

# **Introduction**

## **Energy in Refugee Camps**

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### **The Story of Energy in Refugee Camps**

Energy runs through every aspect of our lives: it is the golden strand underpinning the use of all our appliances and technologies. Within the room where you are reading this there are lights and electricity, heating or air conditioning. Close by there is almost certainly a computer, power for your television and radio, and sockets that you can use to charge your mobile phone. In the kitchen there is a cooker, stove, kettle or microwave to help prepare food and warm drinks. Underneath it all the national grid murmurs and grunts away to provide power for offices, universities, hospitals, schools and businesses. Energy is not just the sparks of electricity or the burning of cooking fuels, it is the cold beer with friends, the warmth to heat homes; it is the sustenance provided by a cooked meal; it is the electronic click of pressing ‘submit’ on an email or a journal article. Without energy our social rituals and professional outputs start to fall away: life becomes a daily physical struggle to stay warm or cool and to find fuel to cook with. Energy is widely considered essential for modern life in the global north, but the same is not necessarily true for people living in refugee camps.

Refugees are often left without access to electricity or cooking fuels. Worldwide there are now over 102 million forcibly displaced people (UNHCR 2021a), the majority of whom live without access to affordable energy and struggle on a daily basis to access even basic resources (GPA 2022). Many refugee communities remain in extreme conditions of poverty for generations, with families living in camps for over twenty years. Humanitarian agencies, such as the United Nations High Commission for Refugees – UNHCR, are responsible for ensuring refugees have energy. However, in reality humanitarian agencies often do not provide reliable access. As a result the basic energy needs of millions of people are not

being met by the humanitarian system. Rather, many refugees are forced to secure their own energy or live without power or modern cooking access.

The title of this book, *Voices in the Dark*, speaks to two forms of darkness woven through my research: first, the fact that refugees often face limited access to energy; and second, that humanitarian systems and interventions are not informed by the needs of refugees. Evidence presented within the book suggests that humanitarian policy-makers and practitioners have limited experience and knowledge concerning energy, and do not have systems that can support them to deliver energy products and services. Refugee households are not involved in the design of energy programmes, which leaves refugees in the dark (or having to find their own solutions). When refugee homes and businesses do have access to energy, it is often because they have been able to secure and pay for it themselves. Darkness in a refugee-energy context has a political dimension: values and judgments are embedded within humanitarian systems that create and prolong a lack of access to energy and power.

This book presents the voices and opinions of refugees living in Rwanda and Kenya – detailing their challenges and experiences accessing energy, drawing on research conducted over the last decade on humanitarian energy. Many refugees report that the financial and emotional burden of energy weighs heavily on them and that their communities struggle without public lighting or access to power in their schools and community spaces. A sense of anger and frustration loomed large in these descriptions, with refugees becoming exasperated at UN agencies and non-governmental organisations (NGOs) for their failure to provide even basic energy access. The sustainable provision of affordable and reliable energy in refugee camps feels a long way off. As one of the refugee leaders I work with commented:

It feels hopeless. The barriers for refugees are so high. The knowledge about the realities of our lives isn't there. I talk and talk about energy, and why we need proper cooking access and electricity. But it doesn't even register with them – the humanitarians – they just don't know why it matters. When I think about the scale of the challenge, I don't even know where to start. (Refugee living in Kenya)

My own story of working on humanitarian energy started in a similar fashion. While working as a climate adviser within the UK's Department for International Development (DFID – now the Foreign, Commonwealth & Development Office – FCDO), I was invited for a week-long workshop for humanitarian advisers. The topic of one of the first sessions was 'climate and future-proofing humanitarianism', and it was led by one of the most senior humanitarians working for

the department. Towards the end of the session he opened up the floor to the group, asking for suggestions on any issues the group had not yet discussed. Surprised that during a session on climate there had been no mention of sustainable energy, I suggested energy as a topic. ‘Ahhh, our personal energy levels, yes, yes. Rest and recuperation strategies, taking care of our minds and bodies. So important!’ he responded. Somewhat confused, I hesitatingly clarified that I meant light bulbs, power sources, cookstoves, and electrical and thermal types of energy. I was met with blank looks and puzzled faces. The retreat leader continued, ‘right ... there are some generators I suppose, but why would we need to think about that for climate change?’ My jaw dropped and I mentioned that the energy sector globally is responsible for over 70 per cent of all carbon emissions (Ritchie and Roser 2023), and that emissions from fossil fuels are one of the main sources of pollution driving climate change. I suggested that when talking about mitigating and reducing the impacts of climate change, we have to talk about energy. Over the following few days many humanitarians came up to me to ask what I knew about energy in emergency situations, and I confessed that I knew very little: I had actually to come to the workshop hoping to learn about the topic from them. On returning from the event I set about googling and trying to find resources on energy in refugee camps or as part of humanitarian response. There was shockingly little available, and at that stage there were no comprehensive numbers or figures on how energy was provided in humanitarian settings.

Versions of this interaction – whereby humanitarians question why people would be interested in the energy used in displacement settings – have sadly continued to be standard in my experiences as both a practitioner and an academic. Sometimes the question of ‘why energy’ comes from a place of genuine interest and curiosity; sometimes in the form of a defensive reply to being asked about the topic or even with anger – why would humanitarians care about generators or cookstoves when they have the important business of protection to get on with!?

Despite these challenges I, together with colleagues at Chatham House and the Moving Energy Initiative, started the first comprehensive study of energy in humanitarian settings – resulting in the publication of the seminal ‘Heat, Light and Power’ report in 2015. In the decade since we started researching humanitarian energy, much has changed. Many UN agencies now have dedicated energy strategies, hundreds of sustainable-energy projects exist in refugee camps and there is initial data on emissions from the humanitarian use of fossil fuels. Indeed, a new ‘humanitarian energy sector’ has emerged, brought together by the efforts of refugees and displaced people, the UN, development agencies, NGOs, the private sector and donors under the umbrella of the Global Platform for Action

on Sustainable Energy in Displacement Settings (GPA), hosted at the UN Institute for Training and Research (UNITAR).

This book draws on my experiences over the past decade working as a humanitarian energy practitioner – designing and developing sustainable-energy investments in refugee camps – as well as my ethnographic and geographic research at the University of Oxford. The book hopes to change perceptions on energy access in refugee camps by documenting the energy lives of refugees and analysing how humanitarian systems are trying to provide energy access. To do this my research demonstrates how energy is used by refugees in their homes, businesses and communities. Using ethnographic evidence to explore how and why energy is important to people living in refugee camps in Kenya and Rwanda, *Voices in the Dark* places refugee voices and displaced energy needs and priorities at its heart, revealing how important electricity and clean cooking access are for displaced households living at the margins of society. Refugee stories evidence the value of electricity and modern cooking in all our lives, highlighting the importance of these resources for refugee quality of life. The book offers a critical resource for researchers working on forced migration, geography and energy studies, demonstrating the realities of refugee lives lived in the dark.

## **Life in Refugee Camps and the Surprising World of Humanitarian Energy**

Life in a refugee camp is undeniably difficult. Many camps struggle with poor shelters, healthcare and limited opportunities for jobs. Most camps are intended to be temporary and so the long-term supply of education, livelihoods or opportunities is often not considered. In many camps in Kenya, Rwanda, Uganda and more generally in sub-Saharan Africa, most people live in small shelters, huts, tents or informal accommodation. Water has to be pumped or collected and is often in limited supply. Food is either distributed for free or brought from local markets, and most food distributed by humanitarian agencies is raw and often un-processed – for example, in the form of flours or grains. As a result, refugees living in camps face considerable physical hardship and are living day by day ‘just trying to survive’ (Refugee living in Uganda). Despite this, many camps have been in place for over twenty years. The emotional burden of living in a temporary and uncertain state for decades cannot be overstated, and in some cases has led to dependency on aid structures.

For those wishing to learn more about the daily realities of life in a refugee camp, I would encourage readers to seek out reflections from refugees themselves – rather than relying on retelling and translations produced

through the humanitarian system. For example, [www.kakumablogging.com](http://www.kakumablogging.com) is a platform dedicated to sharing the stories and experiences of refugees living in Kakuma camp (Kakuma blogging 2023). Many such resources are now available to create space for the voices of refugees and hear from them directly on the issues impacting on their lives (Global Refugee-Led Network [GRN] et al. 2022).

In terms of energy in camps, the picture is a mixed one. Humanitarian energy is a broad concept, defined as the ‘institutions, policies, programmes, global initiatives, actions, and activities which use a range of sustainable and fossil fuel energy sources in contexts of displacement to meet the energy needs of people in camps and urban settings, self-settled refugees, host communities, and internally displaced people’ (Rosenberg-Jansen 2020: 17). The field is an emerging one, with the first substantive action on sustainable energy only starting in 2013 (Lahn and Grafham 2015). Previously there was a lack of detailed considerations of energy needs within displaced settings. It was generally assumed that expensive diesel generators were provided to camp operators and refugee communities were given small amounts of firewood to cook their food. To many, this was the extent of the energy lives of refugee communities. However, as we shall discover in the coming pages, the world of energy is considerably more dynamic than this: uncovering how energy is used in humanitarian settings offers many revelations and exposes the importance of electricity and cooking resources in displacement situations.

Firstly, it is important to clarify the use of the word ‘energy’. Generally, energy is considered to cover lighting, heating and power technologies (Ibid.). The term *energy* is used flexibly throughout the book, as many practitioners and refugee communities use energy as a byword or general term when describing a specific technology or use of fuel. However, the term ‘*energy access*’ is somewhat more complex. The statement ‘many refugees have no access to energy’ is frequently used, but there is a nuance here. To be completely without energy access is almost impossible – as to even cook our food and boil water we must use some energy. Many refugees use firewood and open fires to do this, and often have access to a very small amount of lighting or electricity.

The World Bank have developed a detailed system to assess how much energy people have and group this access into ‘tiers’ – tier 0 being almost nothing and tier 5 being equivalent to full power. This system is called the Multi-Tier Framework (the MTF), and more information is available for those wishing to learn more about different levels of energy (ESMAP 2015). However, in non-technical speak, tier 0 is roughly equivalent to either using basic technologies – such as firewood, charcoal, candles, kerosene, light from fires or basic electric lighting such as a torch. Tier 1 access is similar to being able to use a couple of light bulbs and maybe

enough electricity to charge your mobile phone – for example, by using a small solar home system (SHS). Above tiers 2 or 3 is generally considered ‘modern access’ to energy, and in countries in Europe most people have access to tier 4 or 5.

One of the most startling things about working in the humanitarian sector was how little different levels and forms of energy access were understood, with many people classing access as a binary of ‘no access to energy’ or ‘total access to energy’ whereas almost always the reality lies in between these two points. Therefore, to be more accurate, the statement ‘many refugees have no access to energy’ should read ‘many refugees have no access to *modern* energy’. While this may seem overly specific it matters a great deal in practice, as there is quite a difference between having no energy at all and only having access to basic technologies such as firewood. The complexity of some of these terms are explored in a paper by Al-Kaddo and Rosenberg-Jansen (2021) for those wishing to consider these differences in more detail. Even within the coming chapters the nuances around energy and energy access are hard to maintain, and at various points in the book both terms are used flexibly to explore an understanding of the realities of life with access to minimal energy.

### *Energy Spaces: Refugee Energy Users and Social Practices of Energy*

A number of surprising elements emerged during my initial research on humanitarian energy. First among these was the extent of energy present in refugee camps. All the homes and business spaces I visited used some form of energy, and energy products and services were very visible in the camps. In theory this should not be a great surprise, and in many ways it is obvious that energy is an essential part of life in displaced contexts as it is in other locations. However, when I turned to explore the academic literature on this topic I was surprised to see very little academic consideration of the energy needs of refugees. As the sections below explore, many literatures could be relevant to the examination of refugee energy but as yet do not cover the topic in detail.

Exploring the ‘secret life of energy in refugee camps’ (Rosenberg-Jansen 2022b: 1) requires us to understand the spaces and uses of energy in refugee homes, businesses and public facilities. Academic authors have considered the social practices of energy in the global north, contrasting energy as a practical or technical issue with energy conceptualised as a core part of social needs and interactions (Hargreaves and Middlemiss 2020). Much of this literature seeks to understand how technical approaches to energy (which areas have power, what appliances are used and how much energy is consumed) differ from the social uses of energy (what energy means to people, how they use it as part of their everyday lives, and how social and

cultural patterns influence energy use). In UK and European contexts, this debate often centres on the social, physiological and communal aspects of energy consumption (Whitmarsh 2011; Wilhite et al. 2000). This literature frequently focuses on the decentralised energy transitions currently happening in western economies (Bridge et al. 2013; Eyre et al. 2011) and can include analysis of public perceptions and cost savings (Attari et al. 2010), understandings of climate change (Spence et al. 2011) or how European communities react to renewable technologies (Devine-Wright, 2005). In refugee contexts, however, these topics remain largely unexplored and detailed descriptions of the spaces and places of humanitarian energy have not been developed (Rosenberg-Jansen 2022a).

Evidence from energy-demand research is helpful here, drawing on practice theory and sociology – for example, Elizabeth Shove’s research, which focuses on how ‘energy is woven into the fabric of society’ (Shove and Walker 2014: 41). Shove and Gordon Walker conceptualise ‘energy not as a cause or consequence of social systems but as an ingredient of the social practices and complexes of practice of which societies are composed’ (Ibid.: 46). Energy practices are considered as a core part of how the ‘dynamics of demand’ are constituted, including a mixture of everyday activities such as travelling, cooking and watching TV (Ibid.: 52). There is considerable work on social practices and demand within western cultural practices, such as work by Shove (2003) and Stephenson et al. (2010). This literature is supported by social-practice theory, which examines how energy practices and institutional action come together, and the pragmatic choices that govern cultural choices (Schatzki, Knorr-Cetina and von Savigny 2001). Cultural theory and ethnography have also been used to further understand experiences of energy and the role it plays in people’s lives (Mackley and Pink 2013; Pink 2011; West, Bailey and Winter 2010). Exploratory work on the social practices of renewable energy has been conducted in Kenya and sub-Saharan Africa (Barry, Steyn and Brent 2011; Karekezi and Kithyoma 2002; Lay, Ondraczek and Stoeber 2013), and some research has evaluated knowledge and perceptions of renewable-energy technologies within development settings (Zyadin et al. 2012). In particular, gender and energy access have provided fruitful avenues in development research (Daigle 2022; Listo 2018). Understanding the social importance of energy is one of the elements developed by this book: chapter 1 considers in detail how refugee households view energy and how these values are linked to social, national and cultural practices.

To date there has been limited in-depth research on the social aspects of energy within refugee communities. There are a few studies that analyse how energy access can improve refugee economic opportunities (Lahn and Grafham 2015); how displaced people use local, natural and human resources to supplement their fuel allowance (Lyytinen 2009); fuel-efficient

stoves and conflict (Abdelnour and Branzei 2010); and a description of the types of energy services used by displaced people (Lehne et al. 2016). In addition there is some geographically focused work on Lebanon's response to Syrian refugees (Williams 2014), technology-focused solutions such as the IKEA solar-homes initiative (IKEA Foundation 2017) and ethanol-fuelled households in refugee camps in Ethiopia (Egziabher, Murren and O'Brien 2006), as well as wider contextual research on the policy situation surrounding energy needs in humanitarian emergency responses (Van Dorp 2009). New and emerging research has also started to focus on the issue of co-design and co-development of energy solutions with displaced people (Nixon et al. 2021; Robinson, Halford and Gaura 2022) and the importance of energy access for refugees in Bangladesh (Rafa et al. 2022).

Refugee camps encompass multiple networks, uses of technologies and points of interaction, and offer sites that can be examined to understand how networks and refugee policies are constructed. There is already a considerable literature on the social and cultural environments of refugee settings, including research by Liisa Malkki in Tanzania (1995), Cindy Horst in Kenya (2006) and Christian Williams in Southern Africa (2012). Much of this literature provides examples of situated ethnographies, which link theories of encampment with the lived experience of refugees in specific locations. The humanitarian literature on East Africa (De Montclos and Kagwanja 2000; Jaji 2012; Practical Action 2020; Rogers and Bloom 2016) is also relevant as the focus-country examples for this research are Kenya and Rwanda. Although these authors often cover cross-cutting issues such as health, disability, age, religion and gender (Fiddian-Qasmiyeh et al. 2014), energy has remained largely absent from their work. To some extent anthropology has lent itself to analysing infrastructure and technology from a social perspective. Ethnographies of infrastructure are becoming increasingly common, and Jamie Cross and Alice Street (2009) have explored the role of anthropology in analysing poverty and lives 'at the bottom of the pyramid'. Social historians and anthropologists have also turned to the electricity sector to understand the role energy plays in people's lives – for example, Thomas Hughes's (1993) *Networks of Power* and Tanja Winther's (2008) *The Impact of Electricity*. Winther's book on the impact of electricity provision on rural communities in Zanzibar directly concerns the role energy plays within people's lives. Anthropological energy-access studies such as this provide a useful background to this book, offering a model for ethnographic research on energy.

Alongside the academic literature it is important to consider how policy research can be relevant to debates on the social nature of energy demand in refugee settings. Indeed, if grey literature is not consulted the majority



of technical work on this topic would be neglected. Policy research on humanitarian energy (Grafham, Lahn and Lehne 2016; Gunning 2014) has much to teach us about the surprising world of humanitarian energy – for example, policy analysis from the Global Platform of Action (GPA) for Sustainable Energy in Displacement Settings (UNITAR, 2019), who are supporting structural recognition of sustainable energy programmes in refugee camps and displacement settings. The GPA's 'State of the Humanitarian Sector in 2022' report outlines the progress being made towards Sustainable Development Goal (SDG) 7 on sustainable energy (GPA 2022). *Voices in the Dark* builds on such policy work to consider the spaces and practices of energy in refugee homes (chapter 1) and refugee businesses (chapter 2), and public and operational spaces in refugee camps (chapter 3).

### *Energy Communities: Institutional Actors and Humanitarian Assistance*

A second surprising element during the initiation of the research for this book was the number of actors, individuals and communities involved in energy access in refugee camps. Hundreds of NGOs, humanitarian agencies, development actors, donors, refugee leaders and community groups, local and global private-sector companies, and intermediary organisations were involved in the humanitarian energy world. But the recognition of this diversity of communities seemingly went unnoticed and undescribed in the humanitarian literature. Getting to know which communities of actors to speak to, which organisations to approach and how responses on energy were organised was deeply challenging.

Academic analysis from the fields of geography and science and technology studies was helpful in understanding how to approach who was doing what on energy in humanitarian settings. In particular, analysis on institutions (Douglas 1986), spatial relations (Massey 1984) and communities (Law and Hassard 1999) was useful in considering how actors come together to produce social dynamics. Literature on 'energy communities', which comprise both institutions and individual actors (Campbell, Cloke and Brown 2016), was deeply informative and constructive for conceptualising my research. Humanitarian energy communities can be viewed as having two core constituencies: practitioners and refugees. Understanding policy-making communities and the nature of practitioner voice is the focus of David Mosse's (2006) work on the anthropology of aid workers and their programmes. This type of analysis 'studies up' to examine international development and aid mechanisms, using anthropology to study contemporary society (Macclancy 2019; Nader, 1972). Some academic traditions suggest studying energy-policy transitions (Love and Isenhour

2016; Winther and Wilhite 2015) using ethnographic methods such as observation, action research and participating in development policy as a researcher or consultant. Energy communities in humanitarian settings also include refugees and host community groups. Understanding the practices of refugees and detailing their experiences of energy can be carried out through ethnographic methods, but also by employing action research methods and using alternative interviewing techniques. For example, there is some literature on participatory approaches with regard to energy in refugee camps and rural communities in developing countries (Abdallah 2015; Bates et al. 2002; Rouse 2002). My research critically engages with these issues by detailing how different communities value and perceive energy access, drawing on ethnographic methods to bring refugee voices into the heart of the research.

A key area of literature that is relevant for the arguments presented in this book is the analysis of the structures of humanitarian assistance, grounded in the field of refugee studies, and specific work on the politics of aid and refugee communities (Betts, Loescher and Milner 2011; Crawley 2017; Loescher 2001) – including research on refugee economies (Betts et al. 2014), self-reliance (Easton-Calabria and Omata 2018) and the structures of protection (Scott-Smith and Breeze 2020). This literature suggests how refugees access resources, exploring dependency on humanitarian aid and self-reliance (Kibreab 1993: 321). Much of this analysis critically assesses emergency assistance to refugees, asking how refugees make a living and whether aid is ‘imposed’ (Harrell-Bond and Chambers 1986; Zetter 1988). Balance and nuance are important within these debates, as some authors argue that institutional measures to push refugees to become self-reliant can be destructive (Easton-Calabria and Omata 2018; Hunter 2009) while others describe the independence of refugee communities (Clements, Shoffner and Zamore 2016; Pascucci 2017). Recognising ‘dispersed dependencies’ is critical in understanding the multiple and complex ways in which refugees engage in a variety of social, emotional, physical and other dependencies that are both related to and independent of humanitarian systems (Easton-Calabria and Herson 2020: 44). Although significant work on UN institutions and their policies has emerged over the past twenty years (Betts, Loescher and Milner 2011; Black 2001; Bornstein and Redfield 2011; Loescher 2001), limited critical evaluation in the energy space has taken place. Recent publications have started to analyse the role of humanitarian institutions in providing energy (Grafham 2020; Rosenberg-Jansen 2020), but have not yet started to explore in detail institutions’ and humanitarian organisations’ action on energy within camps. Chapter 4 considers these issues further in its presentation of the provision of energy in refugee camps.

## *Energy and Politics: Forced Migration and Humanitarian Assistance*

The third surprising element uncovered at the start of my research was the extent to which energy was deeply political in refugee contexts. Gone was the relatively neutral use of the technical terms of electrical engineers and energy economists, and in its place were openly derisive comments about the value of energy in refugee lives. As chapters 4 and 5 evidence through the depiction of the views and judgements of humanitarian actors, the provision of energy in refugee camps is by no means a neutral set of technological choices. Rather, humanitarian actors are making choices on who deserves energy and how refugee communities are supported in accessing sustainable solutions.

The field of forced migration studies provides literature here on the politics of life, questioning the role that humanitarian organisations play in refugee lives and examining whether humanitarian choices are based on principles of neutrality and impartiality or whether they are the result of political choices (Steiner, Gibney and Loescher 2003). This discussion helps to illuminate who is doing what in humanitarian energy contexts: in many cases, informal communities and enterprises are providing many essential social and development services, while humanitarian organisations are focused on only providing life-saving interventions (Rogers and Bloom 2016). Didier Fassin's 'humanitarian politics of life' (2007: 502), in particular, operates as a useful theoretical frame for my analysis. Fassin defines the politics of life as 'politics that give specific value and meaning to human life', which emerges as part of humanitarian action and shapes the 'evaluation of human beings and the meaning of their existence' (Ibid.: 500–1). Fassin's work enables a critical analysis of humanitarianism, exposing how aid agencies shape refugee energy access through political structures and the micro-level politics of practice. This framing considers both the structures and practices of humanitarian action, to understand the political nature of energy access.

Fassin's concept has been applied to humanitarian technologies by a number of scholars. For example, the framing is used by Tom Scott-Smith to analyse 'the hierarchies of humanity that relief work creates' and the way that 'international aid agencies institutionalize inequality while claiming to treat people equally and impartially' (2019: 510). Scott-Smith focuses specifically on refugee shelter, looking at how political assessments are embedded in technology-centred interventions (Ibid.: 509). Several other authors have also applied this approach to humanitarianism (Bornstein and Redfield 2011; Fassin 2010; Hyndman 2000). My work draws on these ideas to understand how energy is viewed as a 'basic need' within the

humanitarian sector, examining how decisions about energy are political (Brown and Cloke 2017).

The literature on the humanitarian ‘politics of life’ includes a related concept, developed by Ilana Feldman (2012: 155), on the ‘politics of living’ within Palestine. The politics of living is what happens when ‘humanitarianism moves from crisis response to a condition of life’; it shifts attention from the work of aid agencies to the strategies of refugees, who have to carve out a ‘politics of living in the humanitarian space’ (Ibid.: 155–56). My work engages with many elements of Feldman’s discussion, which relates directly to the impact of humanitarian agencies in providing services. However, I have not focused on the national characteristics of displaced people or how their political claims relate to access to services, as Feldman does, because my research focuses on energy provision rather than on access to legal rights. Instead, I use the term the ‘politics of living’ in a more general sense – one adapted from Feldman to refer broadly to the dynamics of being, surviving, living and thriving within humanitarian contexts. I examine how access to energy is related to quality of life, and to evaluating what role humanitarian agencies have in providing energy.

This book explores both disputes about the provision of energy *and* the value that energy has for communities, including how energy resources are secured and accessed by refugees as well as how they are provided by humanitarian agencies. My use of the ‘politics of living’, therefore, draws on Feldman’s analysis and Fassin’s work on the politics of life but nuances these conceptions to draw attention away from the binary divide of life versus death to encompass what living beyond survival means to people. In humanitarian spaces, this means access to a range of products and services that meet the full energy needs of refugee lives, not just the provision of basic energy products needed to prevent loss of life. In particular, the literature on the politics and anthropology of infrastructure ties into this debate, suggesting that ‘ethnography can open up’ narratives of modernisation, of joy and of energy technologies beyond traditional humanitarian conceptions of providing life (Larkin 2013: 334). For example, the work of Brian Larkin on the politics and poetics of infrastructure (Ibid.), and by Ed Brown and Jon Cloke on the ‘political economy of energy choices’ (2017: vii), enables us to understand some of the ‘messy realities’ (Humanitarian practitioner interviewed in London, UK) of humanitarian energy on the ground.

In summary, existing academic work on energy spaces, energy communities and the political nature of energy has much to teach us in the uncovering the importance of energy in refugee camps. Literature that illuminates refugee stories, literature that critiques the politics of life in refugee settings and literature that reflects upon the global nature of

humanitarian action will be drawn upon in the coming chapters to support arguments made throughout the book.

## **The Literature on Energy in Humanitarian Contexts**

### *Existing Evidence and Research Rationale*

Access to energy has not traditionally been considered as a basic human right when responding to humanitarian emergencies (UNITAR 2019). Importantly, energy is not formally part of the humanitarian cluster system, possibly because energy needs are placed at the bottom of the urgency list in the haste to respond (Bellanca 2014). In recent years a considerable amount of new evidence has been published on humanitarian energy. Indeed, we can now characterise the sector as *emergent* rather than *nascent* (Rosenberg-Jansen 2022a). Despite this intensification of work on the topic several research gaps still exist – including the four areas outlined below.

Firstly, knowledge on technologies and energy demand in refugee camps. Research on the energy sector is often focused on the sources of energy – in particular, renewable technologies. Within refugee camps, renewable solutions usually centre around solar energy (due to the advanced nature of this technology and the natural solar resource available in refugee-hosting countries), although there is an increasing use of renewable biomass and biogas, wind generators, micro-hydro, geothermal and waste recycling on an ad hoc basis (UNHCR, 2019a; Van Dorp 2009). Previous energy studies do not go beyond the technical and often fail to examine existing sources of energy and uses within refugee communities. Understanding the roles of various technologies and how they are utilised within humanitarian systems can inform policy and potentially help improve international development programming. Analysing how energy is used within camps can also provide a new theoretical lens for energy-access scholars.

Secondly, although policy research has developed some quantitative information about the amount of energy that refugees consume and the sources of energy available in camps and displaced urban settings (for example, the Moving Energy Initiative 2017 analysis and GPA in 2022), qualitative research on refugee energy use is rare. It is therefore essential to explore not only energy supply but also how energy is understood and valued. There is limited practitioner and academic research exploring the detailed practices and policies of energy for refugees. This book hopes to fill this gap in part by qualitatively examining *how* humanitarian energy is happening on the ground in refugee camps. This includes studying how refugees access energy and how the humanitarian community support

them in securing this access – building on the work of Sharon Abramowitz and Catherine Panter-Brick on ‘ethnographies of practice’ (2015: 10) to understand how these groups act in concert. As Mosse (2006) pointed out almost two decades ago, there is a need for academic research that provides detailed, nuanced understandings of the role of actors and institutions within the aid and international-development sectors. Accessing energy policy is a ‘black box’, the decisions, actions and processes of which are not visible to external parties. This is a problem because if we do not know what energy programmes are designed to do, they cannot be constructively criticised or be adapted to be more inclusive. Humanitarian policy communities are judged as being ‘successful’ and influential because they enlist stakeholders and generate funding for a specific humanitarian area rather than being evaluated on more substantive ways that improve the lives of refugees (Buchanan-Smith 2003; Heeks and Standforth 2013). Moreover, emerging evidence suggests that humanitarian agencies have a limited role to play in delivering energy solutions on the ground (Grafham 2020).

Thirdly, practitioner knowledge on how refugees access energy adds to our understanding about how humanitarianism operates and who it engages with. In particular, applying an analytical lens and critical refugee studies literature to energy access helps develop a more detailed and rigorous analysis of how change happens in refugee camps. In this book I provide a detailed description of the views and values of a range of actors within the humanitarian energy sector, a community comprising both policy-makers and local communities such as local host government members and NGOs (Arce and Long 2000; Lewis et al. 2003). Refugee communities include households, activists, community leaders, local social groupings and those who have a ‘sense of belonging together’ (Gold 2005: 3).

Fourthly, scholarship on the lived experience of refugees can help to illuminate how energy access differs within refugee communities. This speaks to the academic literature on the ‘nuanced understanding of lived experience’ (Lenette and Boddy 2013: 72) and taking ‘alterity seriously’ (Law 2000: 2). This study directly contributes to these debates by providing an in-depth description of the experiences of refugee energy practice in East Africa. My research considers the lived experience of refugees *and* the values of energy professionals, within the context of the emergence of this sector, to gain a more detailed and nuanced understanding of current changes. Focusing on values and perceptions, and listening to actors as if they are their own ethnographers, enables their agency to be taken seriously (Mol 2010). By focusing on values and conceptions about energy, the book focuses in particular on people whose views and experiences are rarely heard when it comes to energy in refugee camps: the *Voices in the Dark* of the book’s title.

## *Methodological Approach*

Research on energy can take many forms: it can encompass the analysis of demand and energy uses or involve studying supply routes and sources of energy, conducting socio-technical explorations of systems, modelling needs or developing ethnographic descriptions of lived experience; it can also entail geographic mappings of national and local priorities, qualitative studies of technological objects, sociological descriptions of governance structures, assessments of institutional action, and power or discourse analysis. Such studies could use quantitative, qualitative or mixed methods and choose to explore local, national, regional or global sites of study. My research draws on many such elements, but I have deliberately chosen to not use just one method exclusively in order to capture the range of experiences on energy in the camps. As a result I used a number of social science methods such as interviews and observation to develop the results presented in this book.

This work can be considered an ethnography since it is a rich and grounded description of communities: a ‘study of people in naturally occurring settings or “fields” by methods of data collection which capture their social meanings and ordinary activities, involving the researcher participating directly in the setting, if not also the activities, in order to collect data in a systematic manner but without meaning being imposed on them externally’ (Brewer 2000: 6). While this means that I draw on anthropological methods – in particular, interviewing techniques for lived-experience data collection (Clifford, French and Valentine 2010; Ingold 2014) – my research does not present a single-sited ethnography of humanitarian energy in one location (conceived as a detailed and comprehensive portrait of a particular community or professional culture). Rather, I have focused on producing an ethnographic snapshot of energy life in the camps in Rwanda and Kenya, alongside an evaluation of how policy-makers and practitioners view energy in very different ways. This builds on the work of Mosse, who suggests that ‘ethnography is less concerned with what international policy ideas are, than with what they do, and how. This requires careful exploration of complex institutional and social processes, often written against powerful self-representations of experts and professionals’ (2007: 2).

The results presented in this book bring together experience from my practitioner roles as a humanitarian energy specialist and as a research academic analysing the lived experience of energy in refugee camps. Over the past ten years I have conducted multi-sited fieldwork in refugee camps in Kenya and Rwanda, alongside data collection on the global humanitarian energy sector based on discussions with practitioners in London, Vienna, Geneva, Oxford, Brussels and many other cities. This enabled

me to engage with high-level policy debates and emerging projects, as well as experience views on energy projects and supply within refugee camps. I conducted multiple trips to the Kakuma and Kalobeyei camps in Kenya and the Mahama, Kigeme, Nyabiheke and Gihembe camps in Rwanda. Alongside these trips, I also held interviews and meetings in Nairobi, Kigali and regional towns and villages in Kenya and Rwanda. Data collection also involved conducting both semi-structured interviews with practitioners, largely conducted remotely online, and observation at international events in Geneva, New York, London, Amsterdam and Lisbon.

Using these methods, I have used energy anthropology and engaged approaches to produce an *engaged energy ethnography*, defined as: a rich description of the range of energy experiences of policy-makers, practitioners and end users, produced using a situated, engaged and ethical approach to understand how and why energy matters to a range of communities. Engaged energy ethnography allows the voices of refugees and practitioners to speak for themselves, represented through the cultural and political framings they find important. Building on direct evidence from refugees and practitioners I developed a key set of themes and patterns emerging from data collection, to understand how energy is valued in humanitarian settings. Engaged energy ethnography builds on ethnographic and anthropological approaches: it requires spending time directly with communities, listening to their values and opinions in their own words, and understanding holistic dynamics within locations. My approach draws upon qualitative data, contrasts the views of communities and practitioners, and does not aim to paint a singular picture of any one community.

As a consequence of this, I present the views and opinions of refugees and practitioners in their own words. To do this I note in quotes only the place and location of interviewees. For example, 'Refugee living in Rwanda' or 'Humanitarian energy practitioner in the UK'. Some readers may be surprised at this formulation, and consider the lack of names or further descriptors associated with interviews disconcerting. However, this attribution style was chosen to ensure the anonymity of interviewees, and especially to protect refugee research participants who may be able to be identified if much further information was provided. This form of referencing interviewees could also be said to obscure the positionality and power of different individuals – a criticism that to some extent is a fair one. I have tried to mitigate this risk by describing the roles and power held by individuals, and creating a balance in how interviewees and their positionality is described.

My own positionality as a researcher is also important here. Working as a woman on the topic of energy was often seen as surprising and



non-threatening, and so enabled access to refugee homes and businesses where others may not have been invited in. My experience working as a practitioner also facilitated access to programmatic and research spaces – and, importantly, meant that many humanitarians felt free to speak openly with me based on our existing relationships and established trust. Both types of privilege are relevant here, as they enabled access to spaces and discussions that may not otherwise have been possible. Within this context I have tried to stay faithful to the stories and perspectives of refugees and practitioners as much as possible – grounding such knowledge within lived experiences and paying attention to narratives of power (Sultana, 2022).

Within the book, I have tried to reflect a range of voices to demonstrate the complexity and shifting nature of energy in refugee camps. The aim of such an approach is to analyse what perceptions mean in political and humanitarian terms, going beyond ethnographic description to produce an informed opinion on energy perceptions and access in refugee camps. Developing an engaged energy ethnography in refugee settings was challenging because the fieldwork produced many forms of evidence and multiple narratives from within the humanitarian community and camps. To resolve this, I present evidence throughout this book in the form of detailed quotes from interviewees – narratives and explanations drawn directly from participants and told in their own words, contextually embedded within the situations in which they were told.

## Book Structure

This first chapter has provided a brief introduction to energy in humanitarian settings – outlining the surprising nature of refugee energy experiences, highlighting the considerable number of communities and actors involved in energy in refugee camps and providing initial reflections on the political nature of humanitarian energy. A brief outline of relevant academic literature and the methodology underpinning the empirical analysis in the book has been offered within the sections above.

Chapter 1 focuses on household energy and outlines how refugee families value energy in multiple ways: in terms of social, cultural, economic and emotional connections, as well as valuing technologies and the usefulness of energy products. The discussion engages with the literature on the social nature of energy demand, describing how refugees value energy in terms of social engagements and cultural priorities. Throughout the chapter I describe the values that people place on energy, including practical and economic values, and consider how energy is linked to the quality of life in refugee camps. I suggest that refugees know a considerable amount

about energy and often secure access to it themselves through buying products and services directly from suppliers. Most households have ownership of energy and responsibility for their own electricity access. This can be understood as challenging the self-reliance narrative put forward by some humanitarian agencies: in terms of energy, refugees are already largely independent and self-reliant, so policies and narratives that push for further independence may be redundant. In the chapter I show how access to energy in the camps is seen as a sign of progress and development, and as having direct benefits in improving quality of life, as well as opening up a discussion on the political nature of independent access to energy services by refugee communities.

Chapter 2 highlights one of the most noticeable uses of electricity in refugee camps: energy used by refugee businesses and entrepreneurs, who use energy to power their shops, restaurants, cafés and other spaces. I show how refugee businesses secure and supply energy, and detail how energy is essential for businesses – enabling people to create additional income, as well as supporting the social and communal development of the camps. I argue that energy enterprises support economic life within the camps and provide a critical resource for refugees. I link this description to the literature on energy communities and outline how business users of energy are often not considered by humanitarian organisations. As a result energy for refugee enterprises is not planned for, embedded in interventions or supported by humanitarian programmes. The core argument of the chapter is that energy enterprises are one of the key constituents within energy communities in the camps, and businesses are the main group supplying energy products and services to refugee communities. I argue that refugee businesses are playing a key role in the politics of living in refugee camps, and are in fact enhancing the quality of life for refugee households by enabling access to energy.

Chapter 3 examines energy in community facilities and operational spaces within the camps, suggesting that access to energy is limited and, even where spaces such as offices are connected, power is often intermittent and only available for some hours of the day. I describe how refugees feel frustrated by this and detail their concerns about why water, sanitation and hygiene (WASH) facilities, schools, clinics and public spaces are without power while some operational spaces such as offices, staff compounds and registration centres have higher levels of access. The core argument of this chapter contrasts unequal access to energy in public spaces with energy for humanitarian operations, questioning why some spaces receive access and others do not.

Chapter 4 considers the provision of energy and starts to explore how energy is supplied and accessed in refugee camps. In this chapter I present

the value of energy as viewed by humanitarians, the roles and responsibilities within organisations for the provision of energy, and disconnects in the humanitarian energy system. I also consider how institutions provide energy for refugees, finding a lack of comprehensive action on delivering sustainable solutions. This is presented in contrast to the considerable amounts of electricity available for humanitarian staff in their homes and businesses. Throughout the chapter I argue that humanitarian organisations are often failing to provide the energy that refugees need. This, I conclude, is having a negative impact on the quality of life of refugee communities.

The last chapter offers conclusions and summarises the key findings of the research, developing ideas on whose values are embedded within decision-making. This chapter raises questions about who energy is designed *for* in humanitarian settings. The evidence is presented in terms of the literature on the nature of power and perceptions, the politics of life and the way that these issues can inform academic thinking on humanitarian systems. I argue that some views and values on energy matter more in refugee settings than others. I also suggest that organisational modes of governance, and the roles of institutions, often determine the level of energy access for refugee communities. The core argument of this chapter is that energy access is political in nature and that humanitarian systems structure the quality of life of refugees. There is a disconnect, in other words, between the needs, desires and values of people living in the camps and the humanitarian systems that are there to support them. Power, control of resources and access to energy in these spaces are not equitable. There is a division between how refugees in the camps already procure their own energy and the programmes that provide electricity. I suggest that the governance of humanitarian energy programming is political and that power (in both senses) has a real impact in refugee settings.

Throughout this book I return repeatedly to the idea that some opinions on energy matter more than others, and that institutional political power has a significant impact in constraining the levels of energy access in refugee camps. As we have seen, the title of the book, *Voices in the Dark*, lends itself to several meanings. The first is more literal: many refugees living within the camps struggle without lighting or power in the night and are limited by the darkness this brings. The second meaning is figurative: institutional users of power and global policy-makers often have limited knowledge and experience of energy needs within the camps; for them, darkness comes in the form of not seeing the realities of energy needs and choices on provision. Political choices about energy are unrecognised and value judgements are being made, perhaps unconsciously or unintentionally, by humanitarian systems. This too is

a form of darkness, one created by the complexities of humanitarian action. Refugee voices, meanwhile, speak into darkness, which is demonstrated through a lack of knowledge on the part of humanitarians about how displaced people use electricity, why it matters to them and how they come to access it.