

The US-EU Energy Trade Dilemma

by Claudia Squeglia and Raffaello Matarazzo

ABSTRACT

The diverging paths in terms of energy self-sufficiency between the US - among the world largest producers - and Europe - highly dependent on imports - appear to create opportunities for exchanges of oil and gas between the two shores of the Atlantic. On the oil front, recent market developments are putting pressure on US decision-makers to remove the outdated oil export ban that was adopted in the mid-1970s. On the gas side, the EU supply diversification goal is nurturing the Old Continent's interest in the US's export potential. Nevertheless, political hurdles undermine the likelihood of the US lifting the oil ban within this presidential term, while the uncertain competitiveness of US gas delivered to European markets could limit US-EU gas exchange. These political and market conditions risk quashing EU efforts for the inclusion of an energy chapter, aimed at boosting EU-US energy trade, in the negotiations on the Transatlantic Trade and Investment Partnership (TTIP).

United States | Energy | Oil | External trade | European Union | TTIP



The US-EU Energy Trade Dilemma

by Claudia Squeglia and Raffaello Matarazzo*

Introduction

The prodigious surge in US hydrocarbon production in recent years (first shale gas and then, more recently, shale oil) continues to produce profound economic and geopolitical effects. The collapse of oil prices, the change of OPEC's approach to price and volume management, the rebalancing of relations between producing and consuming countries, and the increasing economic pain suffered by Russia, Venezuela, Ecuador and a number of East African and Middle Eastern countries, are only the most visible consequences of the US hydrocarbon production boom.

The so-called "shale gale" was enabled by the combination of two existing technologies applied to known deposits of hydrocarbons, which are considered uneconomic if extracted by traditional drilling methods. The innovative application of extraction techniques and operating procedures has transformed the US from one of the world's potentially biggest importers of energy to a substantially energy-independent nation, in which cheap energy has literally fueled the recovery of many of its industrial sectors.

At the same time, across the Atlantic, the opposite has taken place. The domestic decline of oil and gas production due to the progressive exhaustion of traditional basins has caused a corresponding increase in Europe's dependency on regions that, in some cases, have become more politically unstable. The steep decline in European energy demand triggered by the economic recession and the strong and costly support for renewables have only in part tempered this dynamic. And little relief can be expected from a US-style shale boom in Europe, which for a number of reasons is unlikely to take place to any significant extent.¹

¹ To name just some of the main above-ground obstacles: strong public opposition, higher population density, huge water requirements for hydraulic fracturing, and the absence of a favourable legal framework.

^{*} Claudia Squeglia is vice president at Eni, Government Affairs Department, with a long experience in strategic planning and control, business strategy, and oil and gas market analysis. Raffaello Matarazzo (MA, PhD) is manager at Eni, Government Affairs Department, and associate fellow at the Istituto Affari Internazionali (IAI). The views expressed in this paper are exclusively those of the authors and do not necessarily reflect those of Eni.

Paper prepared for the Istituto Affari Internazionali (IAI), September 2015.

These diametrically opposite trends in energy import dependency on the shores of the ocean have rekindled European interest in the potential benefits of energy trade with the US. In addition, following the Republican mid-term landslide in 2014, debate has resumed in the US on the removal of a crude oil export ban that was imposed in the very different energy context of the 1970s.

The Old Continent's interest in the benefits of imported US energy could not but be reflected in the controversial negotiations for the Transatlantic Trade and Investment Partnership (TTIP), which have been under way since 2013. In this context, the European Commission has repeatedly proposed dedicating a specific section of the treaty to the energy trade, with a view to greatly facilitating US LNG exports towards Europe. As things stand currently, US LNG export projects have to go through complex and costly authorization processes.

The European Commission sees the inclusion of an energy section as a way of not only shoring up its security of gas supply, but also laying the path to a lifting of the obsolete ban on crude exports. The US has resisted this, mainly because of the very high sensitivity on the subject of energy independence and the role of cheap domestic energy in bolstering economic activity and competitiveness.²

1. The US debate on the crude oil export ban

On July 30, 2015, the US Senate Energy and Natural Resources Committee narrowly passed a bill³ for the removal of the ban on crude oil exports, which has been in force in the US since the mid-1970s. The bill passed along party lines by a vote of 12-10. Congressional Democrats remain reluctant to reverse the ban, citing a fear that it would lead to higher energy prices. However, Democrat support is seen as crucial to getting President Barack Obama to sign any legislation permitting crude exports.⁴ The measure therefore faces an uphill battle in getting passed by the full Senate. Despite the fact that both the Administration and many members of Congress appear, in principle, in favour of lifting the ban, very few seem willing at this time to take on explicit responsibility for such a choice.

² US crude oil production has increased from 5 million barrels per day (b/d) in late 2006 to above 9 million b/d in late 2014. Total petroleum production is over 12 million b/d, making the US the largest liquids supplier in the world. Rising production and declining petroleum consumption has reduced US import dependence from 60 to 26 percent over the past eight years. Jason Bordoff and Trevor Houser, *Navigating the U.S. Oil Export Debate*, New York, Center on Global Energy Policy, January 2015, p. 4, http://energypolicy.columbia.edu/node/910.

³ The Offshore Production and Energizing National Security Act of 2015. See US Senate Committee on Energy and Natural Resources, Business Meeting on 20 Agenda Items (Continued), 30 July 2015, http://www.energy.senate.gov/public/index.cfm/hearings-and-business-meetings?ID=17a3a637d168-43ab-a293-5667f0da3715.

⁴ The Chair of the Senate Energy Committee, Republican Lisa Murkowski, has been a long-time advocate for lifting the ban, which she said was outdated due to the US drilling boom that has propelled the country to vie with Russia and Saudi Arabia as the world's biggest oil producer.

From a political point of view, one of the main arguments marshaled against the lifting of the ban is the widespread public perception – founded or not – that exports would result in an increase of the domestic energy bill. The political establishment is therefore very careful not to burn a part of its electoral consensus on this subject. On the other hand, the possible price-lowering effects of the reintroduction of Iranian crude to world markets could be an opportunity for a simultaneous removal of the ban, without the latter having a significant impact on increasing US domestic oil prices.

But the effect on prices is a secondary problem. The real obstacle for part of the US establishment is that the export ban is intertwined – even psychologically – with national security, which seems difficult to give up even in a geopolitical and market context that is radically different from when the ban came into force.⁵

2. Deep roots

The Energy Policy and Conservation Act (EPCA)⁶ was adopted by the US Congress in 1975, a couple of years after the 1973 oil embargo launched by the Organization of Arab Exporting Countries (OAPEC)⁷ and in a context of administered oil prices in the country. The provision called for the president to "enact a law prohibiting the export of oil" produced in the United States. The oil export restrictions were later codified in the Export Administration Regulations, today managed by an agency in the Department of Commerce. Only in exceptional cases considered to be of national interest may the President authorize limited oil exports.

The rationale for the rule's introduction lay in the peculiar market framework of the mid-1970s in a context of administered oil prices in the US: the need to isolate the US market from international ones in order to enable price controls and therefore prevent domestically produced crude from being exported to international markets at a premium.

⁵ On 23 June 2015, a report entitled Cross-Currents: Iranian Oil and the U.S. Export Ban that was prepared for the Senate Energy Committee Chair Sen. Murkowski underlined that if the United States does not lift its 40-year ban on crude exports, Iran could soon be competing in global markets that would be mostly shut to US oil companies. According to the report, if the deal between the P5+1 (China, France, Russia, the UK and the US plus Germany) and Iran on the Iranian nuclear program is reached, the OPEC member could be producing significantly more oil by the end of 2016, pushing down global crude prices. American crude is not a "perfect" replacement for Iranian oil, the report states, but "U.S. shipments of certain grades could be competitive under the right economic conditions." See US Senate Majority Staff, *Cross-Currents: Iranian Oil and the U.S. Export Ban*, 23 June 2015, p. 7, http://www.energy.senate.gov/public/index.cfm/files/serve?File_id=5924132f-4885-4651-a6a2-c75354b3688a.

⁶ Public Law 94-163, 89 Stat. 871, 22 December 1975, http://www.gpo.gov/fdsys/pkg/STATUTE-89/pdf/STATUTE-89-Pg871.pdf.

⁷ OAPEC is comprised of 10 member countries: Kuwait, Libya, Saudi Arabia (1968); Algeria, Bahrain, Qatar, the United Arab Emirates (1970); Syria, Iraq (1972); and Egypt (1973).

The lifting of the administered price regime in the early 1980s, at the end of the international oil crises, removed the original rationale for the crude export ban. Therefore, sometime later, the ban on the export of refined oil products was lifted, while the ban on crude export survived because of its irrelevance in a context of US declining oil production and high import dependence.

The recent boom of US shale oil production rekindled, starting in 2009, the debate on relaxing export restrictions. American producers are strongly inclined towards the removal of the ban because they would benefit from higher international prices. In contrast, refiners oppose it because low domestic oil prices enable higher margins and the greater competitiveness of refined products sold outside of the US on the international markets.

The drive towards the liberalization of exports can seem paradoxical given that the US continues to import about 30 percent of its consumption and will likely remain a crude importer. This apparent inconsistency between the need for oil imports and the push for exports is mainly due to the mismatch between the quality of US domestic crude (light oil) and the plant configuration of refineries (high complexity). The irony is that US refiners invested billions of dollars in the early 2000s to increase the complexity of their refineries, having assumed they would have to cope in the future with increasing amounts of heavy crudes (which cost less) imported from Canada, Mexico and Venezuela. The shale boom would completely overturn such an assumption a few years later. But for complex refineries, working light crude results in low yields, so refiners are willing to use certain US light oils – and particularly North Dakota's Bakken shale oil – only if they can buy it at a discount; otherwise they would prefer to import heavy crudes from Canada, Venezuela and Mexico. In consequence, many producers of light oil, not having the option of exports, are actually "captive" suppliers of US refiners and suffer their terms.⁸

3. Two sides of the coin

Promoters of the export ban's removal say it has lost its *raison d'être* and that exports would have positive effects on the national economy by promoting investment growth and domestic oil production, thereby boosting employment in the industry and benefitting the whole economy, not only producing states. According to the energy consultancy IHS, each new job in oil extraction creates three new jobs in related industries and another six in the general economy.⁹ The IHS study presented

⁸ Philip Brown et al., "U.S. Crude Oil Export Policy: Background and Considerations", in CRS Reports, No. R43442 (31 December 2014), https://www.fas.org/sgp/crs/misc/R43442.pdf.

⁹ IHS Energy and IHS Economics, Unleashing the Supply Chain. Assessing the economic impact of a US crude oil free trade policy. Executive summary, March 2015, p. 5, http://www.energy.senate.gov/public/index.cfm/files/serve?File_id=6fcbe64a-7a34-4ac8-ba14-b7be1cfe1bee.

by Ambassador Carlos Pascual on March 19, 2015 to the Committee on Energy and Natural Resources of the US Senate quantifies the average annual benefits (between 2016 and 2030) of the ban's removal:

- between 124,000 and 240,000 new jobs;
- between 26 and 47 billion dollars extra GDP;
- the recovery of US credibility within the WTO, in which the Americans have condemned protectionist China for imposing a ban on the export of rare earths;
- a weakening of oil-dependent states in geopolitical competition with the United States such as Russia and Iran, among others;
- a more efficient functioning of the market.

Those who oppose the lifting of the ban point out instead:

- reasons of national security, based on the overall non-self-sufficiency of the country for oil supplies; the Energy Information Administration's (EIA) projections to 2040 show a continued need for crude oil imports of between 6 and 8 million b/d;
- the removal of the ban would benefit Asian and, to a lesser extent, European refiners at the expense of US refiners;
- increased domestic production would result in greater environmental damage from increased GHG emissions and a greater use of land for oil production;
- exports could result in higher energy bills for the average citizen, with negative repercussions on the economy and employment.

4. Political clash

In April 2015 US Energy Secretary Ernest Moniz showed that there are no compelling economic reasons against the ban and that the US is still an oil importer despite it. The administration, Moniz concluded, would however further explore the issue.¹⁰

Polls show citizen opinion changes very much depending on how the subject is presented, but also that there is a high level of sensitivity regarding gasoline prices and oil company profits – two factors that fatally swing the public pendulum in favor of the status quo.¹¹

The Republican Party and the 2016 presidential candidates, therefore, will likely avoid taking a lead on the issue, preferring to seek a bipartisan agreement with President Obama, who however aims at climate becoming a flagship legacy of his administration. The White House reluctance to open a new front with environmental movements may further reduce the likelihood of the ban lift in the next year.¹²

¹⁰ Jennifer A. Dlouhy, "CERAWeek: Energy chief sees no 'compelling' case for oil exports yet", in *Fuel Fix* Blog, 23 April 2015, http://fuelfix.com/?p=672826.

¹¹ Jonathan Leff, "As gasoline prices drop, Americans swing to favor oil exports: Poll", in *Reuters*, 29 January 2015, http://reut.rs/1CCf7TM.

¹² On 26 June 2015, 13 Democratic senators sent a letter to the US President strongly urging

The White House also believes it has made another important concession to the exploration and production sector by issuing, on December 30, 2014, a guidance that simplifies and promotes the export of condensates (very similar to light crude oil and used as feedstock for oil refining and petrochemical processes).¹³ Although not comparable to crude exports, the measure provides partial relief to the many producers currently under pressure due to low oil prices.

Furthermore, the presently low spread between Brent (the European oil price benchmark) and the US WTI price benchmark is about 4.7 dollars per barrel (2015 YTD), which is unlikely to generate political pressure to speed up a decision on the crude export ban.

To date, it seems difficult to expect a removal of the ban before the inauguration of the next US president in January 2017. If the Republicans won the White House in 2016, retaining control of Congress, the ban would probably be removed at the beginning of the next presidential term. In the event of a Democrat victory, however, the outcome would be less obvious, even if the ban would be increasingly difficult to defend.¹⁴

Some analysts believe that ultimately a compromise position could be reached in which the refiners are "compensated" by the simultaneous lifting of the ban on foreign vessels transporting cargo between US ports (the so-called Jones Act), a measure that ensures advantages for US shipowners and an increase in costs for refiners.¹⁵

The debate on the ban on exports of crude from the US will remain on the agenda in coming months, during passage of the bill proposed by Chairman Murkowski for its removal, which could end (with a positive vote by the Energy Commission and then approval by the Senate) by December. It is not obvious, however, that the issue will be raised by candidates during the presidential campaign, which enters a critical phase in January 2016 with the beginning of both parties' primaries. The great sensitivity of the public to the issue, particularly in "swing" states, and the easy manipulation to which the subject lends itself do not make it a topic of choice for participants in the electoral battle.

him to keep the ban in place. The group includes some prominent voices, including progressive heavyweights Elizabeth Warren and Ed Markey of Massachusetts. See http://www.markey.senate.gov/imo/media/doc/2015-06-26-OilExports-Senate-Letter.pdf.

¹³ US Department of Commerce Bureau of Industry and Security (BIS), FAQs: Crude Oil and Petroleum Products, 30 December 2014, http://www.bis.doc.gov/index.php/policy-guidance/faqs.

¹⁴ Corey Boles and Greg Priddy, *No action to lift crude export ban before 2017*, Eurasia Group, 11 February 2015.

¹⁵ See, for example, Charles K. Ebinger and Heather Greenley, "Changing Markets. Economic Opportunities from Lifting the U.S. Ban on Crude Oil Exports", in Brookings Energy Security Initiative Policy Briefs, No. 14-02, September 2014, p. 21, http://brook.gs/1hvXLBt.

In the wider policy world, however, there seems to be a growing awareness that the economic, geopolitical and security reasons that inspired the ban have now expired. The stakes remain very high, and in the current volatile and uncertain oil market, a decision of such political and economic relevance can only be taken at the end of a deep and inclusive process.

5. TTIP from an energy perspective

Unless, against all expectations, the TTIP treaty makes a contribution to the removal of the oil exports ban, to date the implications of the treaty on energy markets are likely to be fairly limited. This is not just because tariff barriers on the energy trade are generally limited, but also because of the specific characteristics of trade in resources in the EU and US.

Coal, together with other solid fuels, is the main energy source traded between the US and the EU. The EU imports about 18 percent of its needs from the US, and there are neither tariff nor non-tariff barriers to this trade. There is, if anything, a problem of coherence within the EU's environmental policies but on which the TTIP would have no effect.

The treaty could have some impact on US LNG exports to Europe, with LNG that may well become the most important energy commodity traded between the two shores of the Atlantic. Following the shale boom and the proliferation of liquefaction projects for LNG exports in the US, many importing countries (particularly in Asia and in Europe) have begun to look to US LNG as an important diversification lever with respect to an excessive dependence on a small number of large producers. US LNG may also represent an opportunity for pricing mechanism diversification, by including in European buyers' portfolio some Henry Hub indexed gas (Henry Hub is the main US gas hub).

There are currently more than 20 LNG export projects in the US going through the authorization process, which they must complete before arriving at the Final Investment Decision and therefore begin construction and operations. The export of LNG from the US (lower 48) requires two licenses: an export authorization from the Department of Energy (DOE) that certifies – for countries that do not have a free trade agreement (FTA) with the US – that the exports will not be contrary to the national interest, as well as an authorization from the Federal Energy Regulation Commission (FERC) that includes an environmental impact assessment and a construction permit.

Were TTIP to be agreed upon and ratified – while simplifying the DOE part of the story, upgrading EU member states into "FTA countries" – it would not affect the FERC approval process, which can cost up to 100 million dollars and take between 16 and 24 months, and which therefore constitutes the biggest obstacle to export projects. The streamlining of DOE approval procedures, which already took place

in 2014, effectively means that TTIP's ratification would have little practical bearing on the trade of LNG towards Europe.

The real obstacle to LNG exports from the US to Europe seems to be, if anything, the very small price differential between gas traded on the Henry Hub and on European hubs (about 4 dollars per million BTU, 2015 YTD), which is insufficient to cover the costs of processing and logistics (estimated at no less than 5 dollars per million BTU) of exporting gas from the US to Europe.

Also, taking a longer-term market view, the US-EU hub price spread is not expected to recover to a level capable of ensuring permanent affordability of these gas flows. Moreover, the US is also negotiating another FTA: the Trans-Pacific Partnership (TPP), which includes some of the leading importers of LNG in the Pacific, further reducing the already modest advantage for Europe that could have resulted from US LNG following the signing of TTIP.¹⁶

Conclusions

Starting in the late 1940s, the United States became increasingly dependent on imported oil due to the decline in domestic production, and so the issue of energy self-sufficiency has been high on the agenda of both policymakers and the general public. The shock caused by the international oil crisis of the early 1970s, in the midst of the Cold War – the outcome of which was then more uncertain than ever – further exacerbated the perception of American vulnerability on the energy front.

The "shale revolution" of the last few years, therefore, has played into deeply rooted economic and political collective paradigms in the US. Despite the resilience, so far, of the American oil and gas bonanza, high production levels cannot be taken for granted, and the ongoing debate about removing the oil export ban has implications that go far beyond national borders. Besides the ongoing public debate, the policy world is also considering both the direct and indirect geopolitical implications of any export of oil and of the potentially far-reaching developments in the international LNG market.

The European Union is one of the international players most naturally interested in the outcome of this debate, in part because of the historical link between the two shores of the Atlantic. As noted above, the implications of US oil exports would still be less than those of significant exports of LNG.

¹⁶ Koen Rademaekers et al., TTIP Impacts on European Energy Markets and Manufacturing Industries, Brussels, European Parliament Policy Department A: Economic and Scientific Policy, January 2015, http://www.europarl.europa.eu/thinktank/it/document.html?reference=IPOL_ STU%282015%29536316.

The impact for the EU of the removal of the oil export ban would mainly concern a possible slight decrease in the price of the commodity, resulting from the increased flow of crude on the global market. Some specific benefits could accrue to the refining industries in Europe and Asia: once US crude oil prices are in line with those in international markets, non-US refiners could recover some of the competitiveness lost to their US competitors. Oil market developments are increasing pressure on US decision-makers to remove the outdated oil export ban, as confirmed by the recent approval of a pro-lift bill by the US Senate Energy Committee. But political and cultural hurdles and, last but not least, President Obama aiming at climate becoming his flagship legacy, could hinder the lift's likelihood within this presidential term.

The export of LNG could have major geopolitical relevance, particularly at a time when tensions between Russia and Ukraine on the one hand and the instability coupled with booming domestic gas demand in North Africa on the other, have put the issue of the diversification of gas supplies at center stage in Europe. However, expectations must be carefully calibrated to current market realities: the cost of liquefaction and transportation of LNG from the US is likely to compromise the competitiveness of US gas on overseas markets such as Europe, compared to supplies from Russia or Africa. But the effects on European gas pricing may still not be secondary, especially if viewed in a medium-term perspective.

Despite the US shale gale and the diverging paths of energy self-sufficiency between the Atlantic's shores, the possibility of a stronger and more beneficial transatlantic energy trade continues to face relevant obstacles. While geopolitical development may campaign in favour of a stronger EU-US energy exchange, market and political conditions seem to confirm the long road still ahead.

Updated 1 September 2015

Istituto Affari Internazionali (IAI)

Founded by Altiero Spinelli in 1965, does research in the fields of foreign policy, political economy and international security. A non-profit organisation, the IAI aims to further and disseminate knowledge through research studies, conferences and publications. To that end, it cooperates with other research institutes, universities and foundations in Italy and abroad and is a member of various international networks. More specifically, the main research sectors are: European institutions and policies; Italian foreign policy; trends in the global economy and internationalisation processes in Italy; the Mediterranean and the Middle East; defence economy and policy; and transatlantic relations. The IAI publishes an English-language quarterly (The International Spectator), an online webzine (AffarInternazionali), two series of research papers (Quaderni IAI and IAI Research Papers) and other papers' series related to IAI research projects.

Via Angelo Brunetti, 9 - I-00186 Rome, Italy T +39 06 3224360 F + 39 06 3224363 <u>iai@iai.it</u> www.iai.it

Latest IAI WORKING PAPERS

- 15 | 28 Claudia Squeglia and Raffaello Matarazzo, The US-EU Energy Trade Dilemma
- 15 27 Sven Biscop, Global and Operational: A New Strategy for EU Foreign and Security Policy
- 15 26 Robert Springborg, President Sisi's Delegative Authoritarianism
- 15 | 25 Riccardo Alcaro, The West and the Middle East After the Iran Nuclear Deal
- 15 | 24 Anastasia Nesvetailova, The Offshore Nexus, Sanctions and the Russian Crisis
- 15 23 Rosaria Puglisi, A People's Army: Civil Society as a Security Actor in Post-Maidan Ukraine
- 15 | 22 Nona Mikhelidze, #ElectricYerevan: Why Armenia's Future is in Europe
- 15 21 Sami Andoura, What Potential for Cooperation between the EU and Turkey on Diversification of Gas Supply?
- 15 | 20 Galia Sabar and Elizabeth Tsurkov, Israel's Policies toward Asylum-Seekers: 2002-2014
- 15 | 19 Sabrina Marchetti and Ruba Salih, Gender and Mobility across Southern and Eastern European Borders: "Double Standards" and the Ambiguities of European Neighbourhood Policy