DURHAM
PARTNERS IN PROJECT GREEN
DURHAM ECO-BUSINESS ZONE

Member Case Study

The ACE research and testing facility offers chambers and technology for climatic, structural durability and life-cycle testing at UOIT. Facilities include one of the largest and most sophisticated climatic wind tunnels (CWT) on the planet.

In the CWT, wind speeds can reach 300 kilometres per hour with temperatures that range from -40 to +60°C. With their solar arrays and storm generators they can create any weather condition imaginable, from sweltering jungle downpours to the paralyzing cold of an arctic storm.

At ACE, electricity is their biggest operating expense. Obtaining an energy footprint at a granular level for individual pieces of equipment needed to run the wind turbine and testing rooms is of great value for ACE. For instance, with circuit level metering, it is possible to measure not only energy consumption (kWh used) right down to the individual piece of equipment, but also to analyze power quality on a granular level which can help ACE improve their power factor and reduce power factor charges on their monthly electricity bills. Managing energy costs in real time at a granular level allows ACE to determine exact energy use for the electrical loads used to run a specific test.

Since ACE rents out its facility to industry, it is important to have precise energy cost data for specific areas of the testing facility for more accurate budgeting and predictive costing to pass along to their clients.

CIRCUITMETER
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ACE selected CircuitMeter to track their energy use. It was determined that CircuitMeter's circuit level metering plus real time energy analytics platform was a cost effective solution to meter and manage their energy use in real time. The cost of installation was reasonable and they had in-house electricians who were able to install the system without significant downtime and without impacting customer operations.

CircuitMonitoring™ by CircuitMeter provides ACE with an energy management information system (EMIS) that meets their energy reporting needs and is easily scalable for future expansion. Most importantly, CircuitMeter is located in Durham Region and their team is available to support ACE if any face-to-face meetings are required; but in the 6 months since implementation of the system, it is slicing and dicing ACE's energy data without a hitch.