

**ECONOMIC COMMISSION FOR EUROPE
COMMITTEE ON SUSTAINABLE ENERGY**

Working Party on Gas

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**SECURITY OF SUPPLY & INVESTMENTS
ISSUES FOR THE ECONOMIES IN
TRANSITION IN THE UNECE REGION**

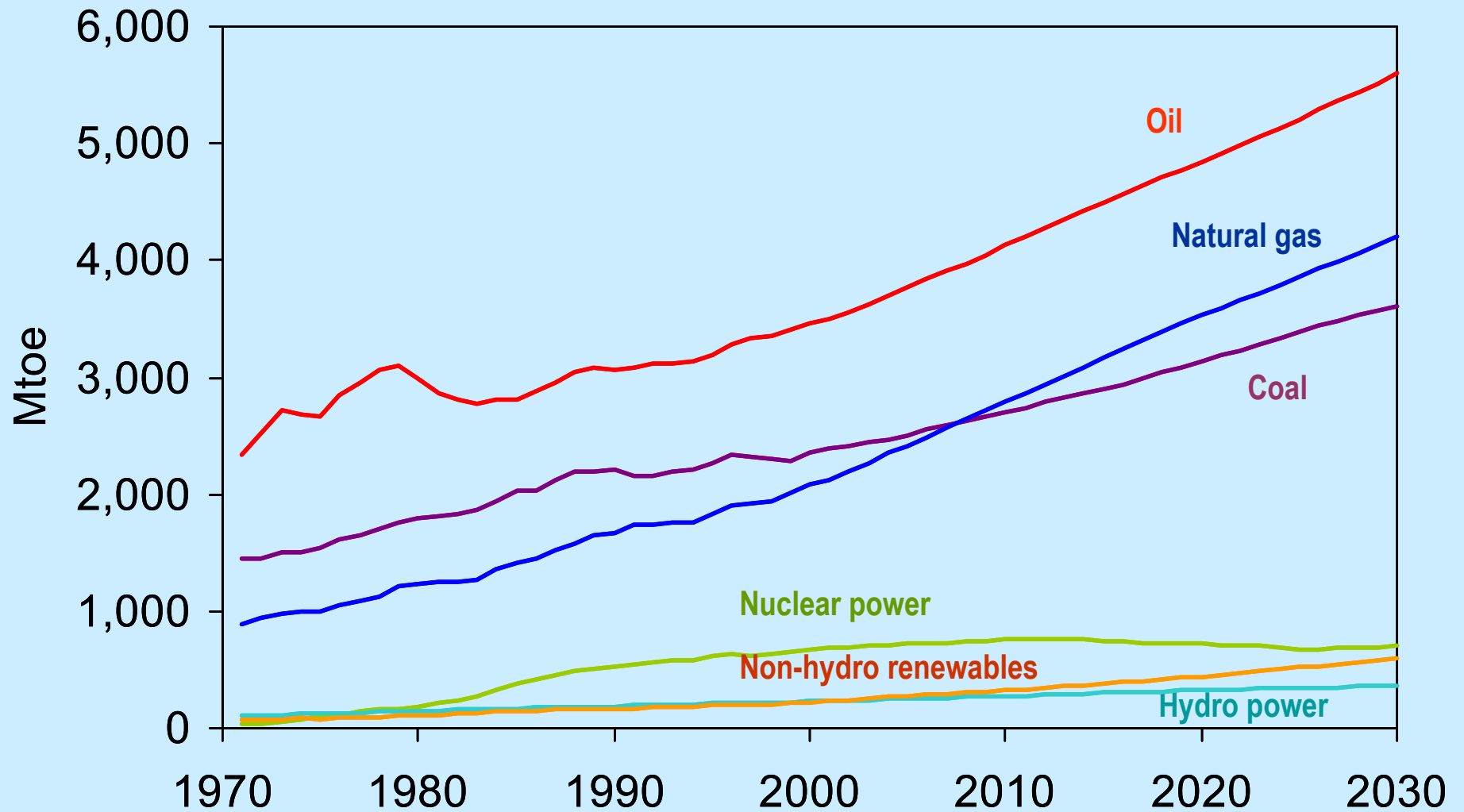
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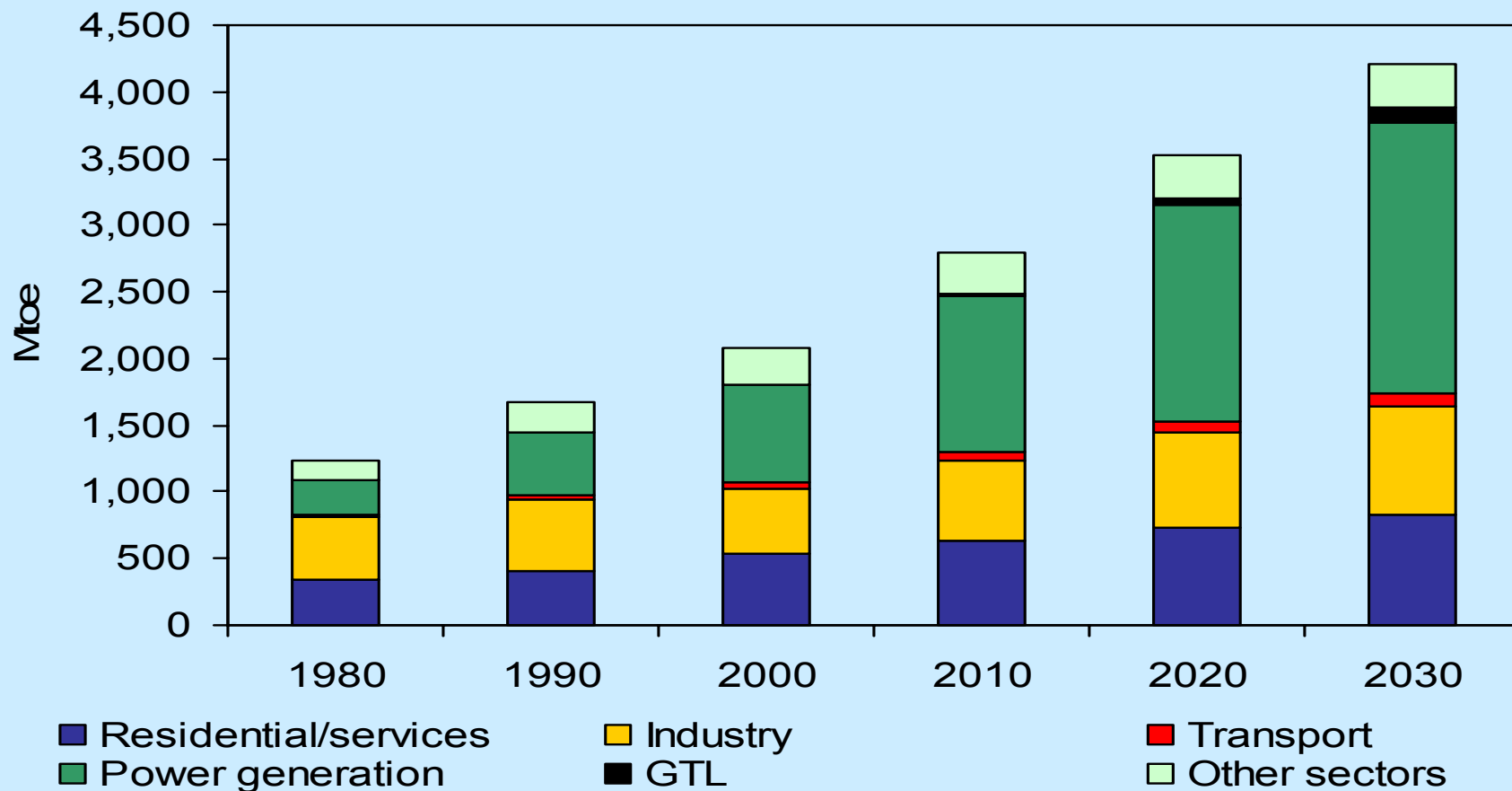
Central Findings of Energy Projection

- *Unless policies change*, world energy demand will continue to grow steadily
- Fossil fuels will continue to dominate the energy mix
- Most of the growth in demand will come from developing countries
- Global resources are adequate to meet growing demand for at least the next 3 decades, but prices may need to rise

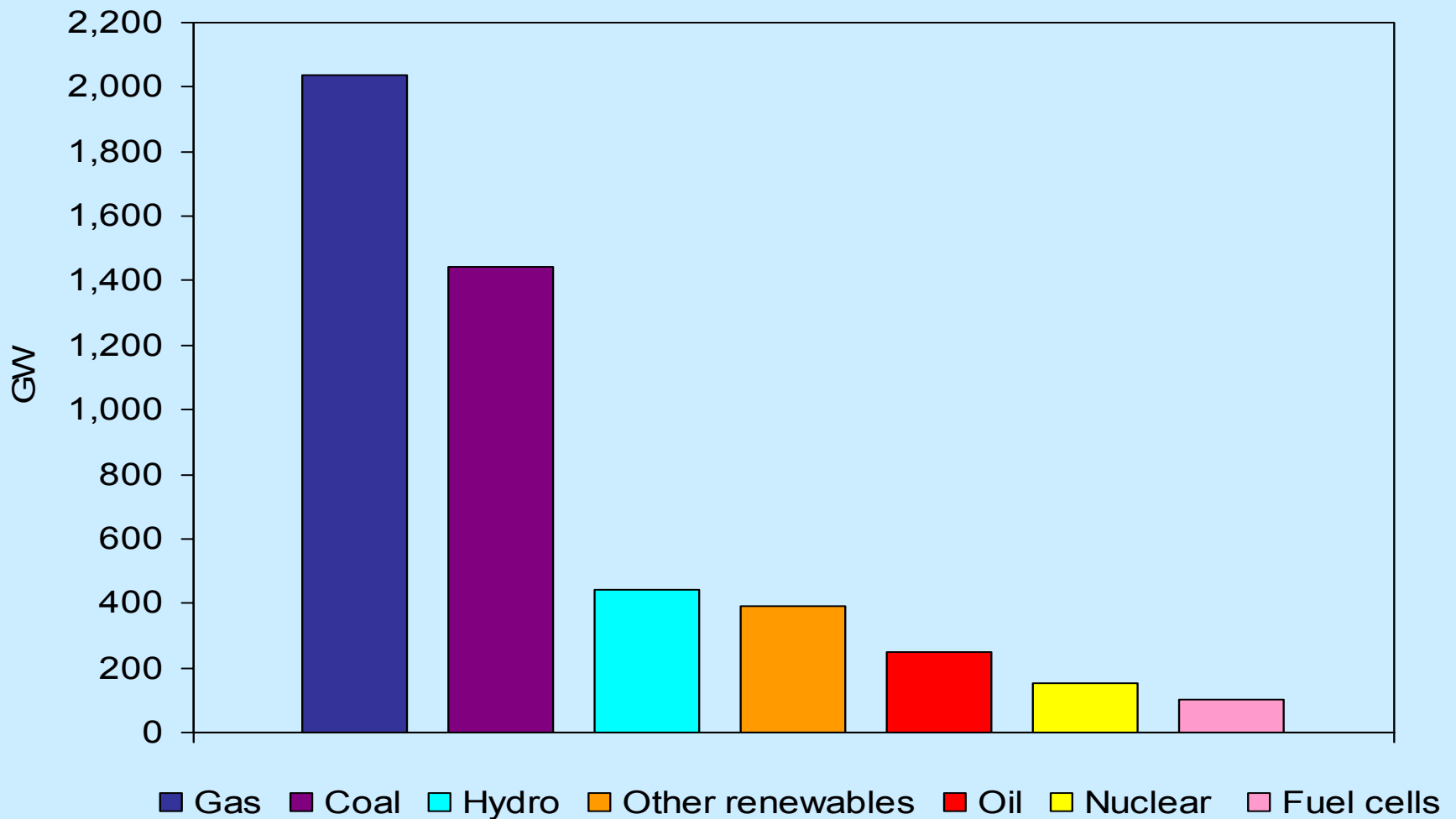
World Primary Energy Demand



World Natural Gas Demand



World Power-Generation Capacity Additions, 2000-30



Implications of the Projections

- The projections highlight 4 strategic energy challenges:
 - *security of energy supplies*
 - *investment in energy infrastructure*
 - threat of environmental damage caused by energy use
 - uneven access of the world's population to modern energy
- Governments will have to take strenuous action if these concerns are to be addressed

Specific problems in the Economies in Transition in the UNECE region: rapidly changing economic & regulatory environment

- Privatisation (the state becomes *regulator, not owner*)
 - Unbundling of vertical monopolies
 - Liberalisation of the gas and power markets → competition
 - Right (cost-reflecting or market) pricing -- resulting
 - In a more efficient gas & electricity sector
- but often also
- In shrinking reserve infrastructure capacities
 - In insufficient **investments** into the gas & electricity sector

The impact of the reform of the gas & electricity supply industry on investment decisions

Before the reform:

- Low risks to invest
- Adequate assets to be able to meet demand
- Security of electricity supply has been consistently high
- This approach has however also resulted in *over-investment and additional costs* to consumers.

After the reform:

- Investment decisions are made by market players
- Costs and risks of decisions borne by market players \Rightarrow
- No incentives to *overinvest*
- Leaner, but still reliable gas & electricity system
- But sometimes: *Capacity shortages* during peak-demand periods.

Main consequences of the reform: *risk management* directs investments

Main risks in Economies in Transition:

- Political instability
- Absence of a sound and stable economic/financial policy and/or energy policy
- The local legal system (breaching indiv. contracts)
- Complicated and slow bureaucratic system
- Slow licensing procedures
- No cost-reflective electricity prices, cross-subsidization

Risks in the West: bad regulation, environm'l issues

Investments with low risks (e.g. CCGT) dominate.

HOW TO FACILITATE INVESTMENT

- Appropriate return on capital for investors
- Cost-reflective or market prices on producers' domestic markets
- A regulatory approach that encourages investments
- Market-based approach as opposed to government intervention – although this issue can be debated.
- Transparency, particularly to avoid cross subsidies until unbundling is achieved
- Good monitoring of security of supply
- Reliable, stable and transparent legal and regulatory framework

The existence of all of the above factors can help to encourage professional as well as financial investors/banks to invest in the sector in this region.

- It is absolutely essential in the interest of security of supply to minimise the risks (political, financial, legal, administrative, regulatory etc.) for investments.
- *However, it must be emphasised that in a market economy, investments will never be completely without risks.*
- The following solutions can be suggested:

Mitigation of Risks Model

(Return of the “Stronger State” Model)

(mainly for the countries of the former Soviet Union)

- The government will have a strong and direct role in the supply of gas & electricity and in the encouragement of investments
- Governments may have to guarantee the return on investments to foreign investors by direct methods (e.g. long-term PPAs) or by indirect methods (e.g. lower taxation or a guaranteed return on the invested asset by price regulation)
- It may lead to a relatively good situation in terms of security of supply, but with all the disadvantages that were highlighted in the UNECE paper “Guidelines on Reforming Energy Prices and Subsidies” (lower ec. eff., wastage of en.)

Strong Risk Taking Ability Model (The Oil Company Model)

(mainly for most developed Economies in Transition)

- High risks associated with investing in the energy sector - hence, players are needed who are able to take these risks; only the strongest players are able to successfully compete in the market
- In the energy sector, instead of the vertically integrated national model, a partially vertically integrated international or horizontal model might prevail
- Model has a number of advantages: it offers a market-friendly solution and does not require state subsidies
- Difficulties may also occur with this model: the vested interests of the multinational gas & power companies may not lie in the construction of large reserve capacities, which could affect security of supply and lead to price spikes.

**Thank you for your
Attention!**
