Black Sea Trade and Development Bank

Oil Refining, Storage and Retail in SE Europe – IENE Conference

Infrastructure Financing

30-31 March 2017



Greece at the Crossroads of the Energy Roadmap: Agenda

- 1. Energy Market Key Considerations
- 2. Black Sea Region and Greece Economic Outlook
- 3. BSTDB Activities in the Energy & Infrastructure
- 4. BSTDB Energy Priorities and Strategy in Greece
- 5. BSTDB & ENI Activities

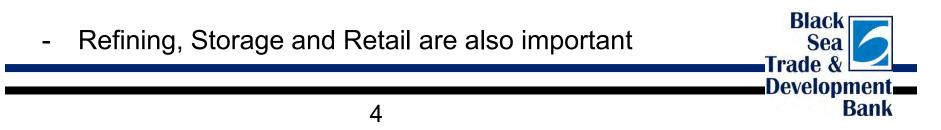


Energy Market – Key Considerations



Energy Market: European and SEE Context

- South East Europe (SEE) is strategically located between the hydrocarbon-rich regions of the Caspian basin, including Russia and the Middle East, and the big energy-consuming countries of Europe.
- SEE region's overdependence on energy imports is a defining characteristic of its economy.
- Also SEE is an EU priority Gas Corridor
- Greece and SEE are well positioned to play an important role in the transit of hydrocarbon resources and in the diversification of oil and gas supplies, both within the Black Sea region and SEE and for Europe as a whole.



EU's Proposed 12 Priority Energy Corridors



- -- Gas
- - Electricity
- — Electricity and gas
- — Oil and gas
 - Smart Grids for Electricity in the EU



Diversity of Supply – Southern Gas Corridor (SGC)



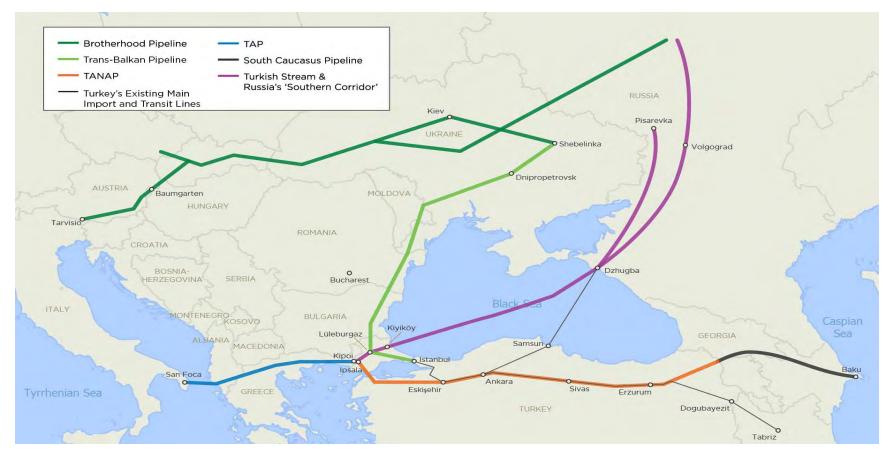
- Shah Deniz Stage 2 is the starting point of the SGC and an integral part of the future gas supplies from the Caspian region through Black Sea region to Europe, which BSTDB is already financing.
- The SGC is the value chain of 3 connected gas pipelines:
 - Southern Caucasus Pipeline (SCP), 1)
 - 2) Trans Anatolian Natural Gas Pipeline (TANAP) and
 - 3) Trans-Adriatic Pipeline (TAP).

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Diversity of Supply – Turkish Stream



The SGC and the proposed Turkish Stream will diversify the supply routes, but Greece still being strategically located.
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Diversity of Supply – Interconnectors

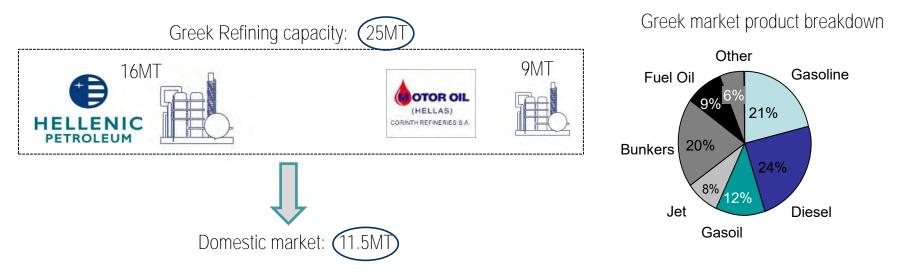


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- Connectivity is paramount as it allows for diversity of supply routes.
- SGC will facilitate the
 development of ancillary
 gas infrastructure in SEE
 and regional market
 integration (i.e. ICGB the
 Greek Bulgarian
 interconnector). Gas will
 be further diversified into
 the Balkans and Central
 Europe.



Refining Capacity in Greece and SEE



- Greece has the largest refining capacity in SEE (25MT or 150,000 m3/d).
- Bulgaria by comparison has 42,600 m3/d
- Romania by comparison has 46,400 m3/d



Black Sea Region and Greece



Black Sea Region: Economic Outlook

- The Black Sea region has been among the slowest growing emerging market regions since the global financial crisis.
- In 2015, the region fell back into recession, with GDP growth at -0.7%. West part of the region (Balkans) tied to EU business cycle and coping well. East is on different business cycle and in recession but seems to have bottomed out.
- Prospects are slightly better, GDP growth expected at up to 1.0% for 2016; stagnant/ marginally contracting in 2015; 2017-18 uncertain but on current form likely to be better (2-3%).
- External spillovers is a problem but regional economic pattern suggests that significant structural difficulties may underlie the protracted sluggishness without simple remedies or solutions.
- Weak investment flows (FDI, domestic) remain. This is problematic for both the immediate slowing effect on GDP growth and the longer run impact as underinvestment threatens potential economic growth.

BSTDB Members Comprise a Dynamic and Growing Region

Overview of Greater Black Sea Region Romania **Black Sea Region** Moldova Ukraine Capital: **10 Bucharest** Population: 327m Population: 21.4m GDP: \$3.594bn Capital: Chisinau Capital: Kiev GDP: \$169bn Weighted av. GDP per cap.: \$10,979 Population: 3.6m Population: 45.6m GDP per cap.: \$7,905 GDP: \$7.3bn GDP: \$176bn GDP per cap.: \$2,038 GDP per cap.: \$3,864 Bulgaria Capital: Sofia 7.3m Population: Russia GDP: \$54.3bn GDP per cap.: \$7,243 Capital: Moscow Georgia + + Population: 143.1m + + Albania GDP: \$2.007bn Capital: Tbilisi GDP per cap.: \$14,027 Population: 4.5m Capital: Tirana GDP: \$15.8bn Population: 3.2m GDP per cap.: \$3,520 GDP: \$12.4bn GDP per cap.: \$3,845 += Greece Turkey Azerbaijan Armenia C* 0 Capital: Athens Capital: Ankara Capital: Yerevan Capital: Baku 11.4m Population: Population: 74.7m Population: 3.3m Population: 9.2m GDP: \$249bn GDP: \$789bn GDP: \$9.9bn GDP: \$68.7bn GDP per cap.: \$21,799 GDP per cap.: \$10,561 GDP per cap.: \$3,027 GDP per cap.: \$7,442



BSTDB Activities in the Energy & Infrastructure Sectors



BSTDB: Energy & Infrastructure Portfolio (1999-2016)

- Overall the BSTDB has signed over €3.5 billion worth of investment for the Black Sea region including Greece.
- As of today BSTDB has lent €780 million (US\$870 million) to €11.6 billion energy and infrastructure related projects in the Black Sea region including Greece.
- Energy & Infrastructure at the BSTDB includes:
 - Oil & Gas (upstream, midstream and downstream)
 - Electricity (generation, transmission and distribution)
 - Renewable Energy Sources (biomass, geothermal, hydro, solar and wind)
 - Energy Efficiency
 - Municipal Infrastructure and
 - Telecoms, Information Technologies and Media.

BSTDB Strategy in Greece



BSTDB: Strategy in Greece for 2015-2018

Priority attention to:

- BSTDB will continue offering its financial support for eligible energy and infra projects aiming to restore economic growth, improve infrastructure and enhance energy security in the Country;
- Given its strategic geographical location Greece has been seeking to become an energy transportation hub in the region. In this context, BSTDB will follow and seek added value involvement in various energy projects of high priority for both the Country and the wider Black Sea region including, among others, oil and gas storage facilities, pipelines and interconnectors;
- The Bank will also to support the development and upgrading of regional electricity markets;
- On the transmission side, this may involve participating in projects entailing reinforcement of power transmission infrastructure and interconnection between Greece and neighboring countries; Black

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BSTDB: Strategy in Greece for 2015-2018

- On the generation side, the Bank will seek opportunities to work with private Greek companies interested to be involved in power production schemes from both conventional and renewable sources;
- BSTDB will be willing to support the privatization priorities of the Government of Greece where the Bank's assistance can be offered in the form of post-privatization financing to upgrade the energy and infra facilities in the Country;
- Municipal infrastructure including sewage/waste treatment facilities, solid waste treatment, urban transport infrastructure and energy efficiency is another priority area where BSTDB can contribute with its financing products targeting:
 - ✓ energy efficient / saving projects for companies or households,

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- ✓ green logistics projects.
- Other involvement in energy and infrastructure operations may include creative arrangements such as PPPs.

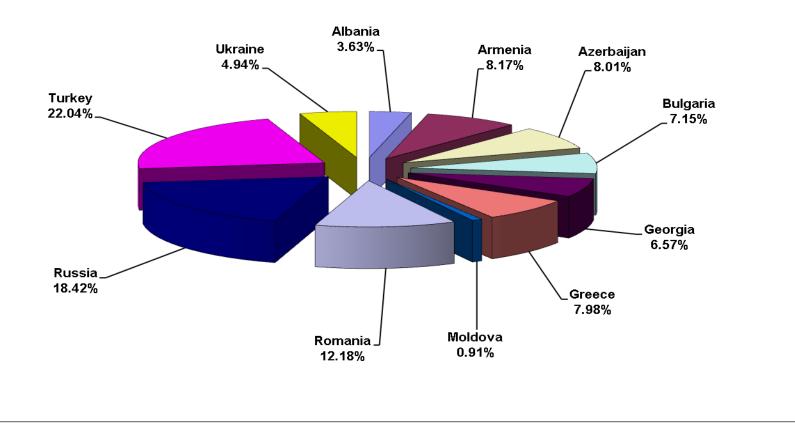
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BSTDB & ENI Team Activities



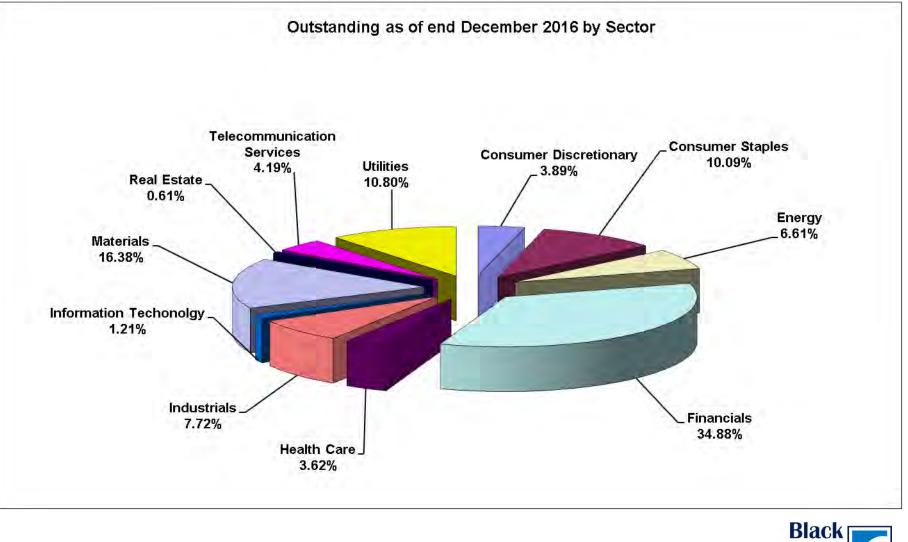
BSTDB Loan Portfolio (Outstanding)

Outstanding as of end December 2016 by Country





BSTDB Loan Portfolio (Outstanding)





Hightel (Albania)



Project Cost	Total: EUR 16.6 bn BSTDB: EUR 8.8 m
Borrower	Hightel Albania
Term	7 years
Sector	Telecom
Summary	Financing the acquisition of towers and rooftops infrastructure from Plus Network, building of new units, upgrading of acquired units and construction of new microwave network infrastructure.



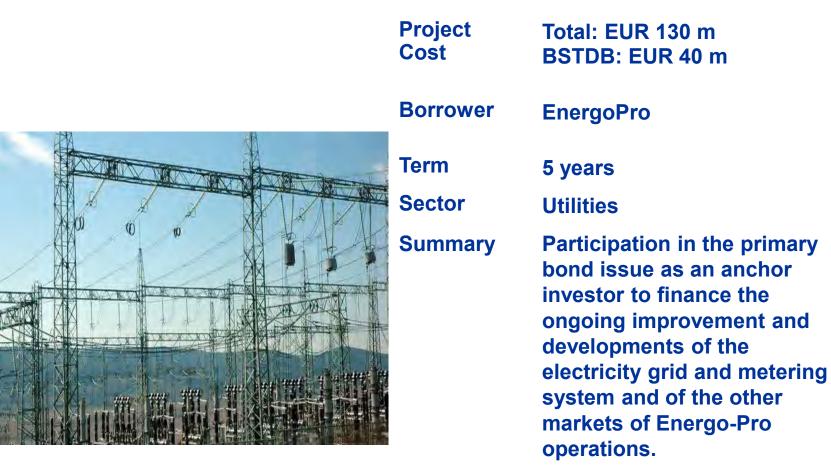
AES Maritza East I (Bulgaria)



Project Cost	Total: EUR 1.1 bn BSTDB: EUR 18 m
Borrower	AES-3C Maritza East I EOOD
Term	16 years
Sector	Utilities
Summary	Construction, operation and maintenance of a 2x300MW lignite-fired power plant in Bulgaria

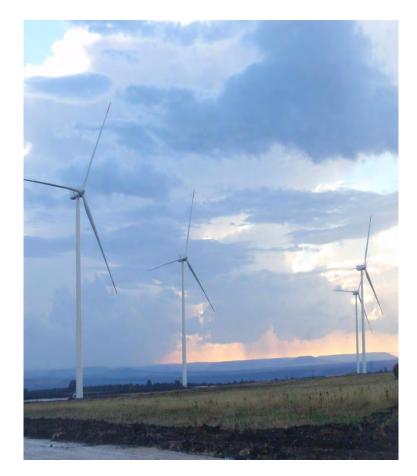


EnergoPro (Bulgaria)





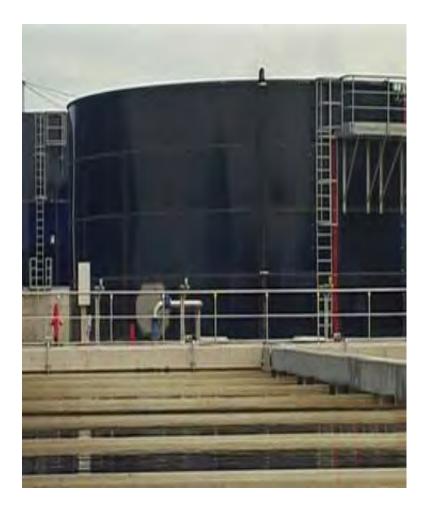
Suvorovo Wind Farm (Bulgaria)



Project Cost	Total: EUR 103 m BSTDB: EUR 11 m
Borrower	Eolica Bularia AD
Term	16 years
Sector	Utilities
Summary	Construction and operation of 60MW wind farm located in the municipality of Suvorovo (North East part of Bulgaria)



Batumi Wastewater Treatment (Georgia)



Project Cost	Total: EUR 44 m BSTDB Unfunded Risk Participation: EUR 16 m
Beneficiary	Finance Ministry of Georgia Municipality of Batumi
Term	15 years
Sector	Municipal infrastructure
Summary	Provision of guarantee under the EUR 20 m Ioan facility extended by KfW for rehabilitation of water distribution network and the wastewater system in Batumi region.



OTE - Hellenic Communications SA (Greece)



Project Cost	Total: EUR 389 m BSTDB: EUR 50 m
Beneficiary	ΟΤΕ
Term Sector	3 years Telecom / Utility
Summary	Loan to support strategic investments in Greece and the development of its network. OTE is expected to invest around EUR1.3bn over the next four years in the development of the Next Generation Access (NGA), the IP network transformation, as well as the launch of new products and services.
	Development

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EDPR PV Solar Plants (Romania)



Borrower	SPVs owned by EDPR
Term	15 years
Sector	Utilities
Summary	Financing of the construction and operation of a 51.4 MW PV park in Southern Romania

Project Cost BSTDB: EUR 10 m



Teamnet International (Romania)



Project Cost	BSTDB: EUR 7.5m Debt BSTDB: EUR 5m Equity
Borrower	Teamnet International
Term	7 years
Sector	IT Services
Summary ansforming chnology	Financed the Company's capital investments and working capital needs required for the expansion of existing operation centers in Romania and Moldova, the rollout of new operation centers in Turkey and possibly other countries in Eastern Europe, and upgrading the Company's software platform and products.
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Teamber transforming technology

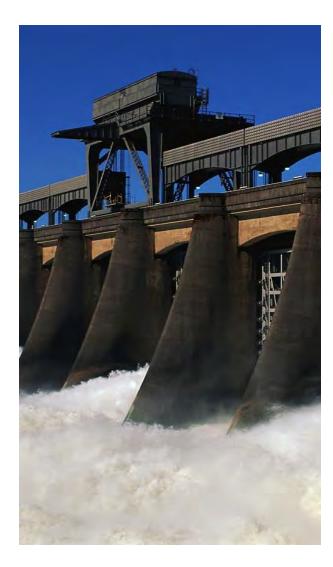
Gurmat Geothermal Power Plant (Turkey)

- Project Cost BSTDB: USD 1b
- Borrower Gurmat Electric Uretim
- Term 15 years
- Sector Energy
- Summary Financing of the construction and operation of 170MW geothermal power plant south western Turkey





Koprubasi HPP (Turkey)



Project Cost	Total: USD 55 m BSTDB: USD 18 m
Borrower	Yüksel Enerji Elektrik Üretim ve Ticaret A.Ş.
Term	8 years
Sector	Utilities
Summary	Anti-flooding and energy project on the Devrek River in the region of Bolu in Turkey. The BSTDB loan has been used to finance construction and operation of a hydro-power station with a combined capacity of 74MW



SOCAR Turkey Enerji AS (Turkey)

Project Cost	Total: USD 1,300m
	BSTDB: USD 30m

Borrower SOCAR Turkey Enerji AS

6 years

Term

Sector

Summary

Energy

BSTDB has become a lender as part of the syndicate under a credit linked loan, along with Goldman Sachs, JP Morgan and other lenders.





Galnaftogaz (Ukraine)



Project Cost	Total: USD 220 m BSTDB: USD 20 m
Borrower	Concern Galnaftogaz
Term	7 years
Sector	Utilities
Summary	CAPEX program and expansion of the Borrower's gas filling stations network in Ukraine



Thank you

BLACK SEA TRADE AND DEVELOPMENT BANK

ENERGY & INFRASTRUCTURE

ei@bstdb.org

BSTDB

1, Komninon Street

546 24 Thessaloniki Greece tel: + 30 2310 290477 fax: + 30 2310 290469 e-mail: <u>ei@bstdb.org</u> www.bstdb.org Follow Us





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