EMPOWERING CONSUMERS THROUGH AI-POWERED ENERGY LITERACY TOOL: A CO-DESIGNED APPROACH
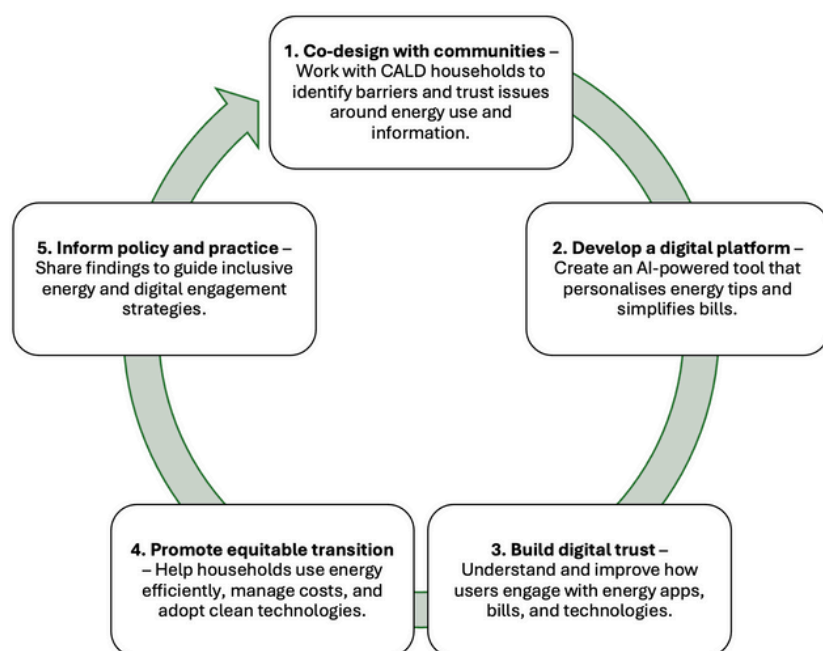
1. INTRODUCTION

- Australia's energy system is rapidly evolving, driven by rooftop solar, smart meters, complex tariffs, and digital platforms.
- Many households struggle to make sense of their energy use and bills.
- Culturally and Linguistically Diverse (CALD) and digitally excluded communities are particularly affected, often finding energy information confusing or inaccessible.

3. PROJECT OVERVIEW

The aim of the project is to co-design an AI-powered digital platform that improves energy literacy, builds trust, and empowers Culturally and Linguistically Diverse (CALD) communities to make confident energy decisions about efficient energy use and bill management.
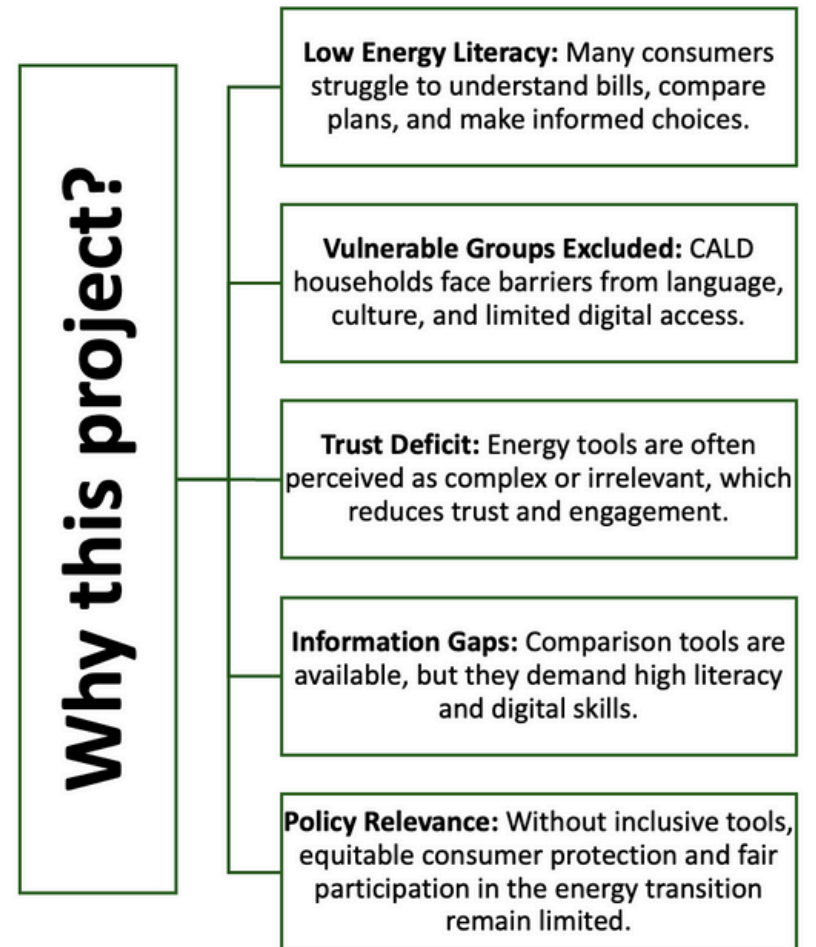
4. PROJECT OBJECTIVES

1. Co-design with communities – Work with CALD households to identify barriers and trust issues around energy use and information.
2. Develop a digital platform – Create an AI-powered tool that personalises energy tips and simplifies bills.
3. Build digital trust – Understand and improve how users engage with energy apps, bills, and technologies.
4. Promote equitable transition – Help households use energy efficiently, manage costs, and adopt clean technologies.
5. Inform policy and practice – Share findings to guide inclusive energy and digital engagement strategies.

RESEARCH TEAM

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2. WHY THIS PROJECT

Why this project?

Low Energy Literacy: Many consumers struggle to understand bills, compare plans, and make informed choices.

Vulnerable Groups Excluded: CALD households face barriers from language, culture, and limited digital access.

Trust Deficit: Energy tools are often perceived as complex or irrelevant, which reduces trust and engagement.

Information Gaps: Comparison tools are available, but they demand high literacy and digital skills.

Policy Relevance: Without inclusive tools, equitable consumer protection and fair participation in the energy transition remain limited.

5. METHODOLOGY

This study uses a co-design, mixed-methods approach that combines social research, behavioural insights, and AI modelling to understand how digital tools can build trust and improve energy literacy.

Research Stages:
1. Needs Analysis
2. Co-Design Workshops
3. Prototype Development
4. Evaluation
5. Policy Translation

6. PROJECT IMPACT

This project will inform policymakers, regulators, and community organisations on how co-designed AI tools can enhance inclusiveness, usability, and trust in digital energy engagement. It will promote interactive, evidence-based approaches that empower consumers and strengthen confidence in managing energy use.

Trustworthy Digital Society

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