



GRAHAM PALMER

PHD RESEARCH PROJECT TITLE:

AN IMPROVED METHODOLOGY FOR ENERGY RETURN ON INVESTMENT (EROI) FOR FOSSIL AND NON-FOSSIL FUEL ELECTRICITY GENERATION

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ABOUT

Graham is an electronic and industrial engineer with a technical, R&D, and management career in small business. His experience covers analog electronics, industrial automation, energy efficiency, and HVAC (heating, ventilation and air conditioning). Following the completion of a Masters in Sustainable Energy at RMIT in 2008, he has made contributions to the energy and climate areas. His research aims to develop an improved systems-based methodology for EROI (energy return on investment) for fossil and non-fossil electricity generation. The research will draw on the field of Biophysical Economics, the history of energy transitions, markets, renewables integration, and engineering. The aim is to provide a more comprehensive metric for energy supply technologies that better captures "societal value", to inform energy and climate policy.

PHD PROJECT

- High quality energy, including electricity, underpins economic development
- EROI provides a physical measure of the resources needed to deliver electricity to society
- Electricity is valuable only within the context of a system, but ascertaining the value of particular components can be challenging
- Electricity pricing is multi-layered and rules based
- EROI offers a pathway to bypass the complexities of electricity pricing to inform energy and climate policy

SUPERVISOR

Dr. Roger Dargaville

GERMAN SUPERVISOR

TBD

START DATE: December 2014

*available to work with Master students as project collaborators.

