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Practices and imaginations of energy justice in transition. A case study of the Noordoostpolder, the Netherlands☆

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ABSTRACT

Renewable energy technologies are often idealized as environmentally innocent alternatives to fossil fuels. Fossil fuel extraction is often considered as 'unjust' and renewable energy as the 'just' alternative. At the same time renewable energy projects, such as wind parks, are often resisted because of the uneven impacts of its infrastructure. This paper analyses such ambiguous meanings of energy justice (social justice issues related to energy) along the lines of its three tenets: distributional, procedural and recognition justice, aiming to understand how energy justice is constructed from below. It does so on the basis of a case study in the Noordoostpolder (the Netherlands) where plans for extracting shale gas went together with both large-scale and small-scale renewable energy practices. The paper analyses how energy justice is 'made' by how people resist shale gas and engage in 'renewable energy practices' and as such produce new imaginations and normativities of energy justice. Such an ethnographic approach helps to understand energy justice as a process of co-construction of activists, policy makers and scholars and as such responds to recent calls for a human-centred approach to the study of energy transitions. The paper is based on two and a half years of ethnographic fieldwork in the Noordoostpolder.

1. Introduction

> It is crowded in the meeting room of the Rabobank Noordoostpolder. This evening a consultancy report on the possible economic effect of shale gas exploitation in the Noordoostpolder will be presented. The meeting is organised in the context of the 'Energy dialogue', a series of meetings initiated by the Dutch government to stimulate dialogue on the energy transition. The outcome of the research for the local economy is clear: the agricultural and recreational sector will face a downturn and real estate value will decrease. In breakout groups, everybody is invited to write down their comments: 'better bet on renewable energy', 'shale gas slows down energy transition', 'we have to create possibilities for renewable energy', 'money is put at better use to stimulate renewable energy' and 'old energy,' you can't do that anymore' (fieldnotes, Energy Dialogue, 7 July 2016).

The above vignette discloses how opposition against fossil fuels and support for renewable energy are intertwined. Whereas the meetings' participants consider shale gas exploitation as 'unjust' and 'wrong', renewable energy is seen as the 'just' and 'right' alternative. There are, however, also examples of renewable energy projects met with resistance; communities sometimes resist the construction of wind parks because they perceive its construction as unjust (Pasqualetti, 2011; Petrova, 2013; Rygg, 2012). These different perceptions of what is a just way of producing energy raise questions about how experiences of energy justice are shaped and how energy justice is practiced in everyday life. What makes renewable energy more 'just' than fossil fuels? How are ideas of what is 'right' and 'wrong' in terms of energy production constructed in practice? How do these practices relate to the different dimensions of energy and environmental justice? What are the policy implications of these imaginations and practices of energy justice? In this article we aim at answering these questions.

The conceptualisation of energy justice is intimately related with environmental justice. Environmental justice research originally focused on inequities in the distribution of environmental 'bads' and has its origins in activism against the unequal distribution of environmental risks related to waste sites in the United States (Schlosberg, 2013; Temper et al., 2015). Environmental justice thus interrogates the relationship between marginalized groups and environmental issues. In similar vein, energy justice research generally focuses on how energy

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consumption and production relate to social inequalities. Both energy and environmental justice studies tend to look into three tenets of justice: distributional, recognition and procedural justice (Walker, 2009; McCauley et al., 2013; Jenkins et al., 2016). Distributional justice is about the uneven distribution of ills related to energy infrastructure and unequal access to affordable energy; procedural justice concerns the use of equitable and non-discriminatory procedures for decision-making about energy; and recognition justice pertains to fair representation and full political rights with regard to energy issues (McCauley et al., 2013). However, in our analysis of how energy justice is practiced and experience, it becomes clear how especially procedural and recognition justice may be interwoven.

Although environmental justice and energy justice are closely related as concepts and both pursue a normative-ethical analysis of injustices, the scope and depth of the case studies about the social dynamics of energy production, as well the role that these (ethnographic) case studies play in the analysis of energy (in)justice, differ. Research on activism against the extraction of fossil fuels and how this relates to ideas of environmental justice, tend to be studied within an environmental justice framework (e.g. Kosmicki and Long, 2016; Bell and Braun, 2010), as well as in-depth case studies on the social impacts of large renewable energy projects such as big wind farms (e.g. Pasqualetti, 2011; van der Horst and Toke, 2010). Energy justice studies do use examples of social mobilization related to mainly large-scale renewable energy projects, but mostly from a more philosophical approach where cases are primarily analysed to build a normative-ethical framework, rather than an analysis of what energy justice might mean locally (e.g. Heffron and McCauley, 2014; Fuller and McCauley, 2016; Sovacool and Dworkin, 2014; Sovacool et al., 2013). In addition, individual energy consumption and production are exclusively studied within an energy justice framework (e.g. Sovacool, 2015; Walker et al., 2016). As a consequence, the local construction of energy justice in relation to both the extraction of fossil fuels and the production of renewable energy as an explicit answer to this, remains unstudied and undertheorised. Analysing different types of energy production justice concerns within the energy justice framework would open up avenues for analysing individual 'renewable energy practices' related to activism regarding fossil fuels developments.

In this paper we look into the distributional, recognition and procedural tenets of energy justice related to shale gas developments and renewable energy production in the Noordoostpolder, the Netherlands. We combine the energy justice framework with insights from the critical environmental justice literature that has been influenced by political ecology (Domènech, March, and Saurí, 2013; Holifield, 2009; Swyngedouw and Heynen, 2003). What we take from this literature is that the meaning of energy justice, like environmental justice, is not something static that can be check-listed, but rather a process of co-construction of meaning between activists, policy makers and scholars. Such an approach towards energy justice implies not only analysing discourses, but putting social practices at the centre of social inquiry (Ortner, 2006). Such practices might not explicitly refer to energy justice, but do reflect a normative positioning regarding energy production. We thus look at how energy justice is 'made' through the social practices, how ideas of just energy production are enacted in daily life and as such produce new imaginations of energy justice. As such, our study contributes to the theorization of energy justice 'from below', that is, as it emerges from people's practices and imaginations. It does so through an ethnographic analysis of the links between social mobilization against fossil fuels and (individual) 'renewable energy practices'. Such an approach helps to fully understand energy justice in practice and as such responds to Sovacool's call for a more human-centred approach to study energy transitions (Sovacool, 2014).

The central aim of this article is to understand how people experience and construct energy justice from below. Our central argument consists of three claims that interlink theory, practice, policy and methodology. These three claims are closely related to the challenges of energy justice research guiding this special issue and on which we will reflect in our conclusions. Our first claim is that energy justice should always be analysed within its specific history, time, context and location. Ideas of what is considered a just way of producing energy may not only be partly guided by time-related ideas about intergenerational distribution justice, but also transform over time in reaction to the presence of different forms of energy production. Meanings of energy justice are rooted in the past as well as in ideas about the future, but also relate to actualities of both fossil fuels and renewable energy developments (challenge 1 'learning from national policy contexts' and 5 'temporal approaches', see Jenkins et al., 2017). Second, people often practice what they consider as 'just' without expressing such social practice discursively as 'energy justice'. However, these practices do entail new imaginations of energy justice. Energy justice is not just constructed at the institutional level, but also – if not foremost- through such social practices. Our third claim is that researchers as well as policy makers should therefore take local practices and imaginations of energy justice into account in research design and project development. In most policymaking that is labelled as 'thinking local' and 'from below', participation is limited to several stakeholders. Ownership in a transition towards a just energy production is best reached by thinking horizontally and going beyond stakeholders and local governments (challenge 3 'methodologies for energy justice, see Jenkins et al., 2017).

2. Literature review and policy background

In popular discourses, renewable energy technologies are often idealized as green or environmentally innocent alternatives to fossil fuels (Ottinger, 2013). In the Noordoostpolder, renewable energy is often seen as the alternative to what is considered the unjust extraction of shale gas as well. As we will show in the findings section, renewable energy is then equated to 'just', discarding fossil fuels. However, renewable energy projects can also be considered as unjust because of their inequitable distribution of environmental and health hazards and the inability of communities to participate in related decision-making (Ottinger, 2013). In this section we briefly review the literature on social mobilization, which is often rooted in ideas about just and unjust energy production, within the environmental and the energy justice framework.

Over the past three decades, the growing body of environmental justice research shows that the poor, indigenous peoples, women and (other) minority communities are disproportionately impacted by the risks posed from hazardous environmental sites (e.g. Kosmicki and Long, 2016; Schlosberg and Carruthers, 2010) and that gender, class and ethnicity shape the way people experience environmental justice. In general, environmental injustices develop when economic interests outweigh local community concerns, often valuing natural resources and land use in a different way (Martinez-Alier, 2009). Recent research shows how socio-politically relatively weak groups are unequally burdened by the presence of coal-fired power plants in the USA (Kosmicki and Long, 2016). However, some extraction projects today are remarkable because they do not discriminate. Willow, analysing recent shale gas developments in the US concludes: "the boundary between those who benefit from environmental degradation and those who bear its burdens seems to have shifted so that today almost all of us are outside corporate and public decision-makers' realm of responsibility" (Willow, 2014 p. 252). Most literature in the field emphasizes how fossil fuel extraction projects pose threats to local resources and infringe on local communities' perception of environmental justice (Schlosberg and Carruthers, 2010).

The energy justice literature that evaluates cases of renewable energy production often uses examples on large-scale wind parks (Heffron and McCauley, 2014; Barry et al., 2008), with some case studies on solar parks (Yenneti and Day, 2015; Yenneti et al., 2016), as the operation of such facilities represents a burden borne disproportio-