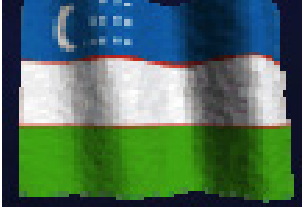
Greetings from Uzbekistan



MODERN UZBEKISTAN

The leading industrial country in CA.

- Abundant resource potential
- Well-developed human resources
- Favorable investment climate

- More than USD 25 bln of foreign investments have been attracted so far.

KOREA TODAY

Energy Silk Road initiative

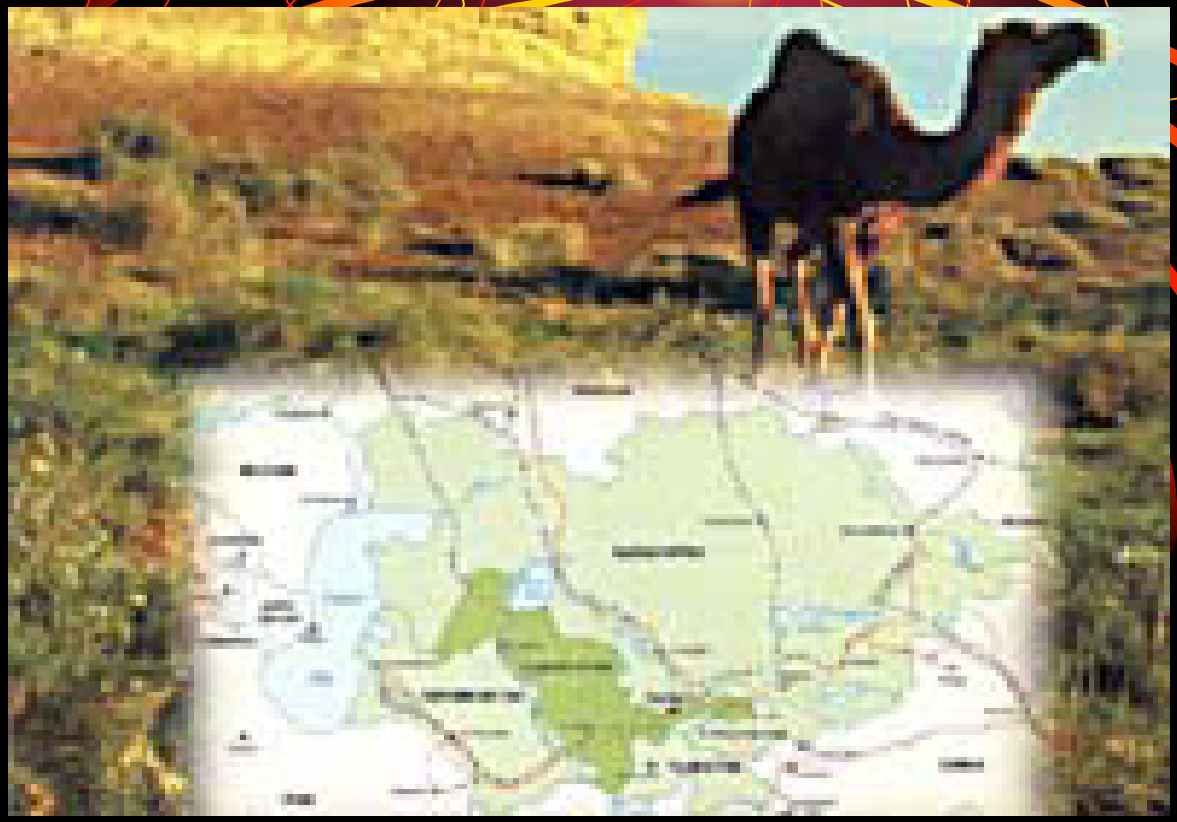
KOREA GAS CORPORATION

KOGAS

PROPOSED INVESTMENT IN UZBEKISTAN – $ 950 M.

Romen A. Zakhidov

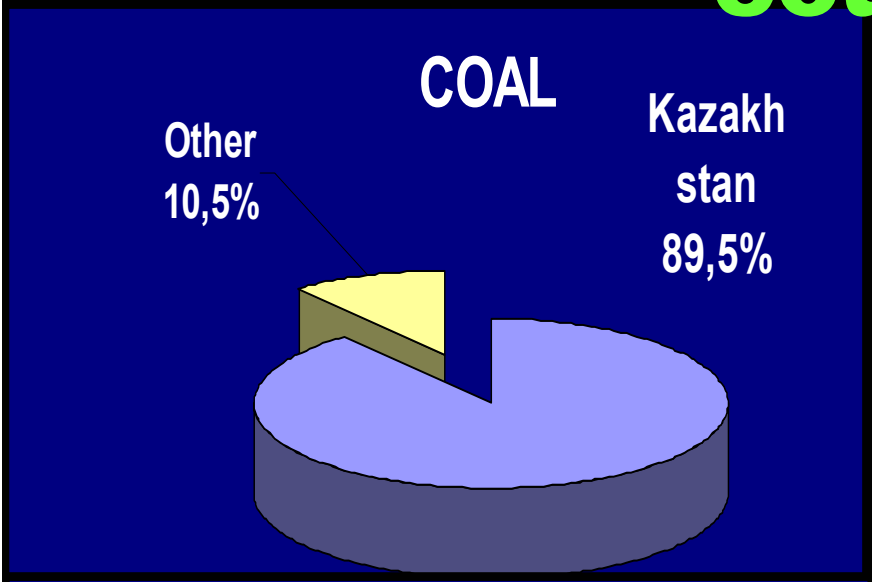
Power of the Central Asian countries: condition, prospects of development and international cooperation.

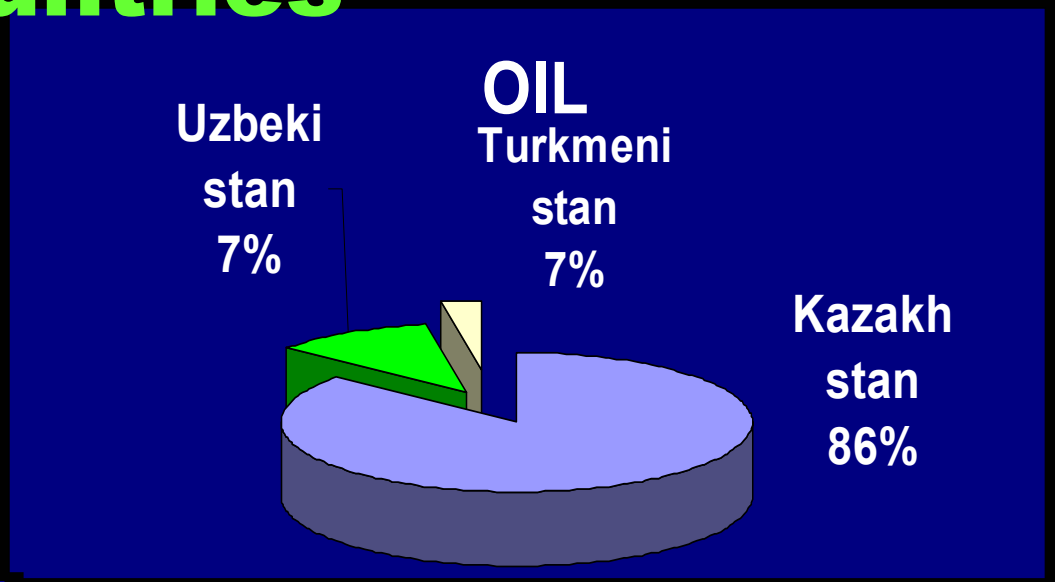


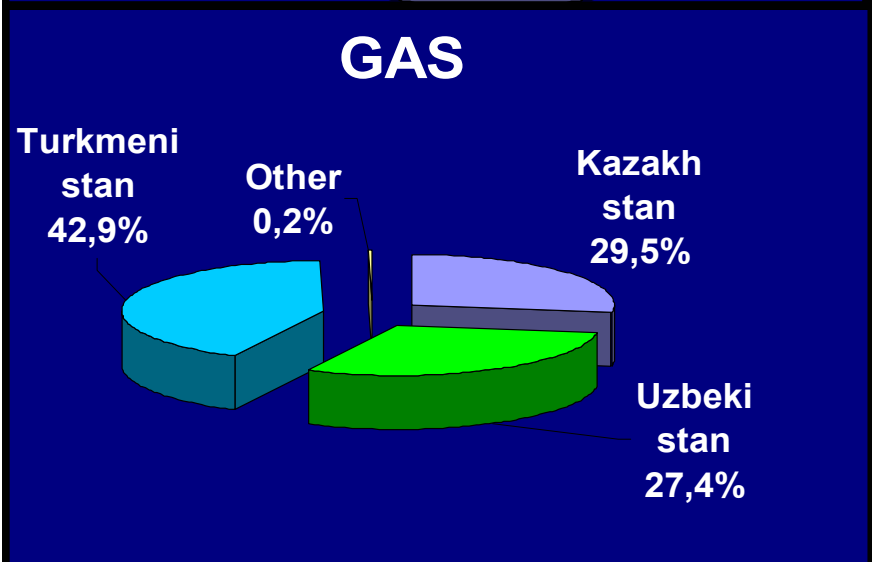
The explored energy reserves of the CAR countries

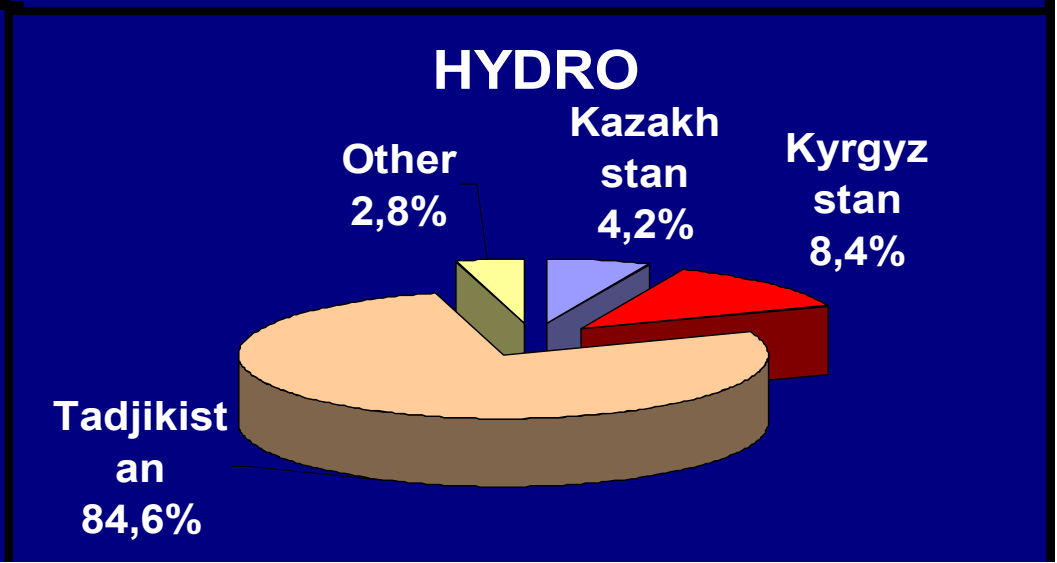
Energy resources / *countries*	Coal	Oil	Gas	Uran	Hydro
	bill.t	bill.t	bill.m^3	thou. t	bill. kWh
Kazakhstan	34,1	4800	2000	601	27
Kyrgyzstan	1,34	11,5	16,54	*	52
Tajikistan	0,67	5,4	16,8	*	527
Turkmenistan	*	85	2900	*	2
Uzbekistan	1,95	82	1850	83,7	15
CAR	38,06	5183,9	6773,3	684,7	623

Distribution of stocks of primary power resources on the CAR countries









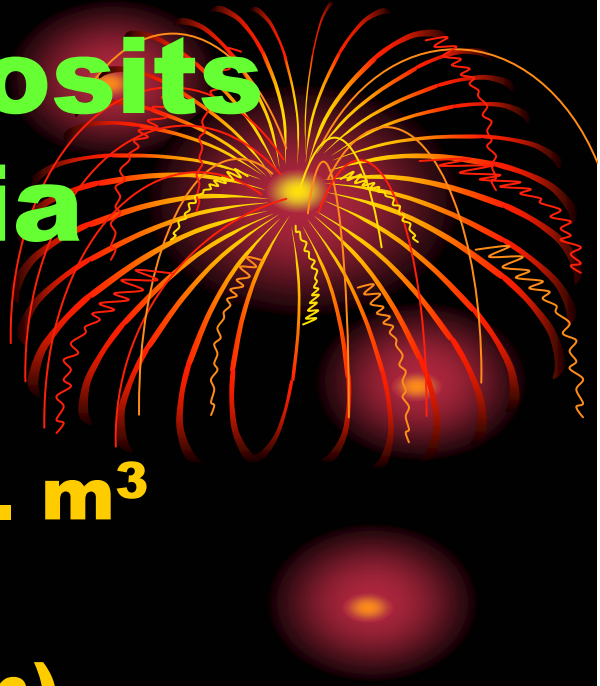
Export of fuel-energy resources in the CAR countries (2006)

Energy resources	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	CAR
Coal, million t	*23,0*	*	*	*	*	*23,0*
Oil, *billion.t*	53,5	-0,1	- 0,5	4,6	*	57,5
Gas, Billion m^3	*13,7*	*-0,6*	*-1,2*	*60,0*	*13,4*	*85,3*
Electr. energy, GWh	*4 ,0*	*2,7*	*	*0,8*	*0,3*	*7,8*

Biggest oil deposits in Central Asia

1. Tengiz deposit (Kazakhstan)
reserves – 6,9 bil.barr.
output - 550 thousand barr. per day
2. Karachaganak deposit (Kazakhstan)
reserves – 8-9 bil.barr.
output - .....thousand barr. per day
3. Kashagan deposit (Kazakhstan)
reserves – more than 10 bil.barr.
output - 1.5 M. barr. per day by 2019
Investment - $ 31 bil.
4. Kurmangazi deposit (Kazakhstan)
Planned output – 2 M. bar. per day
Investment - $ 23 bil.

Biggest gas deposits in Central Asia



1. Dovletobad deposit – 3-4 trln. m^3 (Turkmeniya)
2. South Iolotan deposit(Osman), (Turkmeniya)
   Reserves - 4-7 trln. m^3
3. Sag Kenar deposit (route to China)
   Reserve – 1.7 trln. m^3

Oil export routes

- **Existing routes**

1. **Russian- Kazakhstan**

   “Transneft” (rus.company) oil pipelines. Capacity (C) – 18 M.ton

2. **Caspian consortsium pipelines (CCP) Atyrau – Novorossiysk (from Tengiz d.)**

   C_{ex}=25.5 M.ton C_{pl}=67 M.ton

3. **Pipeline Atasu (Kazakhstan) – Alashankou (China) C=20 M.ton**

Project routes

I. a) Kazakhstan – Azerbaijan (Baku), using tankers

b) Baku – Tbilisi – Djeikhan (BTD), C=1 M.barr. per day

II. Kazakhstan, Turkmenistan – Iran (Neka), using tankers

Gas export routes

1. Pipeline Central Asia – Center (CAC) (through Uzbekistan)
   C_{ex}~50 bil.m^3, C_{pl}~90 bil.m^3
2. Pipeline Bukhara-Ural (through Uzb.)
3. Pipeline Korpedje (Turkmenia) - Kurt- kui (Iran)
   C_{ex}~8 bil.m^3, C_{pl}~14 bil.m^3

Project pipelines

1. Atcaspian pipeline. Kazakhstan, Turkmenia – Russian C_{pl}~20 bil.m^3 to 2012
   Agreement is signed 12.05.2007
2. Transcaspian pipeline

a) Turkmenia-Azerbaijan

b) Baku-Tbilisi-Erzerum (BTE)
   C_{ex}=6.6 bil.m^3, C_{pl}=20 bil.m^3

c) Erzerum – Europe (project Nabucco), C_{pl}=30 bil.m^3

3. Turkmenia-China (agreement April 2006)
   Put to act 2009 C_{pl}=30 bil.m^3

FOREIGHN INVESTORS

I. Exploration Contracts

1. Gazprom (Russia)

2. CNPC International

3. Petronas Carigali (Malaysia)

4. Korea National Oil Corporation

5. Korea Gas Corporation

II. Production Sharing Agreements

1. Lukoil (Russia)

2. Soyuzneftegaz-Vostok (Russia)

3. International Consortium

III. Joint Ventures

1. JV with Korean Consortium (KOGAS, LOTTE Group, LG International, SK Gas, STX Energy)

2. 14 Joint Ventures in E&P, services

DYNAMICS OF INVESTMENT DEVELOPMENT

$ mln.

Cooperation with KOREA

1. On August 30, 2006, the Republic of Uzbekistan executed a Production Sharing Agreement with the Consortium of Investors comprising Uzbekneftegaz (Uzbekistan), CNPC International Ltd. (China), KNOC Aral Ltd (Korea), LUCOIL OVERSEAS (Russia), PETRONAS CARIGALI (Malaysia) for the Uzbek sector of the Aral sea.
2. Protocol of key principles for the establishment of a joint venture was signed with the Korean Gas Corporation on February 28, 2007, for integrated development of the Surgil field in the Ustyurt region. The total investment – $ 960 M.

   First step- envisions natural gas processing 4 bcm/year to produce high density polyethylene (362 thous. t/year) and

Electric power industry of the CAR countries

- *Existing problems:*
- *High share of the out-of-date equipment (as generating and network);*
- *Greater losses of the electric power by transfer and distribution;*
- *Deficiency of investments;*
- *Falling of solvent demand and taking place non-payments for the delivered electric power.*
- *Structure of the established capacities, GW.*

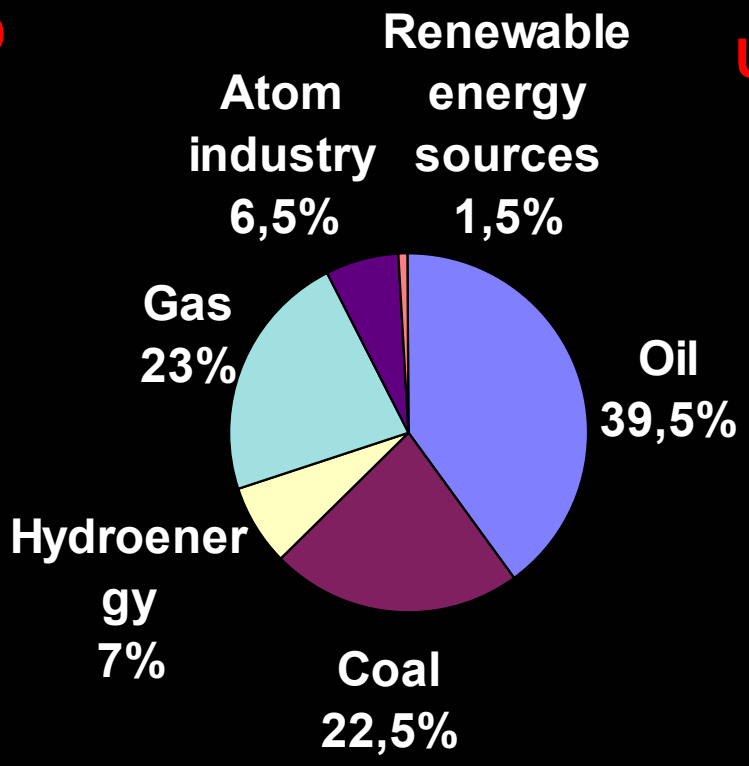
	Kazakh-stan	Kyrgyz-stan	Tadjiki-stan	Turkmeni-stan	Uzbeki-stan	CAR
Electr-stations	18,3	3,74	4,413	2,851	11,583	40,887
Including:						
ThermoPS	15,91	0,738	0,346	2,85	9,844	29,688
%	87,0	19,7	7,84	99,9	85,0	72,6
HydroPS	2,22	2,95	4,067	0,001	1,739	10,977
%	13,0	80,3	92,16	0,01	15,0	27,4

Parallel work of power supply systems of the CAR countries will allow

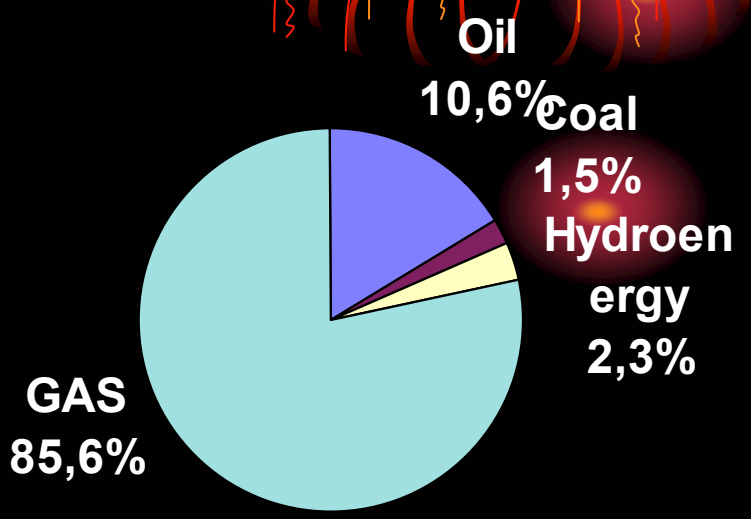
- To provide equation of sources of the electric power and sharing thermo-and hydro stations;
- To raise reliability of supply by the electric power in normal and emergencies;
- To provide standard frequency, levels of pressure, to minimize technical losses of the electric power;
- To increase throughput of electric networks;
- To provide performance of intergovernmental agreements on a

Structure of a power balance

WORLD



UZBEKISTAN



Energy savings measures in power industry

Application gas turbine's and steam gas installations, combinated development of heat and electric energy, increase the factor of extraction of oil and gas and increase energy efficiency of their processing and transportation, enrichment of coal on a place of extraction and introduction of its effective technologies bur ning, reduction of losses for the internal needs, the adjustable electric drive, etc.

Reforming of electric power industry of Uzbekistan.

- Moder nization of the Tashkent thermal power station construction of steam gas installations capacity 370 MW to 2009 the Credit of Japan at a rate of 24 955 million Japanese yens.
- Modernization of a Navoi's thermal power station. Construction modern steam gas installations a capacity 346 MW. A preliminary total cost - 232 million US dollar.
- Construction on the Tashkent thermal power station of three gas turbine installations on 25 MW with a water-heating boiler-utilization. The credit of Japan.
- Transfer of boilers Novo Angren ThPS to all-the-year-round burning of coal
- Construction of 15 small HYDROELECTRIC POWER STATIONS N=420 MW
- Development - 1,3 billion kWh.

Big solar furnace 1 MW, Parkent

SOLAR-WIND COMBINED INSTALLATION, CAPACITY 15 kW.

Solar collector's field (S=1000 m^2) for preliminary heating of water for boiler-house "VODNIK", Tashkent.

THANK YOU FOR ATTENTION!