

### WATER-ENERGY-LAND USE LINKAGES

Nexus solutions for a climate resilient Central Asia

# Financing for water, energy and land-use nexus in Central Asia

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# Multidimensional benefits of water and energy co-operation

### What would effective water-energy co-ordination mean in Central Asia?

- Efficiently managing and using natural resources
- Ensuring equitable sharing of benefits
- Ensuring ecological and social sustainability
- Based on collaboration and shared responsibility among all CA countries towards regional peace and security



#### What are the benefits?

**Economic** 

Social

Environmental and climate

**Political** 



### Examples of multidimensional benefits

#### Types of benefits

#### **Examples**

#### **Economic**

- Regional-level benefit from increased production of crops, electricity, etc.
- Avoided economic losses from water-related natural hazards
- Saved costs of operation of water and energy related institutions,
- Greater access to investments (e.g., joint project development)

#### Social

- Improved access to water and energy resources, including in remote areas
- New employments created by additional investment projects

### Environmental and climate

- Better management and conservation of biodiversity, and mitigation of water and land pollution (e.g., optimal environmental flows)
- Enhanced resilience to compounding climate and other external risks

#### **Political**

- Enhanced political trust among the countries resulting from strengthened transboundary co-operation
- Greater political stability resulting from improved access and availability to affordable energy and water



## What is needed to promote effective water-energy co-ordination?



**Policies** 

Capacities

Technologies

Finance investment

Effective water-energy co-ordination in Central Asia





# What kinds of finance do we need for effective water-energy co-ordination?

#### **Financial needs**

#### Selected examples

Institutional co-ordination between energy and water sectors

Financial transactions to facilitate water-energy exchange; operationalisation of outcomes of the IFAS improvement

Investment in basic enablers

Enhancing flow regulation system; data/analytics/information; climate risk management; development of policies and capacity; support for technology transfer

Investment in new infrastructure development and rehabilitation

HPPs in the Zarafshan river basin; Kambarata-1 HPP

Operation and maintenance of existing infrastructure

Karshi and Amu-Bukhara canals; Tuyamuyun Hydroscheme; Chu-Talas water infrastructure; Orto-Tokoy (Kasansai) reservoir; Andizhan (Kempirabad) reservoir; etc.



# Finance can be provided from various sources through different channels

#### **Financial needs**

#### **Examples of financial interventions**

Institutional co-ordination between energy and water sectors

Financial contribution based on inter-state agreements

Support to enhance flow regulation, capacity, policies, etc

Investment in basic enablers

Investment in data, analytics, technology transfer, etc.

Investment in new infrastructure development and rehabilitation

Concessional finance, equity, risk mitigation instruments,

Lending for infrastructure investment

Operation and maintenance of existing infrastructure

Revenues from water/energy tariffs to cover O&M costs

Provision of working capital to cover O&M costs



# Finance can be provided from various sources through different channels

	O			
State budgets	Donors & Dev. banks	Private- sector Fls*	Water/ energy users	Examples of financial interventions
<b>✓</b>				Financial contribution based on inter-state agreements
<b>✓</b>	<b>✓</b>	<b>(\/</b> )		Support to enhance flow regulation, capacity, policies, etc
<b>✓</b>	<b>✓</b>	<b>(\/</b> )		Investment in data, analytics, technology transfer, etc.
<b>✓</b>	<b>✓</b>			Concessional finance, equity, risk mitigation instruments,
	<b>✓</b>	<b>✓</b>		Lending for infrastructure investment
		<b>✓</b>	<b>✓</b>	Revenues from water/energy tariffs to cover O&M costs
./				Provision of working capital to cover O&M costs

-Is: Financial institu



# Opportunities exist to realise the benefits from greater water-energy co-ordination

#### Possible approaches

Greater interaction between water and energy institutions

Adaptive and multi-year planning

Pursuing a "benefit sharing" model

#### **Expected outcomes for Central Asia**

Joint funding proposals / Minimising unintended negative impacts of the investment on other sectors

Long-term investment planning for water & energy sector development / Management of uncertainties in climatic and socioeconomic changes, and other investment risks

Comprehensive assessment of multidimensional benefits of water and energy / More flexible and efficient exchange of water and energy / Equitable sharing of the multidimensional benefits



# Opportunities exist to realise the benefits from greater water-energy co-ordination (continued)

#### Possible approaches

Enhancing the "enabling environment" to mobilise finance

Identifying suitable financial mechanisms & instruments

Building on new momentum in support of the WEF Nexus approach

#### **Expected outcomes for Central Asia**

Strengthened legal and regulatory frameworks, economic instruments, transparency and rule of law, institutional capacity, etc.

Greater use of PPP, inter-state agreements on joint projects development, a "consortium" to attract finance, a dedicated fund, financial instruments such as bonds, guarantees, insurance, etc.

Greater access to investment and development finance for (e.g.,) climate change adaptation, biodiversity protection, Nature based Solutions, hydrometeorological services, etc.



### Questions to shape next steps

- 1. Which approaches (on the previous slides) would you particularly like to discuss at the SPECA WEE Working Group and through the IKI Water, Energy, and Land-use Nexus project?
- 2. What kind of stakeholders do you suggest the Working Group and the Nexus project should engage to advance the discussion on finance for water-energy coordination?
- 3. What kind of financial mechanisms and instruments could help CA countries foster effective water and energy coordination?



### Ways forward

- Circulation of this slides and relevant background documents to participants for their written feedback and any follow-up discussion
- Consultations at
  - national level (e.g., through National Policy Dialogues planned under the IKI supported Nexus project.)
  - regional level (e.g., the Nexus thematic regional workshops and other forms of regional meetings, next SPECA meetings, etc.)
- Engagement with other partners (e.g., Green Central Asia, Eurasian Dev Bank, USAID, etc.)
- Explore opportunities to bring to political level discussions (platform to be decided)



### THANK YOU FOR YOUR ATTENTION

#### For further information, visit our website:

https://oe.cd/well-nexus

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