

CONTENTS

LNG to 2030: A Detailed Review of Future Volumes & Trends

The LNG industry has experienced significant growth in recent years and has featured:

- Large-scale demand growth
- Emerging new supply sources
- Emerging new import markets
- Increased investment in LNG infrastructure
- Increased contract flexibility
- Speculative LNG carrier newbuilding orders
- Continued increase in average vessel size
- Development of containment and propulsion systems

LNG trade volumes are forecast to increase by over 180% by 2020 and by approximately 250% by 2030. The LNG sector is in a period of large-scale expansion.

This Report examines the current and historical development of the LNG trade, detailing the major importers and exporters. By examining the prospects of the individual LNG supply and import markets, detailed analysis is included on future prospects for LNG trade volumes and structure through to 2030. The development of future trade volumes is also analysed under *High* and *Low* growth scenarios.

The LNG vessel fleet contains over 260 vessels and will continue to expand as a large number of vessels are delivered in the near-future. This Report further investigates the future extra LNG vessels required throughout the forecast long-term period.

This Report also highlights the recent and future developments within the LNG sectors of:

- Floating Production Storage and Offloading (FPSO)
- Floating Storage and Regasification Unit (FSRU)
- Manning
- Compressed Natural Gas (CNG)
- The Spot Market

The Report provides invaluable independent analysis on the development of LNG trade and shipping through to 2030 – a period set to witness massive expansion and change throughout the LNG sector. It represents the most up-to-date and comprehensive examination of the LNG sector prospects and is essential reading for all parties with an interest in the LNG sector.

SECTION 1 EXECUTIVE SUMMARY

This Section offers a summary of the principal points emerging from the detailed and extensive analyses.

In addition, this Section includes a summary of the most significant points and conclusions emerging from the Report – these are presented in the order of the corresponding Sections for ease of reference.

SECTION 2 NATURAL GAS & LNG TRADES

In recent years there has been a large-scale shift in favour of gas in national energy profiles – this Section examines the development of natural gas within primary energy demand. Natural gas trades, in the form of pipelines and LNG, are presented, highlighting that three of the top 10 international gas trades are LNG. Overall, LNG trade expansion has increased by approximately 65% since 2000. This Section highlights the LNG importing and exporting countries and seaborne trade volumes since 1970.

SECTION 3 LNG FLEET & RECENT DEVELOPMENTS

The world fleet of LNG carriers has reached over 260 vessels, and the growth in capacity will continue to increase at a rapid rate in the near future. The orderbook has a current total of over 120 vessels representing approximately 66% of the existing LNG fleet capacity. This Section examines:

- Fleet developments
- Vessel age profile
- Containment systems
- Country of build
- Fleet operators
- Recent freight rates
- Recent long- and short-term charters
- The secondhand vessel market

The newbuilding LNG vessel market is also examined, and highlights:

- The current orderbook
- Current yards undertaking construction
- Newbuilding containment systems
- Newbuilding propulsion systems
- Newbuilding prices
- Newbuilding operators

SECTION 4 OUTLOOK FOR LNG EXPORT SUPPLIES

This Section details the individual LNG export countries in terms of their evolving development through to 2030. Current and future liquefaction capacity is outlined in each of the main regions of Europe, the Americas, the Middle East, North Africa, West Africa, and Asia Pacific. This includes plans for the development of LNG export capacity in a number of new countries – including, Russia, Peru, Venezuela, Iran, Yemen, Angola and Papua New Guinea.

SECTION 5 OUTLOOK FOR LNG IMPORT DEMAND

The profile of LNG import markets is changing dramatically – linked to a strong trend in favour of gas within national energy profiles. The net effect is for demand expansion in existing import markets and the emergence of a number of new sources of LNG demand. The potential list of LNG import countries is forecast to increase from 17 to over 35 during the course of the study period. Overall import demand is forecast to increase by approximately 250% through to 2030. This Section details the expected development of annual import volumes for existing and new markets.

SECTION 6 MAJOR ISSUES & TRENDS WITHIN THE LNG INDUSTRY

This Section includes analysis and discussion on the main developments that have occurred in the LNG sector in the recent past and the potential developments in the future. These include:

- Floating Production Storage and Offloading (FPSO)
- Floating Storage and Regasification Unit (FSRU)
- Manning
- Compressed Natural Gas (CNG)
- The Spot Market
- Q-Flex & Q-Max Vessels

SECTION 7 OUTLOOK FOR LNG TRADE PATTERNS & VOLUMES

This Section forecasts the development of LNG trades on a regional basis, with future trades volumes and patterns within Europe, Asia Pacific and the Americas, and outlines the overall forecast LNG trade growth through to 2030. Future LNG trade growth is also investigated through High and Low growth scenarios. The prospects for future vessel scrapping are included under two scenarios:

- Vessels scrapped at 35 years of age
- Vessels scrapped at 40 years of age

The resulting implied fleet profile for the LNG sector over the near-term is evaluated as too the requirements for extra LNG vessels throughout the study period.

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Detailed analysis on:

- Trade Volumes & Patterns
- Vessel Newbuildings
- Vessel Scrapping
- Import Demand
- Export Supply
- LNG Market Developments
- Potential for LNG FPSO / FSRU

The Report represents the most up-to-date analysis on the LNG vessel sector and is a comprehensive evaluation of future prospects. It is therefore essential reading for all parties associated with the LNG shipping industry.

"LNG TO 2030: A DETAILED REVIEW OF FUTURE VOLUMES & TRENDS" is one of a large number of detailed shipping industry reports researched and published by **Ocean Shipping Consultants Ltd.**

Other recent publications include:- *Tick for details ✓*

- "Offshore Rigs: Global Prospect to 2020"
- "Offshore Support Vessels: Global Prospect to 2020"
- "LPG Trades & Shipping: Global Prospects to 2018"
- "Chemical Carriers & Product Tankers to 2015"
- "Global Cement Trade & Shipping
- Future Outlook to 2015"
- "Shipping Profitability to 2015"
- "Refrigerated Trades & Outlook to 2015"
- "The World Ship Repair Market to 2015"
- "World Shipbuilding:
Prospects for Prices & Demand to 2015"

OSC also undertakes confidential consultancy projects for individual clients worldwide. Further details are available on request.

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Includes detailed analysis and forecasts to 2030 on:-

- Trade Volumes & Patterns
- Vessel Newbuildings
- Vessel Scrapping
- Import Demand
- Export Supply
- LNG Market Developments
- Potential for LNG FPSO / FSRU

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