

The CRS is always open for cooperation and partnership, and ready to expand, deepen and replicate our projects with existing and new partners.



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VISION 2027

The DKU Center for Natural
Resources and Sustainability

Our Strategy 2022-2027

CRS Purpose

The Center for Natural Resources and Sustainability (CRS) at the Kazakh-German University (DKU) was established to consolidate education and applied research for sustainable societies in the Central Asian Region. We apply innovative approaches along the three main tracks:

- Generation, transfer and exchange of knowledge, technologies, know-hows and competencies;
- Education;
- Networking with academic communities to enhance the water-energy-land-ecosystems-mobility nexus against the backdrop of climate change in Central Asia.



Background

- DKU is the largest external educational and scientific project in Central Asia funded from Germany's federal budget;
- DKU participates in the implementation of Germany's Central Asia Policy within the framework of the EU Strategy for Central Asia. Originally, the main focus was on water (Berlin Process of Germany's MFA) that later expanded to encompass climate resilience (Green Central Asia Initiative). Another focus is reconnecting the Silk Road with Germany/EU economic policy towards China;
- The Center's mission is to facilitate interdisciplinary Master Programs based on the DKU's practical and research expertise and experience;
- In 2016, the UNESCO Chair on Water Management in Central Asia was established at DKU.

Our Strategy 2022-2027

Our human capacity

We are sustaining the CRS's human infrastructure as a long-term guarantee of our institutional advancement and progress. The CRS Head possesses regional experience resting on a strong and multifaceted network of partnerships. The CRS Lab Leads – professionals of ample experience within their thematic areas – also act as heads of the CRS-supported Master Programs.

To strengthen our strategic development and regional position, we have established the Advisory Board comprising the representatives of the international community, business associations, national agencies and authorities, as well as local communities. The Board guides the strategy and implementation of CRS activities.





Our Strategy 2022-2027

Knowledge Space

The CRS Knowledge Space manifests a center of excellence in knowledge management for the production, collection and sharing of information internally, nationally, and internationally. The 4 pillars of the CRS Knowledge Space for effective knowledge operations build on systematically:



- identifying and capturing our experiences and lessons learnt, as well as valuable external content;
- packaging them into knowledge and learning products;
- sharing them within and outside the CRS;
- monitoring and evaluating these efforts.

The CRS's main goals are to encourage and promote the process of learning and grasping knowledge; provide the academia and students, public officials, local communities, and other interested parties with authentic information, including the CRS own knowledge base (Central Asian Journal of Water Research, CRS Working Paper Series, Silk Road of Knowledge Conference policy briefs, CRS study materials, etc.), as well as official documents and publications, technical and academic resources from the region and other parts of the world.



Knowledge Transfer

- Education (MA programs)
- Dialogue technologies (workshops/trainings)

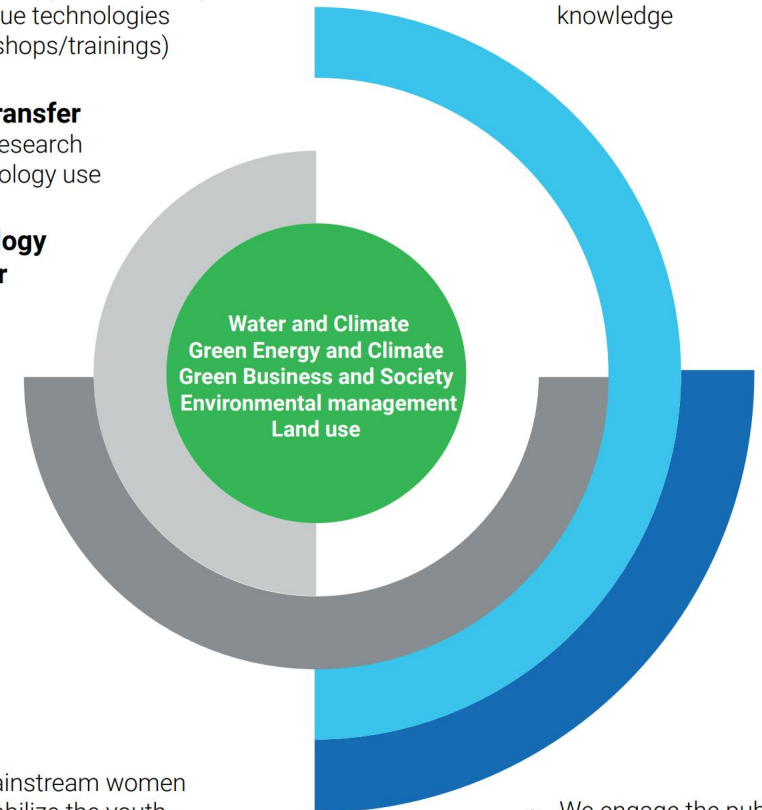


- We commercialize knowledge

Skills Transfer

- Field research
- Technology use

Technology Transfer



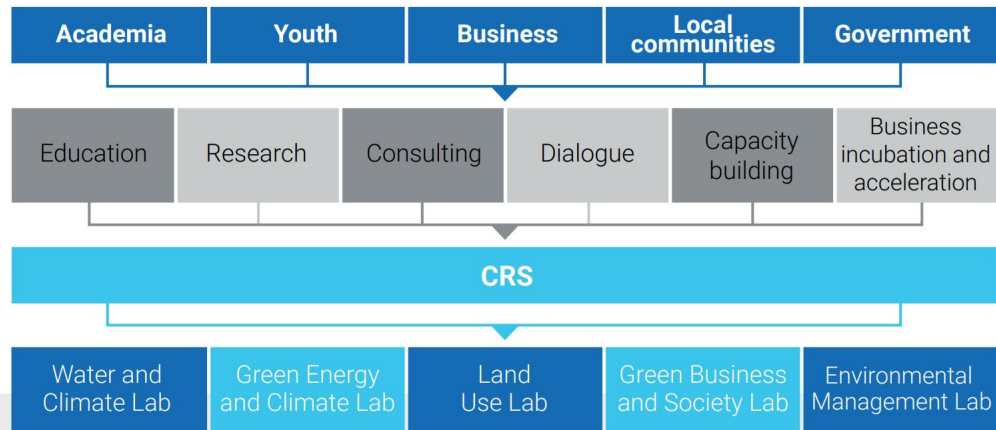
- We mainstream women
- We mobilize the youth
- We network

- We engage the public and decision makers



Our Strategy 2022-2027

CRS key focus areas



Water and Climate Lab

- Integrated Water Resources
- Water sector climate adaptation
- Climate change adaptation
- Water-ecosystems approach
- Disaster risk reduction
- Management
- Water Diplomacy
- NEXUS

Land Use Lab

- Landscape-based improvement in sustainable urban planning
- Carbon sequestration
- Biodiversity and land ecosystem conservation
- Sustainable consumption
- Sustainable landscape management

Environmental Management Lab

- Sustainable university lifestyle
- Nature-based solutions
- Promoting environmental culture and human rights
- Awareness raising on sustainable development

Green Energy and Climate Lab

- Renewable energy management and technologies
- Energy efficiency of buildings and industries
- GHG emissions management
- Green Economy and Green Energy Transition
- Climate change mitigation

Green Business and Society Lab

- Incubation and acceleration of business projects
- Low-carbon and environmentally friendly technologies and projects
- Green finance tools and mechanisms
- Sustainable business practices
- Sustainable society
- Social innovation

Our Strategy 2022-2027

Training Lab

Our strong training profile allows us to develop training programs to build the capacity of civil servants, expert and business communities, as well as young professionals and students. We contribute to constructing a strong and competitive society by imparting the latest tools, knowledge and skills to engage various stakeholders in addressing environmental challenges. We offer short- and long-term online and/or offline trainings making knowledge ever more accessible and convenient.

Corporate trainings

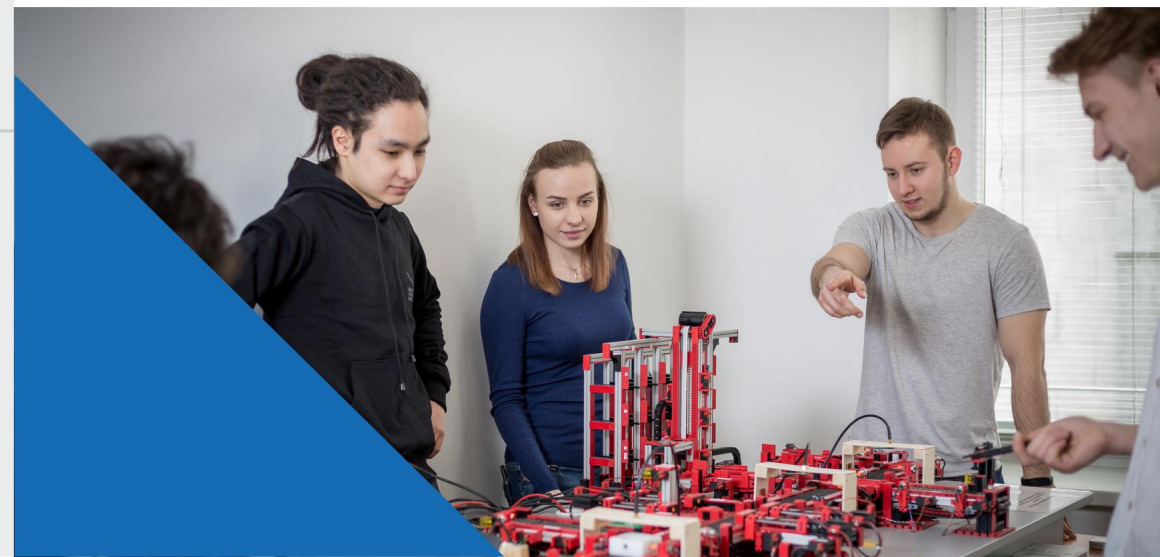
We conduct trainings for governments, academic institutions and international agencies to ensure the transfer of knowledge on current issues and changes in the policy agenda and legislative framework related to sustainable development.

Trainings for experts, trainers and academicians

We enhance the competencies of experts and trainers in our priority areas, and train them to further enable a skilled transfer of knowledge from one stakeholder to another. We also offer trainings for subject-matter academicians to update them on international knowledge, skills and technologies.

Training for students and young professionals

We organize summer and winter schools, academic competitions and study trips for students and young professionals. We promote business ideas through hackathons and our business in-cubator.



Our Strategy 2022-2027 Dialogue

The CRS facilitates dialogues for public, non-public (academic civil society) and business entities with the aim of exchanging knowledge, building networks, mainstreaming women and the youth. Our dialogue formats range from conferences and workshops for experts to stakeholder dialogues, including the academia, decision makers, business representatives, striving to commercialize scientific knowledge. The transfer of knowledge and audience-targeted information are in the center of CRS efforts. Our partners range from universities in all Central Asian countries to professional associations and decision makers within the Center's scope of activity. We likewise organize exhibitions on sustainable development topics, and support technology transfer among societies and countries in Central Asia.

The CRS offers the platform for academic research of Central Asian and international scholars on Water Management, i.e. the Central Asian Journal of Water Research (<https://water-ca.org/>) and Sustainable Development, and Working Paper Series.



Our Strategy 2022-2027 Education

In cooperation with German academic institutions, DKU offers high-level graduate and post-graduate education in the fields relevant for sustainable development. All DKU programs undergo educational certification (ACQUIN). The CRS supports DKU-led educational programs in the domains of sustainable development and natural resources by providing internships and hands-on experiences to students supplemented with extra curricula teaching. DKU students utilize CRS scientific products and connections to advance their research, networking and professional career.

Bachelor Programs

In the field of engineering, DKU offers BA Programs in energy and environmental engineering, as well as logistics; in economics (Chair of Economics & Business); and in social political studies (Chair of World Politics).

Master Programs

The CRS supports DKU-offered MA Programs related to sustainable development:

- Integrated Water Resources Management (IWRM) focusing on water

security, safe access, and rational water allocation in Central Asia;

- Strategic Management of Renewable Energy and Energy Efficiency aimed at fostering the transition of Central Asian countries to green economy and energy;

Post-Graduate Programs

The CRS assists young PhD researchers in partnership with German universities, and hosts post-graduate fellows.



Our Strategy 2022-2027 Research

The CRS conducts applied and practical research. The results of domestic research activities constitute the key element of our educational programs and consulting.

We offer inform and advice policy- and decision-making processes, as well as business operations based on our comprehensive research on cross-cutting issues.

The spectrum of our research ranges from applied research through action and accompanying research to the entire comprehensive policy case studies, market research with applied orientation including interdisciplinary contexts.

Our research methods combine quantitative and qualitative research approaches using modeling, data collection services, surveys, field visits, scenario development, etc.

The CRS's goal of strengthening academic communities is reflected in our close academic networking offering capacity building for academicians in conducting common research, publication platforms for Central Asian researchers, as well as engaging with global academic partners interested in Central Asia.



We generate:

Research and Review Papers

Our Research Papers are fully documented and interpreted accounts of significant findings of original research projects, and include the presentation of methods, results, discussion, and conclusions. Our Review Papers are critical and comprehensive reviews providing new insights on and/or interpretation of a broad range of issues through thorough and systemic evaluation of available evidence.

Field Research

Our field research includes observing and collecting data on the themes relevant for sustainable development, environment, as well as people and their social and economic status.

Policy Analysis

Under this block, we are looking into the policy context, focusing on the larger Central Asia Region including Afghanistan, and offering studies as well as problem and situational analysis based on the participatory and other cutting-edge research approaches.

Our Strategy 2022-2027 Consulting

The CRS offers its scientific and technical expertise in combination with the educational offer, as well as research and analytical skills oriented towards practical problem solutions. Our beneficiaries include private and public organizations implementing national and international projects. We support them by building their capacities, implementing joint projects and/or accelerating existing businesses on their behalf.



Capacity development

The CRS offers activities to build capacities for action of individuals, as well as public, non-governmental and business entities. We support the development of our partners' knowledge in our focus areas. We not only train our partners but also transfer technical and organizational knowledge.

Project management

The CRS manages projects of our partners to boost their and the overall sustainability of the surrounding society. Our objective is to professionally and efficiently implement content-related as well as financial and administrative activities within the framework of project management. Our services follow international and internal quality management standards.

Business incubation and acceleration

Our activities help to frame and further develop business ideas, and incubate and accelerate them into early-stage enterprises, offering mentorship and networking with investors and interested partners.

Strategic & policy advice

The CRS provides strategic advice to companies, and policy advice to governments and related agencies. Our team is distributed regionally in Central Asia and Germany keeping close contact with local conditions on the ground. We also collaborate with a wide range of technical experts and active members of local societies across the region to ensure we have access to unique insights from the real experiences in Central Asia.

Technology consulting

Our team of transformative experts helps harnessing technology and innovation within our focus areas as a way to reinvent local business region-wide.