











International Conference and Exhibition



HYDRO 2024

Secure technology for turbulent times

Messe Congress Graz (MCG), Austria 18 to 20 November 2024

Organized by:

THE INTERNATIONAL JOURNAL ON HYDROPOWER & DAMS

Supporting organizations include:







Regular updates will be posted on our website and published in *Hydropower & Dams*Email: Hydro2024@hydropower-dams.com
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A full Call for Papers will be issued shortly; meanwhile some of the key themes are listed below:

Potential and development opportunities

National plans and potential
Policies and targets: Are they always realistic?
New planning tools
Integrated regional development
Opportunities for cross-border trading
Planning cascade development

Hydro in the energy transition

Hydro in synergy with other renewables
Floating solar PV and dam mounted PV
Increasing hydropower flexibility
Quantifying the value of hydro's ancillary services
The increasing important of pumped storage
Success stories and instructive case studies

Project financing and development

Role of public and private sectors
Risk allocation and management
Concession arrangements and options
Legal and institutional aspects
Contractual issues
Commercial and economic aspects
Quantifying the value of hydro's ancillary services

Safety and risk

Disaster risk management
Dam safety management
Enhancing the safety of dams and powerplants
Software systems and cyber security

Technology

Increasing roles for artificial intelligence BIM for planning, design and operation Civil construction and automation
Heightening dams
Monitoring and instrumentation
Hydraulic modelling of dams and spillways
Machinery efficiency and turbine technology
Small hydro, rural electrification and marine energy
Transmission and electrical engineering

Operational issues

Optimizing reservoir operation
Operation and maintenance
Enhancing efficiency
Grid stability and dynamic power regulation of units

Climate and hydrology

Hydrology and flood management GHG emissions: research update Climate change and ESG Adaptation and resilience strategies Structural measures

Environmental and social aspects

Fish protection: innovative technology Impact assessment and mitigation Residual and cumulative impacts Stakeholder consultations Sedimentation management

Social issues and capacity building

Technical and institutional capacity building
Benefit sharing for local development
Knowledge transfer — on site and through training
Inspiring the next generation of engineers
Appropriate contracts for less developed countrie