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# Needs and Objectives of Annex XVI in Japan

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## **Objectives of Annex XVI**

- "Hidden hydro opportunities" can be identified from such as:
  - review and update of existing hydropower inventories
    improvement of existing power plant performance
    adding power to non-power dams and water management facilities
- Overall objectives of the annex is to provide a framework to enable and support development of hidden hydro opportunities globally.

## Work Plan

- Work plan is consisted of four tasks:
  - 1. Updating hydropower inventories
  - 2. Improving performance from existing hydropower
  - 3. Adding power to non-power dams and water management facilities
  - 4. Hydropower technology research and innovation in the context of hidden hydro opportunities

## Outputs

- Major outputs and contributions to the annex:
  - Summary report by October 2020
  - Methodologies to identify and estimate hidden hydro potential
  - Case histories of successful development of hidden hydro opportunities
  - Needs for research and innovation to increase development of hidden hydro opportunities
  - Roadmap to enable and support development of hidden hydro opportunities globally

### Needs in Japan

• Needs of the annex in Japan are to:

verify a development process of hidden hydro opportunities since the existing inventory surveys.

accelerate an increased development of hidden hydro opportunities to the 2030 target.

#### Recent Hydropower Inventories in Japan



Source: ANRE, METI

## Hidden Hydro Potential in Japan

- Reducing barriers to new projects by reviewing and updating development criteria on hydropower inventories and by introducing innovative technologies
- Improving existing plant performance with and without R&U
- Adding power to various types of non power dams and water management facilities cost efficiently and environmentally friendly

## Challenges to the 2030 Target

- Update of criteria on hydropower inventories
- Update of R&U strategy
- Effective use of multipurpose reservoirs



2030 target of capacity increase in hydropower (ANRE, METI, 2015)

## Thank you for attention!