Supplementary File: Research Team Background

1.1. Background to this Research

This research is part of the Users-Centred Energy Systems Technology Collaboration Programme ("Users TCP") by the International Energy Agency. The Users TCP mission is to "provide policy-relevant evidence on factors influencing energy use, including technology acceptance, and their impact on society." Two Tasks under the Users TCP - the Hard-to-Reach Energy Users ("HTR Task") and EmPOWERing All Task collaborated on this article.

1.1.1. The Hard-to-Reach Energy Users Task

The HTR Task has been running since early 2019, and is co-funded by the Swedish Energy Agency (Sweden), Consortium for Energy Efficiency (U.S. and Canada), and Electricity Authority (Aotearoa New Zealand). During Phase 1 (2019-2023), it focused on characterising "hard-to-reach" (HTR) energy users, including an in-depth critique on this terminology (Rotmann et al., 2020). A broad definition and shared goals were co-designed by Task participants, in order to ensure all categories of HTR energy users were captured:

"In this Task, a hard-to-reach energy user is any energy user from the residential and non-residential sectors, who uses any type of energy or fuel, and who is typically either hard-to-reach physically, underserved, or hard to engage or motivate in behaviour change, energy efficiency and demand response interventions that are intended to serve our mutual needs."

Phase 2, starting in early 2024, focuses on "hidden energy users" (including those living in hidden hardship) and how to better engage them. Its shared goal is "to identify, listen to, elevate, and empower priority voices, so as to be guided by their experiences, insights, and needs, to achieve a truly just energy system transition for all." The Task has run two national expert workshops focusing on elevating Indigenous voices already, with a third one planned in April 2026 in Aotearoa. It is also undertaking participatory field research, including pilots with priority communities.

1.1.2. The EmPOWERing All Task

Phase 1 of the EmPOWERing All Task, funded by the Swedish Energy Agency, began in 2021. The focus was to synthesise state-of-the-art research on power, gender, and energy use to identify best practices while developing strategies to counter organisational and institutional inertia and apply the knowledge gained in designing inclusive, just, and efficient technologies. Areas of research include masculinities and climate denial, Global South perspectives and learnings across South-North contexts, and the inclusion of women and marginalised groups in policy work and institutions.

Phase 2, initiated in 2025, places a greater emphasis on intersectional aspects rather than solely focusing on gender. Indigenous perspectives and practices, as well as the impacts of resource extraction related to the so-called "green transition" on Indigenous peoples, are important additions to this phase. The workshop held in Kiruna in June 2025, in collaboration with the Hard-to-Reach Energy Users Task, marked the starting point of this work.