enquidity | Gunnar Steck

1s workshop of the EaP working group on LNG markets Warsaw, 20 February 2019

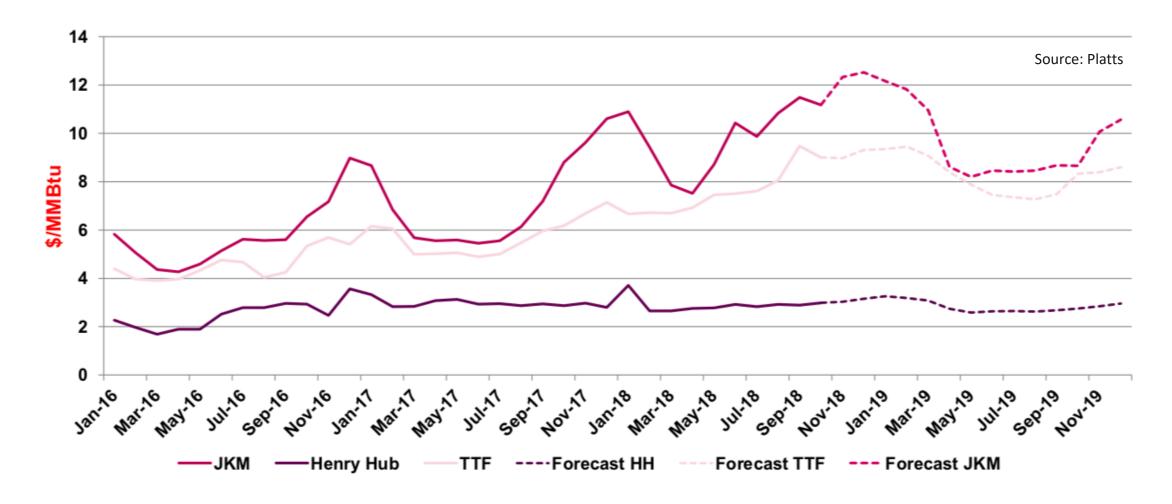
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Workshop Series on

Key drivers to promote the liquidity, flexibility and transparency of the global Liquefied Natural Gas market

Co-organised by the Ministry of Economy, Trade and Industry of Japan and the European Commission Directorate-General for Energy Pricing, and how prices are discovered or built, became the focal point of workshop discussions. So, what's wrong with today's price transparency?

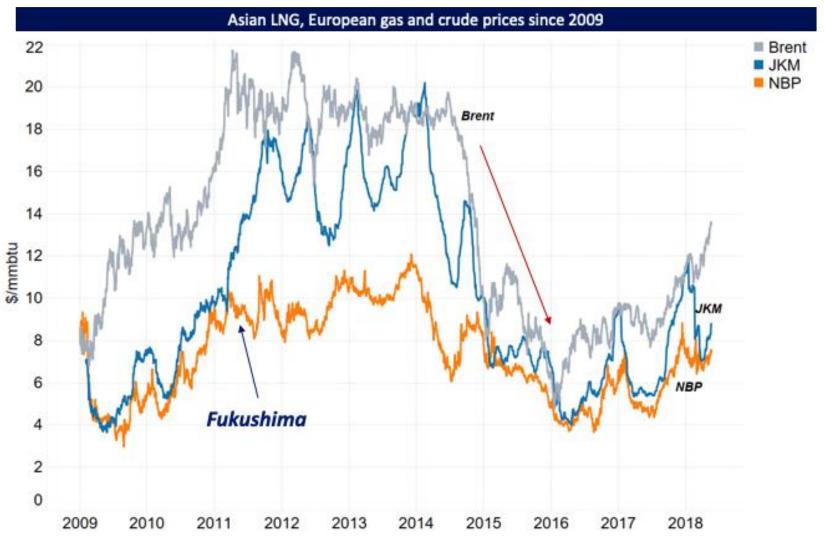




Gas prices reflecting the supply-demand balance would create a truly global market.

In liquid traded markets prices reflect the underlying supply-demand-balance, minimising the risk of manipulation, allowing forward price transparency and facilitate investment.

And this in turn allows LNG to sail where it is valued most – efficient ressource allocation on a global scale.



Source: Platts, Bloomberg, Trafigura

In liquidity we ,trust'.

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Asian markets lack that liquidity.

Growth of LNG MOC information (June 13 to October 10, 2018)



Source: Platts

The workshop flow:

Incremental Change: Standardization of Contracts

Florence, October 18



Price Transparency through Downstream Hub Development

Tokyo, March 19



Price Transparency through ,Seabourne' Trading

Barcelona, July 19



Supply Security in Changing Markets

Nagoya, October 19



Florence: Reasonably simple contractual standards are a known catalyst for trading.

The Workshops resulted in a draft **standard clause on destination diversion**, drafted to comply with EU and Jpn antitrust requirements.

The structure of the clause consists of 4 major sections:

Basic Right for Buyer to request diversion

 Limitation to 1 - Seller's right to reject for technical, operational and legal reasons

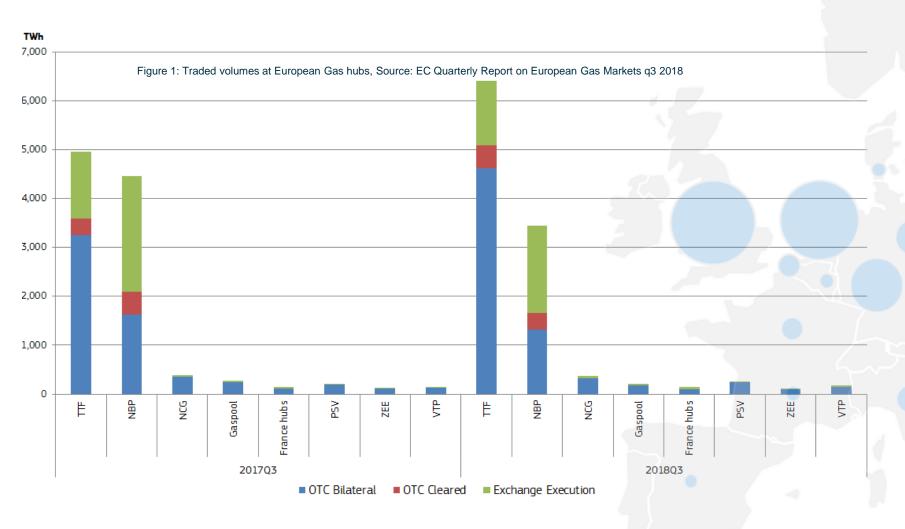
 Compensation for additional costs and risks due to the diversion

Rules for optional third-party audit

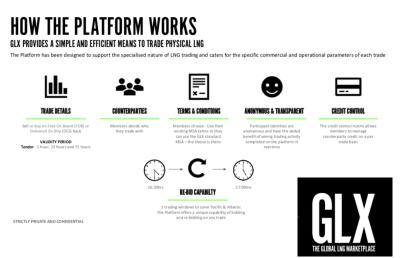
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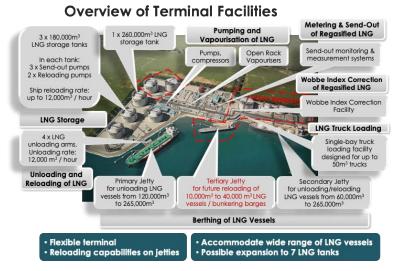


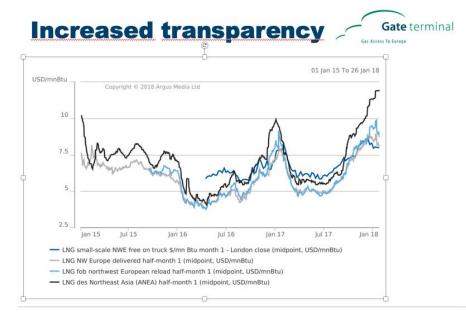
Tokyo: There are tested best-practice solutions for creating liquidity through market liberalization – in essence this is "hub development á l'Europe".











- 1. Truck loading
- 2. Bunkering
- 3. Reloading
- 4. Transshipment
- 5. Small scale LNG
- → transactions
- → transaction reporting
- price transparency





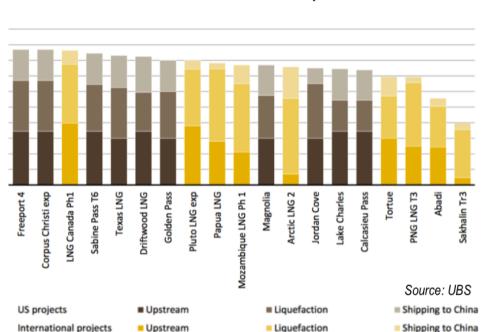
Nagoya: Target market ,track records' are paramount for calculating project debt capacity. They need time to develop.

How much can I lend? Debt Capacity: Price (P) multiplied by Volume (V) PxV



Breakeven Cost of Selected LNG Projects

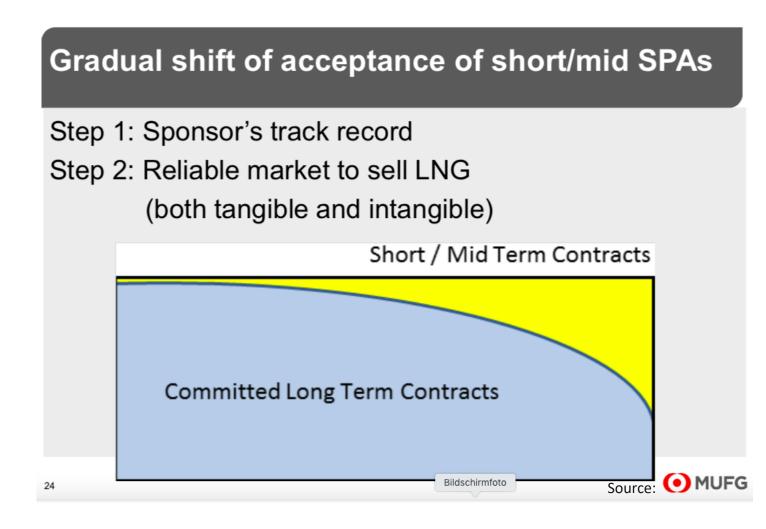
(\$/MMBtu, delivered to East Asia) Source: Columbia, SIPA



Long term offtake agreements will therefore keep dominating the market.

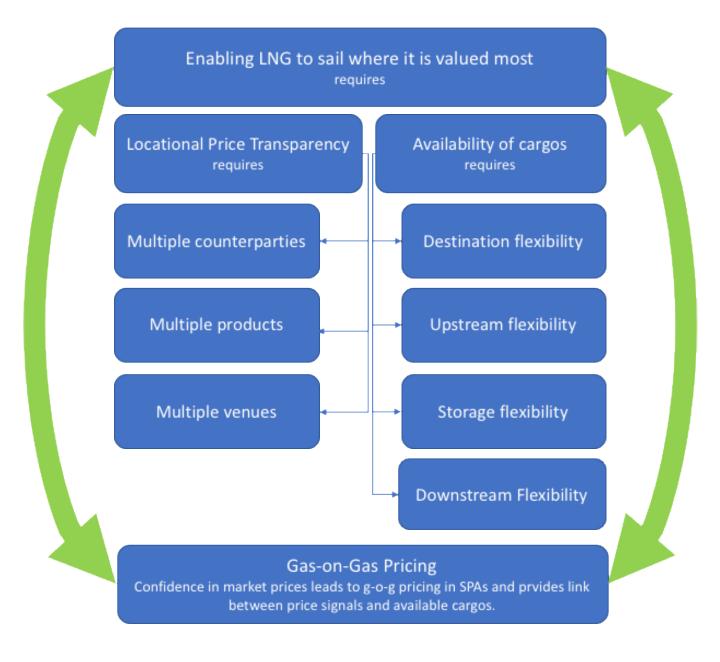
On a longer term basis a project's ability to market uncontracted volumes and/or replace shorter-term offtake agreements in the market, will create the "track record" required for lenders to trust in a project's ability to generate a stable cash-flow even without LT offtake agreements.

In the meantime, investors with experience in taking merchant risk might need to engage.

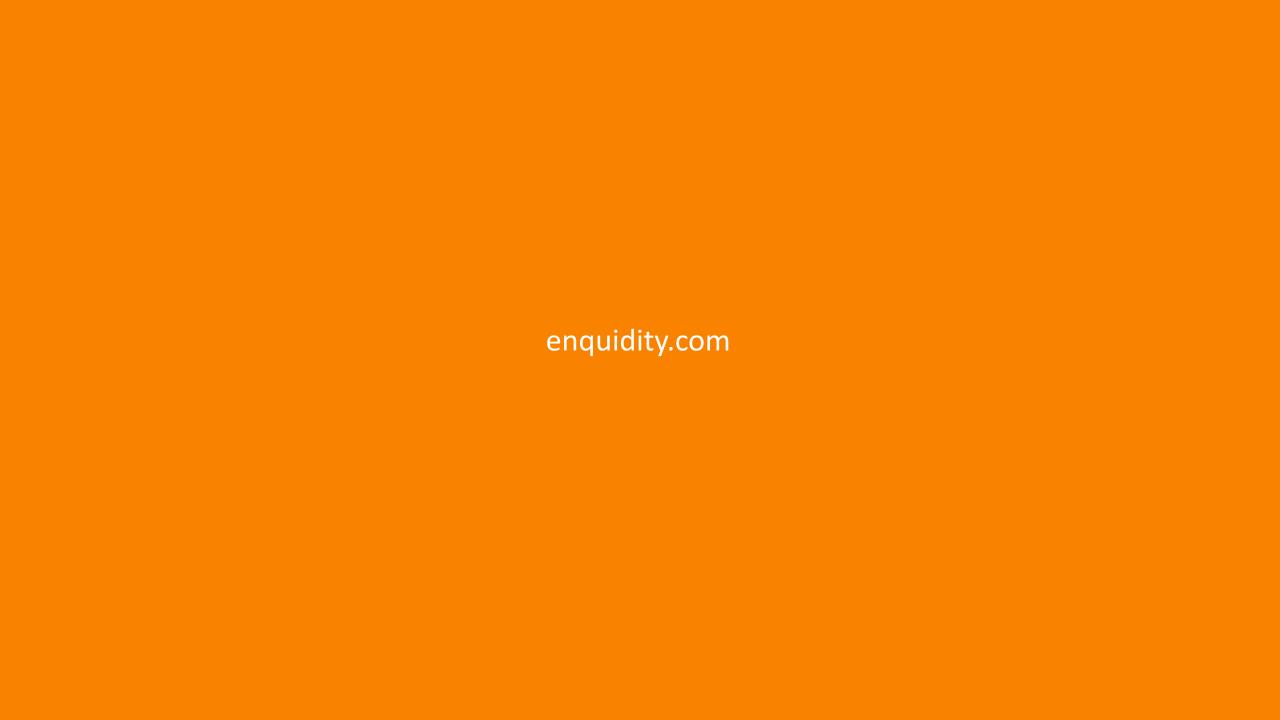




It's all about efficient resource allocation: LNG should sail where it is valued most, when it is needed most.







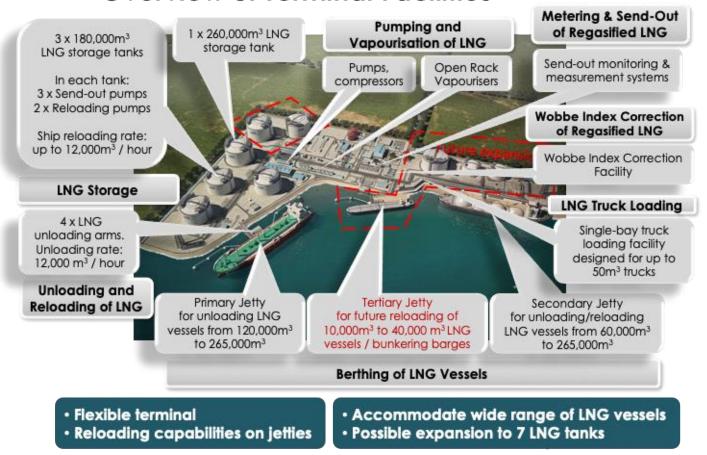
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	Code	- 3	Bid	Ask		Code		Volume	
+ - WD	PGAS	100	15.500	15.550	85	PGAS			
	PGAS			15.550		PGAS	15.525 🛊		
+ - DA	PREB	65*	15.650	15.675	5	PGAS	15.650 •	26995	
	SPEC	120	15.650	15.675	20	PGAS	15.650 •		
+ - BOW							16.225		
+ - W/END	PGAS	120	15.550	15.575	60	TFS	15.550 →	48138	
	GFI	180	15.525	15.575	20	PGAS	15.550 →		
+ - Apr-17	ICAP	30	15.925	15.950	30	ICAP	15.935 •	5325	
+ - May-17	ICEF	10	15.925	15.935	30	3	15.925 •		
+ - Jun-17	ICEF1	10	15.905	15.925	30	2	15.925 🖈	485	
+ - Jul-17	2	30	15.780	15.885	30	3	15.865		
+ - Aug-17	ICAP ²	30	15.800	15.915	30	3	16.175		
+ - Sep-17	ICAP		15.950	16.100	30	3	16.025		
+ - Q217	ICEF ²	5	15.935	15.939	30	=	15.960 🖈	270	
+ - Q317	ICEF		15.925	15.944		ICEF4	15.940 🖈	430	
+ - Q417	ICEF ³	5	16.735	16.750	5	2	16.725 →	250	
+ - Q118	ICEF ²	5	17.250	17.250	5	GRFN	17.265 🛊	325	
+ - Sum 17	ICEF ³	5	15.929	15.950		PGAS	15.950 →	1340	
+ - Win 17	ICEF	20	16.975	16.998	5	3	17.000 •	495	
+ - Sum 18	GFI	15	15.775	15.820	10	ICEF ²	15.800 •	160	
+ - Win 18	GFI	10	17.075	17.120	5	ICEF ³	17.075	590	
+ - Good Friday									
+ - 2018	ICAP	10	16.400	16.425	10	SPEC	16.430 🛊	260	
+ - 2019	2	10	16.275	16.325		SPEC ²	16.325 🛊	170	
+ - 2020	ICEF	10	16.250	16.275	10	2	16.200 →	111	
+ - 2021	2	5	16.125	16.325	10	3	16.275		
+ - Gas Yr 17	3	5	16.373	16.419		ICEF ³	16.360		
+ - Gas Yr 18	3	5	16.272	16.523	5	2	16.900		
Warrang 20 Feb 2010							1		



Overview of Terminal Facilities







HOW THE PLATFORM WORKS

GLX PROVIDES A SIMPLE AND EFFICIENT MEANS TO TRADE PHYSICAL LNG

The Platform has been designed to support the specialised nature of LNG trading and caters for the specific commercial and operational parameters of each trade



TRADE DETAILS

Sell or Buy on Free On Board (FOB) or Delivered Ex-Ship (DES) basis

VALIDITY PERIOD

Tender - 1 hour, 23 hours and 71 hours



COUNTERPARTIES

Members decide who they trade with



TERMS & CONDITIONS

Members choose - Use their existing MSA terms or they can use the GLX standard MSA – the choice is theirs



ANONYMOUS & TRANSPARENT

Participant identities are anonymous and have the added benefit of seeing trading activity completed on the platform in real-time



CREDIT CONTROL

The credit control matrix allows members to manage counterparty credit on a per trade basis

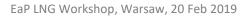


2 trading windows to cover Pacific & Atlantic The Platform offers a unique capability of bidding and re-bidding on any trade



STRICTLY PRIVATE AND CONFIDENTIAL





THE GLOBAL LNG MARKETPLACE