

# ICH SUSTAINABLE HYDROPOWER AND TRANSBOUNDARY WATER COOPERATION.

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ICWC WATER DIALOGUES



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# WHAT IS SUSTAINABLE DEVELOPMENT?

*"Sustainable development is:*

- development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts:*
  - the concept of **needs**, in particular the essential needs of the world's poor, to which overriding priority should be given; and*
  - the idea of **limitations** imposed by the state of technology and social organization on the environment's ability to meet present and future needs.”<sup>1</sup>.*



1. World Commission on Environment and Development (WCED). *Our common future*. Oxford: Oxford University Press, 1987 p. 43.

# ROAD MAP AROUND THE WORLD

Hydropower accounts for the large majority of existing renewable power generation, and there is significant future potential to increase hydroelectricity supply, particularly in Africa, Asia, South America, and Central America. In many countries (e.g. Norway, parts of Canada, and Brazil) hydropower has long been the dominant source of electricity production. This technology will continue to play an important role in the transition toward a low-carbon economy.



# ROAD MAP AROUND THE WORLD

Hydropower contributes one-fifth of the world's power generation, and provides the majority of supply in 55 countries. For several countries, hydropower is the only domestic energy resource. Its present role in electricity generation is substantially greater than any other renewable technology, and the remaining potential, especially in the less developed countries, is vast.



# WHAT IS SUSTAINABLE HYDROPOWER DEVELOPMENT?

- The Sustainable Development of Hydropower Initiative seeks to share expertise, best practices, and methodologies related to the sustainability and financing of hydropower, as well as motivate multilateral development and financing agencies to consider sustainable hydropower in their portfolios of possible energy solutions for developing countries.



# SUSTAINABILITY DIMENSIONS

1 • Environmental

2 • Economic

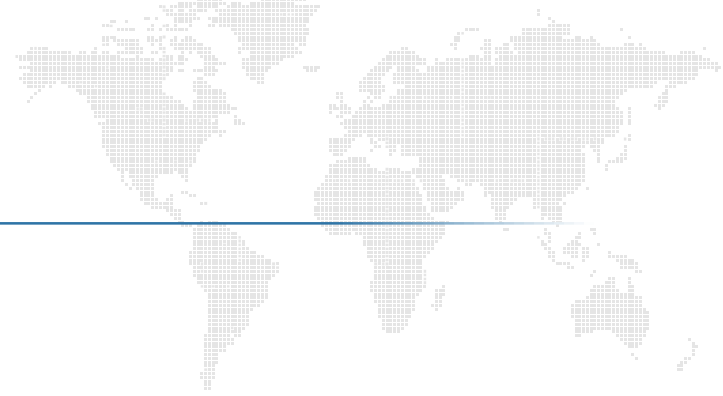
3 • Social well-being for today and tomorrow.

- Political and Governmental systems.

- Ethical approaches for society.



# SUSTAINABILITY NEEDS



## **empathy**

*(noun)*

*the ability to share someone else's feelings or experiences by imagining what it would be like to be in their situation*

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*AlternativeWay.NET*

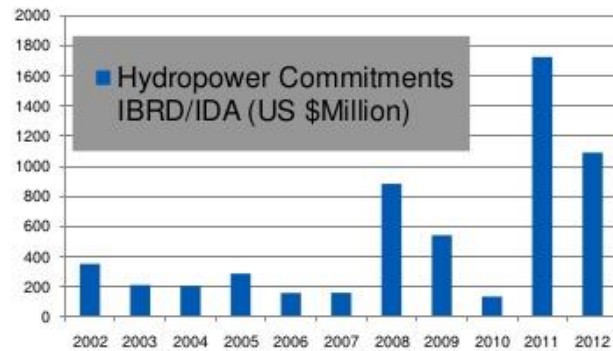
# MEASURING SUSTAINABILITY IN HYDROPOWER DEVELOPMENT



## ***Hydropower in the World Bank 2002-2012***

- The Bank's strategic support has gone from being inactive in 2002 to one of active promotion of sustainable hydro in global forums in 2012

- IBRD/IDA supported hydro with a total lending of \$5.75 billion and a total installed or rehabilitated capacity of 8.75 GW



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Hydropower constitutes an opportunity for development, livelihood improvement, poverty alleviation and environmental protection



Energy

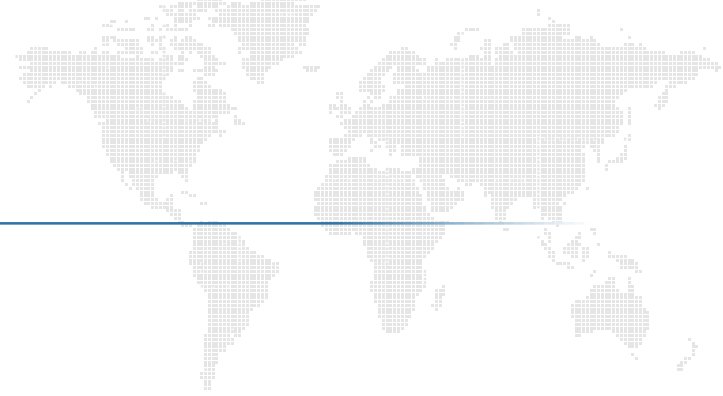


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# FOCUS ON SUSTAINABLE HYDROPOWER

- **Facilitation;** Fostering a productive dialogue between the various actors involved in complex multipurpose projects, specially in international water
- **Promoting Sustainability;** setting up economic, financial, technical, environmental and social arrangements in a way that delivers long term benefits at both the national and local levels
- **Flexible Financing;** providing long term predictable resources in low income and high income risk places, to the public and the private sectors as well as partial risks
- **Measuring Results;** Providing support for monitoring and implementation to help countries achieve their objectives and get value for money from their investments

# ICH CAPACITY BUILDING

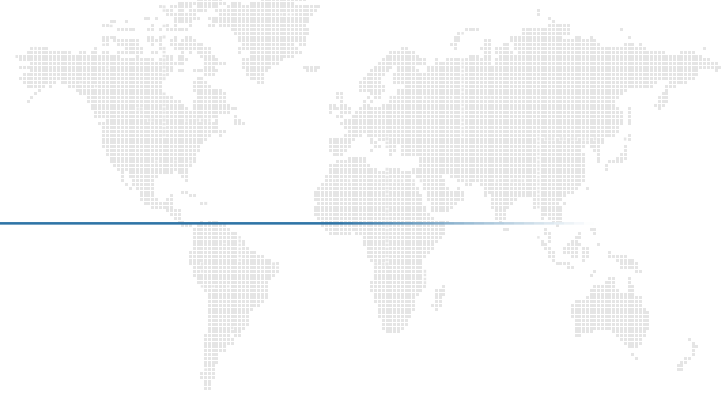


## Facilitation

- Capacity building from Planning to Implementation
- International Courses in Norway
- Regional Courses in Africa, Asia, Latin America
- Social, Environmental, Economic, Technical.



# ICH CAPACITY BUILDING

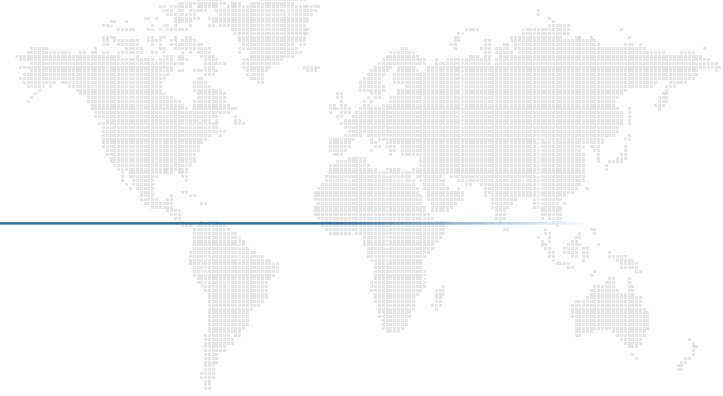


## Promoting Sustainability

- International conferences, seminars and forums
- Tailored made courses and training programmes



# ICH CAPACITY BUILDING



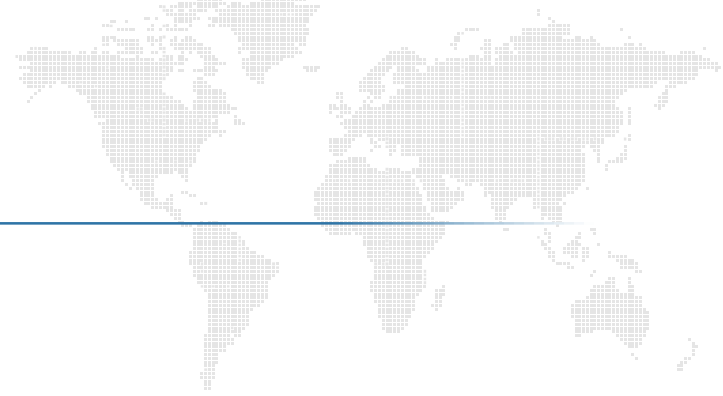
## Flexible Financing

Engagement with the main international financial institutions in the different capacity building programmes.

- Private Sector
- Public Sector



# ICH CAPACITY BUILDING




## Measuring Results

Providing constant support with the latest methodologies on monitoring.

Gaining through training.

Operation and Maintenance.



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- Sustainability requires commitment from multiple sectors
  - Sustainability often means establishing new norms and institutions outside of the developer's direct control.

# RESILIENCY



- Humanbeings' capacity to overcome adversities in life, and inclusively been transformed by them.

# ICH SUSTAINABLE HYDROPOWER

- learning from each other – building up a better world !



# Thank you!

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