



Study on Gas Saving to Reduce Natural Gas Demand and Enhance Energy Security





Major purposes



- Examining of experience and mechanisms of effective energy and gas use in Western Europe countries;
- Development of practical recommendations of effective gas and energy use increase for Russia, Eastern Europe and CIS countries.



Fulfilled Work



- Meeting of UNECE Working Party on Gas in Moscow in March 2007
- Consultations with IGU experts
- Preparation of questionnaires
- Distribution of questionnaires among UNECE members and IGU experts
- Processing of the obtained information



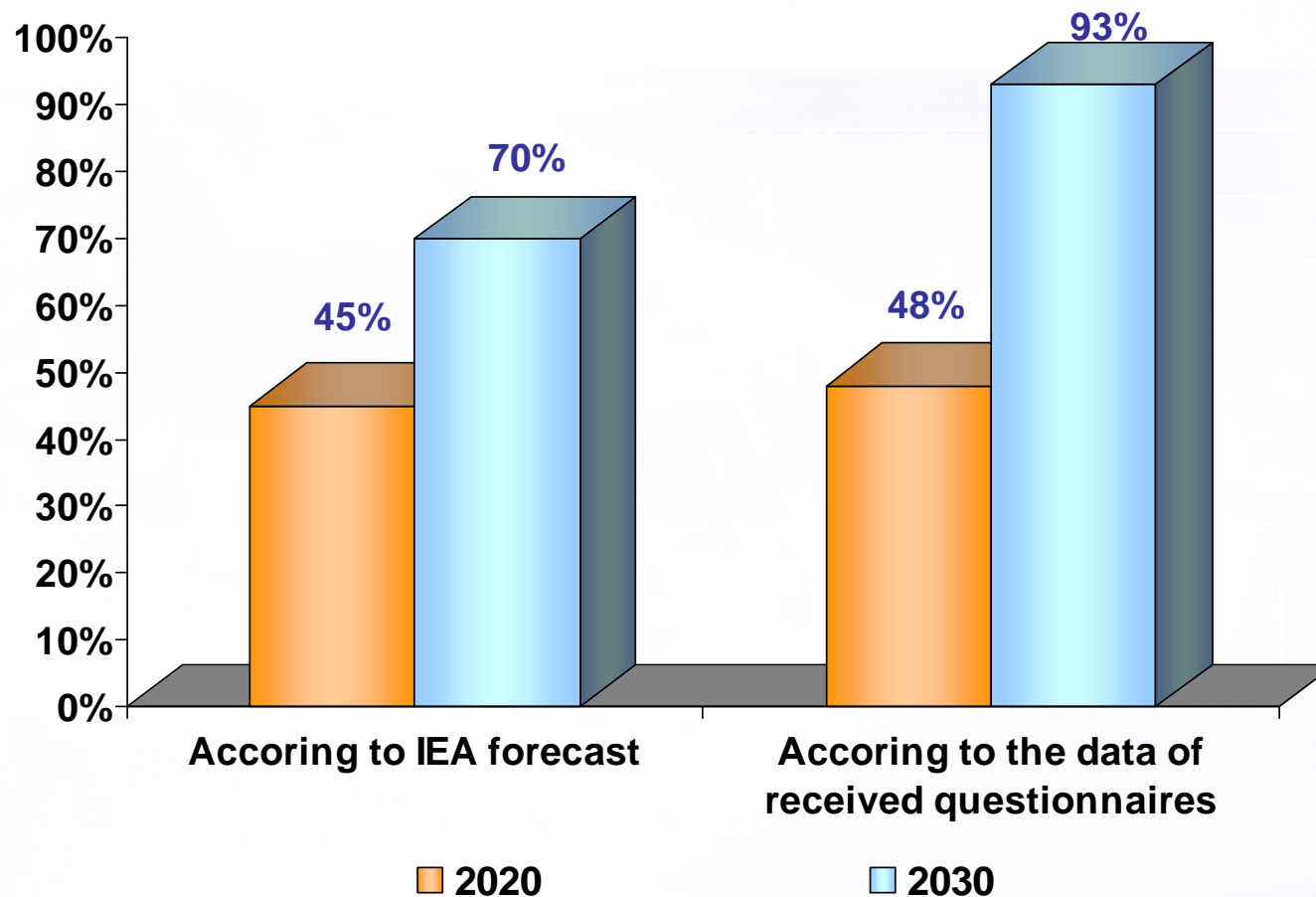
Achieved Results



- 17 completed questionnaires were received:
 - 8 from the developed countries
 - 6 from the Eastern European countries
 - 2 from Asia
 - 1 from South America
- 11 questionnaires were received from UNECE and 6 from IGU



International Gas Demand Expected Increase

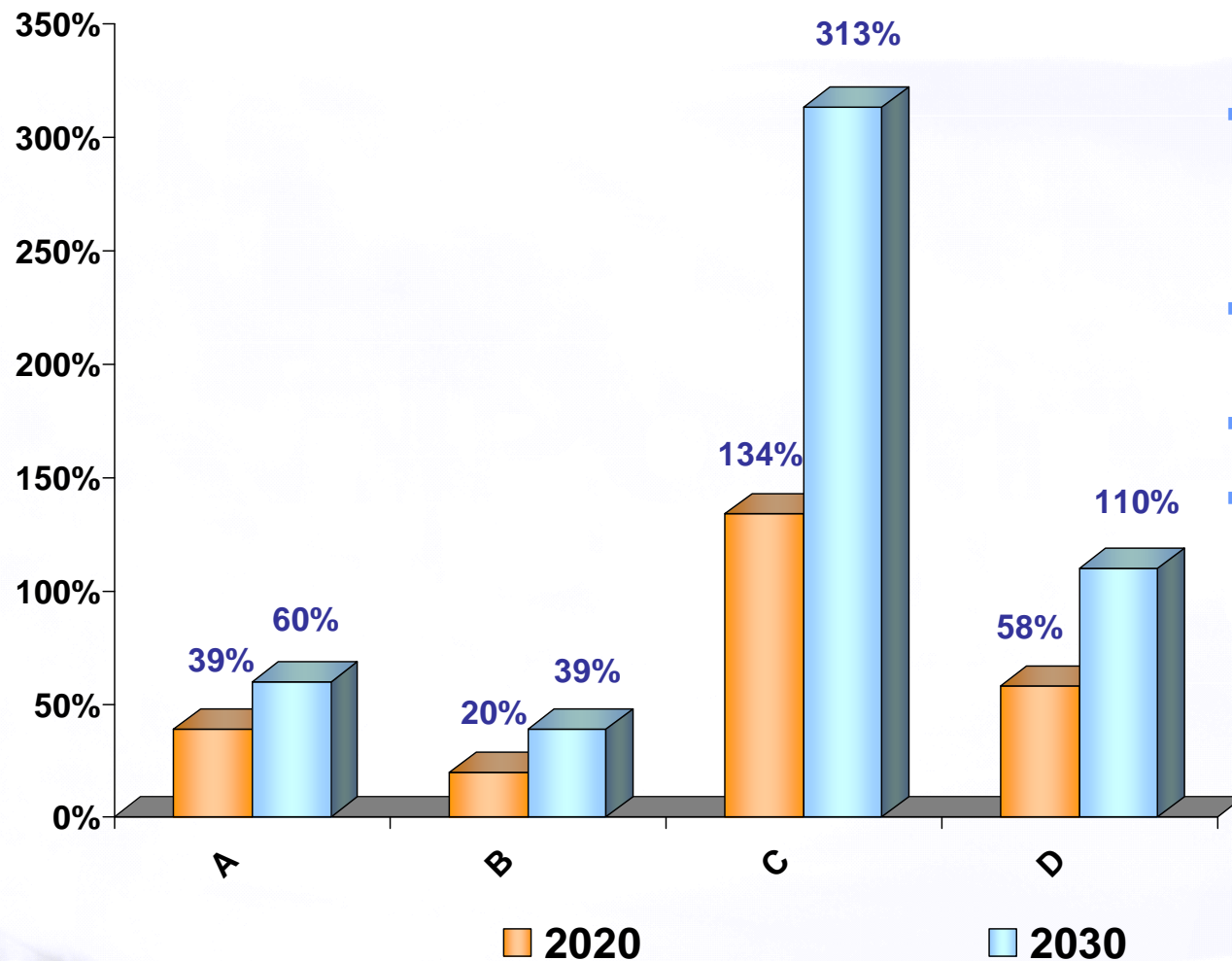


According to the contributing experts the future gas demand will exceed the existing forecasts. This fact increases the need in energy conservation.





International Gas Demand Expected Increase

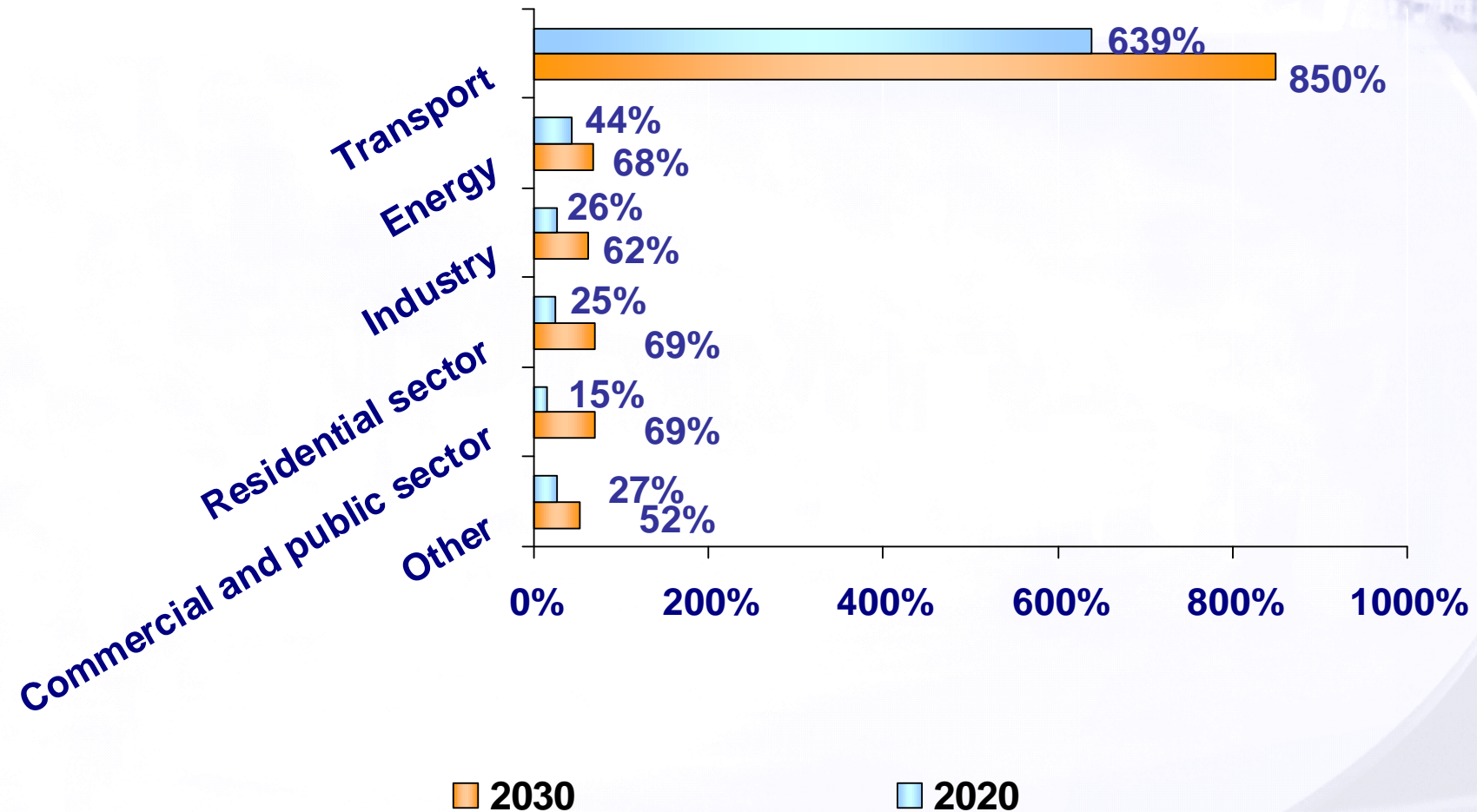


- A – World leading economies and countries with high economic development
- B – Eastern European countries
- C – Asian countries
- D – South American countries

According to experts opinion



Gas Demand Increase by Sectors



According to experts opinion



Main Factors Influencing National Gas Sector Development



Factor	Rank	Effect			
		Countries with high economic development	Eastern European countries	Asian countries	South American countries
Changes of prices of different types of fuel	1	Strong	Strong	Strong / Moderate	Moderate
Governmental policy in the energy sector	2	Strong / Moderate	Strong / Moderate	Moderate	Strong
Strengthening of environmental legislation and requirements	3	Strong / Moderate	Moderate	Low / Moderate	Low
Stable delivery demand	4	Strong / Moderate	Moderate	Moderate	Moderate
Energy markets liberalization	5	Moderate	Moderate	Moderate	Moderate
Taking of energy-saving measures	6	Moderate	Low	Moderate	N/A



Main Factors Brought About National Economy Energy Intensity Reduction



Factor	Rank	Countries with high economic development	Eastern European countries	Asian countries	South American countries
Equipment modernization and the introduction of new technologies	1	2	1	1	1
State programs aimed to reduce the energy intensity of economy	2	4	3	2	3
Public promotion of energy conservation	3	1	4	3	4
High rate of growth of fuel and energy tariffs and prices	4	5	2	4	5
Activities of energy service companies (ESCO)	5	7	7	5	2
Growth of the environmental concerns of society	6	3	6	6	6
Fuel crises in the 1970-s	7	6	5	7	7



Possible Reaction of Consumers in Case of Gas Prices Increase



Possible increase of prices		Consumers reaction
Countries with high gas prices	Countries with low gas prices	
10%	30%	Growth of production cost in accordance with gas prices increase and willingness to pay more
20%	50%	Execution of an energy saving project aimed to reduce energy payments
30%	150%	Switching of production process to alternative fuel(s)
50%	300%	Closure of the business or move to another country with lower energy prices

Current tariffs in the countries with low gas prices do not motivate consumers to save energy!





Obstacles for Energy Conservation Increase in Developing Countries



- Low conscience of energy conservation
- Low prices and tariffs of energy resources, particularly gas
- Insufficient Governmental measures towards energy conservation
- Lack of legislative basis, standards and norms for implementation of energy conservation policy
- Difficulties with raising finance for energy conservation projects



Recommendations for Energy Conservation Problems Solution



- Promotion and support of equipment modernization and introduction of new energy saving technologies
- Public promotion of energy conservation policy
- Significant increase of gas prices
- Strengthening the Governmental policy towards the efficient use of energy
- Transfer of experience of the developed countries in the field of work on legislative acts, determination of the financial and fiscal energy conservation mechanisms for countries with the high energy intensity economics
- Stimulation of energy companies for maintaining energy conservation policy



Conclusions



- Gas consumption demand is rapidly growing regardless of prices increase
- Efficient gas use will permit to smooth the tendency of growing gas demand
- In the developed countries the issue of energy conservation and gas use efficiency are considered as vital at gas prices increase
- Low gas prices is a significant but not the only obstacle on the the way of fulfillment of energy conservation potential



THANK YOU!

СПАСИБО!

