

Business Summary

Management Summary - eCycle is a manufacturer of a high efficiency brushless motor-generator that delivers more than twice the power at less than half the weight and double the efficiency of legacy products and is easier to use. It is ideal for mobile applications requiring a combination of small size, low mass and efficient performance.

- Higher power density results from its SolidSlot™ construction, which utilizes solid conductor bars instead of conventional windings.
- Because it is as equally capable as motor and a generator, it can serve as a key component to enable many hybrid applications, including mobile and stationary platforms.
- The effectiveness of eCycle's motor-generator has been proven through ten years of increasing sales to well known customers in many industries for numerous applications.

Market opportunity - Worldwide mega-trends of higher energy cost and environmental conservation are increasing the importance of efficiency and will help grow eCycle's sales in the future, with hybrid technology considered a key element in managing the higher cost of fuel. Hybridization represents a means to increase the efficiency of vehicles, not just automobiles, which have received most of the publicity, but also ATVs, scooters, motorcycles, tractor-trailers, agricultural and utility vehicles, powerboats and sailboats (as well as in homes and consumer appliances), all of which represent major market opportunities for eCycle's products. These opportunities represent extensions of hybrid technology, the benefits of which have been demonstrated in ships and locomotives for many years.

Markets and Products - eCycle's core technology consists of brushless motor-generators that are perfect for vehicles or any battery-powered application. They are up to 95% efficient compared with a little as 40% for conventional motors and generators. This equipment was originally developed for a motorcycle in 1996. Since then, it's been demonstrated that it has many other uses in products serving many large global markets, such as:

- **APU (Gen-sets)** – In these platforms, eCycle's motor-generator functions as both a starter for the engine and a high efficiency source of voltage and

current. When used as a generator, it is the most attractive solution for mobile electric power. eCycle's APUs deliver both high performance and packaging advantages. Unlike conventional AC generators, eCycle's product is smaller, lighter and delivers up to 10 times the current. They are available with three engines – Robin-Subaru fueled with gasoline or propane, Hatz fueled with diesel, biodiesel or jet fuel, and Kubota, fueled with diesel, biodiesel or jet fuel. Among the key uses are reduction of idling in tractor-trailers and back-up power for mobile and stationary installations.

- **Electric outboard powerhead** – This product is installed in Yamaha outboards, replacing the gasoline engine with eCycle's brushless motor. It is quiet and produces up to 9.9 HP with 0% emissions for recreation on emissions or performance restricted waterways.
- **Motor drives for EV, HEV and UAV platforms** – Motorcycles and scooters, ATVs, turf care, unmanned aerial vehicles and more. Unlike other motor drives, eCycle's CMG offers high performance at low voltage and may be connected in series or parallel. When this product is used in a hybrid capacity, it serves as an integrated starter-alternator (ISA).
- **Hydraulic power unit (HPU)** – This product provides pressure and flow from the industry's smallest, lightest, most efficient and reliable packages.
- **Air conditioning/pressurization units** – This product, which utilizes eCycle's CMG close coupled with a scroll compressor (e.g. Sanden), provides substantial capacity (up to 10 tons – twice the residential benchmark) for mobile uses as well as for stationary and back-up systems that require high efficiency and reliability.

Capacity Expansion – eCycle is expanding by building a fully functional manufacturing cell that has the capacity of producing more than 100 units per month. In addition, we are increasing our marketing activities and hiring employees. Over the next five years, we will add additional manufacturing cells and grow monthly production volume to over 1,000 units by adding new equipment, facilities, and new employees.