

**OCEAN
SHIPPING
CONSULTANTS
Limited**

PRESS RELEASE

Fluctuating Prospects for Future LPG Fleet

The world LPG carrier fleet is forecast to expand from 15.4m cbm at the beginning of 2007 to 26.9m cbm by 2018. World seaborne LPG trade (including ammonia and petchems) is forecast to increase from 88mt to 137mt over the same period, and the implications for vessel profitability are for declining returns in the near-term followed by a rise in profitability by the middle of the next decade.

These are some of the findings in the new detailed report – entitled '**LPG Trades & Shipping: Prospects to 2018**' – which analyses the current and historical developments within the LPG carrier sector and examines the prospects for trade and fleet development under alternative scenarios, presenting detailed forecasts for trade volumes, fleet requirements and freight rates through to 2018.

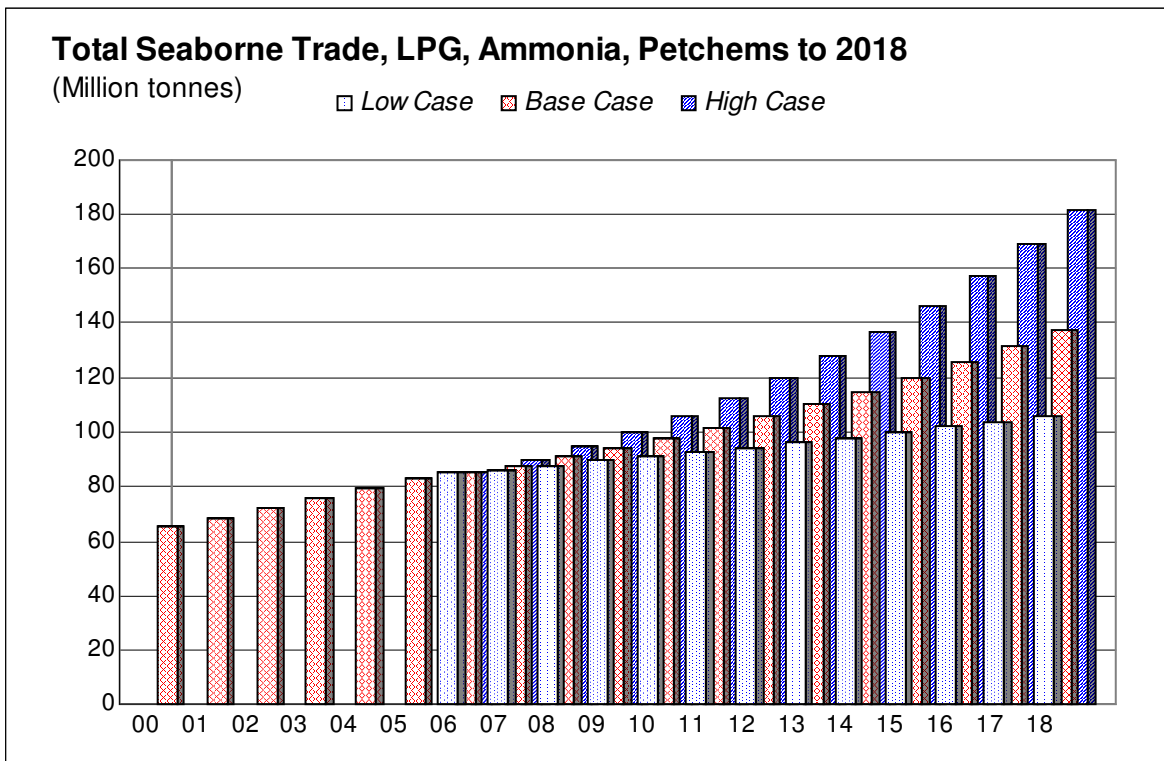
The following highlights some of the findings of the Report:-

World LPG Fleet Development

- The world LPG fleet was estimated at 15.4m cubic metres (cbm) at the beginning of 2007, made up of 1,036 vessels and dominated by the VLGC sector, which accounts for 56% of fleet capacity.
- The LPG carrier **orderbook** totalled approximately 7.3m cbm (162) vessels, equivalent to 48% of the current fleet capacity.
- **South Korean** yards dominate the LPG carrier newbuilding market with 65% of the orderbook; **Japanese** yards account for 30%.
- The LPG fleet is forecast to grow from 15.4m cbm to 20.1m cbm by 2012 and expand to 26.9m cbm by 2018. The VLGC sector is set to witness the largest growth, with capacity rising from 8.6m cbm to over 17.0m cbm.

World LPG Trade

- Total **seaborne LPG trade** is estimated at approximately 57m tonnes in 2007, with total seaborne **ammonia** at 19m tonnes.
- The four main **petrochemicals** are:
 - Ethylene
 - Propylene
 - Butadiene
 - VCM
 These account for approximately 11m tonnes of seaborne trade in 2007.
- **Seaborne LPG** trade is forecast to increase from 57m tonnes in 2007 to over 70m tonnes by 2012 and to 94m tonnes by the end of the study period.
- **Seaborne ammonia** trade is forecast to grow from approximately 19m tonnes in 2007 to 21.5m tonnes in 2012 and increase to 24.5m tonnes by 2018.
- **Seaborne petrochemical** trade is forecast to rise from 11m tonnes in 2007 to 14.0m tonnes by 2012 and to 18.8m tonnes by 2018.
- Overall seaborne LPG, ammonia & petrochemical trades are forecast to increase from approximately 87m tonnes in 2007 to 106m tonnes by 2012 rising to 137m tonnes by 2018.



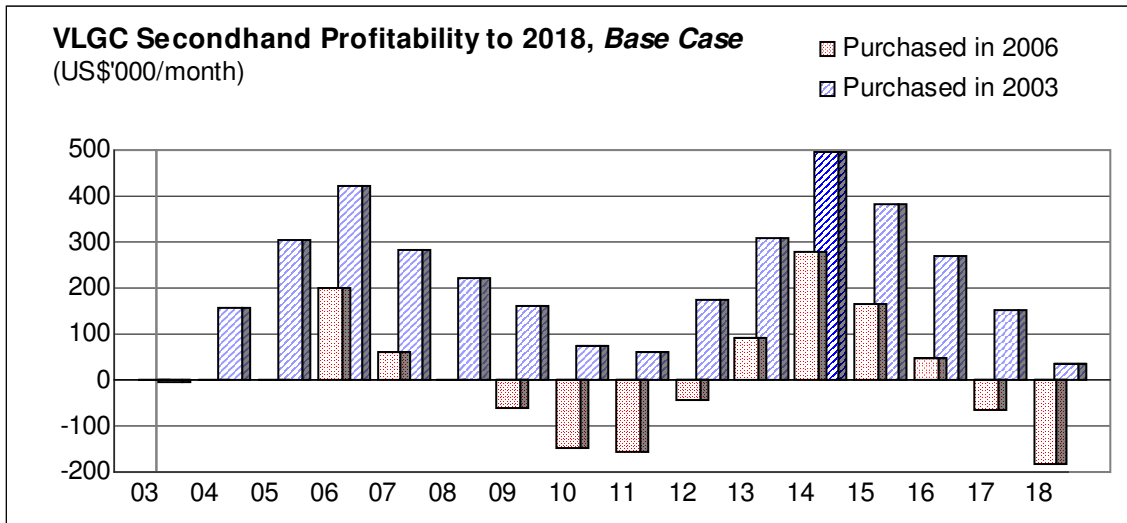
Source: OSC

LPG Carrier Freight Rates, Costs & Profitability

- **1-year time charter rates** for **VLGCs** are forecast to average US\$1.0m/month during 2007 and decline through to 2011(US\$0.83m/month). Thereafter rates are forecast to rise by 2014 and reach US\$1.3m/month followed by a downward re-adjustment to US\$0.90m/month in 2018. This follows the recent profile of rising freight rates.
- **1-year time charter rates** for **LGCs & MGCs** are forecast to follow a largely similar freight rate pattern during the study period as the VLGCs, although with less fluctuation.
- The outlook for LPG vessel **operating costs** is one of escalation, with a forecast increase of approximately 22% through to 2012, for each of the vessel sizes, followed by a further 27% rise by 2018, therefore cost levels for a VLGC are forecast to rise from US\$3.23m p.a. to US\$4.97m p.a.
- **Operating profits** are forecast to fluctuate with freight rates causing **VLGC** operating profits to fall to US\$0.52m/month, US\$0.48m/month for **LGCs** and US\$0.41m/month for **MGCs** by mid-term. This will be followed by a rise in operating profits by 2014 to US\$0.95m/month for **VLGCs**, US\$0.68m/month for **LGCs** and US\$0.57m/month for **MGCs**. This will be followed by a fall in operating profitability by the end of the study period.
- For a representative **secondhand 10-year old VLGC** (purchased in 2003, before the rapid rise in vessel prices), the **profitability** profile highlights a potential decline in returns to 2011 down to US\$0.06m/month. This is forecast to increase to US\$0.50m/month by 2014. Thereafter vessel profitability is forecast to decline to US\$0.03m/month by the end of the study period. For a **secondhand 10-year old VLGC** (purchased during the rapid rise in vessel prices, e.g. 2006), the forecast is for a more negative **profitability** profile.
- These widely different profitability profiles highlight the critical importance of the timing of vessel acquisition in determining vessel profitability.
- **LPG Newbuilding Profitability** - with current freight rates declining slightly, albeit from a very high position, vessels that have been ordered recently at record high prices are set to struggle to cover total costs after delivery.

Overall Conclusions

- ⇒ The LPG fleet is forecast to experience major growth in the near future, with a large number of vessels being delivered.



Source: OSC

- ⇒ There is a significant volume of older LPG vessels that will be disposed of during the next decade. However, the current orderbook more than compensates for future scrapping levels.
- ⇒ Despite a forecast rise in LPG demand and supply during the study period, the substantial increase in fleet capacity is forecast to have a significant negative impact on freight rates in the near term.
- ⇒ By the middle of the next decade, a continued rise in LPG demand will lead to increased vessel ordering and higher freight rates and vessel profitability.
- ⇒ During the final years of the study period, increased vessel deliveries will suppress freight rates and reduce vessel profitability.
- ⇒ The mixed market outlook highlights the critical nature of timing in purchasing and chartering programmes in shaping overall vessel profitability.

‘LPG Trades & Shipping: Prospects to 2018’

Available: 1st July 2007

Price: £900, €1,350 or US\$1,800 – for printed or electronic (PDF) version.

Price: £1,050, €1,575 or US\$2,100 for printed and electronic (PDF) versions.

Details from:

Study Sales Dept., Ocean Shipping Consultants Ltd, Ocean House,
60 Guildford Street, Chertsey, Surrey KT16 9BE, England

Telephone : (0)1932 560 332

Fax : (0)1932 567 084

Website : www.OSClimited.com

E-mail : info@OSClimited.com