



“Assessment of Waterpower Potential and Development Needs” By the Numbers

A quick look at the growth potential of hydropower by the year 2025, as detailed in the March 2007 report released by the Electric Power Research Institute.

GENERAL OVERVIEW

- **270,000 GWH** - existing hydropower generation in the United States (75 percent of U.S. renewable energy generation—the largest renewable source)
- **90,000 MW** - overall water potential available
- **23,000 MW** - potential capacity increase by 2025

BY 2025, CONVENTIONAL POTENTIAL

- **10,000 MW** - overall potential increase
 - **2,700 MW** - from new small and low-power conventional hydropower
 - **2,300 MW** - from capacity gains and efficiency improvements at existing hydropower facilities
 - **5,000 MW** - from new hydro at existing non-powered dams



Copies of the EPRI report are available at www.wpri.com. Search for report #1014762.

By 2025, NEW WATERPOWER TECHNOLOGY POTENTIAL

- **10,000 MW** - increase from ocean and wave energy devices
- **3,000 MW** - increase from new hydrokinetic technologies

National Hydropower Association

Hydropower is a domestic source of renewable, reliable, and affordable electricity. No other energy source offers so many advantages.

Domestic and Secure

Domestic hydropower is a secure energy source that is not subject to disruptions from foreign suppliers, just like oil, coal, and natural gas.



Efficient

Today's hydropower turbines are capable of converting more than 90% of available energy to electricity, which is more efficient than any other form of generation (the best fossil fuel power plant is only about 50% efficient).

Renewable

Every year, rain and snowmelt replenish hydro power's supply. As a naturally infinite and inexhaustible energy source, hydro power will be there simply because there is too much energy at the top of the world's water to generate electricity.

Popular

Nationally, 63% of individuals believe hydropower is important or very important for meeting future electricity needs.

Source: U.S. Environmental Protection Agency, 2002

Clean

Hydropower uses water to generate electricity. It is abundant, locally available, and produces no pollution or other toxic by-products.

HydroPOWER
the power of moving water

Clean power for a secure energy future

Any moving water has the potential to make power



Water used for power is returned to the water cycle

The hydrologic cycle

Source: EPA, "Hydropower: Energy from Hydro." <http://www.epa.gov/epaosrp>

Reliable

Hydropower can go from coal power to wind power in an instant. It can be used to generate electricity during peak demand periods, or to provide a steady, constant flow of power. It can be used to generate power during times of high demand, or to provide a steady, constant flow of power.

Flexible

Hydropower has the unique ability to change output quickly. It can be used to generate electricity during peak demand periods, or to provide a steady, constant flow of power. It can be used to generate power during times of high demand, or to provide a steady, constant flow of power.

Non-power benefits

Hydropower projects do more than just provide electricity. They can also provide flood control, water conservation, and recreation. They can also provide a steady, constant flow of power.



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