

Symposium Recommendation

The Water-Energy Nexus in Asia

20 March 2014, Tokyo, Japan

- 1. Water-Energy nexus promotes an integrated approach to deal with elements contained within the nexus. We should utilize nexus approach to achieve a balance among the elements and move from maximizing efficiency in each sector to maximizing benefits from both sectors as well as promoting complimentary redundancy from each of them. This provides system resilience to achieve sustainability.
- 2. Priority should be given in promoting water as a stable form of energy. This has been confirmed by the energy recovery experiences in Japan in the aftermath of the March 11 triple disaster. Development of hydropower in conjunction with irrigation and flood control has special significance in Asia for the improvement of human wellbeing. Full utilization of agriculture land with ample irrigation is priority for the region. Hydropower development needs re-visitation incorporating new developments and potential of hybrid systems with renewable energy as well as the wide use of mini, micro and pico hydropower systems.
- 3. Waste treatment in the energy-water nexus holds potential not only in minimizing energy demands for waste treatment, but also in utilization of waste as a source of energy. The range of application span wastewater treatment, human and animal waste use for biogas generation and as fertilizer.
- 4. Natural disaster management can benefit from water-energy nexus approach to reduce flood disasters in the face of increasing extremes due to climate change. Water resources development, flood control and energy development needs to be integrated with wise land use management, distributing benefits to both upstream and downstream inhabitants.
- 5. Water and energy access for all needs to be taken as a priority in the region. Vigorous promotion of "Clean Water and Clean Energy" will support achieving MDGs and should be taken up in SDGs in the post 2015 development agenda. Livelihood improvement needs to be given the center stage in this development with emphasis of co-management of common resources by the local communities and central authorities based on equity principles.