LNG PROCUREMENT

Presented by:
Sheikh Imran ul Haque

The Successful Strategy

Under the Fast Track LNG Import Project:

- **PSO** be assigned the responsibility of LNG import,

- **SSGC** manage the receiving of LNG at import terminal and transmission of Regasified LNG (RLNG) to SNGPL through swap arrangements

- **SNGPL** supply RLNG to end consumers.

The Mandate

- For import of LNG, ECC vide decision dated 2nd July 2013 have authorized this Ministry to engage in negotiations with Qatargas on Government to Government basis for importing LNG upto 500 MMCFD on delivered Ex-ship basis.
- Accordingly, Pakistan State Oil Company Limited (PSOCL) and Qatargas Operating Company Limited (QOCL) have been nominated by respective governments to negotiate the LNG Sales Purchase Agreement (LNG SPA).
- PSO / GOP and USAID appointed international consultants (FGE and WFW) engaged in negotiations with Qatargas, the State of Qatar's designated entity, on the terms of a long term LNG Sale and Purchase Agreement (**LNG SPA**) for 15 years, on Government to Government basis, for supply of LNG up to 3 mmtpa.

PSO's Strength and Ability

PSO Imports FY12-15

Year		FY12	FY13	FY14	FY15
HSD	No. of Vessels	61	58	49	50
	Quantity (000 M.Tons)	3,070	2,997	2,573	2,703
	Import Value (Rs. In Mln)	300,342	319,053	280,226	224,131
LSFO	No. of Vessels	18	16	16	15
	Quantity (000 M.Tons)	1,016	1,009	1,019	961
	Import Value (Rs. In Mln)	70,580	67,247	74,499	53,444
HSFO	No. of Vessels	83	71	75	64
	Quantity (000 M.Tons)	5,177	4,871	4,993	4,334
	Import Value (Rs. In Mln)	325,306	297,132	326,425	212,980
Jet Fuel	No. of Vessels	9	2	2	1
	Quantity (000 M.Tons)	210	51	23	10
	Import Value (Rs. In Mln)	19,652	4,879	2,411	987
MOGAS	No. of Vessels	46	43	41	44
	Quantity (000 M.Tons)	1,127	1,293	1,440	1,945
	Import Value (Rs. In Mln)	115,808	142,502	174,749	156,525
Total	**No. of Vessels**	**217**	**190**	**183**	**174**
	Quantity (000 M.Tons)	**10,602**	**10,246**	**10,048**	**9,954**
	Import Value (Rs. In Mln)	**831,688**	**830,814**	**858,310**	**648,067**

Note: Vessel booked at the time of berthing

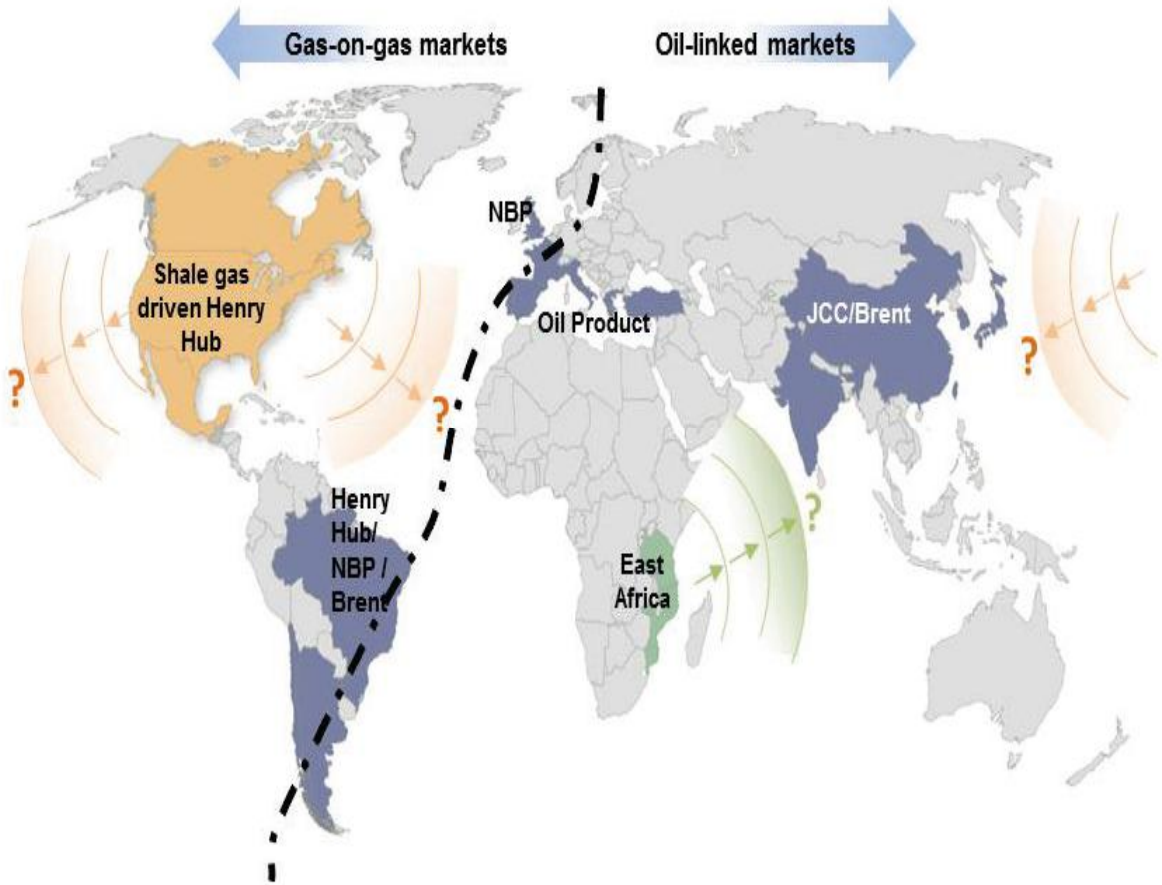
Price Negotiation

To negotiate the LNG price and other important aspects with Qatargas, ECC vide decision dated 15th August 2014 has approved constitution of a LNG Price Negotiation Committee (PNC) comprising of Secretary Petroleum (Chairman), representatives of Finance Division, Water and Power and BOI not below the rank of Additional Secretary, MD SNGPL,MD SSGCL, MD PSO and MD ISGSL (as Secretary Committee).

Oil and LNG Sector Overview

	OIL	LNG
Feedstock Costs	Crude feedstock is main element of the delivered price	Gas feedstock is a small share of the delivered price
Annual Value of Trade	$2.4 trillion US	$193 billion US
Producing Countries	117 (countries with refineries)	18 (exporters)
End-User Countries	196 (all countries)	26 (importers--but growing)
Shipping market	Large, competitive and flexible	Small with mostly dedicated fleets
Import infrastructure	Thousands of ports	93 regas plants in 26 countries
Producing facilities	655 refineries	26 LNG plants (89 trains)
Spot market	Large and active with many players	Growing, but few major players
Futures markets	Large, active drivers of prices & contracts	Nonexistent
Typical Contracts	1-2 months up to 1-2 years	4-20 years
Resales/Diversions	Common	Usually forbidden

Commodity Pricing / Indexation



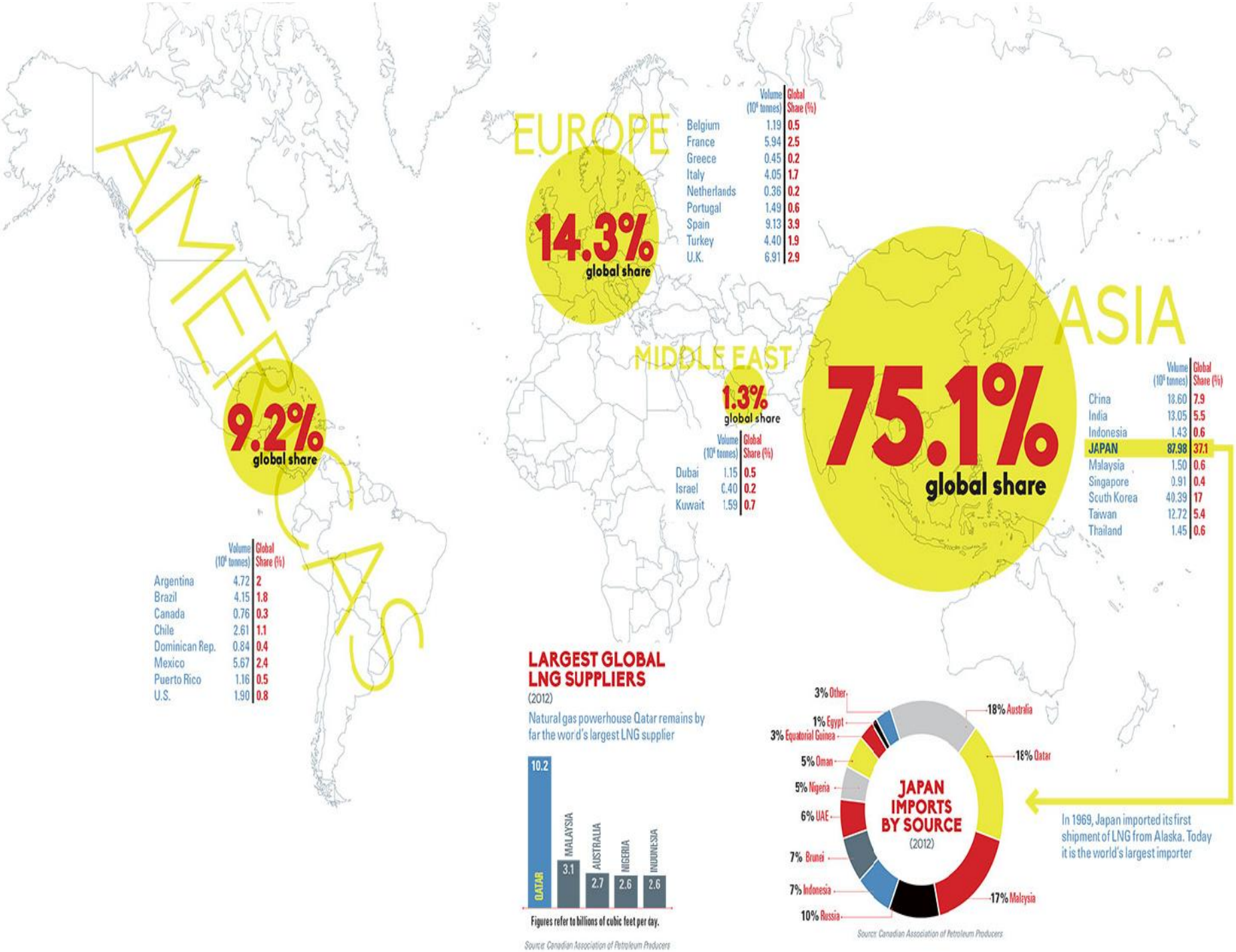
Typical Brent / JCC base price structures assume following form

LNG Price $/MMBTU = (percentage) x Brent / JCC + XXX; where

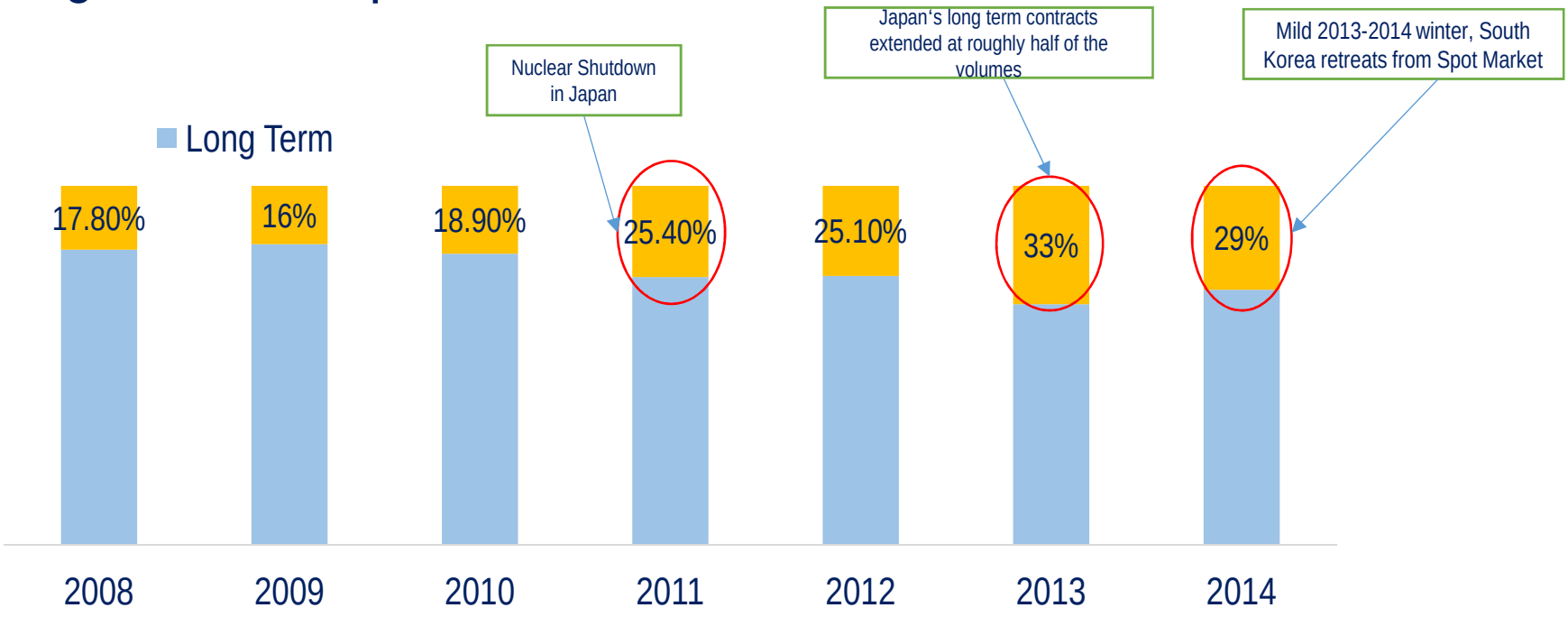
- Percentage = variable contract to contract – 12% to 16%
- Brent (x,y,z) = Brent / JCC linkage; oil prices averaged over past 03, 06, 09 or 12 months
- XXX = Constant Component / Premium

LNG Price $/MMBTU = (percentage) x Hub Price + Tolling Tariff + Freight Costs + Variables; where

- Hub Price = the final settlement price (in $/mmbtu) for the New York Mercantile Exchange's HH natural gas futures contract for the Month in which the relevant cargo's delivery window is scheduled to begin
- Percentage = variable contract to contract – 115% and above
- Tolling tariff is a significant cost element. Freight Cost – significant cost element due to distances - $1.5/mmbtu (Europe) to $3/mmbtu (farther distances)
- Variables – Premiums etc, adjusted annually based on CPI


AMERICAS
9.2%
global share
Volume (10^6 tonnes) | Global Share (%)
Argentina 4.72 2
Brazil 4.15 1.8
Canada 0.76 0.3
Chile 2.61 1.1
Dominican Rep. 0.84 0.4
Mexico 5.67 2.4
Puerto Rico 1.16 0.5
U.S. 1.90 0.8
EUROPE
14.3%
global share
Volume (10^6 tonnes) | Global Share (%)
Belgium 1.19 0.5
France 5.94 2.5
Greece 0.45 0.2
Italy 4.05 1.7
Netherlands 0.36 0.2
Portugal 1.49 0.6
Spain 9.13 3.9
Turkey 4.40 1.9
U.K. 6.91 2.9
MIDDLE EAST
1.3%
global share
Volume (10^6 tonnes) | Global Share (%)
Dubai 1.15 0.5
Israel 0.40 0.2
Kuwait 1.59 0.7
ASIA
75.1%
global share
Volume (10^6 tonnes) | Global Share (%)
China 18.60 7.9
India 13.05 5.5
Indonesia 1.43 0.6
JAPAN 87.98 37.1
Malaysia 1.50 0.6
Singapore 0.91 0.4
South Korea 40.39 17
Taiwan 12.72 5.4
Thailand 1.45 0.6
LARGEST GLOBAL LNG SUPPLIERS
(2012)
Natural gas powerhouse Qatar remains by far the world's largest LNG supplier
QATAR 10.2
MALAYSIA 3.1
AUSTRALIA 2.7
NIGERIA 2.6
INDONESIA 2.6
Figures refer to billions of cubic feet per day.
Source: Canadian Association of Petroleum Producers
JAPAN IMPORTS BY SOURCE
(2012)
3% Other
1% Egypt
3% Equatorial Guinea
5% Oman
5% Nigeria
6% UAE
7% Brunei
7% Indonesia
10% Russia
18% Australia
18% Qatar
17% Malaysia
Source: Canadian Association of Petroleum Producers
In 1969, Japan imported its first shipment of LNG from Alaska. Today it is the world's largest importer

Long Term v/s Spot & Short term

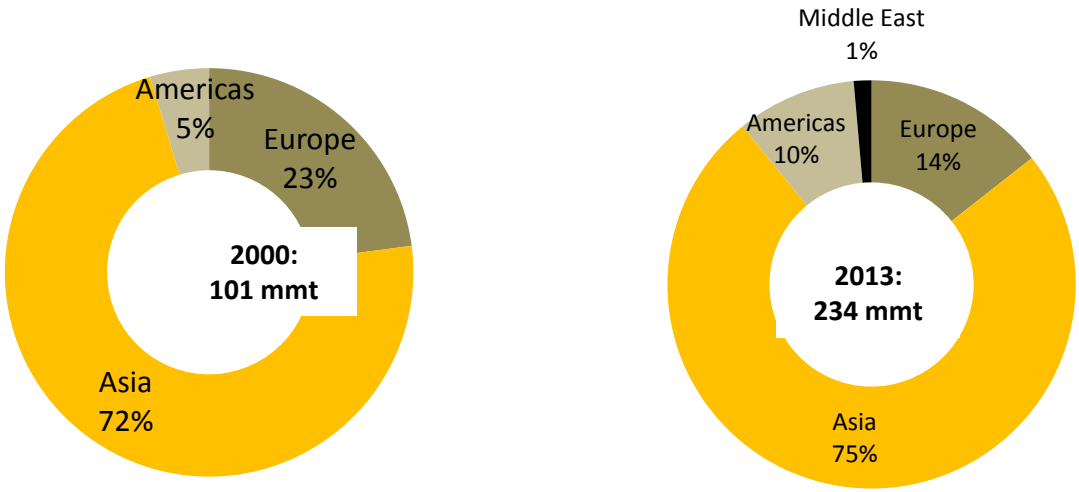


A number of key factors have contributed to the rapid growth of non long-term trade in recent years <u>including</u>

- The growth in LNG contracts with destination flexibility, mainly from the Atlantic Basin and Qatar, which has facilitated diversions to higher priced markets.
- The increase in the number of exporters and importers. 26 exporters & 28 importers in 2014 as compared to 6 exporters and 8 importers in 2000.
- Reliance of Japan, South Korea & Taiwan on spot market for sudden changes in demand (Fukushima) due to lack of domestic production or pipeline imports.
- The large growth in the LNG fleet, which has allowed the industry to sustain the long-haul parts of the spot market (chiefly the trade from the Atlantic to the Pacific).

Why Qatar?

Global LNG imports, 2000 - 2013



Qatar has liquefaction facilities to Produce 77 Mtpa of LNG with all 14 LNG trains running at full capacity which confirms Qatar as the world's main LNG supplier with a market share of over 30%.

LNG Import Initiated

Commissioning cargo

Given SSGC's contractual commitment under the LSA, ECC vide case No. ECC-52/7/2015, dated 09-04-2015 approved the following proposal submitted by MP&NR vide summary dated 02-04-2015;

To keep an option of commissioning of LNG terminal through PSO, PSO may be allowed to import one commissioning cargo through FSRU on FOB basis or LNG carrier on DES basis under LNG SPA.'

Accordingly, PSO imported one cargo of LNG from Qatargas for a Fertilizer Co. on board the FSRU on FOB basis which arrived on 26th March, 2015 and the terminal was commissioned on 27th March 2015.

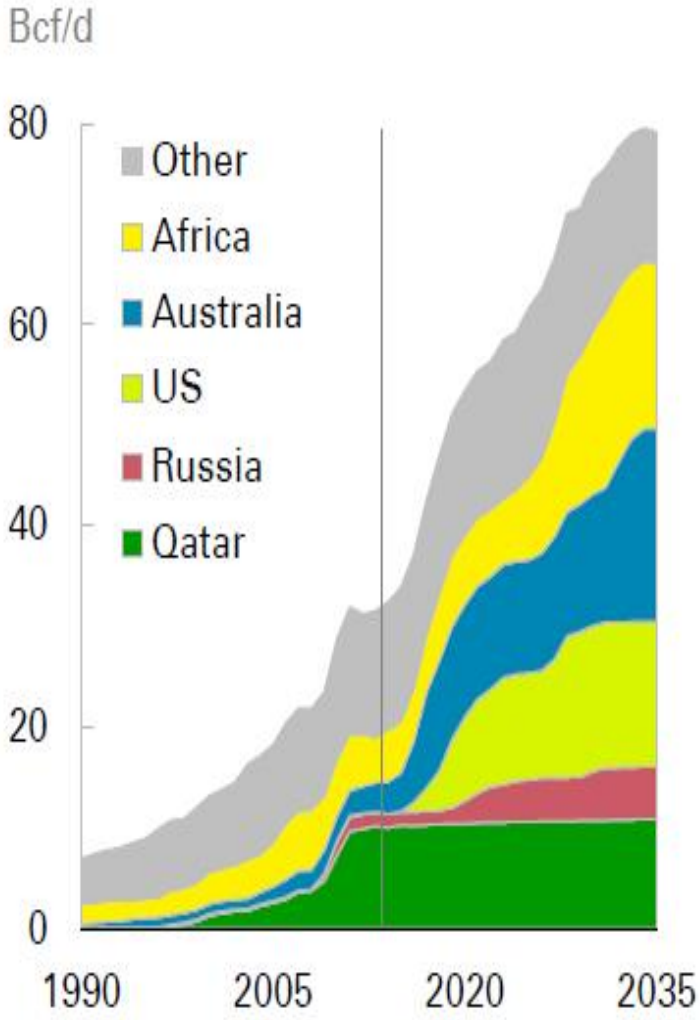
Status of LNG cargoes received till Oct 2015

Supplier	Month	Terms	Status	Slope	Price	DES Average
QG	26-Mar	FOB	Arrived		$ 8.0500	
QG	24-Apr	FOB	Arrived		$ 7.5000	
QG	11-May	FOB	Arrived		$ 7.5000	**$ 7.625**
QG	28-May	FOB	Arrived		$ 7.5000	
QG	15-Jun	FOB	Arrived		$ 7.5000	
QG	9-Jul	FOB	Arrived		$ 7.7000	
Tender	17-Jul	DES	Arrived	12.9500%	$ 8.2321	
Tender	28-Jul	DES	Arrived	13.4900%	$ 8.5754	
Tender	28-Aug	DES	Arrived	12.2700%	$ 7.6142	
Tender	7-9 Sept	DES	Arrived	15.6000%	$ 8.7758	**$ 7.7151**
Tender	20-22 Sep	DES	Arrived	11.8669%	$ 6.6757	
Tender	6-8 Oct	DES	Arrived	14.8899%	$ 7.6208	
Tender	16-18 Oct	DES	Arrived	15.8800%	$8.1275	
Tender	26-28 Oct	DES	Arrived	11.9163%	$6.0989	

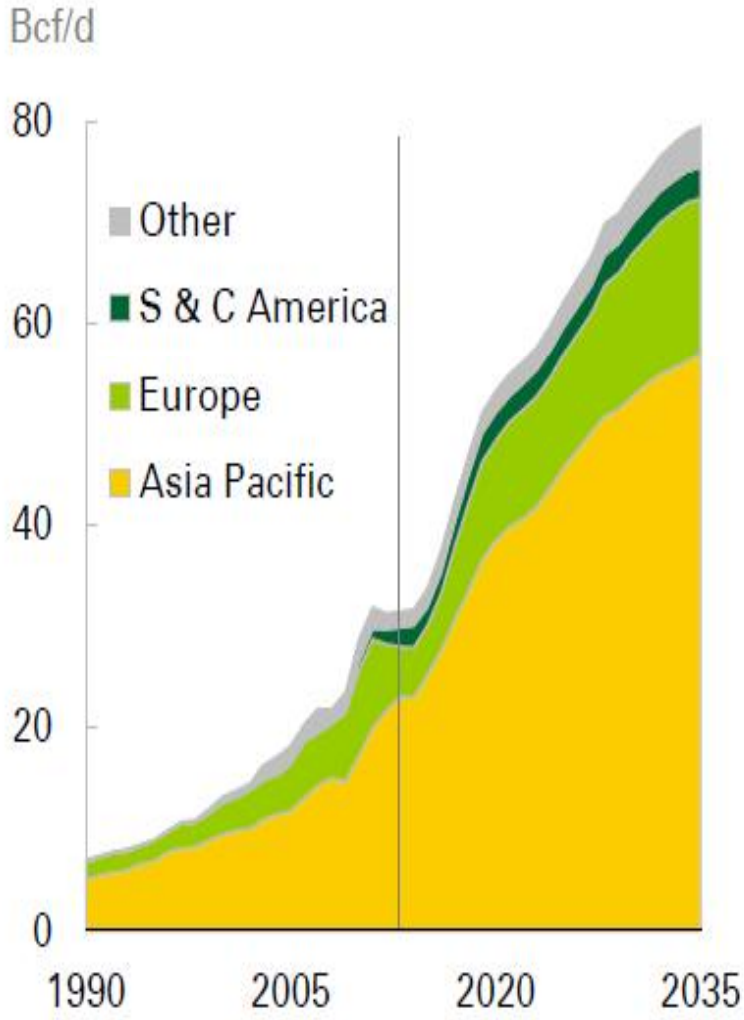
PSO – Qatargas2 SPA Highlights

Tenure	2015 to December 31,2030 Extendable with mutual consent
Terms	Take or Pay
Type	Delivered Ex-ship
Volumes	2015 (prorate of 1.5mtpa) 2016 (1.5mtpa) 2017 onwards (3mtpa)
Buyer **Seller**	Pakistan State Oil Company Limited Qatar Liquified Gas Company Limited 2
Price revision	After 10 years
Price and Terms	By Price Negotiating Committee

Global LNG Supply



Global LNG Demand



Current LNG Import and Way forward

Long Term Deal

Government to Government

1. With Qatargas
2. Preliminary meetings held with: Petronas, Malaysia's and with PB Trading Sendirian Berhad, Brunei Darussalam's designated entity
3. Interest shown by: Angola LNG and CNOOC

Spot/Multi-Cargo Tender

PSO has experienced Spot / Multi cargo tenders since May 2015 and first cargo was received in July 2015

Term Tender for upto 5 Years LNG Supplies

To be floated shortly

Thank You