

Dams and Sustainability

WEBINAR #2

- Life Cycle Sustainability Assessment (LCSA) -

May 6, 2025

1pm - 3pm (CEST)

Free event
To register please visit
Webinar#2 registration

(a TEAMS invitation will be sent to your e-mail address the day before)

The recent World Declaration on Dams and Reservoirs approved by ICOLD in New Delhi (October 2024) highlights the key role of dams in climate change adaptation and energy transition. In parallel to this Declaration. ICOLD launched the *Dams* and Sustainability (D&S) initiative in 2023, bringing together the efforts of several technical committees. The D&S initiative aims, first and foremost, to raise awareness among dam professionals of the need to improve the sustainability and life cycle thinking of existing and new dams. Sustainability could be described as the development of an activity throughout its life cycle without negative social, economic and environmental impacts on future generations. In the case of dams, sustainability should be analysed from the initial planning and design stage, through construction, operation and maintenance, to decommissioning and demobilisation.

A *first Webinar* (available here) took place in May 2024 and was an excellent opportunity to present the main sustainability goals and objectives of this new ICOLD initiative. The time has come to start investigating the appropriate tools and methodologies that can be applied to assess the sustainability of dams and reservoirs. This second Webinar is intended to introduce the general principles of a Life Cycle Sustainability Assessment (LCSA) methodology. The LCSA comprises not only environmental LCA, but also social and economic life cycle cost assessment. ICOLD has invited a distinguished group of experts to present the key components of the LCSA and examples of how it is applied in other sectors, with the aim of adapting it to dams and reservoirs.

Program

- <u>Introduction</u> *Michel Lino* (President of ICOLD)
- Webinar presentation
 Luc Deroo & Francisco Ortega (TC-T of ICOLD)
- General introduction to LCSA with a focus on dam-specific aspects Sonia Valdivia (World Resources Forum)
- <u>Sustainability criteria from the perspective</u> of funding institutions Nicholas Zmijewski (World Bank)
- Tools and methods of the Hydropower Sustainability Standard (HSS) that are applicable to dams and reservoirs Kimberley Lyon (World Bank / HSA Council Chair)
- Sustainability framework for earthworks

 Jean-Pierre Magnan (EU Working Group

 on Sustainable Earthworks)
- <u>Life cycle cost assessment of dams</u> *Alena Raymond* (*AmSpec*)
- Biodiversity footprint and LCA: <u>Case studies and analyses</u> *Bonaventure Fontanier* (EDF)
- Social Life Cycle Assessment (S-LCA):
 An example from the mining sector *Isabel Wolf* (Technical University of Berlin)
- Q&A Session

 Moderation by

 Steve Usher (HP&D)

