The Psychological Component of Justice in the Energy Transition

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By Elena Pugach, Master Student of the Master in Sustainability, Society and the Environment at Christian-Albrechts-Universität zu Kiel, Germany

Based on the IPCC 2014 report, fossil fuel use and industrial processes make up the largest share (65%) of global greenhouse gas emissions (Edenhofer, 2015). As a result, an important piece of the strategy to keep global temperatures at an acceptable level is focused on the transition of the energy system. However, studies have shown that transitions inherently produce winners and losers, such as those displaced from legacy energy systems, those impacted by new energy projects, and those who are/will be experiencing energy insecurity. Therefore, considering the effects of the transition on stakeholders is paramount (Carley & Konisky, 2020). One way to consider the effects of transitions is by using the concept of justice, which is defined as “the fair, equitable, and respectful

treatment of humans, other species, and the environment (Williams & Doyon, 2019, p. 145).” This article will evaluate justice through three different justice concepts: distributive, procedural, and recognition. It will then examine energy transition case studies to illustrate the practical effect of all three justice concepts.

Justice as Recognition from a Psychological Perspective

Justice as recognition focuses on recognizing and valuing the knowledge, views, and interests of key stakeholder groups (Walker, 2012). In locations with a colonial history, transitional efforts need to recognize Indigenous communities, as well as incorporate truth and reconciliation (Williams & Doyon, 2019). Of all justice dimensions, justice as recognition is the least addressed (Williams & Doyon, 2019). However, it is inseparable from the other two dimensions because it determines whose values, knowledge, and norms are considered in the decision-making process and in the distribution of costs and benefits (Lecuyer et al., 2018). Research has shown that individuals have a psychological tendency to exclude people in their out-group in justice considerations (Opotow, 1990). The consequences of recognition of injustices are lasting psychological harm to those affected (Fanon, 2008; Ohenjo et al., 2006).

Case studies in the Energy Transition

The Energy Futures Lab (EFL) is an Alberta-based organization aiming to facilitate energy system transitions. It is led by an environmental NGO and connects representatives from various energy sectors, government levels, and stakeholder groups to bring a diversity of perspectives. Most transition efforts in Canada do not fully address justice as recognition, and the same can be said for EFL. First Nations participants noted issues with EFL’s recognition efforts such as: being asked to speak on behalf of all Indigenous peoples in Canada, having Indigenous and reconciliation initiatives as separate elements in recognition efforts, and a lack of consistency between Indigenous and EFL understandings of important definitions such as “reconciliation” and “partnership.” Upon finding gaps in the implementation of justice concepts, Williams and Doyon (2020) recommended the use of their framework for future transitional projects as it includes all dimensions of justice. Surprisingly, most lab participants rated EFL’s Indigenous recognition efforts positively, demonstrating that even incomprehensive recognition efforts can generate positive attitudes towards the

energy transition (Williams & Doyon, 2020).

Procedural Justice from a Psychological Perspective

Procedural justice focuses on the inclusion and influence of stakeholders in the decision-making process, access to information and the justice system, and the transparency of the decision-making process (Walker, 2012). Currently, decision-making processes for new energy projects are not inclusive of the communities that host the facilities (Carley & Konisky, 2020), and such procedural exclusion can cause people to stop adhering to social norms (Tyler, 2006). Perceived procedural fairness improved people's long-term acceptance of decisions and their satisfaction with their distributed outcome, even if unfavorable (Kazemi et al., 2015). This demonstrates the value of procedural justice in the acceptability of energy transitions.

Case studies in the Energy Transition

Several renewable energy projects have shown that technocratic top-down procedures inhibit the acceptability of policy, while community collaborative approaches enhance the acceptability of policy (Wolsink, 2007; Wolsink, 2010; Wolsink & Breukers 2010). The implementation of a wind farm project in the Dutch part of the Wadden Sea faced opposition due to community concerns about its impact on the landscape. Certain areas of the region hold natural, ecological, and cultural heritage and provide significant contributions to the local economy. Despite these considerations, the spatial layout for the project was chosen without consulting local stakeholders. Negotiations about landscape fit were attempted with locals after choosing project sites. However, it was impossible to negotiate at that stage because acceptability risks were the highest in the initial planning phase. As a result, the community group opposing the project succeeded in generating enough national support to cancel the project (Wolsink, 2010). This case study demonstrates the repercussions of failing to consider procedural justice in all stages of project implementation as well as the psychological ramifications of injustice in mobilizing effective social movements.

Distributive Justice from a Psychological Perspective

Distributive justice focuses on the distribution of environmental costs and benefits, such as how resources, opportunities, risks, responsibilities, and financial costs are allocated between various stakeholder groups (Walker, 2012).

Disparities in the allocation of costs and benefits from the energy transition are extensive, potentially exasperating problems already faced by low-income communities and communities of color (Carley & Konisky, 2020). Acceptability of energy transitions not only depends on the distribution of costs and benefits but also on the nuances of how they are distributed (Steg et al., 2015).

Case studies in the Energy Transition

Sustainable energy transitions will be perceived as unjust if one group faces most of the costs while other groups receive most of the benefits (Steg et al., 2015). To balance out the costs and benefits of transitional projects, risks should be mitigated as much as possible while benefits should be provided to those who face most of the cost. Various studies have shown that the acceptability of energy projects differs based on how compensation is distributed. A study found that support for a hypothetical wind project was greatest under a "community benefit frame" which highlights the benefits the community would receive in connection to the wind farm (Walker et al., 2014). Another study showed that non-monetary compensation is better received by the host community, while monetary compensation garners less support than no compensation (Claro, 2007). When bribery is suspected, compensation can have negative consequences (Steg et al., 2015). A third study showed that people prefer to allocate royalties from a wind project to local rather than state funds because it appears fairer (Krueger et al., 2011). These studies all demonstrate that individuals are highly committed to distributive justice.

Conclusion

A just energy transition begins with the consideration of justice as recognition because it determines whose values and knowledge is used as the foundation to implement the other two dimensions of justice (Lecuyer et al., 2018). It was shown that individuals have a psychological tendency to exclude people in their out-group in justice considerations (Opotow, 1990). Therefore, the application of justice cannot begin without putting key stakeholders and historically excluded minorities in positions of power. Due to the interconnectedness of the three dimensions of justice, failure to address any one dimension will result in the failure to remedy justice. Overall, the implementation of justice concepts will strengthen support for transitional efforts, thus enabling its success (Williams & Doyon, 2019).

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