



United Nations
Economic Commission for Europe



Increasing Energy Efficiency for Secure Energy Supplies

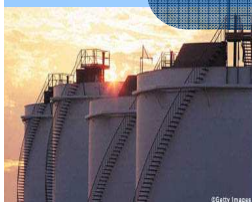


Alexandre Chachine
Chief
Sustainable Energy Section

Steering Committee of the Energy Efficiency 21 Project
Twentieth session, 3-5 June 2009



Long-Term Objective

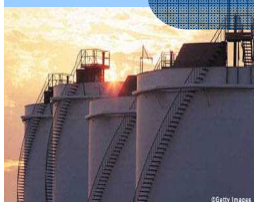


INCREASING ENERGY EFFICIENCY FOR SECURE ENERGY SUPPLIES

Promote development of energy efficiency investments projects designed to reduce the domestic consumption of hydrocarbons in energy exporting countries in order to release additional energy resources for domestic consumption or for exports



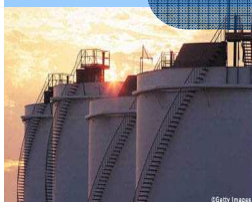
COUNTRIES



AZERBAIJAN, BELARUS, FRANCE,
GERMANY, KAZAKHSTAN, RUSSIAN
FEDERATION, TURKMENISTAN,
UKRAINE, UZBEKISTAN



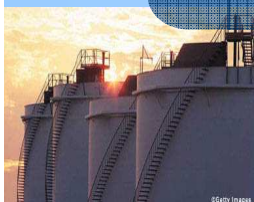
ACTIVITIES



- Establish network of government & industrial experts
- Develop technical criteria for identification and selection of energy efficiency investment project proposals
- Review and evaluate the investment climate and energy policy related to financing investment projects
- Develop new mechanisms to finance efficiency improvements from the greater availabilities of oil and gas



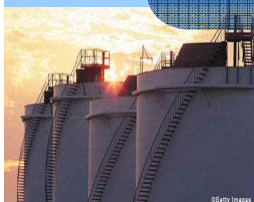
EXPECTED ACCOMPLISHMENTS



- Increased skills to identify, develop and finance investment project proposals in oil and gas industry
- Improved capacity to analyse and finance investments from the revenues of increased hydrocarbon sales derived from efficiency improvements



ACTIVITY 1.1

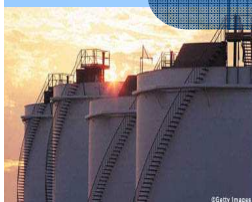


Establish Network of Experts

- National experts: Azerbaijan, Belarus, France, Germany, Kazakhstan, Russian Federation, Turkmenistan, Ukraine, Uzbekistan
- Industrial experts: GAZPROM promgaz, E.ON Ruhrgas, GdF-SUEZ
- Regional experts: European Business Congress, World Petroleum Congress, Regional Cooperation Council (RCC)
- Financial experts: CONNING Asset Management



ACTIVITY 1.2

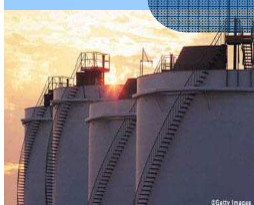


Develop Criteria for Projects Identification

- International Criteria
- National Expertise
- UNECE EE21 FEEI Project



ACTIVITY 2.1

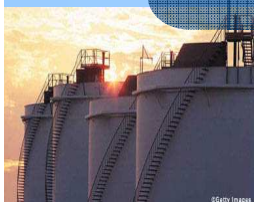


National Energy Policy and Investment Climate

- Country Reports
- International & Regional Reports
- Measures to overcome barriers and improve investment climate



ACTIVITY 2.2

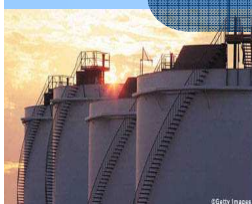


New Mechanisms to Finance Efficiency Improvements from Greater Availabilities of Oil & Gas

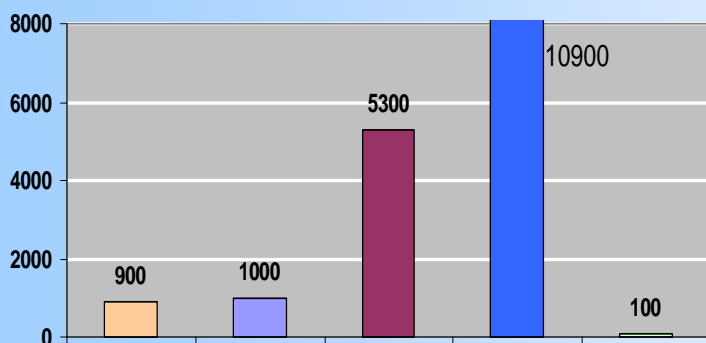
- Results of National Reports
- Conclusions by International & Regional Reports
- Dissemination of Synthesis Report to National & Regional Authorities



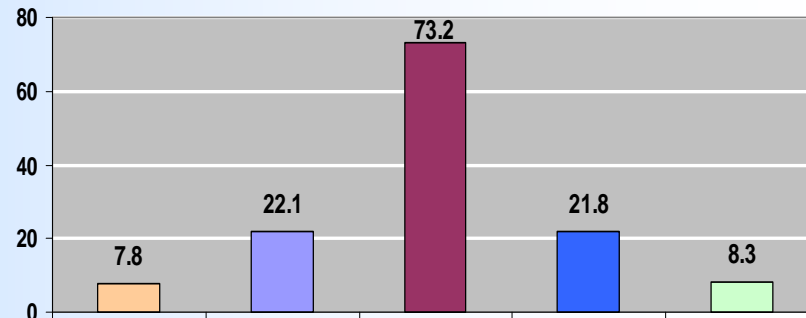
OIL, RESERVES, PRODUCTION & TRADE



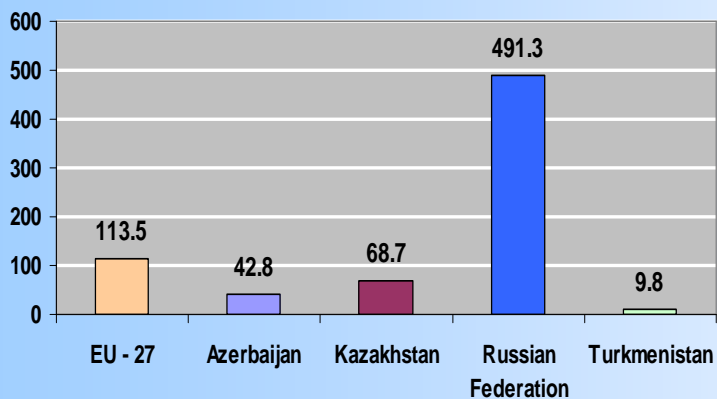
Oil Reserves: Million tonnes



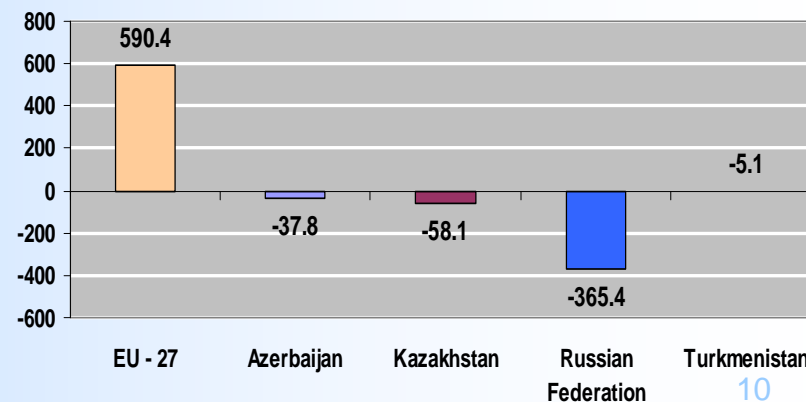
Reserves to Production Ratio (R/P): Years



Oil Production: Million tonnes

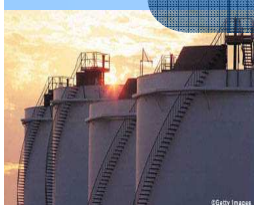


Oil Imports (+) Exports (-) Imports: Million tonnes

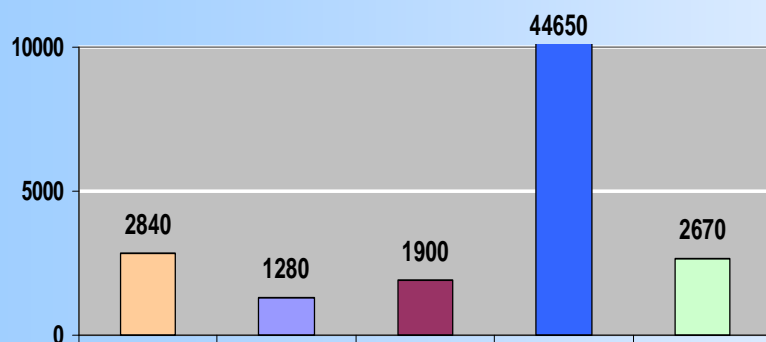




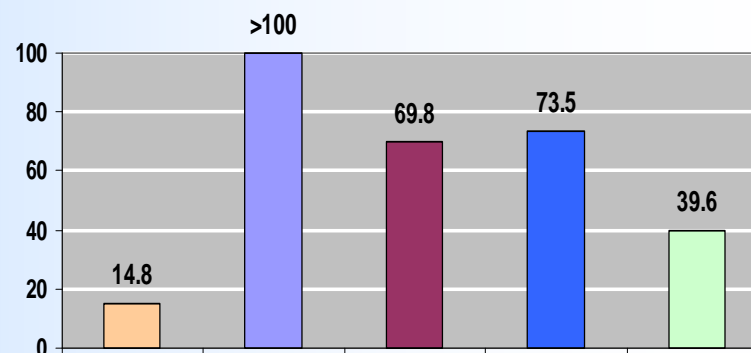
GAS, RESERVES, PRODUCTION & TRADE



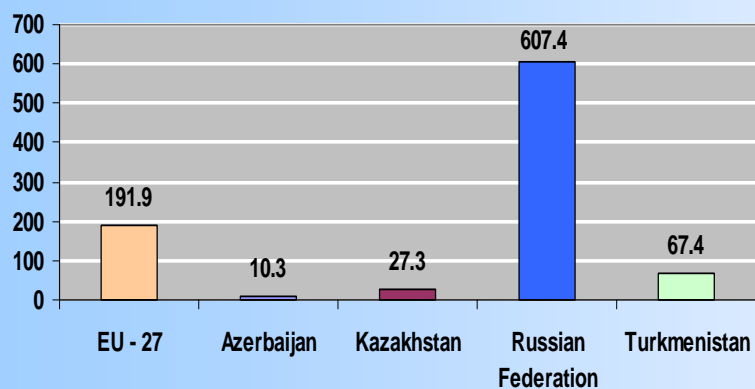
Gas Reserves: Giga (109) m3



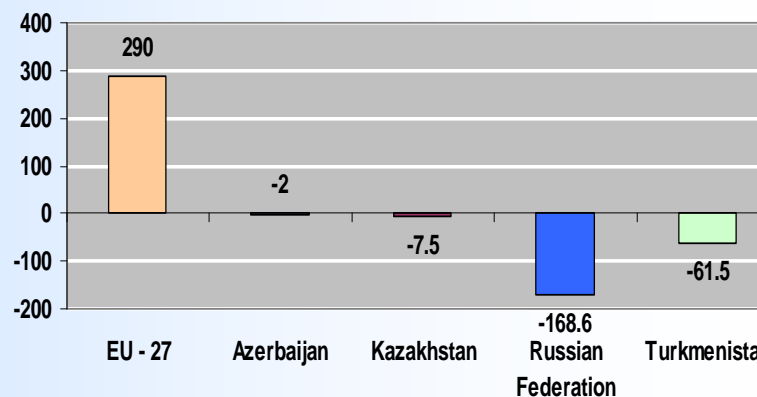
Reserves to Production Ratio (R/P): Years



Gas Production: Giga (109) m3

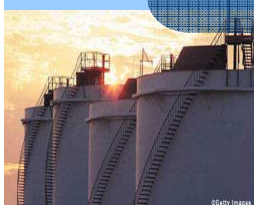


Gas Imports (+) Exports (-) Giga (109) m3

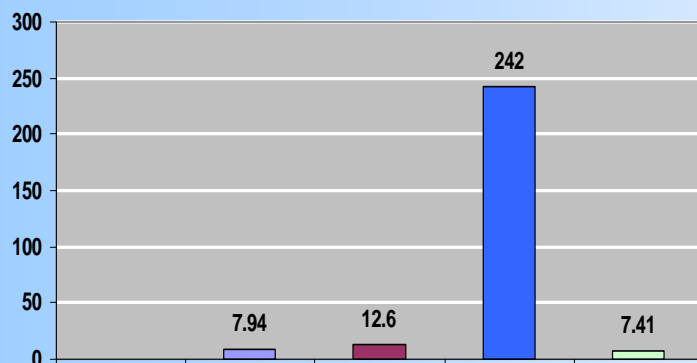




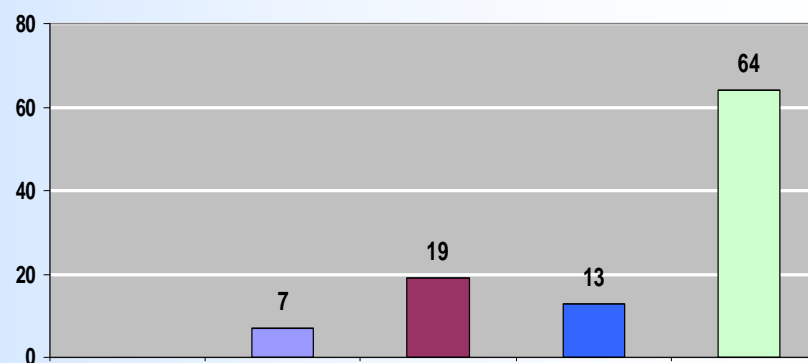
OIL CONSUMPTION: Mtoe; (%)



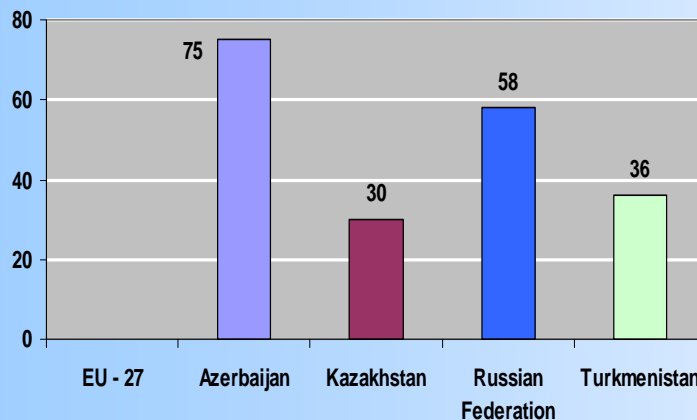
Refineries: Mtoe



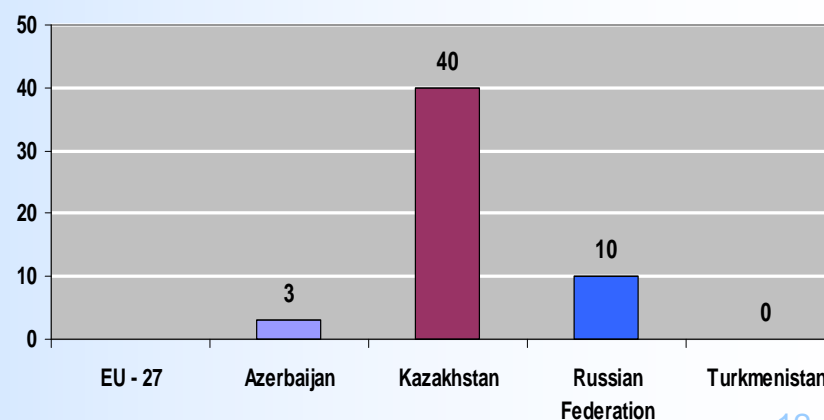
Household & Services: (%)



Transport: (%)

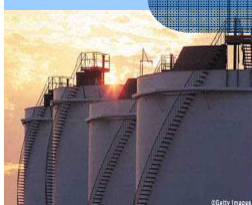


Industry: (%)

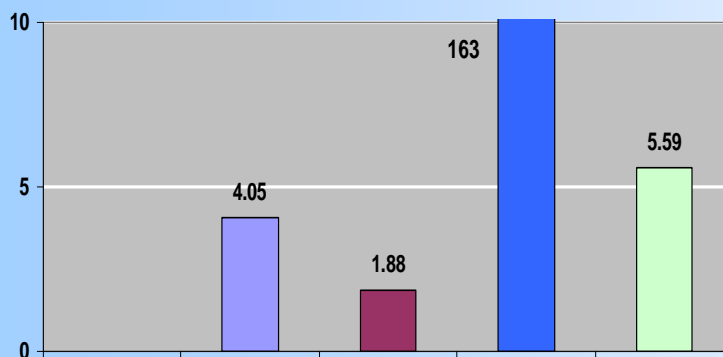




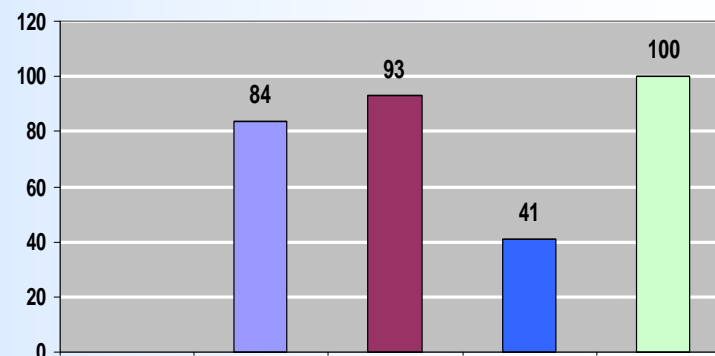
GAS CONSUMPTION: Mtoe; (%)



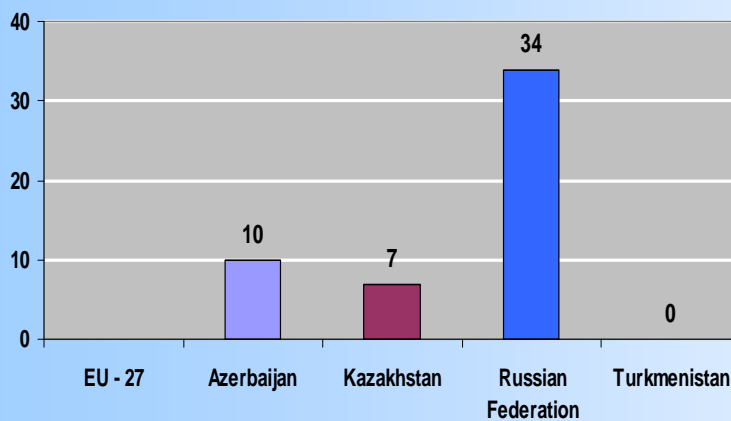
Power Plants: Mtoe



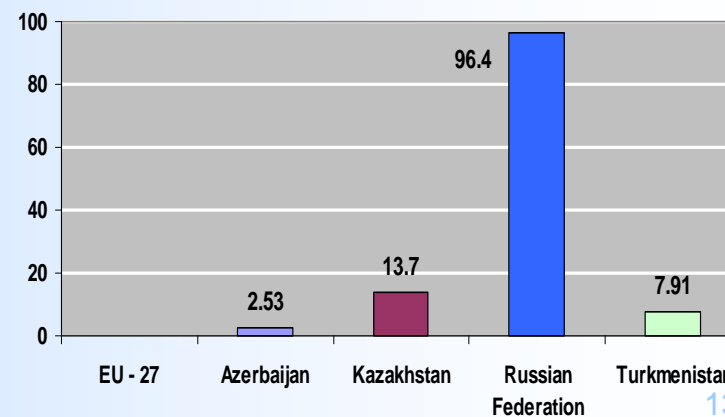
Household & Services: (%)



Industry: (%)

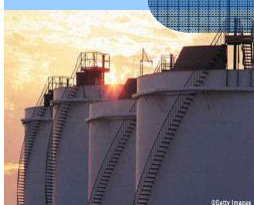


Gas in Final Consumption: Mtoe

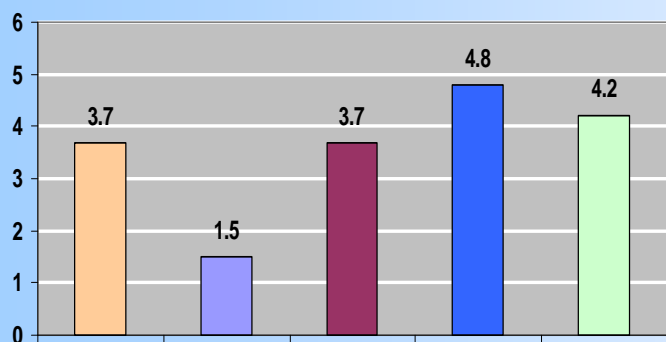




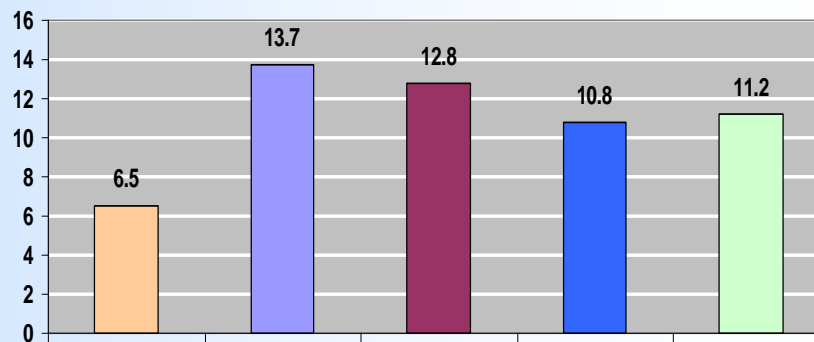
ENERGY SUPPLY & DEMAND INDICATORS



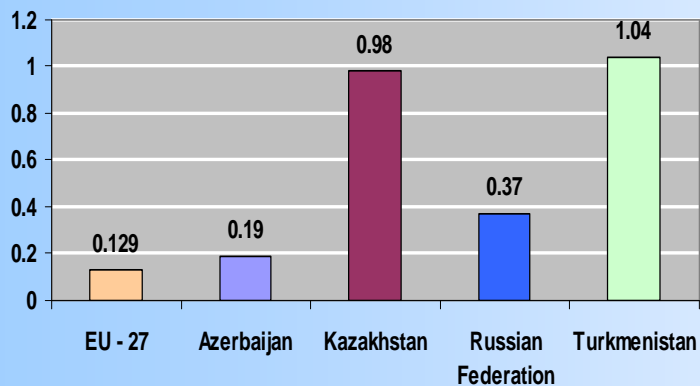
Energy Consumption per Capita: toe



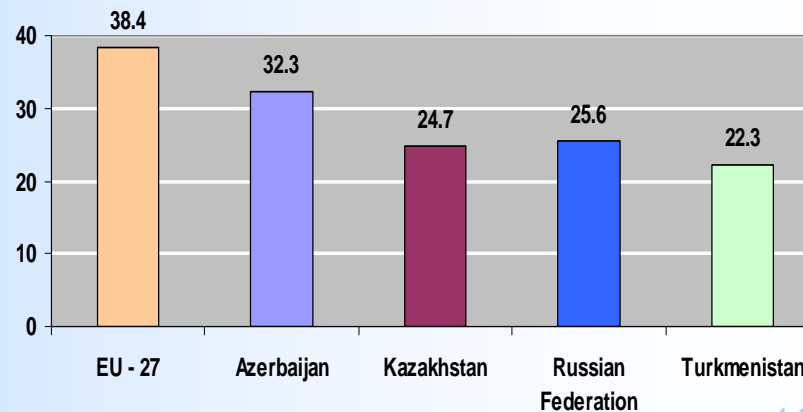
Transport and Distribution Rate of Losses: %



Energy Consumption per GDP: koe/USD
2005

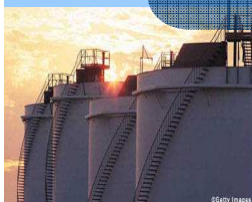


Efficiency of Thermal Power Plants: %

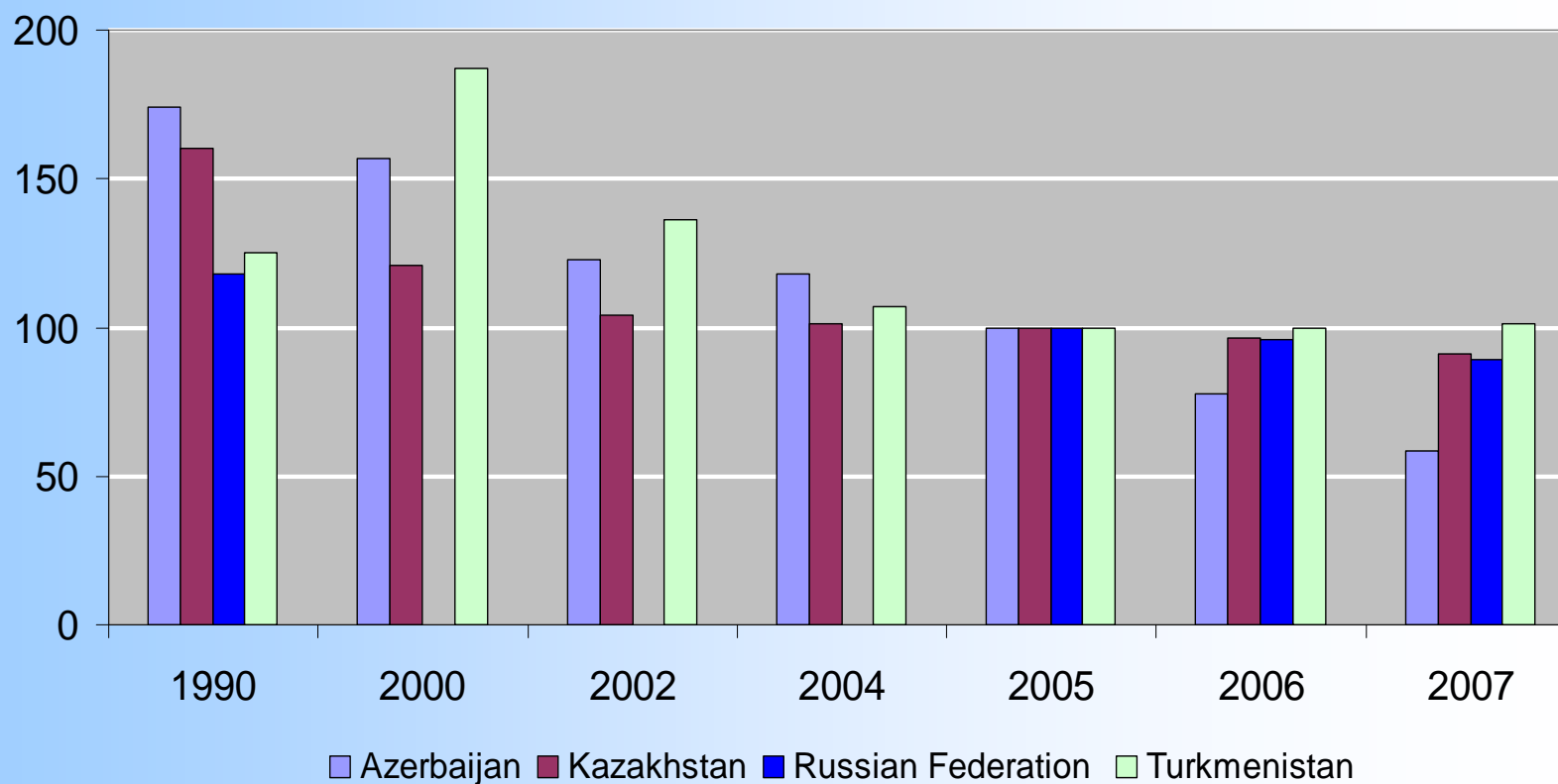




INDEX ENERGY CONSUMPTION / GDP 1990 – 2007 (2005 = 100)



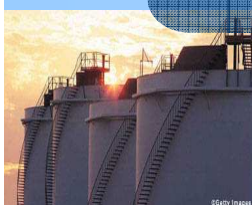
Index Energy Consumption / GDP 1990 – 2007 (2005 = 100)





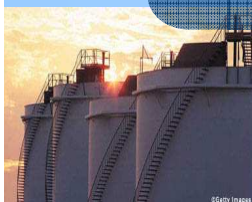
NEXT STEPS

- Report to the 18-th Session of Sustainable Energy Committee (November 2009)
- Review of National Reports (February, 2010)
- Presentation of a Synthesis Report to the 19-th Session of Sustainable Energy Committee (November 2010)
- Concluding Seminar (spring of 2011)





Summary/Conclusions



- Initial network of experts created
- Reports from experts (governments, industry, financial sector, NGOs etc.) constitute basis for future work
- Energy Efficiency is equally important for producing, importing and countries of energy transit
- Huge potential for energy saving in producing countries
- Role of governments, industry, public and private sector, Joint ventures, ESCOs etc.



Thank you for your attention !

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