

# Chapter 1

## Expanding Energy Justice Across Borders: The Role of Global Philosophy



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**Abstract** Our energy systems are truly international, and yet even now, our energy policies tend to be grounded at the national level and in many instances, remain ill-equipped to tackle transboundary energy issues. Our energy policy systems are also largely detached from the concerns of ethics or justice. It follows that we must find new and innovative ways of not conceptualising these normative issues, but of operationalising response to them. This book stems from the emergent gap: the need for comparative approaches to energy justice, and for those that consider non-Western ethical traditions. Opening the edited volume, this chapter begins by giving context to the concept of “energy justice” itself and outlines our comparative philosophical approach to it, focusing specifically on “global philosophy” for its role in dialectically engaging with philosophies from around the world. We then show how the different chapters of the volume contribute to this purpose in four parts: setting the scene, practice, applying theory to practice and theoretical approaches. The final section of this chapter concludes with reflections on the contribution of global philosophy approaches to energy justice as with a set of future research recommendations. Through these recommendations, and all of those within, we position the book as one that contributes to energy justice scholarship across borders of nations, borders of ways of thinking and borders of disciplines.

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## 1.1 Introduction

Our energy systems are truly international, and so are their social justice impacts. Whether it is the shipment of precious metals for wind turbine production, the transfer of waste products or international grid networks, almost all of our energy crosses national borders. With this, it also crosses ways of thinking and often, academic disciplines. Kazakh uranium mining, Japanese nuclear powerplant operation, South-African nuclear energy production and Brazilian nuclear waste management can and will touch upon very different ethical systems, notions of “right” and “wrong” or local aspects of energy justice. Yet even now, our energy policies tend to be grounded at the national level and in many instances, remain ill-equipped to tackle transboundary energy issues (Goldthau and Sovacool 2012; Jenkins and Taebi 2019). Our energy policy systems are also largely detached from the concerns of ethics or justice (Jenkins et al. 2018), even though they tacitly represent sets of values around how energy systems *ought* to operate and who for. It follows that we must find new and innovative ways of not conceptualising these normative issues, but of operationalising response to them. This book stems from the emergent gap: the need for comparative approaches to energy justice, and for those that consider non-Western ethical traditions.

Beyond a solely normative endeavour, the pragmatic necessity of such an approach is clear. The rate and scale of the energy transition from fossil fuels to renewable energy and storage represents a major policy challenge. Yet whilst there has been some global forward momentum, progress on energy and climate policy has so far been phlegmatic. This challenge stems, in part, from failures to secure the social acceptance of technological shifts. This social resistance—which typically slows the pace of change—pervades every stage in the global energy system at a range of levels, from resource extraction to production, consumption, waste and reuse. As the energy transition moves forward, better understandings of the nature of the justice challenges that emerge in energy systems are needed not only to enable progress, but also to avoid reinforcing social vulnerabilities. The dangers of reinforcing social vulnerabilities are also pressingly clear, in that parts of the world still strengthening their economic development and therefore are comparatively vulnerable to new or emerging injustices (Monyei et al. 2018). Without energy development or energy systems development mindful of culturally relevant and welcome development, more harm than benefit could be done.

With the basis of a globalised energy system, local energy justice specificities and energy justice vulnerabilities, our aim is to see how different ethical systems can add to our understanding of what “energy justice” and “energy ethics” are, and how we ingrain them into energy policy at the local and the global level. In essence, we want to enlarge the ethical evaluations of energy technology development and the surrounding policy for it. The result is a unique contribution that across novel chapters marries a philosophical focus (with emphasis on different ethical systems, ancient or contemporary philosophies) to empirical/policy-oriented focus (with emphasis on how certain values play a role in current societies). Yet of course, we

are limited in what this book can achieve given the truly global scale of the issues involved. Thus, with such a vast field before us, we ask a few guiding questions that will begin the debate. What are the key aspects of ethical systems for global energy justice? How can these ethical systems contribute to the evaluation of energy systems across borders? And how can these theoretical elaborations contribute to actual changes in local and global energy policy practices?

To begin, this chapter first gives context to the concept of “energy justice” itself and outlines our comparative philosophical approach to it. From several approaches within comparative philosophy, we then focus on “global philosophy” for its role in dialectically engaging with philosophies from around the world. This brings us towards truly global notions of energy justice and creates a framework that urges for the combination of practices and theories at local as well as global levels. We then show how the different chapters of the volume contribute to this purpose in four parts: setting the scene, practice, applying theory to practice and theoretical approaches. The final section of this chapter concludes with reflections on the contribution of global philosophy approaches to energy justice as with a set of future research recommendations.

## 1.2 What Is “Energy Justice” in an International Context?

Rooted in the growing awareness of the connections between energy and social justice, the energy justice concept emerged, incorporating literature from environmental and climate justice as it developed (Hall 2013). The result is a framework that aims “to provide all individuals, across all areas, with safe, affordable and sustainable energy” (McCauley et al. 2013: 1; Jenkins et al. 2018). In this way, McCauley (2018: 1) positions it as “a framework that allows us to critique the problems of the global energy system, as well as to lead us to better decision-making in future energy investments, in both the private and public spheres”. In order to conceptualise this goal of energy justice and the means of achieving it, a range of tenet frameworks have been developed. The most widely used of these is the approach outlined by McCauley et al. (2013), which focuses on distributional justice, procedural justice and justice as recognition. Within, each “tenet” is employed on the logic that if injustice is to be tackled, you must (a) identify the concern—distribution, (b) identify who it affects—recognition and only then (c) identify strategies for remediation—procedure (Jenkins et al. 2016). In more detail, distributional justice is concerned with the impacts of infrastructure; justice as recognition represents a concern for who is, or who is not, included in these decisions; and procedural justice investigates the mechanisms through which those decisions occur.

With increasing popularity over the last 10 years, energy justice investigations have emerged with regard to whole systems, ethical behaviour and climate change mitigation, amongst other topics (Jenkins et al. 2016). Further studies have applied energy justice concepts to household energy consumption, energy policymaking,

cities, fuel poverty and consumption and mobility, amongst others. Heffron and McCauley (2017) identify that these studies appear across academic sectors, showing not only the breadth of topical investigations, but also disciplinary and interdisciplinary reach too. Three special issues with “energy justice” in their title aid this proliferation, one in *Energy Policy* (Jenkins et al. 2017), one in *Energy Research and Social Science* (Simcock and Mullen 2016) and, in the latter stages of 2018 and early stages of 2019, one in *Applied Energy* (McCauley et al. 2019). Yet despite the widening popularity of the term, a core limitation has emerged; the authors writing in this field still tend to come from a limited range of country perspectives, where a classical approach of evaluation technologies is through the lens of European and North American ethics (for a good example, see Sovacool and Dworkin 2015).

Arguably then, the energy justice literature may fall prey to homogenising global perspectives or to unjustly misrecognising the ethical perspectives of other people, places and histories. Thus, throughout this volume, we present an attempt to enlarge the evaluation to one that engages different ethical systems, including explicitly non-European perspectives (Sovacool et al. 2017). We do so through a focus on a range of technologies and countries, from solar in India to nuclear in Kazakhstan and hydropower in Brazil, for instance. We also do so through explorations of core energy issues pervading national policy landscapes in India, Nepal and Kenya. Although variously achieved, our idea is that we use the ethical systems in these places to comparatively consider a range of energy justice judgments. This, then, is an early step towards the first truly international perspective on energy justice. Uniquely, we do this through the lens of comparative philosophy, and specifically that of *global philosophy*, presenting a volume that is the first of its kind.

### 1.3 Global Philosophy Across Borders<sup>1</sup>

Comparative philosophy is a broad concept, yet as a core element in this volume’s approach, it needs to be further specified. There is a debate amongst comparative philosophers about what comparative philosophy is or should be. Allinson (2001), for example, states that *all* philosophy is comparative philosophy given all philosophical reasoning compares one way of being at least something else. Wong (2017) defines it more explicitly, stating that comparative philosophy brings together philosophical traditions that have developed in relative isolation from one another and that are distinguishable both culturally and regionally. He uses the example of Chinese versus Western perspectives as two that are classically considered as distinct. In such contexts, comparison is possible along the lines of methodological commensurability (whether and how comparisons can be made), metaphysical and epistemological commensurability (a comparison of traditions on the conceptions

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<sup>1</sup>This paragraph builds strongly on Connolly (2015).

of “real”, for instance) and ethical commensurability (comparison of these traditions on the matters of how people ought to live their lives, for instance) (Wong 2017). Following this definition, we pragmatically consider comparative philosophy as philosophy that considers and compares “sufficiently distinct cultures and traditions” (Connolly 2015: 24).

Within comparative philosophy, several approaches to study these “sufficiently distinct cultures and traditions” have emerged, each of which carries a strongly differential set of assumptions. To set the scene for the chapters that follow and to provide rationale for our particular focus, we draw attention to four particular comparative approaches: universalism, pluralism, consensus and global philosophy.

*Universalist* approaches start from the assumption that philosophy in general—and in our case, issues of energy justice in particular—should lead to the construction of a world philosophy through the synthesis of prominent global traditions. Some universalists see the goal of comparative philosophy to develop into a framework that can serve as a foundation of a transnational political community (Clarke 2002: 119). Others are less strict and see the universalist idea more as an end point. As Zhao (2009: 106) puts it, “universalism is not something ready at hand, but a matter of reconstruction, a potentiality to be realized, and a consequence of collaborative dialogues”. As a famous example, Dahlsgaard et al. (2005) identify that six core virtues—courage, justice, humanity, temperance, wisdom and transcendence—recur in the philosophical and religious traditional writings in Confucianism, Daoism, Buddhism, Hinduism, Athenian philosophy, Judaism, Christianity and Islam. The authors thus concluded that “justice and humanity showed up the most reliably in that they made every tradition’s list; they tended to be named explicitly, and we suspect, given their crucial importance to the survival of even the smallest society, that they are truly universal” (p. 210). Bennett (2011) concluded the same for the concept of “divine justice” in Islamic eschatology, Judaism, Christianity, Hinduism and Buddhism.

A second approach, *pluralism*, states that differences between cultures are both justified and irreducible to one another. Put another way, it appreciates that “a culture can to some extent consist of commonly recognized values, but that these values provide a counterpoint to one another. The identity of a culture is, in part, defined by which values are the most salient and which ones serve as counterpoints to others. [...] No judgment of superiority can be made here. Each sort of ethic focuses on a good that may reasonably occupy the centre of an ethical ideal for human life” (Wong 1989: 65). Fan (1997) defends this position in the justice debate by pointing at the differences in the implicit assumptions between Rawls’ theory of *justice* and the theory of *ren* by Confucius. Amongst other observations, Fan mentions that Rawls mainly looks at the distribution of instrumental goods as opposed to the counterfocus on intrinsic goods. This difference stems from two diverse values underlying the theory. On the one hand, the two core features of Rawls’ theory, according to Fan, are that all persons are equal in a morally relative sense given they are “equally rational, similarly capable of grasping a conception of their good and a sense of justice” (Rawls 1971: 505) and that all persons are mutually disinterested individuals leading to a symmetrical relation. On the other hand, the

Confucian principle of *ren* refers to the moral invitation that all humans love all humans. The conclusion of his comparison is that “it remains reconcilable with only some, but not all reasonable comprehensive conceptions of the good life that various people hold. Confucianism, as a useful and significant example, stands firmly in contrast to Rawlsianism regarding a series of important moral and political assumptions” (Fan 1997: 448). This is to say that the plurality of these perspectives means that each carries its own benefits and points of distinctions.

A third strand of comparative philosophy proposes a balance between universalism and pluralism; a *consensus approach* that combines both views. Rawls (1987: 178) outlines an approach that establishes “a set of norms shared by multiple traditions, while at the same time allowing for diversity of acceptable philosophical foundations to these norms”. Rawls also perceives that an overlapping consensus is possible in which different religious philosophical worldviews congregate to a collection of shared norms, even though they are based on the set of individual reasons that are not necessarily compatible with one another.

These three comparative philosophical views face some classical challenges. One reoccurring question is on the feasibility of generalising evidence in the social sciences, or of linguistic, foundational and evaluative incommensurability (Wong 1989; Connolly 2015). Yet for our story throughout this volume, the issue of one-sidedness is more important. The topic of “asymmetry” is central in comparative philosophy debates, referring to the idea that Chinese perspectives, for example, tend to be compared in reference to frameworks, concepts or issues found in Western philosophical discussions. That is, in these comparisons, “local, idiosyncratic experiences from moments in Greek, Roman, or European history are [often] taken as normative expectations for all of humanity” (Angle 2002: 5). Or, as Shun (in Connolly 2015: 108) put it: “while we see frequent deployment of Western philosophical frameworks in the study of Chinese thought, we rarely encounter the reverse phenomenon, namely the deployment of Chinese philosophical frameworks in the study of Western thought”. Wiredu (1996) warns that the asymmetry can lead to intellectual colonisation, in which the original meaning and understanding is completely erased and replaced by the colonial philosophical framework; an idea that bares striking similarities to misrecognition or misrepresentation as an aspect of energy justice, perhaps. What is more, this trend of one-sidedness is particularly disconcerting given that scholars such as Krishna (1988) have evidenced that the achievements in various fields within several cultures paralleled those in the West, so that they could not be regarded as inferior in any way.

Comparative philosophy scholars have indicated different ways to try to avoid this one-sidedness. Ivanhoe (2011) sees contextualisation by reconstructing historical meaning as a solution. Hall and Ames (2003) explored the beneficial role of differentiation, in which comparative philosophers analyse how the general assumptions of the cultural tradition in which the text was written differ from our own. Stalnaker (2006) mentions “bridge concepts” that capture the general assumptions of two different philosophical approaches as “person”, “virtue” and “human nature”. Parekh (1999) adds that reaching consensus is not realised by

making abstraction of our moral religious and philosophical values, but rather through dialogue about these values and our reasons for holding them with members of other cultures. All such proposals circle around a fourth approach in comparative philosophy—global philosophy—which has been identified as a strand that partially overcomes these contradictions.

For Connolly (2015), the goal of global philosophy is to compare traditions to creatively interact at specific points in the philosophical arena rather than to compare fixed historical traditions. In this regard, comparative philosophers are positioned as scholars that should engage in philosophy in a way that is open to the insights and approaches from other philosophers and philosophical traditions around the globe. Fay (1996: 233–234), talking of interactionism, states that appropriate comparative philosophy “conceives of the relation of the self and the other dialectically, it denies that ‘at bottom’ the self and the other are essentially distinct and fixed, or that a particular identity means utter difference from that which it is not. Instead it insists that the identity of the self is intimately bound up with the identity of the other and vice versa, that self and other are constantly in flux and that they are both similar as well as different. [...] The principle lesson [...] is engage, learn from, adapt, or perish”. Global philosophy makes a political and empowerment statement. As Ikenobe (1997: 196) puts it, “To deny a people a philosophy is to deny them any kind of intellectual activity, a system of thought, culture and civilization”. Comparative philosophers thus see two interrelated purposes for themselves (Connolly 2015: 33) that is interpretative work “using terms, ideas, or concepts from one philosophical tradition to help understand or interpret another philosophical tradition” and constructively “seeking to advance or develop philosophy through cross-tradition engagement”. We see this as the core of global philosophy. It follows that energy justice should be engaged with and aim for adaptations created through a constant dialectical process across borders.

Global philosophy should take relevant parts from the three previous views, universalism, pluralism and consensus. From universalism, it should borrow the notion that humans around the world share some common elements in biology, psychology or grounding experiences (Nussbaum 1988). From the pluralist approach, it should take the specificity of culture and tradition as important elements. It also agrees with the consensus approach that combining views is core, but does not agree to the purely rational way in which this can be done. Instead, in its interaction with specific points in the contemporary philosophical arena, global philosophy can be productive, critical (Struhl 2010; Connolly 2015: 196) and focused on problem-solving. Garfield (2014: 8) gives the example that “a central motivation for studying classical Buddhist texts is that they engage with questions and problems in which we are interested, sharing enough common ground for us to understand what they have to say and contributing enough that is new that we have some reason to listen to it”. As we illustrated, Fay (1996) and Connolly (2015), amongst others, stress the indispensable need for engagement. Thus, the important challenge in comparative philosophy is to bridge the gap between universalists who optimise the communication across boundaries and pluralists who optimise in acknowledging the uniqueness and

richness of every approach. A purely theoretical world philosophy approach is, therefore, doomed to fail and needs the interaction between theory and practice at its core.

## 1.4 Towards Global Energy Justice

This volume uses the global philosophy approach in comparative philosophy to explore energy justice without borders. The idea of this volume emerged during energy justice discussions at a workshop in Europe, amongst Europeans discussing the contributions of a list of European and U.S. philosophers. Dominant amongst this discussion was the work of Sovacool and Dworkin (2015), who gave a very elaborate and useful overview of analytical applications to energy problems. They refer to energy efficiency and Plato's and Aristotle's virtue approaches; energy externalities and Bentham's utility theory; Kant's human rights approach; procedural justice as described by Jefferson and Habermas; energy poverty insights from Rawls, Sen and Nussbaum; energy subsidies based on the freedom concept of Nozick and Friedman; energy resources based on Dworkin's ideas on posterity; and fairness and responsibility in Singers' plea against climate change, for instance. Yet apart from Nussbaum, this list consists solely of men, and apart from Sen, all contributors seem to represent a largely Western way of thinking. As such, although the overview is very helpful, we could argue that this approach is implicitly universalist. Indeed, when considering their global application, their combination sends an unspoken message that these theories with their concepts *can* be successfully applied worldwide, and therefore that they *should* be.

From a philosophical point of view, this issue is not problematic per se. As universalists would argue, their approach may indeed be either the normatively *right* way or pragmatically the *best* way forward to consider cross-border energy justice issues. Above, we discussed Fan's view on Rawlsian justice and Confucian *ren* and Fan's pluralistic conclusion that Confucianism firmly stands in contrast of Rawlsian theory, for instance. This pluralistic approach certainly does honour the differences in different ways of thinking. Yet it also shows the difficulties that follow from it. Fan, as a comparative scholar, can conclude that Rawls and Confucius are using entirely distinct concepts and principles and therefore, that people evaluating energy systems from a Confucian perspective should not be deprived of using it as a universalist approach that opposes another way of thinking to theirs. Nonetheless, it remains the case that energy policy researchers and practitioners are faced with worldwide energy practices that necessitate worldwide solutions. The incommensurability should be overcome at a theoretical or practical level to find solutions.

In a bid to overcome this challenge, this volume presents some of the first discussions on comparative philosophy-based approaches to energy justice. How can energy justice cross borders? How can energy justice compare traditions to mutually engage, learn from each other and where appropriate, adapt to find common



grounds for common solutions to common challenges? To our knowledge, this endeavour is currently missing in the energy justice literature, even though a very few scholars have elaborated first steps that are instrumental in this novel field, but in a distinct and isolated way. Guruswamy (2016) explores the jurisprudential lineages of justice within Western, Islamic, Buddhist and Confucian traditions. Sovacool et al. (2017: 680) made a first inquiry in non-Western applications of energy justice when they mapped several applications of differential ethical approaches to energy and energy justice. They outlined that Ubuntu philosophy is linked with neighbourhood efforts to foster energy efficiency and decisions about energy resources within a local society, for example. Taoism and Confucianism can represent a plea for respecting due process in energy policy and decision-making, building on human rights protection when executing energy projects. Hinduism is seeking to minimise the extent and allocation of energy externalities, offering affordable energy access to help fight energy deprivation. Buddhism is said to focus on respect of future generations with energy system management, minimising harm to the environment and the entire world. Indigenous perspectives, finally, can focus on energy systems elaborated cautiously through long-term experience and sovereign cultural procedures, requesting restoration and avoiding disruptive ecosystem transformations.

We must acknowledge, of course, that the endeavours to widen European and North American approaches to energy justice to a broader *global* approach face a very central challenge. At the theoretical level of analysing justice from a comparative philosophy perspective, Tan (2015: 219) strongly questions the universality of the notion of justice itself. Tan pleads that “any proposed distribution arrangement must be assessed against the needs of the human participants in the social relationship at stake and the needs of those relationships”. Her point that the Confucian concept *yi* is often translated as *just*, meaning both “to treat like cases alike and treat different cases differently” (Tan 2015: 205). Tan points out that a closer look at these cases clarifies that “it is not the distributive question that drives [...] whether it is *yi* to have, take, or accept things. There is no concern about whether those involved receive or deserve equal shares, or arguments over whether someone should have more or less of something, or something proportional to some kind of merit. Instead, the concern is overwhelmingly about the effect of actions on specific interpersonal relationships, actual or potential” (Ibid., p. 207). For example, the criterion whether a gift initiates or invokes an ethically appropriate relationship between the giver and the recipient is crucial. Thus, pushing us beyond just a consideration of which Western approach is bet (as in McCauley’s (2018) consideration of liberalism and libertarianism); this conclusion poses a strenuous challenge to the justice element of global energy justice in particular, as it seems a Western concept that is “pushed” into global philosophy. Problematising current advances in this notion of justice through a global philosophy approach, each chapter in our volume contributes to this significant challenge in the literature, serving, in turn, as guiding frameworks in energy justice or as practical insights into improvements in local and global energy policy.

## 1.5 About the Book

*Energy Justice Across Borders* will contribute to emergent gaps in energy justice scholarship and its application across borders of nations and ways of thinking, being critical of energy justice's own aims and origins as an arguably overly Western concept. This positions the aim of this book as one that (1) provides novel examples of comparative approaches to energy justice and (2) further considers the perspectives of non-Western ethical traditions. In executing this project, we bring together four different fields: energy policy research, the ethics of technology, energy justice scholarship and comparative philosophy. This diversity of perspectives is further reflected in the location and specialisms of the editorial and authorial team. We also aim for diversity in the range of energy technologies we consider, with contributions around nuclear, energy production, smart grids energy distribution, hydropower and even LED lighting, for example (see Table 1.1). These, in turn, represent a wide range of energy system stages.

The first part of *Energy Justice Across Borders* sets the scene by giving examples of how current energy justice applications deal with the need to cross borders and how energy ethical approaches handle energy issues in a non-Western way. Representing a core issue in global philosophy approaches, the second part then starts with engaged practices to overcome the divide between universalism, consensus and pluralism. In the third part, we explore the interplay between theory and practice, applying theoretical frameworks to energy technologies through real-world case studies. In the fourth and final part, we present chapters predominantly focusing on theoretical approaches. We do so as reflection that whilst we stress the need for theory-practice exchange in global philosophy, we do not seek to do so at the expense of contributions that entail pure theoretical development.

### 1.5.1 Setting the Scene

The first part of the book gives examples of energy justice investigations and their recurrence in particular settings, outlining current conceptual approaches. It begins with Chap. 2, which examines the relationship between energy policy and the values that appear in social movement mobilisations with respect to energy in the United States. Three policy case studies are discussed: net metering, smart meters and green economic development. It outlines that both challengers and incumbents link their strategic frames to broader cultural values to gain credibility in the public sphere. Both types of coalitions generally reference a similar group of widely shared values that are associated with institutional logics, but they engage in different strategies to make credible linkages between their positions and the general values and to question the linkages posed by the frames of opponents. The chapter maps out the broad value categories that appear in the framing contests, develops a typology of counterframing strategies and explores cross-cultural applicability and limitations.

**Table 1.1** Overview of the volume’s chapters, indicating the topic, the featured countries and the energy sub-systems discussed

#	Authors	Title	Countries or regions	Energy subsystem
2	Hess	Energy politics in the public sphere: Frames, values, and symbolic power	USA	Smart meters, green economic development
3	Duff et al.	A right way, wrong way and better way for energy engineers to work with Aboriginal communities	Australia	Energy hub, nuclear
4	Nuryшева et al.	The Kazakh ethical tradition and anti-nuclear ethics	Kazakhstan	Nuclear
5	Kruger et al.	Energy justice, hydropower and grid systems in the Global South	Democratic Republic of Congo	Hydropower
6	Govindan et al.	Gender in electricity policymaking in India, Nepal and Kenya	India, Kenya, Nepal	Energy policy
7	Terefe	Sociomaterial solar waste: Afterlives and lives after of small solar	Ethiopia, Africa	Energy policy
8	Kumar et al.	The impacts of policy on energy justice in developing countries	India	Smart grids
9	Herrington et al.	A Hindu philosophy perspective on the temporal nature of energy justice in Odisha, India	Odisha province and India	Energy policy
10	Janssens et al.	LED lighting across borders. Exploring the plea for darkness and value-sensitive design with Libbrecht’s comparative philosophy model	Europe, India, China	LED lighting
11	Guan et al.	Energy justice and construction of community with a shared future for mankind	Yulin City and China	Energy production
12	Oostveen	On the concept of “energy” from a transcultural perspective	Europe, India, China	Energy concept
13	Pellegrini-Masini et al.	Energy justice and intergenerational ethics: Theoretical perspectives and institutional designs	Africa and Europe	Intergenerational energy policy
14	Sanusi et al.	Exploring marginalization and exclusion in renewable energy development in Africa: A perspective from Western individualism and African Ubuntu philosophy	Africa and Europe	Sustainable energy technologies

Chapter 3 is an exploration of the experiences of indigenous peoples and energy justice in the hypothetical case of “Warrigal Downs Energy Hub”. Aboriginal Australians have an intrinsic relation to country, kinship and community. The processes related to colonisation have decimated traditional lifestyles, ecology and even families. The chapter outlines that the resultant challenge for engineers lies in the ability to reconcile energy engineering with the contemporary and traditional

needs of Aboriginal people. A discussion around Aboriginal peoples' most deeply held values is linked both to global and professional ethical canons. Writing as a team of Aboriginal and non-Aboriginal educators and engineers, they introduce a right, wrong and even better ways to work sensitively, meaningfully and reciprocally with Aboriginal people in Australia in energy hubs and nuclear non-proliferation.

Chapter 4 provides another example of an ethical approach towards nuclear non-proliferation, though from a very different context and ethical perspective. The chapter showcases the differences that exist in energy justice approaches, in this case by delivering a clear story "from within", making a strong plea for the application of Kazakh traditional ethics in energy justice. The authors outline that at different stages of history, the nature of philosophical approaches in various civilisations characterises the diversity and unity of human aspirations for peace and harmony. They argue that the development of nuclear weapons in the modern world is a serious challenge to these concepts, especially from a Kazakh perspective, further suggesting that the ethical ideas of different nations can be used as a strong argument in favour of mankind's refusal of nuclear weapons. The authors focus on the harmonious worldview of the nomadic populations, who they argue, understood the interconnectedness of the world of man and the world of nature.

Chapter 5 articulates the views that grid systems are key focal points for energy debates in the Global South. The authors explore the notion that off- and on-grid realities, with a plethora of micro-grid systems in between, exist simultaneously with differing under-explored consequences for rights, responsibilities, opportunities and constraints. They argue that a conceptualisation around macro- and micro-levels of justice help to elucidate this complexity. A comparative philosophical approach ensues through a spatial exploration of justice in relation to the Democratic Republic of Congo and the grid systems derived from hydropower. Original qualitative data is presented, analysed and reflected upon, with concluding insights into conducting energy justice in the Global South.

### ***1.5.2 Energy Justice Across Borders in Practice***

Part II explores real-world practices that overcome divides in comparative philosophy approaches. Chapter 6 states that electricity is increasingly regarded as an amenity crucial to human well-being and overall economic development. It argues it is also one that contributes to improving gender parity and social inclusion, especially in situations where women are challenged by harsh living conditions. Specifically, the chapter scrutinises how gender issues are addressed and incorporated in the electricity policies of India, Kenya and Nepal. The analyses reveal that though there is an increase in the electricity policies that reflect gender considerations, more than half of the reviewed documents are devoid of any explicit featuring of gender concerns. The authors argue this "gender-blind" approach towards the impact of access to electricity and its potential emanates from a hesitation to explicitly acknowledge the differentiated needs of women and men in creating equitable outcomes. The

chapter provides recommendations for gender inclusion in the electricity policies for successful outcomes.

Chapter 7 focuses on the issue of energy access through empirical data on Ethiopia in particular, and Africa in general. The author outlines that access to modern energy is vital to societal well-being and to economic development, yet that still the majority of rural households in developing countries do not have access to basic household energy services. Despite different policy attempts to improve access, they are often unsuccessful due to the socioeconomic, cultural, resource and technical conditions present in particular contexts. In contrast, some projects considering local social needs through innovative approaches have been successful. Hence, increasing access to improved energy technology requires an understanding of local contexts, linking to income-generating activities and poverty alleviation and the inclusion of women. The author argues that a bottom-up approach is sustainable to increase energy access whilst contributing to poverty alleviation and livelihood improvement.

Chapter 8 considers the emergent issue of solar waste from off-grid technologies. This chapter argues that solar waste represents multiple matters of concern; it is a problem of pollution, resource and “social ruin” all together. The authors suggest that whilst an energy justice framework is well suited to identifying issues of distributional, procedural and recognition justice in relation to solar waste—what they refer to as “afterlives”—there is a need to engage with postcolonial theories of ethics in order to better grapple with the different kinds of social ruins solar waste may represent—what they refer to as “lives after”. The chapter concludes that combining an energy justice perspective with postcolonial analysis reveals critical, ethical analysis of both the material elements of off-grid solar infrastructure *and* the lives that come after it at a range of scales.

### ***1.5.3 Applying Theory to Practice in Energy Justice Across Borders***

Part III of our volume links theoretical understandings of energy justice and comparative philosophical thought to real-world practical action. Chapter 9 draws upon Sen’s interpretation of the Hindu Bhagavad *Gita* to discuss the temporal justice implications underlying the energy transitions observed in much of the Global South. In particular, it applies this Hindu-based philosophy to unpack the energy policy dichotomy currently facing policymakers in the Indian state of Odisha: the conflict between achieving sustainable development whilst also rapidly decarbonising by transitioning away from a strong industrialisation-driven model of economic development. Drawing from the *Gita*-inspired notions of a focus on duty in the here-and-now versus a sensitivity towards future consequences of present actions, the authors introduce *Nyāya*, a Sanskrit term for justice. They argue that *Nyāya*’s focus on “realised” justice is far more comprehensive and inclusive in that it allows

policymakers to move beyond *Niti*, which limits policy to following the trappings of bounded institutions, rules and regulations.

Chapter 10 presents an exploratory opportunity to open up an exchange between value-sensitive design (VSD) and the current transition to outdoor LED lighting via Libbrecht's comparative philosophy model. Libbrecht's model describes three fundamentally different forms of thinking about and relations to the world, which are based on "immanence", "rational transcendence", and "emotional transcendence". The authors start with broadening the traditional rationale for, and analysis of, the LED lighting transition by incorporating the value of darkness. They argue that a classical VSD approach on smart LED lights risks focusing on a standard list of rational transcendence values, including control and comfort. A focus on immanence, however, brings in the "by-itself-so", whereas emotional transcendence lays emphasis on "alter-intentionality". The chapter concludes that Libbrecht's model broadens the set of values used in VSD and that this comes with non-evident choices of accepting elements from other worldviews and the need for normativity in VSD.

Chapter 11 explores Chinese philosophical ethical perspectives. Focusing mainly the Confucian thoughts on *hexie* (harmony) and *yi* (just), the *tianxia* (world) view and the reflections from the tradition of community both from the West and East, the authors link energy justice to the construction of "community with a shared future for mankind". They argue that the foundation of energy justice lies in how to construct the relationship between the subjects (both individual and collective) of justice in the community with a shared future. They do so through cases of Yulin and global carbon emissions, before pointing out that one should deal with the four major relations involved in the complete process of energy acquisition, distribution, utilisation and post-processing in order to build a just energy system. The chapter concludes with three possible strategies to deal with global issues of energy justice, that is, specific strategy, real-time strategy and holistic strategy.

#### ***1.5.4 Theoretical Approaches in Energy Justice Across Borders***

Careful not to dismiss the contribution of theoretical approaches to global energy justice issues, Part IV presents three largely conceptual contributions. Chapter 12 theoretically elaborates on the concept *energy* from a transcultural perspective. Often, energy is only approached by means of the stipulated definition, as used in science. The chapter argues that this usage disregards the specific philosophical origins of the concept. It gives the example of the comparative philosophy of Libbrecht, where the concept of energy is used as a comparative category which has related concepts in each of the various ideal types of worldviews—the Greek, the Indian and the Chinese—his comparative model describes. The author suggests that by informing ourselves of particularly Buddhist and Chinese perspectives on energy and ethics, we can transform and expand our understanding of energy in order to

increase its explanatory power with regard to contemporary questions of energy justice. This includes a post-human approach towards it.

In Chap. 13, the authors discuss the temporal scope of energy justice as they tackle the question of whether future people should be considered as participants in the scheme of redistribution. In doing this, they firstly confront two prominent theories of distributive justice that have been constantly juxtaposed in the political philosophy literature. The first one is the social contract theory that they consider in the classic formulation given by Rawls, in the moral variant proposed by Scanlon and in the contractarian version devised by Gauthier. The second one is communitarianism, not simply in the Western formulation given in the literature on liberalism, but also through the lens of the African political philosophy of Ubuntu. The chapter discusses how the philosophical concerns for future beings have been translated into specific policies, with the aim of weighing the interests of present individuals against the social rights of posterity. Their analysis is based on dualism between an individualistic conception of human beings as utility maximisers and a communitarian view on human relations.

Chapter 14's contribution is to explore and compare energy marginalisation in Africa and Europe, to underscore the violation of ethics in renewable energy deployment and to find means of addressing energy injustice through the proper application of the respective ethical principles. It compares two distinct fields of philosophy, Western and Ubuntu. Applied to energy justice, the authors deduce that both philosophies look at the needs of people, claim that it is morally imperative to overcome energy poverty and to allow equal access to opportunity, both for current and future people. Yet the authors see differences as well. They outline, for instance, that the Western "nature as resource" view needs to be overcome since one can argue that it rests on a problematic metaphysics of nature and may stand in the way of further developing an environmental ethics that goes beyond anthropocentric conceptions. This reflects a comparative discussion on which ethical approach carries the most explanatory and analytical power, and which defines clear needs in future research.

## 1.6 Conclusions

The chapters in this book each make an attempt at exploring how different ethical systems can add to our understanding of what energy justice is and how we embed it into energy policy at the local and the global level. The collection therefore provides insights into the key aspects of ethical systems for global energy justice, their contribution to evaluating energy systems across borders and the role of theoretical elaborations in contributing to changes in energy policy practices. In particular, our global philosophy approach urges for the combination of practices and theories across various borders at various scales. It pushes us to study practices, analyse the interaction between practices and theory and elaborate on theories that answer practical needs, for instance. It also analyses and supports the interaction

between the local, regional and global scales thinking, policies and energy technologies. Through such a contribution, we hope that our volume adds the first global philosophy approach to energy justice that challenges scholarship, policy and practice.

This volume's target is large, thus it should be no surprise that it is not comprehensively achieved. First of all, although we aimed at a wide list of philosophies, our list is far from exhaustive. The volume gives voice to perspectives from Africa, the Americas, Asia, Australia and Europe, and yet many philosophies are lacking. Within Asian philosophy, for example, we discuss Indian, Kazakh and Chinese philosophies, but not Japanese or Persian, for instance. Further, some theistic philosophies such as those based on Islam or Christianity are not present. As such, whilst we present a volume with a wide range of ancient and present-day philosophies that contribute to energy justice, there is room for enlargement.

Secondly, comparative philosophers might argue that there is insufficient in-depth comparative philosophy in this volume. We acknowledge that the focus of this volume is not on in-depth, highly specialised discussions of discipline-specific issues, although we do present comparative chapters on the concept of energy. Instead, we stress the interplay between application and theory since we believe that the important challenge for a global philosophy approach is to bridge the gap between universalists who optimise the communication across boundaries and pluralists who optimise in acknowledging the uniqueness and richness of every approach. Global philosophers may wish to expand this application.

Third, we see great value in policy research and ethics of technology studies that take the entire energy chain into account and follow a system approach. We are aware that our examples and empirical materials are fragmented. Although we talk about mining, energy production, energy distribution and energy wastes and afterlives, for instance, we do so in reference to different energy technologies. In this regard, the volume does not give a clear system perspective, but does present the building blocks for later systems-wide applications. It follows that to close the emergent research gap, studies should engage in "source-to-sink" comparative philosophy studies of energy justice issues.

Fourth, we indicated earlier that a key challenge for global approaches to energy justice approach is the Western origin of the term "justice" itself. Tan's (2015) analysis does locate a common element in the Confucian concept *yi* and the Western concept of just, meaning both "to treat like cases alike and treat different cases differently"; yet at the same time, she makes very clear that the concept of *justice* focuses on distributive question to have, take or accept things, whereas the core in the concept of *yi* is that a gift invokes an ethically appropriate relationship between the giver and the recipient. It cannot and should not be denied that justice is a much more Western concept. However, global energy justice can and should support both energy policymakers and scholars to take the common meaning as a starting point and to engage in and elaborate on the dialectical adaptation of justice, *yi* and other concepts.

Following on from above, it will not be sufficient to focus on the concept of "justice". Comparative philosophy must be open to other linked, often overlapping,



concepts, including “energy”, “democracy”, “responsibility”, “community”, “truth”, “knowledge”, “emotion” and so forth. From these ideas, we might ask the following questions: How do different ethical systems lead to different ways of giving meaning to these relevant concepts? How can these different meanings be used in a situation that unites the different ethical systems? How can comparative philosophy support this mutual engagement? How can a balance be found between the sense of urgency in sustainability transitions on the one hand and the need for philosophical in-depth analysis mandated by the above questions?

Finally, a global, comparative approach to energy justice is not just one that should be discussed but *applied*. Energy justice should support initiatives that include local, regional and global values to energy policy. It should be critical to its own aims of energy *justice* as a potentially *too Western* concept. It should actively engage in dialectical adaptation, together with comparative philosophy, in finding new approaches to energy innovation. Through this recommendation, all of the above and all those in each chapter, we hope *Energy Justice Across Borders* will add to the need in energy justice scholarship and practice across borders of nations, borders of ways of thinking and borders of disciplines.

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