

Developments in Energy Demand and Efficiency in the VEF Countries

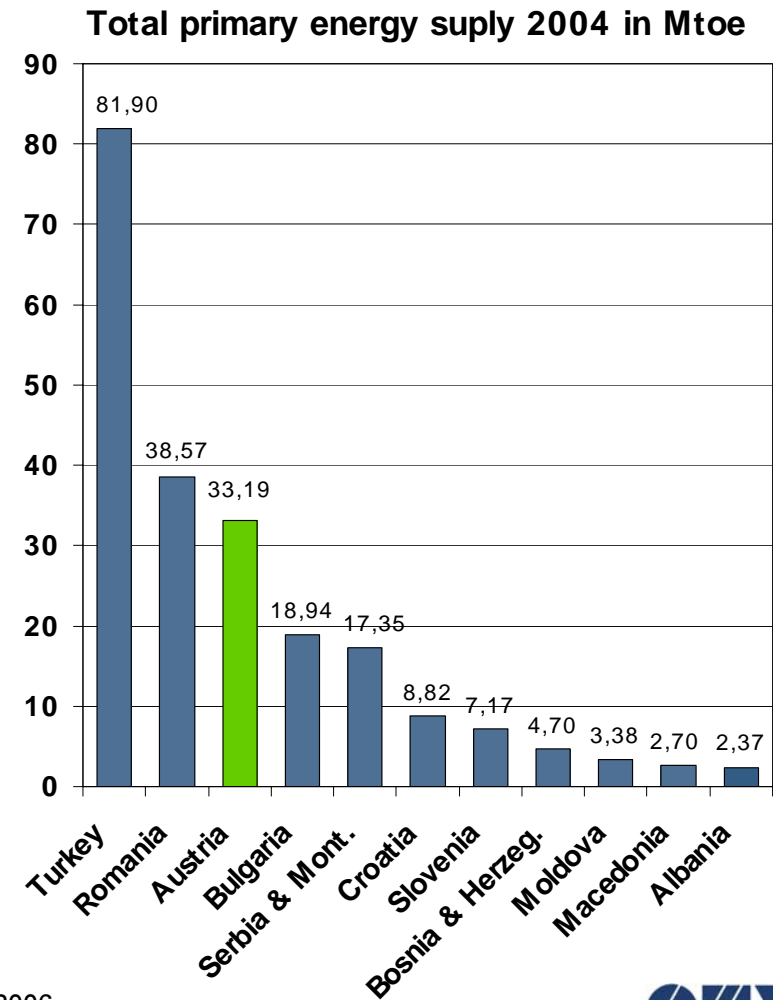
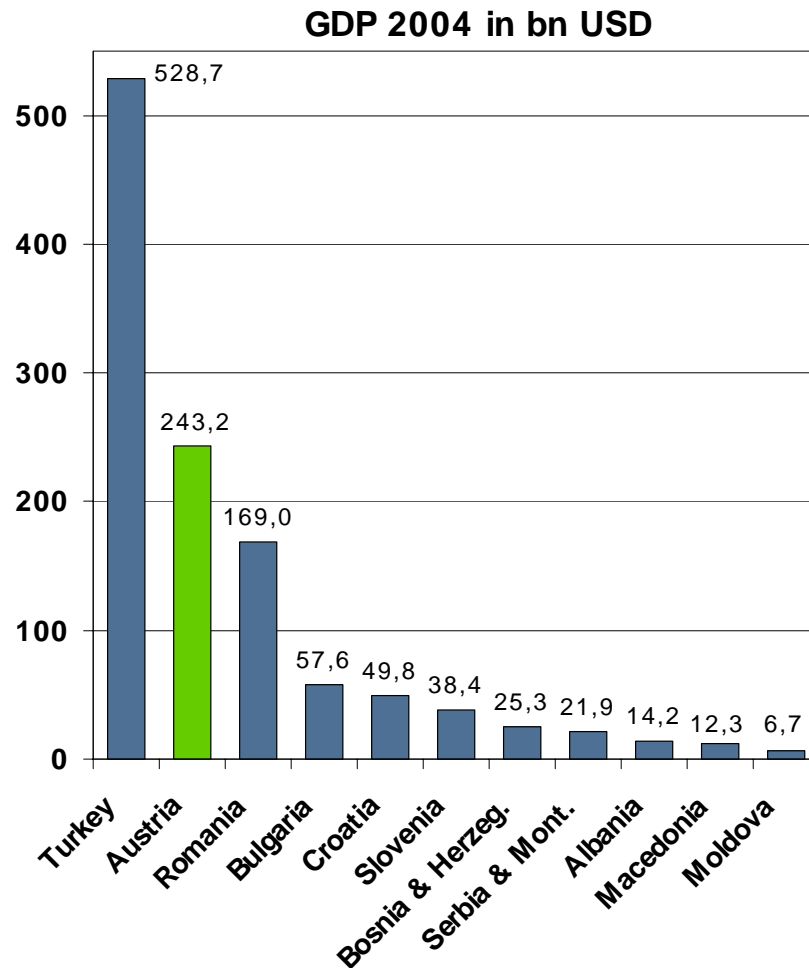
Vienna Economic Forum
6 November 2006

Wolfgang Ruttenstorfer
Chief Executive Officer

Content

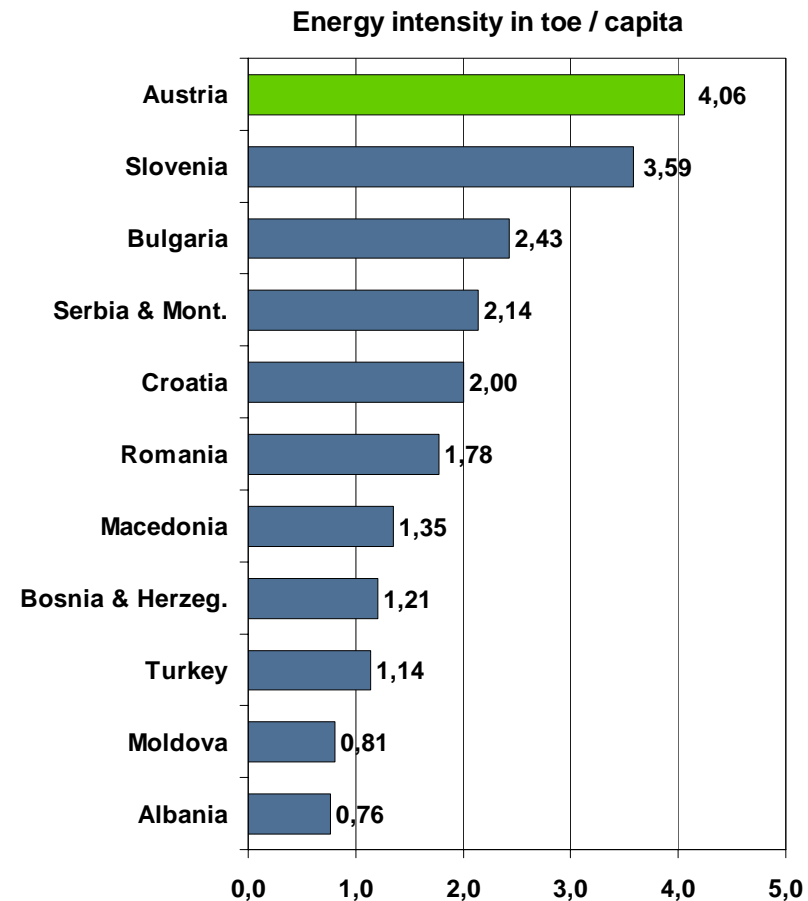
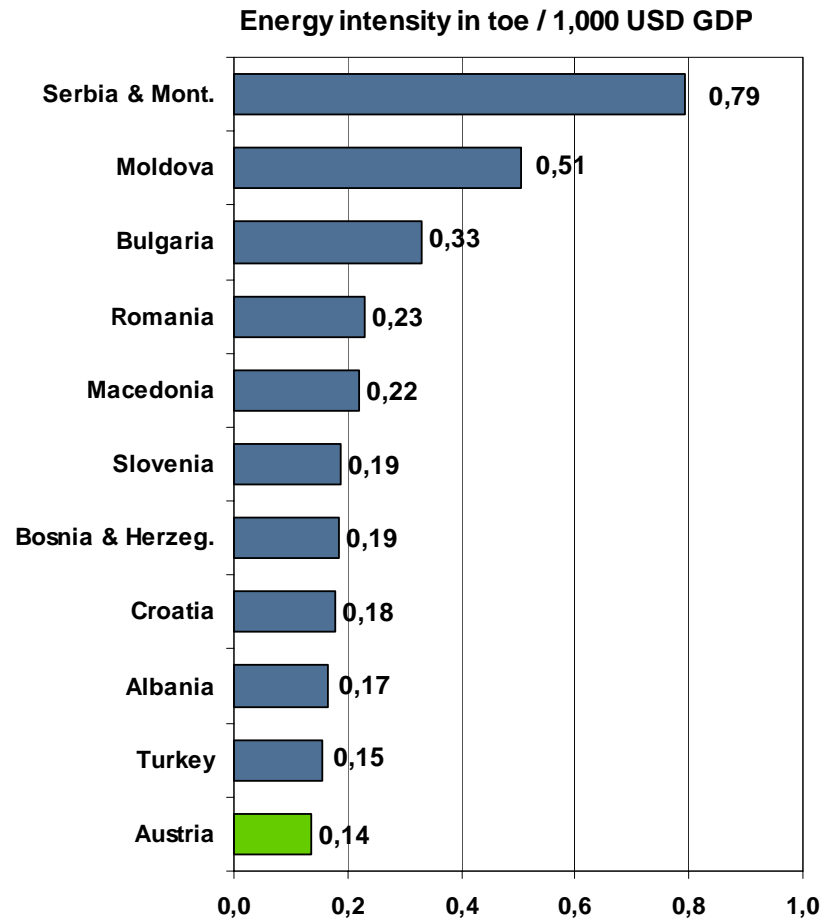
- ▶ Energy efficiency in VEF-countries
- ▶ Trends and perspectives for CE & SEE
- ▶ Developing of energy infrastructure in Europe
- ▶ Investment needs and the European energy policy
- ▶ The energy industry's approach - conclusion

GDP and energy supply in VEF-Countries



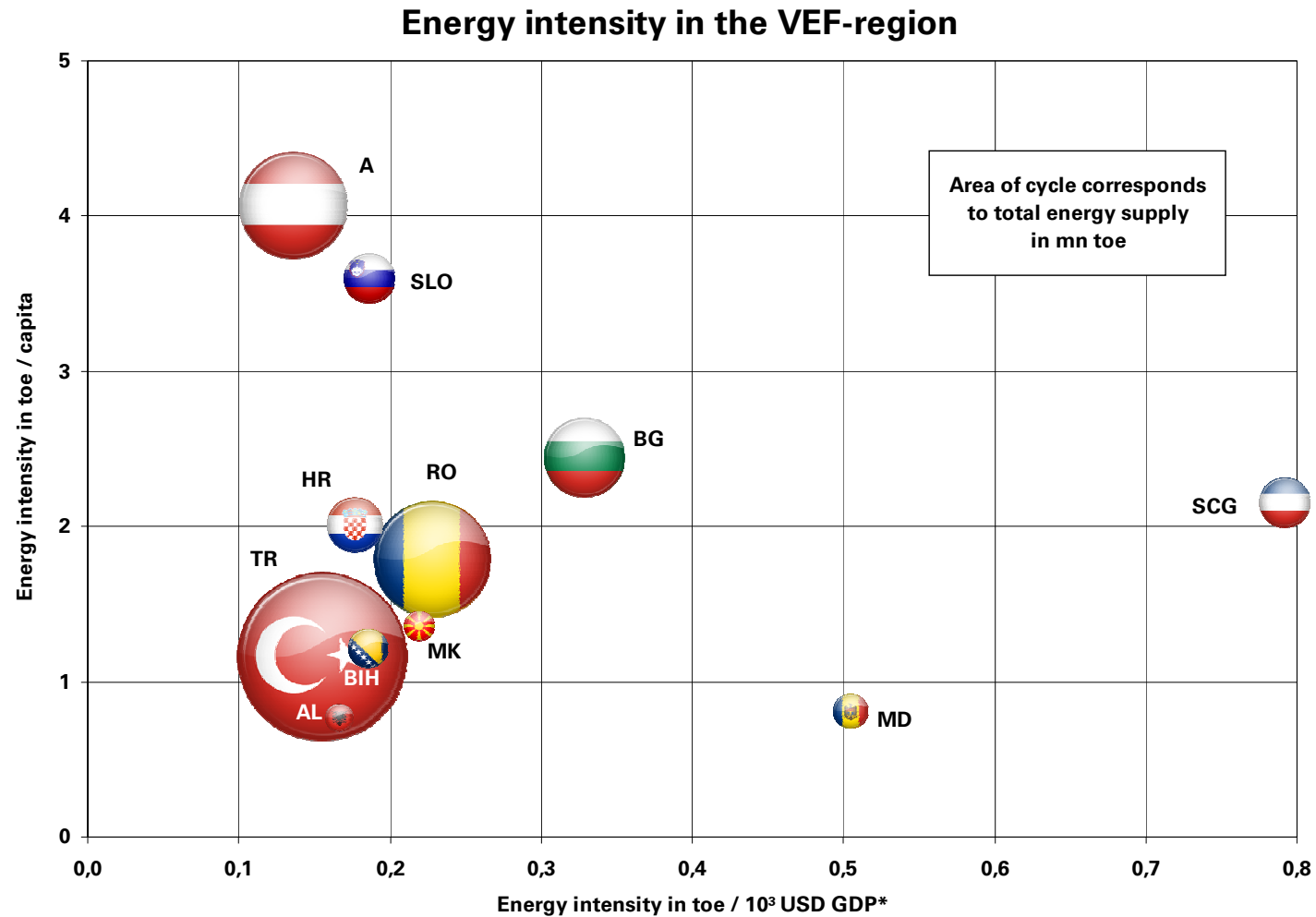
Sources: IEA "Energy Balances of NON-OECD- Countries 2003-2004", 8/2006
 IEA "Energy Balances of OECD- Countries 2003-2004", 8/2006

Energy intensity in VEF-Countries - 2004



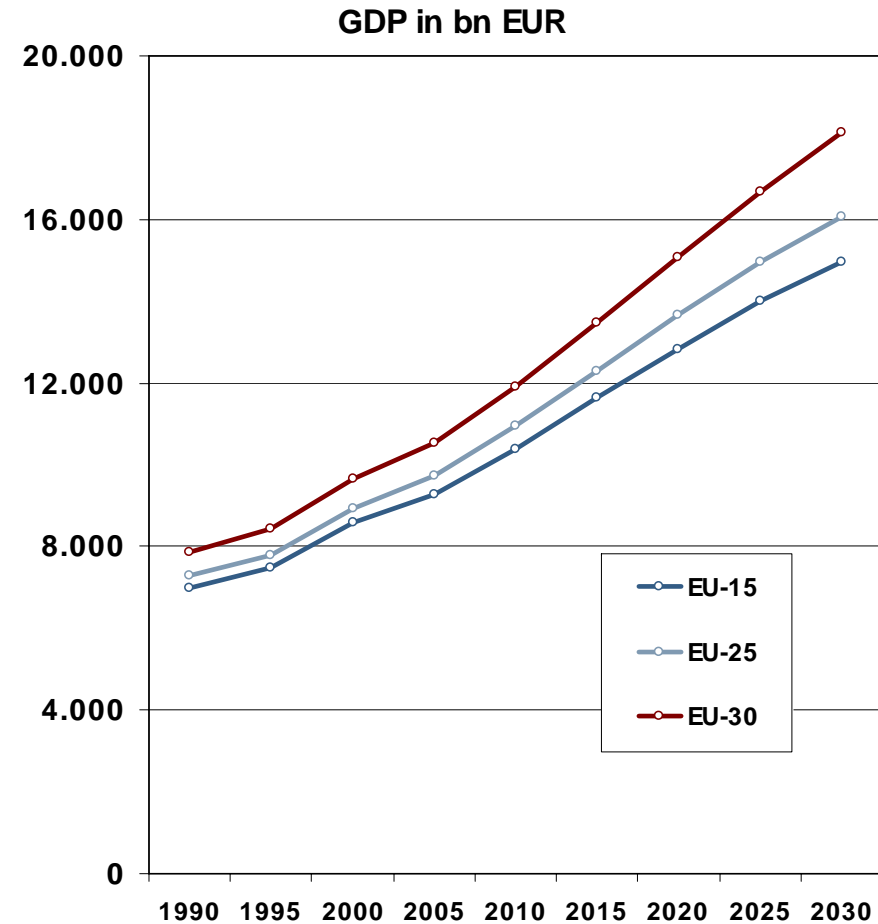
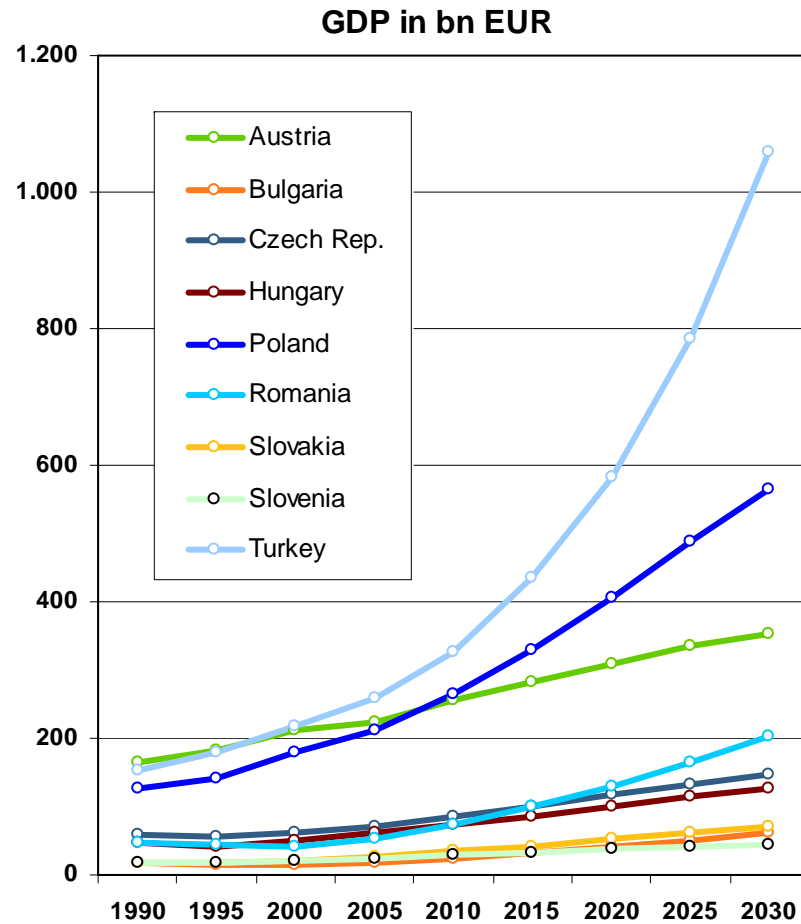
Sources: IEA "Energy Balances of NON-OECD- Countries 2003-2004", 8/2006
 IEA "Energy Balances of OECD- Countries 2003-2004,,", 8/2006

Energy intensity in VEF-Countries - 2004



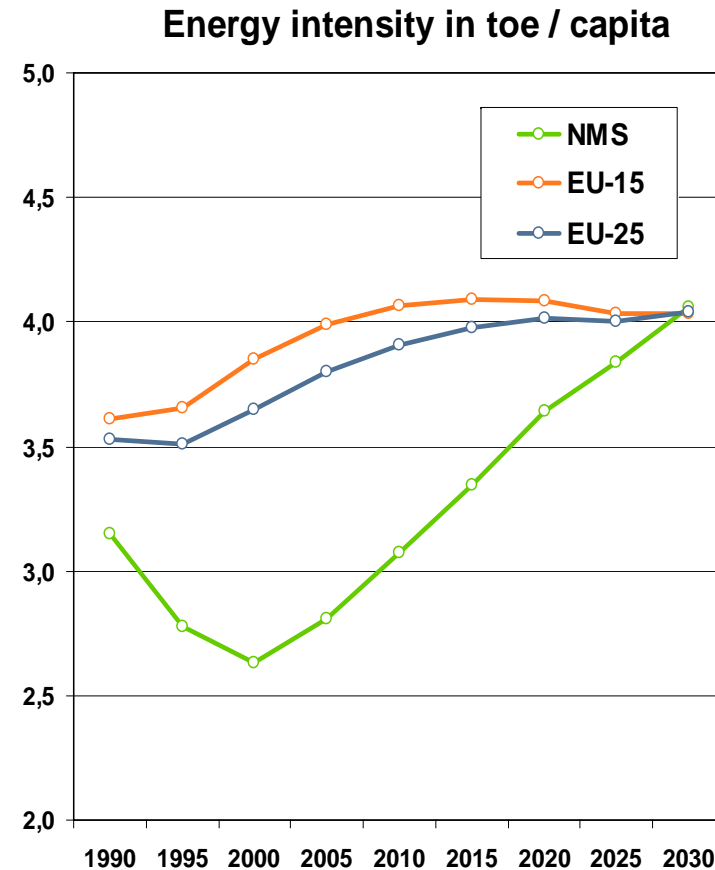
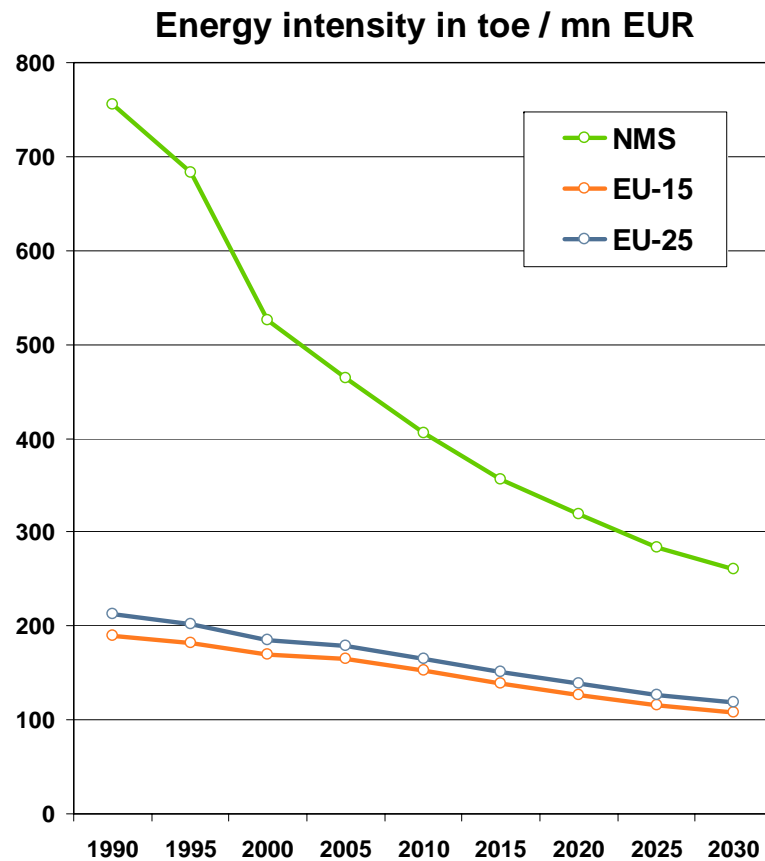
Sources: IEA "Energy Balances of NON-OECD- Countries 2003-2004", 8/2006
 IEA "Energy Balances of OECD- Countries 2003-2004,,", 8/2006

GDP-Forecast for European countries



Source: EU „European Energy & Transport - Trends to 2030“, Update 2005

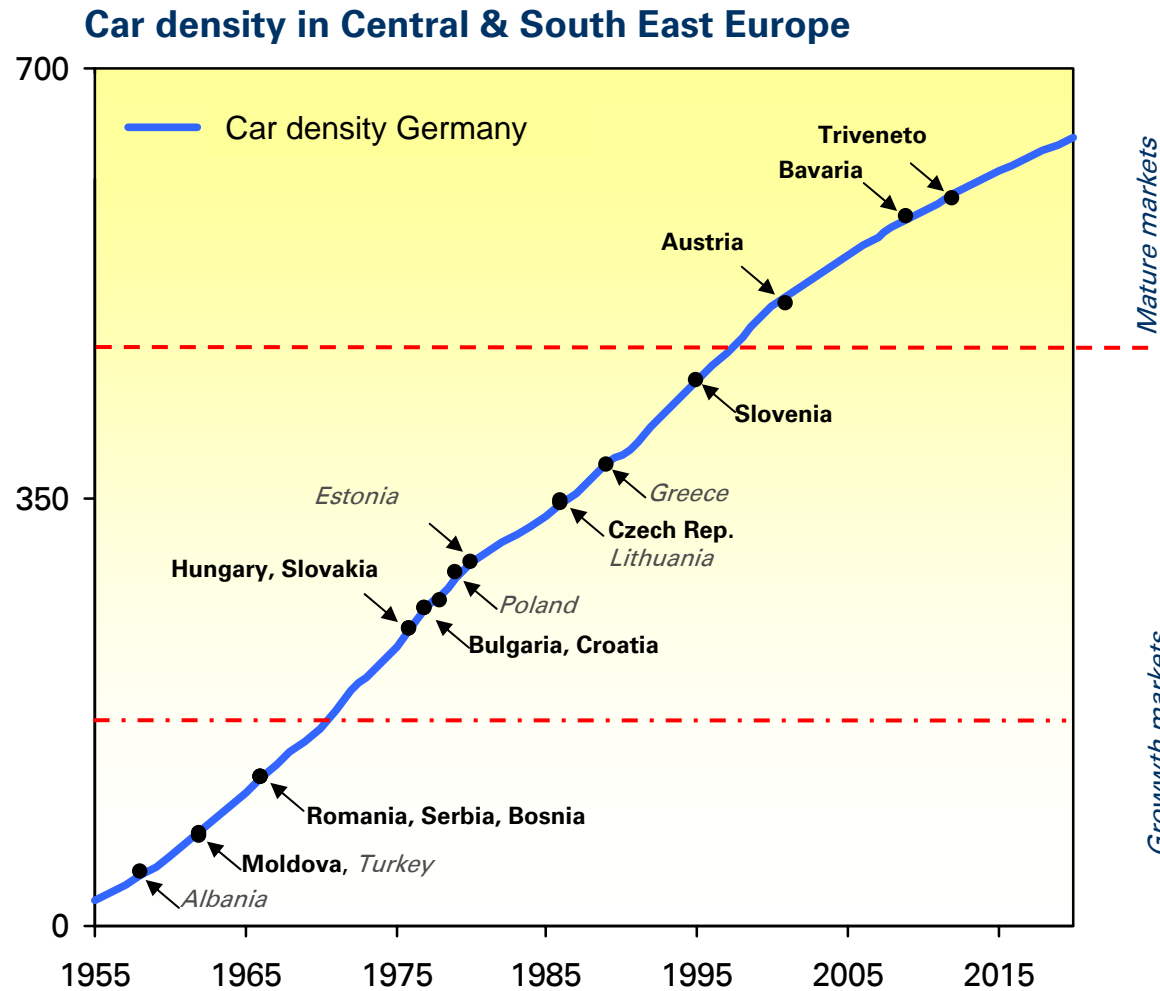
Energy intensity in Europe - 1990-2030



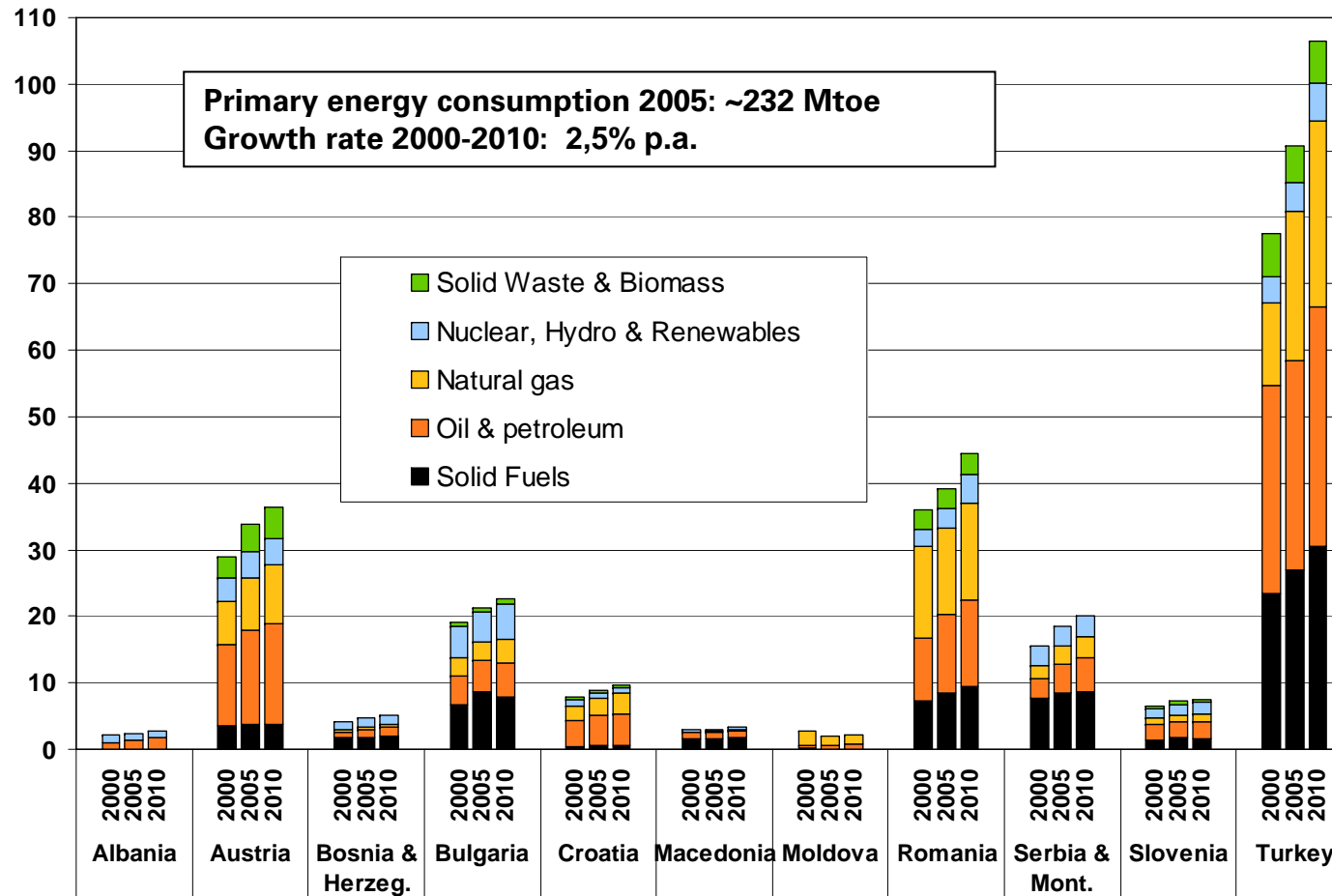
Source: EU „European Energy & Transport - Trends to 2030“, Update 2005

NMS..... New Member States

Mobility in Central & South East Europe - growth potential for decades

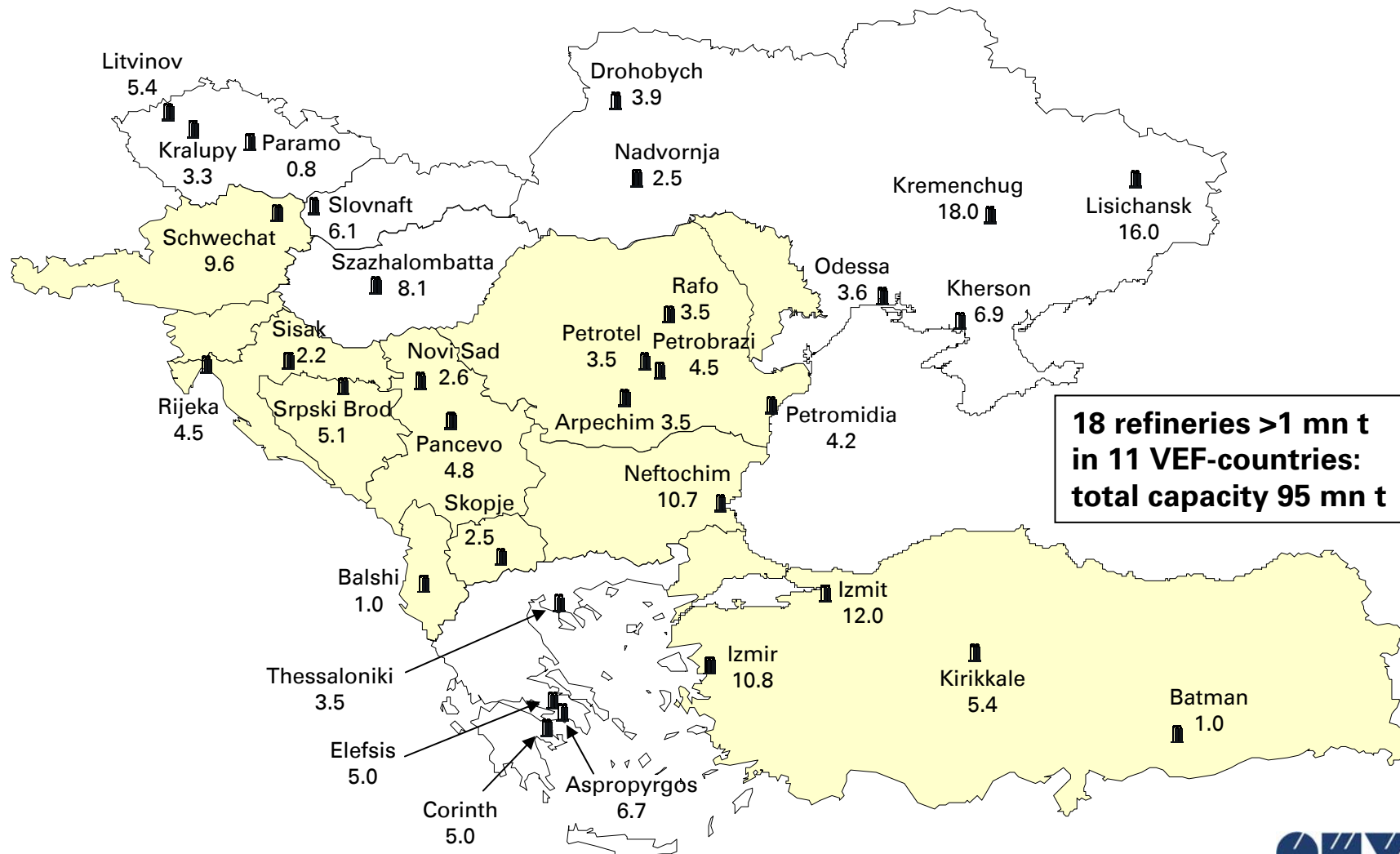


Primary energy consumption in VEF-Countries



Source: Global Insight "European Energy and Environmental Outlook", 6/2006

Refineries in Central & South Eastern Europe



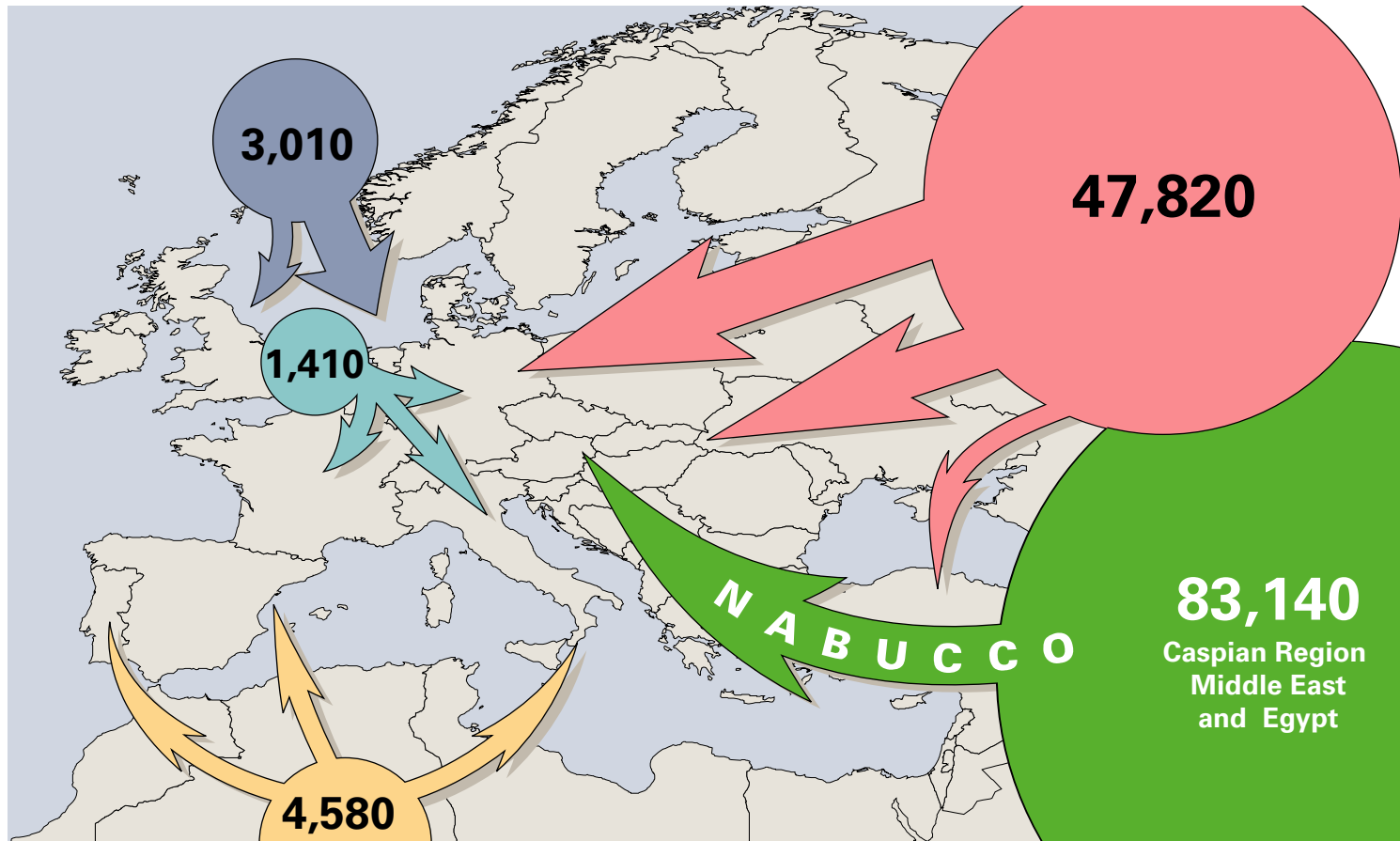
■ Source OMV: Refinery Crude Capacity in mn tonnes;

European access to Russian and Caspian Crude



- Heavy / sour crude
- Light / sweet crude (Caspian Crude)
- Crude via Adriatic
- BA ... Burgas – Alexandroupolis
- BSP ... Bratislava - Schwechat
- BTC ... Baku – Tbilisi - Ceyhan
- PEOP ... Pan European Oil Pipeline (Constanza – Pancevo - Trieste)
- SCCOP ... Samsun – Ceyhan Crude Oil Pipeline

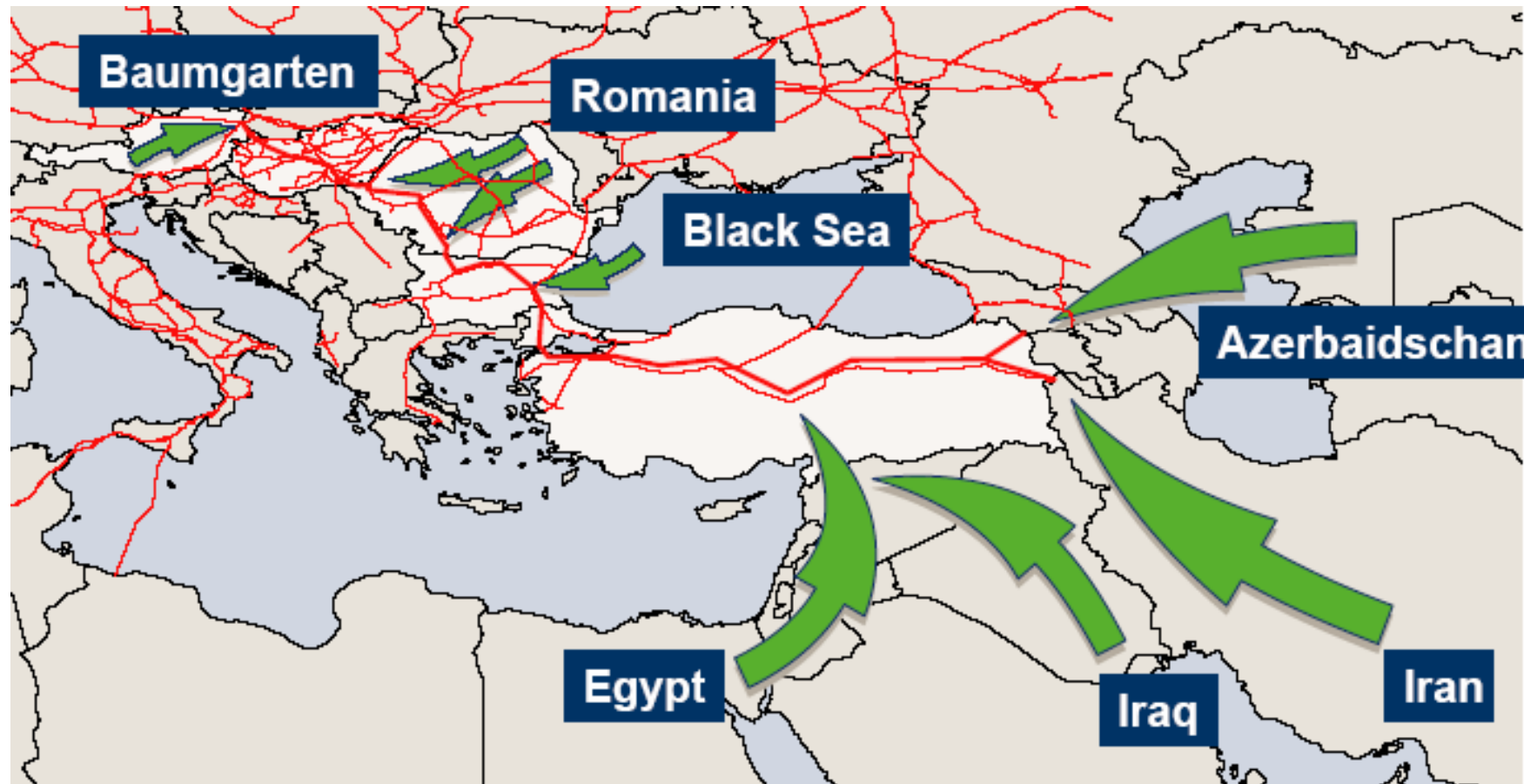
Missing link between giant gas sources (in bcm) and potential markets



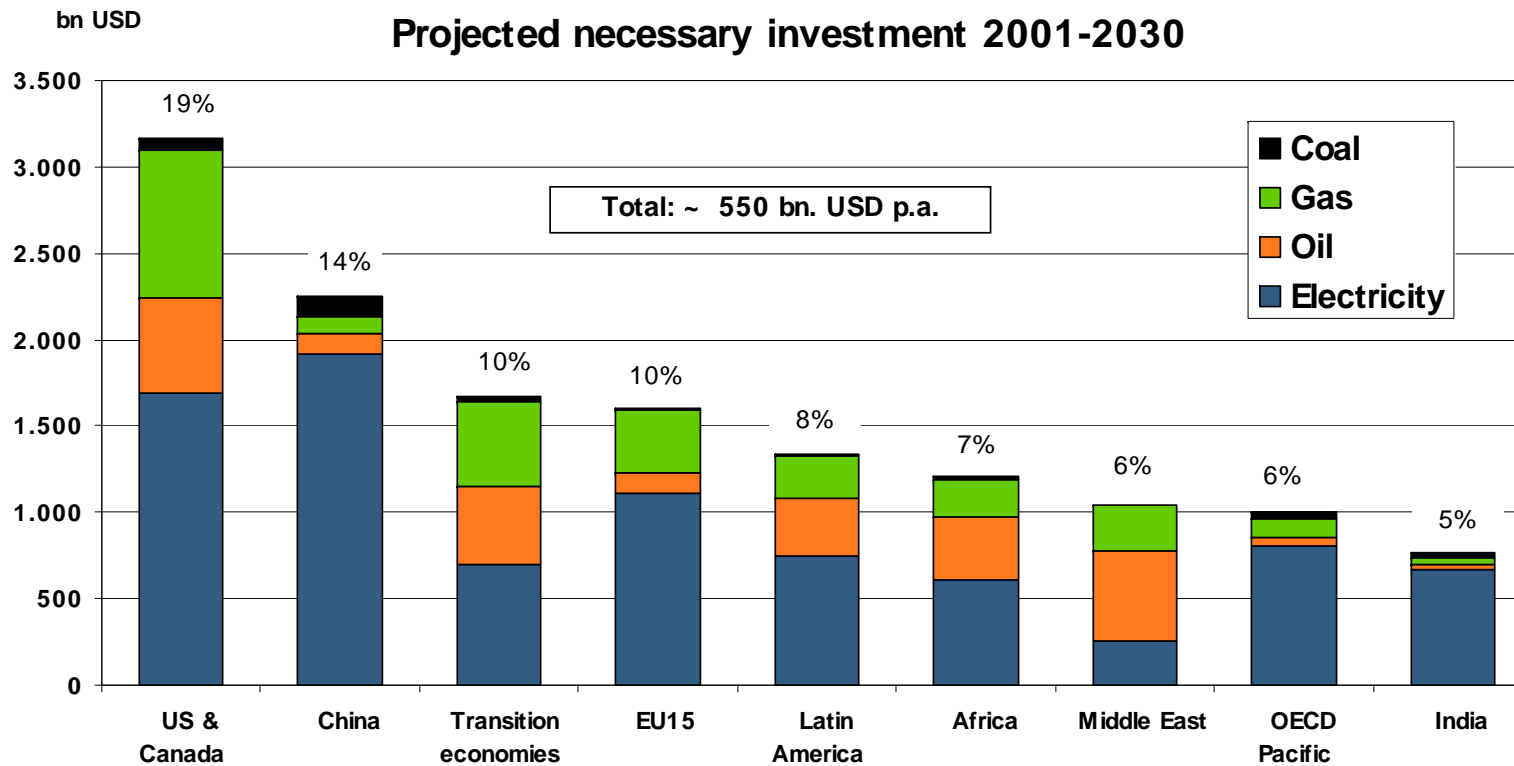
Source: BP Statistical Review 6/2006

Nabucco gas pipeline project

Gas supply sources for Nabucco



Global energy investment

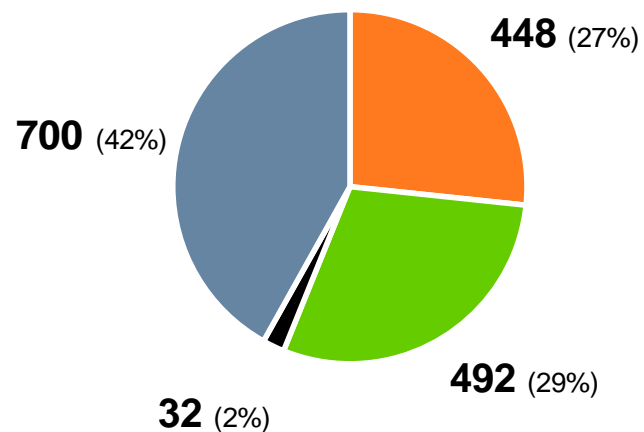


Source: IEA / World Energy Investment Outlook 2003

Energy investment

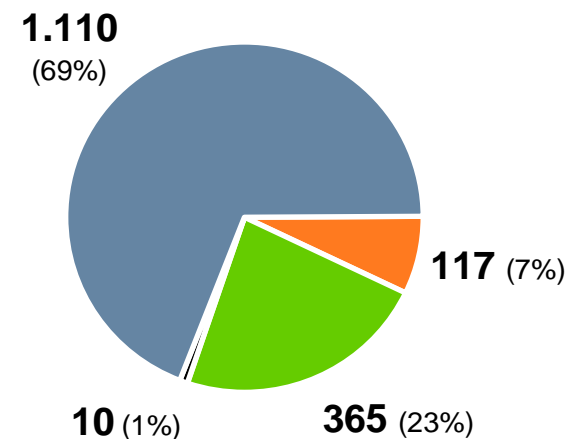
Projected necessary investment 2001-2030 in bn USD

Transition Economies *)



Total: 1.672 bn USD

EU-15



Total: 1.602 bn USD

Source: IEA / World Energy Investment Outlook 2003

*) incl. FSU, EU-New Member & Balkan States

Framework for energy investment in VEF-region

- ▶ Stable regulatory and market framework - compatible to EU energy policy
- ▶ Opening of markets enabling access, transparency and a level playing field
- ▶ Screening of project proposals in electricity, gas, oil, energy efficiency and capacity building – shared views for supply demand balance
- ▶ Broad international cooperation to define, finance and realize of key projects
- ▶ Lowering financing costs and risks for investors

The new European energy policy

- ▶ **Green Paper “European strategy for sustainable, competitive and secure energy” – six priority areas**
 - ▶ Towards a coherent external energy policy
 - ▶ Tackling security and competitiveness of energy supply
 - ▶ Solidarity among MS: towards an European internal energy supply policy
 - ▶ An integrated approach to tackling climate change
 - ▶ Encouraging innovation: a strategic European technology plan
 - ▶ Energy for jobs and growth: completing the internal electricity and gas markets

- ▶ **Outcome of EU-Council (Spring Summit): March 23-24, 2006**
 - ▶ Annual revision of EU energy strategy
 - ▶ Coordinated negotiations with supply countries
 - ▶ Solidarity in case of disruptions in oil & gas supply
 - ▶ Energy efficiency : -20 % EU-25 energy demand in 2020
 - ▶ 15 % share of renewables in 2015 (8 % share of biofuels)
 - ▶ No resistance against nuclear power

The energy industries approach - conclusion

- ▶ **Focus on Exploration & Production:**
 - ▶ Availability not the issue, but access, investment and technology
 - ▶ Appropriate regulations, fiscal regimes and competitiveness are critical
 - ▶ New competitors in the market, need for dialog and cooperation
- ▶ **Energy infrastructure:**
 - ▶ Call for competitive framework for long term planning & investment
 - ▶ Linking new energy sources to the markets
 - ▶ Diversification and flexibility to manage imbalances, volatilities
- ▶ **Energy demand:**
 - ▶ Further growth of energy demand to 2030, oil & gas remain dominant
 - ▶ Significant growth but no revolution by renewables in the energy-mix
 - ▶ Sensitive balancing of energy systems and energy efficiency required