From the Ground Up: Embedding Just Transition and Energy Justice Principles in Geothermal Development

Róisín Greaney, TASC

As we work towards climate neutrality, there is growing recognition that the transition must be fair, equitable, inclusive, and leave no one behind. While the goal of achieving a just transition is relatively straightforward, the path to realising it is far less certain and requires transformative change. In other words, '**if the process of transition is not just, the outcome never will be**'. Recent legislative and policy developments in both Ireland and Northern Ireland, including the *Climate Action and Low Carbon Development (Amendment) Act 2021* and the *Climate Change Act (Northern Ireland) 2022,* reflect a growing recognition of the need for a socially inclusive and equitable transition. However, these texts vary in how deeply they incorporate just transition principles.

At the core of this broader transformation is the energy transition, where nothing short of a radical reorganisation and large-scale change is required to address current widespread energy injustice and keep the goal of 1.5°C within reach. Energy justice scholars ask key questions: How will the benefits and burdens of the energy transition be shared? And how can these decisions be made in a way that is equitable, transparent and inclusive?

Public and community participation is widely recognised as essential for the success and acceptance of transition policies. Yet, traditionally, citizen participation in the energy system and broader energy transition has been framed through the role of the citizen as an energy consumer. This passive view of citizen engagement has been criticised by scholars for limiting the role that a person might play in the energy transition and reducing their potential to contribute. The citizen-as-consumer narrative has been further challenged for reinforcing market-centered discourses and overlooking issues of inequality and exclusion related to participation and access to resources.

In response, energy justice scholars call for a move beyond tokenistic or one-way informational models of participation. Public opposition to geothermal projects, for example, should not be simplistically dismissed as a lack of understanding or self-interest (i.e., NIMBYism). While accessible information and clear communication remain important elements of engagement, particularly for geothermal energy, which is less well-known than other renewable sources, meaningful citizen participation requires a

more nuanced view of public concerns. This includes recognising legitimate fears, trust dynamics, and questions of distributional justice.

Participation should be deliberative, inclusive, and rooted in justice. Beyond the draw of social acceptance, meaningful public engagement should support citizens to shape project outcomes, participate in co-creation, and share in the resulting social and economic benefits.

These issues of justice and participation are especially relevant to geothermal energy, where development across the island of Ireland remains in its early stages, and where the 'ground rules' have yet to be fully defined. Geothermal energy development for heat is typically decentralised and used locally, opening up unique opportunities to democratise its production and management. As the sector develops, it is timely to explore not just the technical aspects of how clean heat can be generated, but also who benefits, who decides, and who is heard.

Through the GEMINI project, TASC, the Think-tank for Action on Social Change, will examine how energy justice and just transition principles can be embedded into the development of the geothermal sector in Ireland and Northern Ireland. This action research element of GEMINI aims to answer the following research question: *How can communities and citizens participate in and gain social and economic benefits from geothermal energy development on the island of Ireland?*