

1ST HIGH-LEVEL BUSINESS TO BUSINESS ENERGY FORUM

Towards large-scale U.S. LNG exports to the EU's gas market: competitive pricing, infrastructure investments and technological innovation

May 2, 2019
EUROPEAN COMMISSION
Charlemagne Building
Alcide de Gasperi Room





This event is organized by the US-EU Energy Council in collaboration with Central Europe Energy Partners, Polskie LNG and LNG Allies









EU-U.S. Energy Council 1st High-Level Business to Business Energy Forum

Towards large-scale U.S. LNG exports to the EU's gas market: competitive pricing, infrastructure investments and technological innovation

May 2, 2019 Charlemagne Building Brussels, Belgium

Overview

In their Joint Statement of July 25, 2018, U.S. President Donald J. Trump and European Commission (EC) President Jean-Claude Junker agreed to strengthen strategic cooperation with respect to energy. They agreed on the benefits of expanded exports of U.S. liquefied natural gas (LNG) for transatlantic energy security and the diversification of European energy supplies. Following-up on this agreement, the EU and the United States are pleased to present the 1st EU-U.S. Energy Council High-Level Business to Business Energy Forum on May 2, 2019 with the theme of "Towards large-scale U.S. LNG exports to the EU's gas market: competitive pricing, infrastructure investments and technological innovation".

American and European businesses are poised to invest in significant transatlantic commercial opportunities that span the entire LNG supply chain; from new infrastructure for upstream development, liquefaction and re-gasification to pipeline network distribution. This forum is designed as a high-level event to capitalize on this opportunity by bringing together U.S. and European decision-makers from companies in the LNG sector for match-making and deal-making purposes.

The 1st EU-U.S. Energy Council High-Level Business to Business Energy Forum will bring together 250-300 participants from the LNG sector to help accelerate the wider penetration of competitively priced U.S. LNG into the EU market. This will support the EU's energy diversification strategy and further facilitate construction of the remaining necessary LNG infrastructure. The forum will also explore new models for public-private project finance and look ahead to innovative usages of LNG in the transportation sector. U.S. Secretary of Energy Rick Perry and Commissioner for Energy and Climate Miguel Arias Cañete will preside over the event with Ministerial-level representation from EU Member States.

U.S. LNG Market Developments: A Reliable Supply of Affordable Natural Gas

The impact of the shale revolution in the United States continues to reverberate through global energy markets. Natural gas production in the United States increased nearly 50 percent since 2000 and currently stands at close to 30 trillion cubic feet per year (tcf/y) (850 billion cubic metres per annum (bcm/a)). The U.S. Government has authorized 21.35 billion cubic feet per day (bcf/d) (217 bcm/a) of natural gas for export. U.S. liquefaction capacity continues to expand, with three facilities—Sabine Pass, Cove Point and Corpus Christi—already operational and three more new U.S. projects coming online by the end of 2020—Cameron, Elba Island and Freeport—increasing total U.S. liquefaction capacity to 11 bcf/d (112 bcm/a). Four new export terminals—Magnolia LNG, Delfin LNG, Lake Charles, Golden Pass—and the sixth train at Sabine Pass have been approved by both the U.S. Federal Regulatory Commission (FERC) and the U.S. Department of Energy with final investment decisions (FIDs) expected soon. These four proposed projects represent a combined additional LNG export capacity of 7.6 Bcf/d (80 bcm/a). With new U.S. LNG export terminals along the Atlantic coast coming on line that shorten the transit time and costs—notably in Maryland, Georgia and Rhode Island—U.S. exports will become even more attractive and cost competitive in the European gas market.

European LNG Market Potential: Strong and Sustainable Demand for Imports—Opportunities for U.S. Industry

The EU gas market is a large, liberalized and liquid market with ample access possibilities for LNG suppliers, including those from the United States. Total regasification capacity in the EU's 20 large-scale LNG terminals totals 19 bcf/d (210 bcm/a), which is sufficient to cover over 40 percent of Europe's gas demand. Two new European LNG import terminals are under construction in Spain (Tenerife and Gran Canaria) and a number of expansions are planned for Europe's existing LNG import terminals. Moving forward, there are 7 large-scale LNG import terminals being considered or planned in the EU which, if built, can result in Europe's regasification capacity growing significantly by 2021. EU Member State storage facilities contribute further to the flexibility of the European gas system.

Each EU LNG project faces a unique set of opportunities and challenges, defined by regulatory and market factors. Some key EU LNG import projects will likely benefit from the EC's streamlined permitting requirements for Project of Common Interest (PCI). EC regulation requires Member States to operate a 'one stop-shop' for permitting by designated National Competent Authority for PCIs, while Energy Regulatory Authorities can provide so-called 'regulatory incentives' for PCI projects. In addition, the EC has awarded substantial funds for the construction of two LNG projects (Krk LNG Terminal in Croatia and the Cyprus LNG Terminal above €100 million each) from the €4.7 billion budget of the Connecting Europe Facility (CEF) for energy infrastructure. The EC has also provided support for the preparatory activities of four other LNG projects (Shannon LNG Terminal in Ireland and connecting pipeline (IE); Alexandroupolis terminal in Greece; Gothenburg LNG terminal in Sweden; and a capacity extension of Świnoujście LNG terminal in Poland).

Large-Scale LNG Exports to Europe: The Future is Now

European partners are now looking to U.S. LNG exports as an opportunity to diversify gas supplies and supply sources. The availability of U.S. LNG supplies represents an important energy source within the EU's Energy Union Framework Strategy to mitigate disruptions in supply from other sources amid projected declines in domestic production from the North Sea and the Groningen gas field in the Netherlands. U.S. LNG is also attractive due to the flexible terms under which it can be procured. The potential for Europe as a prime destination for U.S. LNG exports is significant given the continent's geographic proximity, ample import capacity, liquid, transparent and liberal markets. Significant volumes have been contracted to European–based companies for flexible destination delivery. Over the longer term, opening the transatlantic market for large-scale LNG trade will be linked to European natural gas and LNG market growth, including both greater market integration and the spread of local transmission networks to boost demand. The investment climate for new modern infrastructure to support this growth will depend on several factors:

- 1) Investing in the few remaining gas interconnection projects to ensure a fully integrated EU market where all EU Member States can have direct or indirect access to LNG;
- 2) Developing innovative business and pricing models to further increase the competitiveness of U.S. LNG
- 3) Spurring demand in key markets with innovation in the transport sector for road and shipping; and
- 4) Improving transparency on access at individual terminals.

Industry leaders and decision-makers will engage in discussions on these topics and more at the business event.

About Us: EU-U.S. Energy Council

The EU-U.S. Energy Council is a high-level transatlantic body designed to deepen coordination on strategic energy issues of mutual interest, foster cooperation on energy policies and further strengthen research collaboration on clean energy technologies. Co-chairmanship of the Council is held at the senior-most diplomatic levels in the EU and in the United States Government. The High Representative of the EU for Foreign Affairs and Security Policy/Vice President of the EU Commission Frederica Mogherini, the Vice President for Energy Union Maroš Šefčovič, and the Commissioner for Energy and Climate Miguel Arias Cañete serve as co-chairs on the EU side. Secretary of State Mike Pompeo and Secretary of Energy Rick Perry co-chair for the United States. A representative of the rotating EU Presidency also takes part in the meetings. The 1st EU-U.S. Energy Council High-Level Business to Business Forum is the result of an agreement by Council Co-Chairs at the 8th EU-U.S Energy Council in Brussels on July 12 2018 to sponsor a leading business forum with the goal to spur greater cooperation and market opportunities in the transatlantic energy market.



1st U.SEU Energy Council High-Level Business to Business Forum Alcide de Gasperi room				
8:00–9:00 am	Arrival and Check-in			
(1 hour)				
8:30 am	Please arrive at the Charlemagne Building by 8:30 am.			
9:00–9:20 am (20 min)	EC Keynote Address: European Commissioner for Energy and Climate Miguel Arias Cañete will address the steady progress of the Energy Union Framework Strategy since 2015 and commercial opportunities for LNG in the EU gas market presented by the Connecting Europe Facility (CEF) and funding for EU Projects of Common Interest (PCIs) in the energy sector.			
	Energy security remains at the top of the EU's agenda. Spurred by the crisis in Ukraine, the EC announced a new "Strategy for a Resilient Energy Union with a forward-looking Climate Change Policy" in 2015. At its core, the framework is aimed at diversifying energy sources, suppliers and routes of supply, and increasing the environmental sustainability of energy use. For the gas sector, this vision includes fully implementing the EU "Third Energy Package" requirements for ownership unbundling and third party access to energy infrastructure; tapping Caspian gas supplies via the Southern Gas Corridor and support the development of new sources in the Black sea and the East-Mediterranean; allowing access to LNG imports for all.			
9:00 am	Keynote remarks by Commissioner Arias Cañete			
9:20–9:40 am (20 min)	U.S. Keynote Address: U.S. Secretary of Energy Rick Perry will address the transformative economic and energy security benefits of this energy revolution in the transatlantic market.			
	In 2018, for the first time in 60 years, the United States became a net exporter of natural gas. American natural gas production reached approximately 30 tcf/y (850 bcm/a)—the most ever—and is expected to break the record again in 2019. U.S. liquefaction capacity continues to expand as six new U.S. projects will have come online by the end of 2020—Sabine Pass, Cove Point, Cameron, Elba Island, Freeport, and Corpus Christi—increasing total U.S. liquefaction capacity to 11 bcf/d (112 bcm/a). The U.S. Department of Energy (DOE) stands firmly behind the export authorizations it has granted and takes very seriously the investment-backed expectations of private parties subject to its regulatory jurisdiction. This certainty makes the United States an extremely reliable and flexible natural gas supplier.			
9:20 am	Keynote remarks by U.S. Secretary of Energy Rick Perry			
9:40–10.00 am (20 min)	In the United States, DOE's Energy Information Administration (EIA) projects			
	that U.S. LNG export capacity will reach 8.9 Bcf/d (91 bcm/a) by the end of 2019. There are currently over a dozen projects that are awaiting final regulatory			

		_
	review at the U.S. Federal Energy Regulatory Commission (FERC) which are expected to complete the regulatory process at FERC and DOE within the next 12 to 18 months. These projects, if built, would represent over 20 bcf/d (200 bcma) of additional LNG export capacity. In Europe, total regasification capacity from 20 large-scale LNG terminals currently stands at 19 bcf/d (210 bcm), which is sufficient to cover over 40 percent of Europe's gas demand. Two new European LNG import terminals are currently under construction in Spain (Tenerife and Gran Canaria). Europe's regasification capacity will also grow quite significantly by 2021 as a result of expansions planned at some of Europe's existing LNG import terminals. Moving forward, there are 7 large-scale LNG import terminals being considered or planned in the EU.	
	Presentation	
	International Energy Agency (IEA) tbc	
9.40 am	Presentation by Fatih Birol, Executive Director of the International Energy Agency (IEA) tbc	
10:00–11:00 am	CEO Roundtable on a secure and liquid global gas market	
(1 hour)	See Roundadio on a social and inquia giobal gao market	
10:00 am	The liquidity and depth, as well as legal certainty, of the European gas market is its main attraction to gas suppliers; a liquid and flexible global LNG market that follows price signals is the main attraction for buyers. Prices are set on the global scene and LNG investments are driven by expectations on how these prices develop. Final investment decisions (FIDs) by the private sector will ultimately determine the speed and scale of new LNG and pipeline infrastructure in the transatlantic market. This roundtable discussion will focus on identifying private sector capital investment needs and market challenges to competing on (the global and) European gas market and increase flows of U.S. LNG supplies to EU regasification terminals. Moderators: • United States • European Commission. Roundtable Participants • CEO's from major U.S. LNG exporters, EU buyers, traders and LNG operators Opening remarks by U.S. and European Commission	
10:10 am	Moderated Q&A	
11:00 am	Session concludes	
11:00–11:20 am (20 min)	Coffee Break and Networking Opportunity	B2B opportunities VIP room
11:00 am	Coffee will be available in the Foyer	
11:20–12:50 pm (45 min)	Panel Discussion: Natural Gas Infrastructure developments to support LNG supplies	B2B opportunities VIP room
	Further developing the transatlantic market for large-scale LNG trade will depend on modern infrastructure investments in the United States and Europe,	

	including new export/import terminals, greater market integration and the spread of local transmission networks to boost demand. In Europe, some further infrastructure investments could facilitate this: 1) New gas interconnection infrastructure between EU Member States, in particular in South-East Europe to fully integrate the market; and 2) Commissioning of a new terminal / Floating Storage Regasification Unit (FSRU) in South-East Europe. Key bottlenecks include missing pipeline interconnection in Central and Southeastern Europe, including the completion of the North-South Corridor and improving interconnectivity for the Iberian Peninsula to access the liquid hubs in North-West Europe. A key regasification project is being developed on Krk Island but additional capacity in Poland can also contribute to further LNG volumes to reach the Central-European market. In the United States, additional infrastructure is also required to bring production to market in areas such as the Permian Basin where production currently exceeds pipeline capacity. Panelists will discuss the steps needed to ensure the timely completion of these key modern infrastructure projects and their expected impact. Moderator: • European Commission • United States Panel Participants • Ministers	
11:20 am	Opening remarks by U.S. and European Commission	
11:30 am		
12:50 pm	Session Concludes	
12:50–2:00 pm (1 hour 10 min)	Lunch	
12:50 pm	A working lunch buffet will be available in the Foyer	
2:00–3:30 pm (1 hour 30 min)	Panel discussion: U.S. LNG competing on the EU gas market This diversity of supply of U.S. LNG is linked to the destination-free clauses in U.S. LNG supply contracts; off-takers may resell cargoes as they desire provided the LNG is not sold to the very limited number of countries with which the U.S. does not maintain trade relations. Destination flexibility is also leading to rapid innovation and the emergence of a global gas market enabled by new LNG trading practices such as cargo swaps and redirections. On the demand side, the maturation of Floating Storage Regasification Units (FSRU) in the LNG sector is now providing added flexibility and opening up a future of potential reassignment based on short-term market needs. LNG pricing is also witnessing innovation amid increasing liquidity between international hubs, even the prospect of delinked Henry Hub pricing for certain regions of the United States. Panelists will discuss the latest trends and technologies in the sector in the context of an emerging global gas markets. Moderators • European Commission • United States Panel Participants	B2B opportunities VIP room

2.00 pm	Opening remarks by U.S. and European Commission	
2.10 pm		
3.30 pm		
3:30–3:45 pm	Coffee break	B2B
3.30-3.43 pm	Confee bleak	opportunities
		VIP room
3.30 pm	Coffee will be available in the Foyer	VIII TOOIII
3:45–4:30 pm	Panel discussion: LNG Technology Innovation as a Demand Side Driver	B2B
•	Innovation in the LNG sector—from new uses in shipping and road transport to	opportunities VIP room
	peak-shaving—offers the potential to increase market demand. In shipping, Implementation of the International Maritime Organization's (IMO) new fuel specifications limiting a global sulfur cap of 0.5% on Heavy Fuel Only (HFO) (also known as bunker fuel) starting from January 1, 2020 represents a pressing issue for maritime and refining industries. LNG presents a potential alternative fuel for shipping within the low sulfur restrictions. In road transport, LNG presents an attractive alternative to diesel fuel for Heavy Duty Vehicles (HDV) amid cost-competiveness and environmental benefits. Panelist will discuss how industry and government can work together to spur these innovative demand driver technologies.	
	Moderator	
	United States	
	European Commission	
	Panel Participants	
	Industry and research/academia	
3.45 pm	Opening remarks by U.S. and European Commission	
3.55 pm	Panel discussion	
4.30 pm	Session Concludes	
4:30–5:30 pm	CEO Roundtable on large-scale U.S. LNG exports to the EU's gas market	
(1 hour)		
	This roundtable discussion will focus on the key issues raised during the	
	conference and identify next steps that can assist in increasing the flows of	
	U.S. LNG to EU regasification terminals.	
	Moderators:	
	United States	
	European Commission.	
	Down dtoble Doutisin outs	
	Roundtable Participants	
	CEO's from major U.S. LNG exporters, EU buyers, traders and LNG approximately.	
1:20 nm	Operators Operators Operators Operators Operators Operators	
4:30 pm 4.40 pm	Opening remarks by U.S. and European Commission Moderated Q&A	
5:30 pm	Session concludes	
5.30-6.00 pm	Closing remarks	
5.30-5.45 pm		
5.45-6.00 pm	Closing remarks by 6.3. Closing remarks by European Commission.	
7:00–9:00 pm	Evening Reception	
(2 hours)	Please join us for an evening reception and cocktail hour Location TBD	
(Z Hours)	1 Todos John do for all evening reception and cooklail flour Location 100	