



ENERGY AND POVERTY RESEARCH GROUP



THE UNIVERSITY
OF QUEENSLAND
AUSTRALIA

Create change

Addressing energy poverty

Modern, clean and efficient energy services are crucial for human well-being. Energy services facilitate social and economic development, bring shared prosperity and foster equity and gender empowerment. Yet, more than 1 billion people remain with no access to electricity and just under 3 billion people continue to use traditional forms of solid fuels for cooking.

In recognition of this massive energy challenge, the United Nations General Assembly has declared the decade *2014 - 2024 as the Decade of Sustainable Energy for All*.

The UN has also declared Energy Access as one of 17 Sustainable Development Goals, calling for *universal access to affordable, reliable, sustainable and modern energy services by 2030*.

Established in 2014, the Energy and Poverty Research Group (EPRG) at the University of Queensland (UQ) is an interdisciplinary pan-UQ initiative that works to solve pressing global energy challenges in impoverished

communities. The group's work focuses on developing sustainable, reliable and affordable energy solutions tailored to a variety of regions.

Since inception, the EPRG has grown rapidly and has brought together a diverse set of skills in its eight PhD students, two research fellows and five academic research leaders. Our students are enrolled in various schools at UQ, working across a range of disciplines including the School of Social Science, School of Communication and Social Change, School of Chemical Engineering, and School of Mechanical and Mining Engineering.



Our Mission

Our vision is to enable transitions necessary to achieve the UN Sustainable Development Goal of 'Affordable and Clean Energy Access for All by 2030'.

To that effect, our mission is:

1. To undertake pioneering research to influence policy, business models and community behaviour
2. To offer education that better equips future leaders to tackle the transdisciplinary challenges of energy and development.
3. To design and deliver innovative, context-driven, low-cost, scalable solutions for the global energy poverty dilemma.

Our research focus

Our work at EPRG is focused on enabling energy transitions across five thematic areas:



ENERGY AND CLIMATE

Energy use has critical implications for climate change. Transitioning from fossil fuel-led energy consumption to cleaner energy solutions is important for climate mitigation. Yet, basic access to energy for energy poor communities can help build their resilience to disasters from both natural climatic variability and anthropogenic climate change, furthering global climate adaptation efforts. Our work explores both these positive and negative feedback loops connecting energy to climate.



ENERGY FOR COMMUNITY DEVELOPMENT

Households and communities are key stakeholders in the process of understanding and enabling energy transitions. At EPRG, we study community energy practices, household behaviours, role of both individual and collective agencies, lessons from successful and failed policy experiments, and barriers facing communities to help identify pathways for access to modern and reliable forms of energy.



ENERGY FOR PRODUCTIVE LIVELIHOODS

The contributions of energy to long-term socio-economic and environmental welfare remain under-studied and under-valued. At EPRG, this is an area of growing interest as our current research moves beyond basic energy access to explore innovative clean, modern energy alternatives to enhance existing livelihoods and create a diversified and prosperous economy.



GENDER AND EQUITY

We recognise that gender is situated at the centre of energy access and energy poverty deliberations, both in policy and practice. We hope to advance knowledge on the relationship between energy access and women's empowerment by understanding energy's contribution to women's livelihoods, economic productivity and social and political empowerment.



ROLE OF THE PRIVATE SECTOR

We believe that the private sector has a particularly critical role to play in driving poverty alleviation efforts in energy impoverished communities. Our research explores the business case for investments in the energy sector targeted towards the 'Base of the Pyramid' markets, thereby generating 'shared value' for energy providers, users, governments and the broader community.

Energy poverty denies billions of people in the developing world access to services that sustain modern societies.

Engagement and collaboration

In addition to the various Schools enrolling our PhD students, we work with a number of other UQ partners including the Global Change Institute and the School of Psychology's Parenting and Family Support Centre.

Within Australia, we work with Monash University and the CSIRO.

Internationally, we work closely with several collaborators in India, including the National Institute of Advanced Studies, Bengaluru; Tata Institute of Social Sciences (TISS), Mumbai; Indian Institute of Technology (IIT-M), Mumbai; The Energy and Resources Institute (Teri), Delhi; Foundation for Ecological Security (FES), Anand; Practical Action; Xavier Institute of Management (XIMB); and Yuva Vikas, Bhubaneswar.

We welcome expressions of interest from Australian and International partners – academic, business, government and civil society organisations – to collaborate and support our work in enabling energy access for poverty alleviation.

For further information please contact the EPRG

eprg@uq.edu.au

www.uq.edu.au/eprg

or

Professor Paul Lant

Phone: +61 7 3365 4728

Email: paul.lant@uq.edu.au



Energy is the golden thread that connects economic growth, increased social equity, and an environment that allows the world to thrive.

Ban Ki-Moon, UN Secretary-General