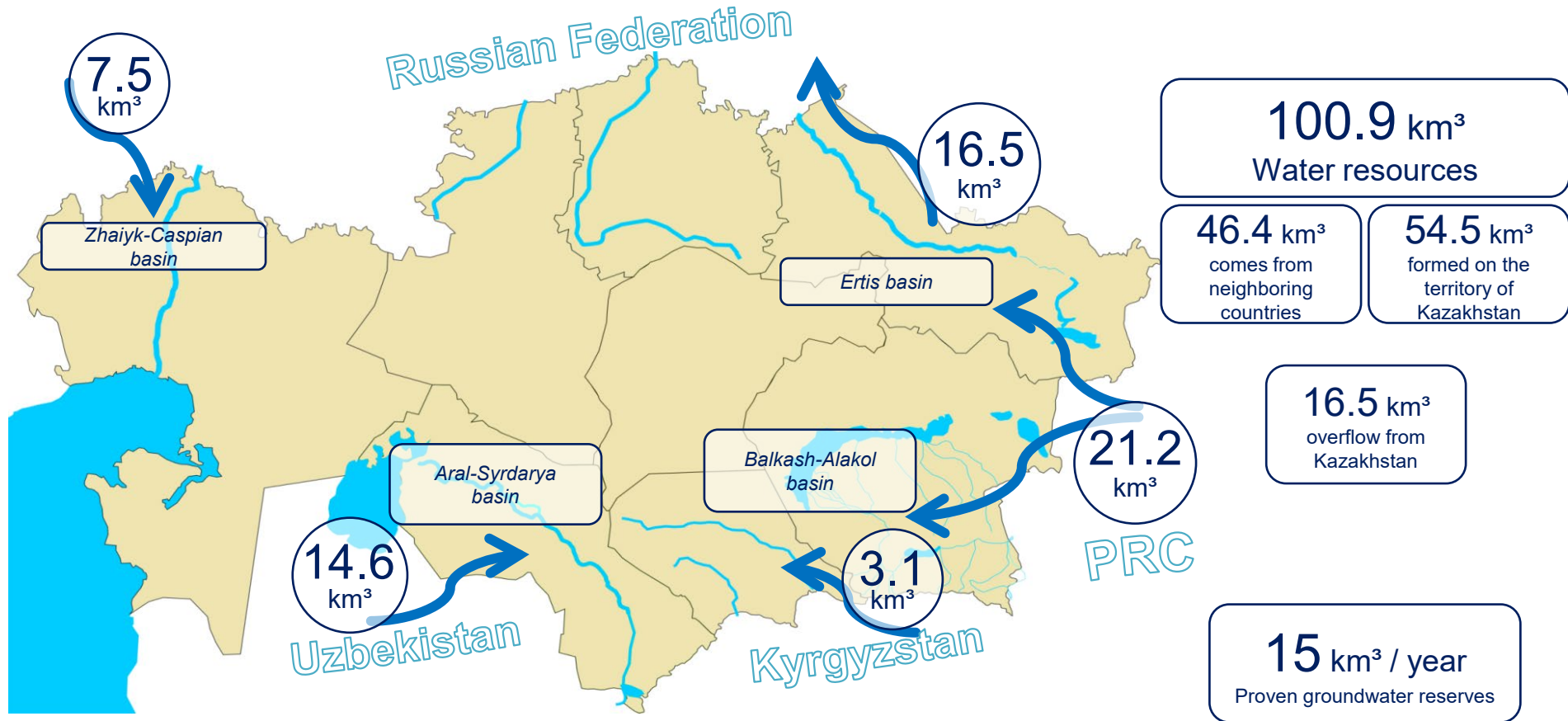




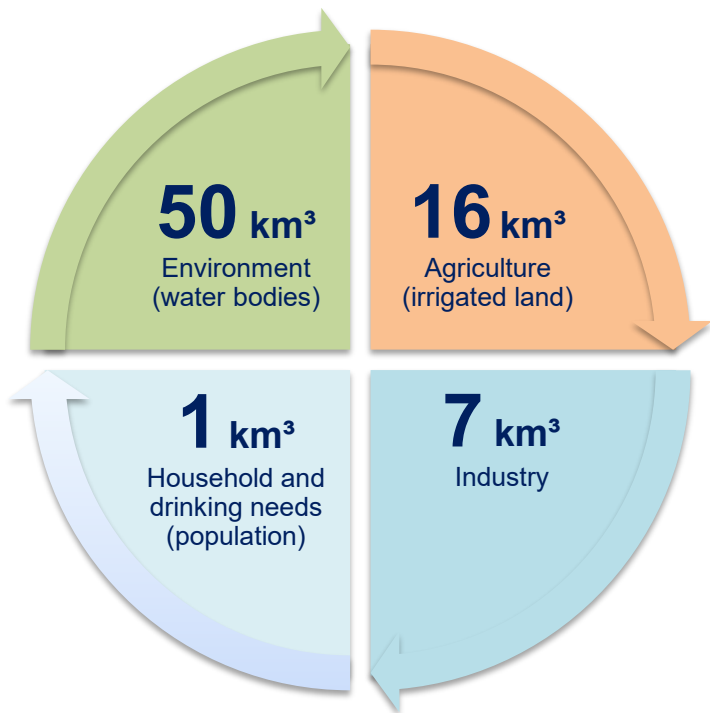
Water Resources Management in Kazakhstan

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Water resources of the Republic of Kazakhstan



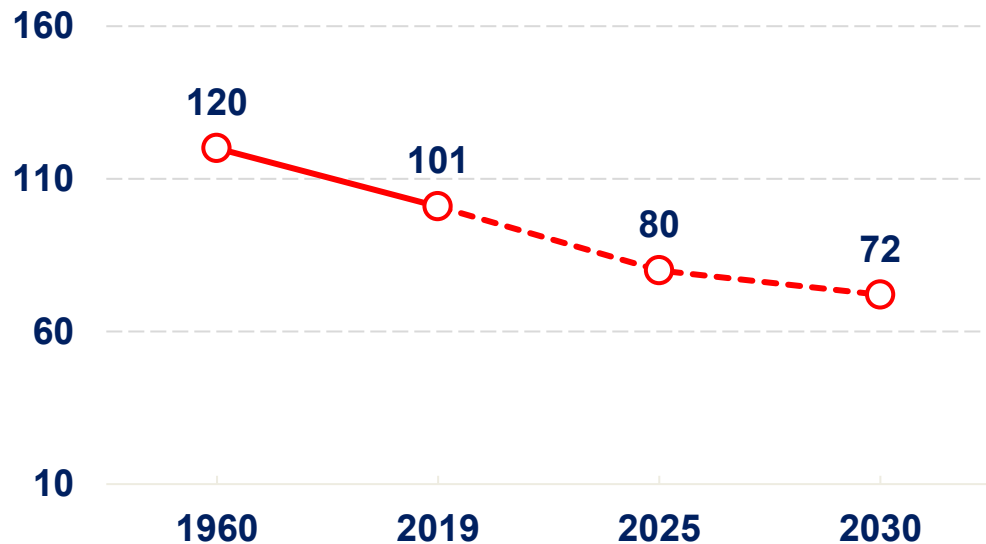
Balance of water resources of the Republic of Kazakhstan



24 km³
Water intake

64% – agriculture
28% – industry

River flow volume, km³



*** According to the Institute of World Resources, the countries of the Central Asian region are classified as having a high level of water stress, while the Republic of Kazakhstan is classified as a medium-high level.*

Water supply problems

Country's population

- Provision of quality drinking water;
- Lack of irrigation water during the growing season, especially in the southern regions.

Environment

- Poor environment (Aral, Balkhash, Ural);
- Dependence of the ecological situation on the water policy of neighboring states (CA, PRC, RF);
- Pollution of water bodies by consumption discharges;
- Depletion of water bodies as a result of wasteful use of water resources.

Country's economy

- Moral and physical deterioration of water infrastructure;
- Insufficient protection from flood waters and low water levels;
- Low volumes of recycled water (recirculation for cleaning purposes) in industry.

Goals and objectives of the national project

GOALS

- ❑ Guaranteed provision of water resources for sustainable development of the Republic of Kazakhstan;
- ❑ Conservation and restoration of water bodies to a state that provides environmentally friendly conditions for the population and the economy.

OBJECTIVES

- ❑ Ensuring the safety of aquatic ecological systems;
- ❑ Guaranteed provision of the population, environment and sectors of the economy with water through the implementation of water conservation measures and increasing the volume of available water resources;
- ❑ Improving the efficiency of water resources management.

The main directions of the national project



1. International cooperation



2. Updating the legal framework



3. Institutional reform



4. Modernization and reconstruction of water infrastructure



5. Water market research



6. Digitalization, “Smart Water”, water conservation



7. Sustainable use of water resources



8. Training of specialists and scientific support



9. PPP development



10. Implementation of global national projects

The main directions of the national project

1. International cooperation

- Improvement of the mechanism of water and energy cooperation;
- Development and conclusion of new intergovernmental documents;
- Formation of professional negotiating groups in order to improve the negotiating position.

2. Updating the legal framework

- Development of a draft strategy for water security of the Republic of Kazakhstan;
- Endowing the CWR MEGPR with the function of an industry tariff regulator (except for drinking water supply);
- Harmonization of the water strategy and program with the UN Sustainable Development Goals;
- Adoption of a package of draft laws:
 - ❖ Water Code;
 - ❖ On the Safety of Hydraulic Structures;
 - ❖ On Irrigation and Drainage;
 - ❖ On Drinking Water Supply and Sewerage;
 - ❖ On Associations of Water Users.

3. Institutional reform

- Reorganization of RSE Kazvodkhoz into JSC;
- Reorganization of RSE Nurinsky Group Water Supply into JSC for group drinking water supply;
- Transformation of SI Kazagromeliovodkhoz into Institute for the Study of Water Problems JSC;
- Organization of the Expertise and Laboratory Analysis Service;
- Organization of the Service for the Supervision of the Technical Condition of Hydraulic Structures.

The main directions of the national project

4. Modernization and reconstruction of water infrastructure

- Construction of new and reconstruction of existing water facilities.

5. Water market research

- Study of international best practices of water market creation (Australia, France).

6. Digitalization, “Smart Water”, water conservation

- Implementation of an automated control and monitoring system;
- Automation of hydraulic structures;
- Digitalization of Kazakhstan's water sector;
- Implementation of the “Smart Water” project;
- Implementation of a geographic information system to monitor facilities;
- Creation of a single dispatch center in Nur-Sultan.

The main directions of the national project

7. Sustainable use of water resources

- Widespread implementation of water conservation policy based on modern technologies;
- Ensuring wide awareness and involvement of civil society and business;
- Creation of a flood management system.

8. Training of specialists and scientific support

- Revision of educational standards for water specialists;
- Working through the opening of a specialized university to train specialists;
- Allocation of international grants to leading educational institutions of the world;
- Opening of the design and engineering bureau at the national operator;
- Strengthening scientific software, including on the basis of Kazakh Scientific Research Institute of Water Economy.

9. PPP development (directions)

- Construction, reconstruction, modernization;
- Trust management of state property (or lease);
- Service or leasing PPP projects;
- Increasing the investment attractiveness of infrastructure.

10. Global national projects

- Implementation of additional major projects to redistribute water resources to water-deficient basins of the RoK.

Target indicators of the national project by 2030

1

Preservation of water balance at the level of **100** km³ by increasing additional surface water resources: construction of new reservoirs for **5-7** km³, water conservation up to **5** km³, use of groundwater up to **15** km³.

2

Decrease in water consumption per unit of GDP from **91.2** to **73.0** m³ / thous. US dollars.

3

Building **26** new hydraulic structures.

4

Reconstruction of **182** republican, **300** communal hydraulic structures.

5

Construction of new irrigation systems to increase irrigated land from **1.7** to **3.0** million hectares; increase in the length of the lined main and distribution channels from **3,423** to **19,000** km.

6

Improvement of material and technical equipment of basin inspections up to **100%**.

7

Increase in forest cover of catchment areas with **1.0** to **200** thousand hectares



Thank you for attention!

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