About Us

The CHTTC attracts turbine manufacturers and developers and focuses on life-cycle project solutions for fully integrated systems. The centre offers an actual commercial setting with the following assets: regulatory approval, equipment for manned and unmanned deployment and retrieval, a connection to local grid and test equipment to study the impact of the environment on turbines and the impact of the turbines on aquatic life.

The CHTTC site is located downstream of the Seven Sisters Generating Station on the Winnipeg River. It is a man made channel composed of granite bedrock. The channel is more than 1 km long and the average width of the channel is about 60 m. The average depth of the channel is around 11 m, however, the depth can fluctuate by as much as 1.5 m. The velocity range in the channel is typically between 1.5 and 3 m/s.

Contact Information

If you are interested in creating a partnership, requesting a service or would like more information about the CHTTC and how to become involved with us, visit our webpage at www.chttc.ca.

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The CHTTC site is located 90 km northeast of Winnipeg on the Winnipeg River. The offices and labs of the CHTTC are located at the University of Manitoba.

CHTTC
Canadian Hydrokinetic Turbine Test Centre

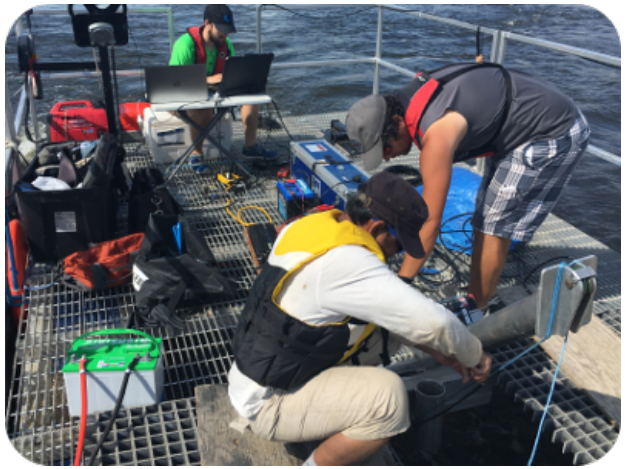
www.chttc.ca

Resource Assessment

Researchers at the CHTTC developed flow measurement procedures that allow for the complete assessment of any hydrokinetic site. The CHTTC has the capabilities to:

- Locate potential hydrokinetic resources
- Perform preliminary site assessments including near surface measurements and bathymetry
- Perform detailed site assessments including flow measurements and long-term flow monitoring

Flow measurements are performed using highly accurate measurement devices. The CHTTC is able to efficiently analyze flow measurements using custom computer software.



CHTTC Services

With over 10 years of experience in marine environments, the CHTTC is equipped and capable of designing solutions to hydrokinetic related challenges. Services include but are not limited to:

- Site assessments
- Data collection and analysis
- Field test installation, deployment, retrieval and maintenance of hydrokinetic turbines
- Monitor hydrokinetic turbines integrated onto the grid
- Validate the operation and performance in cold climates
- Develop mooring solutions
- Environmental assessments
- Computer modeling and simulations

Turbine Experience

At the CHTTC, hydrokinetic turbines from many manufacturers have been tested. As a result, the CHTTC garnered a wealth of experience in the planning and installation of hydrokinetic turbines. The CHTTC has the capabilities to:

- Help manufacturers perform deployments and retrievals of hydrokinetic turbines
- Perform site assessments to determine the optimal placement of hydrokinetic turbines
- Monitor and test the performance of hydrokinetic turbines

The CHTTC provides significant cost savings by reducing the time and cost to market for developers and by providing a framework for the industry to develop standards, protocols and procedures. The CHTTC allows technology developers to save time, cost and effort when installing and testing their turbines.