

CHINA'S RENEWED INTEREST IN HYDROPOWER DEVELOPMENT

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Executive Summary

1. Despite lingering concerns over negative ecological and social impact of massive dams, the Chinese government has decided to add a staggering 120 gigawatts in installed capacity from 2011 to 2015, or more than 50% of the existing total hydro capacity.
2. China will invest 400 billion *yuan* (US\$62 billion) by 2015 in the construction of four huge hydroelectric dams on the Jinsha River, with total installed capacity to double that of the Three Gorges Dam.
3. In the context of climate change, energy shortage and Japan's nuclear disaster, China's hydropower scale-up accords with the ongoing global renaissance in hydropower investment and rehabilitation as justified by the World Bank and International Energy Agency.
4. With 20% of the installed hydropower capacity in the world, China still has huge potential to further develop its commercially feasible hydro resources, as compared with other hydropower-rich countries like Norway, Japan and Canada.
5. China's electricity output has been growing at an annual rate of around 10%, on par with its average economic growth in the past decade.
6. Installed hydropower capacity accounts for 22% of China's total installed capacity in power generation, 74% of which still comes from coal-fired thermal plants.
7. China renewed its interest in hydropower in the wake of the Japanese Fukushima nuclear crisis in March 2011.

8. The government's heavy hydropower investments may spark social and ecological problems including residents displacement, landslides, sediment increase and species extinction.
9. Despite the government's preference for hydropower construction, China's differentiated power pricing system is not in favor of hydro powerhouses.