pre-shale era.

Alexander Medvedev, deputy chairman of Gazprom's management committee, made light of the US challenge. "There is room enough for all in this gas market. Europe needs another 70 BCM of gas by 2020," he said at the CERAWeek forum.

Oil and natural gas sales accounted for 68% of Russia's total export revenues in 2013



Source: U.S. Energy Information Administration, Russia Federal Customs Service Note: Natural das includes liquefied natural das (LNG) sales.

The COP21 climate accords in Paris have made gas an imperative, giving it a clear edge over coal as the fossil fuel of choice, since its CO2 emissions are half as much.

But Mr Medvedev hinted that Russia will fight back, warning that its gas deliveries will be "competitively priced".

Russia faces a dilemma. Gazprom can easily undercut LNG from the US, able to deliver gas for just \$3.50. It has 100 BCM of idle capacity in west Siberia, according to the Oxford Institute for Energy Studies (OIES).

James Henderson, a senior research fellow at the OIES, said it is tempting for Russia to "crater" the price until it falls below the break-even cost of shale frackers, much as Saudi Arabia is doing to oil frackers. "There may be some logic for Gazprom in adopting a Saudi-like strategy in order to reinforce its long-term competitive advantage," he said.



A Gazprom worker

Russian gas prices in Europe have already fallen so far - to \$5.80 today from \$11.20 in 2013 - that it may be worth the pain of pushing it a little lower to defend Moscow's 30pc share of the market.

The OIES said Gazprom could lose \$25bn to \$40bn in revenues over the next five years if it fails to act. The question is whether to strike a pre-emptive blow now while the first US cargoes are still modest. America's huge ramp-up occurs after 2018.

Bud Coote, a former chief energy analyst at the US Central Intelligence Agency and now a senior fellow at the Atlantic Council, said the Kremlin may try to knock out America's LNG industry but that too would be very costly. "There's no question that the Russians could underprice LNG [but] it's hard to see them robbing themselves of so much revenue," he said.



For the US, the start of LNG exports is a bitter-sweet victory. The first cargoes come just as the market crumbles. The price of LNG in Europe has dropped from \$12 to \$5.35 over the past three years.

In Asia it has dropped from \$17 to \$6 as Japan's nuclear power plants restart after the 2011 Fukushima crisis, and discounted Indonesian LNG is currently selling for \$4.50. The glut has undermined the whole calculus behind the dash for LNG, at least for now.

Mr Houston, from Parallax, said the short-term ups and downs are meaningless in an industry with a horizon of 20 years or more, and COP21 is a gift to gas. "Coal may not be dead but it is on a respirator. The future for LNG in the US is absolutely great," he said.