

GREEK NATIONAL NATURAL GAS SYSTEM (NNGS): DEVELOPMENTS AND PROSPECTS

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WITHIN THE JURISDICTION OF THE MINISTRY OF ENVIRONMENT, ENERGY & CLIMATE CHANGE



Source of Development, Supplier of Energy



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DESFA's Profile

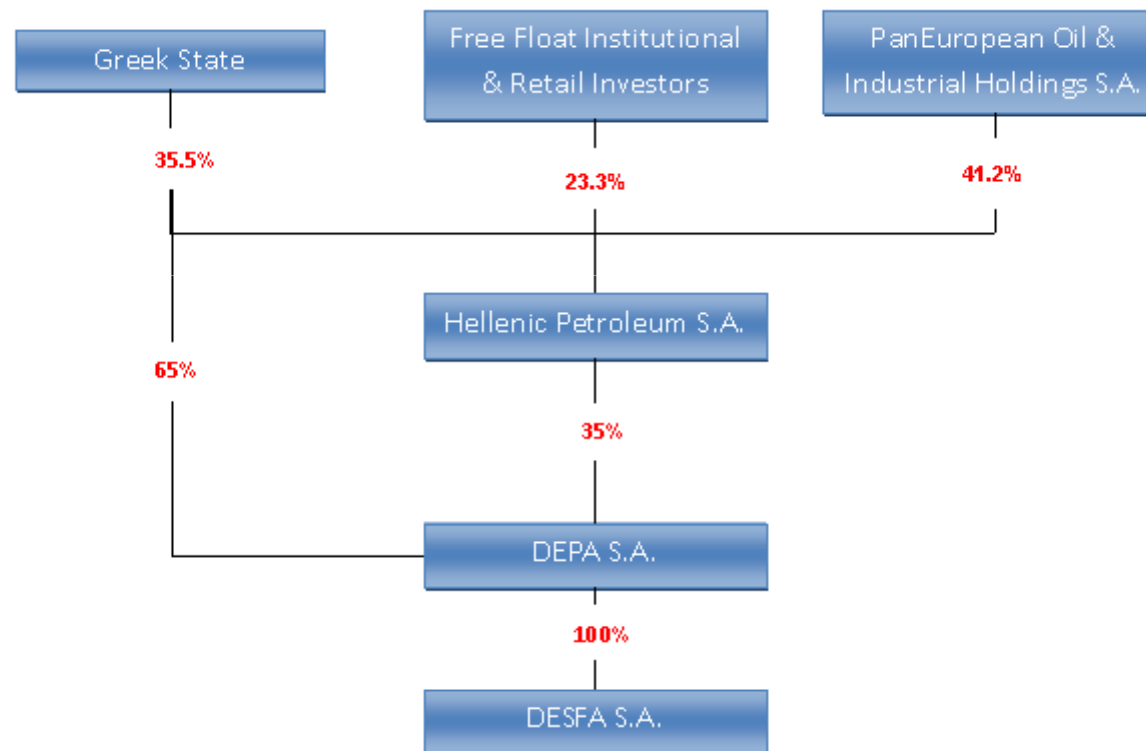


Introduction

- DESFA was established on the 31st of March 2007 after the completion of the Legal Unbundling procedure of the Public Gas Corporation of Greece (DEPA S.A.), in accordance with European Directive 2003/55 and the Greek Law 3428/2005, for the liberalization of the natural gas market.
- DESFA is currently a 100% subsidiary of DEPA.
- DESFA fully owns the National Natural Gas System (NNGS), with full responsibilities regarding (a) the provision of Third Party Access services under non-discriminatory terms, (b) the operation, (c) the maintenance and (d) the development of the gas system.
- DEPA is under privatization process. DESFA will remain under the direct or indirect control of state, according to the draft law, which transposes EU Directive 2009/73 into the Greek legislation. The draft law is currently under public consultation.



Current Corporate Structure of DESFA after the Legal Unbundling





National Natural Gas System (NNGS)



Currently, the NNGS comprises of:

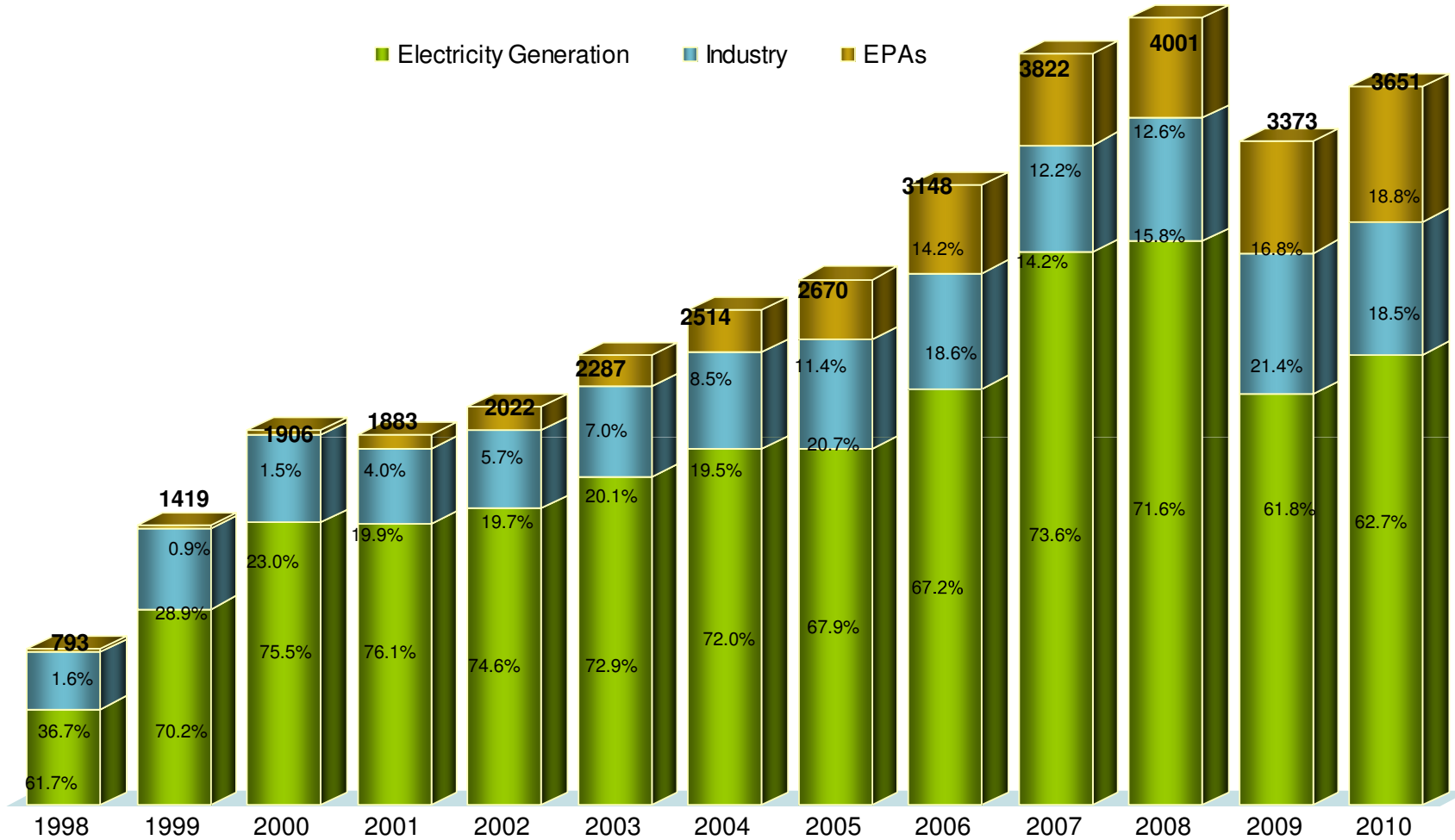
- A main pipeline of app. 512 km for the transmission of natural gas through the three gas entries to the Greek territory (Greek/Bulgarian borders in the North, Greek/Turkish borders in the East and LNG terminal in the South).
- Branch pipelines of total length 717 km for the transmission of high pressure gas across the country.
- One LNG receiving terminal on Revithoussa island in the gulf of Megara with a total storage capacity of 130.000 m³ LNG. The Sustained Maximum Send out Rate (SMSR) app. 1.000 m³ LNG/hour, while the emergency hourly rate rises to 1.250 m³ LNG/hour.
- Line Valve Stations and Metering and Regulating Stations.



Natural Gas Outlook



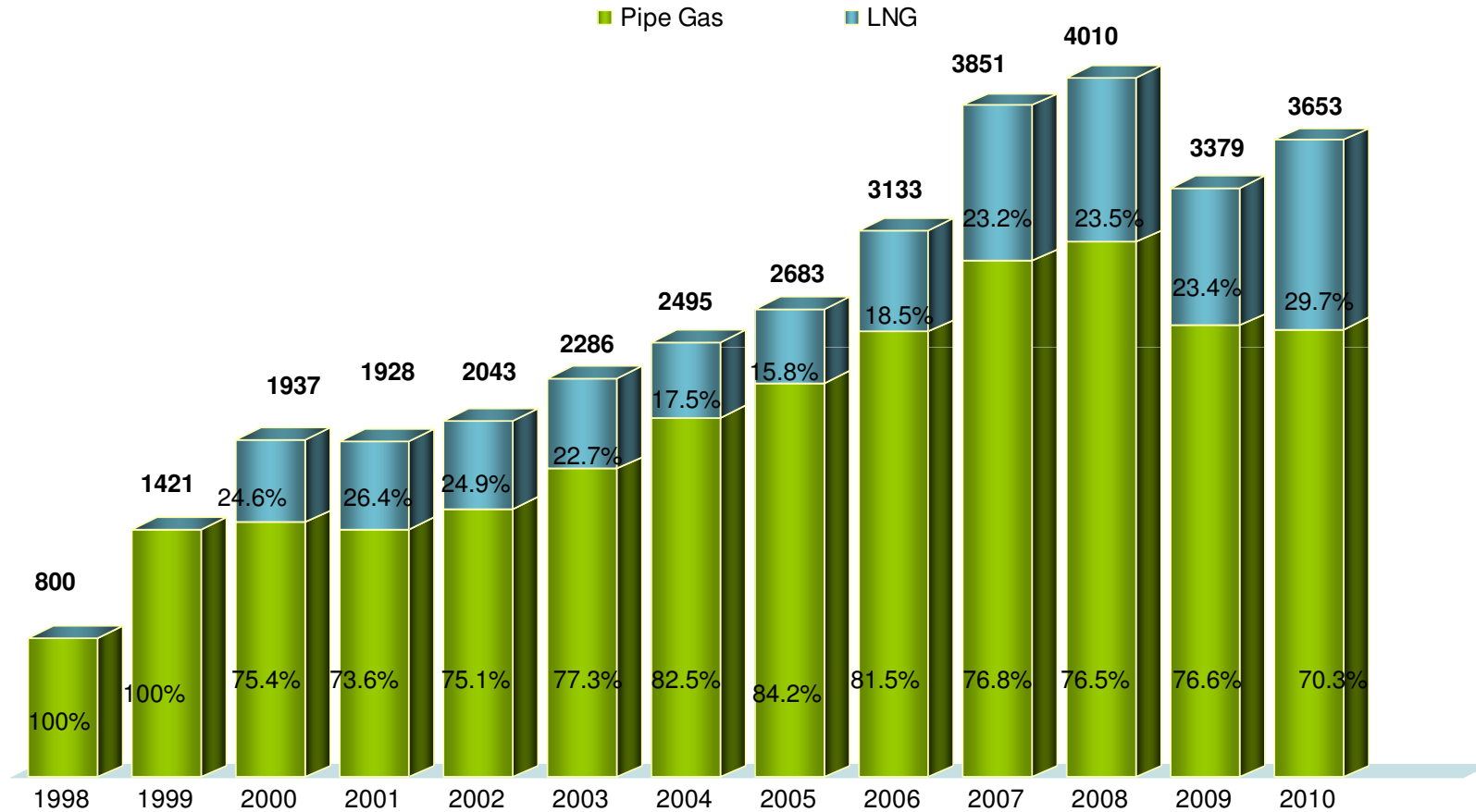
Natural Gas demand historical data





Natural Gas supply historical data in the Greek market

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The existing and the under construction gas fired power plants for the next years are ensuring the increase of the gas demand in the Greek gas market

Gas Fired Power Plants connected to the NNGS by the end of 2010			
Power Plant	Technology	Installed Power (MW)	Owner
Komotini	CC	495,0	PPC
Lavrio III	CC	180,0	PPC
Lavrio IV	CC	560,0	PPC
Lavrio V	CC	385,3	PPC
Ag.Georgios VIII	Conventional	160,0	PPC
Ag.Georgios IX	Conventional	200,0	PPC
ELPEDISON POWER I	CC	390,0	ELPEDISON POWER
ELPEDISON POWER II	CC	421,6	ELPEDISON POWER
ALOUMINION	CHP	334,0	ALOUMINION S.A.
IRON I	OC	147,8	IRON THERMOELECTRIKI
IRON II	CC	435,0	IRON THERMOELECTRIKI
PROTERGIA	CC	430,1	PROTERGIA S.A.
TOTAL		4.138,8	
PPC: 47.8% IPPs: 52.2%			



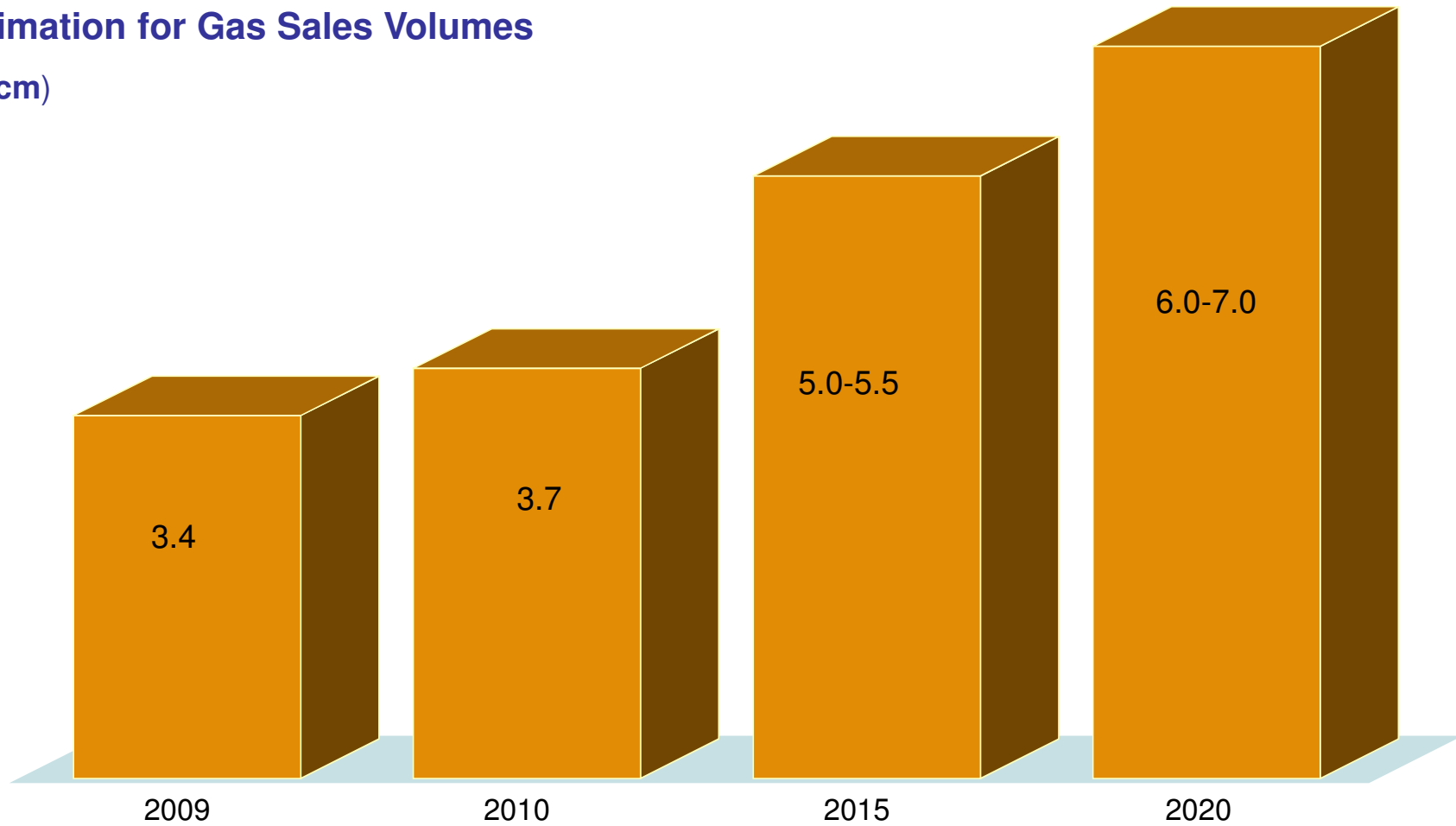
(Table cont'd)

Gas Fired Power Plants expected to be connected			
Power Plant	Technology	Installed Power (MW)	Owner
ALIVERI	CC	400	PPC
MEGALOPOLI	CC	850	PPC
CORINTHOS POWER	CC	436,6	CORINTHOS POWER
TOTAL		1,686.6	



Estimation for Gas Sales Volumes

(bcm)





Capacity Development of NNGS

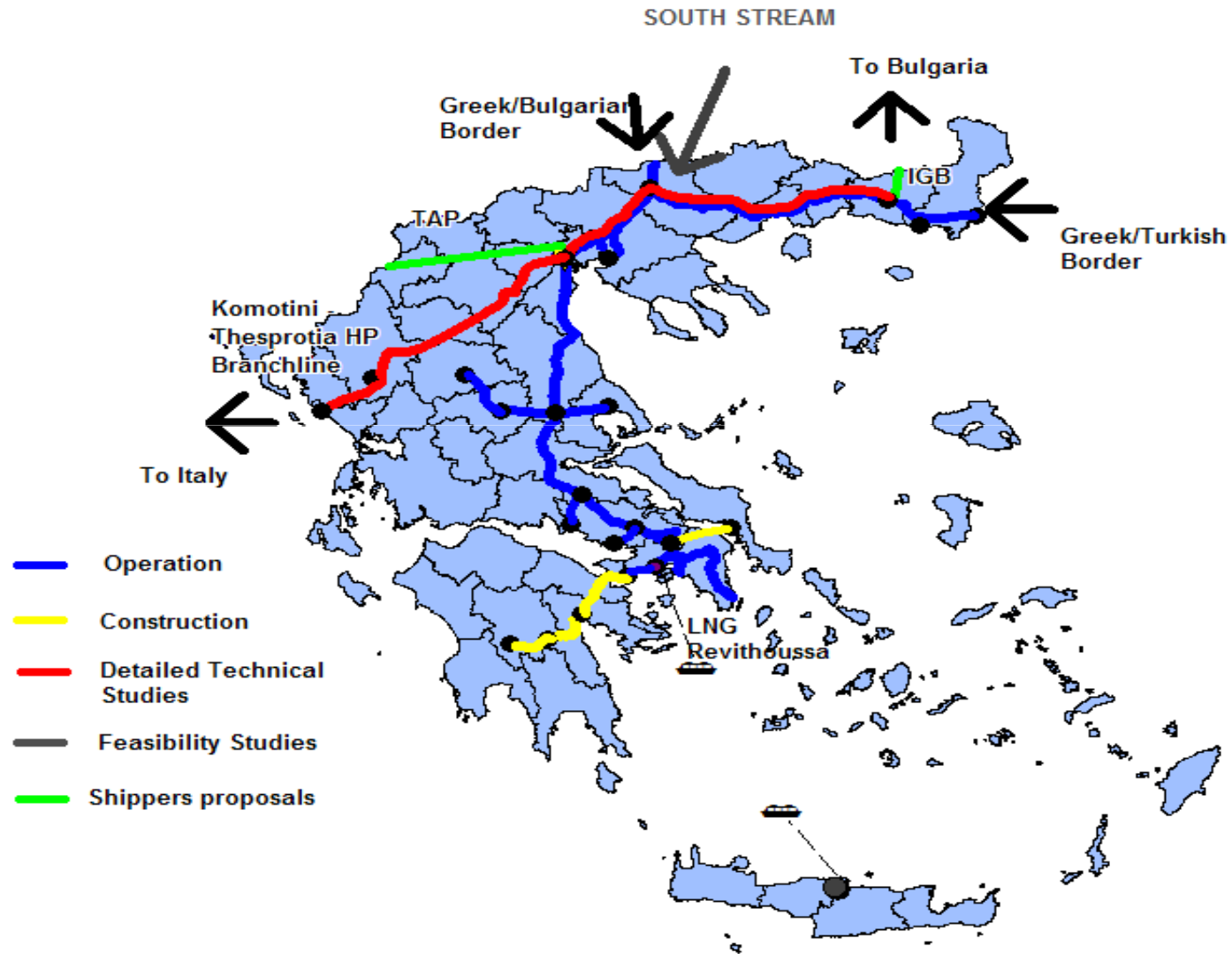


DESFA, since its development, completed NNGS projects, which had been decided by DEPA and approved by the Minister of Development (e.g. Interconnector Turkey Greece)

In addition and in the framework of the Greek & European Legislation, DESFA promotes, plans and develops new projects which are going to enhance the transportation capacity of the NNGS, and at the same time turn Greece to an energy hub in the region of South East Europe



NNGS with its future expansions





Implemented Gas Projects since the establishment of DESFA	
Completion of NNGS projects started by DEPA	277 million €
Other NNGS projects since the establishment of DESFA	14 million €
Total	291 million €
NNGS Main Projects under construction	
High Pressure branch line to Aliveri <i>(under construction)</i>	74 million €
Compression station in Nea Mesimvria <i>(under final stage of construction)</i>	61 million €
High Pressure Branch to Megalopolis <i>(at the start of construction)</i>	130 million €
Total	265 million €



(Table cont'd)

Planned Main Projects	
2nd Expansion of Revithoussa receiving terminal <i>(included in the Development PLAN 2010 – 2014) (EPC Tendering phase)</i>	159 million €
Greek Part of South Stream <i>(Feasibility phase and preliminary environmental examination completed)</i>	640 (onshore)+840 (offshore) million €
High Pressure pipeline Komotini Thesprotia <i>(included in the Development Plan 2010 – 2014) (Technical studies phase)</i>	900 million €
Receiving terminal in Crete island <i>(Feasibility Study phase)</i>	470 million €
Underground Storage SOUTH KAVALA <i>(The concession of underground reservoir under examination)</i>	300 million €



Other Major Developments in 2010



- Issued in April 2010 of the pending secondary legislation for the liberalization of the Gas Market.
- New Shippers activated in the NNGS from the Entry Point Agia Triada since May 2010.

18,1% of the total gas demand from 1st of April up to 31st of December 2010 imported by other than DEPA Shippers



Distributed quantities to Users after the implementation of NNGS Code (1/4-31/12/2010)

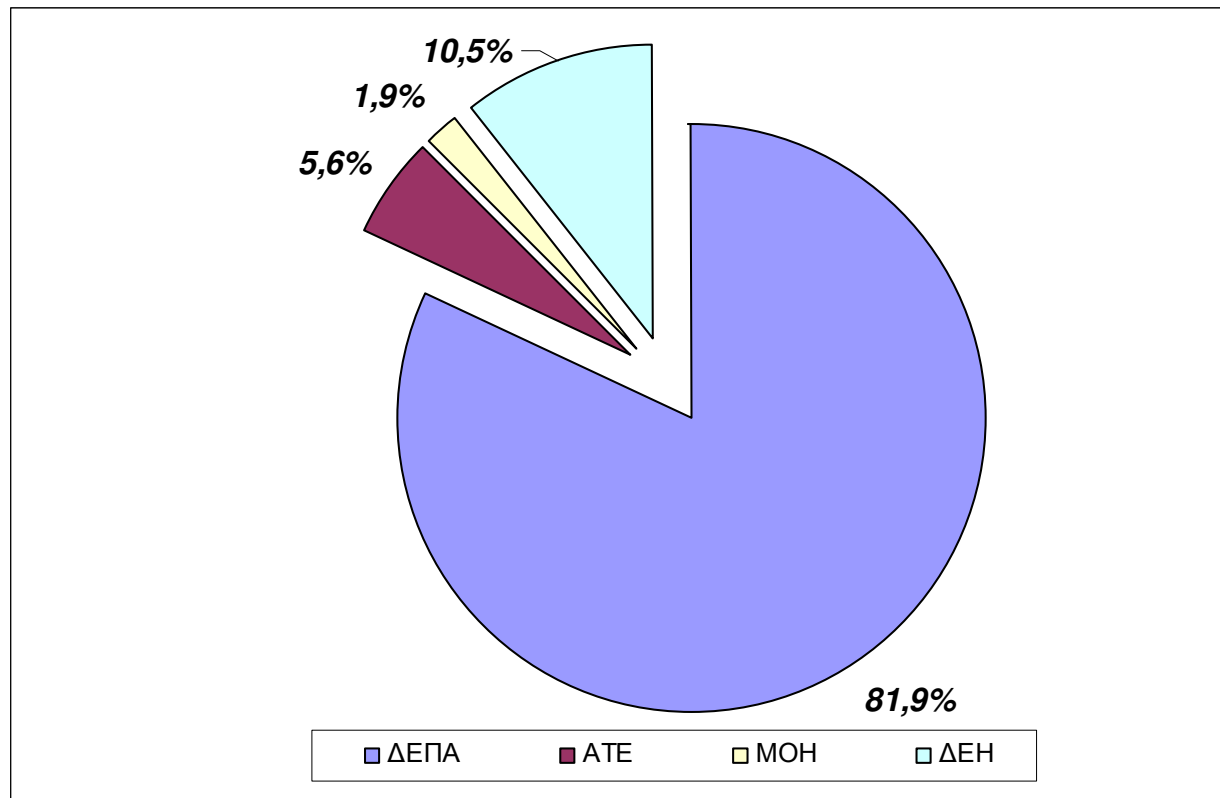




Illustration of supply shares for Russian gas, Turkish gas and LNG for 2010

3. N.G SUPPLIES SHARES
YEAR 2010

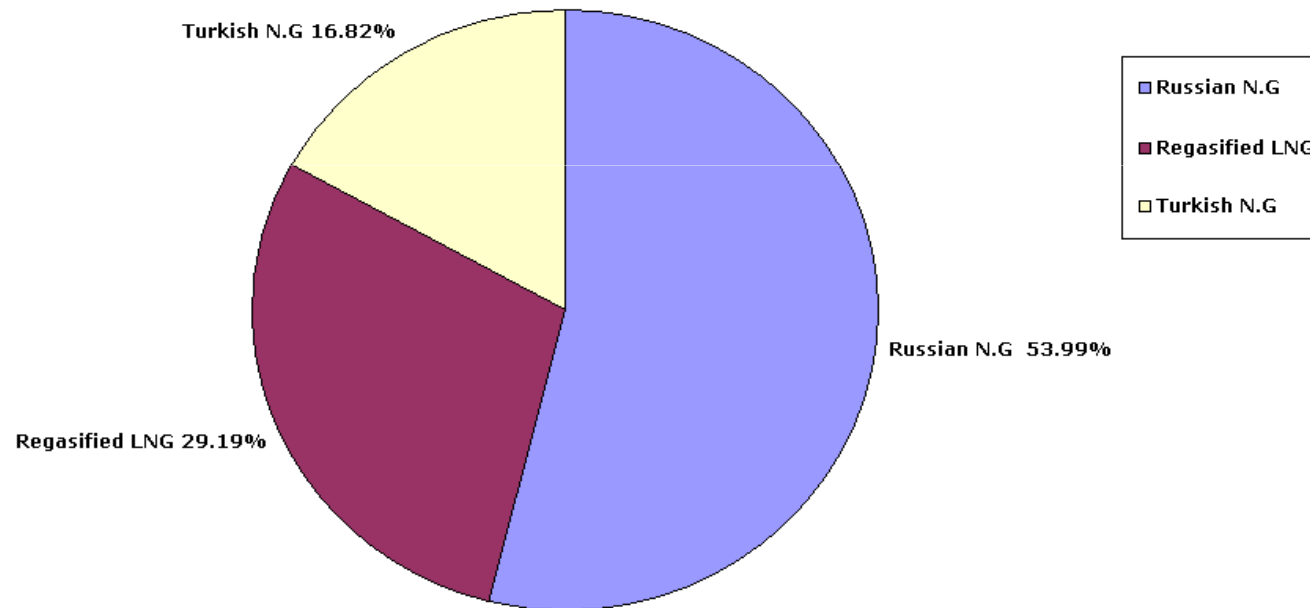
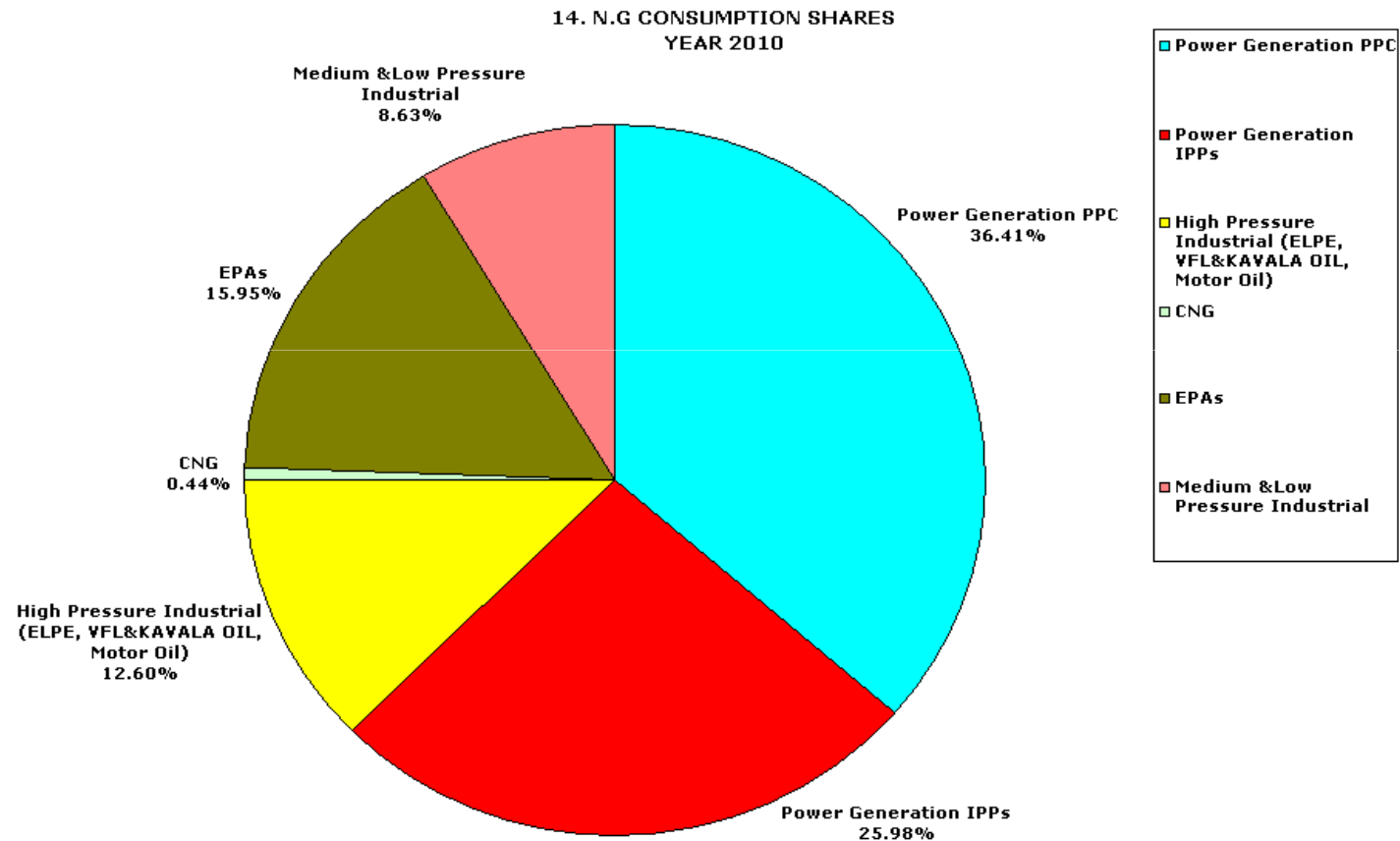




Illustration of consumption shares as per client category for 2010





- South Stream Project. Operation of Joint Company with GAZPROM, South Stream Greece S.A., since June 2010. Feasibility study and preliminary environmental examination have been completed for the section in Greece.
- NNGS Infrastructure in Northern Greece concerning transportation of Caspian gas to Europe. Basic Engineering of the pipeline Komotini - Thesprotia started in Sept. 2010 and now is under full development. Preliminary Environmental Assessment and Examination approved by the competent Ministry in Dec. 2010.
- Active Participation in the newly established ENTSOG (European TSOs organization) that prepares the new Network Codes on a pan-European level, according to the 3rd Energy package. A DESFA director has been elected in the Board of ENTSOG



DESFA's prospects



Regulatory Integration

- Development of new tariff system under discussion with RAE.
- Updated Network Code under elaboration by RAE addressing additional issues (i.e. procedures for development of the Network, provision of services for interruptible gas flows, reverse and backhaul flows, etc)
- The transposition of 3rd Energy Package into the Greek Legislation (directive 09/73, etc) under public consultation. Draft new law before the Greek Parliament soon.



FINANCIAL STATUS OF DESFA IN RELATION TO INVESTMENTS REALIZATION

- **5-year Development Plan 2010 - 2014 approved by the Ministry after RAE's written agreement**
- **Financial support of the main projects by the Cohesion Fund for Greece approved by the competent ministries**
- **Financing of new projects from European Investment Bank loans.**
- **Acceptable Debt to Equity ratio**
- **Improving financial results and performance of DESFA**



Financial Statements 2009-2012

In Million of Euros	Dec. 2009	Dec. 2010	Dec. 2011	Dec. 2012
Post Tax Earnings	22,5	34,8	52,2	69,7
Earnings Before Interest Taxes Depreciation and Amortization (EBITDA)	83,7	101,8	130,1	149,9
Total Equity	689,1	716,4	737,7	787,2
Total Assets	1.411	1.386	1.527	1.573
Cash and Cash Equivalent	32,2	59,8	98,3	144,8



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