

The revolutionary AI technology that works for generators, electric motors, and also for batteries

Electric motors have been around for a long time; however, they have one flaw – They operate within a limited range of torque (turning or rotational energy of an engine). Or put another way, electric motors have limited efficiency to operate over a broad speed range. In practice, this means the better electric cars need at least two electric motors – one for slower speeds, and one for highway speeds, as there is no gearbox like a conventional car.

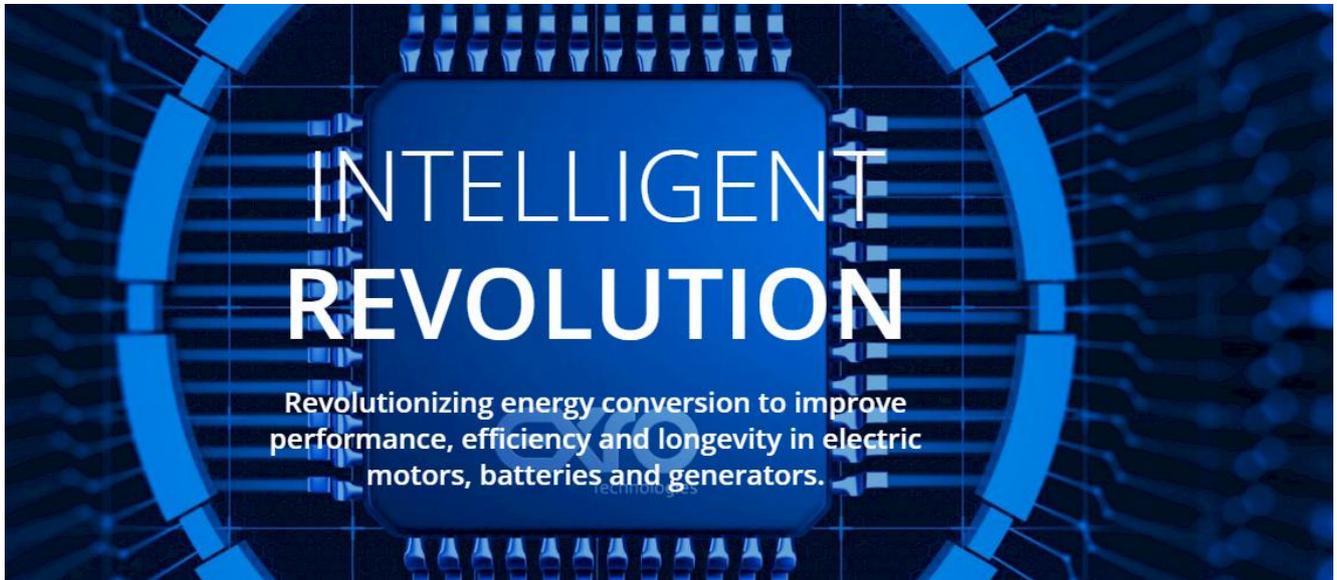
However, this is all changing now with a new technology that uses Artificial Intelligence (AI) to adjust and manage the electrical output, somewhat like how a gearbox works in a car. The technology works for generators, electric motors, and also for batteries. It is simply revolutionary.

[Exro Technologies Inc.](#) (CSE: XRO | OTCQB: EXROF), the company that is pioneering and commercializing this technology, states that it is “revolutionizing energy conversion to improve performance, efficiency and longevity in electric motors, batteries and generators.”

Exro’s technology aims to pioneer the way energy is stored, transferred and used by keeping the energy flowing at an optimal rate. They are doing this by commercializing an intelligent energy management system (IEMS) that uses Artificial Intelligence (AI) and big data analytics to change the way energy is transferred, used, and stored. By creating a dialogue between motor coil switching, motor controls, and battery management systems, Exro creates a system that

brings together and integrates several disciplines, to improve efficiency, reliability, safety and maintenance.

Exro Technologies revolutionary intelligent energy management system



Exro's patented Dynamic Power Management (DPM) system is a proprietary software that controls electric motor coils through individual coil switching and expands speed/torque capability and improves machine efficiency across a wider operating range.

Exro's technology also helps lithium ion batteries last longer

This technology also applies the principle of managing energy as it converts at the individual level to lithium ion batteries, by managing the charge and discharge of energy at the individual cell level of the battery. The aim is to improve the battery performance and efficiency, which should result in longer usage and possibly a second life of a battery. Exro's technology seeks to give a useful second life to billions of batteries that today are thrown away.

Collaboration with Potencia Industrial

As a result of successful testing, the company has received its [first production order](#) for motor drivers from [Potencia](#)

Industrial. The motor drivers are designed for independent integration as well as being one of five modular units that comprise the overall Intelligent Energy Management System. The Driver connects the battery to the electric motor and enables the motor to run with greater efficiency with high reliability and safety features.

Potencia is integrating Exro's motor drivers into vehicles that have been identified for the conversion of internal combustion engines to electric motors. Potencia is working on converting taxis in Mexico City from conventional to electric vehicles (EVs). The city has 250,000 taxis all needed to be converted to EVs.

Delivery is anticipated to start in Q1 2020 and will be done in phases allowing Exro to ramp up production while optimizing processes.

Sue Ozdemir, CEO of Exro, stated: "This is a big milestone for the Exro team as it marks another success in tackling the energy market and utilizing our technology to partner with companies who are working to make a difference."

Electric motors run almost every machine in society



Collaboration with Lithium Werks

In collaboration with [Lithium Werks](#) (a large Chinese battery manufacturer), Exro is applying its technology to the lithium-ion battery to be able to make the battery work more efficiently and extend battery life. Also if one battery cell fails instead of losing the whole battery, Exro's technology is able to do a workaround that can by-pass the damaged cell and keep the battery working.

The market opportunity for Exro's technology is enormous

Global Applications	Market Segment Applications
<ul style="list-style-type: none">❖ 1 billion cars❖ 100 million elevators❖ 200 million diesel generator sets❖ 300 million industrial motors❖ 65 billion lithium ion batteries	<ul style="list-style-type: none">• E-bike market 38.6B* 2025• Electronic motor scooter market 42B* 2030• Global Electric engine market 214.5B* 2025• Stationary battery storage 170B* 2025

This is just the start of the Company's strategic commercialization initiatives as they look to grow partnerships with customers around the world. The market for better electric motors, generators, and batteries is enormous. Exro is at the cutting edge of both future design and commercialization and is already in collaboration with two large and successful global companies.

Exro Technologies Inc. is a Vancouver, BC-based technology company with a market cap of just C\$ 20 million.