



CEE: Regional Energy Prospects in 2010

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EVN

EVN is currently active in 17 CEE countries



Strategic business units:

- ▶ Energy supply
- ▶ Electricity generation
- ▶ Networks
- ▶ Environmental services, water supply, waste water treatment including biogas-utilization and waste to energy

Some of the Main Challenges of the Energy Sector

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- ▶ **Rising demand versus increasing lack of electricity production capacity in the region**
- ▶ **Not up-to-date technical and environmental status of thermal capacities**
- ▶ **Need for CO₂ reduction**
- ▶ **Necessity for sustainable long term energy strategy for the region**
- ▶ **Enormous need for investment capital Insufficient interconnection capacities**
- ▶ **Step by step developement of renewables versus lack in production flexibility (vs. wind power) and the neccesity of feed in tariffs above market prices**

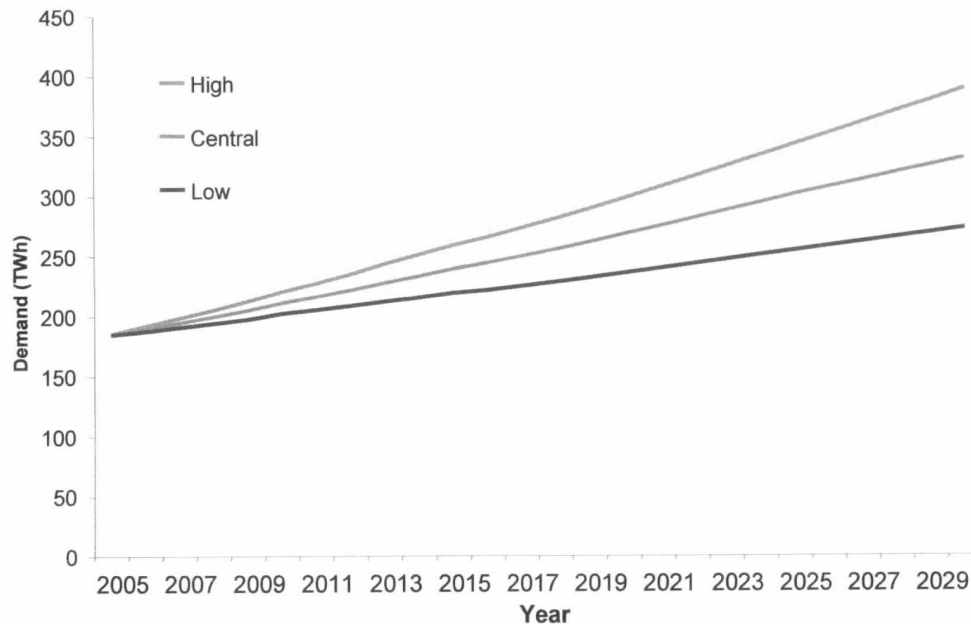
Some of the Main Challenges of the Energy Sector II

- ▶ **Lack of natural gas supply system for households and SMEs**
- ▶ **High inefficiencies in the system and enormous waste of energy / households heating with electricity**
- ▶ **High grid losses/low payment ratios/unsolved social problems**

- ▶ **Up to 2015 full scale adoption of energy sector regulation of EU, due to Athens Treaty**

- ▶ **Therefore we appreciate highly the important role and the distinguished competence of the Energy Community and it's secretariat to support the region to master these challenges.**

Massively increasing electricity demand



- The projections are consistent with average growth rates of approximately 1.5%, 2% and 3% per annum in the Low, Central and High scenarios respectively.
- With a yearly growth rate of 3%, the average household consumption will accumulate from now 3400kWh to ~7000kWh by the year 2030.

About 30 000 MW of capacity will be needed in South Eastern Europe to meet increasing demand and replacement necessities

► But note that such enormous investments in the electricity sector need:

- Long lead time**
- Stable political, regulatory, legal and economic environment**
- Enormous investment capital in a period of increased risk premiums and credit crunch – additional incentives necessary to attract foreign investment**
- Investment in new power plants as well as sufficient grid infrastructure**

Investment needs can only be met by high rate of FDI (Foreign Direct Investment)

FDI brings additional advantages:

- ▶ Enhancing efficiency and productivity**
- ▶ Technical and Managerial Know-how**
- ▶ Up to date technical solutions and environmental protection technology**
- ▶ Future introduction of Clean Coal Strategies**
- ▶ High standard IT solutions**
- ▶ Creation of new quality jobs**

To support FDI and energy efficiency, investment incentives are necessary:

- ▶ **Measures to make investments economically viable, to allow the necessary WACC plus reward for the investor**
- ▶ **Stable legal, political and regulatory framework**
- ▶ **Only part of energy efficiency investments are repaid by energy savings (e.g. through contracting)**
- ▶ **Implementation of Energy efficiency support programmes, subsidies and financing support (national, international, multinational organisations, CDM, ...)**
- ▶ **Sufficient feeds in tariffs for renewables**
- ▶ **Continuous information campaigns about saving energy for consumers**

EVN as a strategic investor in CEE

Energy supply

- ▶ About 1 m electricity, gas and heating customers in Lower Austria**
- ▶ 1.6 m electricity, 40,000 heating customers in Bulgaria**
- ▶ 720,000 electricity customers in Macedonia**
- ▶ Development of gas distribution system for district of Zadar in Croatia**

EVN as a strategic investor in CEE

Electricity generation

- ▶ **Over all goal: EVN wants to produce 50 % of the electricity delivered to end users in own plants; Currently operationed 1,829 MW generation capacity (gas, coal, hydro, wind and biomass)**
- ▶ **Construction of a coal-fired power plant of 790 MW in Duisburg-Walsum, Germany**
- ▶ **Realisation of three storage HPP's in Albania with a total capacity of apr. 320 MW and a yearly production of apr 1.000 GwH**
- ▶ **Cogeneration in Plovdiv (capacity 50 MW)**
- ▶ **Major wind and biomass projects in Austria and CEE**

EVN as a strategic investor in CEE

Environmental services

- ▶ **Waste incineration plants of 300,000 tons p.a. in Lower Austria, 360,000 tons p.a. in Moscow**
- ▶ **More than 80 drinking and waste water plants for more than 10 m people in Europe**
- ▶ **Major projects currently developed for Istanbul (waste water) , Montenegro and Cyprus (desalination plants)**