Απελευθέρωση της Αγοράς ΦΑ και Δυνατότητες Ανάπτυξης

16ο Εθνικό Συνέδριο Ενέργειας, «Ενέργεια και Ανάπτυξη 2011»
Αθήνα, 22 Νοεμβρίου, 2011

Παναγιώτης Κανελλόπουλος
Διευθύνων Σύμβουλος, M&M GAS CO

M&M GAS CO

- M&M Gas Co S.A. is a private corporation founded in 2010, by **MYTILINEOS HOLDINGS S.A.** and **MOTOR OIL HELLAS (CORINTH REFINERIES) S.A.**
  - **MYTILINEOS HOLDINGS S.A.** with significant presence in the Energy sector (largest independent Power Producer in Greece) and expertise in the construction as well as operation of combined cycle Gas Power Plants, and
  - **MOTOR OIL HELLAS (CORINTH REFINERIES) S.A.**, a major Energy player in the European & International market with presence in both Upstream and Downstream Oil & Gas
- M&M is active in the **“Supply and Marketing of Natural Gas”** sector and its scope is to source and provide secure and competitive Natural Gas supplies to both the shareholders’ affiliate companies as well as serving eligible customers in the Greek Market.
- M+M was the first private company to import LNG in Greece and get TPA rights in the Revythousa LNG terminal, effectively leading to the liberalisation of the NG market Greece
- Being the pioneer in the newly liberalised Greek Natural Gas market, M&M is committed in developing options that maximise the End to End benefit and lead in efficient and effective gas supplies.
- **M&M Gas Co**, on top of its main activity of sourcing, trading and marketing Natural Gas (both Pipeline and LNG) is set up to realize construction, operation, maintenance & management of Natural Gas facilities, pipelines, networks, etc., as well as providing consultancy and project management services in related fields, ensuring best in class results for the stakeholders.

Key Facts & Figures

- In a glance, both groups' assets relevant to Natural Gas are:
  - A 440 MW CCGT Power Plant, **Protergia S.A.**
  - A 440 MW CCGT Power Plant, **Korinthos Power S.A.**
  - A 330 MW CHP Power Plant, **Aluminium S.A.**
  - A 172,000 barrels/day Oil Refinery with 70 MW installed power capacity, **MOH**
- Our existing portfolio of customers represents, volume wise, over **1.6 BCM** of annual consumption, while our prospective in the Greek Market exceeds some additional **1.2 BCM**.
- Since the liberalisation of the Greek Natural Gas Market, **M&M Gas Co** is the first private Gas Marketing Company that received the licence to operate and the only one that executed supply contracts to both affiliate companies and third parties.
  - During 2010 and ytd 2011, M+M Gas offloaded ca **0.4 BCM** of NG (LNG form) to Revithousa either to be used in order to cover the requirements of the shareholders or for the Public Power Company of Greece ("PPC")
  - It was the first to be awarded with the **Public Power Corporation of Greece** short term LNG supplies via an international tendering process.

Key Clients

ALOUMINION

- A 330 MW CHP Power Plant , consumption of 0.35 BCM p.a.
- An alumina furnace, consumption of 0.1 BCM p.a.

PROTERGIA

- A 444 MW CCGT Power Plant, consumption of 0.4 BCM p.a.

M&M, through its shareholders, “controls” a market of ca 1.6 BCM or ca 40% of the Greek NG market

Korinthos Power

- A 436 MW CCGT Power Plant, consumption of 0.4 BCM p.a.

MOH Korinth Refinery

- Refinery with 70 MW installed power capacity, consumption of 0.35 BCM p.a.

What does M&M do?

We support our clients by…

- Covering their energy needs
- Managing risk
- Navigating an uncertain future
- Developing Projects

By delivering…

Integrated, Innovative Solutions

- Efficient Sourcing
- Flexible Portfolio
- Decision support tools

Expert advice and support

- Match supply and demand
- Energy contracts
- Project development

Capability Development

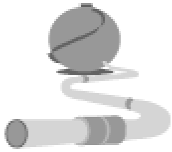
- Operational and Regulatory issues
- Long term development
- Information services

Through…

- Sourcing Utilising an Extensive Network of Links and Business Partners
- Gas Supply (spot and moving towards term contracts)
- A highly Efficient and Proactive Approach
- Experienced People in NG Business

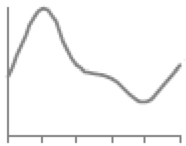
European gas markets have experienced significant changes between 2008 and 2011

Supply: Current market oversupply, probably extending until 2014-2015



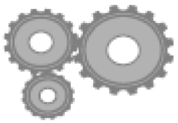
- Unexpected additional volumes of unconventional gas in US
- Additional LNG capacities in Europe
- OUTLOOK: Oversupply to last at least for some years, cyclical market development foreseen after this period

Demand: Slow recovery after sharp drop in demand



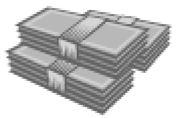
- Sharp decrease in demand due to financial crisis
- OUTLOOK: Slow recovery of industrial demand, rather decreasing residential/commercial sector demand due to growing energy efficiency

Market structure: Increased liquidity and market liberalization



- Increased physical interconnections
- Continued market liberalisation, e.g. simplified balancing rules, improved TPA
- Efficient retail competition, e.g. through limits on duration and proportion of volume that can purchased from one supplier (Germany) and increased customer switching possibilities
- Increased liquidity of hubs and existence of trading points in many markets
- OUTLOOK: Increase of hub liquidity expected, increased influence of hubs in pricing

Pricing: De-Coupling of oil and gas prices



- Hub price signal increasingly a reference for large gas customers
- Mismatch between oil-linked LTCs and hub gas prices sales contracts
- Hub price levels volatile and frequently below oil-indexed price levels – future development driven by supply/demand balance and commodity cycles
- OUTLOOK: De-Coupling of oil and gas prices expected to sustain, value of commodity and flexibility at risk

M&M gas

Regulation challenges long term booking of cross-border import capacities fostering market integration

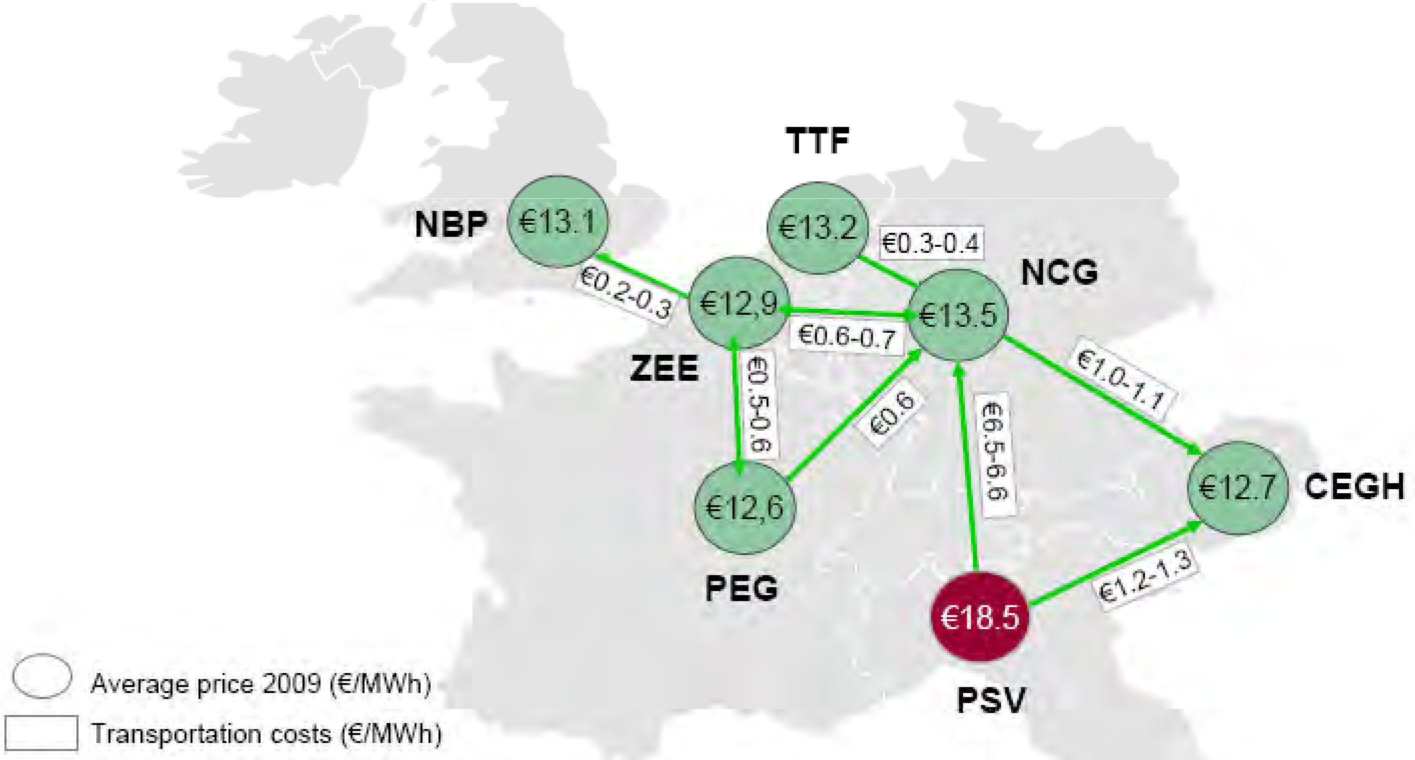
Promotion of open access in international pipelines across Europe taking interconnection one step further

- **Incumbents traditionally in "exclusive" position to control cross-border capacities by long-term booking**
  - Shielding the market against potential competitors
  - Excluding producers from marketing directly
- **EU commission effectively challenging this status to promote market liberalization. Examples:**
  - Divestiture plans: Snam Rete Gas sales 49% TENP (Netherlands – Germany – Switzerland); 46% Transitgas (Germany – Switzerland – Italy), 89% TAG (Russia, Austria, Italy), etc.
  - German regulation:
    - 20% of intl. transmission capacity reserved for short term bookings
    - Max. 65% of transmission capacity may be booked for periods over 4 years
    - Installation of capacity trading platforms (ie: Trac-x)

Price Structure in NW and Central Europe is increasingly based in *Basis Differential Dynamics*

Markets where supplies are based on liquid hubs (UK, The Netherlands) can increasingly profit from differentials between these prices and oil indexed imports

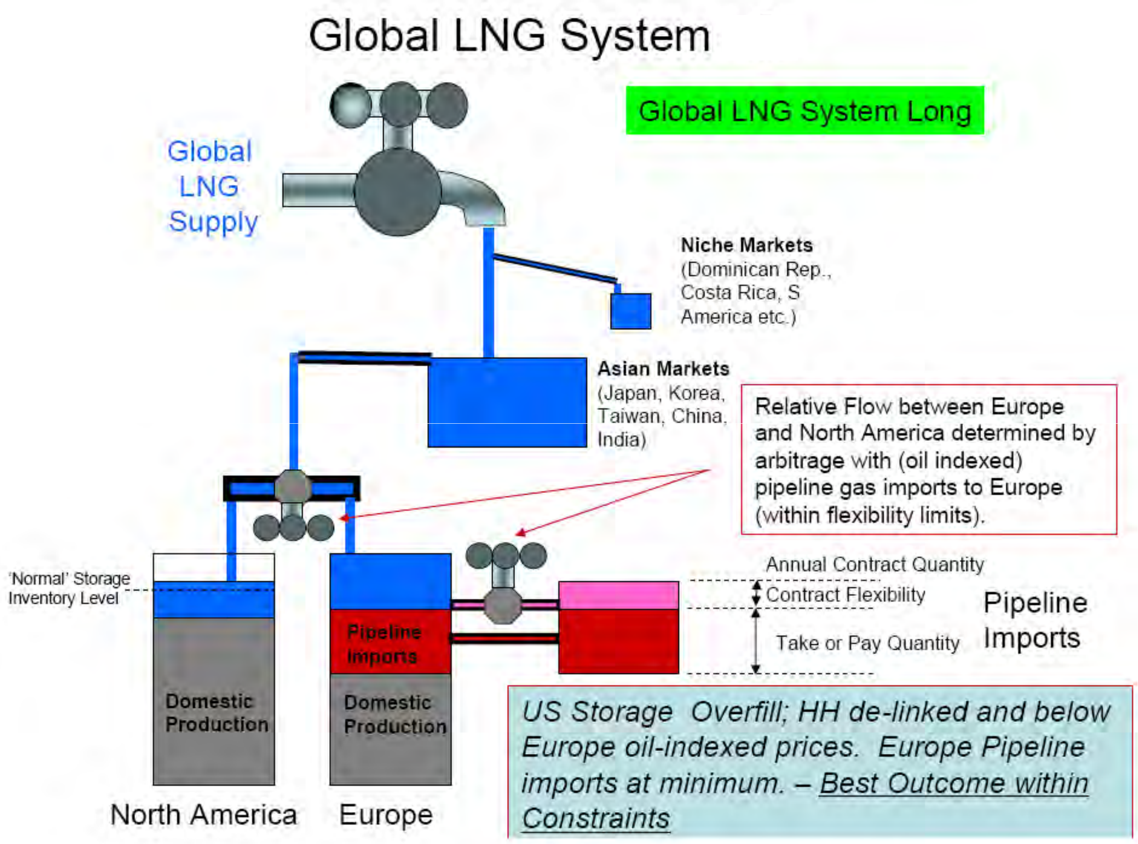
Basis Differential Dynamics: Price in Hub A = Price in Hub B + Transport from A to B



Source: Boston Consulting Group

Market Interaction through LNG and Pipeline Arbitrage

- "The markets of North America, Europe and Asia which are impacted directly or indirectly by LNG imports, despite their different market-price structures and security of supply concerns, can be described as having a 'system dynamic' which is heavily influenced by arbitrage, especially between oil-indexed European pipeline gas and LNG which has flexibility as to its ultimate destination."

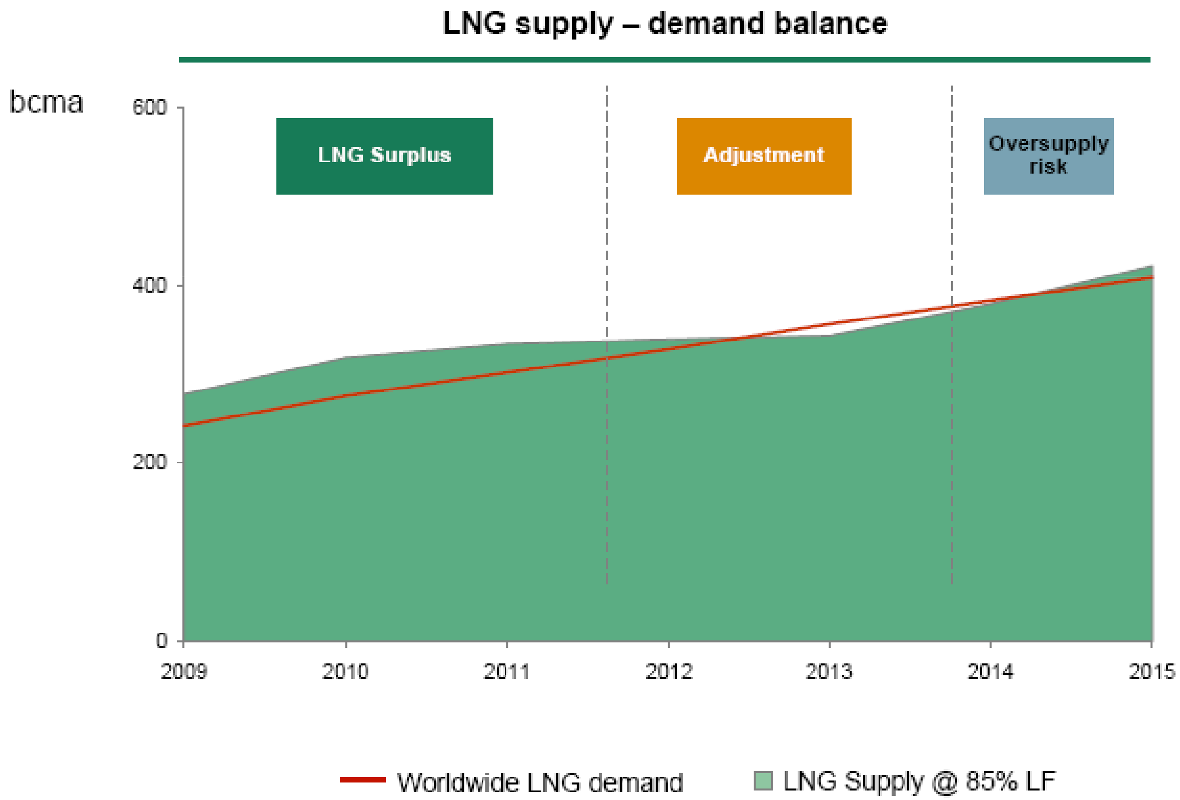


Source: Oxford Institute for Energy Studies

Global LNG Outlook (cont.)

LNG supply-demand balance: progressive adjustment until 2012-2013 followed by new risk of oversupply in 2014+

- Market under severe oversupply in 2H 2008 and 2009
- 2010: strong improvement of supply-demand balance driven by demand growth and "gOPEC behaviors" (Qatar maintenance)
- 2012-2013: High probability for a balanced market (@85% LF), driven by limited number of facilities starting up during the period
- 2014: high risk of oversupply, driven by FIDs in the Pacific (esp. Australia)



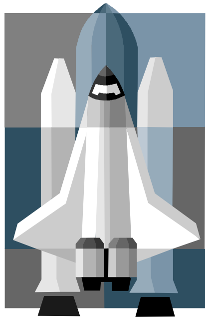
Source: CEDIGAZ; IEA; BCG; WoodMackenzie

Global LNG Outlook (cont.)

- **LNG spot prices in 2009–2011 were structurally below long-term prices, although final pricing structure was very reliant on**
  - throughput from core suppliers (Qatar maintenance, Nigeria force majeure, Bontang decline, etc), price negotiations in Europe (speed moving towards liquidity) and demand development
  - Potential surge of LNG spot prices in 2012-2013, although premiums vs long term not comparable to 2005-1H2008, given increase in market liquidity
  - 2014-2015 could poise an additional window of opportunity to source competitively
- **Short-term European spot gas prices are expected to trade below the oil-linked contract price**
  - Poor demand on 2011e – European demand is likely to fall by 4% due to milder winter and power cut (Soc Gen)
  - Pre-paid Russian gas is still available
  - No LNG rerouting from UK to Japan – Limited rerouting from other countries marks a demand for higher premium over NBP
  - No storage cost in summer in UK
- **Over the long term, contract LNG prices expected over ~$7/MMbtu, as this price level is required to recover capital costs for marginal supplies**
  - Level of integration in the value chain, market balance at the time of negotiation and logistics could significantly impact final contractual conditions

SWOT Analysis

Strengths



- Geographic position - crossroad of pipelines
- NG developments projects in the area (Cyprus, Israel)
- Developing Market
- Revithousa LNG Terminal

Areas for Improvement

- Regulatory framework
  - Cross-border capacities
  - Hub creation
  - Pricing
- Infrastructure
  - Revithousa LNG terminal limitations
  - Physical Interconnections

Opportunities

- Attract investments
  - Pipelines, LNG terminal, FSRUs
  - New EPAs
  - Privatization Program
- Become East Med Hub
  - Supply other Balkan countries

Threats

- Delay on implementation of Infrastructure projects
- Southern corridor not to pass through Greece

M&M gas

Benefits stemming from the liberalization of the NG market

- Enhancement of the penetration of most environmental friendly fossil fuel
- Enhancement of the security of supply
- Reinforcement of the competition will lead to lower natural gas prices and consequently reduction of the energy bill of the energy consuming industries which in turn results to the increase of the competitiveness of the Greek economy
- Cheaper natural gas in the power production sector will potentially result to the reduction of the electricity tariffs
- Cost reduction for the commercial consumers and households
- A positive message towards the international markets that Greece proceeds with all the necessary reforms

Summary and Conclusions

- Structural changes in the European gas market are underway
  - EC actively promotes market liberalization
- Slow demand recovery combined with slight oversupply may create windows of opportunity
- 2011 and 2012 will be a decisive years for the Greek Natural Gas Market
  - Privatization projects
  - Infrastructure projects
  - Enhancement of competition