



CONSULTING
ENGINEERS

SUSTAINABLE DEVELOPMENT SOLUTIONS NETWORK (SDSN) CONFERENCE

HYDRO4U, AT-BASHI RIVER

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INTRODUCTION ILF

10,500+
PROJECTS
SUCCESSFULLY EXECUTED

150+
COUNTRIES IN WHICH ILF HAS
BEEN SUCCESSFUL

45+
OFFICE LOCATIONS
ACROSS FIVE CONTINENTS



2,600+
EMPLOYEES
WORLDWIDE

262+
MILLION €
REVENUE

55+
YEARS OF
EXPERIENCE

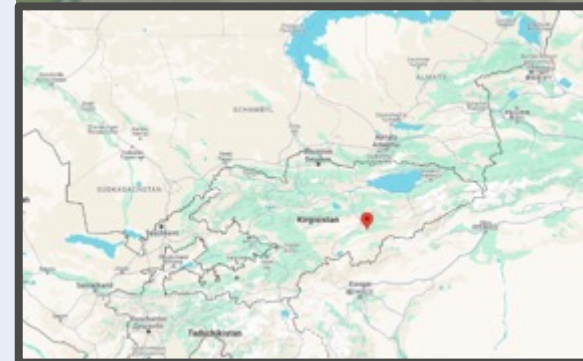
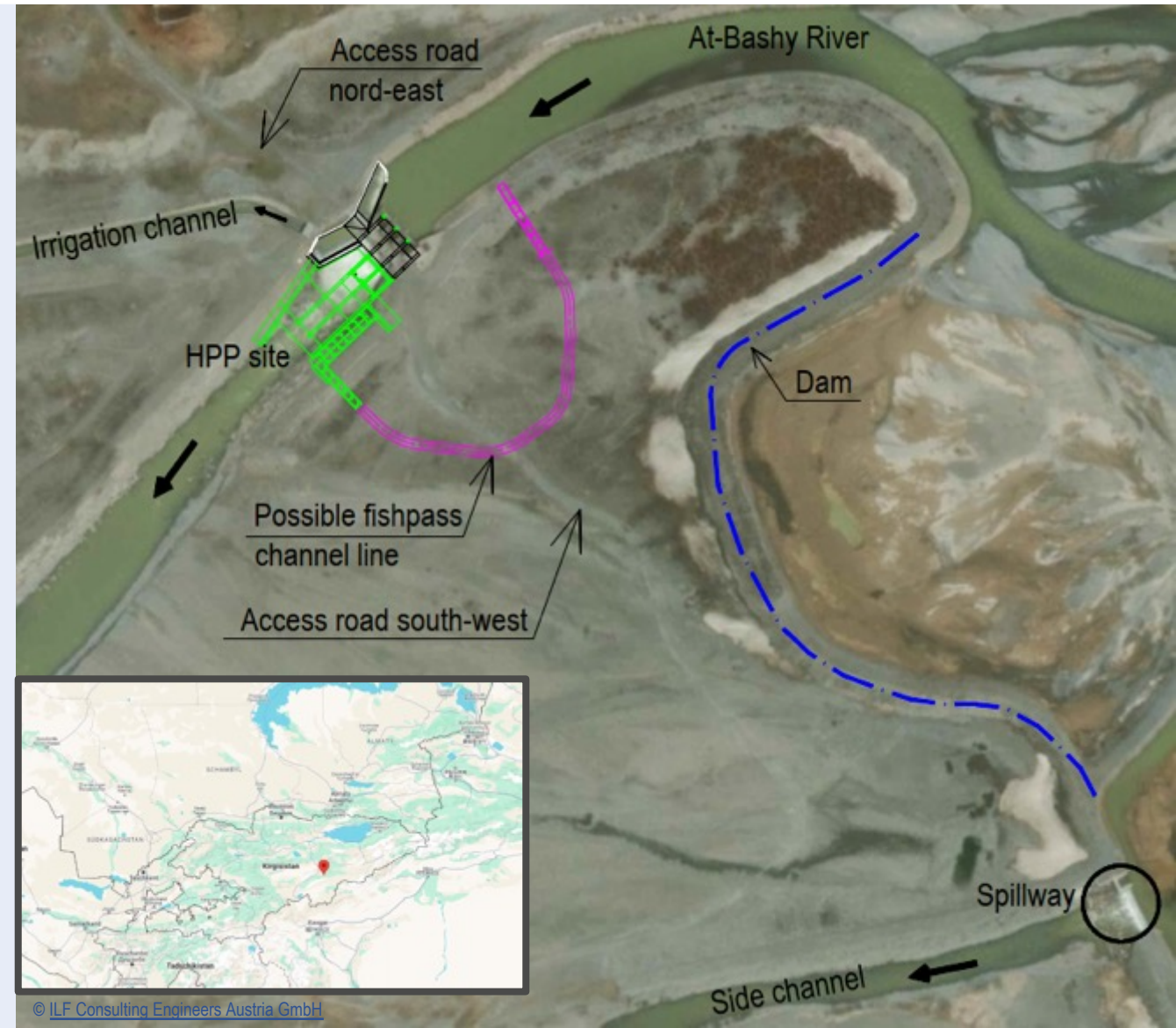


Tailored interdisciplinary engineering, consulting and project management services for complex industrial and infrastructure projects

AT-BASHY HYDROSHAFT POWER PLANT

■ Project Background

- » Ideal local conditions for showcasing modular design
- » Existing weir offers space for hydropower modules
- » Renovation needs enhances project benefits
- » Fish migration facilities amplify positive impact
- » Obstacle removal expected to benefit fish fauna



DEMONSTRATION SITE

AT-BASHY HYDROSHAFT POWER PLANT

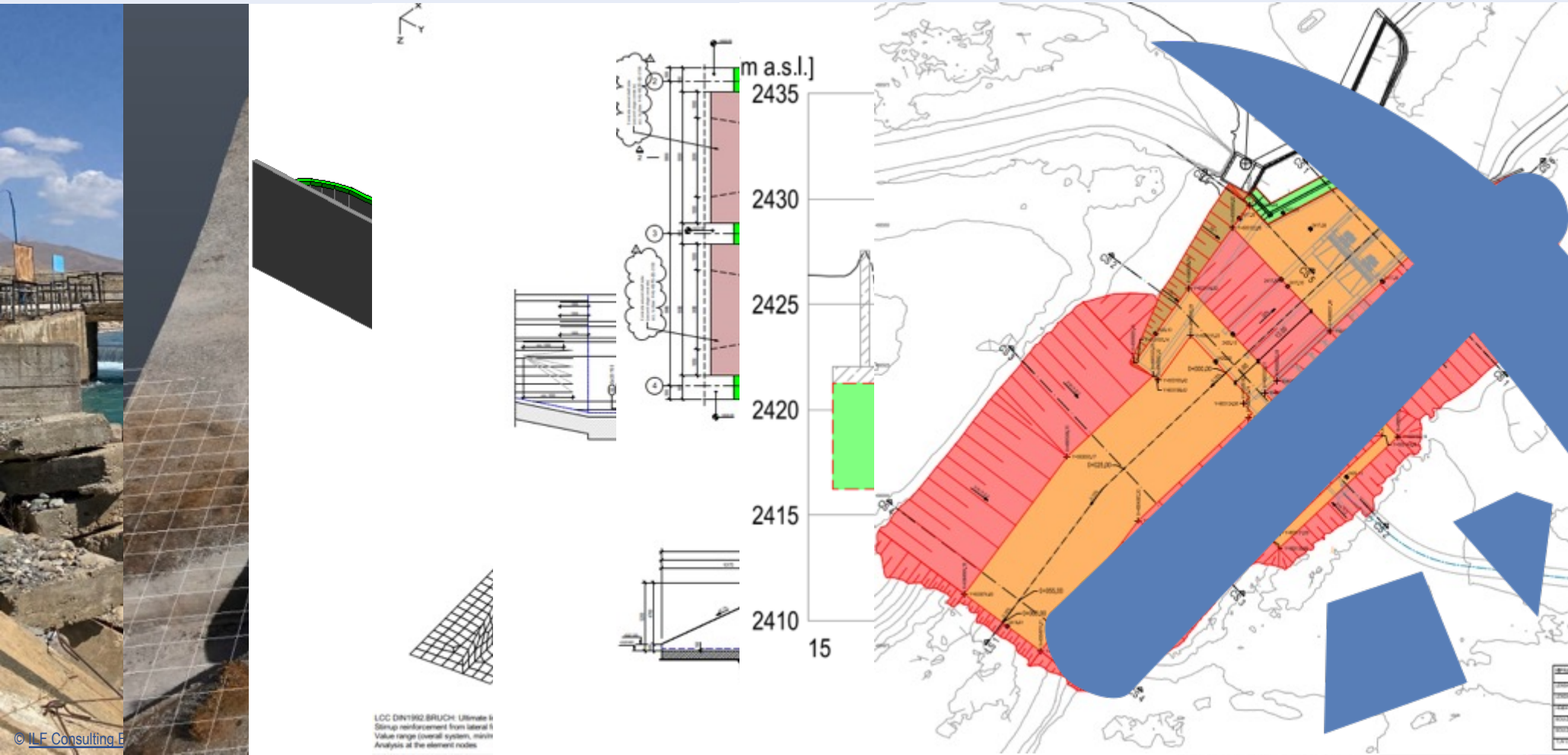
- **Country:** Kyrgyz Republic
- **Region:** At-Bashy District
- **River:** At-Bashy

- **Site Parameters:**
 - » Existing Diversion weir with around 7 m head and three pressure segments
 - » Emergency spillway for water diversion during construction in place
 - » Elevation at 2,400 m



PLANNING DETAILED DESIGN

AT-BASHY HYDROSHAFT POWER PLANT



- Site visit
- Laser survey
- Model design
- Structural design
- Reinforcement
- Formwork
- Structural support
- Excavation
- Construction start – site supervision fall 2024

Table 1: Construction Schedule	
Start of construction	2024-09-01
End of construction	2025-03-31
Duration	18 months
Start of site supervision	2024-09-01
End of site supervision	2025-03-31

CONSORTIUM AND ILF ROLE

HYDRO4U – GENERAL INFORMATION'S

- “Hydropower For You” (Hydro4U): stand for small scale hydropower for you
- High potential of small-scale hydropower in Centra Asia
- Adapt innovative European technologies to the Asian market
- Demonstrating viability and price competitiveness
- Focus on longevity, eco-compatibility and socio-political acceptance
- ILF’s contribution is related to services requested in:
 - » WP3: Elaboration of the detail design, Geological support and interpretation of the geological site investigation results and site supervision
 - » WP6: Communication, dissemination and exploitation



HYDRO4U

CONTRIBUTIONS OF PARTNERS

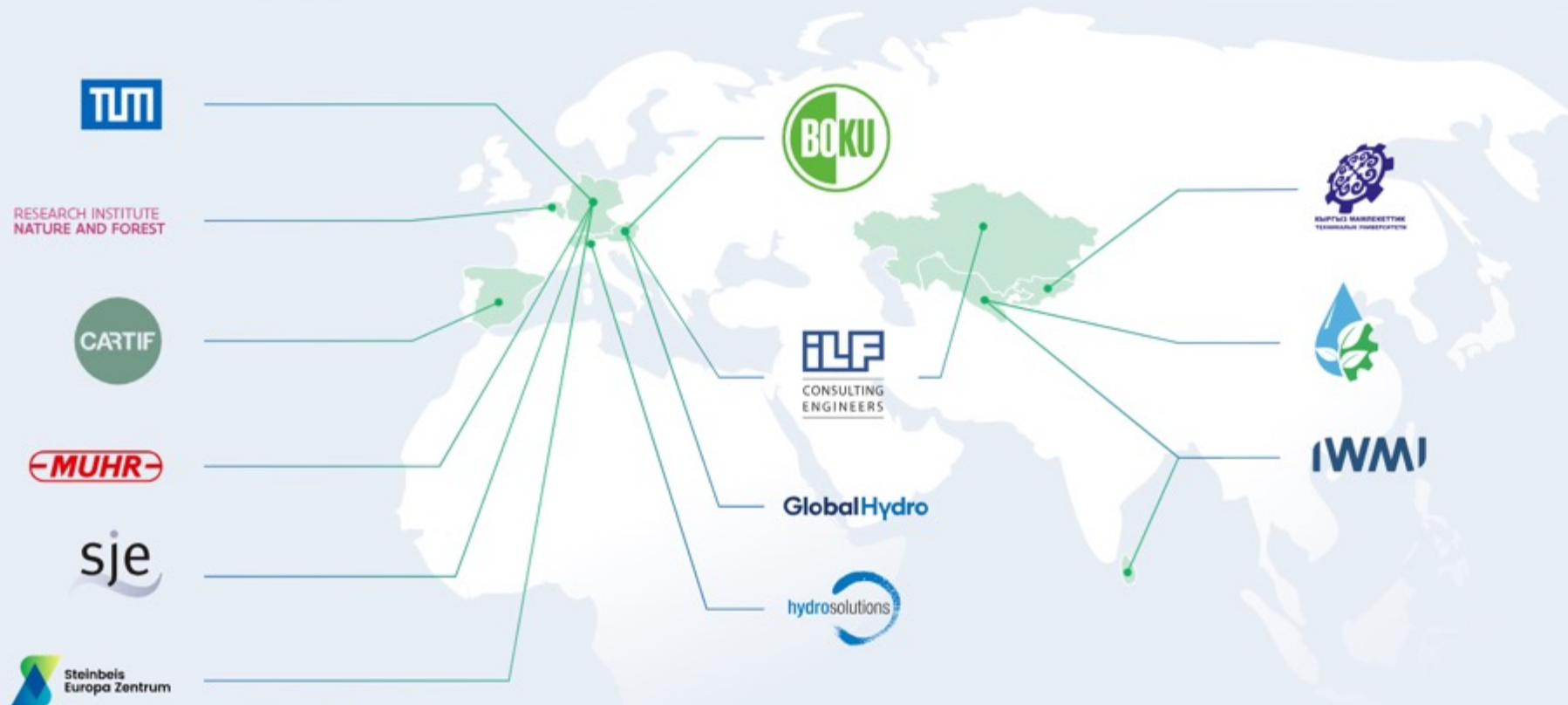
HYDRO4U – GENERAL INFORMATION'S

TUM	Technical University Munich: Technical coordination between consortium and investor, technology development management, object design and hydraulic design of the demonstration site
HSOL	Hydrological scenarios for current and future conditions with respect to climate change
BOKU	Ecological assessments related to fish biodiversity and distribution, fish population structure, habitat use, migration, and environmental flows
TIIAME	Ecological assessments related to fish biodiversity and distribution, fish population structure
EV-INBO	Ecological assessments related to the telemetry studies
ILF	Support in the design process, expertise on geology and geotechnics, detailed design formwork and reinforcement drawings, site supervision
IWMI	Socio-economical assessment according to the Water-Food-Energy-Nexus approach
GHE	Expertise on electromechanical equipment, powerhouse design
MUHR	Expertise on hydraulic steelworks design
SJE/KJC	Support in data collection



CONTRIBUTIONS OF PARTNERS

HYDRO4U – GENERAL INFORMATION'S



EXPERIENCE / BENEFITS

HORIZON EUROPE

- Collaboration and networking with international expertise and companies of the business field
- Be informed about the latest status of market development of small-scale hydropower
- Finding new partners
- Experience in innovative engineering solutions
- Potential business development in Central Asia
- ONE ILF
- Sustainability
- Hydro Energy





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THANK YOU FOR YOUR ATTENTION!



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