



CAR Energy Transitions and health - Pitch Development Meeting

CAR is moving into a new research area and would like to fund 2-3 projects in the area of energy transitions and health. CAR would like to invite researchers to pitch their project ideas in this area.

Examples of research in this area include (but are not limited to):

- Health Impact Assessment
 - Impacts of transition from fossil fuel power stations to renewable energy sources such as biodiesel
 - Waste to energy plant e.g. incineration
 - Impacts of (if any) of small scale energy generation
 - Impacts of transition from conventional vehicles to electric vehicles
- Life Cycle Analyses
 - Electric vehicles: increased electricity use, battery manufacturing and recycling issues, heavier vehicles therefore more brake and tyre wear related PM, etc.
 - Disposal of renewable technologies: wind turbines, solar panels, batteries, etc.
- Identification of not yet quantified un-intended consequences for health and environment: infrasound, batteries damage and consequent release of toxic materials, etc

The CAR team, together with the researchers/collaborators and other relevant partners, will develop a work plan that would ultimately lead to an application for NHMRC/ARC/MRFF or similar funding. CAR will invest approximately \$20K in 2-3 projects (Total allocation \$60K). This will fund activities identified in these work plans and may include literature reviews, pilot studies, needs assessment, economic analysis, engagement with industry etc. *CAR reserves the right to vary the amount of funding at any time.*

Process



1. EOI - In order to assess the suitability of your proposed project we would like you to submit an EOI (500 words or less) addressing the following questions in your submission:

- What is the relevance to energy transitions and health (100 words)?
- What is the gap in knowledge that this project will address (100 words)?
- How will this project capitalise on CAR's strengths (100 words)?
- Who are the external partners and what is their stake in the research e.g. Industry or government departments (100 words)?
- What outcomes will this research lead to (e.g. new funding sources, new knowledge, products, and services) (100 words)?

Note that to be eligible you will need to have a CAR chief investigator on the project (www.car-cre.org.au)

EOI will be open from 31st August and proposals are to be received by no later than 5pm 30 September 2018 (AEST).

2. Shortlist

EOIs will be scored against the five questions above. EOIs will be ranked and the top 2-3 applications will be shortlisted. You will be notified by 12th October if your proposal has been shortlisted.

3. **Pitch Meeting** All shortlisted projects will be invited to the CAR Pitch Development Meeting planned for the 31st October.

Background

CAR would like to identify key potential research directions in relation to health impacts of energy transitions.

What do we know?

- Few studies considered health impacts of energy transitions directly (most are focused on environmental impacts/outcomes)
- Studies that discuss health outcomes related to indirect effects from improvement of air quality through fossil fuel reduction (reduction in PM, CO₂, NO₂, VOCs)
- Degree of health benefit is likely to vary with type of energy technology and related sector.

Where are the gaps in knowledge?

- Future scope for health impact assessment (HIA) work
 - Frameworks for health impact assessments e.g. HIA of biofuel use; uptake of electric vehicles
 - Future scope for life cycle assessment (LCA) work to ensure inclusion of health e.g. LCA of PVC (solar panels), batteries, wind farm blades
- Toxicological assessment of alternative fuels
- Epidemiological studies in specific areas e.g. windfarm exposures (wind turbine syndrome)
- Health impact related to or from a lack of residential energy efficiency measures (buildings, sources of energy e.g. wood heaters)
- Need for economic modelling to include short and long term health impacts/co-benefits including modelling of impact of changes in energy prices
- Considering health consequences not yet known or articulated.

Next Steps...

Our purpose is to ensure that the major upcoming societal shifts in energy generation and use including, production of goods, heating/cooling and transportation consider the human health risk and benefits, so that changes with possibly far reaching consequences can be

implemented in ways that benefit human health and reduce any associated health risks. The health impacts of energy transitions are a major gap in current energy related policy and research. We see the most useful contributions from CAR are to (1) promote and lead aspects of new research focusing on human health, (2) develop new collaborations in new areas to develop and influence work already underway, and (3) influencing public policy decisions.

We would now like to invite project ideas in this space....

Proposed Structure of the pitch development meeting

Date: 31st October

Venue: Woolcock Institute of Medical Research

Time	Chair: Guy Marks
9:30-09:45	Coffee/Tea on arrival
9:45-10:00	Welcome
	Project 1
10:00-10:10	Pitch on research proposal (10min)
10:10-11:30	Workshop project (80min)
	Project 2
11:30-11:40	Pitch on research proposal (10min)
11:40-1:00	Workshop project (80min)
1:00-2:00pm	Lunch
2:00-2:10pm	Pitch on research proposal (10min)
2:10-3:30pm	Workshop project (80min)
3:30-4pm	Closing remarks

Each of the selected 2-3 pitch projects will be allocated 10 min to pitch their proposed project. Together we will workshop the project in the remaining 80min.