



**Category:** Renewable energy.

**Sub Category:** R&D

[www.evr-motors.com](http://www.evr-motors.com)

## Company profile

EVR Motors Ltd. is developing novel Direct Drive Generators; innovative technology that will greatly improve the performance of wind, water, ocean and other types of turbines.

The Direct Drive Generators of EVR Motors have a unique and innovative design of their magnetic system that among additional benefits, maintains high efficiency at all rotation speeds.

Installed in wind turbines, the Direct Drive Generators operate from 1.0 KW up to 10.0 MW, over the majority of the turbine's lifespan. Their installation will significantly increase turbine capacity factor, while reducing its cost.

Today, further research and development is financed by Horizon GreenTech Ventures (h-v.co.il), the company is incubated at the Ashkelon Technological Incubator. Other partners of EVR Motors include Alstom S.A, Rotem Industries, Gefen Biomed Investments, and BDB Technology Investments.

**Year of establishment:** 2012

**No. of employees:** 3

## Background of the company

EVR Motors team of founders consisted of highly qualified engineers, and highly motivated and energetic business specialists.

EVR Motors develops motors since 2008, and generators since 2009. Recently the company completed its first laboratory prototype of the direct drive generator which showed exceptional results.

Currently the company develops its first commercial prototype of a direct drive generator for small scale wind turbines.

## Technologies & products

The EVRG by EVR Motors is a "direct drive" permanent magnet, multi-pole & multi-phase generator, based on a novel modular magnetic system developed by the EVR Motors team. The generator can produce electricity directly from variable RPM inputs (starting from almost zero RPM) without any expensive gearboxes or energy-losing cooling requirements.

The EVRG Advantages:

- Continuous High efficiency (93-98%) over all rotation speeds
  - Fewer heat losses in the electric and magnetic conductors
  - Energy harvest starts at the lowest wind speeds
- Reduced weight
- Can be produced with non-rare-earth magnets (Sr-ferrite instead of NdFeB)
  - Resolution for the China rare earth materials quota issue
- Modular Construction
- Reduced manufacturing costs, fewer fault risks
- No need for liquid cooling (optional)

## Objectives / Target companies

EVR Motors Vision is to be a leading player in providing innovative and efficient solutions for the renewable energy industry.

EVR Motors Mission is to develop and manufacture innovative, cost-effective, more efficient and reliable direct drive generators for wind & marine turbines.

Target Companies: wind, tides & hydro turbines manufactures.