9 Energy transitions in the global South

Towards just urgency and urgent justice

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This book has explored energy transitions unfolding in the global South against the backdrop of an urgency vs justice dilemma. In the age of the Anthropocene the urgent need for de-carbonising our energy systems can be at odds with taking seriously questions of social and environmental justice. With public debates pushing the importance of urgency,[1] often at the expense of justice questions, we have argued that a politics of just energy transitions is needed to navigate the dilemma.

The analyses presented in this book show different facets such a focus can uncover, from studying solar and wind farms in post-war Sri Lanka to legal frameworks that aim to protect the rights of Mother Earth in Bolivia; from following energy provision infrastructures in Lebanon to lower-caste women entrepreneurs installing clean cookstoves in South India; or from comparatively tracing Gambian and Irish mobility practices, governing solar energy technology rollouts in Portugal or questioning sustainability in Indian smart grids.

Following such narratives helps us detect angles and approaches that characterise promising pathways for engaging with a politics of energy transitions in the Anthropocene. They are part of a broader research landscape that we look at through three lenses in this concluding chapter: a methodological, a theoretical–conceptual and an empirical lens. We propose that these lenses could sharpen and re-focus our attention when navigating the landscapes of energy transitions. The chapter ends by suggesting how urgency, justice and related connotations offer both productive tensions and reinforcing potential. This can enrich, open up and bring into focus our understanding and efforts to shape energy transitions.

Energy transitions under three lenses

Informed by the chapters presented in this book and by broader reflections on the current social scientific work on energy transitions we highlight some promising research angles and approaches. Although neither exhaustive nor exclusive, they can be seen as a critique, as well as a driver for, current and future (research) engagements. It is not our aim to define a research agenda for a whole field, as has recently been suggested for the field of sustainability transitions research or for the field of science, technology and society studies (STS) respectively (Köhler et al., 2019; Sovacool et al., 2020). While such endeavours have their use, this

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conclusion follows the wider aim of this book, which is to draw lessons from a range of studies and perspectives embedded in energy transition and justice work in the global South. Our hope is hereby to contribute to, inspire and set in motion inquiries that engage with the politics of energy transitions in a variety of ways, contributing to a variety of agendas. In what follows, we identify what we consider fruitful ways of engaging with energy transitions research. Grouping them under three lenses is of analytical and structural value. In practice, we expect that their main value lies in the ways in which they are combined.

Methodological lens: comparisons and looking beyond

One approach that we consider promising when engaging with energy transitions is the comparative method. Though not new in the field of energy, most research has focused on comparisons within conventionally accepted categories such as comparisons between industrialised nations, or comparisons between global South nations. Greene and Schiffer (this volume) remind us about the value of engaging in comparisons between developed and developing countries. By comparing the evolution of mobility careers in Ireland with that unfolding in The Gambia they argue that car and cycling mobility careers in both countries are, surprisingly, not so different after all. Centrally, gender emerges as a significant factor in shaping mobility practices in both countries. Such North–South comparisons help to deconstruct simplistic assumptions either about development-status as the default explanation for incomparability, or as the default explanation for difference.

Work on comparative urbanism informed by postcolonial theory can be instructive for global comparative energy transitions research. Urban studies scholars have long been engaged in methodological discussions about the issue of comparison (e.g. Pickvance, 1986; Brenner, 2001; Robinson, 2011). One key lesson from these rich discussions is the danger of unreflectively taking cities – or in our case interventions for energy transitions – from the global North as the default or benchmark for comparisons. Greene and Schiffer's contribution proceeds on a more equal footing, avoiding that the variables and topics to be considered are restricted to certain locations (Robinson, 2011). They show that a North–South comparison does not necessarily have to end in identifying an "advanced" North and a South that needs to "catch up" or "leapfrog" by eliminating its differences with the North (see also Kumar and Shaw (2020); Kumar and Taylor Aiken (2020) for more examples of South–North comparisons).

In the academic literature, perspectives and approaches developed in the global North remain the benchmarks for comparison. Sareen's contribution flips this relation by suggesting how insights from governing the roll-out of solar technologies in Rajasthan (India) can be relevant for endeavours in Portugal. It contributes to work that takes the plea for "learning from the global South" seriously by taking findings developed in the global South as yardsticks for actions implemented in the North. Scholars in critical energy research also increasingly engage with South–South comparation work (Mohan and Tan-Mullins, 2019; Shen and Power, 2017).[2] What all these approaches of critical comparison have in common is their

aim to deconstruct unquestioned benchmarks often set by and relevant for the global North. Critical comparative engagement with energy transitions is a powerful way to unearth their politics and to foster equity and learning.

The call for a broader engagement with perspectives outside one's own discipline and practice is considered valuable when tackling complex socio-technical problems, including energy transitions. Increasingly, scholars in energy research look beyond academic silos and approaches. Social sciences and humanities scholarship on climate and energy ethics and justice are examples of such scholarly cross-fertilisation (Foulds and Robinson, 2018; Jenkins et al., 2020a). By studying the role of regulatory arrangements that are to promote Bolivia's energy transitions "in harmony with nature", the contribution by Villavicencio-Calzadilla and Mauger makes the case for gaining insights at the intersection between legal and social energy studies. Their chapter reminds us of the importance of legal and policy frameworks underpinning energy transitions and what these sources can tell us about opportunities and challenges to shape them. Besides looking for perspectives beyond disciplinary boundaries, increasingly, calls for a more societally engaged role of academia surface, pointing to the value of engaging with non-academic communities and activists (Jenkins et al., 2020b; Schneider, 2019). Whether within or outside academia, calls for broader engagement remind us about our own epistemic bubbles and the opportunities (and challenges) that emerge when engaging with the unfamiliar.

Theoretical–conceptual lens: rich and diverse

A lot of current research on energy transitions in the global South reverts to a certain set of theoretical approaches, including transition studies (Broto et al., 2018; Hansen et al., 2018), political economy (Brown and Cloke, 2017) or political ecology (Gent and Tomei, 2017). This book nuances and enriches current theoretical and conceptual thinking by adding perspectives that foster critical thought when engaging with energy transitions. Though all contributions in this book add inspiring angles for thinking about energy and change, here, we will put three of them into the spotlight.

Following an assemblage perspective, Abi Ghanem makes the case to move away from a technology-focused approach when studying energy transitions. She traces the system of electricity provision in Lebanon with an assemblage perspective, highlighting the spatiality and temporality of infrastructure as well as the everyday dynamics of the formal and informal electricity service production. Here, assemblage thinking offers a rich analytical tool which helps understand energy (transitions) more holistically, including questions of embedded practices, access and justice. It also shows us how informal arrangements for energy provision, rather than being part of a "mafia" that should be eradicated by top-down government action, can offer opportunities for community-based local energy transitions. In Melnyk and Singh's contribution we are reminded of the importance of decentring the dominant perspectives and understanding and scrutinising concepts from a Southern/less dominant perspective. The authors do so by

questioning the dominant high-tech visons and narratives of sustainable energy transitions as proposed and perpetuated by the North, particularly in the EU Directive 2018/2001 on promoting the use of energy from renewable sources. When aiming to enable visions of sustainable energy futures they emphasise the importance of considering local and contextualised knowledge and values, as essential ingredients for more inclusive and just vision building. This includes examining possibilities for low-tech rather than high-tech technologies, community- rather than market-based interactions and wellbeing rather than economic growth imperatives.

In the Govindan and Murali chapter, the issue of intersectionality (Crenshaw, 1989) emerges as a promising focus when analysing energy transitions (see Datta and Ahmed, 2020, for more on infrastructure and intersectionality). The authors show how casteist practices and gender prejudices affect female cook stove entrepreneurs in South India. Paying attention to the compounding of inequalities or disadvantages, including caste and gender, but also poverty, race or education, highlights important dimensions of the politics of energy transitions. A different yet equally important intersection comes to the fore in Theiventhran's chapter. By studying the justice trade-offs that emerge in energy transitions within a post-war Sri Lanka, the author points us to the sensitive dynamics unfolding at the intersection of energy and/in post-war settings.

One argument we bring forth is to recognise the heterogeneous ways in which energy transitions unfold. Accounting for such heterogeneity, including dynamics and power relations, requires a rich and diverse set of theoretical and conceptual approaches to understand and shape energy transitions. Theoretical and conceptual diversity helps deconstructing or de-privileging any single theory or dominance of concepts. Some have argued that more diversity does not necessarily lead "to productive research and legacy", rather it contributes to a fragmentation of the field (Sovacool et al., 2020, p. 26). Yet, we find that overly focusing on homogenising research agendas and approaches may fall into the same trap as the dominant Anthropocene narrative we challenge in this book. The urgency versus justice theme describes how demands for urgent collective action can overrule issues of justice and the recognition of heterogeneity.

Empirical lens: global South

The diverse contributions presented in this book all focus on energy transitions as they unfold in the global South. Understood only from a geographical perspective, this focus describes a demarcation that is underpinned by a nation-based understanding of the global South. Such an understanding is often connected to narratives of a "Third World", of the "periphery" regions outside Europe and North America, where the poor and politically and culturally marginalised people reside (Dados and Connell, 2012). We agree with the many critiques, including the lack of acknowledging heterogeneity, colonial histories, power and agency (e.g. Said, 1977; Sparke, 2007; Trefzer et al., 2014) that such a flat understanding of the global South as a fixed geographical block evokes. Global North and global

South are notions "constructed and reconstructed through various discourses" and cannot be seen as "pregiven, stable unities or wholes" (Abnave, 2016, p. 35).

Aiming to "find evidence of global South within the global North" and vice versa, Trefzer et al. (2014) propose to understand the global North/global South paradigm as "nestled within each other" (p.4). Rather than restricting the global North and South to geographical associations, they conceptualise them as markers for (compromised) power: they suggest using global South as a framework to detect the manifold inequalities, while the concept of global North helps to uncover "contingent and interconnected spaces of wealth and privilege" (Trefzer et al., 2014, p. 4). With this they can see "South" (and "North") everywhere, from North to South and East to West.

We sympathise with this understanding, as it highlights the variety of forms and spaces where power and privilege unfold. However, discarding this geographical dimension of the global North/South does not recognise that colonial and neocolonial histories have shaped geographies in the South in particular ways, affecting the possibilities how agency, identity and power can unfold and shape futures. Furthermore, the Anthropocene narrative reminds us that those who will suffer most from the climate crisis are not only determined by power relations, but also by geographical location and characteristics.[3] We find that a more sensitive conceptualisation of the global South is emerging when keeping a geographical focus, while at the same time conceiving of the global South as "an open-ended and inclusive category" (Sparke, 2007, p. 123).

In this book, we have observed the dilemma between urgency and justice along the demarcations of global North and global South. Global South has been useful for an accounting of more complex, place-specific understandings of situated lived experiences in the context of energy transitions. Our aim was to give space for analyses that tell different stories without diminishing people to victims and without homogenising experiences and contexts. By localising the urgency–justice debate along the global North–South demarcation we do not aim to cement simplistic correlations. Rather, we aim to encourage further explorations of the shifting dynamics of urgency and justice as they unfold amidst intensifying global interdependencies.

Urgency and justice: from productive tension to reinforcing power

This book has opened the space for energy transition narratives describing the dilemma of urgency and justice. Giving voice to other empirical, methodological or conceptual narratives enriches our understanding and possibilities for actions. The question about urgency and justice in energy transitions is thus not so much about choosing one over the other. Rather than taking sides, we propose to see this dilemma as describing a productive tension, reminding us not to subscribe to singular narratives. It reflects to us that interventions always come with trade-offs, the detecting of which is the start of finding a balance. Such a balance cannot be understood as a static equilibrium, but rather a continuous calibration of

focus. The different lenses which we have presented in this chapter can help in this endeavour.

This does not mean, however, that the urgency versus justice dilemma is the only productive backdrop against which we can see and understand the unfolding of energy transitions. When engaging in a less dualistic and more integrative way of thinking about urgency and justice we can see them as two parts of the same coin: rather than being oppositional, both notions can reinforce each other's thrust. Following this train of thought, urgency has both a time/action as well as an agenda setting/prioritisation connotation. Our efforts to study energy transitions would thus foreground the importance to foster both an urgent justice as well as a just urgency agenda. We cannot see one without the other in an era in which the state of the planet grows ever more alarming, an era in which it is especially the poor and marginalised who suffer most from consequences brought about by the resource-intensive lifestyles of the affluent.

Framing the unfolding of energy transitions against the backdrop of urgency and justice highlights aspects relating to timing, prioritisation, fairness and equity, as essential questions to consider in our efforts to understand and shape change. Urgency and justice issues emerge in many dis- (but also) heartening realities we currently witness, underlining their topicality and relevance. At the same time, features of urgency and justice in energy transitions are no new themes and relate to and overlap with other notions in critical debates of energy research and practice. For example, one can trace connotations of urgency and justice in the ideas of scale and participation. Scale and scaling up are ongoing concerns in energy transition work (e.g. Naber et al., 2017). Urgency in relation to scale highlights facets of expansion, outreach and replication when designing and implementing energy interventions. If we look at the notion of justice we can find it resonating in and with work on participation (e.g. Visvanathan, 2005). Issues of justice form an integral part of the diverse questions on how to give people a voice and letting them participate in energy interventions.

We can also see features of urgency and justice in the notions of impact and context. The quest and question for "having impact" is being tackled on a variety of agendas, not only through ex-post impact assessments of energy interventions or through the sustainable development goals (SDGs) and their indicators. Also, the notion of impact is increasingly found in the financial sector promoting impact investments, amongst others in energy innovations (e.g. Barman, 2020). Within academia, debates about impact relate to questions around the impact (energy) research has on effecting socio-environmental change (e.g. Rau et al., 2018). Calls for context-sensitivity, -awareness and -consideration are a longstanding concern of critical research on energy (e.g. Agarwal, 1983). Thus, questions of making context matter are at the heart of many analyses, and the chapters of this book are no exception to this.

Energy transitions have been studied against a variety of backdrops and the identified notion-pairs are meant to suggest neither exclusivity nor completeness. Though each notion stands in its own right, as notion-pairs they can be seen as variations of the theme of urgency and justice. This is instructive, as

they show similar dynamics to the ones suggested for urgency and justice. The notions open up a productive tension and/or have reinforcing potential: for example, the tension between aiming for scale-up might be at odds with meaningful participation; or the reinforcing power that can emerge when impact and context are thought of together. Similar to the lenses suggested above, they add different colour-shades against which the landscape of energy transition can be understood and shaped. With this they enrich, open up and bring into focus an urgency and justice agenda for a politics of energy transitions in the Anthropocene.

As we are writing the conclusion of this book (November 2020), the COVID-19 pandemic continues to show that struggles for urgency and justice are not isolated from other crises. With the COVID-19 virus spreading all over the world, human health-related priorities and actions emerge on global agendas. Along with capturing international attention have come shifts in financial resource distribution. These shifts affect energy transitions in the global South, as funds threaten to dry up. This jeopardises the future and impact of ongoing work and efforts.[4] While this threat is not to be taken lightly, from a more optimistic perspective, the challenges brought about by the recent global health crisis also offer chances for reflection and reorientation of action. They offer chances to rethink our energy transitions and how we imagine, study and shape them, not only on a local, but also on a global level. More importantly, those challenges show that issues of urgency, justice and health are fundamentally related to each other – as they all touch upon the deep-rooted question of how we want to live together on this planet.

Notes

1 For example, leading newspapers are changing their language when reporting about environmental issues, referring to climate crisis (instead of change) or global heating (instead of warming): www.theguardian.com/environment/2019/may/17/why-the-guardian-is-changing-the-language-it-uses-about-the-environment, accessed 25 Nov 2020.
2 See also developing work on India's role in Sub Saharan Africa: www.ankitk.com/2020/09/new-research-agenda-indian-in-sub.html , accesssed 1 December 2020.
3 The same, of course, holds for the potential different regions have for example for solar or for wind energy.
4 One example is the off-grid renewable energy sector: www.powerforall.org/insights/economics/covid-economic-impact-renewable-energy, accessed 1 December 2020.

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