

SIDE-EVENT AT WORLD WATER DAY 2014

ADDRESSING THE WATER-ENERGY NEXUS: THE ROLE AND SUSTAINABILITY OF HYDROPOWER

UNU HEADQUARTERS, COMMITTEE ROOM #3(5F)
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Institute for Integrated Management
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SIDE EVENT DURING THE 2014 WORLD WATER DAY

ADDRESSING THE WATER-ENERGY NEXUS: THE ROLE AND SUSTAINABILITY OF HYDROPOWER

21 March 2015, 12.15pm to 13.00 pm
UNU Headquarters Building, Tokyo, Japan
Committee Room #3(5F)

Programme

Water and energy are intertwined in various ways and numerous forms. Addressing the water-energy nexus requires a holistic, multi-stakeholder and inter-disciplinary approach that necessitates the inclusion of research, as well as its transfer into practice, thus addressing capacity development at individual and the institutional levels.

Multi-purpose reservoirs provide an example of the water-energy nexus, in particular given the need to store energy in a world which is increasingly driven by renewable energy sources. Hydropower is trending towards a role which is complementary to mixed energy systems, and hydro generation often acts as the buffer between supply and demand for electricity energy. Storing water has additional benefits in terms of freshwater supply, navigation, tourism and environmental services. In addition, reservoirs are essential for the mitigation of potential climate impacts of increased flood and drought. Notwithstanding these benefits, there is a tremendous range of sustainability topics that should be considered in the design and operation of storage hydropower, along with the delivery of other reservoir services.

The side event will, therefore, look at the unique role that water can play in modern energy systems through the use of storage hydropower; in addition, it will also investigate the sustainability challenges that might be encountered, and how performance and improvements might be achieved to optimize multi-purpose benefits.

Format

Three presentations of 10 minutes each will be followed by a panel discussion, giving the audience an opportunity to share their questions and comments.

Moderator: Mr. Mathew Kurian, UNU-FLORES

Presentations:

1. Addressing the water-energy nexus in managing multi-purpose reservoirs (Mr. Reza Ardakanian, Director, UNU-FLORES)
2. The Hydropower Sustainability Assessment Protocol (Mr. Richard Taylor, Director, International Hydropower Association, U.K.)
3. The role of multi-stakeholder capacity development in the water-energy nexus (Mr. Jens Liebe, UNW-DPC)