

Vienna Economic Talks- Istanbul Meeting

Key Trends in Energy Sector

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**Chairperson
Limak Investments**

23.05.2011

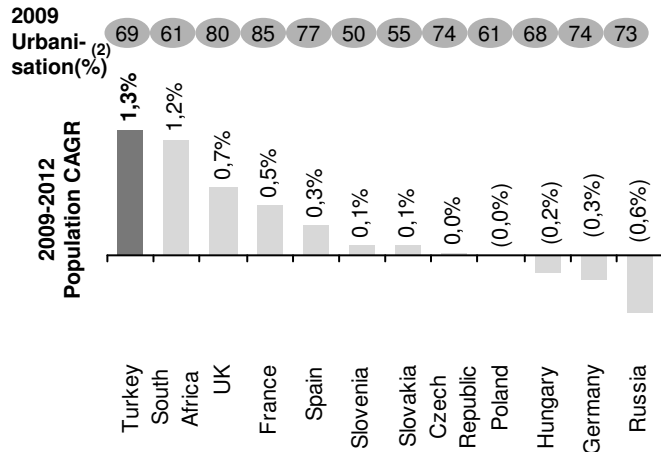
Agenda

- Macroeconomic outlook of Turkey
- GDP Growth and impact on Energy
- The need for a sustainable and diversified energy portfolio (i.e. Hydro energy)
- Limak Energy Generation Portfolio
- Private Participation in Energy Investments (i.e. Public Private Partnerships)

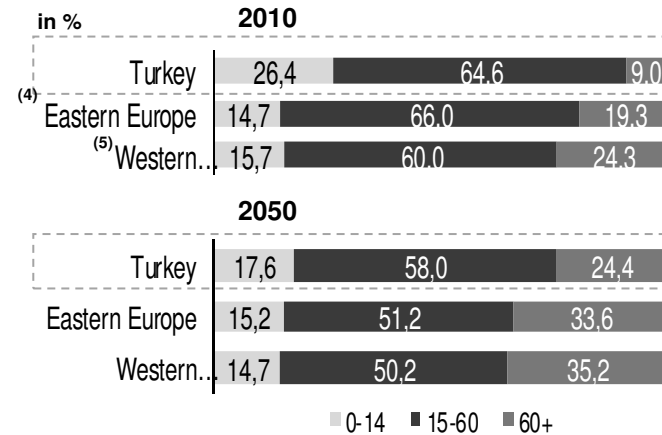
Macroeconomic Outlook of Turkey

High growth prospects

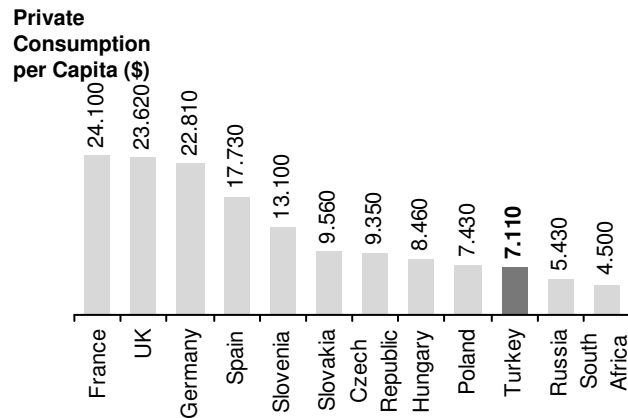
High Population Growth ⁽¹⁾



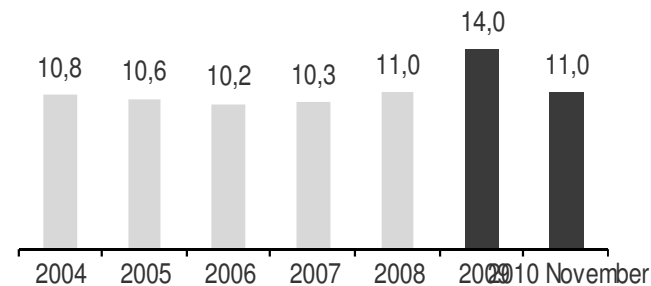
Demographic Age Profile ⁽³⁾



Low Consumption per Capita ⁽⁶⁾



Unemployment Rate ⁽⁷⁾



(1) Source: OECD; as of November 2010

(2) Source: United Nations

(3) Source: United Nations World Population Prospects - The 2008 Revision Population Database - Medium variant

(4) Including Poland, Austria, Greece, Czech Rep., Hungary, Slovakia, Slovenia, Bulgaria, Serbia, Croatia

(5) Including Austria, Belgium, France, Germany, Liechtenstein, Luxembourg, Monaco, Netherlands, Switzerland

(6) Source: Economist Intelligence Unit

(7) Source: Turkstat

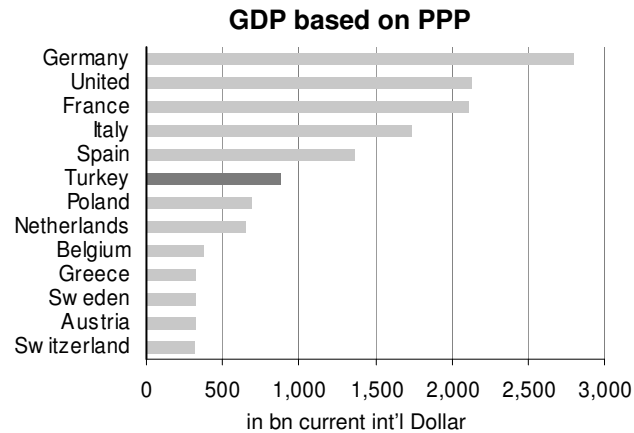
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Execution is the Key

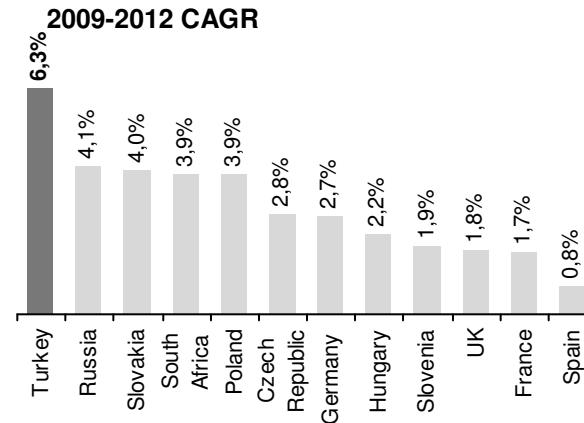
Economic growth in Turkey

Strong Fundamentals and Significant Economic Growth Potential

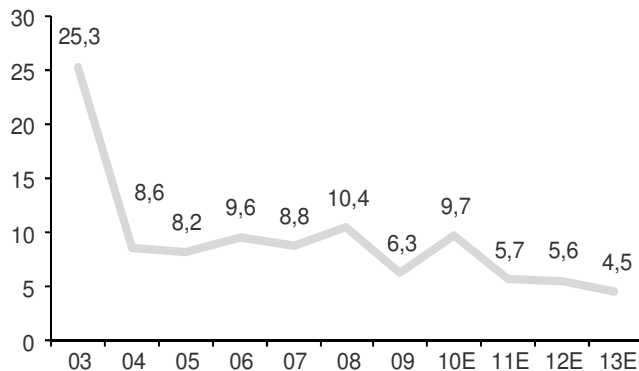
Europe's 6th largest economy



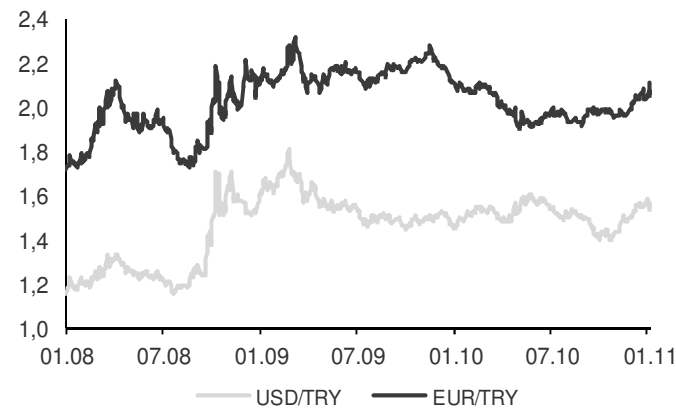
GDP growth to outpace European countries



CPI inflation



Exchange Rates

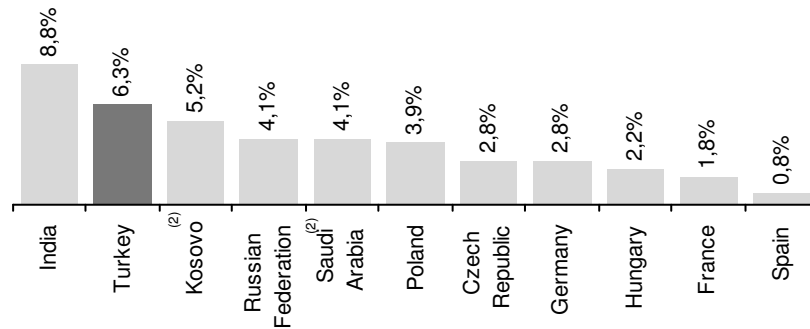


GDP Growth and Impact on Energy

Significant GDP growth opportunities with low energy penetration

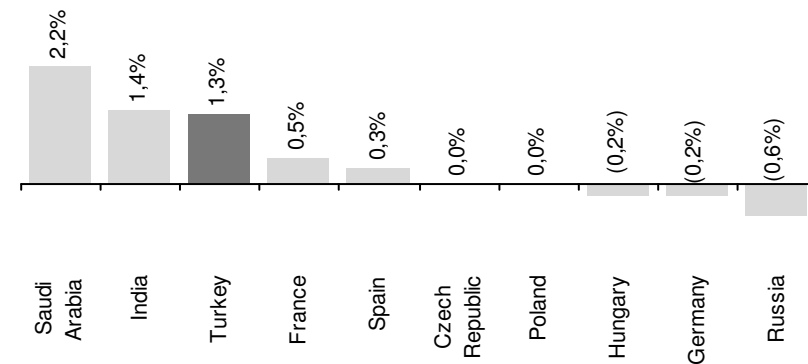
GDP Growth to Outpace European Countries ⁽¹⁾

2009-2012 CAGR



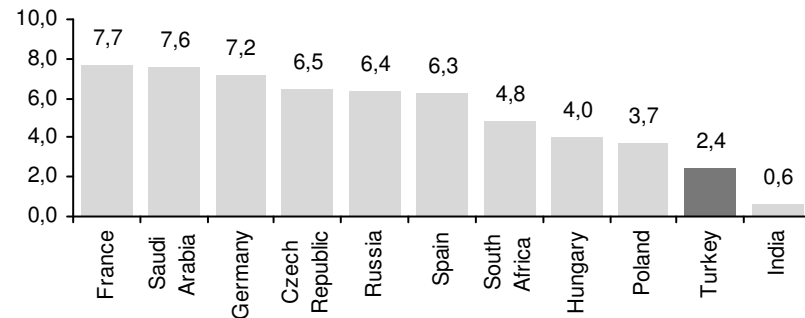
High Population Growth ⁽²⁾

2009-2012 Population CAGR

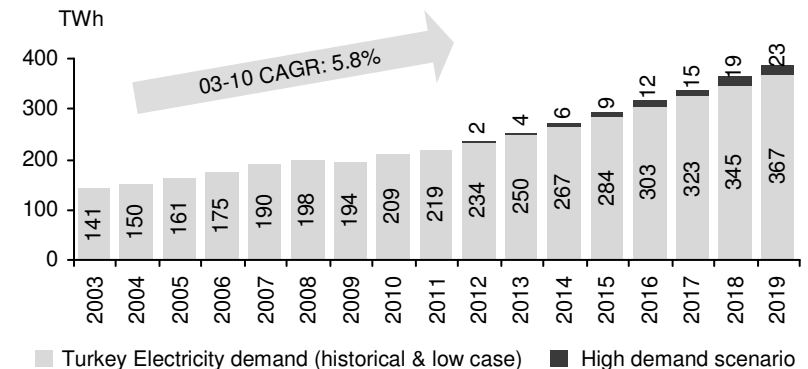


Low Electricity Consumption ⁽³⁾

Elec. Consumption (MWh per capita)



Stable and Growing Long-Term Electricity Demand



(1) Source: OECD, Economic Outlook No 88 - December 2010
 (2) Source: International Monetary Fund, World Economic Outlook Database, October 2010
 (3) Source: International Energy Agency, 2010 Key World Energy Statistics. Figures shown are as of 2008

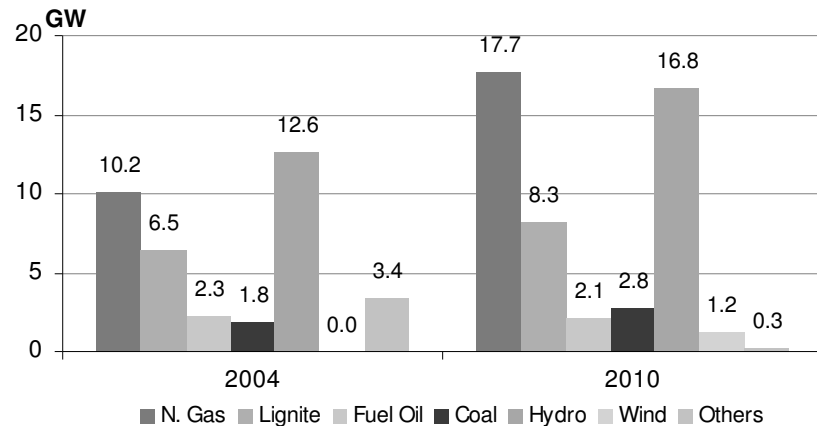
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Execution is the Key

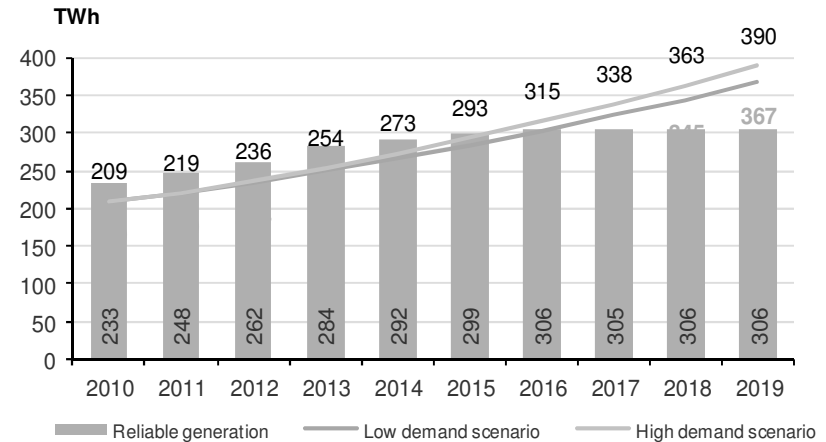
The need for a sustainable and diversified energy portfolio

Hydro Energy Potential

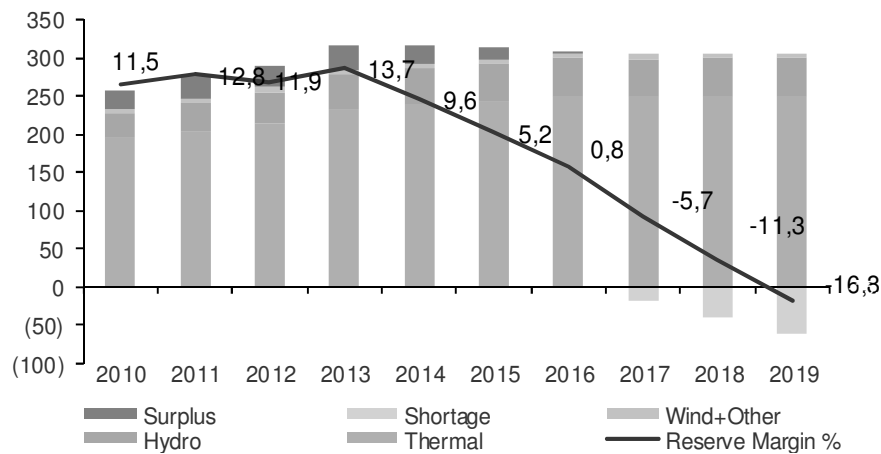
Installed Capacity by Energy Source – 2004 vs. 2010 ⁽¹⁾



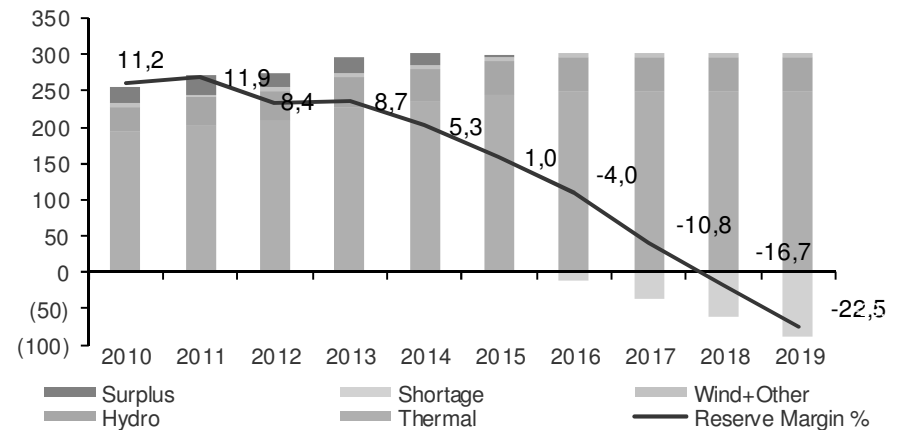
Power Demand Projections of TEIAS (TWh) ⁽²⁾



Reliable Generation – Low Demand Scenario ⁽²⁾ (TWh)



Reliable Generation – High Demand Scenario ⁽²⁾ (TWh)



(1) Source: TEIAS
 (2) Source: TEIAS 10 year Generation Capacity Projection Report, October 2010

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Execution is the Key

Limak Energy Generation Portfolio

Electricity Generation Companies

As of December 31, 2010:

- The Company has total of 14 HPPs mainly located in the Eastern Turkey
- The total gross capacity (operational, under construction and in design phase) is 943 MW
- The total annual gross output of all plants is expected to be 3,356 GWh
- One of the best hydrology, high snowfall
- Most assets are located in a cascade system

Kargı

- Ownership: 49,5%
- Planned installed capacity: 100 MW
- License period: 49 years



Pamuk

- Ownership: 25.46%
- Installed capacity: 24 MW
- Remaining licence period: 41 years

Pembelik

- Ownership: 46.81%
- Contracted installed capacity: 130 MW
- Remaining licence period: 44 years

Alkumru

- Ownership: 97.52%
- Installed capacity: 266 MW
- Remaining licence period: 46 years

Kirazlık

- Ownership: 20%
- Contracted installed capacity: 45 MW
- Remaining licence period: 46 years

Değirmenli

- Ownership: 97.50%
- Planned installed capacity: 15 MW
- Licence period: 49 years

Buharkent

- Ownership: 99.60%
- Planned installed capacity: 10 MW

Bayram

- Ownership: 94%
- Planned installed capacity: 90 MW
- Licence period: 49 years

Georgia

- Ownership: 50%
- Planned installed capacity: 105 MW
- Licence period: n.a.

Seyrantepe

- Ownership: 46.81%
- Installed capacity: 53 MW
- Remaining licence period: 41 years

Uzunçayır

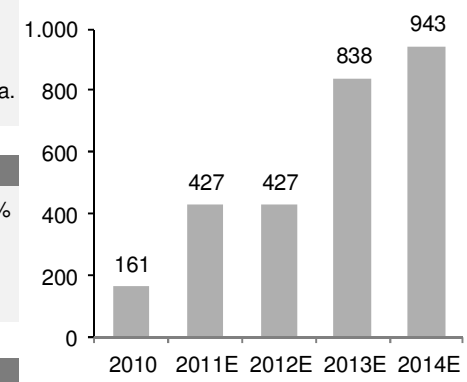
- Ownership: 100%
- Installed capacity: 84 MW
- Remaining licence period: 45 years

Tatar

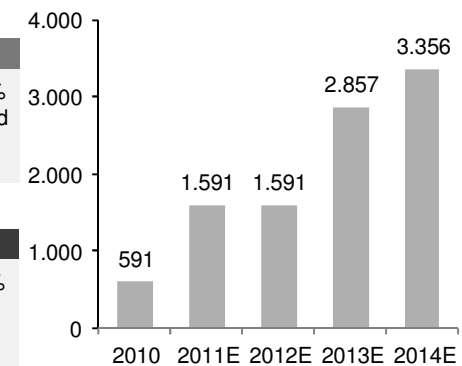
- Ownership: 46.81%
- Contracted installed capacity: 131 MW
- Remaining licence period: 44 years

■ Operational ■ Under construction ■ In design phase (license pending)

Operational Installed Capacity (MW)



Annual Power Generation (GWh)



Source: Company data

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Execution is the Key

Private Participation in Energy Investments

Increasing importance of PPPs

Turkey's need for energy investments increases in parallel with the pace of economic growth. To reach 100.000 MW of total installed capacity by 2023:

- Turkey should invest approximately 5-6 billion USD every year in energy sector
- We should deploy all types of energy sources (conventional and non conventional sources), i.e. building new hydro power plants, new coal plants with domestic/import coals, rehabilitating the existing ones, new gas plants and developing new renewable energy projects (wind, solar, biomass, geothermal etc.)
- As one of the most convenient and least expensive renewable energy sources in Turkey, hydro energy with a total capacity of 36.000 MW should be fully operational by then.
- Participation of private sector in energy investments should increase via Public Private Partnerships contracts (PPPs).
- During the next 10-15 years, PPPs will play an essential role in Turkey in terms of faster implementation of large energy investments, risk sharing between private and public sector, reducing operation and construction costs and enabling public management system to be enhanced.



Thank you for your attention