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**Uzbekistan's Energy Investment  
Policy and Cooperation Strategy  
during the Period of Global  
Financial Crises**

President Islam Karimov

Global financial and  
economic crisis, way and  
measure on its overcoming  
in conditions of Uzbekistan

# The anticrisis program

- **The accelerated realization of modernization, technical and technological reequipment of the enterprises, wide introduction of modern flexible technologies, transition to the international standards of quality**
- **Realization of measures on modernization of electric power industry, reduction of power consumption and introduction of an effective system of energy saving**

# The priority projects

- The programs on realization of the major priority projects directed on modernization, technical and technological updating both cardinal increase of competitiveness and growth of an export potential of economy include about **300 investment projects** in fuel and energy, chemical and oil-and-gas, metallurgical branches, easy and textile industry, industries of building materials both mechanical engineering and other branches of economy on a total sum more than **24 bill. US dollars.**

# **Investment climate in Uzbekistan**

**In the Republic of Uzbekistan the favorable investment climate is created, the wide system of legal guarantees and privileges for the foreign investors, that is caused by political and economic stability.**

# Normative-legal base

## The acts:

- " About guarantees and measures of protection of the rights of the foreign investors ",
- " About the foreign investments ",
- Decree of the President " About additional stimulus and privileges given to the enterprises with the foreign investments ",
- " About additional measures on stimulation of export of production made by the enterprises with the foreign investments ".

# Given privileges

- **Protection of the foreign investments during subsequent of ten years after investment**
- **Clearing on 7-year's term from payment of the tax on the income**
- **Clearing on 5-year's term from payment of the tax on property**
- **Clearing on 5-year's term from payment of customs payments for imported the process equipment, materials and components**

# Activity in fuel-energy complex

- **Exclusive right on realization in the certain territory of search and prospecting works with the subsequent development of any of the revealed deposits by creation of joint venture, on conditions of concession or sharing of production;**
- **Clearing of all kinds of the taxes and payments for the period of realization of prospecting works;**
- **The property right and unobstructed export of a part extracted hydrogen carbons, and also products of their processing on the tolling basis.**



# Uzbekistan-Korea. Cooperation in oil- gas sphere. Last events.

- **2008, May. The agreement « About joint study Uzunkui-Tuarkyr investment block » between National holding company «Uzbekneftegas» and Korean gas corporation (KOGAS).**
- **2008, May. The agreement « About the basic principles of realization of prospecting works on Chust-Pap and Namangan-Tergachin investment blocks of the Fergana region of Republic of Uzbekistan », with the Korean National petroleum corporation (KNOC).**
- **2008, November. The agreement « About realization of prospecting works on Namangan-Tergachin and Chust-Pap investment blocks of the Fergana region of Republic of Uzbekistan » with the Korean national petroleum corporation (KNOC).**

# Uzbekistan-Korea. Cooperation in oil- gas sphere. Last events.

- **2008, December. Within the framework of the second Forum of cooperation of Republic Korea and countries of Central Asia the Memorandum of mutual understanding ” between National holding company «Uzbekneftegas» and company «DongHo ENC» (Korea) is signed.**
- **Introduction of the newest technologies in area of gas distribution, electronic systems of the account of natural gas and software.**

# Electric power industry of Uzbekistan

**The program of modernization,  
technical and technological  
reequipment of electropower  
branch                      on 2009 -2015.**

# The current condition of energy system

## Thermal Power Stations



- The established capacity - 10 619 MW
- Volume of manufacture - 42,9 bill. kWh

# The current condition of energy system

## Hydro Power Stations



The established capacity – 1419MW

Volume of manufacture - 5,1 bill. kWh

# The current condition of energy system

## Electrical network



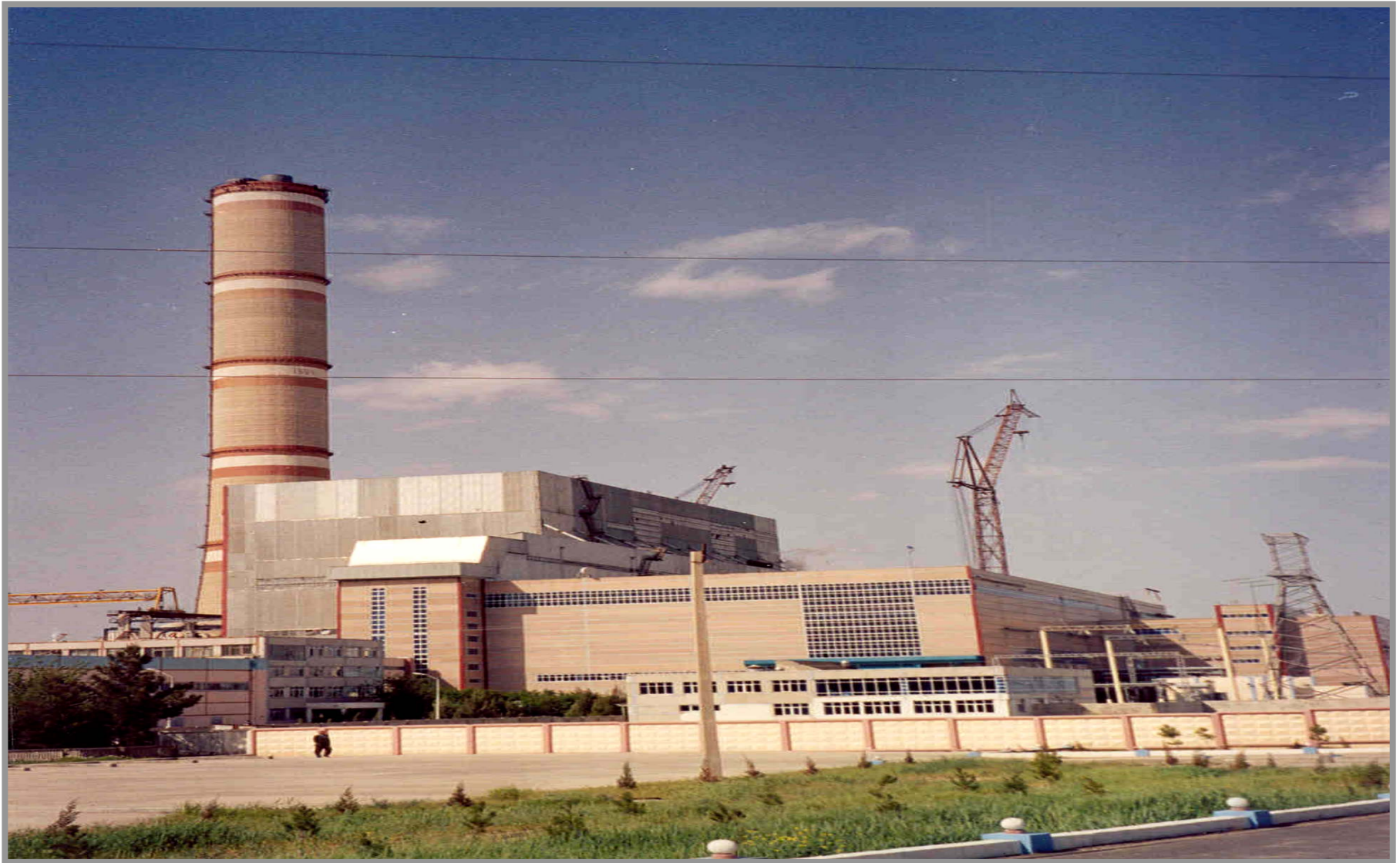
Extent - 236,8 thousand km

Transformer capacity -37,7 mln. kVA

# The working Programs

- The program of development and reconstruction of generating capacities in power of Republic of Uzbekistan for 2001-2010 years:  
In a stage of realization - 8 projects
- The program of reduction of losses by manufacture, transportation and consumption of electrical energy  
In a stage of realization - 4 projects
- The program of modernization, technical and technological reequipment of electropower branch on 2009-2015 yy.

# Implementation of the block № 1, Talimarjan TPS, 800 MW, 2005 y..





# What it gives?

- Reduction of deficiency of capacity in Samarkand-Bukhara energy unit and unloading of transit on line Syrdaria - Samarkand
- Decrease of the specific charges of fuel in energy system and economy in an annual visial 270 thousand t.c.e., that is equivalent 230 mln. cub.m of gas
- Liquidation of deficiency of capacity at hours of a maximum o'clock
- Maintenance of manufacture of the electric power in immediate proximity from a place of production of gas, reduction of losses of gas at its transportation

# Reconstruction of power blocks № 7 and № 8 of Syr-Darya TPS



1. Increase of stability and reliability of energy blocks
2. Introduction of the automated system of management
3. Decrease of the specific charges of fuel on holiday of the electric power on blocks with 384 g/kWh up to 343 g/kWh

4. Annual economy of fuel - 125 thousand t.c.e.

# Results of realization of the Program of development and reconstruction of generating capacities in power of Republic of Uzbekistan

- Increase of capacity of thermal power stations on 920 MW
- Input of new generating capacities - 800 MW, transformer capacities - 1052 MVA, transmission lines - 343 kms
- Economy of the electric power - 1400 mln. kWh, fuel - 650 thousand here and thermal energy - 64,5 thousand Gkal
- Reduction of the technological losses on transport from 14,1 % up to 13,5 % (1290 mln. kWh)
- Maintenance in complete volume of needs in electrical energy of branches of economy and population of Republic

# Modernization and technological reequipment of power stations

## Modernization Tashkent TPS with installation VGI

The purpose of the project: introduction of modern highly effective technologies of energy production

Settlement cost: 281,8 mln.\$

– CMW - 84,5 mln. \$

– Equipment - 197,3mln.\$

**Capacity: 370 MW**



Manufacture of electro energy: 2,8 bln. kWh.

Economy of power resources: 350 mln. cub. m. of gas

Term of construction: 2007-2011yy

Stage of the project: the feasibility REPORT is authorized in 2002

Sources of financing:

Own means - 34,5 mln.\$ ,

Extra (Japanese bank) - 247,3 mln.\$

## Before modernization

Capacity: 1860 MW

Manufacture: 5,87 bil. kWh

The specific charge of fuel: 399,6 g/kWh

## After modernization

Capacity: 2230 MW

Manufacture: 6,27 bil. kWh

The specific charge of fuel: 343,8

# Modernization and technological reequipment of power stations



## Before modernization

Capacity: 1250 MW

Manufacture: 6,3 bil. kWh

The specific charge of fuel:  
410,6 g/kWh

## After modernization

Capacity: 1546 MW (in view of  
dismantle 50 MW)

Manufacture: 6,9 bill. kWh

The specific charge of fuel: 368,7  
g/kWh

## Modernization Navoi TPS with installation VGI

The purpose of the project:  
introduction of modern highly  
effective technologies of energy  
production

Settlement cost: 272 mln. \$.

– CMW - 93,9 mln. \$.

– Equipment - 178,1 mln.\$

Capacity: 346 MW

Manufacture of the electric power:  
2,65 bill. kWh.

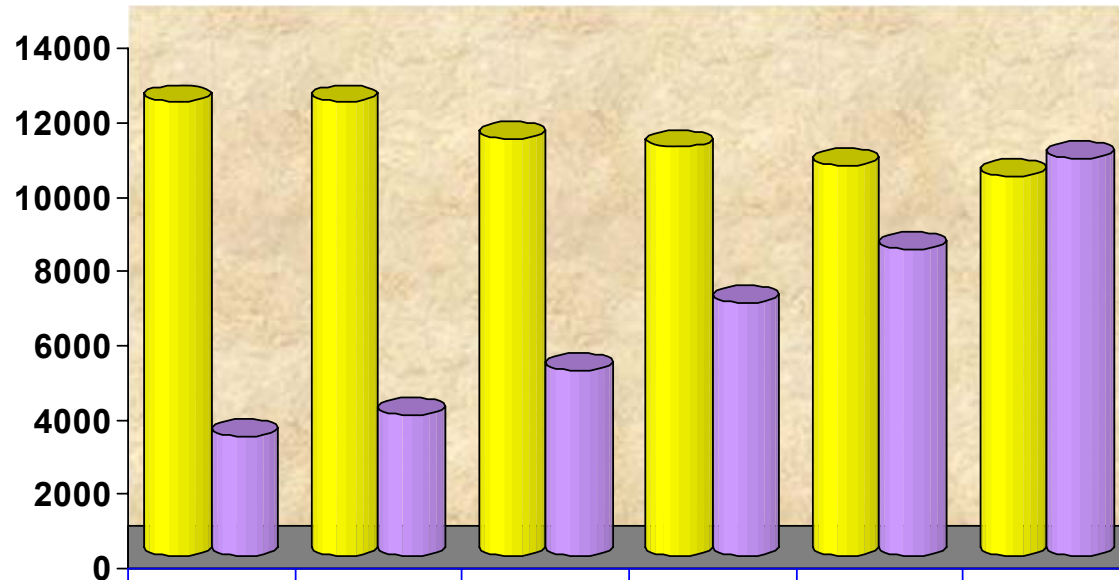
Economy of power resources: 340  
mln. cub. m. of gas

Term of construction: 2010-2012 yy

Stage of the project: development  
technical documantation in 2009.

# Replacement of natural gas with increase of a share of burning of coal in New - Angren TPS

For the period 2007- 2012 yy economy of gas is 2119 mln.cub.m



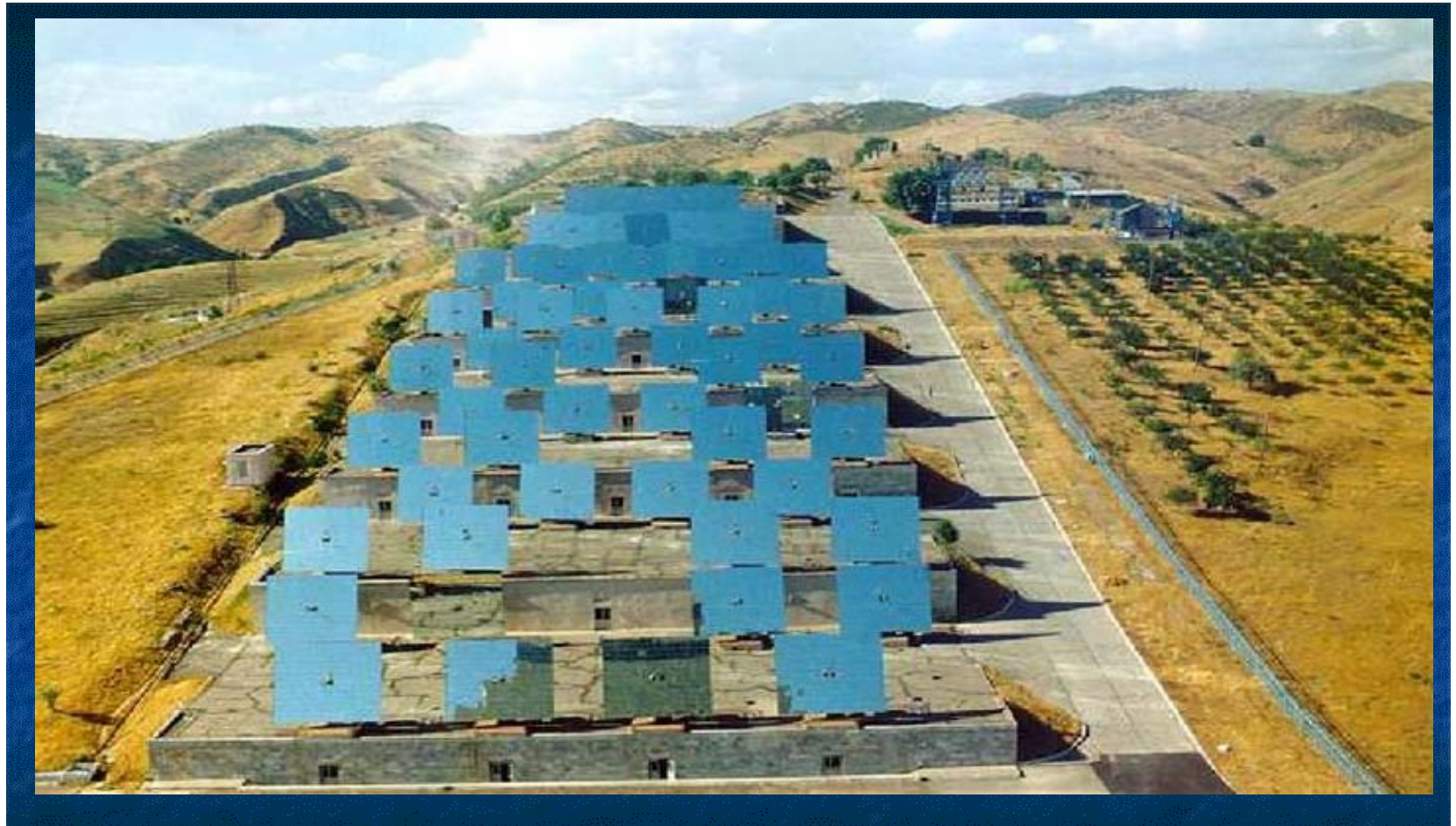
	2007	2008	2009	2010	2011	2012
■ Reduction of gas mln.cub.m.	12 200	12 200	11 200	11 000	10 500	10 200
■ Increase of coal, thousand ton	3 230	3 800	5 000	6 800	8 250	10 700

# RENEWABLES IN UZBEKISTAN

## Big solar furnace 1 MW, Parkent



# Common view of heliostat's field





# Ceramic wares, produced on Big Solar Furnace





Sterling's engine  
 $N=1\text{kW}$  , solar  
concentrator  
 $d=5\text{ m}$

# SOLAR-WIND COMBINED INSTALLATION, CAPACITY 15 kW.



**Solar collector's field ( $S=10000 \text{ m}^2$ ) for preliminary heating of water for boiler-house "VODNIK", Tashkent.**



# Solar collector's field ( $S=250 \text{ m}^2$ ) for boiler-house Agalyk, Samarkand province.



# PV installation for shepherd's family .



# Biogas installation



# Micro Hydro Power Station





THANK YOU FOR  
ATTENTION!