

**CYPRIT & GREEK OIL & GAS SUMMIT 2012**



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



**14 & 15 JUNE 2012**

**PALM BEACH HOTEL, LARNACA**

# CYPRUS ENERGY CHARACTERISTICS

Cyprus has an **isolated energy system**, dependent entirely on **imported petroleum products** → needs to diversify its energy sources

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 → economic growth is coupled to an increase in the **demand for energy**

# WHAT DO WE NEED?

## CYPRUS NEEDS

an environmentally friendly energy system which will ensure Security of Supply and will provide consumers with a qualitative service at the Lower Possible Cost

# ENERGY POLICY

THE CYPRIOT LONG TERM STRATEGIC PLAN IS ALIGNED WITH THE EUROPEAN UNION DIRECTIVES AND ENERGY STRATEGY

## Security of energy supply

- diversification of its energy sources
- maintaining sufficient fuel stocks for National Security

## Increasing the competitiveness of Cypriot economy

- Decrease the energy costs for Industry, Commerce and Households

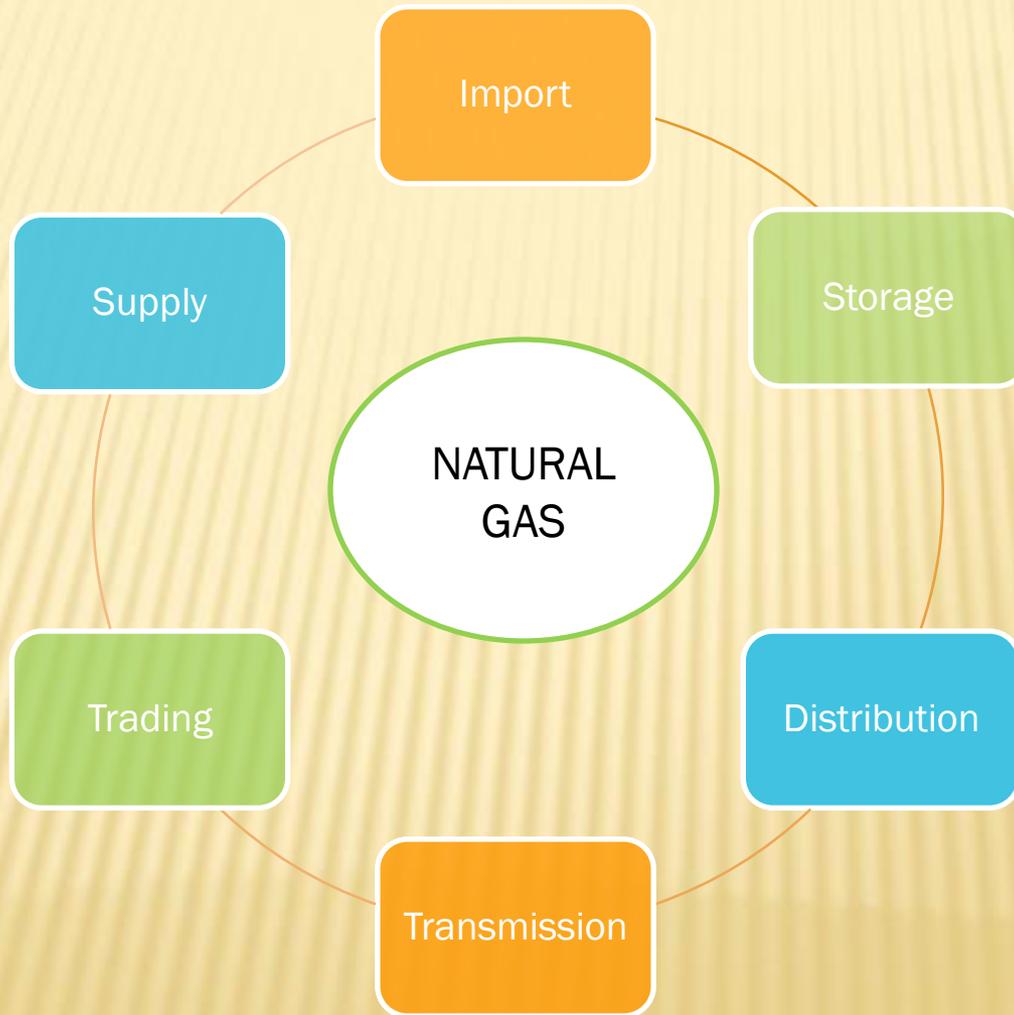
## Adherence to environmental commitments.

- contribution to 20-20-20 by 2020 Target (by reducing CO<sub>2</sub> emissions and improving power generation efficiency)

# THE NATURAL GAS MARKET

- According to EU Directives Cyprus qualifies and is classified as an Emergent Market for Natural Gas and also as an Isolated Market.
- Unlike the electricity sector, which has been liberalized since 2004, the gas sector, will be fully monopolistic 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.
- In view of recent Gas Discoveries by Noble Energy (USA) in Block No 12 in the Cyprus Exclusive Economic Zone, DEFA is currently in discussions with the Government to widen its role and activities

# DEFA'S ROLE



# 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 to also supply Industries, Hotels and Households.
- II. Furthermore DEFA is responsible for developing the necessary GAS NETWORK infrastructure

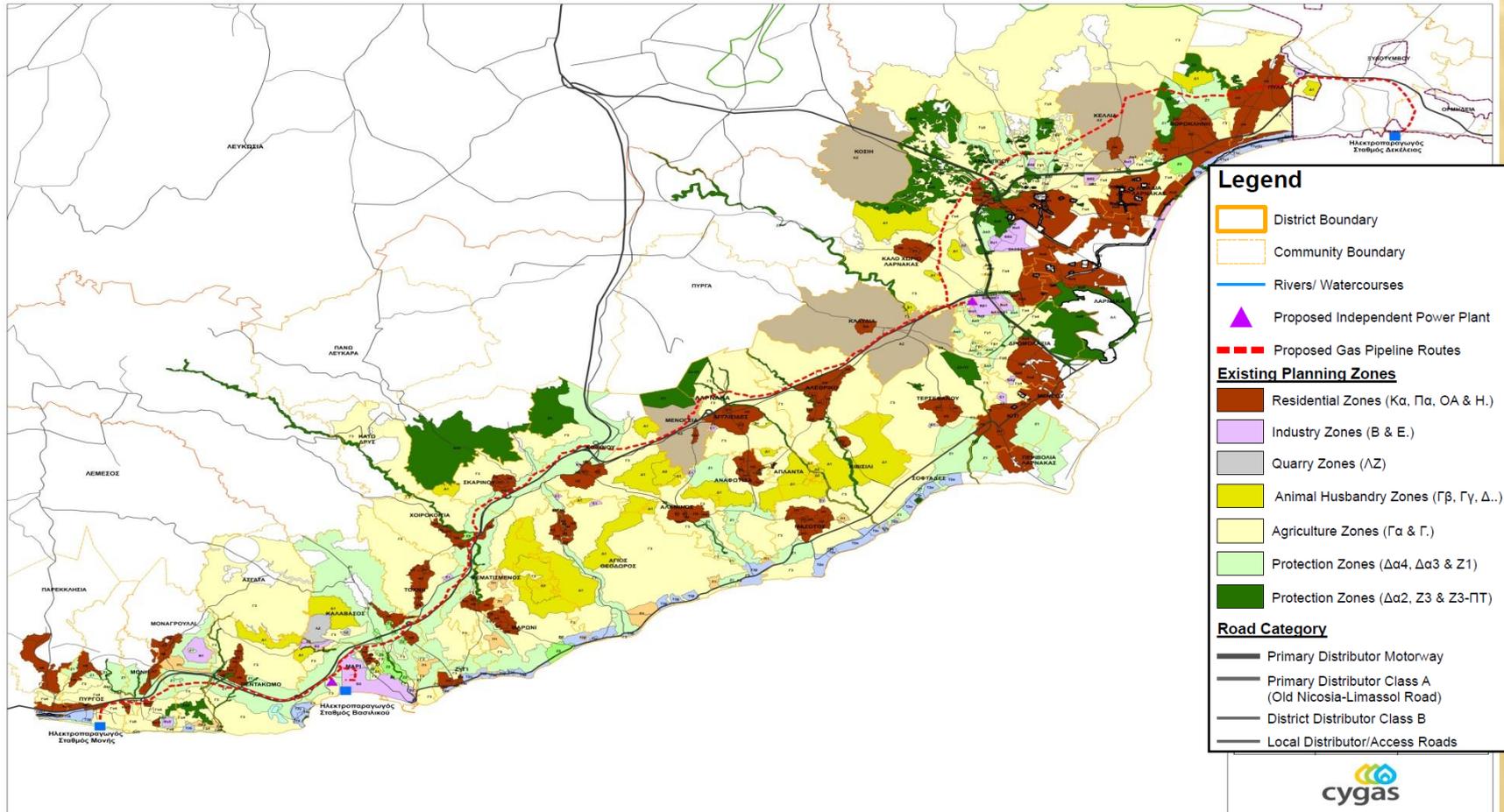
The Gas Network will initially consist of 3 pipelines connecting the Gas Import Hub with the three existing downstream Power Stations. The estimated cost for “Phase A” of this project is around €60m. Towards this cost DEFA has managed to Secure a €10m grant from EU under the European Economic Programme for Recovery.

Vasilikos Power Station	Moni Power Station	Dhekelia Power Station
• ≈0.6 km pipeline	• ≈12 km pipeline	• ≈65 km pipeline

# 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 continuing uninterrupted.
- The strategic planning regarding the Gas Infrastructure Network remains unaffected and a Public Consultation with all affected communities took place on 06/06/2012.
- 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 ,DEFA is in close contact with European Investment Bank (EIB) and other Commercial Banks regarding the funding of the Pipeline Network Project.

# POSSIBLE INVESTMENT OPPORTUNITIES IN THE CYPRUS ENERGY SECTOR



As a result of ongoing developments, the following investment sectors can be identified:

1. Exploration (2<sup>nd</sup> Licensing Round, 11<sup>th</sup> February 2012 – Closing Date 11<sup>th</sup> May 2012- 15 Proposals were submitted)
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.)

# 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 which was announced on 11<sup>th</sup> February 2012, offering big investment possibilities.
- ✘ 15 Proposals have been received, which were submitted by big companies around the world.

## 2.SUBMARINE GAS PIPELINES

- ✘ In order to bring 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)

- ✘ The setting up of 1-3 Liquefaction trains 5MT/y each, (in modular form), in Cyprus, in order to liquefy gas reserves and export them to Europe, Japan, etc as LNG (Liquefied Natural Gas), is a necessity.
- ✘ 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 and 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) so it is open and free to competition.
- ✘ The Electricity Power Generation needs of Cyprus are quite high and are increasing, while the Sector is still a monopoly!
- ✘ It is anticipated that the first Independent Power Producers will soon appear.

## 6. USE OF NATURAL GAS IN TRANSPORT

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

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