

A scenic landscape photograph of a mountain valley. In the foreground, a river flows through a valley, reflecting the sky. The middle ground shows a wide, flat valley floor with patches of snow and green vegetation. In the background, majestic mountains rise, their peaks covered in snow. The sky is a clear, pale blue.

**OSCE Energy Security Conference**

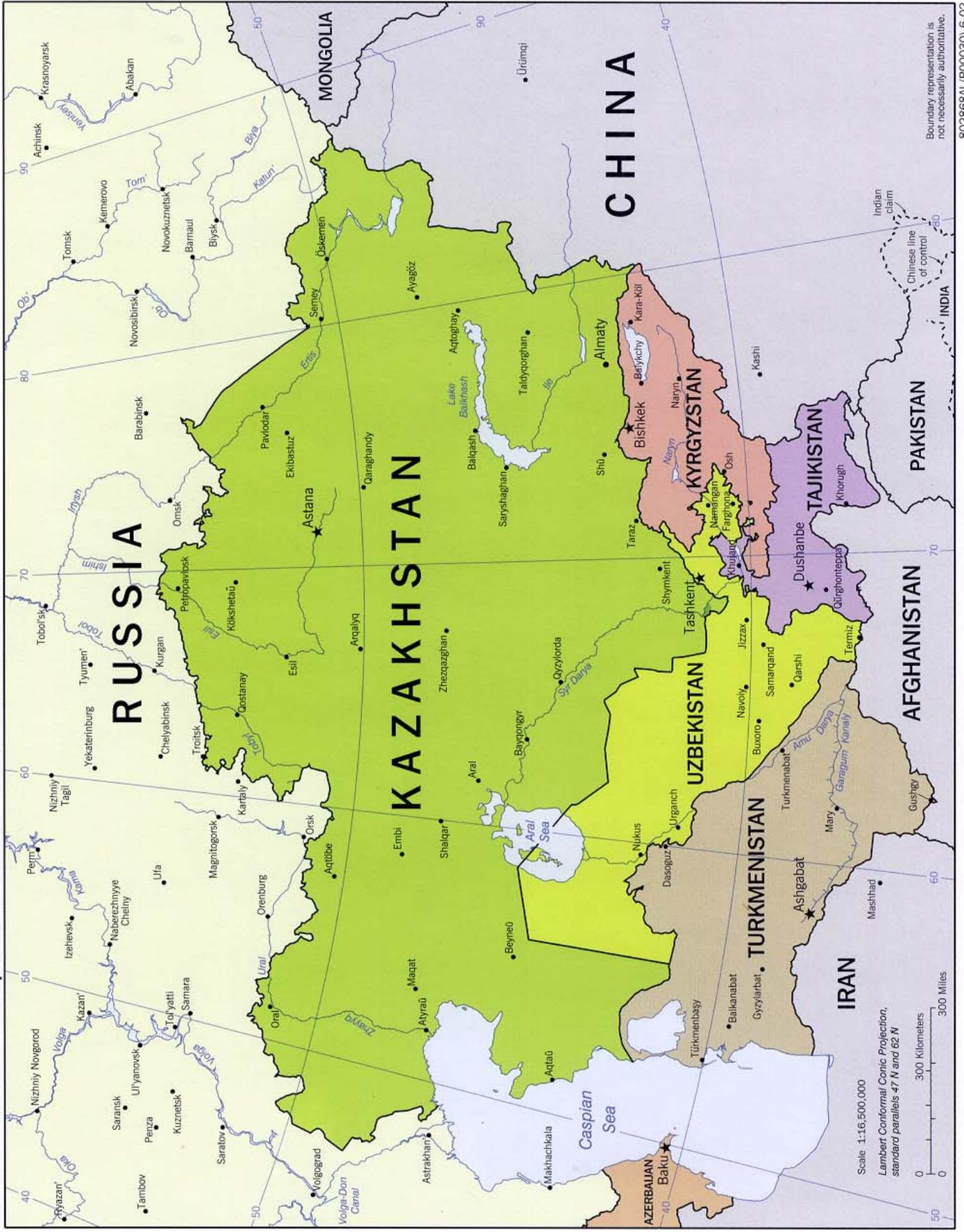
**“Strengthening regional cooperation in Central Asia for promoting stable & reliable energy within Eurasia”, Ashgabad, 3-4 May 2010**

# **Energy – Water Nexus in Central Asia: Evolution of Regional Legal & Institutional Frameworks**

**Sergei Vinogradov**

**Centre for Energy, Petroleum & Mineral Law & Policy, University of Dundee**

# Commonwealth of Independent States - Central Asian States

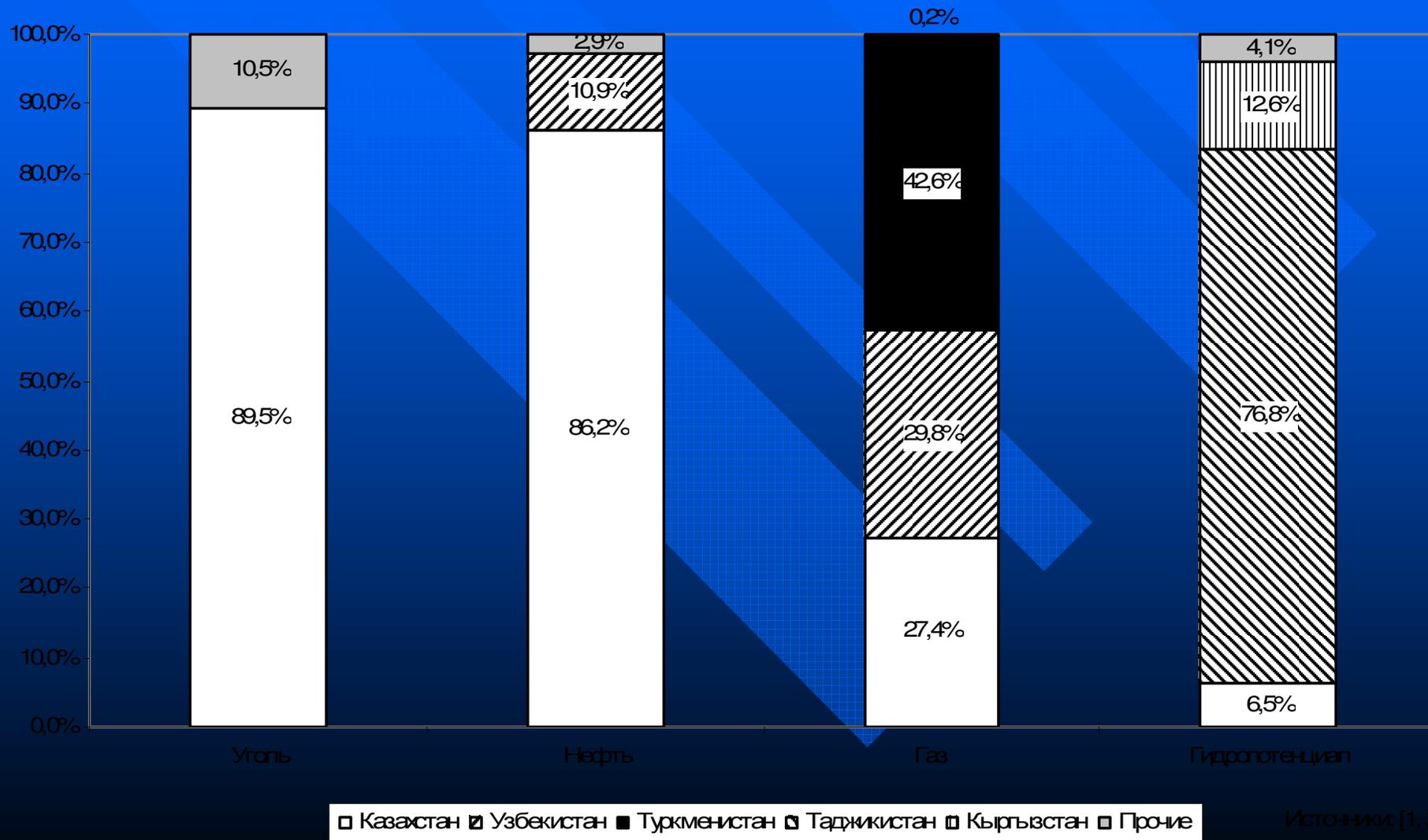


# Energy security in Central Asia

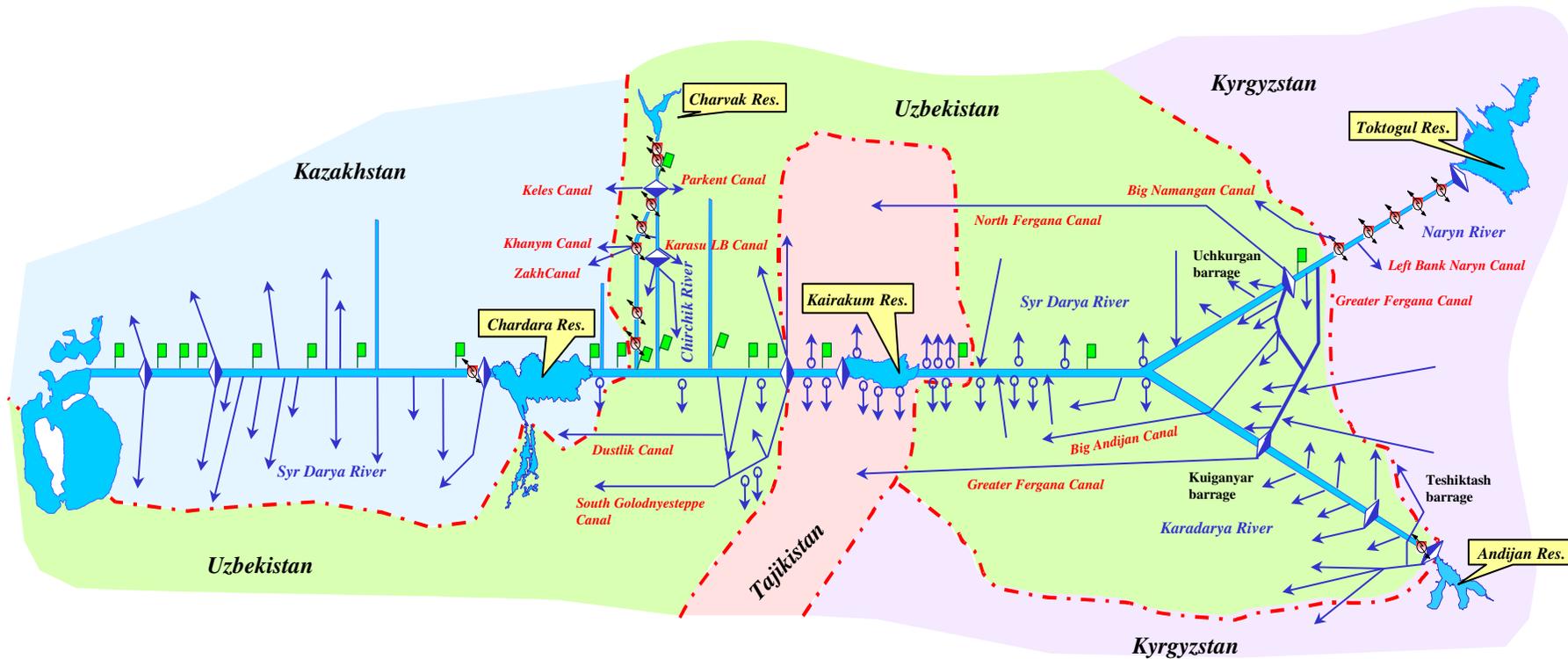
- External dimension – source of energy resources for Europe & North-Western Asia
- Internal dimension – **regional energy imbalance**
- Regional security discourse – focus on transboundary water resources
  - Water security – equitable & efficient use of transboundary waters
  - Energy security – reliable and adequate energy supply
  - Food security
  - Environmental security
- The Syrdarya and Amudarya rivers account for almost 90% of total available water resources
- Growing tension over water utilization: Downstream countries' use (irrigated agriculture) vs. Upstream countries' use (hydro-power generation)
  - Operational regime of the Toktogul reservoir (Kyrgyzstan)
  - Construction of the Rogun dam (Tajikistan), Kambarata (Kyrgyzstan)

# Regional energy imbalance

Allocation of the confirmed reserves of mineral energy resources and hydro-energy potential in the CA region



# Schematic Layout of the Syrdarya Basin



<b>KEY :</b>	Dam or barrage	Hydropost	Canal	Pump station	Hydro-electro station
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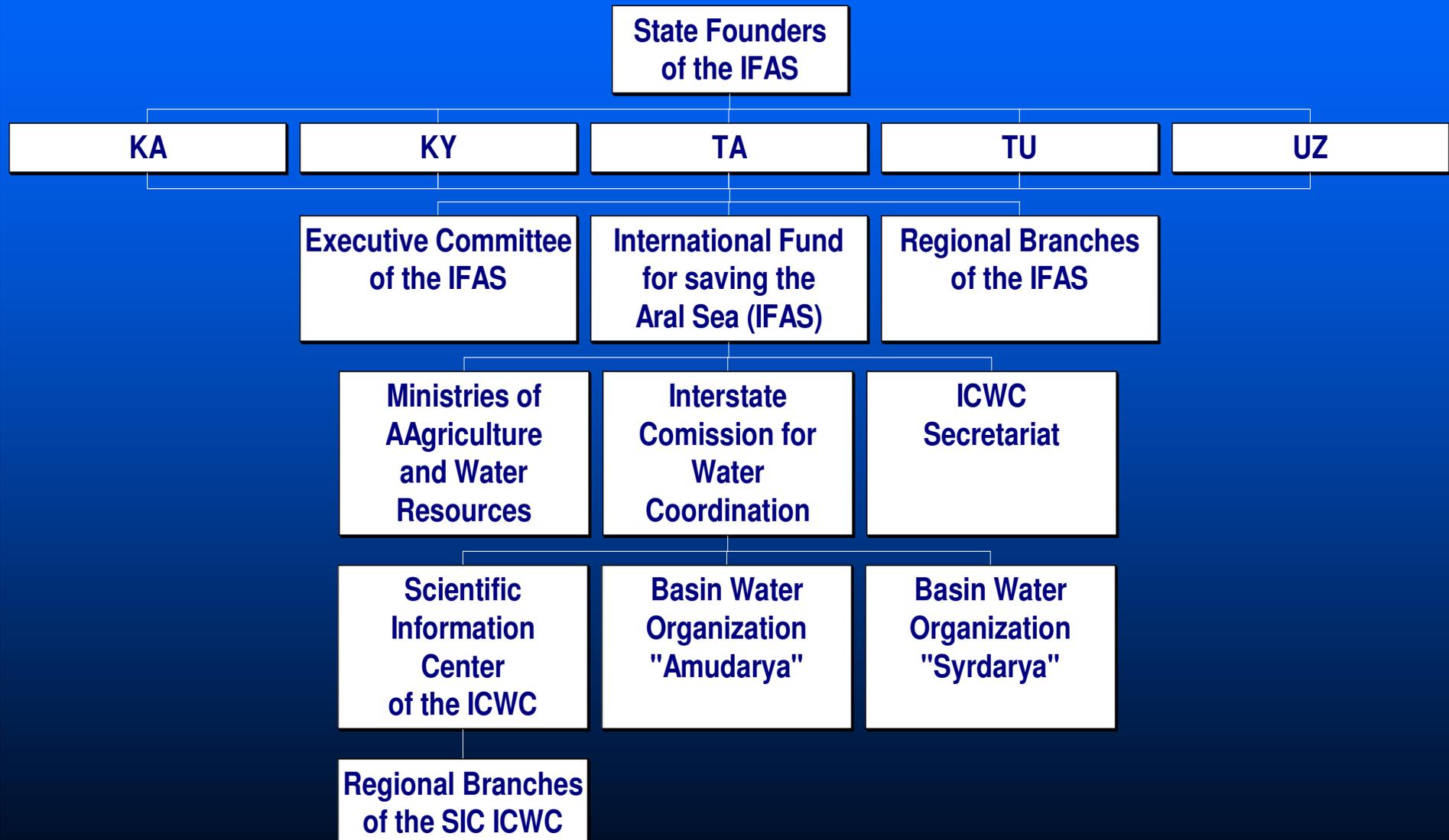
# Regional developments since 1992

- 1992 Agreement on cooperation in the utilization of interstate water resources:
  - “Conservation” of the pre-independence regime of water use
  - Creation of the Interstate Commission on Water Coordination (ICWC)
- 1993 Agreement on joint actions in addressing the Aral Sea problems:
  - New regional institutional mechanism (ICAS → Int’l Fund AS)
- 1996 Agreement on the use of water & energy resources, construction & exploitation of gas pipelines in the CA region (Kaz., Kyrg., Uzb.)
- 1998 Agreement on the use of the fuel-energy and water resources of the Syrdarya river basin: Kaz., Uzb. & Kyrg. (+Tajikistan)
- International & supra-regional dimensions:
  - WB: ASBP, EU: WARMAP, UN ECE: SPECA
  - Eurasian Economic Community (EurAsEC)

# UN ECE

- **SPECA: Special Programme for the Economies of CA**
  - Theme “Water & Energy” – among the initial work areas
  - Objective: to promote efficient use of water & energy resources on mutually agreed & beneficial terms
  - Project Working Group (PWG) on Water & Energy Resources
    - » Strategy for the Efficient Use of Water & Energy Resources
    - » Baku Initiative on Energy Efficiency & Conservation
    - » Development of cooperation on Chu & Talas rivers (with OSCE)
    - » **Dam safety in CA (international agreement and guidelines)**
- **Regional dialogue & cooperation in transboundary water resources management:**
  - Improvement of the regional legal & institutional framework

# Regional Institutional Structure



# EuRasEC: Common Energy Policy

- **Regional economic integration organization (Treaty of 2000):** RF, Belarus, Kazakhstan, Kyrgyzstan, Tajikistan + Uzbekistan (suspended)
- **The Fundamentals of the Energy Policy (28.02.2003)**
  - Policy objective – energy security & energy independence of the member states through the formation of a common energy market
  - Main energy policy aims, principles and directions
  - Policy implementation - Programme of the development of fuel & energy industry of the member states
- **The Concept of the formation of a common energy market**
  - Common market for electricity, oil, gas & coal
  - Harmonization of applicable national regulatory frameworks
  - Gradual liberalization of the energy sector, facilitation of competition
- **Draft Concept of the efficient use of water and energy resources of Central Asia – currently being developed**

# Concept of the Regional Water & Energy Consortium

- First proposed under the Central Asian Cooperation Organization
- Envisaged in the 1998 Syrdarya Agreement
- Inadequacy of the existing institutional framework: ICWC – a purely water-focused mechanism
- ICWC & BVOs – no powers to enforce decisions on water allocations & reservoir operations
- No effective dispute prevention & resolution mechanisms
- Proposed way forward:
  - At the policy level – Interstate Council for Water & Energy (to replace ICWC)
  - At the regulatory level – BVOs as regulators of water infrastructure & reservoir operations
  - Regional electricity market
  - Financial & compensatory mechanisms
  - New power-generating projects (such as Kambarata) – as regional projects
- New legal framework for transboundary river systems & institutional setup

# Main challenges

- How to reconcile conflicting interests: Upstream vs. Downstream?
- How to integrate energy production and transmission and water resource utilization?
- How to manage extremely complex water utilization infrastructure and increase the efficiency of water use?
- How to improve inadequate institutional structure & weak legal and enforcement mechanisms?
- To summarize: Water is the principal factor in achieving regional energy security & sustainability