

Hydropower is kinetic energy from moving water captured by large turbines embedded in dams or other infrastructure. Moving water rotates the blades to turn a generator that produces electricity. Hydroelectric facilities require either strong and regular water flow or a dam or reservoir to hold back and release water to the turbines on demand. In the U.S., hydropower has consistently provided around seven percent of electricity to the grid for years.









The United States has many strong waterways both onshore and along the coasts. Hydroelectric generation is closely linked with precipitation, leading to the greatest share of conventional hydroelectric dam facilities being located in the Pacific Northwest. Pumpedstorage hydropower involves moving water to a higher elevation for later use, but is often net negative in energy balance. While water is the renewable resource powering hydroelectric facilities, the primary material inputs are concrete and steel for the dam and turbines.



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