

# POWERING PROGRESS | CANADA RUNS ON WATER

It takes a force of nature to power our country from coast-to-coast-to-coast, and our waterpower industry is Canada's big blue giant.

**Make no mistake, CANADA RUNS ON WATER.**

Waterpower has been an integral part of the fabric of our country since the first hydropower facility was commissioned in 1891. Now with more than 500 facilities nationwide, waterpower is Canada's most abundant source of clean and renewable energy. In total, waterpower supplies electricity for 6 out of 10 Canadian homes and businesses, with approximately 16 million Canadians living in provinces where 90% or more of electricity is waterpower derived.

## LEAVING A LEGACY FOR FUTURE GENERATIONS

An economic driver, waterpower contributes over \$35 billion annually to our GDP and supports approximately 130,000 jobs across the nation. Even as the world's fourth largest generator of hydroelectricity, much of the country's waterpower capability remains untapped. **Canada has the potential to more than double its current capacity to meet energy demand** while supporting our clean energy objectives.

Canada has ambitious GHG reduction targets, with economy wide reductions of 40% from 2005 levels by 2030 and a net-zero electricity sector by 2035. As a country we are rapidly approaching this target deadline. With just 6 years left to reach the 2030 goal, Canada will have to lower its emissions by 35% (230 megatonnes). To reach the 2050 net-zero goal, we must eliminate the remaining 440 megatonnes annually. Since 2005, GHG emissions from the electricity sector have dropped by 56%. In comparison, emissions from the oil and gas, agricultural, and business sectors have climbed over this time frame.

If these goals are to be reached, we must reduce fossil fuel consumption, while at the same time increasing our use of electricity from renewable and non-emitting resources, a process called "clean electrification."

## WATERPOWER IS HERE FOR THE LONG-HAUL

Since Canada's earliest days, waterpower has harnessed the strength of Canada's rivers to meet our energy needs. Now as our environmental needs become increasingly intertwined with our need for reliable energy, waterpower is once again ready to answer the call.


Producing no air pollutants and with ultra-low greenhouse gas emissions, waterpower is the only abundant form of renewable, flexible baseload electricity generation with long-duration energy storage from reservoirs and pumped storage. Once constructed, waterpower facilities have low maintenance costs and are long-lived assets that can easily exceed 100 years. **Waterpower is reliable** and produces power on demand, unlike other variable renewables that are dependent on weather.

## UNLEASH THE POTENTIAL

**WaterPower Canada members are ready** to reinvest in their existing assets and develop new hydropower and pumped storage facilities to meet the increasing demand for low emitting and reliable energy. However, federal and provincial governments must develop clear plans and strategies to drive electrification. This includes removing constraints and duplications in programs as well as streamlining environmental assessment and permitting process and policies to **reduce approval times** for electricity generation and transmission projects.

Our industry is eager to continue collaborating with governments, Indigenous groups, and communities across Canada to move the needle towards net-zero.

**Canada is and will be powered by water. WATER WORKS.**

 **WATERPOWER IS HERE TO LEAD THE CHARGE TO NET ZERO. LEARN MORE AT WATERPOWERCANADA.CA**