

HYDROPOW

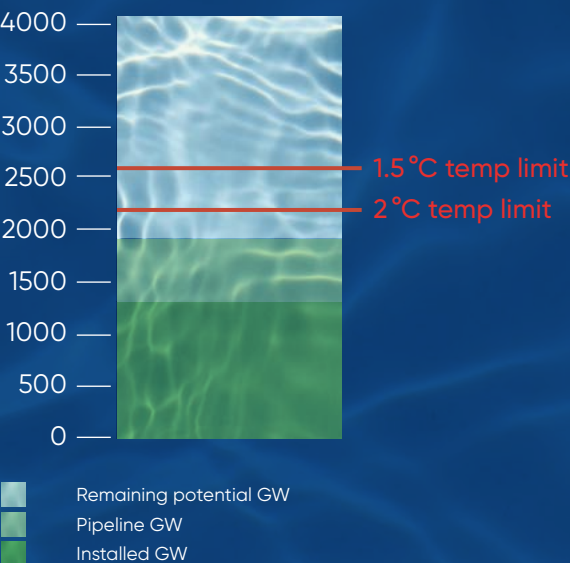
... A TECHNOLOGY WITH A VISION

Renewable hydropower is a reliable, adaptable and cost-effective source of clean power generation and responsible water management.

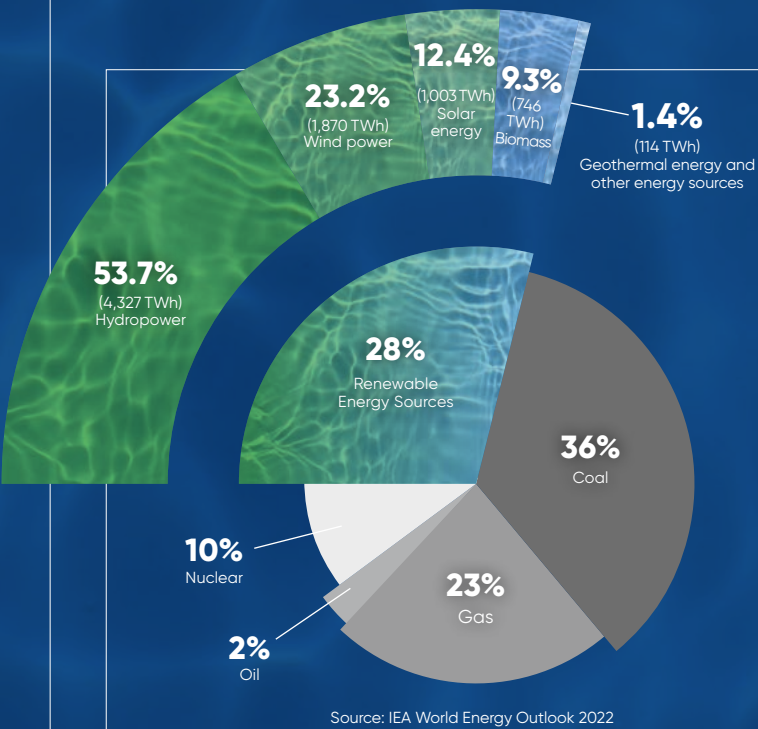
Modern hydropower plants help accelerate the transition to a clean energy supply by providing important services in the areas of power generation, energy storage, flexibility, and climate protection.

Hydropower is also an important resource for building secure, clean power systems and achieving global net-zero targets.

Hydropower 2050 - Towards NetZero



*Excluding pumped storage hydropower



+ 85%
of installed global energy storage capacity

... CHARGING UP VARIABLE RENEWABLES

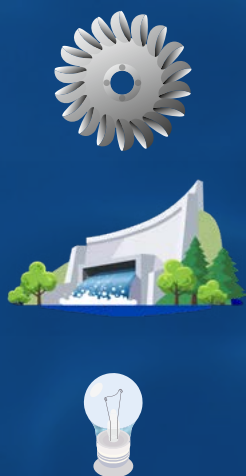
Hydropower is an optimal balance to variable renewables like wind and solar, thanks to its flexibility and energy storage services.

Pumped storage is the world's largest energy storage technology accounting for over 85% of installed global energy storage capacity, far ahead of lithium-ion and other battery types.

ER IS...

... THE SINGLE LARGEST RENEWABLE ENERGY SOURCE

Around 54% of all renewable electricity is generated from hydropower. The sector produces about 15% of total electricity generation from all sources. No country has come close to achieving 100% renewables without hydropower in the energy mix. Hydropower installed capacity reached 1,397 gigawatts (GW) in 2022 as generation hit a record of 4,408 terawatt hours (TWh).



1,397 GW

installed



4,408 TWh

of generation



15%

of total electricity generation

... AMONG THE CHEAPEST SOURCES OF ELECTRICITY

The global weighted average cost of electricity from hydropower projects was US\$ 0.061 per kWh in 2022, making it one of the cheapest sources of electricity in many markets.

**US\$ 0.061
per kWh**



+ 2 million jobs

... AND MORE

Hydropower does not end with electricity generation. It provides socioeconomic benefits, creates local jobs, supports regional economies, ensures water supply and flood control, and can be used for irrigation and navigation. The hydropower industry employs more than 2 million people worldwide directly and many more in related supply chains.

... POLLUTION FREE

According to independent research, using hydropower instead of fossil fuels to generate electricity has helped avoid more than 100 billion tons of carbon dioxide in the last 50 years alone.

The IEA estimated that 1,300 GW of additional hydropower capacity is needed by 2050 to limit the temperature increase to 1.5 degrees Celsius.

- 100 billion tons

+ 1,300 GW to keep < 1.5°

