

# ***The Energy Market in Cyprus: Natural Gas Changing the Picture***



**NATURAL GAS PUBLIC COMPANY (DEFA)**

# CYPRUS ENERGY NEEDS



# The Need to Develop the Internal Gas Market

Cyprus has an isolated energy system, *dependent entirely on imported petroleum products on which we currently spend approximately 7% of our GDP*

Cyprus' accession to the European Union comprised *new obligations and constraints* concerning emissions and the environment



Cyprus needs to Contribute to the EU 20-20-20 Target by *Reducing emissions and increasing efficiency*

Market conditions → The expected economic growth is directly related to an increase in the **demand for energy**

# Energy Policy



The Cypriot long term strategic plan is aligned with the European Union Directives and energy strategy and is based on the following 3 pillars:

Security of energy supply

Increasing the competitiveness of the Cypriot economy  
(Currently Cypriot Consumers pay the highest Electricity  
Prices in Europe)

Adherence to environmental commitments

# The Natural Gas Market



- ❖ According to EU Directives Cyprus qualifies and is classified as an Emerging Market for Natural Gas and also as an Isolated Market.
- ❖ Unlike the electricity sector, which has been liberalized since 2004, the gas sector, will follow a fully monopolistic model for a period of at least 10 years.
- ❖ The Natural Gas Public Company (DEFA), set up and controlled by the state, is the **Sole Distributor**, of any form of Natural Gas, in Cyprus i.e. DEFA is totally responsible for the Cyprus Internal Gas Market.

# Short Term Solution



Following Council of Ministers Decision on 14/08/2012:

1. DEFA is participating in the Contact Team that has entered into discussions with the respective Israeli Contact Team, to investigate the possibility of a bilateral agreement on Natural Gas Matters.

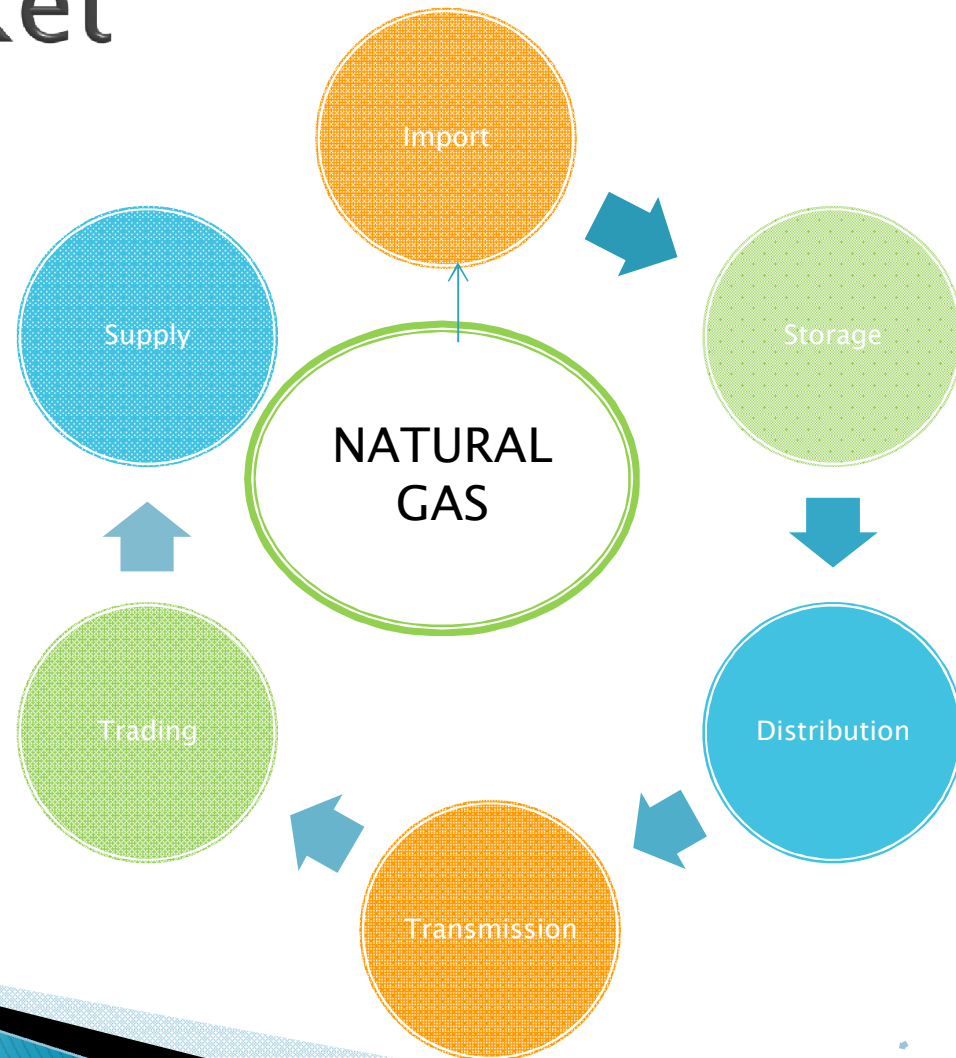
2. DEFA, on 27 September 2012, announced the commencement of the procedure for the Expression of Interest for the Supply of Natural Gas, for delivery to Vasilikos Power Station. The Expression of Interest remained open until Monday the 29th of October, 2012 and DEFA received 17 Expressions of Interest from Companies around the globe.

The Expression of interest concerns the possibility of an Intermediate Solution for a period of approximately 5 years (until our own reserves from Block 12 can be used) , for the supply of Natural Gas to be used mainly for Electricity Production.

Regarding the short term solution , there is no particular preference as to the technology that will support the delivery of Natural Gas to Cyprus. Expressions of Interest received involve both LNG and CNG Technologies

***The deciding factor for the short term solution to be chosen if any, will be the realization of a substantial reduction in the Cost of Electricity Production.***

# DEFA's Role in Developing the Internal Natural Gas Market

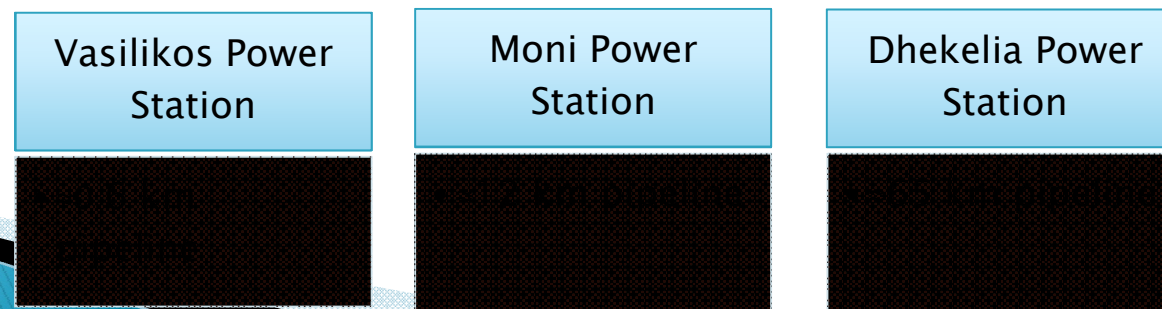


# DEFA Scope of Work



- I. To secure sufficient Natural Gas supplies, at the lowest possible prices, to cover the needs for Electricity Power Generation (Phase “A”) and subsequently supply Industries, Hotels and Households.
- II. DEFA is also responsible for developing the necessary GAS NETWORK infrastructure

The Gas Network will initially consist of 3 pipelines connecting the Gas Import Hub with the three existing downstream Power Stations. The estimated cost for “Phase A” of this project is around €65m. Towards this cost DEFA has managed to Secure a €10m grant from EU under the European Economic Programme for Recovery (EEPR).

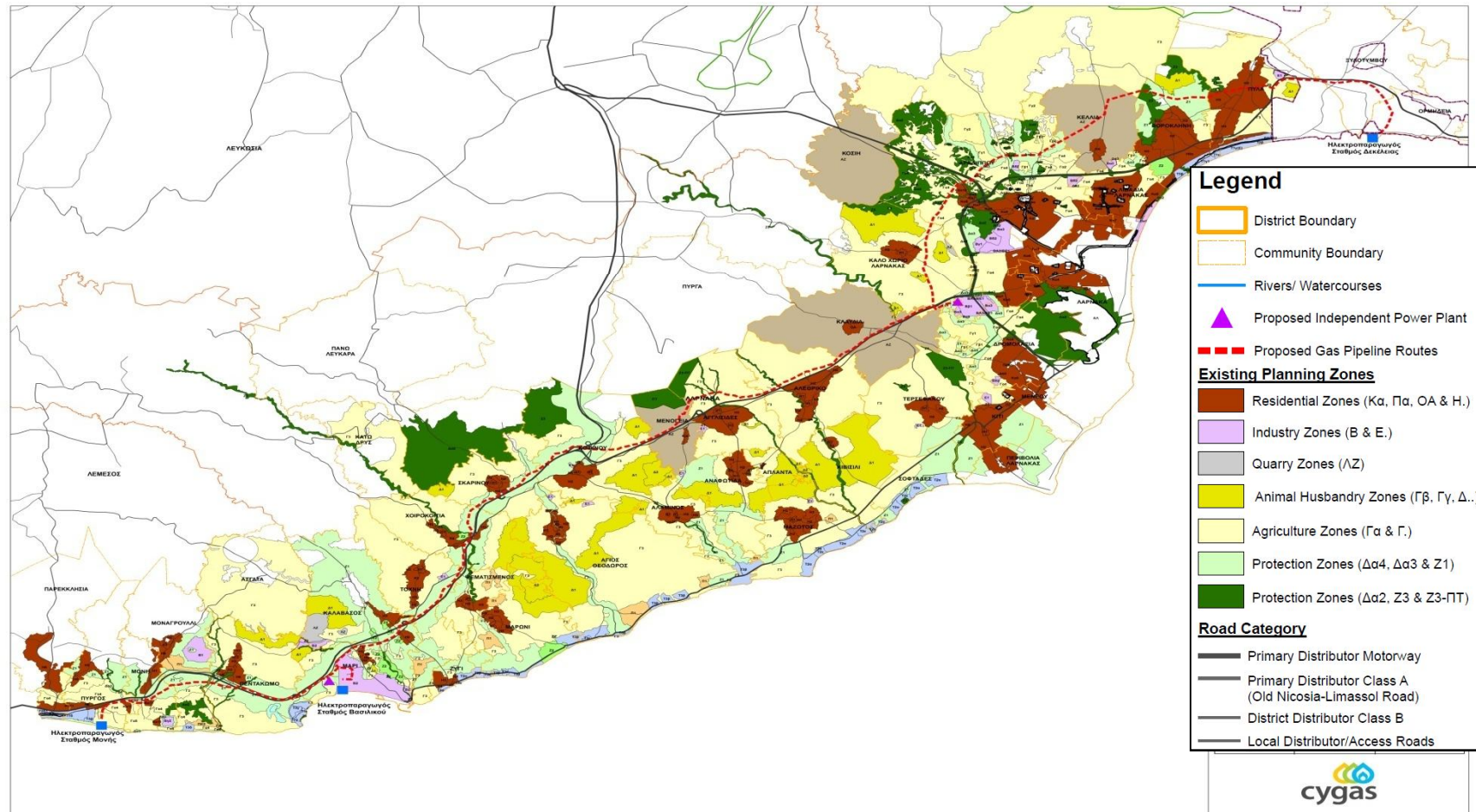




# The Selected Route (For Phase "A")



# The Selected Route (Showing Town planning Zones)



# The way forward



## Pipeline Network Project.

- Regardless of the Supply Source of Natural Gas, technical work on the Pipeline Network Project is progressing uninterrupted.
- The strategic planning regarding the Gas Infrastructure Network remains unaffected and a Public Consultation with all the 22 involved local communities took place in June 2012.
- The gasification of the Island (Phases B and C) connecting the Receiving Terminal to Industries, Hotels and Households will be an on-going process and it is expected to cost over €500 million.

## Financing the Project.

- Apart from technical work, BIFA is in close contact with European Investment Bank (EB) and other Commercial Banks regarding the funding of the Pipeline Network Project.

# Investment Opportunities

The recent Natural Gas Discoveries in Cyprus Block 12 opened up a range of possible Investment Opportunities in the Cyprus Energy Sector :

1. Exploration (2<sup>nd</sup> Licensing Round, 11<sup>th</sup> February 2012 – Closing Date 11<sup>th</sup> May 2012)
2. Submarine Pipeline(s)
3. Liquefaction Plant(s)
4. Cyprus Internal Natural Gas Distribution Network
5. Electricity Power Generation
6. Use of Natural Gas in Transport (buses, cars, etc.)

# Why Invest in Cyprus

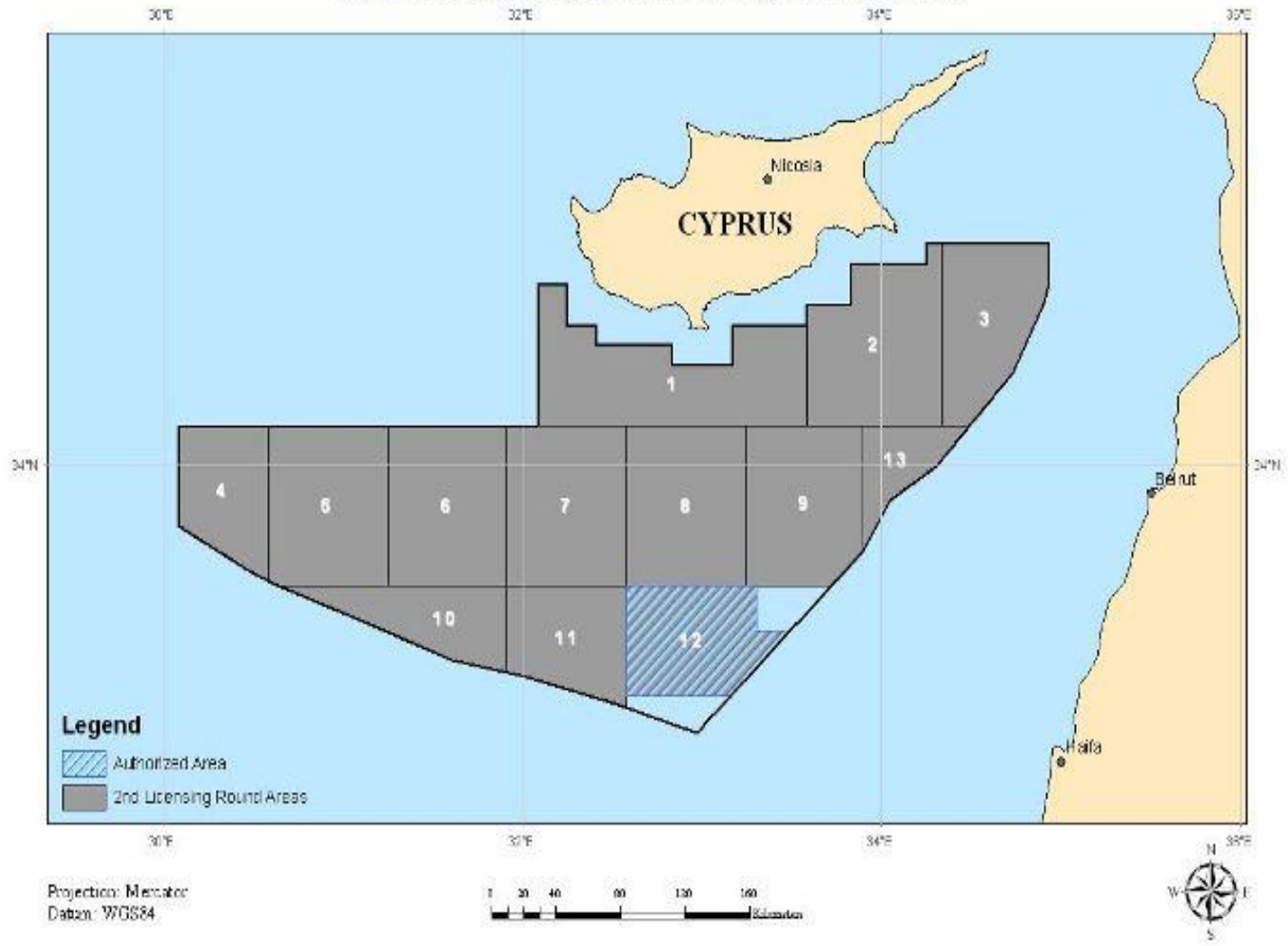


1. *European Union Member State since 2004 and a Euro Zone Member State since 2008*
2. *Highly Qualified and Multilingual Labour Force.*
3. *Lowest EU Corporate Tax Rate (10%)*
4. *Very Good Foreign Direct Investment (FDI) Track Record*
5. *Macroeconomic Stability*
6. *Efficient Legal, Accounting and Banking Services*
7. *Strategic Location in Middle East with Proximity to Suez Canal.*
8. *Advanced Telecommunications Network and Infrastructure*
9. *Reputable International Shipping Centre (currently boasts one of the biggest fleets worldwide)*
10. *Good Living and Working conditions round the year*

# 1. Exploration

- ▶ Block No 12 was awarded to Noble Energy during the 1<sup>st</sup> Licensing Round. Another 12 Blocks are the subject of the Second Licensing Round, offering big investment possibilities.
- ▶ 15 Proposals have been received and the Government of Cyprus Decided to Negotiate the award of 4 further Blocks with the following parties.
- ▶ Blocks 2 & 3 with the Consortium of ENI (Italy) & KOGAS (Korea), Block 9 to the Consortium of TOTAL (France) & Novatek (Russia) , and Block 11 to TOTAL (France)

# 2nd Licensing Round Offshore Cyprus Hydrocarbons Exploration Blocks



## 2.Submarine Gas Pipelines



- ▶ In order to transport the Natural Gas to Cyprus, from the Gas Fields, a 200km + submarine gas pipeline will be necessary. Estimated cost up to US\$2Billion.
- ▶ There is an opportunity for the Production, Laying, Operation and Maintenance of this pipeline, which is bound to have “third party access”.



# 3. Liquefaction Plant(s)



- ▶ Necessary to set up 1–3 Liquefaction trains 5MT/y each, (in modular form), in Cyprus, in order to liquefy gas reserves and export them to Europe, Asia, etc, as LNG (Liquefied Natural Gas).
- ▶ The estimated cost of establishment of such an LNG plant is in the region of US\$10Billion.

# 4. Cyprus Internal Natural Gas Distribution Network



- ▶ The Government of Cyprus has created the Natural Gas Public Company of Cyprus (DEFA) which will be the sole importer and distributor of Natural Gas in Cyprus.
- ▶ DEFA is currently designing the inland gas distribution network. Very soon it will announce tenders for this Project. The gasification of the Island will be an on-going process and it is expected to cost over €500 million.

# 5. Electricity Power Generation



- ▶ The Electricity Market of Cyprus has been liberalized (following EU Directives) and is open to competition.
- ▶ The Electricity Power Generation needs of Cyprus are quite high and increasing, while the Sector is still a monopoly!
- ▶ It is anticipated that the first Independent Power Producers will appear soon.

## 6. Use of Natural Gas in Transport

- ▶ The use of Natural Gas in internal Transportation i.e. Buses, other Vehicles running on Natural Gas and Gas Stations, opens up a new opportunity that needs to be addressed and exploited. This subject is one of the priorities that DEFA itself has set.
  
- ▶ *Thank you*

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