

# General Presentation

The International Commission on Large Dams (ICOLD) was founded in 1928 to provide a forum for discussion and for the exchange of knowledge and experience in dam engineering for engineers and others concerned with the development of water resources. Its objectives are to encourage improvements in dam engineering in all its aspects, and in all phases of the planning, design, construction and operation of dams and associated works.

With a present total of 100 member countries, ICOLD leads the profession in ensuring that dams are built and operated safely, efficiently, economically, and with a minimum environmental impact. For more than 30 years, ICOLD has been particularly concerned to enhance the profession's awareness of the social and environmental aspects of dams and reservoirs, and to broadening its perspective in such a way that these aspects receive the same attention and conscientious treatment as the technical aspects.

To reflect the growing concern for the environment, a Committee on the Environment was formed in 1972 and has been renewed four times since. In June 1980, ICOLD published a comprehensive matrix in Bulletin No. 35 as a guideline for the identification and evaluation of all conceivable effects of individual dams on the specific parts of their environment. In 1999, ICOLD published a position paper on Dams and Environment, which is available on its website (<http://www.icold-cigb.org>).

ICOLD maintain and intensifies activities to harmonize the development of water resources with the conservation of the environment and with regard for the people affected by a project. It increases our understanding of environmental interactions and progress in the methods available to control them by the collection, analysis, evaluation and publication of actual experience, including the elaboration of guidelines based on such experience. It encourages the application of environment conscious criteria and objectives, as well as the establishment of an adequate legal and institutional framework tailored to every country's specific conditions and needs. It provides its members with up-to-date information on the current norms of environmental care and the state-of-the-art in dealing with environmental issues.

ICOLD has published in 2012 a World Declaration on Water Storage for Sustainable Development, jointly signed by ICID and IWRA.

ICOLD is working through 27 Technical Committees that gather experts from different countries in order to reach a set of recommendations on a particular subject.

Here follows recent ICOLD actions that are relevant to Global Compact Initiative:

## Environment

- 1) ICOLD was very active in the 8th World Water Forum organized in 2018 by the World Water Council and was the convenor of the Session 6B3 ICOLD participated in many preparatory meetings (Brasilia, Cancun, Stockholm) to define the sub-themes and the sessions of the Forum. ICOLD was asked to have a session relating the climate goals of IPCC and the targets of the 6<sup>th</sup> Sustainable Development goal.

The session was conceived to answer the question: “How do we make investments for climate protection also profitable for water?” Since Climate goals and Water goals can be competitors in a world dominated by credit scarcity, the session discussed how to reconcile those goals and gave examples of investments who benefit both.

The session organized by ICOLD was titled “How to make Climate Protection Goals and Sustainable Development Goals converge? : Exploring synergies between water-related SDGs and the UNFCCC Adaptation Agenda”

ICOLD Secretary General delivered the keynote speech explaining the crucial role played by dams and reservoirs in the context of climate change. For Climate Change mitigation, with Clean hydropower energy replacing fossil fuels and being an incomparable grid regulation tool, specially important with the increase of intermittent renewable energies. But also for adaptation to Climate Change, the reservoirs helping to reduce water stress and to regulate the impact of devastating floods.

Among the people also intervening were Eric Tardieu, from the Global Alliance for Water and Climate, who gave the general introduction, Niouga Ambroise Ouédraogo, Minister for Water and Sanitation, from Burkina Faso, who gave “An African perspective on SDGs and Climate », Edouard Bounet Ranou, from AFD (French Development Agency), who presented a case-study from Morocco on how private finance allowed adaptation to climate change in the water sector”, Carlos Gardell, from SPANCOLD; who spoke on North-South cooperation and gave the example of the agreement between the Spanish (SPANCOLD) and Bolivian Committees on Large Dams.

ICOLD Honorary President Cassio Viotti concluded the session by stating: “We have seen that Dams and Reservoirs, which have always been essential for human societies will be more essential today with the ongoing climate change, because they will play a key role for Climate Adaptation. I think many countries should be wise enough to include such crucial infrastructures in their adaptation plans.”

At the Forum closing ceremony, Senegal received the flag of the World Water Council as the host country of the 9<sup>th</sup> Forum. The Dakar Forum will center on “Water security for peace and development”. Before, in December 1997, ICOLD had already received in his Paris office Mr Abdoulaye Wade, who heads the Organizing Committee for the Dakar Forum and has expressed its full support for the Senegalese Organizing Committee, with a true convergence of views emerging from the discussions.

- 2) ICOLD has created a Technical Committee specifically dedicated to climate, whose mission is to collect and review the guidance and policies currently used in planning for the impacts of global climate change on dams, reservoir, and the associated water resources. The Committee has now published its report, which became the 169<sup>th</sup> Technical Bulletin of ICOLD. This work has been disseminated in COP22, with a workshop co-organized by the Moroccan Government and ICOLD during a pre-COP meeting devoted to water.
- 3) The Technical Committee on Environment is currently working on “Integrating dams with the environment”. The goal is to get together case studies involving planning, construction and operation of dams demonstrating environmental and socio-economic benefits.

## **Development**

- 4) Initially founded by Western countries, ICOLD has since the 60s worked for the sustainable development of mankind, even if the concept did not exist yet. ICOLD has always been particularly sensitive to the problematics of development and in particular the development of the poorest African countries. In 2008, ICOLD has thus launched a World Declaration on Dams and Hydropower for African Sustainable Development, cosigned with the African Union (AU), the Union of Producers, Transporters and Distributors of Electric Power in Africa (UPDEA), the World Energy Council (WEC), the International Commission on Irrigation and Drainage (ICID) and the International Hydropower Association (IHA). This Declaration has been a landmark and has set a reference for financing institutions throughout the continent. The ensuing development of dam projects resulted in many African countries joining ICOLD and led to the organization of the first ICOLD conference specifically dedicated to Africa in 2013, which took place in Addis Ababa, in the headquarters of the African Union. A second one was organized in 2017 in Marrakech, Morocco. And ICOLD is actively preparing for the third one, in 2019 in Namibia.
- 5) ICOLD has welcomed new member countries in the last years, mostly coming from developing economies. The 100<sup>th</sup> member of ICOLD is the Kingdom of Bhutan and joined the organization in 2017. ICOLD is deploying everything to help those countries to access to the best dam technology available, so they can use it to trigger sustainable

development in their country. ICOLD has in particular developed a Capacity Building program, which produced several training sessions for engineers coming from these countries.

- 6) ICOLD is supporting the SDGs but is especially concerned with SDG 6 and 7. The Reservoirs created by dams are delivering Water and Power to satisfy those two goals.

### **Gender**

- 7) ICOLD has created a Young Engineers Forum in 2011, which grew very fast: 150 young engineers joined the last ICOLD annual meeting. ICOLD is proud to say that three out of four persons elected president of this YEF are women, which is a performance in a dam engineering profession still predominantly male. The last one is Priska Miller, from Norway. ICOLD also had a female Vice President for the first time in 2010. ICOLD culture is to concentrate on science and engineering discussions, not considering the skin color, the gender or the political system. This is why, at the height of the Iran-USA crisis in the 80s, Iranian engineers were freely discussing with their American colleagues during the ICOLD meetings.

### **Commitment renewal**

- 8) During the celebration of the 100<sup>th</sup> Country member joining the organization (Bhutan), ICOLD Secretary General Michel De Vivo made a public statement renewing the commitment of ICOLD to Global Compact values.