

NATURAL GAS IN REPUBLIC OF MACEDONIA

MACEDONIAN GAS
ASSOCIATION

IGU SEPTEMBER 2008

Overall review

- Republic of Macedonia suffers from energy deficiency.
- On an annual level, the energy consumption consists of 33% oil derivatives; 47% coal; 3% natural gas and the remaining part is covered by hydro energy and wood.
- Only 52% of the annual consumption is covered by domestic production.

Description of Constructed Natural Gas Pipeline System

- The Macedonian gas pipeline is connected to the Russian transit gas pipeline, which passes through Ukraine, Romania and Bulgaria, satisfying needs of Turkey, Greece and Ex Yugoslavia for natural gas
- The natural gas pipeline is connected to the Russian transit gas pipeline on the east Macedonian border, in the region called Deve Bair
- The natural gas pipeline extends along the regions of Kriva Palanka, Kratovo, Kumanovo and Skopje

Constructed Pipeline



Technical Characteristics of Constructed Natural Gas Pipeline System

- *Designed capacity*

800×10^6 (Nm³) per year

- *Designed pressure*

54 (bar)

- *Inlet pressure in the high pressure pipeline*

40 (bar)

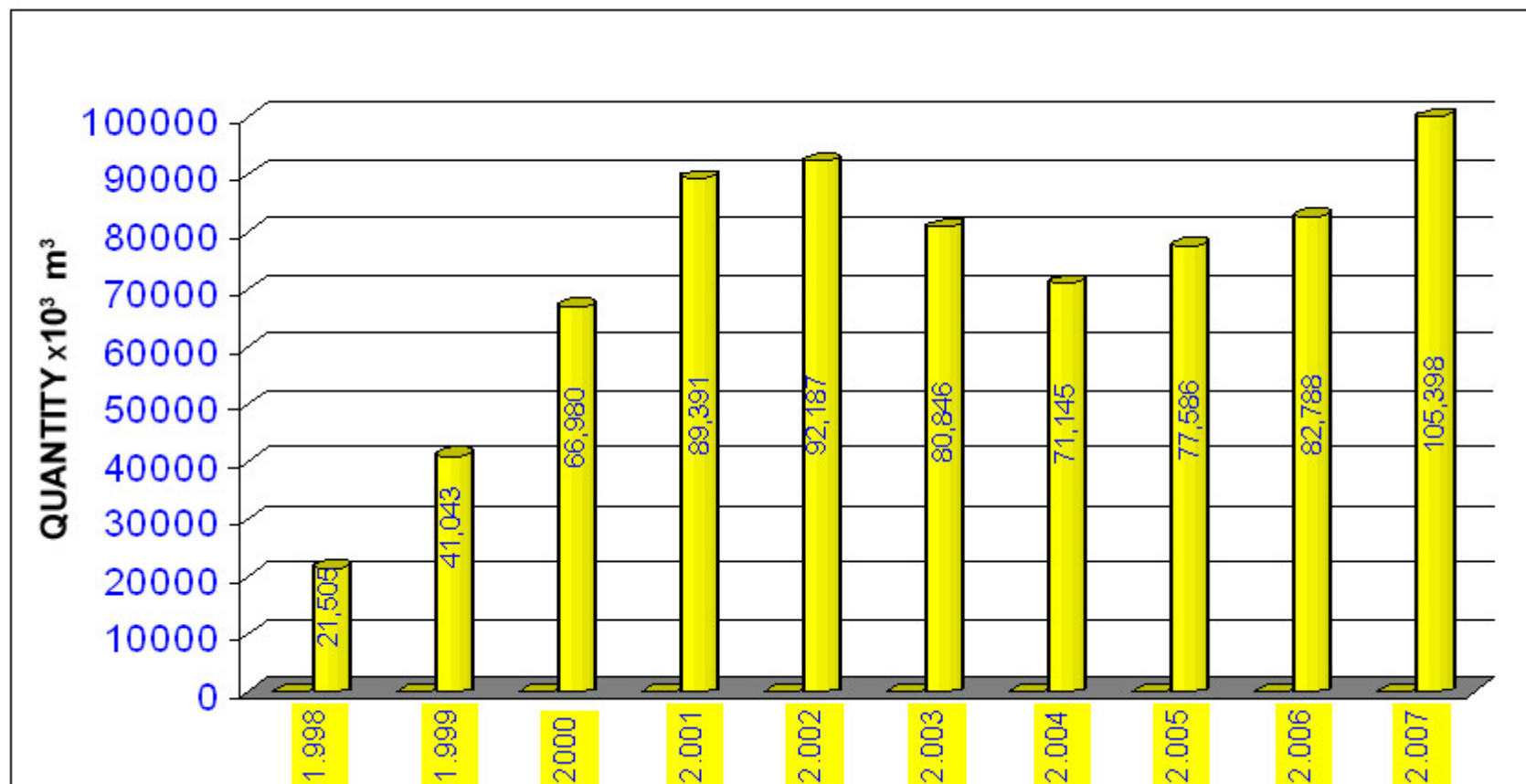
MARKET FRAMEWORK

- A joint-stock venture between the Government and Makpetrol named GA-MA was founded in 2006.
- GA-MA performs the transport services and operates the transport system for the natural gas pipeline.
- Makpetrol holds a license for trade with natural gas for industrial customers.

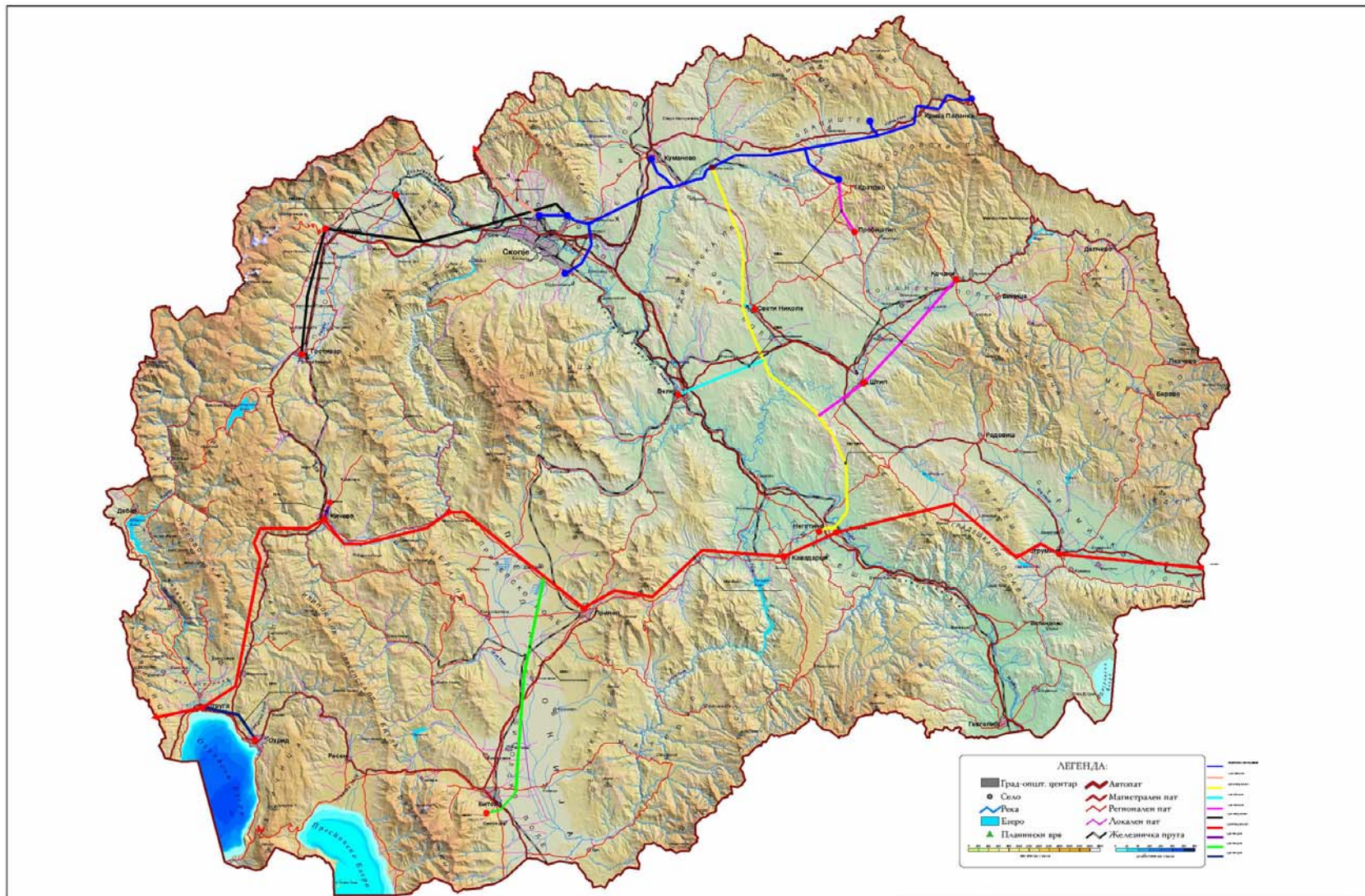
CUSTOMERS

- The transmission pipeline reaches to the industrial zone of the capital city Skopje, where 20 industrial facilities are connected.
- The other connected customers are along the gas pipe-line.

Summary of Annual Consumption of Natural Gas in Macedonia



Planned Pipelines



CONCLUSION

- Intensive expanding of the natural gas usage as energy complex is projected throughout the country in the near future.
- Almost all segments will be covered, particularly the distribution and end user customers.

There is a wide range of activities which shall be realized by the Macedonian Gas Association in close cooperation of International Gas Union.