

Go further with smarter energy predictions



We empower people

TECHNOLOGY SUMMARY

The Energy Estimator is a functional prototype designed to provide real-time and practical estimation of the remaining driving range of an electric or solar-powered vehicle, with particular consideration of South African operating conditions.

The system collects relevant parameters from the vehicle and external sources and processes these through the developed algorithm to calculate the estimated remaining drivable distance.

The system combines:

- Electronic hardware
- Vehicle-mounted sensors
- Software
- Internet connectivity
- Real-time vehicle data
- Route and environmental information
- An optimisation software algorithm

UNIQUE BENEFITS

- Improved accuracy of EV range estimation
- Reduced range anxiety for drivers
- Improved driver confidence in electric vehicles
- Better energy management
- Potential optimisation of vehicle energy consumption
- Potential application to solar-powered vehicles
- Potential integration into existing vehicle platforms
- Potential licensing opportunity with automotive manufacturers
- Potential international commercialisation opportunity

STAGE OF DEVELOPMENT

Functional prototype

IP STATUS

Patent-protected through TUT

APPLICATIONS

- Electric vehicles
- Solar vehicles
- Automotive OEM systems
- Fleet management
- EV energy management
- Mobility technology.

OPPORTUNITY

The strongest opportunity is integration/licensing to automotive manufacturers and there is possibility of refining the system for commercial use by automotive manufacturers. Benchmark against existing international solutions, validate accuracy, establish TRL and approach automotive OEMs for technology demonstrations.

PRINCIPAL RESEARCHERS

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