

Mapping UNSW Impact Global Development

Primary SDG	7: AFFORDABLE AND CLEAN ENERGY
Broad theme	Energy development
Research	Investigating energy disruption in developing areas and reporting on governance and justice to promote more equitable access
Impact region	Sierra Leone, Uganda, Vanuatu, Myanmar
Faculty	Arts and Social Sciences
School/Institute	School of Humanities & Languages
Academic	Dr Paul Munro
Project partners	Scientia Fellowship: \$40,000 per year until 2020
Related SDGs	10: Reduced Inequalities
	12: Responsible Production and Consumption

Elevator pitch

UNSW research is investigating the disruption of energy industries in developing countries by new technologies, helping governments, private companies and NGOs in those countries to deliver more equitable and fair access to energy.

The Challenge: Energy markets in developing countries are being disrupted by new technology

The old approach to energy creation and distribution - where the government builds a large, central grid and then connects everyone to it - is in decline across most developing countries. It was an approach that never provided all of the population with access. To complement this imperfect model, international companies and NGOs have been entering developing countries with advanced energy projects that are not always viable over the long term; something usually breaks, no one is around who knows how to repair it, and there is no proper supply chain for the components.

In response the market for energy has shifted to a more personal, DIY approach using new technologies. This market disruption includes micro and household grids, DIY solar power stations, and charging stations. In Uganda, many companies now sell renewable energy products to the consumer and around 20% of the population own a solar power module of some kind. Yet this new energy market is in its early days. Inconsistencies and inequities across the population remain.

UNSW's solution: Investigate new energy landscape to determine governance and justice issues

Paul has worked in Africa since 2006, mainly on forest governance issues in post conflict areas in West Africa. In Sierra Leone and Liberia, Paul partnered with the UNHCR to set up solar power stations to provide energy to hospitals and schools. He then set up his own NGO that is helping to spread renewable energy across Africa. His organisation, Energy for Opportunity, has completed 300 projects installing solar lanterns and mini grids in households and communities.

Paul is now focusing his research on energy and development. Energy poverty is changing radically in developing countries, and there are implications for governance and justice. Who owns these smaller grids and systems, and are they delivering fair and equitable access to the population? Who has the power and who is missing out? What can governments do and how should they regulate? Paul is looking to answer some of these questions, first in Uganda and then in Vanuatu and Myanmar. He plans to publish his findings in journals, and write a book comparing the three countries. Further funding will assist with on-the-ground research, research assistants, and advising PhD students.

The Impact: Influence the energy market to deliver more fair and equitable access

Paul's research will help governments, private energy companies and NGOs to understand the lay of the land of the disrupted energy market, including any glaring issues around equitable access and justice. His experience running an energy NGO for over ten years will help him to provide valuable insights to these energy industries. He will share his findings to influence regulation, energy strategies and governance. He will also collaborate on projects that deliver more equitable access to energy that is ultimately cheaper, fairer and more reliable than under the old centralised model.

Researcher

Dr Paul Munro is a Senior Lecturer and a Scientia Research Fellow at UNSW. He has conducted a range of research projects in West Africa, Mexico and Australia focused on forests and water. He is also co-founder of Energy For Opportunity (EFO), a non-government organisation dedicated to the dissemination of renewable energy in West Africa. Paul was inspired to work with the people of Africa after travelling through the continent for six months while studying.

Ben Falkenmire 26.02.18