

**9<sup>th</sup> Cyprus Summit**  
**Nicosia 25 November 2013**  
**Cyprus on the mend?**

# **Shaping The New Eastern Mediterranean Energy Map**

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# The Levant Basin

Stretches northwards from the edge of the Nile Delta Cone to the Tartus Fault.

It covers an area of 83,000 km<sup>2</sup>

It lies in offshore areas claimed by Israel, Gaza, Cyprus, Lebanon and Syria.

## USGS Assessment 2010:

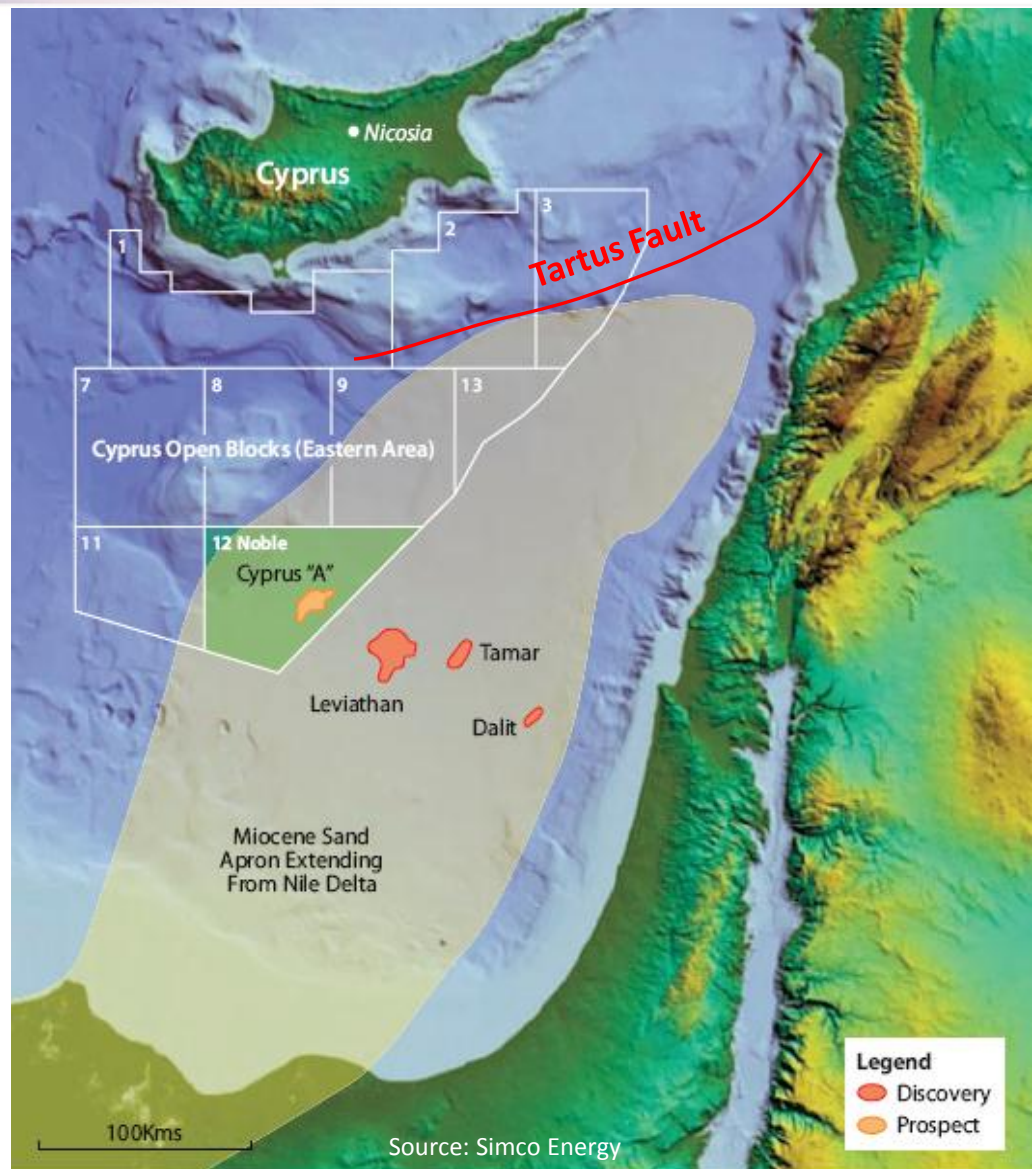
Mean technically recoverable resource:

1.7 bn bbls of oil

3.0 bn bbls of NGLs

122 tcf (3,400 bcm) of gas

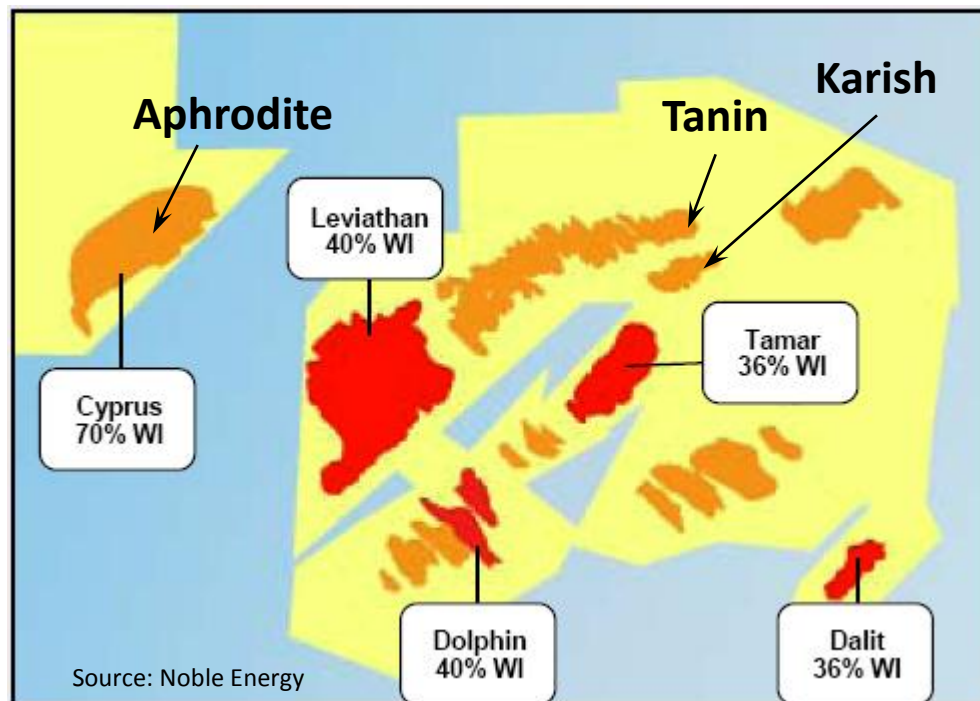
Discoveries to date have been gas



12 prospects identified in the Lower Miocene Sand deposits (Tamar Sand) with unrisked gross potential of over 20 Tcf of gas.

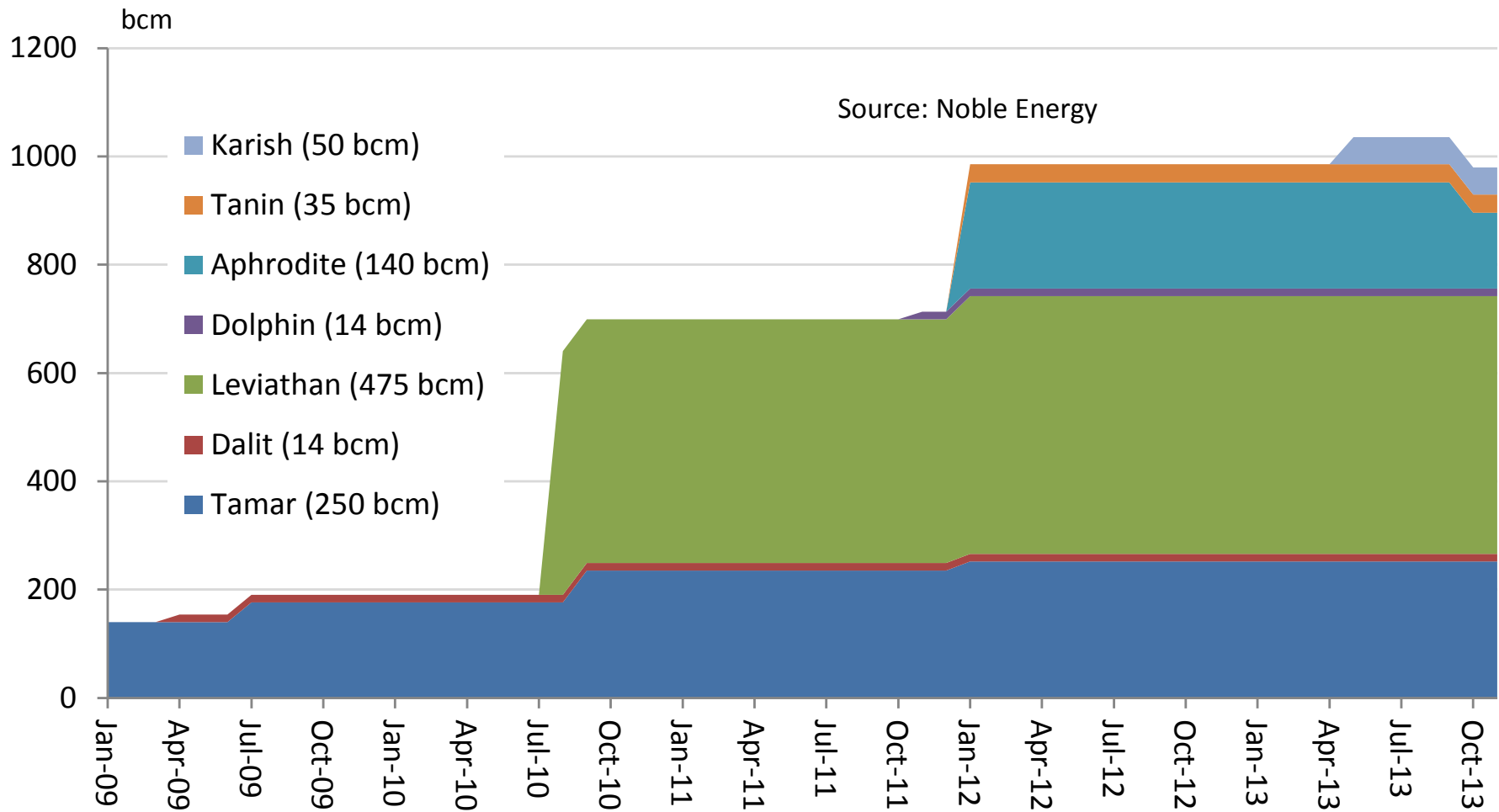
3.7 bn bbls of gross unrisked oil in deep oil play.

## Noble Energy exploration prospects



# Resource build-up

## Mean recoverable gas resource estimates



## Lebanon and Israel remain in dispute over their offshore border

- Lebanon claims that the Tamar and Leviathan discoveries cross into their offshore territory.
- Iran's ambassador to Lebanon claimed that 75% of Leviathan lies in Lebanese waters.
- The claims appear exaggerated, with both fields appearing to lie well to the south of Lebanon's claimed offshore border with Israel.

Lebanon has reached offshore border agreements with Syria and Cyprus

The country opened its first offshore licensing round in 2012, the deadline for bids has been delayed into 2014.



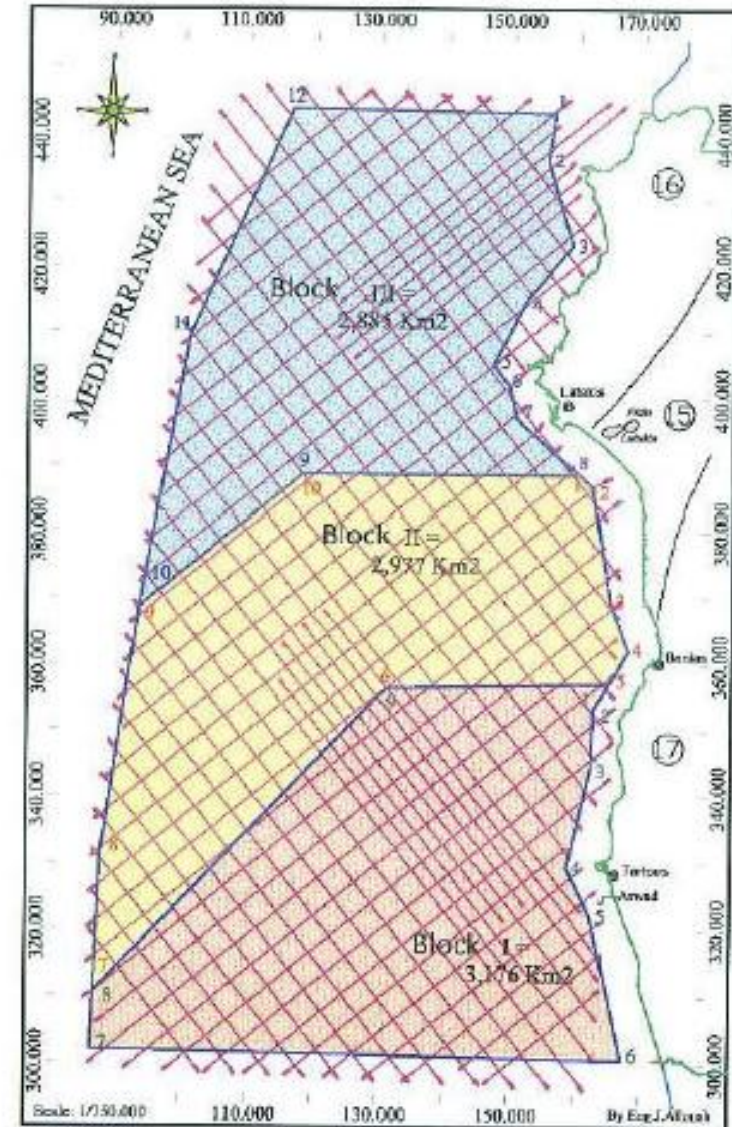
# Syria

2007 licensing round elicited only one (unsuccessful) bid.

A new licensing round for 3 offshore blocks commenced in March 2011. Deadline was extended to mid-Dec 2011.

No bids reported.

Nothing is likely to happen until the current political crisis is resolved.





# Gaza

**BG holds a 90% stake in an exploration licence covering the whole of Gaza's offshore marine area.**

**2000: Two successful wells (Gaza Marine-1 and Gaza Marine-2), yielding estimated gas resources of around 30 bcm (1 tcf) of gas.**

**2002: Plans to pipe the gas to shore in Gaza approved by the Palestinian Authority.**

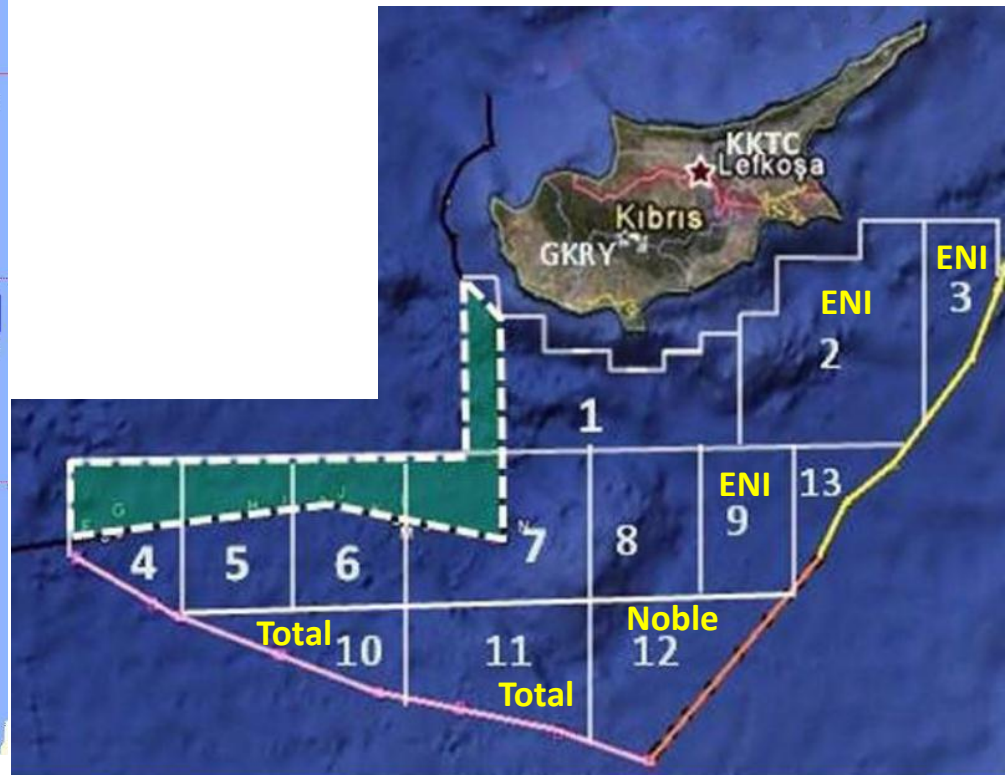
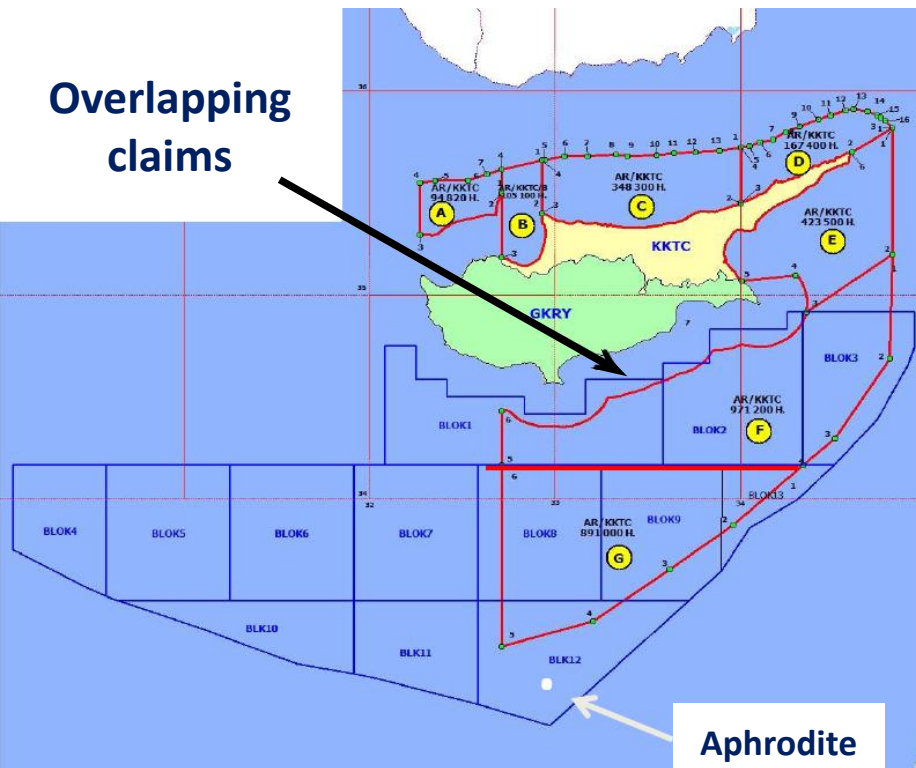
**Israel wants the gas delivered through existing infrastructure via Mari-B to Ashdod and has been accused of blocking the development of the field.**

**BG states on its website that it withdrew from negotiations for the sale of gas from the field to Israel in 2007 and subsequently closed its office in Israel.**

**The fate of the Gaza Marine field remains uncertain.**

# Competing claims

Overlapping  
claims





# Export options

## Leviathan export options

Various gas export options are being evaluated, including pipeline and LNG solutions.

### LNG options:

existing facilities in Egypt

a stand-alone floating LNG solution

a new LNG plant in Cyprus (with Aphrodite)

a new LNG plant on Israel's Mediterranean coast

a new LNG plant on the Red Sea coast

### Pipeline options:

Domestic

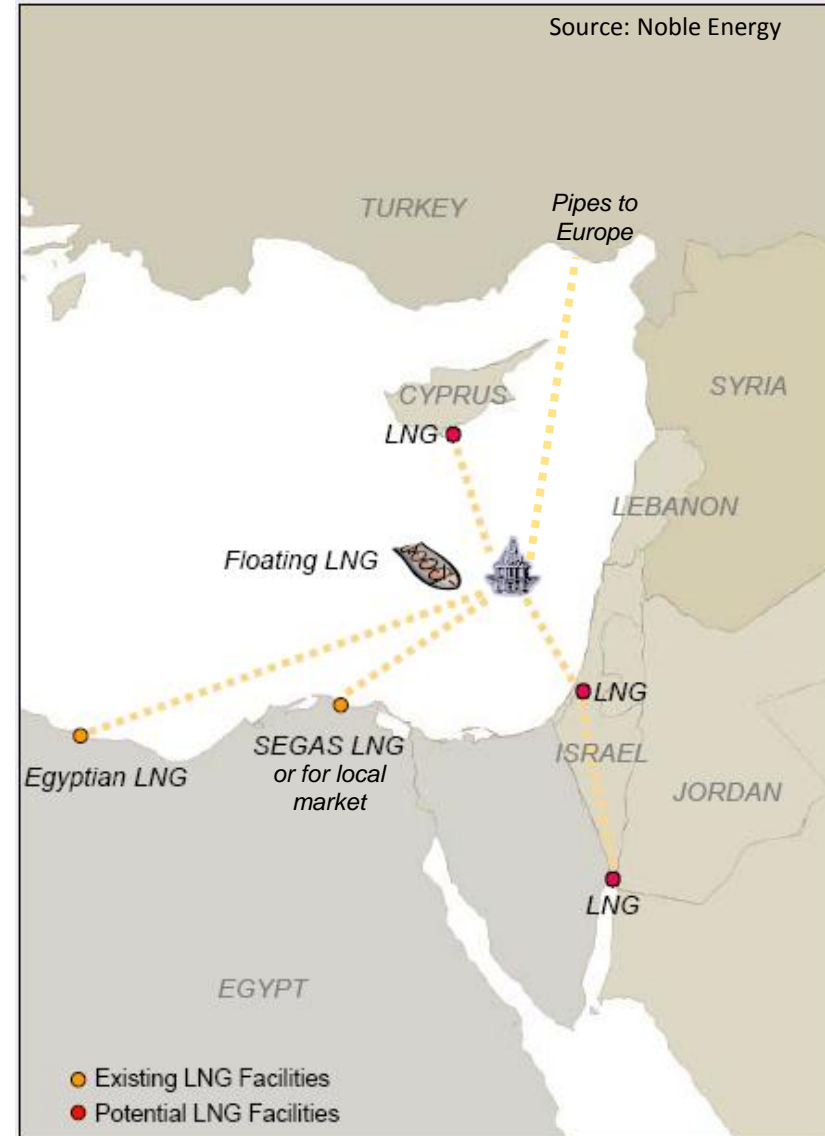
Turkey

Egypt

Jordan

West Bank

Greece (?)



# Cyprus LNG

## Cyprus LNG project proposal

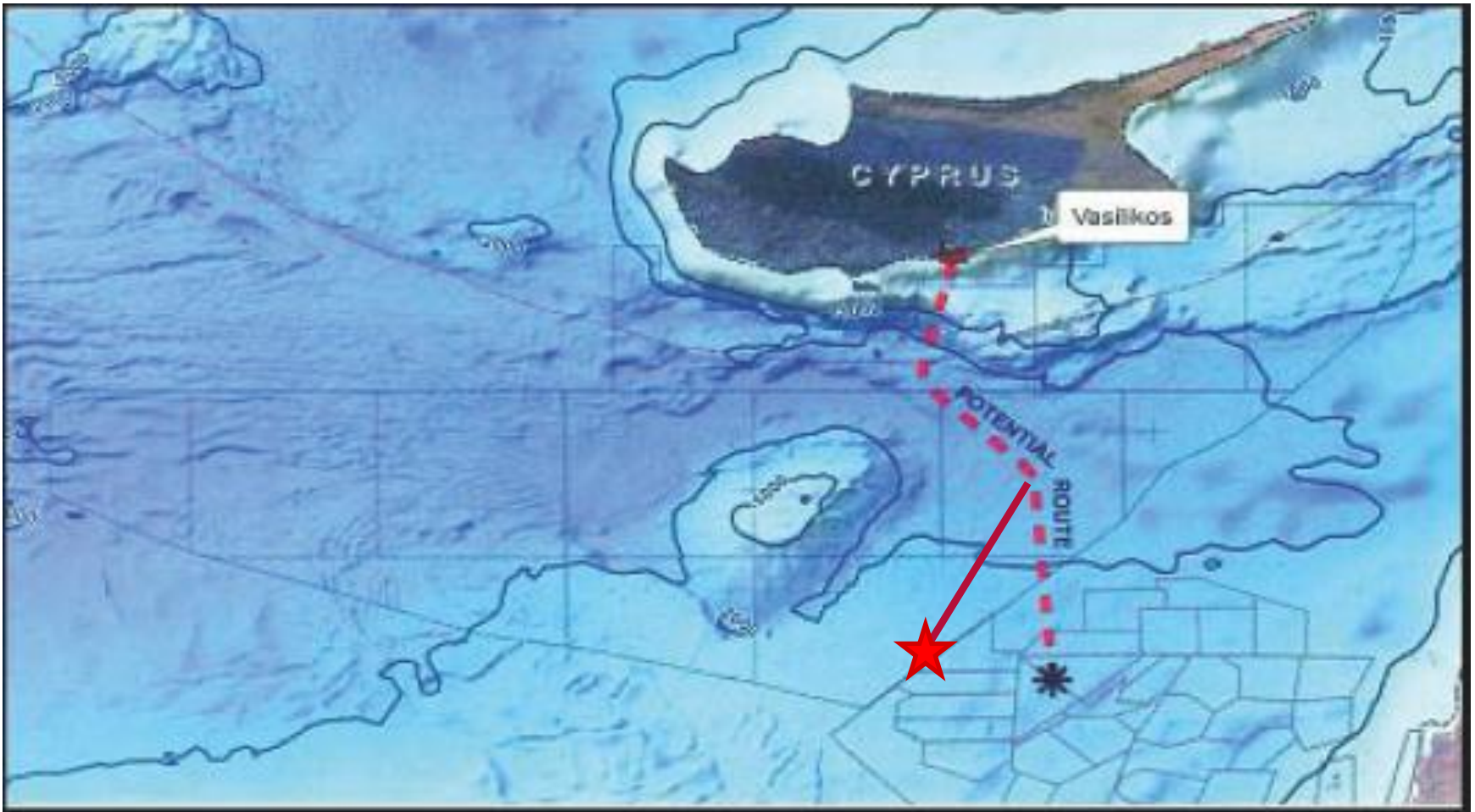


Energy Service, MCIT – Larnaka Municipality, Larnaka 08/07/2011



# Joint development

## Potential Cyprus LNG feedstock



Energy Service, MCIT – Larnaka Municipality, Larnaka 08/07/2011

# Next steps

## Leviathan Phase 1 development concept



Source: Noble Energy



# Gas Outlook to 2035

**CGES**  
CENTRE *for* GLOBAL  
ENERGY STUDIES

## World Natural Gas: Demand, Supply and Trade to 2035



### CGES global gas study

Detailed profiles of major natural gas producing and consuming countries and natural gas pipelines.

Comprehensive lists of LNG liquefaction and re-gasification terminals.

An introduction to unconventional gas, potential resources, the North American experience and international developments.

Forecasts of natural gas supply and demand to 2035 by major country and region.

An optimum allocation of uncommitted gas in 2035, based on least-cost constraints.

The implications for new gas pipelines and new LNG infrastructure.

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