

Project Title: Understanding scale dimensions of large-scale renewable energy projects to ensure a social license to operate for hydrogen/ammonia production

Location: Curtin University

Faculty: Faculty of Sciences and Engineering (Western Australian School of Mines)

Project background and description:

Transitioning to a low-carbon energy future, including with large scale hydrogen production, will require renewable energy technology deployment at a scale not yet experienced across Australia. Most of the projects will likely be in regional and remote areas where there will be concerns around competing land use and other social and environmental impacts. The candidate will work with renewable energy project developers to understand how their projects are currently being perceived by a range of stakeholders and to identify what the potential impediments to developing large scale wind and solar projects might be. Comparing responses across different geographic locations of Australia will identify key considerations for deployment based on regions, local contexts, and renewable energy type.

Aim/objectives:

- Undertake case studies of existing and/or proposed large scale renewable energy projects that may, or may not be, associated with hydrogen production.
- Examine key factors that influence support or opposition to large scale renewable energy projects for hydrogen/ammonia production.
- Identify whether those factors differ across geographies and local contexts.
- Map the expectations and requirements for a social license to operate in each geography that will allow the ongoing development of large-scale renewable energy projects associated with hydrogen.

Eligibility

Eligible courses:

Bachelor (honours) or Masters degree from relevant disciplines include social policy

Eligibility criteria:

- Bachelor (honours) or Masters degree from relevant disciplines include social sciences, environmental science, human geography, political science, psychology and social policy; at 1st class or upper second class level, or equivalent
- Proficiency in qualitative and quantitative social research methods.
- In assessing applications, preference will be given to applicants who can demonstrate an ability to work across disciplines, have excellent interpersonal, communication and management skills
- When applying for a particular project, please state briefly and clearly the relevance of your degree and/or your experience to the project description

- Full-time enrolment

PhD Stipend

PhD scholarships will be available for a period of three and a half (3.5) years. The PhD stipend rate is \$33,413 per annum tax-free. Additional Top Up maybe available.

Environment

The GlobHE Training Centre is offering 12 Higher Degree by Research (HDR) Scholarships (PhD) that will provide a unique training opportunity through:

- World-class and state-of-the-art facilities and experts across the participating universities, research institutions, industry partners and other organisations
- An integrated Training Centre research agenda with inter-disciplinary projects across 5 themes area
- Opportunity to work or placement with partner organisations and industry partners
- Research skills, career development workshops and relevant industrial training
- Competitive support for national and international conference travel and networking opportunity
- Generous project support and excellent mentorship
- Delivering the next generation of highly skilled workforce to give Australia the ability to build home-grown hydrogen solutions and economic models.

Application Process:

All interested students should contact **Professor Peta Ashworth** peta.ashworth@curtin.edu.au or Centre Manager: **Dr Mandalena Hermawan:** mandalena@unsw.edu.au

Interested applicant must email and provide the following information:

- CV
- Academic transcripts for all completed/pending completion degree
- Name of referees (can be academic or former employer)