

# BRUSSELS HYDROPOWER DAY 2023 (Hybrid Conference):

### The added value of the hydropower sector as a catalyst and enabler in the clean and safe energy transition under the energy crisis

Venue:	Residence Palace, Polak Room (Rue de la Loi 155, 1040 Brussels)			
Date and time:	25 <sup>th</sup> April 2023, 9:15-16:30			

**Objective**: The BRUSSELS HYDROPOWER DAY 2023 aims to provide a platform for stakeholder groups in the hydropower sector and decision makers in the European Commission and Parliament, who are working on relevant policy files concerning hydropower. The purpose is to discuss opportunities and barriers affecting hydropower deployment in the framework of the energy transition within the energy crisis and the market as well as regulation conditions.

#### Why attend?

- Find out more about the added value of hydropower and energy storage in the energy transition, within the energy crisis and regulation conditions.
- Learn about best practice in hydropower deployment with reference to electricity market design, flexibility and biodiversity requirements.
- Join the discussion about cooperation with other ETIPs/sectors within the SET Plan on approaches to ensure energy system integration and a flexible safe energy supply.
- Get informed about the next steps of ETIP HYDROPOWER towards "Unifying the voices of hydropower in Europe".

**Target audience**: the conference will gather participants, representing wide stakeholder groups in the hydropower sector and decision-makers in the European Commission and possibly European Parliament working on relevant policy files concerning hydropower.



## Tuesday 25<sup>th</sup> April 2023

Time	Title					
08:30 - 09:15	Registration					
09:15 - 09:35	Opening remarks and welcome speech					
	<b>Opening remarks:</b> Anton Schleiss, EPFL-ICOLD					
	Welcome speech: Hélène Chraye, Head of Unit, DG RTD					
09:35 - 10:15	Keynote speeches: Hydropower in Europe and worldwide					
09:35 – 09:55	Keynote 1: The potential for hydropower in the context of current EU policies (15 min presentation, 5 min Q&A) Speaker: Mathilde Lallemand-Dupuy, Policy Officer, European Commission, DG ENER					
09:55 – 10:15	Keynote 2: The important role of hydropower development in the European safe energy transition (15 min presentation, 5 min Q&A) Speaker: Ana Paula Moreira, Head of Engineering at EDP					
	<i>Chair:</i> Janire Garcia, ZABALA					
10:15 - 10:35	Coffee break					
10:35 – 12:05	Session 1: The added value of hydropower and energy storage in the energy transition and within the energy crisis					
10:35 – 10:50	Presentation 1: The importance of flexibility contribution of hydropower (10 min presentation, 5 min Q&A) Speaker: Ghislain Weisrock, Special Advisor for European Affairs and Power System, France Hydro Electricité					
10:50 – 11:05	Presentation 2: Hydropower and Energy Storage in Greece: Status, perspectives and benefits for the local communities (10 min presentation, 5 min Q&A) Speaker: Sera Lazaridou, Senior Partner, Hydroexigiantiki Consulting Engineers Greece					
11:05 – 11:20	Presentation 3: Fifteen new storage increase projects in Switzerland negotiated at the roundtable with civil society (10 min presentation, 5 min Q&A) Speaker: Peter Lustenberger, Senior Expert Asset Management, Hydroenergie & Biomasse, AXPO Power Switzerland					
11:20 – 12:05	Panel discussion involving audience. Keynote speakers and speakers are invited to the panel (tbc) <i>Moderation:</i> Patrick Clerens, EASE <i>Chair:</i> Shenja Ruthenberg, EASE					
12:05 - 13:20	Lunch					



13:20 - 14:50	Session 2: Best practice examples to tackle economic, environmental and societal challenges with hydropower.						
13:20 – 13:35	Presentation 1: How tariff and policy can influence decision makers; some best practices of hydro project for grid security? (10 min presentation, 5 min Q&A) Speaker: Maryse Francois, CEO, MFX Consulting						
13:35 – 13:50	Presentation 2: Fish behavior at hydropower plants: what we know, and how we can use it. (10 min presentation, 5 min Q&A) Speaker: Jeffrey Tuhtan, Associate Professor of Environmental Sensing						
	Technologies, Tallinn University of Technology						
13:50 - 14:05	Presentation 3: Hydropower Sustainability Standard for hydropower development (10 min presentation, 5 min Q&A) Speaker: Eddie Rich, CEO, IHA						
14:05 – 14:50	Panel discussion with involvement of audience						
	Speakers and further guests are invited to the panel						
	<ul> <li>Diar Isid, Policy Officer, European Commission, DG ENV</li> </ul>						
	<ul> <li>Olivier Tricca, Power Engineer, European Investment Bank</li> </ul>						
	<ul> <li>Benjamin Graff, Open Innovation Manager, CNR</li> </ul>						
	<i>Moderation</i> : Anton Schleiss, EPFL-ICOLD						
	Chair: Jean Jacques Fry, ICOLD						
14:50 - 15:05	Coffee break						
15:05 – 16:05	Session 3: Synergies and collaboration with ETIP's, EERA and other sector						
	organisations for integrated use of renewables in view of safe electricity supply illustrated with examples of hybridization projects						
	Short statement of initiatives and project examples						
15:05 - 15:20	Hydropower as a catalyst and facilitator for the clean, safe and						
	independent energy transition in Europe (HYDROPOWER EUROPE, IHA, IEA						
	Hydropower and EERA Hydro; recommendations for the SET Plan revision)						
	Statement: Liv Randi Hultgreen, Executive Director, FME HydroCen – NTNU						
	• XFLEX Hydro project: Integration of hydropower and batteries						
	Statement: Jean-Louis Drommi, Electricity Expert, EDF						
	• Concrete actions to contribute to the revision of the Strategic Energy Technology (SET) Plan from the ETIPs' perspective (ETIP Forum) Statement: Maria Laura Trifiletti, Project Manager, ZABALA						
	Statement. Mana Laura Himetti, Froject Manager, ZADALA						
15:20 – 16:00							
	• Presenting ASPIRE, the Alliance of Secure, indigenous & Predictable Renewable Electricity						
	Renewable Electricity						
	<b>Renewable Electricity</b> Statement: Donagh Cagney, Policy Director, Ocean Europe						



	Moderation:	Andrej		Misech,		EUREC			
16:00 – 16:15	<ul> <li>ETIP Hydropower 'Unifying the voices of hydropower in Europe' - The next steps Speakers:</li> <li>Mark Morris, SAMUI France</li> <li>Sebastian Mortier, Policy Officer, European Commission, CINEA: Explaining the CINEA approach to the ETIP Hydropower project</li> </ul>								
16:15 – 16:30	Final conclusions and outlook Speakers: Greg Arrowsmith, EUREC and Patrick Clerens, EASE								
16:30	Close								



### **AGENDA ANNEX**

#### Speakers and panellists (in order of agenda):

**Hélène Chraye** 



French State Civil Engineer by education, Hélène Chraye graduated then in Economics and Public Law at Sciences – Po / Paris. After a stay in the French Administration to build the Energy Observatory and then on State Aids to the industry, she joined the European Commission. She later on revamped the EU policy on materials and nanotechnologies, also designing the new European system of materials innovation testbeds. Since 1St June 2019, she is heading the unit in charge of designing and implementing the European Research policy for Clean Energy Transition and is also Deputy Director for the Directorate Clean Planet.

#### Mathilde Lallemand-Dupuy



Mathilde Lallemand is currently working at DG ENER in the European Commission, in the Internal energy market Unit. She worked previously for electricity Transmission System Operators at ENTSO-E and the French TSO RTE.

#### Ana Paula Moreira



Ana Paula Moreira is a Civil Engineer, she has been a collaborator of EDP since 1995, participating in the design of several hydropower projects and repowering powerplants as the author of several geotechnical elements, tunnels, underground powerplants and foundation treatment of dams. In After covering several roles and responsibilities at EDP, since 2021, she has been Head of the Engineering Division of EDP Generation, coordinating the participation of civil engineering, architecture, geology

and geotechnics, BIM, land tenure and geospatial information in studies and projects throughout the life cycle of EDP Generation's assets.



#### **Ghislain Weisrock**



#### Sera Lazaridou



Ghislain works for France Hydro Electricité (French small hydro association) special advisor for European affairs and flexibility and power system issues. He previously worked as the Special Advisor for Hydro Public affairs at ENGIE. Ghislain is an Engineer from Ecole Polytechnique Paris, Ecole Centrale Supélec Paris. He is also COO at CNR (Rhône National Company 3000 MW hydro capacity) and covered various responsibilities in EDF Hydro department with missions abroad in China, India for EDF, Madagascar for World Bank.

Sera is a Civil Engineer with 23-years professional experience, Senior Partner of Hydroexigiantiki Consulting Engineers based in Athens. She is currently President of the ICOLD European Club (term 2023-2025). She is also member of the Board of Directors of the Greek Committee on Large Dams (GCOLD) since 2012, Secretary General for term 2021-2024 while she has served in the past as Vice-President (2018-2021). She is member of the Greek Dam Administrative Authority Board (Dam Safety Regulatory Authority in Greece) since 2019 and registered professional engineer in Greece for Hydraulic Works Design and Geotechnical Works Design. She is also Provisional Accredited Assessor for the Hydropower Sustainability

Tools and member of many national and International Professional Bodies (CDA, ASDSO, ASCE etc).

#### Peter Lustenberger



Peter Lustenberger has dedicated his entire professional career to the power sector. After receiving engineering degrees from ETH Zürich and WPI Worcester (USA), he started his professional career with BBC in Switzerland in the field of thermal power plants. Today, he is Senior Expert Asset Management in Axpo. He advises management, teams and authorities with his extensive knowledge and experience. In addition, he is member of different committees and head of Hydrosuisse, the major expert commission for Hydropower in Switzerland.



#### **Maryse Francois**



Maryse Francois is CEO at MFX Consulting. She is Senior consulting engineer hyropower and hydrostorage, renewable energy, independant non-executive board member.

#### **Dr. Jeffrey Tuhtan**



Associate Professor Jeffrey A. Tuhtan (Member, IAHR and IEEE) received his B.Sc. degree in civil engineering from California Polytechnic State University, San Luis Obispo, CA, USA, in 2004, M.Sc. degree in water resources engineering and management and Dr.-Eng. degree from the University of Stuttgart, Germany, in 2007 and 2011, respectively. He currently leads the Centre for Environmental Sensing and Intelligence at the Tallinn University of Technology, specializing in underwater measurement technologies for extreme physical environments including hydropower turbines, pumping stations, remote rivers, lakes and glaciers. In 2023 he was elected as one of three European representatives to the

IAHR leadership team Committee on Ecohydraulics.

#### **Eddie Rich**



Eddie Rich has been CEO at the International Hydropower Association since September 2019. He has worked on the role of corporates in international development for over 20 years. Roles included deputy head of the Extractive Industries Transparency Initiative (EITI), including a period as its executive director and working as the UK Government Department for International Development (DFID)'s representative to Angola and deputy head in Kenya, and as head of DFID's corporate social responsibility team.



#### Dr Benjamin Graff



Dr Benjamin GRAFF graduated with a MSc in Hydraulics-Hydrology engineering in 2001 followed by a PhD in hydrology in 2004. After 3 years in a consulting office, he joined CNR in 2008 first as hydrological and hydrometeorological expert, then as project manager abroad (2014-2017) and later on as business developer for CNR Engineering (2018-2021). Since 2022, he is Head of Open Innovation at CNR Energy Transition and Innovation Department.

**Diar Isid** 



Diar Isid is working since November 2022 for the European Commission in DG Environment with emphases on ecological status and hydromorphological aspects. Earlier he has worked for 20 years for the Regional Administration in Finland on different water management duties. He has worked closely with hydropower companies to enhance water quality and recreational use as well as to prevent flood risks and damages by coordinating the regulation of waters

**Olivier Tricca** 



Olivier Tricca has been working on electricity projects for more than 28 years of which 13 years in the industry and then in banking sector. In 2015, he joined the European Investment Bank (EIB) as a senior engineer after c. 8 years at the European Bank for Reconstruction & Development (EBRD) in London. He is appraising and monitoring electricity projects, with a focus on private and public hydropower deals in emerging markets and a transversal interest in water-energy nexus. He largely participated to the drafting management of EIB Environmental, Climate & Social Guidelines on Hydropower Development (2019). A graduate Engineer, he holds the French Diploma of Ingénieur en Mécanique des Fluides from INP Toulouse (1992) and a post graduate degree in Management of Technology from Lyon Business school (1993).



#### **Donagh Cagney**



He is Policy Director at Ocean Energy Europe.

#### Jean-Louis Drommi



Jean-Louis is currently expert engineer at Electricité de France, Hydro Engineering Center. He deals with all electrical aspects of hydro projects both at design stage and maintenance. He has been working at Electricité de France since 1987. J-L Drommi was awarded an engineering degree in 1986 from the Ecole Nationale Supérieure d'Ingénieurs Electriciens de Grenoble. He also has an advanced diploma in automation and signal processing. He is senior member of IEEE and author of several papers in the electrical and hydro field. He participates in CIGRE and is a regular delegate of international event. He also currently leads EDF involvement in the XFLEX Hydro initiative funded by the EU.

#### Maria-Laura Trifiletti



Maria Laura has Law degree and a Specialisation in Legal Professions obtained (University of Messina 2005 and 2007), a Master's in diplomacy and international Policy (University of Bologna 2012) and Master's in European project Management (Venice International University 2013). Over these last 11 years in Brussels, she obtained a strong knowledge in the Public Affairs and Consultancy sector, mostly focused on European funding opportunities, both in calls for proposals and calls for tenders in different programmes. In the last 3 years on the Coordination of the ETIP

SNET Platform (within the INTENSYS4EU EU CSA Project and SPRING EU service contract) and supporting the coordinators for the management of DIGIFED and RECET4RAIL projects.



#### Liv Randi Hultgreen



Liv R. Hultgreen is Executive Director for HydroCen – a research center for environmentally friendly energy in Norway. HydroCen is research center with 8 year duration, funded by the Norwegian Research Council, the hydropower industry in the Nordics and the research partners NTNU (Norwegian University for Technology and Science), SINTEF Energy and NINA. HydroCen is engaging in many projects with multiple European research partners, and has currently the leadership role in EERA JP Hydro. Hultgreen has a Master of Science degree in Marine Technology from NTNU, and has extensive experience from engineering leadership positions in Baker Hughes and GE.

#### Thomas Schleker



Dr. Thomas Schleker, (PhD in Biochemistry, University of Basel) works as policy officer at the European Commission Directorate-General for Research and Innovation in the fields of Bioenergy, Renewable Fuels, Hydropower, Storage and Energy Systems, where he contributes to the development and implementation of relevant R&I policies, programmes, and actions for the Clean Energy Transition. He chairs also the Commission-internal technical expert interservice group of the JRC BIOMASS study. For the European Commission Thomas participates in the Executive Committee of the IEA Hydropower TCP. Before joining the European Commission Thomas studied biology (Diplom-Biologe) as well as business management (Diplom-Kaufmann) followed by an academic career in molecular biology, biochemistry and genetics and a position as Cluster Manager (Prokurist) at a regional business cluster of Renewable Raw Materials.

#### **Sebastian Mortier**



Mr Mortier graduated in University of Liège in 2005 where he obtained a Master of Electromechanical engineering. He went on to work as design and project engineer in the industry, for the aerospace, process and nuclear power engineering sectors. In 2012, Mr Mortier entered the European Commission, where he worked as Project Officer in DG RTD for Industrial Technologies. In 2016, he continued his duties in CINEA in the Energy research field, where among other duties he follows the programme on Hydropower.



#### Chairs and moderators from ETIP Hydropower:

#### **Anton Schleiss**



Professor emeritus at Ecole polytechnique fédérale de Lausanne, Switzerland and former director of Laboratory of Hydraulic Constructions of EPFL in Lausanne. He supervised more than 50 PhD and Postdoc research projects. He was president of the International Commission on Large Dams (ICOLD) from 2015 to 2018. With more than 40 years of experience he is regularly involved as a consultant and expert in large water infrastructures projects including hydropower and dams all over the world. He is member of the coordinating team of ETIP HYDROPOWER.

#### Janire Garcia



European Projects Communication at Zabala Innovation Europe and Communication and Dissemination Manager at ETIP Hydropower.

#### **Patrick Clerens**



Patrick Clerens studied law at the University of Saarbrücken and the University of Mainz. Since 1996, he has worked as a consultant for a private company specialising in European Affairs in Brussels. In his capacity as Brussels Representative of different European associations, he has been involved in the energy and climate field since 2003. He is Secretary General of EASE.



#### Shenja Ruthenberg



Prior to joining CLERENS, Shenja Ruthenberg has worked with transnational development in two Interreg programmes, where she developed, assessed and monitored a portfolio of European projects in the low carbon and resource efficiency themes. She has worked as project manager for private and public stakeholders, having been involved in the acquisition of two European projects on cross-border smart grid development (CEF) and on peak shaving (Interreg). At CLERENS she is involved in the management of European projects and proposal writing with the aim of building trust and know-how among European partners.

#### Andrej Misech



Andrej Misech is project officer at EUREC – The Association of European Renewable Energy Research Centers. In the ETIP Hydropower project, he is responsible for Work Package on Supporting Priority Actions for the SET Plan, ETIP Interaction and Collaboration.

#### Jean-Jacques Fry



Dr. Jean-Jacques FRY (M), graduated in 1974 in Hydraulics from Ecole Nationale Supérieure d'Hydraulique de Grenoble, France, obtained a PhD on Soil Mechanics at Ecole Centrale de Paris (1977). Since 2019, he is currently independent consultant, the chairman of the European Club of ICOLD. He is in the managing team of the "Hydropower Europe" forum, a CSA project of EU H2020. He is currently the expert who supervised the constructions of the upper and lower reservoirs of Abdelmoumen Hydropower Pumped Storage Scheme in Morocco (2020-2024).



#### **Mark Morris**



Dr Mark Morris is a professional Engineer working at the interface between research and practice, focussed on environmental hydraulics, hydropower and flood risk analysis / management. Mark works on a mixture of both research and specialist consultancy studies, in particular focussing on European and wider International research collaboration. Recent and ongoing activities include supporting and coordinating European research projects – such as the HYDROPOWER EUROPE, ETIP HYDROPOWER and EcoAdvance projects, strategic planning for UK reservoir safety research and industry driven research into dam and levee surface erosion processes.