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A human rights approach to energy: Realizing the rights of billions within ecological limits

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Abstract

Energy is central to both the 2030 Agenda for Sustainable Development and the Paris Agreement and a prerequisite to the realization of human rights for billions of people. Yet the nexus between human rights, climate change and energy remains underdeveloped in international law and practice. This article considers the potential and limitations of a 'human rights approach' to energy to accelerate progress towards universal access to modern energy services while addressing climate change and inequalities. It considers three distinct elements of a human rights approach to energy: a discursive element; a mainstreaming element; and a litigation element. In exploring the potential contributions of each of these elements to a just energy transition, it demonstrates how a human rights approach to energy can help to address some of the shortcomings of the Sustainable Development Goals related to energy and climate.

1 | INTRODUCTION

Accelerating the pace of progress in poverty reduction and turning the tides on climate change and inequality are perhaps the most urgent challenges in the achievement of the United Nations (UN) Sustainable Development Goals (SDGs).[1] The latest Global Sustainable Development Report notes the widespread prevalence of poverty and unprecedented levels of inequality, while highlighting that the world is at a tipping point with respect to climate change and biodiversity loss.[2] Energy has a key role to play in correcting and reversing these trends. Access to energy has been a catalyst of prosperity for billions of people and is fundamental to modern life.[3] However, the established global energy system has done too little to improve living standards of the most vulnerable. Instead, it has often damaged the ecosystems on which local communities and indigenous peoples depend for their livelihoods and continues to pose the greatest environmental health hazards to those who have benefited the least from increased energy production.[4] The energy sector is also the single largest source of greenhouse gas emissions globally and thus the main driver of climate change, with further detrimental effects on the lives and livelihoods of those who are already marginalized.[5] Securing a rapid and equitable energy transition globally is thus a prerequisite to the realization of the human rights of billions of people and to the achievement of the goals of the Paris Agreement on climate change.[6]

It would be a mistake to view the energy conundrum solely as a matter of figures and metrics. Transformative action is needed to

[1]UNGA 'Transforming Our World: the 2030 Agenda for Sustainable Development' UN Doc A/RES/70/1 (21 October 2015).
[2]Independent Group of Scientists appointed by the Secretary-General, 'Global Sustainable Development Report 2019: The Future is Now—Science for Achieving Sustainable Development' (United Nations [UN] 2019).
[3]Energy Access Targets Working Group, 'More Than a Lightbulb: Five Recommendations to Make Modern Energy Access Meaningful for People and Prosperity' (Center for Global Development, 2016) <www.cgdev.org/node/3124016>.
[4]A Silverman, 'Energy Justice: The Intersection of Human Rights and Climate Justice' in S Duyck, S Jodoin and A Johl (eds), *Routledge Handbook of Human Rights and Climate Governance* (Routledge 2018) 251; see also J Wolfley, 'Mni Wiconi, Tribal Sovereignty, and Treaty Rights: Lessons from the Dakota Access Pipeline' in R Salter, CG Gonzalez and EA Kronk Warner (eds), *Energy Justice: US and International Perspectives* (Edward Elgar 2018) 141.
[5]Silverman (n 4).
[6]Paris Agreement (adopted 12 December 2015, entered into force 4 November 2016) 55 ILM 740.

address all the structural flaws that characterize our current energy systems in a holistic manner. Specifically, the energy transformation must simultaneously combat social exclusion and address environmental degradation and climate change. This involves, first of all, enhanced efforts at the national and international levels to provide access to affordable, reliable, sustainable and modern energy to the 790 million people who remain without access to electricity, and clean cooking facilities to the 2.6 billion people who still depend on polluting fuels for cooking.[7] Second, it involves 'rapid, far-reaching and unprecedented changes' in energy and industrial systems to prevent catastrophic levels of global warming and halt the extinction crisis.[8] Third, it requires a redistribution of political and economic power so that the global energy system becomes just and inclusive.[9] As the present article demonstrates, the SDG dedicated to energy—SDG7—does too little to promote such a holistic transformation. Part of the problem is that neither the goal nor its targets and indicators specify who is responsible for which action. Moreover, potential contradictions between the social and environmental dimensions of the 2030 Agenda for Sustainable Development hamper progress towards a just, inclusive and sustainable energy transition.

International human rights law has a role to play in addressing these shortcomings. As part of international law, human rights offer an established normative framework that ultimately requires 'transformative, structural change to reduce disparities and challenge power imbalances'.[10] Notably, the SDGs' crosscutting focus on inequalities and affirmative measures to correct historically disadvantaged communities, along with a standalone goal on reducing inequality within and between countries (SDG10), were in significant part the result of demands from the human rights community.[11] Moreover, the 2030 Agenda expressly states that the SDGs are 'grounded' in the Universal Declaration on Human Rights and 'international human rights treaties' and 'informed' by the Declaration on the Right to Development.[12] This grounding of the 2030 Agenda in human rights should, at least in principle, enable integrated and comprehensive action to achieve a just energy transition in line with the SDGs.[13] However, the precise ways in which the SDGs are linked to States' obligations under international human rights law remain unclear. Commentators note that human rights advocacy around the SDGs has tended to take the form of 'silver bullet or "add and stir" arguments' that present human rights as indispensable to every part of the 2030 Agenda without articulating specific connections and interactions across the spectrum of issues.[14] This criticism seems particularly warranted in connection with SDG7, which lacks human rights-based targets or indicators and has received minimal focused attention from the human rights community.

Against this backdrop, this article aims to enhance our understanding of the potential of human rights to accelerate energy access while addressing climate change and inequalities. It should be noted at the outset that the article does not seek to argue either for or against the recognition of a standalone right to energy access[15]—a proposal that has received considerable attention in academic literature.[16] Although there are merits to this proposal, concerns have been raised about 'overstretching legal interpretation, overloading under-resourced human rights monitoring mechanisms … [and] implementation failure'.[17] Further concerns relate to the potential devaluation of human rights language and redundancy.[18] Rather than weighing in on this debate, the present article shifts the focus to investigate what can be accomplished through a 'human rights approach'[19] to energy that focuses on existing norms and institutions. It considers three distinct elements of a human rights approach to energy: a discursive element; a mainstreaming element; and a litigation element. The discursive element considers how human rights discourse can provide a normative frame for policy and action on energy across different areas of sustainable development. The focus is on the potential of such discourse 'to accommodate and articulate the significance of the universal access to modern energy services targets' and related goals on climate change and inequality 'within its moral and systematic fabric'.[20] The mainstreaming element is a process-based strategy involving the incorporation of human rights norms 'at all levels of political, legislative and regulatory decision-making' and 'at all stages of development and delivery of actions, programmes and policies, and

[7]S Bouckaert et al, 'Net Zero by 2050: A Roadmap for the Global Energy Sector' (International Energy Agency (IEA) 2021) 167.

[8]IPCC, 'Global Warming of 1.5°C: An IPCC Special Report on the Impacts of Global Warming of 1.5°C Above Pre-industrial Levels and Related Global Greenhouse Gas Emission Pathways, in the Context of Strengthening the Global Response to the Threat of Climate Change, Sustainable Development, and Efforts to Eradicate Poverty' (IPCC 2018).

[9]See also D Gielen et al, 'Global Energy Transformation: A Roadmap to 2050' (International Renewable Energy Agency (IRENA) 2018) 45 ('to realise the energy transition successfully will require to change the entire socio-economic system, and make inclusiveness one of its pillars').

[10]IT Winkler and C Williams, 'The Sustainable Development Goals and Human Rights: A Critical Early Review' (2017) 21 International Journal of Human Rights 1023, 1024.

[11]IT Winkler and ML Satterthwaite, 'Leaving No One Behind? Persistent Inequalities in the SDGs' (2017) 21 International Journal of Human Rights 1073, 1073; J Gupta and M Nilsson, 'Toward a Multi-level Action Framework for Sustainable Development Goald' in N Kanie and F Biermann (eds), *Governing Through Goals: Sustainable Development Goals as Governance Innovation* (MIT Press 2017) 275, 277.

[12]UNGA (n 1) para 10.

[13]Winkler and Williams (n 10) 1024.

[14]PM Haas and C Stevens, 'Ideas, Beliefs, and Policy Linkages: Lessons from Food, Water, and Energy Policies' in Kanie and Biermann (n 11) 146.

[15]The only human rights treaty that expressly refers to energy is the Convention on the Elimination of All Forms of Discrimination Against Women, which requires State parties to 'take all appropriate measures to eliminate discrimination against women in rural areas … and, in particular, shall ensure to such women the right … to enjoy adequate living conditions, particularly in relation to … electricity'. See Convention on the Elimination of All Forms of Discrimination Against Women (adopted 18 December 1979, entered into force 3 September 1981) 1249 UNTS 13 art 14(2)(h).

[16]See, for example, S Tully, 'The Contribution of Human Rights to Universal Energy Access' (2006) 4 Northwestern Journal of International Human Rights 518, 531; S Tully, 'The Human Right to Access Electricity' (2006) 19 Electricity Journal 30, 39; L Löfquist, 'Is There a Universal Human Right to Electricity?' (2018) 24 International Journal of Human Rights 711; AJ Bradbrook, JG Gardam and M Cormier, 'A Human Dimension to the Energy Debate: Access to Modern Energy Services' (2008) 26 Journal of Energy and Natural Resources Law 546.

[17]Tully, 'The Human Right to Access Electricity' (n 16) 38.

[18]ibid.

[19]M Goodale, 'Introduction: Locating Rights, Envisioning Law Between the Global and the Local' in M Goodale and S Merry (eds), *The Practice of Human Rights: Tracking Law Between the Global and the Local* (Cambridge University Press 2007) 1, 5.

[20]MPS Solis, 'Human Rights Versus Human Needs: Debating the Language for Universal Access to Modern Energy Services' in J Jaria i Manzano, N Chalifour and LJ Kotzé (eds), *Energy, Governance and Sustainability* (Edward Elgar 2016) 56, 60.

by everyone involved in such programme delivery'.[21] Finally, the litigation element involves the potential of legal human rights claims to ensure greater accountability of governments and private actors for action and inaction relating to energy. Although these three elements are analytically distinct, they overlap and interact with one another in the real world. For example, a legal case can serve to enhance accountability for malpractices in the energy sector while promoting a framing of the issues in terms of human rights, which in turn can translate into the incorporation of human rights norms in energy policies. This article discusses each of the three elements of a human rights approach in turn, with due attention to the ways in which they interact in the energy justice context. This discussion is followed by conclusions and directions for further scholarship.

2 | FRAMING ENERGY AS A HUMAN RIGHTS ISSUE

At a discursive level, human rights can draw attention to the multiple dimensions in which energy systems affect the life, health and living standards of human beings, as well as the means of subsistence of peoples. Further, as Solis points out, 'rights-talk' not only sheds lights on deprivations but also serves to obtain greater clarity about the duties and responsibilities of actors to address these deprivations while containing 'an implicit commitment to action'.[22] Premised on the notion of universality, human rights can thus be invoked in political discourse as 'high order [norms] that could support the [SDGs]'.[23] Human rights specifically press in favour of action to correct historical injustices and could therefore help ensure that the interpretation and operationalization of SDGs 'confront[s] inequalities of all sorts in a more holistic and sustainable way'.[24] This is important for SDG7, which has been criticized for being operationalized in an overly technocratic fashion without due consideration of the ways in which different components of the energy system relate to human well-being[25] or environmental justice.[26] Moreover, SDG7 may not go far enough in ensuring the achievement of the SDGs' sustainability objectives.[27] A human rights approach to SDG7 brings these sustainability objectives into sharper focus while insisting on positive synergies between the social and environmental sides of the SDGs. In other words, applying human rights discourse to energy can help accomplish a paradigm shift whereby poverty, climate change and inequalities are tackled simultaneously as part of the energy transition. The present section demonstrates how a human rights approach can serve as a frame for transformative politics in connection with three inter-related components of energy justice: ensuring universal access to energy; making energy systems sustainable; and correcting inequalities. 'Energy justice' is understood here as 'a global energy system that fairly disseminates both the benefits and costs of energy services, and one that contributes to more representative and impartial energy decision-making'.[28]

2.1 | Ensuring universal access to energy

Access to modern energy services is a prerequisite to overcoming poverty and ending related human rights violations.[29] Research shows a strong positive correlation between countries' net energy consumption rate and their human development index (HDI) rank, confirming that HDI variables (such as life expectancy, education, income and social equality) and the enjoyment of related human rights (e.g., to life, health, food, water, education, an adequate standard of living and the right to development) are positively influenced by increased energy availability.[30] The lack and scarcity of or difficulty in accessing modern energy services by households has been termed 'energy poverty', referring in particular to access to electricity and to modern and clean cooking facilities.[31] Households that suffer from energy poverty are often trapped in a whirlpool of deprivation: the lack of energy, in addition to insufficient access to other key services and assets, affects productivity, time budgets, opportunities for income generation and, more generally, the ability to improve living conditions.[32] Energy is a means to ensure clean water, proper nourishment, modern public health facilities, clinical and laboratory equipment, communication and transportation.[33] It also enables labour-saving mechanization, freeing up time and increasing the number of productive hours in a day.[34] Income-generating opportunities provided by access to energy reduce the need to migrate to urban areas for employment, while raising living standards in rural areas.[35] Access to energy at home improves children's and adult's educational opportunities by enabling them to study after sunset,[36] leading to greater gender equality and higher literacy rates.[37] The goal of expanding electricity access, including off-grid renewables, for schools and households has become even

[21] DS Olawuyi, *The Human Rights Based Approach to Carbon Finance* (Cambridge University Press 2016) 145. See also JC McCrudden, 'Mainstreaming Human Rights', in C Harvey (ed), *Human Rights in the Community: Rights as Agents for Change* (Hart Publishing 2005) 9.
[22] Solis (n 20) 64.
[23] Haas and Stevens (n 14).
[24] I Saiz and K Donald, 'Tackling Inequality Through the Sustainable Development Goals: Human Rights in Practice' (2017) 21 International Journal of Human Rights 1029.
[25] R Hillerbrand, 'Why Affordable Clean Energy Is Not Enough. A Capability Perspective on the Sustainable Development Goals' (2018) 10 Sustainability 2.
[26] M Menton et al, 'Environmental Justice and the SDGs: From Synergies to Gaps and Contradictions' (2020) 15 Sustainability Science 1621, 1623.
[27] J Hickel, 'The Contradiction of the Sustainable Development Goals: Growth Versus Ecology on a Finite Planet' (2019) 27 Sustainable Development 873.
[28] B Sovacool et al, 'Energy Decisions Reframed as Justice and Ethical Concerns' (2016) 1 Nature Energy 1, 4.
[29] JC Nkomo, 'Energy Use, Poverty and Development in the SADC' (2007) 18 Journal of Energy in Southern Africa, 11; AJ Bradbrook and JG Gardam, 'Placing Access to Energy Services Within a Human Rights Framework' (2006) 28 Human Rights Quarterly 389.
[30] Nkomo (n 29) 13.
[31] J Bonan, S Pareglio and M Tavoni, 'Access to Modern Energy: A Review of Barriers, Drivers and Impacts' (2017) 22 Environment and Development Economics 491.
[32] S Pachauri et al, 'Energy Access for Development' in *Global Energy Assessment: Toward a Sustainable Future* (Cambridge University Press 2012) 1401.
[33] Bradbrook et al (n 16) 531.
[34] Pachauri et al (n 32) 1409.
[35] D Anderson et al, *World Energy Assessment: Energy and the Challenge of Sustainability* (UN Development Programme (UNDP), UN Department of Economic and Social Affairs, and World Energy Council 2000) 30.
[36] S Karekezi et al, 'Energy, Poverty and Development' in *Global Energy Assessment* (n 32) 151; Bradbrook and Gardam (n 29).
[37] L Cozzi et al, 'Tracking SDG7: The Energy Progress Report 2020' (IEA, IRENA, UN Statistics Division, World Bank and World Health Organization (WHO) 2020) 34.

more urgent in the context of the COVID-19 pandemic, which has increased the reliance on technologies for the realization of the right to education.[38] Similarly, ensuring electricity access for health care facilities is essential for the protection of the right to the highest attainable standard of health in the face of the pandemic.

Energy access is also intrinsically related to the human rights requirement of substantive equality and the prohibition of discrimination. More precisely, the premise that access to modern energy services must be universal operationalizes the concepts of human dignity and substantive equality that are inherent in human rights law.[39] Differential access to energy is both a driver and consequence of growing inequality worldwide, between as well as within countries.[40] At the global level, access to energy remains highly unequal, with the poorest 40% of the world's population disposing of some 10% of final energy use and the richest third of two thirds. About one fifth of the world population consumes none. Inequalities in the distribution of modern forms of energy also persist, with a much higher dependence on solid biomass fuels in the least developed countries.[41] Within and across countries, the lack of access to modern forms of energy has significantly contributed to the continued marginalization of affected groups.[42] Women have suffered the most in relation to health problems, security risks and developmental impediments connected with energy poverty. Routinely tasked with household work including cooking, women are often the ones travelling long distances to gather firewood and enduring the adverse health effects of cooking in a haze of firewood combustion.[43] Firewood collection also comes with risks of gender-based violence, musculoskeletal injuries and insect and snake bites. Moreover, having to gather fuelwood undermines women's ability to engage in income-generating activities.[44] Several studies confirm that energy inequality exacerbates gender inequality, with female-headed households facing a particularly high risk of entrapment in poverty.[45] Children's education also suffers where survival takes precedent over learning and thus little time and resources are left for education.[46] Ensuring universal access to sustainable energy will increase the proportion of children enrolled in schools, reduce dropout rates and considerably bring down child labour, thus helping to ensure that each child is able to develop to their full potential.[47] Indeed, it is worth recalling that education is both a standalone right and a precondition for the realization of other human rights.[48]

Together, the human rights claims set out in this subsection provide a strong normative basis for the call for universal access to energy: unlike a framing in terms of 'human needs', which implies relationships of beneficiaries and benefactors, human rights claims entail 'an active, insistent and justified demand' premised on rights, obligations and remedies.[49] The legal and moral stature of human rights compels governments to take affirmative measures to the benefit of those whose rights remain unfulfilled.[50] Moreover, human rights can facilitate collective action, foster local–global solidarity and transformation and provide a framework for social, economic and gender justice.[51] As the following subsections demonstrate, a human rights framing also presses in favour of an integrated approach to energy justice whereby energy access, sustainability and substantive equality are treated as distinct but inseparable human rights imperatives.

2.2 | Making energy systems sustainable

While enhancing access to modern energy in developing countries is one of the most urgent of human rights imperatives, the requirement in SDG target 7.1 that energy must be 'sustainable', and the related targets on renewable energy and energy efficiency, are equally important and must be pursued simultaneously. Currently, more than 40% of the world's population relies on biomass fuels for small-scale heating and cooking.[52] These are not only highly inefficient but also cause indoor air pollution, which is responsible for close to 4 million premature deaths annually.[53] Ensuring universal access to clean energy would prevent these deaths and reduce the risk of respiratory infections and heart diseases for millions of people, thus protecting both the right to life and the right to the highest attainable standard of health. The COVID-19 pandemic has made it even clearer that these are human rights imperatives, given that clean cooking solutions reduce the risks from COVID-19 respiratory illness.

It should be noted here that the use of fossil fuel-based energy sources such as LPG (liquefied petroleum gas) has sometimes been promoted as a 'modern' alternative to fuelwood. Promoting such an 'energy transition' is not only contrary to target 7.1 but also deeply

[38]ibid 21.
[39]See also Solis (n 20) 69.
[40]S Best, 'Shaping a Global Goal on Energy Access That Leaves No One Behind' (International Institute for Environment and Development, 2013).
[41]S Pachauri and N Rao, 'Energy Inequality' (International Institute for Applied Systems Analysis 2014) <https://iiasa.ac.at/web/home/research/alg/energy-inequality.html>.
[42]Cozzi et al (n 37) 32.
[43]Bradbrook and Gardam (n 29) 531; WHO, 'Gender, Climate Change and Health (WHO 2014) 18.
[44]Bradbrook and Gardam (n 29) 532; P Munro, G van der Horst and S Healy, 'Energy Justice for All? Rethinking Sustainable Development Goal 7 Through Struggles over Traditional Energy Practices in Sierra Leone' (2017) 105 Energy Policy 635, 638.
[45]Nkomo (n 29) 15.
[46]Bradbrook and Gardam (n 29) 532; P Jagger et al, 'Affordable and Clean Energy: How Acess to Affordable and Clean Energy Affects Forests and Forest-Based Livelihoods' in P Katila et al (eds), *Sustainable Development Goals: Their Impacts on Forests and People* (Cambridge University Press 2019) 206; E Rehn and EJ Sirleaf, 'Women, War and Peace: The Independent Experts' Assessment on the Impact of Armed Conflict on Women and Women's Role in Peace-Building' (UN Women 2002) 1, 129.
[47]Bradbrook and Gardam (n 29) 308.
[48]Committee on Economic, Social and Cultural Rights 'Implementation of The International Covenant on Economic, Social and Cultural Rights' UN Doc E/C.12/1999/10 (8 December 1999) para 1.
[49]Solis (n 20) 72 (citing H Shue, *Basic Rights: Subsistence, Affluence, and U.S. Foreign Policy* (Princeton University Press 1980) 14).
[50]S Tully, 'The Human Right to Access Electricity' (n 16) 34.
[51]N Reilly, 'Linking Local and Global Feminist Advocacy: Framing Women's Rights as Human Rights in the Republic of Ireland' (2007) 30 Women's Studies International Forum 114, 118.
[52]UNDP, 'Goal 7: Affordable and Clean Energy' <https://www.undp.org/sustainable-development-goals#affordable-and-clean-energy>.
[53]S Foster and D Elzinga, 'The Role of Fossil Fuels in Sustainable Energy System' (United Nations Chronicle, December 2015); WHO, 'Household Air Pollution and Health' (WHO Newsroom, 8 May 2018); UNDP, 'Support to the Implementation of the 2030 Agenda for Sustainable Development' (UNDP 2016) 1, 4.

problematic from a human rights perspective. In Sierra Leone, for example, a mass shift to LPG risks 'not only [transitioning] the household energy market from domestic self-sufficiency to import dependence but would also displace most of its profits from rural communities to major foreign multinational corporations'.[54] This imported commodity, moreover, is intrinsically connected with environmental degradation and human rights issues around the world.[55] Elsewhere, replacing fossil fuels with biofuels has resulted in hunger and malnourishment due to rising food prices, as well as land-grabbing, soil and water degradation and related human rights violations.[56] These examples illustrate that the full spectrum of human rights implications of proposed energy transitions must be critically evaluated to protect societies against false solutions to energy poverty and climate change.

As noted above, a human rights approach specifically calls for attention to the differentiated social and environmental impacts of existing energy systems and policies. Energy extraction, refining, transportation, storage, combustion and waste disposal produce a range of impacts on human health, often perpetuating existing inequalities and injustices. Pollution from fossil fuel combustion such as particular matter, polycyclic aromatic hydrocarbons, nitrogen oxides and volatile organic compounds, for example, particularly affects young children, with children of colour and those living in low-income communities being disproportionately affected.[57] Refineries, power plants and transport corridors tend to be located in disadvantaged areas, where negative health impacts are further amplified by a lack of access to quality health care.[58] Moreover, as noted above, the current energy system is the single greatest driver of anthropogenic climate change, which especially affects or even violates the human rights of those who are already marginalized. The link between climate change and the enjoyment of human rights has been recognized in a series of resolutions, decisions and reports adopted by international and regional bodies, and in several domestic judicial decisions.[59] The UN Human Rights Council, for example, has repeatedly expressed concern about the disproportionate impacts of climate change on marginalized groups and highlighted the role of international cooperation in protecting human rights against the impacts of climate change.[60] UN human rights treaty bodies have further stressed the need to limit global temperature rise to 1.5°C above pre-industrial levels in order to minimize the adverse effects of climate change on the enjoyment of human rights.[61] Indeed, pressure from the human rights community contributed to the incorporation of this long-term temperature goal in the Paris Agreement.[62]

Sachs points out that achieving the 1.5°C long-term temperature goal requires a 'truly radical overhaul' of the energy systems 'almost everywhere'.[63] Such a rapid energy transition calls for multisectoral policies designed to concurrently achieve environmental, social, health and other policy objectives in an integrated manner.[64] Here, the SDGs contain an inherent contradiction, with Goal 8 calling for continued global economic growth equivalent to 3% a year whereas Goals 6, 12, 13, 14 and 15 seek to protect the planet from environmental degradation.[65] SDG7 appears to reproduce this contradiction, as it seeks to increase the renewable energy share in the global energy mix apparently assuming that global energy consumption can continue to grow. However, increased energy consumption will necessitate more and faster energy production. Irrespective of whether the energy sources are fossil fuel based or renewable, this is likely to produce 'production sacrificed zones and vulnerable social groups'.[66] In the case of renewables, significant ecological and social costs are associated with the extraction of metals and minerals required for the production of renewable energy infrastructure. As Hickel observes, '[a] growth-obsessed economy powered by clean energy will still tip us into ecological disaster'.[67] A human rights-based approach highlights the need to move beyond a focus on economic growth (SDG8) and rejects a simplistic understanding of the energy transition as merely requiring a decoupling of growth and environmental degradation. Instead, it requires changes in the energy system designed to tackle inequalities and injustices 'across the entire socio-technological system'.[68]

2.3 | Correcting inequalities

To correct energy inequalities between countries while preventing and reversing environmental degradation, the principle of common but differentiated responsibilities and respective capabilities (CBDRRC) is crucial.[69] This principle is a cornerstone of the international climate change regime, where it produces higher standards of achievement for 'developed' than for developing States, with specific commitments for the former on technology transfer,

[54]Munro et al (n 44) 639.
[55]ibid.
[56]CG Gonzalez, 'An Environmental Justice Critique of Biofuels' in Salter et al (n 4) 41.
[57]FP Perera, 'Multiple Threats to Child Health from Fossil Fuel Combustion: Impacts of Air Pollution and Climate Change' (2017) 125 Environmental Health Perspectives 141, 141.
[58]A Kaswan, 'Greening the Grid and Climate Justice' (2009) 39 Environmental Law 1143.
[59]See, for example, S Duyck, S Jodoin and A Johl (eds), *The Routledge Handbook of Human Rights and Climate Governance* (Routledge 2018); J Peel and HM Osofsky, 'A Rights Turn in Climate Change Litigation?' (2018) 7 Transnational Environmental Law 37.
[60]Office of the High Commissioner on Human Rights (OHCHR) 'Human Rights and Climate Change' UN Doc A/HRC/RES/44/7 (23 July 2020).
[61]UN 'Joint Statement on Human Rights and Climate Change' UN Doc HRI/2019/1 (14 May 2020).
[62]See A Rubinson, 'For Human Rights (Every) Day: Climate Change Negotiators in Paris Must Support 1.5C Goal' (Center for International Environmental Law 2015).
[63]JD Sachs, 'Implementing the Paris Climate Agreement: Achieving Deep Decarbonization in the Next Half-Century' (2016) 6 Horizons: Journal of International Relations and Sustainable Development 34, 40.
[64]ibid.
[65]See, for example, IPCC (n 8); see also Hickel (n 27); J Gupta and C Vegelin, 'Sustainable Development Goals and Inclusive Development' (2016) 16 International Environmental Agreements: Politics, Law and Economics 433, 442.
[66]D Hernández, 'Sacrifice Along the Energy Continuum: A Call for Energy Justice' (2015) 8 Environmental Justice 151; DN Scott and AA Smith, ' "Sacrifice Zones" in the Green Energy Economy: Toward an Environmental Justice Framework' (2018) 62 McGill Law Journal 861. See also Human Rights Council 'Report of the Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment' UN Doc A/HRC/31/52 (1 February 2016).
[67]J Hickel, *Less Is More: How Degrowth Will Save the World* (William Heinemann 2020) 22.
[68]Menton et al (n 26).
[69]United Nations Framework Convention on Climate Change (adopted 29 May 1992, entered into force 21 March 1994) 1771 UNTS 107 (UNFCCC) art 3(1).

finance and capacity-building to enable the latter to take mitigation and adaptation actions.[70] From a human rights perspective, the importance of CBDRRC stems from its potential to promote the objective of substantive equality that is inherent in human rights law.[71] The relevance of the principle to sustainable development is reaffirmed in the 2030 Agenda.[72] This recognition is important in light of overwhelming evidence suggesting that scaling down resource use and reducing energy consumption in high-income States are necessary to ensure that the sustainability objectives of the SDGs can be achieved.[73] At the same time, international public finance in support of clean and renewable energy in developing countries needs to be scaled up to reduce persistent inequalities. Current patterns whereby double the amount spent on support for SDG7 in developing countries, US$400 billion, is spent on fossil fuel subsidies,[74] contradicts the 2030 Agenda, the goals of the Paris Agreement and States' human rights obligations.

Another key feature of a human rights approach to energy and climate change is a just transition of the workforce.[75] This requires understanding, anticipating and responding to the full spectrum of impacts of the energy transition on employment and related human rights. Whereas some have suggested that growth in the energy sector, specifically oil, promotes economic equality among the poorer classes in developing countries, research shows that such growth has in most cases only exacerbated poverty.[76] At the same time, households dependent on fossil fuel jobs are likely to suffer from a transition to renewables if no measures are taken to protect their rights. On the positive side, the renewable energy sector is more labour intensive than the fossil fuel sector and likely to generate both more low-skilled and more skilled jobs. The International Labour Organization (ILO) estimates that the net employment gains from a sustainable scenario in the energy sector amount to some 2.5 million jobs, offsetting the loss of approximately 400,000 jobs in the fossil fuel-based energy sector.[77] Targeted training programmes and strategic investments can help ensure that workers at risk of job losses resulting from the energy transition are able to benefit from the transition,[78] with robust social protection schemes, including unemployment benefits, providing a safety net. Other human rights risks, such as the risk of price hikes affecting energy access of low-income groups, similarly need to be identified and addressed. When this is done, a space emerges for what the Special Rapporteur on Extreme Poverty and Human Rights, Olivier De Schutter, has called 'triple dividend actions', or actions that would reduce ecological footprints while creating employment opportunities and facilitating access to goods and services essential to the enjoyment of human rights.[79]

Transitioning away from a centralized, extractive energy system towards decentralized creation, control and ownership not only involves triple human rights dividends but also reduces the risks of energy-related human rights violations. As noted above, the extraction, production and distribution of fossil fuels have often gone hand in hand with the destruction of livelihoods and damage to sacred sites and traditional territories of indigenous peoples. In some States, the COVID-19 pandemic is even being used as a pretext for pursuing extraction projects without proper due diligence, transparency and free, prior and informed consent of indigenous peoples.[80] Such human rights violations, along with growing awareness of the impacts of climate change, have led to intensifying public pressure for change in the energy sector.[81] In some cases, such pressure has led to notable changes in energy policies and enabled locally driven energy transformations aligned with community needs and priorities.[82] However, obstacles to citizen and community participation in decision making about energy and access to justice for energy-related human rights violations remain numerous. Conversely, the influence of fossil fuel industry over energy policies persists in many States.[83] As the following section sets out, a human rights approach to energy has a potential role to play in ensuring that energy policies are driven by citizens and communities rather than elite or corporate interests.

3 | MAINSTREAMING HUMAN RIGHTS IN ENERGY PRACTICE

As the previous section has shown, human rights norms press in favour of a rapid transition to just and sustainable energy systems. This section discusses to what extent and how the mainstreaming of human rights into energy practices can help to catalyse such a transition. As Olawuyi explains, human rights mainstreaming in policies and actions related to climate change 'is about collaboration and partnership-integration of human rights and climate change obligations to achieve consistent, coherent and systemic implementation'.[84] Specifically, human rights mainstreaming seeks to foster a 'human rights culture' in climate change governance, such that human rights do 'not only come to the table in the face of protests and petitions; rather, human rights considerations … form part of the rules of the game in the design, approval and execution of carbon

[70]MC Cordonier Segger et al, 'Prospects for Principles of International Sustainable Development Law After the WSSD: Common But Differentiated Responsibilities, Precaution and Participation' (2003) 12 Review of European Community and International Environmental Law 54.

[71]OHCHR 'Report of the UN OHCHR on the Relationship Between Climate Change and Human Rights' UN Doc A/HRC/10/61 (15 January 2009) 28.

[72]UNGA (n 1) (reaffirming 'all the principles of the Rio Declaration on Environment and Development, including, inter alia, the principle of common but differentiated responsibilities').

[73]Hickel (n 27); Menton et al (n 26).

[74]OECD, 'OECD Work on Support for Fossil Fuels' <https://www.oecd.org/fossil-fuels/>.

[75]See also UNFCCC (n 69) preambular para 10.

[76]Nkomo (n 29) 12.

[77]ILO, *World Employment Social Outlook* (2018) 5, 42.

[78]UN Department of Economic and Social Affairs, 'High-Level Political Forum 2020: Accelerating SDG7 Achievement in the Time of Covid-19' (2020) 21.

[79]UNGA 'Extreme Poverty and Human Rights' UN Doc A/75/181/Rev.1 (7 October 2020) 5–6.

[80]S Szoke-Burke, 'Land Investments During COVID-19: The Hazards of Pressing on Without Community Participation' (State of the Planet, 2020) <https://blogs.ei.columbia.edu/2020/05/28/land-investments-covid-19/>.

[81]See, e.g., M Finley-Brook and EL Holloman, 'Empowering Energy Justice' (2016) 13 International Journal of Environmental Research and Public Health 5; Wolfley (n 4).

[82]See, e.g., Finley-Brook and Holloman (n 81) 12.

[83]T Donaghy, '8 Reasons Why We Need to Phase Out the Fossil Fuel Industry' (Greenpeace, 3 September 2019).

[84]Olawuyi (n 21) 195.

projects'.[85] The following subsections explain how this paradigm can be applied to policies and actions related to energy at the national and multilateral levels.

3.1 | Mainstreaming human rights at the national level

At the national level, a first step towards mainstreaming human rights into energy practices involves catalysing knowledge and enhancing understanding of the full range of human rights issues related to energy systems. Many of those issues remain overlooked and thus under-addressed in research, reporting and decision making on energy. With regard to SDG7, this is in part because indicators linked to its targets do not include important grounds of discrimination that are prohibited under human rights law, including race and ethnicity.[86] Disaggregation across multiple stratifiers, as called for in SDG target 17.18, is needed across the board to ensure that inequalities and related human rights violations are understood and addressed in their complexity.[87] For target 7.1, for example, disaggregated data enable States and non-State actors to determine who remains deprived of access to energy and therefore who needs to be reached. All States need to take steps, individually and through international cooperation and assistance, to ensure that national statistical organizations around the world have sufficient capacity to produce reliable data, including disaggregated data to effectively eradicate all forms of discrimination connected with energy.[88] An example of good practice on this front is provided by Costa Rica, which is building the capacity of its national statistics institute to capture missing data on the SDGs and ensure disaggregation by population, sex and territory of origin.[89] National human rights institutions (NHRIs) also have a vital role to play in knowledge production and utilization, as these institutions often collect and receive highly relevant quantitative and qualitative data including indications of actual human rights violations connected with the energy system. NHRIs should therefore be included in SDG monitoring and implementation processes, with a clear mandate and sufficient budget to monitor the implementation of SDG7 and related SDGs from a human rights perspective. Illustrative good practice comes from Denmark, where the NHRI is involved in an integrated planning approach carried out by parliamentarians in a cross-party SDG network with support from an expert body.[90] Another example is Kenya, where the NHRI and the National Bureau of Statistics have developed a framework for enhanced monitoring of SDG16 (concerning peace, justice and strong institutions). Collaboration between these institutions also enabled the identification of 29 groups—including persons with disabilities, LGBTI persons and indigenous groups—who were deprived of SDG-related rights. This will enable focused attention on these groups in information-gathering in the national census, which in turn could inform targeted measures to correct the deprivations, possibly supported by international assistance.[91]

As suggested above, the deficit in attention to human rights issues related to energy systems is intrinsically linked to the exclusion of rightsholders in knowledge production and decision making on energy. Ensuring informed and effective participation of rightsholders in these processes is essential to shed light on systematic human rights violations connected with the energy system and the underlying causes of such violations.[92] This often requires rearranging and reconfiguring institutional arrangements throughout the policy cycle: inclusive agenda setting, policy analysis and formulation, decision making, implementation and evaluation, plus capacity building across the board.[93] Legislative measures and policies are also needed to counter undue interference by industry in decision making on energy and climate policy[94] and to protect communities, activists and lawyers from corporate violence, slander and Strategic Lawsuits Against Public Participation (SLAPPs).[95] In addition, all States must take steps to effectively consider and utilize the best available scientific evidence on ecological limits, the human rights implications of disrespecting those limits and the possibilities for a human rights-based energy transition that leaves no one behind. Integrating such evidence in SDG monitoring, reporting and implementation will serve to correct some of the inherent shortcomings of the 2030 Agenda itself, including the incompatibility of the Agenda's sustainability objectives on the one hand and the emphasis on economic growth on the other. Full alignment between the SDGs and States' human rights obligations also requires the development of long-term energy scenarios in line with the Paris Agreement and human rights, based on the best available science, local knowledge and inclusively defined priorities. These scenarios should be used to ensure that the socio-economic and environmental benefits of sustainable energy policies and investments are reaped in responses to COVID-19, as well as in mid-term recovery and long-term development planning.[96] Economic stimulus packages and global responses should thus prioritize measures to expand access to sustainable energy, designed to advance SDG7 while creating employment opportunities, improving health and boosting economic resilience.[97] Moreover, incorporating human rights safeguards into national energy law and policy is vital to prevent and reverse human

[85]ibid.
[86]Winkler and Satterthwaite (n 11) 1080.
[87]ibid 1081.
[88]JA Odera and J Mulusa, 'SDGs, Gender Equality and Women's Empowerment: What Prospects for Delivery?' in M Kaltenborn, M Krajewski and H Kuhn (eds), *Sustainable Development Goals and Human Rights* (Springer 2019) 95, 109.
[89]AR Segura and CM Murillo (eds), 'Second Voluntary National Review: Sustainable Development Goals' (SDG Technical Secretariat in Costa Rica 2020) 14.
[90]E Grambye, 'Human Rights as a Key Data Source and Accountability Mechanism for the SDGs' (3 December 2019) <https://www.ohchr.org/Documents/HRBodies/HRCouncil/2030Agenda/SecondSession/Statements/Eva_Grambye.pdf>.
[91]G Morara, 'Human Rights and the 2030 Agenda: Human Rights and SDG Implementation at the National Level' (3 December 2019) <https://www.ohchr.org/EN/HRBodies/HRC/Pages/IntersessionalMeeting2030Agenda2nd.aspx>.
[92]Human Rights Council (n 66).
[93]Z Shawoo et al, 'Increasing Policy Coherence Between NDCs and SDGs: A National Perspective' (Stockholm Environment Institute 2020).
[94]See, for example, P Galey, 'Thousands of Big Energy Reps at UN Climate Talks: Monitor' (21 June 2019) <https://phys.org/news/2019-06-thousands-big-energy-reps-climate.html>.
[95]See, for example, 'ExxonMobil SLAPP Against Climate Change Activists' (Protect the Protest 2018) <https://protecttheprotest.org/resource/exxonmobil-slapp-against-climate-change-activists/>.
[96]UN Department of Economic and Social Affairs (n 78) 23.
[97]ibid.

rights violations connected with energy projects (such as land grabbing, destruction of sacred sites, mistreatment of local communities and dangerous working conditions).[98] The need for these safeguards is even more urgent in light of reports that the COVID-19 crisis is being used as a pretext for suspensions in the enforcement of environmental protection laws.[99]

3.2 | Mainstreaming human rights at the multilateral level

At the multilateral level, human rights provide an established normative framework for international cooperation to realize SDG7 along with the goals of the Paris Agreement. Crucially, the 2030 Agenda recognizes that 'national development efforts need to be supported by an enabling international economic environment, including coherent and mutually supporting world trade, monetary and financial systems, and strengthened and enhanced global economic governance'.[100] This aim is reflected in SDG17, which sets the goal of '[strengthening] the means of implementation and [revitalizing] the global partnership for sustainable development'.[101] However, commentators have cautioned that 'there is a risk that the broader context to [Goal 17] is being lost in the emphasis on voluntary commitments and partnerships as a primary means of implementation'.[102] Indeed, the SDGs fail to allocate rights, responsibilities and risks between States.[103] Controversy around North–South financial commitments in particular continues to hamper progress in the implementation of the SDGs.[104] Human rights obligations—including the duty to cooperate to realize human rights—can serve to consolidate the global partnership dimension of the SDGs, with human rights bodies providing additional oversight and accountability to ensure its full implementation.[105]

The High-Level Political Forum on Sustainable Development (HLPF) is mandated to hold strategic political discussions about SDG implementation and encourage policy coherence and best practice among other forums and organizations responsible for implementation of the 2030 Agenda.[106] Whereas the sustainable development, human rights and climate change agendas have so far been only marginally integrated in these discussions,[107] some progress towards integration was made during two intercessional meetings of the UN Human Rights Council, which specifically served to promote knowledge and exchange with the HLPF.[108] At these meetings, the Council discussed, among other things, the potential for 'better cross analysis and exchange between the submissions of governments under the [Human Rights Council's Universal Periodic Review (UPR) process] and [governments'] relevant voluntary SDG national reviews under the HLPF'.[109] Indeed, the UPR could help with the preparation of the voluntary national reviews (VNRs) and vice versa.[110] In a similar vein, synergies could be created between VNRs and States' reporting to human rights treaty bodies and other interactions with human rights mechanisms, such as the Human Rights Council's Special Procedure mandate holders. Analysis by the Danish Institute for Human Rights shows that more than 80% of the VNRs presented in 2019 indeed referred to human rights.[111] However, few refer specifically to the links between energy, human rights and climate change. In a similar vein, while the SDGs are increasingly being referenced in the UPR process, only 16 recommendations to date expressly refer to energy. What is more, none of these submissions address structural questions related to the political economy that fosters both energy inequality and climate change. Illustrative are Monaco's recommendation that Morocco '[c]ontinue the campaign put in case [sic] for the widespread access to potable water and electricity in the rural area' and Iran's recommendation that Pakistan '[c]ontinue to invest in green energy projects in order to provide clean and modern energy to all its people'.[112] More systematic and focused attention to the energy, human rights and climate nexus within these procedures will help to accelerate progress on SDG7, while ensuring that its achievement simultaneously promotes the realization of human rights and the goals of the Paris Agreement. At the same time, the capacity of each of these procedures to discuss—and potentially set into motion—serious reform of the international economic order in line with these interrelated goals needs to be utilized.[113]

The mechanisms of international climate change law—in particular, the 'ratchet mechanism' established under the Paris Agreement[114]—also have a role to play in achieving more holistic and integrated monitoring and implementation of SDG7 and related obligations of States under international law. Perhaps most importantly, rights-based energy targets and policies aligned with SDG7 as well as

[98]DS Olawuyi, 'Energy (and Human Rights) for All: Addressing Human Rights Risks in Energy Access Projects' in Salter et al (n 4) 73.

[99]'COVID-19: "Not an Excuse" to Roll Back Environmental Protection and Enforcement, UN Rights Expert Says' (OHCHR, 15 April 2020) <https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=25794>.

[100]UNGA (n 1) para 63.

[101]ibid 19.

[102]S Bernstein, 'The United Nations and the Governance of Sustainable Development Goals' in Kanie and Biermann (n 11) 233.

[103]Gupta and Vegelin (n 65).

[104]Haas and Stevens (n 14) 143.

[105]See also M Langford et al (eds), *Global Justice, State Duties: The Extraterritorial Scope of Economic, Social, and Cultural Rights in International Law* (Cambridge University Press 2012).

[106]ibid 234.

[107]M Robinson, 'Human Rights and the 2030 Agenda: Empowering People and Ensuring Inclusiveness and Equality' (Keynote Speech, Geneva 16 January 2019) <https://www.ohchr.org/Documents/Issues/SDGS/2030/Mrs.MaryRobinson.pdf>.

[108]See Human Rights Council, 'Second Intersessional Meeting on Human Rights and the 2030 Agenda' (3 December 2019) <https://www.ohchr.org/EN/HRBodies/HRC/Pages/IntersessionalMeeting2030Agenda2nd.aspx>. These meetings were convened pursuant to UNGA, 'Promotion and Protection of Human Rights and the Implementation of the 2030 Agenda for Sustainable Development' UN Doc A/HRC/RES/37/24 (13 April 2018). The UN High Commissioner for Human Rights, Michelle Bachelet, presented the Council's contribution to the HLPF for its 2020 session.

[109]Robinson (n 107).

[110]It is also worth noting that the Secretary-General's guidelines for VNRs explicitly encourage States to coordinate reporting processes, including for human rights. UN Department of Economic and Social Affairs, 'Handbook for the Preparation of Voluntary National Reviews: The 2019 Edition' (2018) Annex II, 58.

[111]Grambye (n 90).

[112]The Danish Institute for Human Rights, 'SDG—Human Rights Data Explorer' (2020) <https://sdgdata.humanrights.dk/en/explorer>.

[113]See also BS Chimni, *International Law and World Order: A Critique of Contemporary Approaches* (2nd edn, Cambridge University Press 2017).

[114]See, for example, D Bodansky, 'The Paris Climate Change Agreement: A New Hope?' (2016) 110 American Journal of International Law 288.

the goals of the Paris Agreement should be integrated into States' enhanced nationally determined contributions (NDCs) submitted under the Paris Agreement. For industrialized nations, these targets and policies should concern not only national development paths but also global commitments towards sustainable development finance, including finance for energy poverty eradication.[115] NDCs should specifically outline how States' commitment to respect, protect and fulfil human rights in actions to respond to climate change[116] is operationalized in connection with energy projects within the State's jurisdiction, including projects involving multinational corporations over which the State has regulatory control. The global stocktake, the first one of which is scheduled for 2023, provides an opportunity to review States' collective progress towards a rights-based energy transition aligned with the goals of the Paris Agreement.[117]

4 | LITIGATION FOR ENERGY JUSTICE

Finally, human rights oversight and litigation can enhance accountability for action or inaction towards SDG7 and related goals. Although the SDGs carry strong normative weight building on high-level diplomatic consensus,[118] they are not legally binding and lack strong accountability and enforcement mechanisms. Instead, the SDG's accountability framework is based on VNRs and peer-reviewed guidance. As one commentator notes, in the preparation and adoption of the SDGs, '[t]he one thing that all 193 leaders could agree on was that the SDGs did not actually bind them to anything'.[119] Human rights, by contrast, not only reflect aspirational values but also constitute legal entitlements of peoples and individuals with corresponding legal obligations of States. Linking SDG7 and related goals to those obligations can therefore limit States' discretion to interpret and implement the goals as they see fit.

At both the national and international levels, litigation has been used as a mechanism to forge progress towards a rights-based energy transition and energy justice. For example, the African Commission on Human and Peoples' Rights considered in *Free Legal Assistance Group and Others v Zaire* that a State's failure to provide access to safe drinking water and electricity may constitute a violation of the right to the highest attainable standard of health.[120] Human rights have also been invoked before national courts to seek redress for energy-related harm caused by multinationals,[121] environmental disruption caused by fossil fuel plants[122] and harm caused by mines.[123] As Peel and Osofsky point out, even cases that did not result in a favourable ruling 'do seem to have served more indirectly as a site for learning, particularly about ways of presenting the scientific evidence to demonstrate the associated climate change impacts of large energy projects'.[124] Experience and expertise developed through unsuccessful challenges to permits for coal mines, for example, enabled environmental groups to make stronger claims for measurable impacts from the proposed projects.[125] This expertise is now also being harnessed in litigation targeting other fossil fuels and 'unconventional' energy sources such as shale gas.[126]

A more recent trend is the use of litigation as a mechanism to hold States or private actors accountable for inadequate climate action based on the UNFCCC and/or the Paris Agreement and human rights.[127] One of the most prominent examples of a case targeting inadequate climate policies is *The State of the Netherlands v Urgenda Foundation*,[128] in which the Supreme Court of the Netherlands recognized that Articles 2 (right to life) and 8 (right to private and family life) of the European Convention on Human Rights (ECHR) obliged the State to take more ambitious climate action, with significant implications for national energy policies. Particularly noteworthy is the Supreme Court's reliance on CBDRRC in the interpretation of the ECHR, thus finding that the Netherlands as a developed country is obliged to take the lead in combating climate change and the adverse effects thereof.[129] Following the judgement, the government announced a €3 billion spending package to subsidize, among other things, renewable energy projects and home refits.[130] Similar cases have been filed, with mixed results, in Belgium, Czech Republic, France, Germany, Ireland, South Korea, Switzerland and the United Kingdom.[131]

In addition, an emerging category of human rights cases seeks to hold fossil fuel companies accountable for climate change and its consequences. Particularly noteworthy is *Greenpeace Southeast Asia and Others v Chevron and Others*, in which environmental organizations and Filipino citizens petitioned the Philippines Commission on Human Rights to investigate the responsibility of 50 investor-owned fossil fuel companies for 'the human rights implications of climate change

[115]See also T Voituriez et al, 'Financing the 2030 Agenda for Sustainable Development' in Kanie and Biermann (n 11) 259, 270–271.
[116]UNFCCC (n 69) preambular para 11.
[117]See also H Winkler, 'Putting Equity into Practice in the Global Stocktake Under the Paris Agreement' (2020) 20 Climate Policy 124.
[118]T Pogge and M Sengupta, 'The Sustainable Development Goals (SDGs) as Drafted: Nice Idea, Poor Execution' (2015) 24 Washington International Law Journal 571.
[119]W Easterly, 'The Trouble with the Sustainable Development Goals' (2015) 114 Current History 322, 323.
[120]*Free Legal Assistance Group and Others v Zaire* (1997) 4 IHRR 89.
[121]*Okpabi & Others v Royal Dutch Shell*, [2018] EWCA Civ 191 (14 February, 2018).
[122]P Erickson and M Lazarus, 'Would Constraining US Fossil Fuel Production Affect Global CO_2 Emissions? A Case Study of US Leasing Policy' (2018) 150 Climatic Change 29.
[123]*Gloucester Resources Pty Ltd v Minister for Planning* [2019] NSWLEC 7.
[124]J Peel and HM Osofsky, *Climate Change Litigation: Regulatory Pathways to Cleaner Energy* (Cambridge University Press 2015) 320.
[125]ibid.
[126]ibid 330.
[127]J Setzer and R Byrnes, 'Global Trends in Climate Change Litigation: 2019 Snapshot' (London School of Economics and Political Science 2019).
[128]*The State of the Netherlands (Ministry of Economic Affairs and Climate Policy) v Urgenda Foundation*, HR 20 December 2019, ECLI:NL:HR:2019:2006, para 2.1.
[129]ibid.
[130]S Buranyi, 'Climate Action Under Duress: How the Dutch Were Forced into Emissions Cuts' (The Guardian, 4 May 2020). See also 'Urgenda Opnieuw naar Rechter in Klimaatzaak, Nu om Dwangsom te Eisen van de Staat' (NOS, 27 June 2021) <https://nos.nl/artikel/2386855-urgenda-opnieuw-naar-rechter-in-klimaatzaak-nu-om-dwangsom-te-eisen-van-staat> (reporting that the Urgenda Foundation will seek penalty payments from the State for its failure to implement the judgement).
[131]See *VZW Klimaatzaak v. Kingdom of Belgium & Others* (17 June 2021) Court of First Instance Brussels JUG-JGC N^0 167; *Klimatická žaloba ČR v Czech Republic* (filed on 21 April 2021, Prague Municipal Court); *Notre Affaire à Tous and Others v France* (Paris Administrative Court, 14 March 2019); Case T-330/18 *Armando Ferrão Carvalho & Others v The European Parliament and the Council of the EU*, ECLI:EU:T:2019:324; Case T-141/19, *Peter Sabo and Others v European Parliament and Others*, ECLI:EU:T:2020:179; *Korean Biomass Plaintiffs v South Korea* (28 September 2020, Constitutional Court); *Greenpeace v Secretary of State for Trade & Industry* [2007] EWHC 311.

and ocean acidification and the resulting rights violations in the Philippines'.[132] The Commission concluded its inquiry with an announcement that fossil fuel companies could be held liable for the impacts of climate change.[133] Another landmark case is *Friends of the Earth (Netherlands) v Royal Dutch Shell*, in which the Hague District Court ordered Royal Dutch Shell to reduce its greenhouse gas emissions by 45% in 2030 compared with 2019 levels.[134] In its judgement, the Court relied on 'the widespread international consensus that human rights offer protection against the impacts of dangerous climate change and that companies must respect human rights'.[135] It found that Shell had an individual responsibility to act in accordance with the temperature goal in the Paris Agreement, based on the recognition that businesses must respect human rights.[136] Importantly, the Court rejected Shell's defence that it had reduced obligations to curb greenhouse gas emissions due to its role in providing reliable and affordable energy. In doing so, it pointed at the intrinsic connection between the SDGs and the climate goals of the Paris Agreement:

> It is not the intention for SDG 7 … to detract from the Paris Agreement or to interfere with these goals. This also follows from SDG 13 ('Take urgent action to combat climate change and its impacts') and the preamble under 8 of the Paris Agreement, which emphasizes the intrinsic connection between the tackling of dangerous climate and fair access to sustainable development and the eradication of poverty. The [SDGs] can therefore not be a reason for RDS to not meet its reduction obligation.[137]

This reasoning illustrates how human rights can promote an integrated approach to the SDGs on the one hand and international environmental law on the other. Specifically, it demonstrates that this potential exists not only at the level of discourse and policymaking but also in legal interpretation by a judicial body. A similar case has been filed by a group of French environmental nongovernmental organizations against the French oil company Total,[138] with lawyers speculating about a 'ripple effect into other jurisdictions' resulting from the Hague District Court's ruling.[139] Irrespective of the outcome of these cases, the growing recognition of the premise that fossil fuel companies can be held accountable for the impact of climate change signals important progress towards a rights-based energy transition. The evolving case law also demonstrates willingness on the part of the judiciary to interpret existing rights expansively to bring climate- and energy-related claims under their jurisdiction.

5 | CONCLUSION

The world is off track in achieving SDG7, a goal which in itself falls short of demanding the radical and holistic energy transformation that is needed to prevent large-scale human rights violations. The COVID-19 pandemic has brought the need for such a transition into even sharper focus. A human rights approach to energy has significant potential to help turn the tides. Although human rights are no silver bullet, their legal and moral basis can assist in overcoming the shortcomings of SDG7 and inform an energy transition that is inclusive, holistic and in line with environmental imperatives. Further, it can help to fill the accountability gap that has hindered the implementation of the 2030 Agenda.

This article has considered three inter-related elements of a human rights approach to energy: a discursive element; a mainstreaming element; and a litigation element. At the discursive level, human rights provide authoritative support for the notion that access to modern energy must be universal. Human rights also provide a normative framework for an integrated approach to energy justice and environmental protection, thus strengthening the links between SDG7, SDG13, SDG17 and relevant principles of international environmental law. For example, enhanced efforts and cooperation are needed to ensure that finance for energy reaches the countries that are most in need, with targeted support for off-grid solutions, mini-grids as well as clean cooking solutions in those countries.[140] Framing this need in terms of human rights highlights the legal obligations of States to perform their share of the responsibility in the attainment of SDG7 and other related goals, in accordance with relevant principles of international environmental law such as CBDRRC. Further, it has the potential to raise awareness among those who lack access to energy, or whose rights are otherwise affected by energy systems, and to build social mobilization for a just energy transition.

Mainstreaming human rights into energy practice serves to ensure that monitoring, review and decision-making processes address the full spectrum of human rights issues relating to energy systems in a particular setting. This requires locally and inclusively developed knowledge on each of these issues. Where such knowledge is solicited and relied upon, mainstreaming human rights into energy practice can help 'direct resources, technologies and/or action where they are most urgently needed, keeping a focus on the most vulnerable and marginalised communities'.[141] A human rights approach to energy also requires the incorporation of safeguards in energy laws and policies, coupled with administrative or judicial remedies for harm suffered because of energy malpractice, to minimize and reverse the negative human rights impacts of energy systems. In

[132] *In re Greenpeace Southeast Asia & Others*, Case No. CHR-NI-2016-0001 (Commission on Human Rights).
[133] I Kaminsky, 'Carbon Majors Can Be Held Liable for Human Rights Violations' (Business and Human Rights Centre, 9 December 2019).
[134] *Milieudefensie et al v Royal Dutch Shell plc.*, RBDHA 26 May 2021, ECLI:NL:RBDHA:2021:5337.
[135] ibid paras 4.4.13–4.4.14.
[136] ibid.
[137] ibid para 4.4.42.
[138] *Notre Affaire a Tous & Others v Total* (3 February 2021, Paris Administrative Court).
[139] T Hals and S Nasralla, Analysis: Big Oil May Get More Climate Lawsuits After Shell Ruling: Lawyers, Activists (Reuters, 28 May 2021).
[140] UN Department of Economic and Social Affairs (n 78).
[141] C Gearty, 'Do Human Rights Help or Hinder Environmental Protection?' (2010) 1 Journal of Human Rights and the Environment 21.

settings where such safeguards are incorporated and/or a form of remedies for energy-related harm is made available, empirical studies could shed light on their effectiveness and help correct shortfalls in their design and implementation. Sharing these 'good practices' and lessons learnt at the multilateral level can help to prevent the replication of design and implementation shortfalls elsewhere. More broadly, integrated reporting under the 2030 Agenda, human rights mechanisms and the international climate change regime can help to ensure that responses to climate change are aligned with SDG7, other relevant SDGs and related human rights obligations. The mobilization of rights by social movements can help to achieve a shift in the unequal power relations, locally and globally, that continue to hamper progress in the realization of a just energy transition.

Finally, human rights litigation is increasingly being utilized as a tool to promote various aspects of energy justice. In particular, the growing number of human rights claims against governments and fossil fuel companies for their role in causing climate change illustrates the potential of litigation to contribute to a just energy transition. The ruling of the Hague District Court in *Friends of the Earth (Netherlands) v Royal Dutch Shell* forms a particularly clear illustration of the potential of human rights litigation to contribute to systemic change in the energy sector. As commentators have pointed out, the ruling not only suggests a growing litigation risk for fossil fuel companies for their contributions to climate change but also signals a similar risk for governments and financial institutions that support new fossil fuel projects.[142] In the absence of legally binding standards that prohibit climate destruction and correct energy injustices more directly, the potential of human rights litigation to forge change in this direction seems worth harnessing. At the same time, however, more research is needed to understand the full scope of impacts that may result from resort to human rights litigation in the energy context.

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[142]H van Asselt and G Parihar, 'Shell Court Ruling Is a Wake-up Call for Governments to End Fossil Fuel Support' (Climate Home News, 30 June 2021).

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