WATER AND ENERGY RESOURCES OF CENTRAL ASIA
REFORMING THE WATER MANAGEMENT SYSTEM

- Achieving stable water supply
- Equitable and fair distribution of water resources
- Implementation of the principles of democratic water management
- Improving the productivity of water and land use
- Solving some parts of social problems
WATER RESOURCES IN THE ARAL SEA BASIN
MAIN RIVER BASINS IN TAJIKISTAN

- ozero и водохранилища
- главные реки
- месяц наибольшего речного стока
- участки рек с зарегулированным стоком

Источник: Главтаджикидимет (А. Яблоков, Джонсон)
SPECIFIC PRIORITIES IN THE FUEL AND ENERGY COMPLEX

Reliable energy supply of the country's economy

Transition of the country's hydropower industry to the budget-forming industry

Transition to the leaders in terms of the efficiency of development and use of the country's energy potential

Development of small hydropower and other RES (Renewable Energy Sources)
THE LARGEST CONSUMERS OF ENERGY

Mining industry

- Ore beneficiation process
- Ore grinding and concentrate production
- Primary ore processing
- Metal refining
GREENHOUSE GAS EMISSIONS

Methane - is a strong greenhouse gas found in coal deposits.

Greenhouse gas emissions

in the mining industry - 1.8%
in the production of coking coal and the steel industry - 7-8%
associated with the production of iron and steel

The steel industry is looking for ways to produce steel with less carbon emissions
THE CONCEPT OF USING NATURAL RESOURCE POTENTIAL IN A MARKET ECONOMY

- Natural resource potential
  - Theoretical aspects of the use of natural resource potential
  - Practical use of natural resource potential
    - Technological aspects of the use of natural resource potential (NRP)
      - Optimal NRP control
        - International practice for the effective use of NRP
        - NRP Sustainability Planning
        - Legal basis for the use of the NRP
        - Fundamentals of management in the use of NRP
        - Regional features of the use of NRP
        - Economic bases of use of NRP
        - Informational aspects of the use of NRP
        - Environmental aspects of the use of NRP
DEVELOPMENT PRIORITIES

Mining industry

Enterprises

Non-ferrous and ferrous metallurgy

Building materials industry

Chemical industry

Energy

Building the small hydropower plants

Financial recovery of the energy system

Energy sector restructuring

Implementation of energy saving and energy efficiency measures
MINING INDUSTRY AND POLICY IMPACT

Growth potential and equitable distribution of benefits

- Limiting the impact of natural resource extraction on the degree of price volatility
- Preventing the development of the mining industry at the expense of development in other sectors
- Creation of conditions for the redistribution in society of the proceeds of this industry
OPPORTUNITIES AND CHALLENGES IN THE EXTRACTION OF RAW MATERIALS

Opportunities

Growth momentum

Economic development

Problems

Increases macroeconomic volatility

Reduces incentives to invest in infrastructure and human capital outside of the mining industry

Put pressure on economic and political structures
INDUSTRIAL DEVELOPMENT SCENARIO

Assumes

- Implementation of existing or already launched energy and infrastructure projects
- Rational use of land, water, energy and other resources
- Restoration of existing and commissioning of new production facilities

National economy growth driver

- Accelerated growth of industry based on the commissioning of new capacities for the production of electricity and mining
- Modernization of light and food industry
- Formation of domestic ferrous and further development of non-ferrous metallurgy
- Development of the industry of building materials, light and food industries
CONDUCTING EXPLORATION WORK BY STAGES

Forecast resources
P1, P2, P3

Regional and survey works

Geologicaleconomic assessment predictive resources.

Promising resources
C2, P1

Stage 4. Search and evaluation work

Technical and economic consideration.

Proved and Probable Reserves
C1, C2

Stage 5. Preliminary research

Temporary conditions and feasibility report. Decision to carry out detailed research

Industrial reserves
A, B, C1

Stage 6. Detailed research

Feasibility studies of permanent conditions. Approval of reserves in the GKZ. Transfer of the deposit for development

Produced reserves
A, B, C1

Stages 7 and 8. Additional exploration and operational exploration

Production and fulfilment of the development conditions
Comparison of UNFC and classification of resources and reserves of the Republic of Tajikistan according to the degree of geological exploration (G-axis)

**CATEGORY**

Deposit volumes that can be estimated

- **with a high degree of reliability**
  - **UNFC**: G1
  - **Tajikistan**: A, B, C1

- **with medium degree of reliability**
  - **UNFC**: G2
  - **Tajikistan**: C1, C2 (ratio 50 to 50%)

- **With a low degree of reliability**
  - **UNFC**: G3
  - **Tajikistan**: C1 < 50%, C2 > 50%

- **Estimated volumes (potential deposit) that are based on circumstantial evidence**
  - **UNFC**: G4
  - **Tajikistan**: C3, P1, P2, P3
THANK YOU FOR ATTENTION!