FROM RIGHT TO LIGHT: A HUMAN RIGHTS-BASED APPROACH TO UNIVERSAL ACCESS TO MODERN ENERGY SERVICES

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‘FOR IF ONE SUFFERS, WE ALL SUFFER’.

1 CORINTHIANS 12:26

ABSTRACT

The thesis re-introduces the human rights-based approach to achieve universal access to modern energy services to offer an integrated and coherent legal strategy and implementation framework that brings renewable energy technology and rural electrification under the common logic and language of human rights. Although access to modern energy services is indispensable to providing basic needs, eradicating poverty and meeting sustainable development goals, 1.3 billion people remain without access to electricity and 2.6 billion people are still without access to clean cooking facilities. Essentially, the challenge lies in how to enhance access to modern energy services, particularly for those who are in impoverished rural areas of the developing world, while achieving universal coverage and sustainable development at the same time. In response, the United Nations called the world's attention to this challenge and launched the 'Sustainable Energy for All' initiative that focuses on three interlinked objectives: 1) enhancing universal access to modern energy services; 2) improving the rate of energy efficiency; and 3) increasing renewable energy use. Beyond catalysing global awareness, however, the critical stage of turning the vision into reality with concrete commitments to action beckons.

The imperative of developing a coherent and appropriate legal response is vital to advancing international and national development agenda and goals. For this reason, it is strongly posited that there is a need to embody the notion of basic needs such as access to modern energy services in clear, preferably legally binding standards. However, the legal response to the lack of access to modern energy services is not clearly articulated, particularly from a developing country perspective. In the meantime, the lack of universal access to modern energy services continues to drive the widening gap between the 'haves' and 'have-nots' resulting in marginalisation especially of the rural energy poor. With this marginalisation, the human rights dimension of energy poverty due to lack of access to modern energy services comes into the fore as such a situation amounts to deprivation of basic needs, entails disempowerment, and gives rise to serious equity considerations. Intuitively, these typically fall within the purview of human rights conversations prompting some scholars to suggest a human rights-based approach to achieve universal access to modern energy services. Yet the human rights perspective does not figure prominently in such a global initiative.

From the foregoing, the thesis contextually describes human rights, including the challenge of definitions, associated with such a term. Also, the thesis revisits the conceptual and historical underpinnings of human rights and how these evolved in the modern context. Next, it examines the merits and limits of the language of human needs compared to the language of human rights in terms of enhancing universal access to modern energy services. The thesis then analyses the plausibility of integrating needs-talk into rights-talk, which lays the basis for subsequent discussions on renewable energy technology and rural electrification as integral components of the human rights-based approach. Finally, it looks into the practical significance of adopting such an approach to addressing the energy poverty challenge in a developing country setting such as the Philippines where no similar study has yet to be undertaken.

DECLARATION

I certify that this work contains no material which has been accepted for the award of any other degree or diploma in my name, in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. In addition, I certify that no part of this work will, in the future, be used in a submission in my name, for any other degree or diploma in any university or other tertiary institution without the prior approval of the University of Adelaide and where applicable, any partner institution responsible for the joint-award of this degree.

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CHAPTER 1

INTRODUCTION

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I. ENERGY POVERTY AND THE LACK OF ACCESS TO MODERN ENERGY SERVICES

Access to modern energy services,[1] that is, electricity and clean cooking facilities,[2] is indispensable to providing basic needs, eradicating poverty and meeting sustainable development goals.[3] This is because access to modern energy services affects a variety of critical outcomes involving 'productivity, health, education, safe water and communication services',[4] among others. Yet 1.3 billion people remain without access to electricity.[5] Also, 2.6 billion people are still using traditional biomass fuels - firewood, charcoal, crop residues,

[1] Yinka Omorogbe, "Policy, Law, and the Actualization of the Right to Access to Energy Services' in Kim Talus (ed), *Research Handbook on International Energy Law* (2014) 371: The term "energy services" refers to the benefits derived from the use of energy efficient energy sources over and above that derived from basic biomass, which is the fuel of the poor in developing countries'; International Energy Agency, 'Energy for All: Financing Access for the Poor', *Special Early Excerpt of the World Energy Outlook 2011* (2011) 12: The International Energy Agency defines 'modern energy access' as 'a household having reliable and affordable access to clean cooking facilities, a first connection to electricity and then an increasing level of electricity consumption over time to reach the regional average'.

[2] Benjamin Sovacool and Ira Martina Drupady, *Energy Access, Poverty, and Development* (2012) 5.

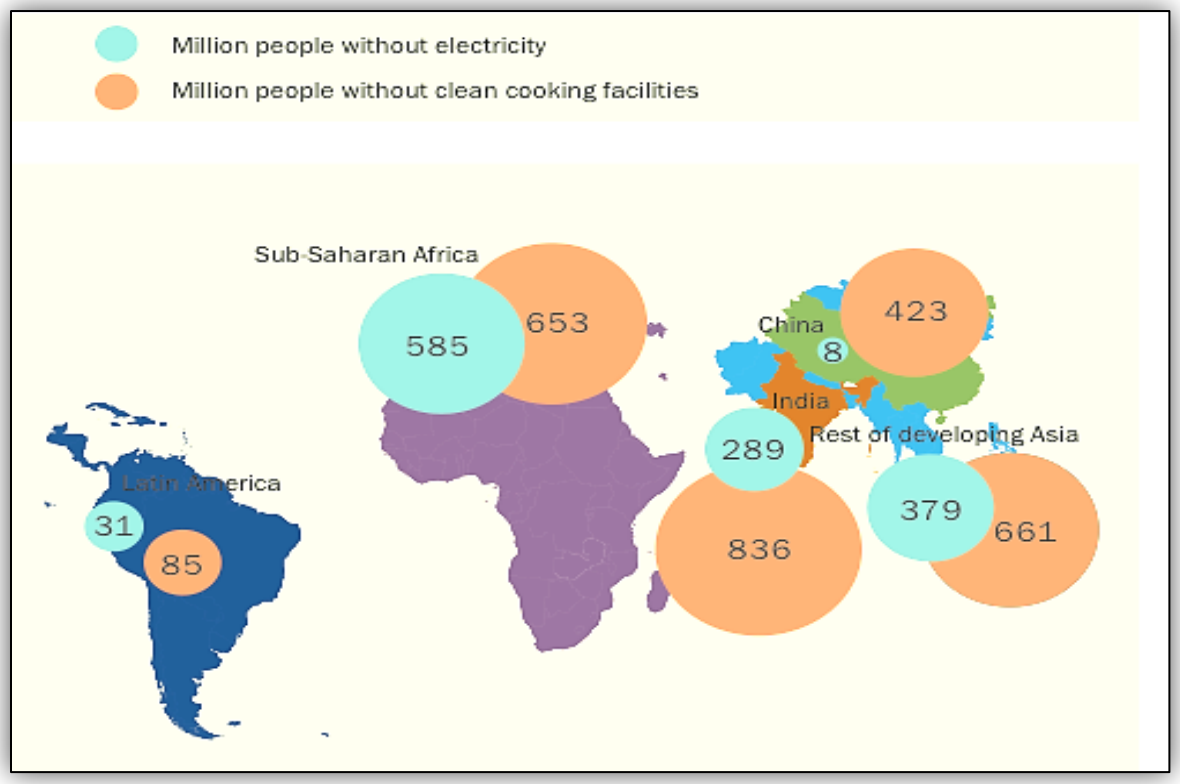
[3] *Promotion of New and Renewable Energy Sources*, GA Res 67/215, 61st plen mtg (21 December 2012) ('*Resolution 215*') para 13, 3; World Commission on Environment and Development, *Our Common Future: A Report of the World Commission on Environment and Development* (1986): The World Commission on Environment and Development (Brundtland Commission) defines 'sustainable development' as 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs'. It elaborates that sustainable development 'contains within it two key concepts: the concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given; and the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs'.

[4] Amie Gaye, 'Access to Energy and Human Development', *Human Development Report 2007/2008* (2007) 1.

[5] International Energy Agency, *World Energy Outlook 2012* (2012) 529.

and animal dung - for their cooking needs with deleterious health consequences.[6] Unfortunately, these twin deficits add another significant dimension to poverty called 'energy poverty,' which refers to the 'inability to cook with modern cooking fuels and the lack of a bare minimum of electric lighting to read or for other household and productive activities at sunset'.[7] In its expanded version, however, energy poverty encompasses 'lack of access to resources, denial of opportunities and choices in energy that is adequate, safe, and reliable for economic and human development'.[8] The map below depicts energy poverty across the planet.

Map 1. Energy Poverty in the World, 2011[9]



By providing access to modern energy services like electricity, the poor are given the opportunity to move up the energy ladder – from traditional biomass fuels to modern energy – and reap its 'positive environmental and health effects'.[10] Also, a variety of income

[6] Ibid.
[7] Gaye, above n 4, 4 quoting the UNDP definition.
[8] United Nations Development Programme, *Towards an 'Energy Plus' Approach for the Poor* (2011) 19.
[9] A Vision Statement by Ban Ki-moon Secretary General of the United Nations, *Sustainable Energy for All* (2011) 6.
[10] World Bank, *The Welfare Impact of Rural Electrification: A Reassessment of the Costs and Benefits* (2008) 31: 'The energy ladder refers to the phenomenon of households and firms — and so, in aggregate, countries —

generating activities and business opportunities becomes possible.[11] In turn, this substantially benefits women and children, who are considered as the 'prime beneficiaries of rural electrification'.[12] There is emerging evidence showing that women in households with electricity spend less time in fuel collection and other household chores, but more for productive work, family, education and leisure activities.[13] Electric lighting and electric-powered water pumping facilities, for instance, 'are likely to reduce women's drudgery in fetching water and create opportunities to set up other businesses'.[14]

Moreover, access to modern energy services addresses critical safety and health-related concerns due to inefficient production and utilisation of energy sources such as indoor air pollution, poisoning and fire hazards from the use of traditional biomass stoves, low quality kerosene lanterns, and paraffin candles for lighting.[15] Alarmingly, the number of premature deaths - over 4 million per annum[16]- due to indoor air pollution alone even exceeds those caused by malaria or tuberculosis.[17] While electricity used for cooking is limited partly due to economic and social reasons, Asian households are likely to adopt electricity for cooking.[18] Furthermore, access to modern energy services enables the delivery of social, health and medical services that enhance the attainment of the United Nations (UN) Millennium Development Goals (MDGs) on maternal health, infant mortality, and water and sanitation,[19] albeit expiring in 2015. Therefore, access to modern energy services is inextricably linked to achieving international and development goals in a definable and concrete sense.[20]

Essentially, the challenge lies in how to enhance access to modern energy services, particularly for those who are in impoverished and remote rural areas, mostly from sub-Saharan Africa and developing Asia,[21] at a time when the concerns for global climate change

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shifting from low-efficiency fuels to high-efficiency ones as income per capita increases'.

[11] Sovacool and Drupady, above n 2, 46.

[12] Douglas Barnes, 'The Challenge of Rural Electrification' in Douglas Barnes (ed), *The Challenge of Rural Electrification: Strategies for Developing Countries* (2007) 5.

[13] Ibid.

[14] Paul Cook, 'Rural Electrification and Rural Development' in Subhes Bhattacharyya (ed), *Rural Electrification Through Decentralised Off-grid Systems in Developing Countries* (2013) 25.

[15] See Sovacool and Drupady, above n 2, 48-9; Douglas Barnes and Willem Floor, 'Rural Energy in Developing Countries: A Challenge for Economic Development' (1996) 21 *Annu. Rev. Energy Environ* 497, 499.

[16] World Health Organization, 'Household Air Pollution and Health', *Fact Sheet No. 292* (March 2014) <http://www.who.int/mediacentre/factsheets/fs292/en/>

[17] International Energy Agency, United Nations Development Programme, and United Nations Industrial Development Organization, *Energy Poverty: How to Make Modern Energy Access Universal?* (2010) 13

[18] World Bank, above n 10, 33.

[19] Sovacool and Drupady, above n 2, 48-9.

[20] See Omorogbe, above n 1, 361.

[21] International Energy Agency, above n 1, 3: According to the International Energy Agency, 84% of 1.3 billion people without access to electricity live in rural areas.

are paramount.[22] This puts renewable energy technology and rural electrification front and centre of achieving universal access to modern energy services although viewed and implemented as separate legal regimes at the moment. The scale and magnitude of the challenge is such that in order to provide universal access to modern energy services by 2030 almost US$1 trillion in cumulative investment is required.[23] Clearly, the world has to act with urgency beyond the rhetoric, while moving away from a 'business-as-usual' approach. This means change and the law plays a critical role in making this change happen, because as Mary Robinson highlights '[l]aw is, first and foremost, a tool for change'.[24] Without innovative policies and increased investments, Sonali Pachauri et al warn that 'the goal of total rural electrification and universal access to modern cooking fuels and stoves by 2030 is unachievable'.[25] This is an unacceptable future,[26] which does not bear any good news to the energy poor. Inevitably, the hard conversation begins and this is where the thesis seeks to situate itself in the academic discourse especially where the literature on the matter is quite minimal and, in some instances, missing.

II. THE INTERNATIONAL PERSPECTIVE ON UNIVERSAL ACCESS TO MODERN ENERGY SERVICES

A. *From Brundtland to the Millennium Development Goals*

The concern for universal access to modern energy services is not new, albeit only belatedly recognised as a vital cog in eradicating poverty in its broad sense and attaining sustainable development goals. As early as 1986, the World Commission on Environment and Development (Brundtland Commission) in its report emphasised that energy is 'necessary for daily survival' and a basic necessity in providing 'essential services' for human life such as heating, cooking, lighting and mobility, among others.[27] Also, Alexandre Kiss and Dinah Shelton expound that meeting essential needs such as energy is one of the critical objectives of sustainable development.[28] Despite this, universal access to modern energy services did not assume prominent standing in poverty debates and discussions at the UN Conference on

[22] The Global Commission on the Economy and Climate, *Better Growth Better Climate: The New Climate Economy Report* (2014) 24.
[23] International Energy Agency, above n 5, 529.
[24] Mary Robinson, 'Preface' in Scott Leckie and Anne Gallagher (eds), *Economic, Social, and Cultural Rights: A Legal Resource Guide* (2006).
[25] Sonali Pachauri et al, 'Pathways to Achieve Universal Household Access to Modern Energy by 2030' (2013) 8 *Environmental Research Letters* 1, 3.
[26] Omorogbe, above n 1, 361.
[27] World Commission on Environment and Development, above n 3.
[28] Alexandre Kiss and Dinah Shelton, *Guide to International Environmental Law* (2007) 97.

Environment and Development in 1992 and on the 2000 Millennium Declaration, including the MDGs.[29]

B. *From 2001 to Pre-Sustainable Energy for All Initiative*

Not until the ninth session of the Commission on Sustainable Development (CSD-9) in 2001 and the World Summit on Sustainable Development (WSSD) of 2002 was the inevitable linkage between sustainable development, poverty eradication and lack of universal access to modern energy services recognised.[30] Moreover, CSD-9 recommended that particular attention be provided to rural areas as it noted that lack of access to electricity was most acute in the aforementioned places.[31] Glaringly, this electricity access problem is most pronounced and almost endemic to developing and least developed countries.[32] Lack of universal access to modern energy services is, thus, seen as a critical human development and poverty issue, because it translates to an inability to provide for the basic human needs of those who are unable to access or avail such services.[33]

As a product of WSSD, the Johannesburg Plan of Implementation (Plan) called for improved 'access to reliable, affordable, economically viable, socially acceptable and environmentally sound energy services and resources.'[34] This can be achieved through decentralised energy solutions considering relevant national specificities and circumstances.[35] Moreover, the Plan advances the need to develop national energy policies and regulatory frameworks that will create the enabling economic, social and institutional conditions in the energy sector to improve access for sustainable development and poverty eradication especially in rural areas.[36]

From CSD-9 onwards, poverty as a result of lack of universal access to modern energy services received a dramatic increase in interest and attention from the international community. In the World Energy Assessment Overview 2004 Update, the non-availability of energy services in rural areas was touted as the most serious energy problem facing humanity

[29] Adrian Bradbrook and Judith Gardam, 'Placing Access to Energy within a Human Rights Framework' (2006) 28 *Human Rights Quarterly* 389, 389-90; 409.
[30] Ibid.
[31] International Energy Agency, above n 17, 7.
[32] Ibid 9.
[33] World Commission on Environment and Development, above n 6, 391.
[34] United Nations World Summit on Sustainable Development, *Plan of Implementation of the World Summit on Sustainable Development* (2002) para 9 (a) 5.
[35] Ibid.
[36] Ibid para 9 (e).

in the immediate future.[37] The 2005 Report of the UN Millennium Project highlighted the need for governments to pursue universal access to modern energy services in order to achieve the targets enshrined in the MDGs.[38] Five years later, the UN Secretary General's Advisory Group on Energy and Climate Change (AGECC) acknowledged in its 2010 Summary Report and Recommendations the centrality of energy in reducing poverty and achieving development goals stating that:

> Energy is at the heart of most critical economic, environmental and developmental issues facing the world today. **Clean, efficient, affordable and reliable energy services** are indispensable for global prosperity. Developing countries in particular need to expand access to reliable and modern energy services if they are to reduce poverty and improve the health of their citizens, while at the same time increasing productivity, enhancing competitiveness and promoting economic growth.[39]

At this point, energy's critical role in achieving international and national development goals is widely acknowledged.

C. *The Sustainable Energy for All Initiative*

By end of 2010, the UN General Assembly adopted in its 65th session a resolution declaring 2012 as the 'International Year for Sustainable Energy for All'. This resolution explicitly recognises that 'access to affordable energy services in developing countries is essential for the achievement of internationally agreed development goals…which would help to reduce poverty and improve conditions and standard of living for the majority of the world's population'.[40] Also, it emphasises the need to provide adequate financial resources and the transfer of technology to developing countries, particularly the use of new and renewable sources of energy.[41]

In 2011, the UN Secretary-General issued a 'Vision Statement' launching a global initiative to attain 'Sustainable Energy for All' (SEFA) and setting up three ambitious objectives to achieve this by 2030: 1) Ensuring universal access to modern energy services; 2) Doubling the rate of improvement in energy efficiency; and 3) Doubling the share of renewable energy in the global energy mix. [42] While 'each one is important in its own right',

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[37] Jose Goldemberg and Thomas Johansson (eds), *World Energy Assessment Overview 2004 Update* (2004) 60.
[38] United Nations Millennium Project, *Investing in Development: A Practical Plan to Achieve the Millennium Development Goals* (2005) 1; 140.
[39] The Secretary-General's Advisory Group on Energy and Climate Change, *Energy for a Sustainable Future: Summary Report and Recommendations* (2010) 7; Emphasis added.
[40] *International Year for Sustainable Energy for All*, GA Res 65/151, 69th plen mtg (20 December 2010).
[41] Ibid.
[42] A Vision Statement by Ban Ki-moon Secretary General of the United Nations, above n 9, 4.

they mutually 'reinforce each other in many instances'.[43] As a starting point, it is estimated that the basic minimum threshold for consumption and productive uses for electricity is 100 kWh and 1200 kWh per person per year.[44] Moreover, 'universal energy access' is taken to mean as 'access to **clean, reliable and affordable energy services** for cooking and heating, lighting, communications and productive uses'.[45]

To set in motion the global call to action, the UN Secretary-General's High-level Group on SEFA prepared 'A Framework for Action' in January 2012 that proposed national and international action to expand access to energy, promote energy efficiency, and invest in renewables.[46] Also, it acknowledged the centrality of energy towards a sustainable collective future by recognising that universal access to modern energy services 'is fundamental to human development'.[47] Next, the UN Secretary-General's High-level Group on SEFA formulated 'A Global Action Agenda' in April 2012 to chart pathways toward achieving the SEFA targets. Again, it reiterates the enabling character of access to modern energy services, particularly electricity, in the following manner:

> Access to energy is a necessary precondition to achieving many development goals that extend far beyond the energy sector - eradicating poverty, increasing food production, providing clean water, improving public health, enhancing education, creating economic opportunity, and empowering women.[48]

In the UN Conference for Sustainable Development in Rio de Janeiro (Rio + 20) in June 2012, an outcome document entitled 'The Future We Want' reaffirmed the respect for all human rights, including the right to development and the right to an adequate standard of living.[49] Also, it reaffirms the importance of the Universal Declaration of Human Rights and other international human rights legal instruments.[50] As such, it called for the implementation of policies and strategies according to the individual national circumstances and development aspirations of countries.[51] In August 2012, the UN Secretary General reported to the UN General Assembly that the International Year of Sustainable Energy for All, 2012, 'has helped raise the energy issue to the top of the agendas of many national and international decision makers and has sparked unprecedented commitments for action that promise to

[43] Ibid.
[44] The Secretary-General's Advisory Group on Energy and Climate Change, above n 39, 9.
[45] Ibid 13; Emphasis added.
[46] The Secretary-General's High-Level Group on Sustainable Energy for All, *A Framework for Action* (2012) 6.
[47] Ibid 7.
[48] The Secretary-General's High-Level Group on Sustainable Energy for All, *A Global Action Agenda* (2012) 5.
[49] United Nations Conference on Sustainable Development, *The Future We Want* (2012) para 8, 2.
[50] Ibid para 9, 2.
[51] Ibid para 127, 24.

advance solutions to critical energy issues'. [52] This action is guided by ensuring the 'availability of **adequate, affordable and reliable energy services** [that] is essential for alleviating poverty, improving human welfare, raising living standards and, ultimately, achieving sustainable development'. [53]

In March 2013, the UN General Assembly adopted a resolution declaring 2014-2024 as the 'United Nations Decade of Sustainable Energy for All' (UN Decade of SEFA). [54] Relevantly, it reaffirms the primary responsibility of each country for its own development, while recognising 'the importance of empowerment of developing countries as the way to achieve a rapid expansion of renewable energy globally'. [55] It also reaffirms the importance of universal access to modern energy services for poverty eradication, enhancing the quality of life, reducing inequality, saving lives, improving health and helping to provide for basic human needs.[56]

A few months thereafter in August 2013, the UN Secretary General submitted a report on the UN Decade of SEFA to the UN General Assembly. It revealed that many countries placed the issue of energy among the three main country priorities to achieve sustainable development.[57] Accordingly, it called for proactive and innovative policies and regulatory frameworks to provide universal access to modern energy services.[58] In July 2014, the UN General Assembly's Open Working Group on Sustainable Development Goals proposed the inclusion of ensuring access to affordable, reliable, sustainable and modern energy for all as one of the Sustainable Development Goals, which will be expected to replace the expiring MDGs in 2015. [59]

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[52] *Secretary General Report on the International Year for Sustainable Energy for All, 2012*, A/67/3714, GA 67th sess, Item 20 of the Provisional Agenda (16 August 2012) 2.
[53] Ibid; Emphasis added.
[54] *Resolution 215* para 2, 2.
[55] *Secretary General Report on the International Year of Sustainable Energy for All, 2012*, above n 52, 2.
[56] Ibid.
[57] *Secretary General Report on the United Nations Decade of Sustainable Energy for All,* A/68/309, GA 68th sess, Item 20 of the Provisional Agenda (6 August 2013) para 25, 7.
[58] Ibid paras 7 and 9.
[59] UN General Assembly's Open Working Group on Sustainable Development Goals, *Outcome Document* (2014) 5; *Secretary General Report on the United Nations Decade of Sustainable Energy for All,* A/69/395, GA 69th sess, Agenda Items 19 (a) and (i) (22 September 2013) 7: The UN General Assembly will consider the proposed goals as part of deliberation on the over-all post-2015 development agenda.

III. THE DISCONNECT FROM HUMAN RIGHTS

Undeniably, the world has intensified its attention to meet the exigencies of universal access to modern energy services. Beyond catalysing global awareness, however, the critical stage of turning the vision into reality with concrete commitments to action beckons in setting the stage for SEFA's implementation.[60] An important component of such commitments is funding, which had fallen way below the target by the time of Rio + 20.[61] For this reason, it is strongly suggested that there is a need to embody the notion of access to modern energy services in clear, preferably legally binding standards.[62] Also, Adrian Bradbrook, Judith Gardam and Monique Cormier point to the imperative of developing a coherent and appropriate legal response to advance international and national development agendas and goals.[63] Yet the legal response to the lack of access to modern energy services is scant and not prominently articulated.[64]

While the legal response is still being formulated, the lack of universal access to modern energy services continues to drive the widening gap between the 'haves' and 'have-nots' resulting in the marginalisation of a significant segment of society such as the rural poor.[65] With this marginalisation, the human rights dimension of poverty due to lack of universal access to modern energy services comes into the fore in view of revealing findings that such a situation amounts to deprivation of basic needs,[66] entails disempowerment,[67] and gives rise to equity considerations.[68] Intuitively, these are matters that typically fall within the purview of human rights conversations, as demonstrated in the pre-SEFA scholarly works of Bradbrook, Gardam and Stephen Tully, essentially broaching the idea of a human rights-based approach to universal access to modern energy services, which will be discussed in the following part of this Chapter. Yet the human rights perspective does not figure prominently in the SEFA initiative. There is a glaring absence insofar as directly linking SEFA,

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[60] A Vision Statement by Ban Ki-moon Secretary General of the United Nations, above n 9, 3.
[61] International Energy Agency, above n 5, 529: Only about 3% of the almost US$1 trillion required to achieve universal access to modern energy services was committed.
[62] See Office of the High Commissioner for Human Rights, *The Millennium Development Goals and Human Rights* (OHCHR) 21.
[63] Adrian Bradbrook, Judith Gardam and Monique Cormier, 'A Human Dimension to the Energy Debate: Access to Modern Energy Services' (2008) 26 *J. Energy Nat. Resources L.* 526, 552.
[64] Ibid 528.
[65] World Bank, *One Goal, Two Paths: Achieving Universal Access to Modern Energy Services* (2011) 17-9.
[66] See Sudhir Anand and Amartya Sen, 'Human Development and Economic Sustainability' (2000) 28 *World Development* 2029, 2030.
[67] United Nations High Commission for Human Rights, *Claiming the Millennium Development Goals: A Human Rights Approach* (2008) 2: Based on the World Bank's 'Voices of the Poor' interviews where the poor defined 'poverty' as disempowerment.
[68] Sonali Pachauri et al, above n 25, 1.

particularly the universal access to modern energy services target, to the international human rights regime. Thus, the following questions emerge: Should universal access to modern energy services be couched in the language of human rights? What are the implications of placing such a global initiative in the realm of human rights talk?

IV. THE LITERATURE AND GAP

As mentioned earlier, the literature on the human rights-based approach to universal access to modern energy services is sparse and largely remains overlooked. Yinka Omorogbe focuses on the putative right of access to modern energy services by linking this to the realisation of the MDGs, SEFA, and the right of development.[69] Along this line, Omorogbe contends that '[i]t appears that the case for the recognition of the rights of development and to modern energy services grows stronger'.[70] However, the literature still struggles to elaborate the conceptual underpinnings and practical implications for applying a human rights-based approach to universal access to modern energy services in the context of SEFA. For this reason, while the works of Bradbrook, Gardam and Tully predate SEFA, they remain relevant to shaping contemporary arguments for a human rights-based approach to achieving universal access to modern energy services. Accordingly, the thesis builds on, and draws from, their early works in order to develop an argument for an integrated and coherent legal strategy that brings together, for the first time, universal access to modern energy services, renewable energy technology and rural electrification under the international human rights umbrella and discourse.

For Tully, an individual entitlement to access modern energy services, particularly electricity, provides an opportunity to integrate a human rights framework within the sustainable development agenda for several salient reasons. First, a human rights orientation can formally recognise and operationalise the need to access electricity since energy is deemed a basic need similar to food or water.[71] From a human rights perspective, this means that governments are expected to meet basic human needs regardless of their financial or technical capacity.[72] Second, a human rights framework brings to the forefront those who currently lack access, particularly the marginalised sectors of society such as the poor,

[69] Omorogbe, above n 1, 385.
[70] Ibid 386.
[71] Stephen Tully, 'The Contribution of Human Rights to Universal Energy Access' (2006) 4 *Northwestern Journal of International Human Rights* 518, 531.
[72] Ibid.

minorities, indigenous peoples and others.[73] Third, a human rights approach allows the empowerment of individuals as specific claimants with identifiable beneficial entitlements.[74] Fourth, a human rights orientation sets out the accountability and responsibility of governments to provide access to basic social services, including electricity.[75] Concomitantly, governments are expected to recruit other stakeholders in improving such access.[76] Fifth, it 'adds useful momentum to pre-existing proliferation of political commitments which are otherwise unlikely to be attained'.[77] Finally, individual entitlement to access modern energy services has already been recognised in varying degrees under international human rights law especially the International Covenant on Economic, Social and Cultural Rights (ICESCR).[78]

Bradbrook and Gardam take the same approach to Tully that a human rights-based approach can provide the impetus at the international and national level for the recognition of a right to access modern energy services as a necessary ingredient for the realisation of other human rights, particularly socioeconomic rights.[79] Also, a human rights orientation has the distinct advantage of imposing obligations on governments to respect, protect, facilitate and provide access to modern energy services as a right.[80] Moreover, it brings on board the entire gamut of the UN human rights framework, including a venue, in articulating access to modern energy services as a legal norm.[81] However, Bradbrook and Gardam caution that much needs to be done to elaborate the content of the right to access modern energy services such as electricity and its relationship to other human rights that are extant.[82]

Significantly, the UN High Commission for Human Rights elaborates that a human rights-based approach plays two significant and vital roles in development. First, it 'adds value' by supporting development practices intended for the realisation of human rights.[83] And second, it 'changes values' by re-orienting development goals and practices to respect and realise human rights.[84] By applying a human rights-based approach to achieving universal access to modern energy services, basic human needs like energy, as an enabler of

[73] Ibid 532.
[74] Ibid.
[75] Ibid 533.
[76] Ibid 534.
[77] Ibid 535.
[78] Ibid 536.
[79] Bradbrook and Gardam, above n 29, 392.
[80] Ibid 412.
[81] Ibid 413.
[82] Ibid 414.
[83] United Nations High Commission for Human Rights, above n 67, 7.
[84] Ibid.

other essential needs,[85] become a matter of justice and not of charity.[86] This is consistent with the view that sustainability and equity intersect in human development terms[87] especially when particular groups in society – the rural poor – are disadvantaged for lack of access to basic needs and opportunities. Accordingly, the international human rights edifice is seen as an attractive candidate to provide the missing legal framework for universal access to modern energy services to be expressed in legally binding norms and standards. However, this proposition needs to be carefully examined and evaluated in order to determine its relevance to current debates and discussions on SEFA, including the broader issues relating to climate change and sustainable development.

While the arguments for a human rights-based approach to provide universal access to modern energy services are convincing and highly meritorious, such an approach does not hold all the answers to the difficult questions associated with achieving universal access to modern energy services. Neither is a human rights-based approach the idealised panacea to the complexities of the energy poverty challenge. There are arguably four limitations, although these may not be the only ones. First, a human rights framework is essentially geared towards enhancing social and economic welfare but not necessarily access to modern energy services.[88] Second, economic, social and cultural rights are broadly framed and do not specifically prescribe the manner of implementation for governments to follow.[89] Third, there are perceptions of incompatibility between increasing individual access to modern energy services and the goals of environmental protection, particularly, climate change mitigation, with the exploitation of traditional energy sources to promote access.[90] Fourth, human rights depend on formal state endorsement to be effective.[91] Arguably, socioeconomic and cultural rights, in particular, essentially become aspirational when not embedded within a national legal framework. Lastly, international recognition of a human right to access modern energy services is a slow, arduous and seemingly interminable process.[92]

[85] The Secretary-General's Advisory Group on Energy and Climate Change, above n 39, preface: Energy is central towards achieving greater productivity, prosperity and comfort.
[86] Office of the High Commissioner for Human Rights, above n 67, 7.
[87] United Nations Development Program, 'Sustainability and Equity: A Better Future for All', *Human Development Report 2011* (2011) 1.
[88] Tully, above n 71, 544.
[89] Ibid.
[90] Ibid 545.
[91] Ibid 547.
[92] Bradbrook, Gardam and Cormier, above n 63, 551.

Despite the purported shortcomings, a human rights-based approach to universal access to modern energy services is analysed to understand its potential to develop an effective and coherent legal strategy that is relevant and appropriate to the energy poverty challenge. This requires an examination of the international human rights legal framework and national legal regimes, which are relevant to achieving universal access to modern energy services. After all, as Louis Henkin elucidates, human rights in the international sphere and those under national legal systems 'are not unrelated in law or in politics'.[93] Consequently, the thesis seeks to fill the gap in the literature regarding the extent to which the normative elements of international human rights law on non-discrimination, equality, and accountability are contextualised in the domestic setting with regard to achieving universal access to modern energy services.

V. SCOPE, METHODOLOGY, AND STRUCTURE

As the SEFA's first limb, the thesis focuses on universal access to modern energy services, because of its primacy among equally important objectives of the global initiative. As Omorogbe asserts, achieving universal access to modern energy services 'is clearly the most important'.[94] Omorogbe explains that '[t]here must be a plan for the provision of improved energy access…before the questions of choice of energy source, or improvements in energy efficiency can arise'.[95] Although there is an emphasis on universal access to modern energy services, the thesis recognises the complementary nature of the three SEFA objectives. For this reason, the thesis touches on the broader aspects of energy efficiency in relation to rural electrification and deals with the technology and deployment aspects of renewable energy in greater detail. Considering that lack of access to modern energy services is most pronounced in, and endemic to, the rural areas of the developing world, the thesis places emphasis on the legal strategies and approaches that are pertinent and applicable to their circumstances and conditions. Also, with the 'Asian Century' looming large, the thesis focuses on developing Southeast Asia, particularly the Philippines, where the rate of regional economic expansion, including energy demand, is projected rapidly to increase during the UN Decade of SEFA from 2014 to 2024.[96] Moreover, the special attention to the Philippines is motivated by the absence of scholarly work on the country as regards the legal aspects of achieving universal access to modern energy services despite being listed among the top 20 high impact countries

[93] Louis Henkin, *The Age of Rights* (1990) 17.
[94] Omorogbe, above n 1, 377.
[95] Ibid 377.
[96] Asian Development Bank, *Asian Development Outlook 2013: Asia's Energy Challenge* (2013) 53.

with the highest global deficit in access to modern energy services.[97] Furthermore, consistent with the human rights theme, the thesis focuses on the state as the primary duty-bearer under international human rights law. It does not delve into the responsibilities of non-state actors. The foregoing, therefore, limits the scope of the thesis.

Using a human rights-based approach, the thesis expounds what such an approach means and entails in relation to achieving universal access to modern energy services. This includes an historical and textual examination of the international human rights legal regime to locate the place of universal access to modern energy services and to understand the latter's relationship to other internationally recognised human rights. In turn, the significance of couching universal access to modern energy services in the language of human rights is explored. Consistent with the human rights-based approach, the thesis also brings together renewable energy technology and rural electrification as an essential resource and implementation measure, respectively, to overcome the energy poverty challenge, as overlayed by climate change and sustainable development concerns. Finally, the thesis looks into the practical implications of applying a human rights-based approach to universal access to modern energy services in a developing country, particularly the Philippines, to demonstrate the transition of the discussions from theory to practice and to identify the salient changes sought to be reflected in the country's institutions, practices, and norms.

From the foregoing, **Chapter 2** of the thesis initially describes the term 'human rights', including the challenge of definitions associated with such a term, especially the centrality of human dignity in the human rights discourse.[98] Also, it seeks to capture the definitional indeterminacy of the international human rights regime by exploring the meaning and implications of the expressions 'universal', 'indivisible', interdependent', and 'interrelated' in human rights talk. The complexity in engaging in such conversations in practice is examined by taking a snapshot of the wordings used and meanings attached by multilateral and bilateral development institutions to these. In the process, this Chapter attempts to demonstrate the confusion of the term 'human rights-based approaches' with the 'rights-based approaches', which are not interchangeable. The confusion and definitional challenges, however, provide an opportunity to define the human rights-based approach as used and contextualised in the thesis.

[97] World Bank and International Energy Agency, *Global Tracking Framework* (2013) 59.
[98] Michael Rosen, *Dignity: Its History and Meaning* (2012) 1.

In **Chapter 3**, the thesis continues with the definitional theme of the previous Chapter. It describes the nature and status of socioeconomic rights, the corresponding critiques of such rights, and the arguments in response to those critiques that largely emerge from the historical division of socioeconomic rights and civil and political rights into separate international covenants. Considering the conceptual affinity of universal access to modern energy services to socioeconomic rights, the various socioeconomic rights under the International Bill of Human Rights and other international human rights documents are identified to locate, link, and derive the centrality of universal access to modern energy services in the promotion and enjoyment of socioeconomic rights and other human rights. This includes drawing an analogy to the right to water insofar as the process of recognising a human right to access to modern energy services is concerned, including the identification of the prospective normative content of such a human right once recognised as one. Accordingly, this Chapter lays the basis for exploring further the nature, opportunities, and limitations of the language of human rights in achieving universal access to modern energy services.

In **Chapter 4**, the thesis revisits the conceptual and historical underpinnings of human rights and how these evolved in the modern context. Next, it examines the merits and limits of the language of human needs compared to the language of human rights in terms of enhancing universal access to modern energy services. This Chapter intends to capture the arguments for and against human rights vis-a-vis human needs through the intellectual tussle between Mark Tushnet and Jeremy Waldron to analyse the plausibility of integrating needs-talk into rights-talk. As such, it paves the way to explain the proposition of couching universal access to modern energy services in the human rights language, including the significance of such a proposition to the energy poverty challenge.

Chapter 5, drawing from discussions in Chapter 3, squarely places universal access to modern energy services in the socioeconomic rights realm. This places the state, as the primary duty-bearer, with the role of promoting, protecting, and fulfilling socioeconomic rights, including the provision of universal access to modern energy services. In effect, governments are mandated to undertake all steps and use all appropriate means to the maximum of their available resources to achieve such a goal. The Chapter proceeds to explain the meaning of 'available resources', which essentially pertain to those available within a state and those from the international community through cooperative frameworks. Flowing from this, it will be argued that renewable energy technology is considered an indispensable resource to achieve universal access to modern energy services. Also, it is seen

as enabling developing countries environmentally to leapfrog the pollutive stage of development in order to address the negative impacts, particularly those arising from climate change, that are associated with achieving universal access to modern energy services. Thus, the Chapter looks into the concept of environmental leapfrogging, the global, Southeast Asian, and Philippine trends in deploying renewable energy technologies, and the regulatory and policy frameworks to overcome barriers and promote wider deployment of such technologies with regard to addressing the challenges posed in attaining universal access to modern energy services.

Chapter 6 builds on the technology, resource and leapfrogging themes in order to outline, from a human rights perspective, the discussions on the importance of legislative measures at the national level, particularly to attain development goals that are previously unreachable due to technological constraints, among other factors. This brings the matter of rural electrification to the centre of the energy poverty conversations considering that lack of access to modern energy services is severe in the countryside. It is portrayed as the unfinished business of rural electrification. The Chapter revisits the historical and modern imperatives of rural electrification, the different approaches undertaken to complete rural electrification, and the emerging changes to its effective regulation, particularly in off-grid areas. In the process, this Chapter seeks to demonstrate the need for coherence and consistency in developing a legal strategy that views renewable energy technology and rural electrification as interrelated components and not as separate legal regimes in achieving universal access to modern energy services, which a human rights-based approach arguably offers.

Finally, **Chapter 7** considers the significance of adopting such an approach to addressing the universal access to modern energy services challenge in a developing country setting such as the Philippines where no such study has yet to be undertaken. For this reason, this Chapter examines the degree and form of national implementation to achieve universal access to modern energy services as seen through the lens of a human rights-based approach. In the process, the conceptual and practical implications of couching universal access to modern energy services in the human rights language are amplified, including its potential to accommodate, articulate and bring coherence to such a critical global initiative according to its moral fabric.

CHAPTER 2

THE (HUMAN) 'RIGHT' WORDS AND THE CHALLENGE OF DEFINITIONS

Table of Contents

I. WHAT ARE HUMAN RIGHTS?

The question 'what are human rights?' suddenly sparks an epistemological inquiry into the meaning of the term 'human rights'. And it is not a trivial pursuit.[99] The importance of how human rights are understood influences in varying degrees the framing of issues, the setting of priorities, and operationalising these in a given context.[100] Literally, the expression 'human rights' simply refers to those rights that one exercises, respects and enjoys by virtue of being human.[101] But this is admittedly an oversimplification. Behind the literal definition is a plethora of moral and political theories that an author or writer seeks to advance and carry in legal, political and moral discourse.[102] As Jeremy Waldron puts it, '[h]uman rights, notoriously, present themselves to us in the form of a list rather than as a unified theory'.[103] While there are different conceptions of human rights in theory and practice, Hector Gros Espiell offers this contemporary definition of human rights that demonstrates the difficulty of a catch-all meaning for the term:

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[99] Jerome Shestack, 'The Philosophical Foundations of Human Rights' in Janusz Symonides (ed), *Human Rights: Concepts and Standards* (2000) 32.
[100] Ibid 33.
[101] Jack Donnelly, *Universal Human Rights in Theory and Practice* (2013) 22-3.
[102] Joseph Raz, 'On the Nature of Rights' in Morton Winston (ed), *The Philosophy of Human Rights* (1989) 45.
[103] Jeremy Waldron,' Is Dignity the Foundation of Human Rights?' *Public Law & Legal Theory Research Series Working Paper No. 12-73* (2013) 4 < http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2196074>

> 'Human rights' means 'the fundamental powers, responsibilities and requirements that a human being possesses, declared, recognized and conferred by the legal order and which, derived as they are from the inherent dignity of human kind (the general and universal bedrock of human rights), constitute today the indispensable and necessary basis of any organization or national political system, and indeed of the international community itself.[104]

The foregoing definition has several distinct elements that draw from the various conceptions of human rights. First, it acknowledges the centrality of one being human, that is, the subject and object of human rights are all human beings.[105] This is a common thread in defining the term. However, there is a view that the object of human rights is a right to certain important goods that 'consist in the necessary conditions for human action'.[106] Second, it involves not only correlative rights and duties but also the powers, responsibilities and requirements that are fundamental to being human. But such a definition does not include an explanation of rights as interests, claims, recognised entitlements, or 'trumps'.[107] Third, it raises the possibility of new human rights 'arising from the demands of today's world',[108] which demonstrates the incremental evolution of human rights as seen in the so-called generation of human rights. But this part is controversial in light of the politicisation and the resulting categorisation of human rights.[109] Fourth, human rights realistically arise from the existence of a legal order whether internally or internationally governed.[110] This gives a positivist twist to the existence of human rights as opposed to the normative interpretation of rights as primordially justified moral requirements.[111] Also, it arguably misses the point about human rights being moral in contradistinction to being legal in nature.[112] Lastly, the definition propounds that human dignity is the cornerstone of the human rights edifice. This last point on the connection between human dignity and human rights can be contentious and is further elaborated in the subsequent discussion.

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[104] Hector Gros Espiell, 'Humanitarian Law and Human Rights' in Janusz Symonides (ed), *Human Rights: Concepts and Standards* (2000) 348.
[105] Alan Gewirth, 'The Epistemology of Human Rights' (1984) 1 *Social Philosophy and Policy* 1, 2.
[106] Ibid.
[107] Morton Winston, 'Understanding Human Rights' in Morton Winston (ed), *The Philosophy of Human Rights* (1989) 10-4.
[108] Gros Espiell, above n 104, 349.
[109] Wiktor Osiatynski, *Human Rights and Their Limits* (2009) 33.
[110] Gros Espiell, above n 104, 351.
[111] Gewirth, above n 105, 3.
[112] Winston, above n 107, 7.

For some scholars, 'human rights' pertain to those that are important, moral and universal, which are complicated words by themselves.[113] One author asserts that human rights are merely the modern reincarnation of the rights of man.[114] Still, others like Amartya Sen suggest that human rights are 'best seen, foundationally, as commitments in social ethics'[115] the validity of which can be tested through 'public reasoning',[116] albeit 'they will survive open, informed, and reasoned scrutiny'.[117] Because the definitional process is admittedly complex, it has been suggested that instead of defining human rights the focus must be on the purposes and practical consequences of human rights.[118] However, the definitional exercise cannot be forever avoided if we are to understand the nature of, and moral justifications for, human rights. As Filip Spagnoli points out, 'they have an impact on the ways we can turn rights into facts'.[119]

For the foregoing reasons, this Chapter considers the centrality of human dignity to the international human rights framework. Next, the Chapter explores the meaning and implications of asserting the universality, indivisibility, interdependency and interrelatedness of human rights as defining characteristics of the international human rights edifice. Thereafter, the definitional indeterminacy that afflicts the human rights regime is reflected in practice with the conflation of the human rights-based and rights-based approaches. This gives the thesis the opportunity to provide some definitional nuances of the human rights-based approach, including its context and use. Accordingly, the definitional theme of this Chapter prepares the stage for exploring further the status of economic, social and cultural rights and finding the locus of universal access to modern energy services in the international human rights realm, including the opportunities and limitations of applying a human rights-based approach to such an initiative.

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[113] Shestack, above n 99, 32.
[114] Maurice Cranston, *What are Human Rights?* (1973) 1.
[115] Amartya Sen, 'Human Rights and Development' in Stephen Marks and Bard Andreassen (eds), *Development as a Human Right: Legal, Political and Economic Dimensions* (2010) 5.
[116] Ibid: The expression 'public reasoning' is attributed to John Rawls and cited by Sen.
[117] Amartya Sen, 'The Global Status of Human Rights' (2012) 27 *Am. U. Int'l. L. Rev.* 1, 4
[118] Shestack, above n 99.
[119] Filip Spagnoli, *Making Human Rights Real* (2007) 11.

II. THE DEFINITIONAL INDETERMINACY OF THE INTERNATIONAL HUMAN RIGHTS LEGAL REGIME

Human rights talk can be inconsistent and confusing. It is not surprising to see a deluge of scholars, lawyers, social scientists and development practitioners, among others, actively lending their respective and varied voices to the human rights debates and discourses.[120] Because the modern day understanding of human rights is 'still a work-in-progress',[121] pinning down exactly what the different human rights expressions, exhortations and terms actually convey is a challenging exercise in definitional determinacy. As the subsequent discussions will demonstrate, much of the controversy goes beyond the rhetorical level. Because words can clarify or obscure,[122] it is better to understand what they convey in theory and in practice in order to see what lies ahead when engaging in human rights conversation, particularly in this thesis.

A. *Human Dignity and Human Rights*

The United Nations (UN) Charter of 1945 (Charter) expressly reaffirms the international legal community's 'faith in fundamental human rights, [and] in the dignity and worth of the human person'.[123] As part of its mandate, the UN shall work towards the 'realization of human rights and fundamental freedoms for all without distinction as to race, sex, language, or religion'.[124] From these considerations, the Charter proclaims the universal character of human rights as applicable to all persons without exception or discrimination.[125] In 1948, the Universal Declaration of Human Rights (UDHR) was adopted as 'the foundational document of international human rights law'.[126] Following the Charter's cue, it reiterated the inherent dignity and the equal and inalienable rights of all human beings as 'the foundation of freedom, justice and peace in the world'.[127] As every human being is 'born free and equal in dignity and rights',[128] who are 'endowed with reason and conscience',[129] it follows that human rights are universal - everyone everywhere is entitled to all rights and freedom under

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[120] Siobhan McInerney-Lankford, Mac Darrow and Lavanya Rajamani, *Human Rights and Climate Change: A Review of the International Legal Dimensions* (2011) 27.
[121] Waldron, above n 103, 7.
[122] Daniel Whelan, *Indivisible Human Rights: A History* (2010) 3.
[123] *The Charter of the United Nations*, 1 UNTS XVI (entered into force 26 June 1945) Preamble
[124] Ibid art 13.
[125] Hector Gros Espiell, Universality of Human Rights and Cultural Diversity' (1998) 50 *International Social Science Journal* 525, 525.
[126] Donnelly, above n 101, 39.
[127] *Universal Declaration of Human Rights*, GA Res 217 A (III) (10 December 1948) Preamble.
[128] Ibid art 1.
[129] Ibid.

the UDHR 'without distinction as to race, colour, gender, language, religion, political or other opinion, national or social origin, property, birth or other status'.[130] Moreover, the UDHR recognises that each member of society is entitled to the realisation of their economic, social and cultural rights that are deemed indispensable for their dignity.[131]

On the other hand, the International Covenant on Civil and Political Rights (ICCPR) and the International Covenant on Economic, Social and Cultural Rights (ICESCR) acknowledge that 'these rights derive from the inherent dignity of the human person'.[132] Evidently, the conception of human dignity does not only underpin the international human rights framework, but it also provides the 'ultimate value' that gives coherence to the human rights edifice.[133] In effect, human dignity has dual usage as the ground of human rights (rights based on dignity inherent in being human) or as the content of human rights (right to have dignity protected).[134] Clearly, human dignity is deeply embedded in the ICCPR and the ICESCR,[135] which collectively with the UDHR constitute the International Bill of Human Rights. Thus, the centrality of human dignity in the human rights realm is affirmed in the 1993 Vienna Declaration and Programme of Action (1993 Vienna Declaration), which recognised and affirmed that 'all human rights derive from the dignity and worth inherent in the human person'.[136]

Unfortunately, there is no common understanding or explicit definition of what is meant by 'human dignity'.[137] Apparently, those who drafted the UDHR intended human dignity as a kind of 'placeholder for whatever it is about human beings that entitles them to basic human rights and freedoms'.[138] Also, Oscar Schachter explains that the intrinsic meaning of human dignity 'has been left to intuitive understanding, conditioned in large

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[130] Ibid art 2.
[131] Ibid art 22.
[132] *International Covenant on Economic, Social and Cultural Rights*, opened for signature 19 December 1966, 993 UNTS 3 (entered into force 3 January 1976) ('ICESCR') Preamble;
International Covenant on Civil and Political Rights, opened for signature 19 December 1966, 999 UNTS 171 (entered into force 23 March 1976) Preamble.
[133] Kevin Hasson, 'Religious Liberty and Human Dignity: A Tale of Two Declarations' (2003) 27 *Harvard Journal of Law and Public Policy* 81, 83.
[134] Jeremy Waldron, 'Dignity and Rank' (2007) 48 *European Journal of Sociology* 201, 203-4.
[135] Donnelly, above n 101, 41-2.
[136] World Conference on Human Rights, *Vienna Declaration and Programme of Action* (1993) ('*Vienna Declaration*') Preamble <http://www.ohchr.org/Documents/ProfessionalInterest/vienna.pdf>
[137] Deryck Beyleveld and Roger Brownsword, 'Human Dignity, Human Rights, and Human Genetics' (1998) 61 *The Modern Law Review* 661, 665.
[138] See Mary Ann Glendon, 'The Bearable Lightness of Dignity' (2011) 213 *First Things: A Monthly Journal of Religion and Public Life* 41, 42 quoting Adam Schulman.

measure by cultural factors'.[139] Also, there is a sense of personal responsibility that attaches to being a person of reason and free will, that is, freely to seek and live in accord with the demands of the ultimate truth.[140] Moreover, human dignity is conceivable from 'intelligence and free will that, by their very nature, impose on us a duty, which conscience enforces, as well as a hunger, to seek the truth'.[141] In effect, human dignity rests on reason, conscience and free will that plausibly pave the way for the recognition of human rights.[142] This emanates from the Kantian conception of dignity that flows not only from the equal respect for the autonomy of persons, but also the duty to conduct oneself in a manner that is consistent with dignity.[143] As such, human dignity is viewed from the standpoint of intrinsic human value and dignified conduct.[144]

Because human dignity is the product of both contemporary and older conceptions,[145] Rachel Bayefsky points out that human dignity is applied in three senses. First, human dignity can only be extended to human beings and not to artificial entities such as 'offices, institutions, or states'.[146] Second, human dignity equally applies to all human beings without the restrictions imposed by any social ordering.[147] Third, human dignity is inherent in being human and 'not a rank bestowed by social recognition or a status conditional upon certain forms of behaviour'.[148] Taken all together, it is posited that dignity functions as a normative idea that 'ought to be accredited to all persons'.[149] Thus, Waldron proffers the following definition of dignity:

> Dignity is the status of a person predicated on the fact that she is recognised as having the ability to control and regulate her actions in accordance with her own apprehension of norms and reasons that apply to her; it assumes she is capable of giving and entitled to give an account of herself (and of the way in which she is regulating her actions and organising her life), an account that others are to pay attention to; and it means finally that she has the wherewithal to demand that her agency and presence among us as a

[139] Oscar Schachter, 'Human Dignity as a Normative Concept' (1983) 77 *American Journal of International Law* 848, 849.
[140] Pope Paul VI, *Dignitatis Humanae* (1965) <http://www.vatican.va/archive/hist_councils/ii_vatican_council/documents/vat-ii_decl_19651207_dignitatis-humanae_en.html>
[141] Hasson, above n 133, 88.
[142] Ibid.
[143] Rachel Bayefsky, 'Dignity, Honour, and Human Rights: Kant's Perspective' (2013) 41 *Political Theory* 809, 812.
[144] Beyleveld and Brownsword, above n 137, 667.
[145] Donnelly, above n 101, 41-42; 133-135: Dignity is derived from the Latin term *dignitas*, which is historically associated with hierarchical distinction and ascribed to an elite group.
[146] Bayefsky, above n 143, 810.
[147] Ibid.
[148] Ibid.
[149] Ibid.

> human being be taken seriously and accommodated in the lives of others, in others' attitudes and actions towards her, and in social life generally.[150]

The different applications of human dignity are particularly relevant once one considers the role of the law in protecting human dignity and how the latter, in turn, influences the law are considered. For Waldron, the law protects human dignity 'by proclaiming and enforcing specific norms that prohibit derogations from or outrages upon human dignity'.[151] On the other hand, human dignity influences the law to treat human beings as dignified agents with a capacity for self-control, self–monitoring, and modulation of their behaviour vis-à-vis general norms.[152] If this is not possible, then human dignity is built into the law's procedures by 'respecting the dignity of those to whom the norms are applied as beings capable of explaining themselves'.[153] Effectively, human dignity assumes a status in law as opposed to merely acquiring a status of being.[154] This is the implication of a value-policy oriented approach of grounding the international human rights framework on the idea of protecting human dignity.[155] However, human dignity is not always explicit as a criterion for treatment in many of the provisions of the ICCPR and the ICESCR.[156] Interestingly, Waldron points to the dual usage of human dignity as the ground of human rights (rights based on dignity inherent in being human) or as the content of human rights (right to have dignity protected).[157] Still, this does not obviate the import of human dignity in either the ICCPR or the ICESCR, albeit it is asserted that human dignity is more germane to certain human rights.[158] As the understanding of human dignity is a work-in-progress,[159] there is ample room to explore its significance and relationship to the rights enshrined in the ICCPR and the ICESCR, including the assertion of new normative claims that fall within the ambit of both Covenants in the modern context.[160]

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[150] Jeremy Waldron, 'How Law Protects Dignity' (2012) 71 *The Cambridge law Journal* 200, 202.
[151] Ibid 200.
[152] Ibid 206.
[153] Ibid 210.
[154] Ibid 202.
[155] Shestack, above n 99, 53.
[156] Waldron, above 103, 4; Article 10 (1) of the ICCPR states that '[a]ll persons deprived of their liberty shall be treated with humanity and with respect for the inherent dignity for the human person.' Also, Article 13 (1) of the ICESCR that provides that 'education shall be directed to the full development of the human personality and the sense of its dignity'.
[157] Waldron, above n 103, 4.
[158] Ibid 4-5.
[159] Ibid 7-8.
[160] See Clifford Bob, 'Fighting for New Rights' in Clifford Bob (ed), *The International Struggle for New Human Rights* (2009) 4: Bob points to the framing of 'long-felt grievances as normative claims'.

B. *Universality versus Cultural Relativism*

The universal character of human rights appears to have been settled as early as the 1968 Proclamation of Teheran,[161] when it was declared that the 'Universal Declaration of Human Rights states a common understanding of the peoples of the world concerning the inalienable and inviolable rights of all members of the human family'.[162] Also, the 1993 Vienna Declaration reaffirmed the universal character of all human rights.[163] Far from being undisputed, the issue of cultural relativism has been a serious thorn in the side of the universality claim.[164] Perennially, cultural relativism is seen as posing one of the major constraints to the universality of human rights.[165] Consistent with the definitional theme of this Chapter, there is a need briefly to define and differentiate universality from cultural relativism, including their implications for the application of human rights.

According to Jack Donnelly, universality is generally taken in one of two senses, either conceptual or substantive.[166] Conceptual universality emanates from the literal sense in which human rights are taken, that is, human rights are equal and inalienable rights that extend to all human beings.[167] Although this shows that all human beings universally hold human rights, it does not prove the existence of such rights.[168] Also, conceptual universality does not address the issue of the rights recognised in the UDHR, ICCPR and ICESCR as being applicable everywhere and to all cultures.[169] Such a concern properly falls within the ambit of the substantive side of the universality of human rights.[170] In such a sense, William Talbott refers to basic human rights[171] that should 'be guaranteed to normal adult human beings not because they are a member of the species *Homo sapiens*, but because they have certain capacities [that is]...the capacity of judgment' and self-determination.[172] As such, the claim that basic human

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[161] Gros Espiell, above n 125, 527.
[162] Final Act of the International Conference on Human Rights, *Proclamation of Teheran* (1968) ('*Proclamation of Teheran*') para 2 <http://legal.un.org/avl/pdf/ha/fatchr/Final_Act_of_TehranConf.pdf>
[163] *Vienna Declaration* para 5.
[164] Jack Donnelly, 'The Relative Universality of Human Rights' (2007) 29 *Human Rights Quarterly* 281, 282.
[165] Rainier Arnold, 'Reflections on the Universality of Human Rights' in Rainier Arnold (ed), *The Universalism of Human Rights* (2013) 1-2.
[166] Donnelly, above n 164, 282.
[167] Ibid.
[168] Ibid 283.
[169] Ibid.
[170] Ibid.
[171] William Talbott, *Which Rights Should be Universal?* (2005) 107: Talbott subsumes these rights (physical security and subsistence, education, freedom of the press, thought and opinion, association, democratic rights, etc. under two general categories – autonomy rights and political rights – that are 'necessary for the development and exercise of autonomy'.
[172] Ibid 16.

rights are universal essentially means that these 'should be protected everywhere'.[173] In the same breath, it is asserted the rights recognised in the UDHR, the ICCPR and the ICESCR have attained 'international legal universality'[174] with the ratification by a significant number of state parties.[175] This universality pertains to the territorial dimension or the extent human rights are globally accepted.[176] Moreover, the UDHR arguably represents a convergence of a variety of comprehensive doctrines wherein Western, Asian and African values are viewed as being supportive of, and not in conflict with, human rights resulting in what Donnelly calls 'overlapping consensus universality'.[177] Accordingly, human rights are grounded in the common humanity of all persons instead of any culture-specific value systems, that is, human rights have transcultural status.[178]

The above stance on the overlapping consensus universality of human rights is the polar opposite of the cultural relativism approach to human rights. Essentially, cultural relativism 'is a set of doctrines that imbue cultural relativity with prescriptive force'.[179] In human rights parlance, cultural relativism asserts that in the face of cultural differences and diversity of cultural traditions the UDHR has no universal normative force.[180] Also, its application needs to be evaluated according to the standards of the relevant culture[181] because '[h]uman essence is culturally relative'.[182] In effect, cultural relativism poses a direct challenge to the universality claim and brands the concept of human rights as disguised cultural imperialism of the West.[183] In the broader context, cultural relativism resonates in the birth of Third World[184] Approaches to International Law (TWAIL) as a scholarly enterprise where

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[173] Ibid.
[174] Donnelly, above n 164, 288.
[175] UN Treaties Collection for Status of Ratification <https://treaties.un.org/Pages/Treaties.aspx?id=4&subid=A&lang=en> The ICCPR has been ratified by 167 parties and the ICESCR by 162 parties.
[176] Arnold, above n 165, 1: Arnold explains that the territorial dimension of universality occurs at the vertical and horizontal levels, that is, at the national, regional and international level.
[177] Donnelly, above n 164, 289.
[178] Paul Healy, 'Human Rights and Intercultural Relations: A Hermeneutico-Dialogical Approach' (2006) 32 *Philosophy & Social Criticism* 513, 515.
[179] Donnelly, above n 164, 294.
[180] Ibid.
[181] Ibid.
[182] Brooke Ackerly, *Universal Human Rights in a World of Difference* (2008) 86.
[183] Kok-Chor Tan, 'Culture, Intervention and Well-Being: Some Reflections' (2007) 7 *Human Rights and Human Welfare* 67, 92: Tan points to the perception or misperception about human rights having 'a hidden Western imperialistic agenda'.
[184] BS Chimni, 'Third World Approaches to International Law: A Manifesto' (2006) 8 *International Community Law Review* 3, 5: The 'Third World' refers to the countries in Asia, Africa and Latin America that share 'common history of subjection to colonialism, and/or the continuing underdevelopment and marginalization' of their people.

international law, including international human rights law,[185] is viewed as promoting the ideological domination of the West and legitimising neo-liberal goals.[186] Although there are serious problems associated with cultural relativism such as its weak philosophical argumentation and false moral infallibility stance,[187] it is perceived as a weighty counterforce 'to misplaced universalism',[188] or to imperialistic tendencies especially of powerful nations.[189] Conversely, universalism holds in check the radical rampart of cultural relativism on such charge as protecting authoritarian regimes or oppressive elites.[190] In its own militant version, however, universalism effectively negates cultural diversity and cultural freedom.[191] Thus, either extreme forms of universality or cultural relativity only serve to widen the chasm between continental values.[192]

To move forward and taking into account variation among regions, countries and cultures in the world, the 1993 Vienna Declaration qualified the universality claim by emphasising that 'the significance of national and regional particularities and various historical, cultural and religious backgrounds must be borne in mind'.[193] By acknowledging such historical, cultural and religious facts,[194] the 1993 Vienna Declaration enhances the possibility of 'interpreting and implementing these standards in culturally inflected ways'.[195] Also, it is tantamount to an open invitation for all concerned to engage in dialogue and discourse.[196] As Michael Freeman notes, '[r]espect for local cultures is not only compatible with international human rights; it is required by them'.[197] Through this approach, the claim of human rights to universality still remains relevant and appropriate in terms of recognising

[185] Ibid 3: It is argued that the international human rights regime 'is being manipulated' to further the neo-liberal agenda.
[186] Karin Mickelson, 'Taking Stock of TWAIL Histories' (2008) 10 *International Community Law Review* 355, 356; Stephen Hopgood, *The Endtimes of Human Rights* (2013) 173: According to Hopgood, '[h]uman rights advocacy therefore becomes a status symbol signalling membership in the transnational capitalist class'.
[187] Talbott, above n 171, 44: Talbott observes that the reasoning that leads to cultural relativism 'almost inevitably leads beyond it'; Donnelly, above n 163, 295.
[188] Donnelly, above n 164, 296; Michael Jacobsen and Ole Bruun (eds), *Human Rights and Asian Values: Contesting National Identities and Cultural Representations in Asia*, (2000) 1: For example, Bruun and Jacobsen cite the case of Asian values being utilised 'to promote culture relativism as an argument against the universality of human rights'.
[189] Amartya Sen, 'Human Rights and Asian Values' (1997) 217 (2) *New Republic* 33, 39: Sen points to the championing of Asian values to check Western hegemony.
[190] Michael Freeman, *Human Rights: An Interdisciplinary Approach* (2011) 128.
[191] Healy, above n 178, 517.
[192] Dianne Otto, 'Rethinking the "Universality" of Human Rights' (1997) 29 *Columbia Human Rights Law Review* 1, 3.
[193] *Vienna Declaration* para 5.
[194] Abdullahi An-Na'Im, What Do We Mean by Universal? (1994) 4-5 *Index on Censorship* 120, 121.
[195] Healy, above n 178, 515.
[196] An-Na'Im, above n 194, 128.
[197] Freeman, above n 190, 124.

and protecting the fundamental interests of everyone everywhere.[198] Additionally, it reaffirms the egalitarian underpinning of human rights and in ensuring that they are construed 'as a common standard of achievement for all peoples and all nations'.[199] Moreover, the universality claim strikes a common chord among all cultures insofar as the respect for human dignity is concerned even if its protection is culture specific.[200] This is especially so in the face of rapid globalisation and the rise of the modern state.[201] Lastly, cultural and geographical boundaries aside, human rights are taken to be universal precisely because they are notionally built on everyone's shared humanity and entitlements as human beings.[202] As Amartya Sen convincingly summarises:

> The recognition of diversity within cultures is extremely important in the contemporary world, since we are constantly bombarded by oversimple generalizations about "Western civilization," "Asian values," "African values," and so on. These unfounded readings of history and civilization are not only intellectually shallow, they also add to the divisiveness of the world in which we live. The authoritarian readings of Asian values that are increasingly championed in some quarters do not survive scrutiny. And the grand dichotomy between Asian values and European values adds little to our understanding, and much to the confounding of the normative basis of freedom and democracy.[203]

With the concept of universality clarified, the Chapter turns to the meaning of 'indivisibility, interdependence and interrelatedness' in the human rights discourse.

C. *Indivisibility, Interdependence and Interrelatedness*

Human dignity and universality are not only largely inchoate and controversial terms in the international human rights sphere. Noticeably, the human rights literature is replete with the mantra that all human rights are 'indivisible and interdependent and interrelated'.[204] The triad description of human rights is often assumed to be a given among UN bodies, human rights scholars and activists with the UN being bold enough to claim that it is 'beyond dispute'.[205] Not only are the terms considered descriptive of the international human rights regime, they are also delivered as a single package of adjectives.[206] Similar to universality, 'indivisibility

[198] Ibid 128.
[199] *Universal Declaration of Human Rights*, GA Res 217 A (III) (10 December 1948) ('*UDHR*') Preamble.
[200] Osiatynski, above n 109, 160.
[201] Ibid 161.
[202] Sen, above n 189.
[203] Ibid 40.
[204] Whelan, above n 121, 1.
[205] Ibid.
[206] Ibid.

and interdependency and interrelatedness' remain surprisingly undefined.[207] Although the terms are often interchangeably used, they are conceptually different.[208] Pertinently, Daniel Whelan propounds that each term effectively ascribes peculiar meanings to human rights.[209] Thus, they need to be separately unpacked to know what they conceptually convey.

1. *Interdependency*

The doctrine of 'interdependency' highlights the functional relationship between human rights.[210] The various human rights are seen as interacting with one another as constituent and supportive parts of a whole.[211] Because all human rights are equally important, the realisation of the different kinds of rights is dependent on the realisation of the other rights regardless of categorisation.[212] However, James Nickel cautions that supporting relationships between human rights relies to a large extent on the quality of implementation, that is, whether implementation is of high or low quality.[213] High quality implementation of a human right is equated with full realisation 'when all the major threats to the right have been adequately blocked or neutralized through actions…providing protections and other services, and providing legal remedies for noncompliance with the right'.[214] Also, it assumes the existence of effective legal and political institutions that facilitate respect and protection of human rights.[215]

While studies on the correlations between different kinds of human rights are limited,[216] interesting research into the existence of trade-offs for the provision of security rights, subsistence rights and liberties show that there is no direct empirical evidence of the putative trade-offs.[217] Instead, it appears that there is a tendency for such rights to be realised together,[218] albeit Lanse Minkler and Shawna Sweeney reveal that the degree of

[207] Ibid 3.
[208] James Nickel, 'Rethinking Indivisibility: Towards a Theory of Supporting Relations between Human Rights' (2008) 30 *Human Rights Quarterly* 984, 987.
[209] Whelan, above 122, 3.
[210] Donnelly, above n 101, 44-5
[211] Ibid.
[212] Spagnoli, above 119, 52: Spagnoli cites the interdependence of economic rights and freedom rights and argues that 'lasting respect for economic rights requires some measure of respect for freedom rights and political rights'.
[213] Nickel, above n 208, 987.
[214] Ibid 992.
[215] Ibid 995.
[216] Lanse Minkler and Shawna Sweeney, 'On the Indivisibility and Interdependence of Basic Rights in Developing Countries' (2011) 33 *Human Rights Quarterly* 351, 355.
[217] Wesley Milner, Steven Poe and David Leblang, 'Security Rights, Subsistence Rights and Liberties: A Theoretical Survey of the Empirical Landscape' (1999) 21 *Human Rights Quarterly* 403, 436-7.
[218] Ibid 438.

interdependency between security and subsistence rights is only modest in developing countries.[219] Future research is, thus, suggested in improving the measurement for the simultaneous realisation of basic rights such as security and subsistence rights.[220] The effect of non-compliance and the resort to legal remedy is controversial and will be dealt with in greater detail on the discussions about the status of economic, social and cultural rights. [221]

2. *Interrelatedness*

Because "interrelatedness' is part of the human rights triad, it is not surprising to conflate it with 'interdependency'.[222] When human rights are declared as interrelated, it is construed as referring to the mutual relationship or interconnectedness of all such rights in the broader context.[223] The term is distinguishable from interdependency, which essentially looks into the relationship between particular rights rather than between categories of rights.[224] Also, interrelatedness is taken in one of two senses, either organic or related.[225] From an organic perspective, a right is deemed to incorporate another right, and thus, 'inseparable or indissoluble'.[226] This means that a core right, say the right to life in the ICCPR, extends its justification and protection to a derivative right such as the right to an adequate standard of living in the ICESCR.[227] In a related sense, however, such rights are deemed to be 'mutually reinforcing or mutually dependent, but distinct'.[228] More likely, human rights are interrelated because they share the same legal justification and characteristics.[229] This idea of interrelatedness brings into the fore the issue on the contentious standing of economic, social, and cultural rights as real rights. Accordingly, interrelatedness serves to re-affirm and demonstrate the equal importance of such rights in relation to civil and political rights.[230]

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[219] Minkler and Sweeney, above n 216, 390.
[220] Ibid 392.
[221] Whelan, above n 122, 4: Whelan explains that the interdependency doctrine becomes problematic 'when one or more of the rights thought to be independent are not necessarily justiciable'.
[222] Ibid. Whelan cites the use of an author using interdependency to describe interrelatedness.
[223] Ibid.
[224] Ibid.
[225] Craig Scott, 'The Interdependence and Permeability of Human Rights Norms: Towards a Partial Fusion of the International Covenants on Human Rights' (1989) 27 *Osgoode Hall Law Journal* 769, 779.
[226] Ibid: Scott introduces the idea of permeability where treaty norms dealing with a family of rights are used to directly or indirectly protect the norms of another treaty dealing with another category of rights.
[227] Ibid 780.
[228] Ibid 782-3.
[229] Whelan, above n 122, 4.
[230] Ibid 5.

3. *Indivisibility*

Possibly the most complicated among the three terms,[231] it is propounded that the concept of indivisibility is closely linked to the idea of human dignity the complete essence of which requires the realisation of the full range of human rights.[232] Ever since human rights were dichotomised into two grand categories - civil and political on one hand and economic, social, and cultural on the other – indivisibility assumed shifting emphases at different times.[233] The 1968 Proclamation of Teheran asserts that human rights are indivisible and that 'the full realization of civil and political rights without the enjoyment of economic, social and cultural rights, is impossible'.[234]

In comparison, the 1993 Vienna Declaration explains that the 'international community must treat human rights globally in a fair and equal manner, on the same footing, and with the same emphasis'.[235] The focus on the organic unity of the human rights regime is currently the dominant theme to highlight the efforts to address the historical division of human rights into separate covenants.[236] After all as James Griffin elaborates the 'term "human right" is nearly criterionless.'[237] Also, the Office of the UN High Commissioner for Human Rights explains that 'in reality, the enjoyment of all human rights is interlinked'.[238] However, it is observed that in practice both Covenants are still treated separately.[239] As such, the controversy surrounding indivisibility will continue to revolve around the apparent impracticality of implementing all human rights on account of resource constraints especially under the ICESCR.[240] This carries considerable currency as long as the state remains as the institution ultimately obligated and held accountable to translate civil, political, economic, social and cultural rights to practical significance, particularly at the national level.[241]

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[231] Donnelly, above n 101, 44-5.
[232] Ibid.
[233] Whelan, above n 122, 6.
[234] *Proclamation of Teheran*, para 13.
[235] *Vienna Declaration* art 5.
[236] Whelan, above n 122, 9.
[237] James Griffin, *On Human Rights* (2008) 14.
[238] Office of the United Nations High Commissioner for Human Rights, 'Frequently Asked Questions on Economic, Social and Cultural Rights', *Fact Sheet No. 33*, 10.
[239] Peter Uvin, *Human Rights and Development* (2004) 39.
[240] Minkler and Sweeney, above n 216, 353.
[241] Whelan, above n 122, 214.

III. THE DISTINCTION BETWEEN 'HUMAN RIGHTS-BASED' AND 'RIGHTS-BASED' APPROACHES

As mentioned earlier, ritualistic words and their implications in human rights talk reflect the complexity of engaging in such conversations. More often than not, there appears to be a constant blurring of the lines to the extent that there is already an admonition not to pay too much attention to the semantics.[242] This blurring becomes more evident in how often the term 'human rights-based approach' is interchangeably used and confused with the expression 'rights-based approach'. Interestingly, a snapshot of the rights theme adopted by multilateral, bilateral and international development organisations is indicative of the diverse language utilised to define or give effect to the terms.[243]

The UN High Commissioner for Human Rights used the term 'rights-based approach' in 2001 to describe 'a conceptual framework for the process of human development that is normatively based on international human rights standards and operationally directed to promoting and protecting human rights'.[244] In contrast, the Swedish International Development Cooperation Agency referred to a 'human rights approach' that 'translates poor people's needs into rights' and obligates states to take the necessary steps to 'respect, promote and fulfil the human rights of all people within their jurisdiction.'[245] At the other end of the spectrum, the World Bank is often singled out and criticised for not explicitly adopting a human rights-based approach to its projects and activities, which explains the apparent lack of precise definition for the term within the multilateral financial institution.[246] As James Wolfensohn, former President of the World Bank, candidly reveals, 'to some of our shareholders [whose governments adopted the Universal Declaration of Human Rights] the very mention of the words human rights is inflammatory language'.[247] Wolfensohn adds that the World Bank 'decided just to go around it and we talk the language of economics and social development'.[248] However, it is contended that the World Bank's programs and activities are actually contributing to the realisation of human rights although it does not

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[242] Scott, above n 225, 779.
[243] Celestine Nyamu-Musembi and Andrea Cornwall, 'What Is the "Rights-Based Approach" All About? Perspectives from International Development Agencies', *IDS Working Paper 234* (2004) 12-3.
[244] Mary Robinson, 'What Rights Can Add to Good Development Practice' in Philip Alston and Mary Robinson (eds), *Human Rights and Development: Towards Mutual Reinforcement* (2005) 38.
[245] Nyamu-Musembi and Cornwall, above n 243, 12-3.
[246] Jose Parra, 'The Human Rights-Based Approach: The Challenge of Developing Human Rights Capacities' in CIFEDHOP, *The Human Rights-Based Approach: A Field of Action for Human Rights Education* (2012) 16.
[247] James Wolfensohn, 'Some Reflections on Human Rights and Development' in Philip Alston and Mary Robinson (eds), *Human Rights and Development: Towards Mutual Reinforcement* (2009) 21.
[248] Ibid.

expressly declare a human rights-based approach to its programs and activities.[249] While the Office of UN High Commission for Human Rights maintained its 2001 definition, it started referring to the expression 'human rights-based approach' in lieu of the plain 'rights-based approach' in 2006 that demonstrated the interchangeable character of the two expressions even within the UN's foremost human rights agency. [250]

Interestingly, Celestine Nyamu-Musembi and Andrea Cornwall attribute the fuzziness of the expressions to the lack of precision and consistency in the fundamental definition of the terms, which turns the recasting and repackaging of the expressions into a convenient exercise of semantics. [251] Also, Varun Gauri and Siri Gloppen observe that the absence of an authoritative source adds to the lack of common understanding on the similarities or differences between the two expressions. [252] Notably, the UN agencies reached a common understanding on human rights-based approaches to development cooperation and programming. [253] This common understanding extends to all programs of development cooperation, policies and technical assistance among the UN agencies.[254] Also, a human rights-based approach is commonly understood as promoting the realisation of human rights embodied in the UDHR and other international human rights instruments.[255] Moreover, the 'human rights standards contained in, and principles derived from, the UDHR and other international human rights instruments guide all development cooperation and programming in all sectors and in all phases of the programming process'.[256] This means that development activities are expected to contribute towards enhancing the capacities of duty-bearers to meet their obligations and/or of rights-holders to claim their rights.[257] Still, there exists an important definitional distinction between a human rights-based approach and a rights-based approach.

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[249] Roberto Danino, 'The Legal Aspects of the World Bank's Work on Human Rights: Some Preliminary Thoughts' in Philip Alston and Mary Robinson (eds), *Human Rights and Development: Towards Mutual Reinforcement* (2009) 511-2.
[250] Office of the United Nations High Commissioner for Human Rights, *Frequently Asked Questions on a Human Rights-Based Approach to Development Cooperation* (2006) 15.
[251] Nyamu-Musembi and Cornwall, above n 243, 14.
[252] Varun Gauri and Siri Gloppen, 'Human Rights Based Approaches to Development: Concepts, Evidence and Policy', *World Bank Policy Research Working Paper 5938* (2012) 3.
[253] *UN Statement of Common Understanding on Human Rights-Based Approaches to Development Cooperation and Programming* (2003) <http://hrbaportal.org/the-human-rights-based-approach-to-development-cooperation-towards-a-common-understanding-among-un-agencies>
[254] Ibid.
[255] Ibid.
[256] Ibid.
[257] Ibid.

Relevantly, Rosalind Eyben elucidates that rights-based approaches come in three streams of thought and practice. The international human rights legal framework underpins the first stream,[258] which is usually associated with the expression human rights-based approach to indicate a focus on the legal and the universal dimension of rights.[259] The second stream is essentially a product of 'the social, cultural and political struggles and debates in both North and South',[260] that is, between rich and poor nations or between developed and underdeveloped economies. The third stream is attributed to political scientists, who emphasise on 'historical evolution from clientelism to citizenship'.[261] This is described as a state-people relationship paradigm shift from citizenship rights subordination in exchange for material rewards to citizenship rights of access without fear of repercussion.[262] The second and third strands are captured in the generic term 'rights-based approach' that carries a wider scope involving 'people's general sense of equity, justice, entitlement and/or fairness'.[263] This includes rights that are yet to be legally recognised as such under the international human rights legal framework.[264] In most instances, however, these streams are blended in practice.[265]

The predominance of any one strand has significant implications insofar as the kind or shape of intervention is concerned,[266] particularly from the standpoint of the user. It is also observed to influence the way rights are interpreted in relation to what Andrea Cornwall and Karen Brock refer to as development policy buzzwords such as participation, empowerment, and poverty reduction, to name a few.[267] For example, instead of directly engaging with civil and political rights the World Bank tries to maintain its non-political stance by creating the enabling conditions for human rights through its work in thematic areas such as good governance and anti-corruption.[268] Thus, the user exercises a purpose-driven choice when interpreting the expression 'human rights-based approach' and how it is operationalised in a given context.

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[258] Rosalind Eyben, 'The Rise of Rights: Rights-Based Approaches to International Development', *IDS Policy Briefing Paper* (2003) <http://www.ids.ac.uk/files/Pb17.pdf>
[259] Nyamu-Musembi and Cornwall, above n 243, 14.
[260] Eyben, above n 258.
[261] Ibid.
[262] Jonathan Fox, 'The Difficult Transition from Clientelism to Citizenship: Lessons from Mexico' (1994) 46 *World Politics* 151, 152-3.
[263] Eyben, above n 258.
[264] Parra, above n 246, 18.
[265] Eyben, above n 258.
[266] Nyamu-Musembi and Cornwall, above n 243, 14.
[267] Andrea Cornwall and Karen Brock, 'What Do Buzzwords Do for Development Policy? A Critical Look at "Participation", "Empowerment" and "Poverty Reduction"' (2005) 26 *Third World Quarterly* 1043, 1043.
[268] Nyamu-Musembi and Cornwall, above n 243, 14.

In this thesis, the term 'human rights-based approach' has been chosen in lieu of the plain rights-based approach in order to signal the predominant emphasis on international human rights law and its normative framework towards the realisation of human rights: civil, political, economic, social and cultural. This paves the way for the investigation and exploration of the international human rights legal regime as it relates to the evolution and recognition of human rights, including the merits of its language. As such, it helps frame the moral and philosophical justification for human rights without necessarily being blind to history and the more comprehensive conception of human rights beyond pure legalism.

IV. A HUMAN RIGHTS-BASED APPROACH: CONTEXT AND USE

Essentially, the definition, normative content and practical implications of the term 'human rights', particularly the 'human rights-based approach', depend on context and use.[269] The expression can also be construed either in its legal or non-legal sense. From a human development and humanitarian policy and practice standpoint, a human rights-based approach focuses on the process of giving effect to generic human rights principles such as participation, accountability, equality and non-discrimination as important pillars of development practice.[270] This differs from human rights-based approach as a legal construct, which essentially relies on the conceptions, articulations and practical implications of human rights under the international human rights legal framework, including its binding attributes.[271]

For purposes of this thesis, the expression 'human rights-based approach' is mainly used in its legal sense or one that flows from the 'universal guarantees protecting individuals and groups against actions and omissions that interfere with fundamental freedoms, entitlements and human dignity'.[272] It is also utilised as a conceptual framework that delves into the human development process that is normatively defined by international human rights law and directed in application and practice towards the promotion and protection of human rights.[273] Moreover, the human rights-based approach is employed as a tool of analysis to look into inequities and inequalities in a given society; to identify discriminatory

[269] McInerney-Lankford, Darrow and Rajamani, above n 120, 28.
[270] Ibid.
[271] Signatory states are expected to implement in the domestic legal order the full realisation of the rights enshrined in the ICCPR and ICESCR.
[272] Office of the United Nations High Commissioner for Human Rights, above n 67, 1.
[273] Ibid 15.

practices that abet the many facets of poverty, including energy poverty; [274] and to find ways to break down and overcome them. This gives currency to the significance of the international human rights legal framework as it relates to contemporary challenges confronting various governments and societies. In effect, the human rights-based approach is both result-orientated and procedure-orientated, that is, as Knut Bourquain explains dealing with 'the establishment of a certain legal interest' and determining 'a frame and certain conditions under which… [State action] has to take place'.[275] Accordingly, the thesis explores the system of rights, obligations and standards underpinned by the international human rights legal regime to help guide or frame legal and policy responses to issues of the day such as universal access to modern energy services.

The preference in this thesis for treating the human rights-based approach as a legal construct rests on the commonly accepted notion of the significant role that the law plays in 'grounding and mediating conflicting claims and ideas within a relatively objective and consensual normative framework'.[276] As contemplated, this normative framework essentially derives its substance and structure from various international human rights covenants and conventions for its basis. In addition, law fundamentally plays a critical role in introducing and implementing any reform or change agenda in society.[277] However, it is argued that the human rights-based approach as a legal construct may effectively delimit human rights within plain legal boundaries.[278] More importantly, human rights are seen as political rather than legal matters because key issues in a human rights-based approach involve 'political, ideological, cultural, and economic dynamics of societies'.[279] There are other shortcomings of the international human rights regime to such an extent that David Kennedy is prompted 'to pull together in a short list some of the questions raised about international human rights...[as being] more part of the problem in today's world than part of the solution'.[280] Some of the prominent critiques about human rights, particularly social, economic, and cultural rights, are further discussed in Chapter 3.

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[274] The International Energy Agency defines 'energy poverty' as lack of access to modern energy services, that is, household access to electricity and clean cooking facilities. International Energy Agency, *Energy Poverty* <http://www.iea.org/topics/energypoverty/>

[275] Knut Bourquain, *Freshwater Access from a Human Rights Perspective* (2008) 56.

[276] McInerney-Lankford, Darrow and Rajamani, above n 120, 29.

[277] Bradbrook et al., above n 63, 552

[278] McInerney-Lankford, Darrow and Rajamani, above n 120, 28

[279] Uvin, above n 239, 179.

[280] David Kennedy, 'The International Human Rights Movement: Part of the Problem?' (2002) 15 *Harvard Human Rights Journal* 101, 101; 108-22: These include human rights crowding out other emancipatory strategies, viewing the problem and solution too narrowly, engaging in too much generalisation or particularisation, and promising more than what it can deliver, among others.

While the foregoing observations and critiques about the human rights-based approach are well taken, it is submitted that the human rights-based approach contemplated herein does not preclude the expanded version of human rights 'as an empowering vocabulary and framework for political and social change'.[281] In doing so, the enabling and facilitating character of the human rights-based approach as a legal construct is recognised beyond the confines of litigation strategies or formal redress mechanisms.[282] This allows the investigation of the human rights-based approach in terms of its potential positively to transform the lives of those who remain caught in the poverty trap,[283] including 'as a means of legitimising a more progressive, radical even, approach to development'.[284]

Nyamu-Musembi and Cornwall point out that a human rights-based approach has little meaning if it does not have the potential to transform power relations, that is, addressing the inequalities among various stakeholders in the development process.[285] This shifts the focus on accountability that Mary Robinson describes as 'the most defining attribute of human rights in development'.[286] Therefore, the attraction of the human rights-based approach springs from the opportunity to press for a higher level of accountability and catalyse positive change – one that offers a path towards inclusion and away from the ills of systemic alienation in society, albeit not a panacea to all such ills. Again, in Robinson's words, '[i]nternational human rights law provides one of the most important and powerful tools for positive change in the lives of individuals and communities throughout the world'.[287] For this reason, the thesis delves into this capacity of the human rights language for accountability and change in more detail in Chapter 3.

[281] McInerney-Lankford, Darrow and Rajamani, above n 120, 28
[282] See Svitlana Kravchenko, 'Right to Carbon or Right to Life: Human Rights Approaches to Climate Change' (2008) 9 *Vermont Journal of Environmental Law* 513, 514: It is observed that enforcement of rights in a legal system alone does not guarantee changes in government policy. Question has been posed on whether or not the concept of human rights can change not only the minds, but also the hearts in a given political system.
[283] Nyamu-Musembi and Cornwall, above n 243, 47.
[284] Ibid 4.
[285] Ibid 47.
[286] Robinson, above n 244, 39.
[287] Robinson, above n 24, Preface.

V. CONCLUSION

Definitions are assumed to be good starting points when establishing a common understanding about key concepts, principles and terms. This is especially true when engaging in complex topics of discourses and debates. However, human rights talk can be contentious, inconsistent and confusing as a melting pot of diverse values, conceptions and even politics. Because the contemporary understanding of human rights is described to be still a work-in-progress, unpacking what the different human rights expressions and terms actually convey is a challenging exercise in definitional determinacy. Beyond the rhetorical level, words and their meanings have serious practical implications. Clearly, the necessity of such an intellectual undertaking cannot be ignored in order to discover what lies ahead when engaging in human rights conversations.

In this Chapter, it has been demonstrated that the term 'human rights' alone conjures a plethora of moral and political theories that complicate the pursuit of a unified understanding of its conception. This effort begins with the concept of human dignity that sets the theme of, and arguably gives coherence to, the international human rights realm. Because human dignity is not explicitly defined, it can function as the ground for, or as the content of, human rights. This dual usage is not surprising, as human dignity is a product of old and modern conceptions. As much as the understanding of human rights is a work-in-progress, so is the understanding of human dignity. Accordingly, there is ample opportunity to explore the significance and relationship of human dignity to all human rights as an ongoing process.

The putative inchoate nature of human rights and human dignity extends to the claim that human rights are universal. Again, the lack of definition is a harbinger of controversy. Despite attempts to hold such formulations beyond dispute, they are more often than not highly debatable to say the least. For example, universality finds its antithesis in cultural relativity. However, there appears to be no benefit to be gained in taking such notions to their extremes. What is emerging as a universal consensus is that the recognition of, and respect for, cultural diversity is important in today's world.

On the other hand, the historical division of human rights into two covenants – the ICCPR and ICESCR – has triggered various efforts to restore the organic unity of the UDHR. This restoration is formulated as a triad description of human rights, that is, human rights are 'indivisible, interdependent and interrelated'. Although delivered as a single package and the terms often conflated with one another, they are posited to actually ascribe different meanings

to human rights. To amplify, the terms interdependent and interrelated focus more on the relationships between particular rights and its categories to highlight the interaction of the various rights as parts of one body. Possibly the most contentious, indivisibility represents the pinnacle of the restoration efforts that arose out of the politicisation of human rights, albeit its practical implication poses a constant challenge to the full realisation of economic, social and cultural rights.

Finally, this Chapter shows that the definitional indeterminacy of the international human rights regime is reflected in practice with the conflation of human rights-based and rights-based approaches. However, it has given ample room to provide a nuanced definition of the human-rights-based approach according to its context and use in the thesis. In the end, the definitional exercise demonstrates that unpacking the qualities that make human rights truly universal, indivisible, interdependent and interrelated is a continuing and dynamic process. Perhaps the definitional indeterminacy of human rights talk is intentional after all. As Waldron counsels:

> Sometimes the quest for precision blinds us to certain insights that we can as yet only formulate haltingly; sometimes it blinds us to the importance of pursuing certain questions (and linking them to other questions) even when there is not yet an answer in sight.[288]

And with this reminder, the next chapter turns to the status of economic, social and cultural rights and the implications of deriving or locating universal access to modern energy services within such rights.

[288] Waldron, above n 103, 29.

CHAPTER 3

UNIVERSAL ACCESS TO MODERN ENERGY SERVICES AND SOCIOECONOMIC RIGHTS: IS IT REALLY IMPRACTICAL TO BE 'POSITIVE'?

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I. WHAT ARE ECONOMIC, SOCIAL AND CULTURAL RIGHTS?

Following the definitional theme of Chapter 2, it seems logical to begin this one with another definition. Succinctly, the Office of the UN High Commissioner for Human Rights refers to economic, social and cultural rights as 'those human rights relating to the workplace, social security, family, participation in cultural life, and access to housing, food, water, healthcare and education'.[289] This basic list recapitulates in a nutshell the economic, social and cultural rights recognised under the UDHR and the ICESCR.[290] Additionally, economic and social rights tend to be defined together as 'socioeconomic' rights that are listed in those international human rights instruments.[291] For purposes of this thesis, the term 'socioeconomic rights' will be used for brevity. It will be recalled that there is already substantial reference to the cultural aspect of human rights in the discussions about the issue of universalism and cultural relativism in Chapter 2. Accordingly, the emphasis this time revolves around socioeconomic rights.

[289] Office of the United Nations High Commissioner for Human Rights, above n 238, 1.
[290] *UDHR* arts 22-30.
[291] Jeremy Waldron, 'Socioeconomic Rights and Theories of Justice' (2011) 48 *San Diego Law Review* 773, 773-4.

Shareen Hertel and Lanse Minkler describe economic rights as the 'inherent right to the resources necessary for minimally decent life'.[292] The UDHR shows that fundamental economic rights include the right to an adequate standard of living, the right to employment without discrimination, and the right to the so-called 'Basic Income Guarantee' in the form of social security or social insurance.[293] Also, economic rights include the 'right not to suffer poverty'.[294] Moreover, core socioeconomic rights are referred to as 'subsistence rights' that serve to underpin access to nutrition, shelter and healthcare.[295] Others refer to socioeconomic rights as rights to well-being or welfare rights to distinguish them from freedom rights.[296] From the foregoing descriptions, economic rights incorporate social rights that further justify the use of the unified term socioeconomic rights.

On the other hand, Wiktor Osiatynski describes socioeconomic rights as entitlement-rights that involve claims for specific goods or services in contrast to claims for protection.[297] For this reason, socioeconomic rights are considered 'positive' rights that require the provision not only of goods or services, but also opportunities.[298] As positive rights, socioeconomic rights also involve the duty of 'active involvement and commitment'.[299] Because they entail considerable costs and resources, socioeconomic rights are argued to be realisable only through the state.[300] Notionally, socioeconomic rights are distinguished from civil and political rights, which only require the forbearance from others, that is, such rights are 'negative' rights that simply obligate others not to interfere.[301] Also, socioeconomic rights are known as 'second-generation rights' to apparently set them apart from civil liberties and political rights, which are labelled as 'first-generation rights'.[302] Such a differentiation coupled with the historical division of human rights into two such categories is where the controversy about the nature and place of socioeconomic rights continue to roil the human rights firmament.

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[292] Shareen Hertel and Lanse Minkler, 'Economic Rights: The Terrain' in Shareen Hertel and Lanse Minkler (eds), *Economic Rights: Conceptual, Measurement, and Policy Issues* (2007) 1-2.
[293] Ibid 3-4.
[294] Spagnoli, above n 119, 48.
[295] Daniel Chong, 'Economic Rights and Extreme Poverty: Moving toward Subsistence' in Clifford Bob (ed) *The International Struggle for New Human Rights* (2009) 110-1.
[296] Rodney Peffer, 'A Defense of Rights to Well-Being' (1978) 8 *Philosophy & Public Affairs* 65, 65.
[297] Osiatynski, above n 109, 109-10.
[298] Donnelly, above n 101, 54-5.
[299] Filip Spagnoli, above n 119, 49.
[300] Osiatynski, above n 109, 114.
[301] Donnelly, above n 101, 54-5.
[302] Wiktor Osiatynski, 'Needs-based Approach to Social and Economic Rights' in Shareen Hertel and Lanse Minkler (eds), *Economic Rights: Conceptual, Measurement, and Policy Issues* (2007) 56.

Accordingly, this Chapter examines the justification, content and implications of socioeconomic rights, including their status as human rights. With the international perspective on universal access to modern energy services in mind, the Chapter next explores its locus within the realm of such rights, particularly under the UDHR, the ICESCR, the right to development and other relevant international human rights instruments. This paves the way to establish the nexus between the international human rights regime and the UN Secretary-General's Vision Statement to achieve universal access to modern energy services by 2030. By explaining this link, the nature, opportunities and limitations of the human rights in relation to the global call for universal access to modern energy services can be further explored. Also, universal access to modern energy services is analogised to the right to water as a model 'for advancing the legitimate place of energy within the human rights framework'.[303]

II. SOCIOECONOMIC RIGHTS AS HUMAN RIGHTS

A. *Critique of Socioeconomic Rights*

Maurice Cranston depicts socioeconomic rights as an anomaly in the human rights equation that only invites philosophical and political objections.[304] For Cranston, socioeconomic rights 'are not universal human rights at all'.[305] The main objection rests on the argument that socioeconomic rights are incapable of being readily translated into positive rights and secured by legislation, which unlike the case of civil and political rights merely require non-interference from others.[306] The postulation that 'amenities' like social security and holidays with pay are universal human rights claims only serves 'to push the political and civil rights out of the realm of the morally compelling into the twilight world of utopian aspirations'.[307] Along this vein, socioeconomic rights allegedly fail the test of practicability because, as Cranston writes: 'If it is impossible for a thing to be done, it is absurd to claim it as a right'.[308] This is especially relevant to developing countries that operate under limited means to be able effectively to fulfil socioeconomic rights.[309] Considering that 'ought implies

[303] Bradbrook, Gardam and Cormier, above n 63, 544.
[304] Maurice Cranston, *What are Human Rights?* (1973) 65.
[305] Ibid 66.
[306] Ibid.
[307] Maurice Cranston, 'Are There Any Human Rights? (1983) 112 *Daedalus Human Rights* 1, 2.
[308] Ibid 13.
[309] Ibid.

can',[310] it cannot be claimed that socioeconomic rights are universal for being dependent on a government's economic circumstances.[311] Thus, serious concerns are raised about the state's capacity directly to provide the goods and services required to satisfy the full range of socioeconomic rights.[312]

Another scholar describes the enforcement of socioeconomic rights as 'a utopian chimera'.[313] The argument that rights have to be enforceable necessitates that the duty bearers must be identifiable and any violation thereof must be capable of redress.[314] For this reason, socioeconomic rights are viewed to be unenforceable or, to be more precise, not justiciable. Although civil and political rights are designed to be immediately capable of judicial consideration and enforcement, socioeconomic rights are taken less as individual entitlements but more as 'solemn statements of important public policy goals' that can be realised progressively.[315] In effect, the remedy of bringing the government to a court of justice for not providing the necessary good and services, even the basic ones to its citizens for lack of resources, is apparently incomprehensible from a liberal rights perspective.[316] This reflects the ideological resistance to socioeconomic rights, because they 'do not constitute a neutral set of beliefs'.[317] Also, there are apprehensions that socioeconomic rights 'would destroy people's incentives and reward sloth'.[318] Moreover, any notions of resource, wealth or material distribution will violate the property rights or economic entitlement of others because, as Robert Nozick contends:

> The major objection to speaking of everyone's having a right to various things such as equality of opportunity, life, and so on, and enforcing this right, is that these "rights" require a substructure of things and materials and actions; and other people may have rights and entitlements over these.[319]

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[310] Robert Stern, '"Ought" Imply "Can"? And Did Kant Think It Does?' (2004) 16 *Utilitas* 42, 53: The expression 'ought implies can' is a principle usually attributed to Immanuel Kant; John Kekes, 'Ought Implies Can and Two Kinds of Morality' (1984) 34*The Philosophical Quarterly* 459, 459: The principle is interpreted as follows: 'a person is morally obliged to do something only if it is in his power to do it or not to do it. If someone is so obliged, then it is appropriate to approve of his doing it and disapprove of his not doing it'.
[311] Hertel and Minkler, above n 292, 10.
[312] Osiatynski, above n 109, 112.
[313] Adamantia Pollis, 'Human Rights and Globalization' (2004) 3 *Journal of Human Rights* 434, 445.
[314] Filip Spagnoli, above n 119, 48.
[315] Jack Donnelly, 'The West and Economic Rights' in Shareen Hertel and Lanse Minkler (eds), *Economic Rights: Conceptual, Measurement, and Policy Issues* (2007) 42.
[316] Filip Spagnoli, above n 119, 48-9.
[317] Philip Alston, 'Making Economic and Social Rights Count: A Strategy for the Future' (1997) 68 *The Political Quarterly* 188, 190.
[318] Cass Sunstein, 'Economic Security: A Human Right Reclaiming Franklin Delano Roosevelt's Second Bill of Rights' (2004) 15 *The American Prospect* A24, A26.
[319] Robert Nozick, *Anarchy, State and Utopia* (1974) 238.

Consequently, it seems that socioeconomic rights as human rights tread on shaky philosophical and political grounds.

B. *Responses to Critiques*

For some, the criticisms hurled against the status of socioeconomic rights as human rights are not only misleading,[320] but also exaggerated.[321] And the responses to such criticisms are equally, if not more, compelling. First, all human rights can be respected, protected and fulfilled through both positive action and forbearance.[322] For example, the freedom of speech does not only require the negative obligation not to interfere but also the positive act of ensuring that recourse to judicial enforcement is available for its protection.[323] This view is reaffirmed by the Office of the High Commissioner on Human Rights stating that like civil and political rights, socioeconomic rights 'aim to protect human dignity by establishing both negative and positive obligations for States'.[324]

Second, all human rights entail costs and resources.[325] Fully functioning state institutions from the judiciary to the police involve considerable expense to create the enabling environment and put in place the necessary mechanism for the protection of such a freedom. Readily, it can be seen that the protection of the freedom of speech involves positive action and costs money much in the same way as socioeconomic rights.[326] Also, the fear about individuals having an unhealthy sense of entitlement to minimal socioeconomic guarantees is misplaced as such guarantees are provided only as a matter of justice[327] due to lack of opportunity available to them without their fault.[328] Effectively, the alleged distinction between civil and political rights and socioeconomic rights on the basis of practicability or cost is unavailing.[329] Otherwise, it will be absurd to assert that one category of rights must be

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[320] Osiatynski, above n 109, 114.
[321] Spagnoli, above n 119, 49.
[322] Ibid 50.
[323] Osiatynski, above n 109, 115.
[324] Office of the High Commissioner on Human Rights, *Transitional Justice and Economic, Social and Cultural Rights* (2014) 7.
[325] Hertel and Minkler, above n 292, 10.
[326] Osiatynski, above n 109, 115.
[327] John Rawls, *A Theory of Justice* (1971) 6; 61. It is argued in the Rawlsian tradition that a conception of justice involving the distribution of benefits and burdens would be preferred if its 'consequences are more desirable'. As John Rawls explains, however, the 'distribution of wealth and income…must be consistent with both liberties of equal citizenship and equality of opportunity'.
[328] Sunstein, above n 317, A26: Minimal socioeconomic guarantees refer to the creation of 'a floor below which human lives are not permitted to fall'.
[329] Hertel and Minkler, above n 292, 10.

abandoned for being impractical to implement.[330] Instead, all human rights must be given 'equal attention and urgent consideration' without distinction. [331]

Third, it is contended that justiciability, that is, the availability of judicial remedy, does not define the human rights regime in its entirety.[332] As Donnelly elucidates, there is too much preoccupation with justiciability, which to a large extent 'does not exhaust the essential function of rights, and justiciable rights are not the only kind of rights'.[333] Additionally, the various rights can be enforced through different mechanisms other than the judicial kind.[334] As Waldron observes, '[i]t is far from clear that a courtroom is the right place for such claims to be resolved'.[335] In the case of socioeconomic rights, public pressure in the form of naming and shaming are likely more effective and appropriate than resort to the courts.[336]

Fourth, the perception that socioeconomic rights have less standing than civil and political rights in the UN system from a justiciability standpoint is substantially diminished when the UN General Assembly adopted by consensus the Optional Protocol to the ICESCR on 10 December 2008.[337] Notably, it allows individuals or groups of individuals as victims to submit communications or complaints to the Committee on Economic, Social and Cultural Rights (CESCR) if their socioeconomic rights are violated.[338] Although a system is in place to monitor country performance, the CESCR still lacks enforcement power in case the states are violating their obligations under the ICESCR.[339] Relevantly, the 1997 Maastricht Guidelines on Violations of Economic, Social and Cultural Rights clarified that it is possible to impute violations to the state in the domestic context.[340] As such, the state is required to

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[330] Waldron, above n 291, 773-4.
[331] 'Limburg Principles on the Implementation of the International Covenant on Economic, Social and Political Rights' in Scott Leckie and Anne Gallagher (eds), *Economic, Social, and Cultural Rights: A Legal Resource Guide* (2006) para 3.
[332] Donnelly, above n 315, 46.
[333] Ibid.
[334] Osiatynski, above n 109, 117.
[335] Waldron, above n 315, 805.
[336] Amartya Sen, 'Human Rights and Development' in Stephen Marks and Bard Andreassen (eds), *Development as a Human Right: Legal, Political and Economic Dimensions* (2010) 8.
[337] Osiatynski, above n 109, 120.
[338] *Optional Protocol to the International Convention on Economic, Social and Cultural Rights*, opened for signature on 24 September 2009, DOC.A/63/435; C.N. 869.2009.TREATIES-34 (entered into force 5 May 2013)
[339] Frances Stewart and Michael Wang, 'Poverty Reduction Papers within the Human Rights Perspective' in Philip Alston and Mary Robinson (eds), *Human Rights and Development: Towards Mutual Reinforcement* (2005) 449.
[340] '1997 Maastricht Guidelines on Violations of Economic, Social and Cultural Rights' in Scott Leckie and Anne Gallagher (eds), *Economic, Social, and Cultural Rights: A Legal Resource Guide* (2006) 469 pt III 16.

establish remedial mechanisms that include monitoring investigation, prosecution, and remedies for victims,[341] which are not necessarily within the province of justiciability.

Lastly, Henry Shue debunks the fiction that socioeconomic rights are separable and distinct from civil and political rights. Shue's basket of basic rights composed of liberty, security and subsistence rights indicates the coherence and interdependence of such rights regardless of category.[342] As Shue explains, subsistence or socioeconomic rights are basic to the enjoyment of other rights and its absence is as fatal as the omission of security and liberty rights in the human rights formulation.[343] Chapter 4 further elaborates this point.

III. THE LOCUS OF UNIVERSAL ACCESS TO MODERN ENERGY SERVICES IN THE INTERNATIONAL HUMAN RIGHTS REALM

A. *UDHR, ICESCR and Other Regional Legal Instruments*

The first point of reference in locating universal access to modern energy services in the human rights discourse is initially to canvass the various socioeconomic rights under the UDHR.[344] Of particular interest is the right to an adequate standard of living where the issue of access to electricity is deemed generally to fall.[345] Specifically, Article 25(1) of the UDHR provides that:

> Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services.[346]

The above provision is essentially replicated in the ICESCR under which universal access to electricity can be subsumed.[347] More specifically, access to modern energy services has been elucidated as being derived from the ICESCR's right to adequate housing as a

[341] Ibid.
[342] Hertel and Minkler, above n 292, 10.
[343] Henry Shue, *Basic Rights: Subsistence, Affluence, and U.S. Foreign Policy* (1980) 24.
[344] Bradbrook and Gardam, above n 29, 412: Bradbrook and Gardam elucidate that the socioeconomic rights regime is 'where any right to access to modern energy services would be located'.
[345] Tully, above n 71, 538: Tully points out that the Committee on Economic, Social and Cultural Rights considers electricity as part of the right to adequate housing, which in turn, is subsumed under the right to adequate standard of living.
[346] *UDHR* art 25 (1).
[347] UN Committee on Economic, Social and Cultural Rights, *General Comment No. 4 on the Right to Adequate Housing (Article 11 (1) of the Covenant)* (1991).

component of the right to an adequate standard of living.[348] Article 11.1 of the ICESCR, in particular, provides that:

> The States Parties to the present Covenant recognize the *right of everyone to an adequate standard of living* for himself and his family, *including adequate* food, clothing and *housing and to the continuous improvement of living conditions*. The States Parties will take appropriate steps to ensure the realization of this right, recognizing to this effect the essential importance of international cooperation based on free consent.[349]

These socioeconomic rights provisions are also iterated or broadly resonate in other regional legal instruments such as the ASEAN Declaration on Human Rights,[350] the African Charter on Human and People's Rights,[351] and the Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights,[352] among others.

B. *Right to Adequate Standard of Living*

David Copp explicates that the right to an adequate standard of living is essentially a right against the state and not against individuals.[353] This proposition puts accountability directly on the shoulders of the government towards the realisation of this right, including the right to adequate housing.[354] Also, Copp argues that the right to an adequate standard of living is conditional on favourable circumstances because it is acknowledged that this right demands considerable expenditure of resources.[355] However, it must be shown that every possible effort has been exerted within available sources[356] to respect, protect and fulfil this right.[357] Moreover, it is explained that this right involves 'the right to be *enabled* to meet one's basic needs',[358] that is, those needs that are 'essential either for maintaining the capability of pursuing one's values or for ensuring that one develop one's own and continues to have that

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[348] United Nations Human Rights Office of the High Commissioner, *Women and the Right to Adequate Housing* (2012) 11.
[349] Italics added; *ICESCR* art 11.1
[350] *ASEAN Declaration on Human Rights*, art 28 <http://www.asean.org/news/asean-statement-communiques/item/asean-human-rights-declaration?category_id=26>
[351] *African Charter on Human and People's Rights*, art 16 <http://www.achpr.org/instruments/achpr/#ch1.1>
[352] *Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights*, art 11 <http://www.oas.org/juridico/english/treaties/a-52.html>
[353] David Copp, 'The Right to an Adequate Standard of Living: Justice, Autonomy, and the Basic Needs' (1992) 9 *Social Philosophy & Policy* 231, 233.
[354] Office of the United Nations High Commissioner for Human Rights and UN Habitat, 'The Right to Adequate Housing', *Fact Sheet No. 21/Rev.1*, 37.
[355] Copp, above n 353, 236-7.
[356] Office of the United Nations High Commissioner for Human Rights and UN Habitat, above n 353, 30: Available resources refer to those existing within a State as well as those available from the international community through international cooperation and assistance'.
[357] Ibid.
[358] Copp, above n 353, 252.

capacity to develop and evaluate them'.[359] Although the right is against the state, all individuals have the duty to extend assistance and contribute to programs that enable the state to fulfil its duty in meeting basic needs.[360]

Although human dignity is not explicitly stated as a criterion, the implication of drawing socioeconomic rights from the inherent dignity of the human person as embodied in the Preamble of the ICESCR allows the interpretation of existing rights therein such as the right to adequate housing to apply to new situations or to give rise to new conception of rights.[361] As Henry Steiner and Philip Alston emphasise, rights 'are not static'; '[t]hey evolve.'[362] To amplify, degrading living conditions and deprivation of basic needs are deemed incompatible with the idea of the inherent dignity or worth of human beings.[363] Consequently, lack of access to modern energy services is antithetical to the concept of human dignity for fostering poverty and hampering access to other basic individual needs.

Relatedly, it has been posited that the focus on the possession of vital goods and services is a plausible method of assessing those with adequate or inadequate standard of living,[364] albeit not enough.[365] Along this line, Amartya Sen suggests a capability approach considering 'that the standard of living is really a matter of functionings and capabilities, and not a matter directly of opulence, commodities, or utilities'.[366] This means focusing 'on what life we lead and what we can or cannot do, or can or cannot be'.[367] Also, such an approach requires looking into other dimensions of human development other than income, wealth or GNP growth such as life expectancy, literacy, and command over the resources to enjoy a decent standard of living as embodied in the United Nations Development Programme's human development index.[368] As Sen asserts, this 'capability set represents the freedom to

[359] Ibid 254.
[360] Ibid 260.
[361] Schachter, above n 139, 853.
[362] Henry Steiner and Philip Alston, *International Human Rights in Context* (2000) 181.
[363] Schachter, above n 139, 852.
[364] L W Sumner, 'Utility and Capability' (2006) 18 *Utilitas* 1, 19: Sumner points out that social and economic development policy requires 'concrete goals and indices or benchmarks of success'.
[365] Amartya Sen, 'The Standard of Living', *The Tanner Lectures on Human Values* (1985) 21 <http://tannerlectures.utah.edu/_documents/a-to-z/s/sen86.pdf>
[366] Ibid 23.
[367] Ibid.
[368] Anand and Sen, above n 66, 2039; United Nations Development Programme, *Human Development Report 1990* (1990) 1.

achieve: the alternative functioning combinations [that are feasible for her to achieve] from which this person can choose'.[369]

C. Right to Adequate Housing

The CESCR explains that the concept of 'adequate housing' or 'adequacy' is imbued with certain normative aspects for the right to adequate housing to be satisfied in any given context. These include legal security of tenure, the availability of services, affordability, habitability, accessibility, location and cultural adequacy.

1. *Legal Security Tenure*

There are various types of tenure that include rental accommodation, cooperative housing, owner occupation and even informal settlements.[370] Pertinently, the UN Special Rapporteur on Adequate Housing observes that those without an officially recognised tenure status are the ones most often discriminated against in terms of access to basic services and facilities.[371] Regardless of the tenure arrangement, all persons should enjoy legal protection against forced eviction, harassment and other threats, including access to basic services and facilities.[372] For this purpose, the state needs to implement immediate measures in an equal and non-discriminatory manner to extend such protection to those who lack it.[373] Also, it should adopt 'measures to ensure that access to basic services and facilities, whether publicly or privately provided, is not dependent on tenure status, official registration of residence, or the presentation of title'.[374] Accordingly, the right to adequate housing contains obligations with immediate effects such as non-discrimination and non-interference with the enjoyment of such a right contrary to the notion that it is mainly a programmatic or progressive goal.[375]

2. *Sustainable Access to Natural and Common Resources*

It is also vital to the concept of adequate housing that beneficiaries have sustainable access to natural resources and common resources, safe drinking water, energy for cooking, heating and lighting, sanitation and washing facilities, means of food storage, refuse disposal, site

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[369] Amartya Sen, *Development as Freedom* (1999) 75.
[370] UN Committee on Economic, Social and Cultural Rights, above n 347.
[371] Raquel Rolnik, *Report of the Special Rapporteur on Adequate Housing as a Component of the Right to an Adequate Standard of Living, and on the Right to Non-Discrimination in this Context*, A/HRC/25/54 (30 December 2013) 17.
[372] UN Committee on Economic, Social and Cultural Rights, above n 347.
[373] Ibid.
[374] Rolnik, above 371, 17.
[375] Office of the United Nations High Commissioner for Human Rights and UN Habitat, above n 354, 7.

drainage and emergency services.[376] For this reason, the structure of the house itself will be inadequate unless there is sustainable and non-discriminatory access to basic services such as electricity.[377]

As a component of the right to adequate housing, access to modern energy services is clearly one of the conditions to the full enjoyment of such a right at the individual level.[378] Beyond this right, however, other human rights are also implicated.[379] It has obvious subsistence or socioeconomic rights undertone, for instance, with a basic needs, poverty eradication and development approach with particular concern for the developing world.[380] For David Smolin, energy falls within the ambit of 'basic human subsistence rights'.[381] Evidently, universal access to modern energy services has crosscutting human rights themes that demonstrate the interdependence, indivisibility and interrelatedness of all human rights regardless of category. However, it is vulnerable to the same criticisms levelled against socioeconomic rights insofar as practicability, justiciability and feasibility are concerned. Thus, placing universal access to modern energy services in the realm of socioeconomic rights invites the same set of controversies that continue to hound such rights in the human rights discourse.

3. *Affordability*

With regard to housing-related costs, affordability requires that these costs are generally commensurate with income levels in order that the meeting of other basic needs are not sacrificed.[382] If such costs compromise the enjoyment of other human rights, then housing is deemed inadequate.[383] The concept of 'affordability' extends to access to modern energy services, as this is a 'housing-related cost'[384] and a prerequisite for inclusive growth. In terms of universal access to modern energy services, 'affordable' is normatively interpreted to mean that 'the cost to end users is compatible with their income levels and no higher than the

[376] UN Committee on Economic, Social and Cultural Rights, above n 347.
[377] Office of the United Nations High Commissioner for Human Rights and UN Habitat, above n 354, 8.
[378] Ibid 3: Access to modern energy services is deemed 'as fundamental as the basic supply and availability of housing'.
[379] Ibid 9.
[380] For example, Resolution 215 explicitly refers to a deep concern to those without access to modern energy services in, and the need to take into consideration the specific needs of, developing countries.
[381] David Smolin, 'The Paradox of the Future in Contemporary Energy Policy: A Human Rights Analysis' (2009) 40 *Cumberland Law Review* 135, 142.
[382] UN Committee on Economic, Social and Cultural Rights, above n 347.
[383] Office of the United Nations High Commissioner for Human Rights and UN Habitat, above n 354, 4.
[384] UN Committee on Economic, Social and Cultural Rights, above n 347.

cost of traditional fuels, in other words what they would be able and willing to pay for the increased quality of energy supply'.[385] In instances where the cost of the minimum energy package exceeds such income levels by 10 to 20 percent, temporary subsidies may be necessary to attain affordability until the dividend of economic development kicks in in the long run.[386]

4. *Habitability*

Habitability demands that inhabitants must be provided with adequate space and protection from natural elements such as 'cold, damp, heat, rain, wind or other threats to health, structural hazards, and disease vectors'.[387] Notably, the CESCR expounds that 'inadequate and deficient housing and living conditions are associated with higher mortality and morbidity rates'.[388] Furthermore, adequate housing demands that the location must allow 'access to employment options, health-care services, schools, child-care centres and other social facilities'.[389] It also means that housing should not be located in polluted sites or in immediate proximity to pollution sources that pose a threat to the inhabitants' right to health.[390] Additionally, adequate housing demands accessibility to those entitled to it giving priority to the disadvantaged groups such as the elderly, children, the physically disabled, the terminally ill, HIV-positive individuals, persons with persistent medical problems, the mentally ill, victims of natural disasters, people living in disaster-prone areas and other groups. This is consistent with the substantiation of the right of all to a secure place to live in peace and dignity.[391] Lastly, cultural adequacy needs to be considered in terms of the way housing is constructed and the building materials used with policies that are conducive to the expression of cultural identity and diversity of housing.[392]

[385] The Secretary-General's Advisory Group on Energy and Climate Change, above n 39, 13.
[386] Ibid.
[387] UN Committee on Economic, Social and Cultural Rights, above n 347.
[388] Ibid.
[389] Ibid.
[390] Ibid.
[391] Ibid.
[392] Ibid.

IV. RIGHTS OF WOMEN, CHILDREN, AND INDIGENOUS PEOPLES

The rights to adequate standard of living and housing are echoed in other related human rights instruments especially with regard to the vulnerable groups or members of society. Specifically, Article 14 of Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) provides for governments to 'take all appropriate measures to eliminate discrimination against women in rural development' and for them 'to enjoy adequate living conditions, particularly in relation to housing, sanitation, electricity and water supply, transport and communications'.[393] Sheila Oparaocha and Soma Dutta highlight the gender dimension of lack of access to modern energy services as a burden that 'falls disproportionately on women,' including their children, with many of them 'working longer work days than men in providing human energy for survival activities.[394] Margaret Skutsch explains that this difference arises from 'the differentiated roles that men and women play in society and within the household'.[395] From the foregoing, the importance of access to modern energy services especially to women and children is emphasised at the outset in Chapter 1. As such, it is critical that strategies and interventions on access to modern energy services are responsive to gender issues and promote gender equality.[396]

Also, Article 24 of the Convention on the Rights of the Child recognises 'the right of the child to the enjoyment of the highest attainable standard of health and to facilities' and ensures that 'no child is deprived of his or her right to such healthcare services'.[397] Moreover, Article 21 of the UN Declaration on the Rights of Indigenous Peoples proclaims that indigenous peoples 'have the right, without discrimination, to the improvement of their economic and social conditions, including, inter alia, in the areas of education, employment, vocational training and retraining, housing, sanitation, health and social security',[398] albeit non-binding in nature. Again, access to modern energy services is indispensable for the fulfilment of the rights contained or recognised in the aforementioned human rights legal

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[393] *Convention on the Elimination of All Forms of Discrimination against Women,* opened for signature 1 March 1980, 1249 UNTS 13 (entered into force 3 September 1981) art 14 (2) (h).
[394] Sheila Oparaocha and Soma Dutta, 'Gender and Energy for Sustainable Development' (2011) 3 *Current Opinion in Environmental Sustainability* 265, 265-6.
[395] Margaret Skutsch, 'Gender Analysis for Energy Projects and Programmes' (2005) IX *Energy for Sustainable Development* 37, 37.
[396] Oparaocha and Dutta, above n 292, 269.
[397] *Convention on the Rights of the Child*, 1577 UNTS 3 (entered into force 2 September 1990).
[398] *United Nations Declaration on the Rights of Indigenous Peoples*, GA Res 61/295, 107th plen mtg (4 December 1986).

instruments in a manner described in Chapters 1 and 3, including the benefits of rural electrification that will be discussed in Chapter 6.

V. RIGHT TO DEVELOPMENT

A. *The Meaning of 'Development'*

Reference to the word 'development' has been plentiful in the earlier discussions about universal access to modern energy services. Initially, development is interchangeably used with the terms 'economic development' and 'growth'.[399] However, this narrows the concept of development into merely a matter of expanding the economic pie with too much emphasis on the material aspects of growth.[400] This is consistent with the observation that development remains largely predicated on the limitless model of economic expansion and material progress, which is unsustainable in the long run,[401] especially with the spectre of global climate change looming large in the horizon.[402] Instead, development must be taken in its broader sense to embrace the enabling conditions required towards the full realisation 'of the individual in every aspect of his/her being'.[403] For this reason, the concept of development 'requires the satisfaction of both material and non-material basic needs,'[404] albeit within 'natural and ethical limits,'[405] as Balakrishnan Rajagopal propounds. Additionally, it is observed that present development thinking leans more towards a human development model – one that involves 'a process of enhancing human capabilities,'[406] which Sen is championing. As pointed out earlier, the UN issues an annual Human Development Report using a human development index as measure of progress,[407] although it is not shown how

[399] Report of the Secretary-General, 'The Emergence of the Right to Development' in The Office of the United Nations High Commissioner for Human Rights, *Realizing the Right to Development* (2013) 7.
[400] Ibid 8.
[401] Balakrishnan Rajagopal, 'Right to Development and Global Governance: Old and New Challenges Twenty-Five Years On' (2013) 35 *Human Rights Quarterly* 893, 908.
[402] Donald Zillman, Catherine Redgwell, Yinka Omorogbe, Lilia Barrera-Hernandez and Barry Barton, 'Introduction' in Donald Zillman, Catherine Redgwell, Yinka Omorogbe, Lilia Barrera-Hernandez and Barry Barton (eds), *Beyond the Carbon Economy: Energy Law in Transition* (2008) 6.
[403] Report of the Secretary-General, above n 399, 8.
[404] Ibid.
[405] Rajagopal, above n 401, 908.
[406] Bard Andreassen and Stephen Marks, 'Introduction' in Stephen Marks and Bard Andreassen (eds), *Development as a Human Right: Legal, Political and Economic Dimensions* (2010) xxiii.
[407] United Nations Development Programme, above n 87, 1; 168: The United Nations Development programme defines 'human development' as 'the expansion of people's freedoms and capabilities to lead lives that they value and have reason to value'. For this reason, the Human Development Index measures achievement in three basic dimensions of human development: 'a long and healthy life, access to knowledge and a decent standard of living'.

the various indicators contribute to the fulfilment of human rights.[408] As such, Bard Andreassen and Stephen Marks observe that there is a noticeable shift in development indicators from a basic needs approach 'in the commodity space to... the space of human capabilities and functionings,'[409] because '[f]reedoms and capabilities are a more expansive notion than basic needs'.[410]

The ubiquity of the term 'development' in the universal access to modern energy services literature prompts this Chapter to explore its link to the right to development as a human right and locating such global initiative within its realm. This is the central theme of this part of the Chapter.

B. *Emergence of the Right to Development*

It will be recalled that the efforts to revert to the organic unity of the human rights regime have been the contemporary focus since its historical division into civil and political rights on one hand and socioeconomic rights on the other.[411] Along this line, the right to development, which Senegalese jurist, Keba M'baye first articulated in 1972,[412] is seen to be the culmination of such efforts to get the world back 'to the mainstream of the human rights movement from which it was deflected for several decades by Cold War international politics'.[413] Through such a right, the indivisibility, interdependency and interrelatedness of civil and political rights with socioeconomic rights are reaffirmed.[414] In other words, the right to development organically unifies civil and political rights with socioeconomic rights as originally intended in order to demonstrate post-World War II solidarity.[415] However, it is not free from controversies since the concept of the human right to development emerged against the backdrop of the developing countries' fight against the perpetuation of colonialism by their economically advanced counterparts.[416]

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[408] Arjun Sengupta, 'On the Theory and Practice of the Right to Development' (2002) 24 *Human Rights Quarterly* 837, 852.
[409] Andreassen and Marks, above n 406, xxx.
[410] United Nations Development Programme, above n 87, 1.
[411] Whelan, above n 122, 9.
[412] Omorogbe, above n 1, 365.
[413] Sengupta, above n 408, 841.
[414] Ibid 840.
[415] Ibid 841.
[416] David Beetham, 'The Right to Development and Its Corresponding Obligations' in Stephen Marks and Bard Andreassen (eds), *Development as a Human Right: Legal, Political and Economic Dimensions* (2010) 102.

The 1968 Proclamation of Teheran initially noted the growing disparity between economically developed and developing countries that impeded the full realisation of human rights in the international community and then asserted that it is 'imperative for every nation, according to its capacities, to make the maximum possible effort to close this gap'. [417] This was followed by the 1969 Declaration on Social Progress and Development, which acknowledged that everyone has the 'right to live in dignity and freedom and to enjoy the fruits of social progress and should, on their part, contribute to it'. [418] Also, it explicitly stated that the aims of social progress and development include the 'elimination of poverty; the assurance of a steady improvement in levels of living'; [419] and the provision of adequate housing for all. [420] After a decade, in 1979, the Commission on Human Rights recognised the right to development as a human right and had resolved to consider and adopt such a right since 1985 until the Human Rights Council replaced it in 2006. [421] In 1986, the UN General Assembly adopted the Declaration on the Right to Development expressly stating that:

> The right to development is an inalienable human right by virtue of which every human person and all peoples are entitled to participate in, contribute to, and enjoy economic, social, cultural and political development, in which all human rights and fundamental freedoms can be fully realized. [422]

Also, it defined the term 'development' as referring to:

> [A] comprehensive economic, social, cultural and political process, which aims at the constant improvement of the well-being of the entire population and of all individuals on the basis of their active, free and meaningful participation in development and in the fair distribution of benefits resulting therefrom. [423]

From the foregoing definition, the right to development has two parts: the right to a process of development (or the obligations of conduct) and the right to certain outcomes of development (or the obligations of result). [424] The conduct aspect of the right to development requires that the process of development provide an equal opportunity for all that is

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[417] *Proclamation of Teheran* para 12.
[418] *United Nations Declaration on Social Progress and Development*, GA Res 12530 (XXIV) (11 December 1969) art 1.
[419] Ibid art 10 (c).
[420] Ibid art 10 (f).
[421] See 'Landmarks in the Recognition of Development as a Human Right' <http://www.ohchr.org/EN/Issues/Development/Pages/Landmarksintherecognitiondevelopmentasahumanright.aspx>
[422] *United Nations Declaration on the Right to Development*, GA Res 41/128, 97th plen mtg (4 December 1986) ('*UN Declaration on the Right to Development*') art 1.
[423] Ibid Preamble.
[424] Andreassen and Marks, above n 406, xxxvi.

predicated on the concept of equity and justice.[425] This means that the conduct needs to be participatory and the distribution of benefits is fair and equitable.[426] On the other hand, the results aspect is directed towards the realisation of all human rights and fundamental freedoms, that is, 'the outcomes of the process are human rights'.[427] As such, the right to development involves a particular process to improve well-being and to expand freedoms as a human right.[428]

Notably, the Declaration on the Right to Development emphasised, similar to the right to an adequate standard of living and the right to adequate housing, that states are primarily obligated to create the enabling conditions at the national and international level to realise the right to development.[429] These include providing 'equality of opportunity for all in their access to basic resources, education, health services, food, housing, employment and the fair distribution of income'.[430] Again, there is an emphasis on access to basic resources and housing, which in contemporary terms squarely include access to energy for cooking, heating, and lighting.[431] However, it is observed to be a right that 'resonates more in the interaction between states than within states'.[432] If the realisation of socioeconomic rights is challenging enough within states, then development as a form of entitlement against other states adds another dimension to such a challenge.[433]

In 1993, the Vienna Declaration reaffirmed that 'the right to development, as established in the Declaration on the Right to Development, as a universal and inalienable right and an integral part of fundamental human rights'.[434] One of the recent iterations of the right to development is found in the 2012 Rio + 20 outcome document entitled 'The Future We Want', which reaffirmed the respect for all human rights, including the right to development and the right to an adequate standard of living.[435] Thus, the status of the right to

[425] Sengupta, above n 408, 848.
[426] Arjun Sengupta, 'The Human Right to Development' in Stephen Marks and Bard Andreassen (eds), *Development as a Human Right: Legal, Political and Economic Dimensions* (2010) 16.
[427] Ibid.
[428] Bonny Ibhawoh, 'The Right to Development: The Politics and Polemics of Power' (2011) 33 *Human Rights Quarterly* 76, 84.
[429] *UN Declaration on the Right to Development* art 3 (1).
[430] Ibid art 8.
[431] Office of the United Nations High Commissioner for Human Rights and UN Habitat, 'The Right to Adequate Housing', *Fact Sheet No. 21/Rev. 1*, 8.
[432] Ibhawoh, above n 428, 89.
[433] Ibid 85-6.
[434] *Vienna Declaration* para 10.
[435] United Nations Conference on Sustainable Development, above n 49, para 8, 2.

development as a human right is already, in the words of Arjun Sengupta, 'an undeniable fact'.[436]

C. *Arguments against and for the Right to Development*

Because the right to development is inextricably linked to socioeconomic rights, many of the criticisms levelled against the latter are mirror images of those raised against the right to development.[437] To amplify, the right to development is likewise perceived to be as impractical, non-justiciable, and infeasible as socioeconomic rights.[438] The counterarguments in favour of socioeconomic rights have been discussed earlier and will not be repeated here. Having said that, however, there are specific criticisms levelled against the right to development that merit further elaboration. One such critique is that the right to development is designed to protect the collective right of a state and of peoples as opposed to the human rights of the individual.[439] As the argument goes, all the rights under the International Bill of Rights are individual rights and any proposition of collective rights will require the reformulation of the conceptual orthodoxy of human rights.[440] Such a scepticism about the right to development as a people's right is equated with the Third World's historical struggle against colonialism, which is translated as a claim against the First World apparently to counteract its perpetuation of the post-colonial economic imbalance.[441] As adverted to earlier in the Chapter, the right to development is viewed as part of TWAIL to ensure that the third world has an adequate role and voice in the international development arena.[442] Again, the North-South debate comes into the picture that only serves to detract the focus on the relationship between human rights and development.[443]

Pertinently, David Beetham observes that the postulation on the incompatibility between the collective right to development and the human rights of the individual has already 'been firmly rejected'.[444] Beetham argues that the right to development is imbued with both a collective and individual aspects the pursuit of which not only serves to enhance the realisation of all human rights for a country's people in general, but also specifically

[436] Arjun Sengupta, above n 408, 842.
[437] Andreassen and Marks, above n 406, xxxiv.
[438] Sengupta, above n 408, 858-61.
[439] Ibid 863-4.
[440] Donnelly, above n 101, 42-4.
[441] Beetham, above n 416, 102.
[442] Opeoluwa Badaru, 'Examining the Utility of Third World Approaches to International Law for International Human Rights Law' (2008) 10 *International Community Law Review* 379, 380.
[443] Ibhawoh, above n 428, 77.
[444] Beetham, above n 416, 102.

geared towards the right of individuals to be able equitably to share in the opportunities, resources, and benefits flowing from development.[445] This resonates with the view that the right to development is 'a synthesis of existing individual and collective rights',[446] and thus, the prevailing preference for a synthesis approach to the right of development that integrates the realisation of socioeconomic rights with civil and political rights as a holistic and undivided vision.[447] In such a sense, universal access to modern energy services with its constant reference to basic human needs, poverty eradication, and development finds close affinity with the right to development in terms of realising both collective and individual rights.

Another misgiving about the right to development relates to its legitimacy, ambiguity and the resulting difficulty in its implementation.[448] Because of these, it is noted that the high expectations emanating from the Declaration of the Right to Development in 1986 with respect to its practical contribution to advancing the link between the human rights and development agenda has remained elusive a quarter of a century thereafter.[449] Apparently, global institutions such as the UN and their corresponding processes became mired in interminable discussions and debates about the meaning and implications of the right to development without producing practical results, albeit the practice on the ground offers more optimism.[450] As a result, coming up with a binding treaty or enforcement mechanism on the right to development has remained bleak.[451]

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[445] Ibid 103-4: However, Beetham cautions the 'inflationary tendencies' to extend the concept of the right to development to non-economic considerations such as personal development as a human right.
[446] Isabella Bunn, *The Right to Development and International Economic Law: Legal and Moral Dimensions* (2012) 82 citing T Van Boeven: Bunn quotes the explanation of the head of the UN Division of Human Rights that '[t]he right to development is a holistic concept which seeks to create a synthesis of a whole range of existing human rights.'
[447] Ibid 83.
[448] Ibhawoh, above n 428, 77.
[449] Philip Alston, 'Ships Passing in the Night: The Current State of the Human Rights and Development Debate Seen Through the Lens of the Millennium Development Goals' (2005) 27 *Human Rights Quarterly* 755, 798.
[450] Ibid 798-9.
[451] Ibhawoh, above n 428, 102; Karel de Vey Mestdagh, 'The Right to Development' (1981) 28 *Netherlands International Law Review* 30, 40: It is considered a general principle of law and 'becomes part of the foundations of international law'.

However, Bonny Ibhawoh offers the insight that the 'intangible outcomes of the discourse in terms of clarifying concepts, mobilizing opinions, challenging orthodoxies, and building consensus on key issues'[452] cannot be glossed over. Also, the right to development as a process has added value to the human rights equation,[453] particularly in establishing accountability within states and between states even if the obligation is arguably imperfect.[454] To the contrary, Ibrahim Salama points out that the critique on imperfect obligation is easily addressed by cross-referencing the obligations under the international human rights regime as constitutive elements of the right to development.[455] In effect, the political culpability of the state and the international community remains identifiable at the very least as such a right crystallises from an international norm into law.[456]

Unfortunately, the legitimising language of the right to development as a human right has not found its way in the drive for universal access to modern energy services. The right to development resonates well within such a global initiative. As Yinka Omorogbe asserts, access to modern energy services 'is now clearly identified as being essential for the realization of the right to development'.[457] However, such a right is putatively polarising and remains to be 'one of the most contested and contentious facets of the international human rights regime'.[458] There is an obvious preference to use the less controversial version of the language of development, but not the more obligatory language of the right to development. As a result, it gives rise again to a sense of disconnection between universal access to modern energy services and the human rights edifice.

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[452] Ibid 78.

[453] Asbjorn Eide, 'Human Rights-Based Development in the Age of Economic Globalization: Background and Prospects' in Stephen Marks and Bard Andreassen (eds), *Development as a Human Right: Legal, Political and Economic Dimensions* (2010) 312: Eide propounds that a human rights approach to development requires 'value change' and not mere 'value-added' to be able to conceptualise and prioritise development that focuses on both process and outcome.

[454] Martin Scheinin, 'Advocating the Right to Development through Complaint Procedures under Human Rights Treaties' in Stephen Marks and Bard Andreassen (eds), *Development as a Human Right: Legal, Political and Economic Dimensions* (2010) 340: Scheinin explains that imperfect obligations refer to 'moral obligations with no corresponding rights entitlements invocable by the beneficiary of the right'.

[455] Ibrahim Salama, 'The Right to Development at 25: Renewal and Achievement of Its Potential' in The Office of the United Nations High Commissioner for Human Rights, *Realizing the Right to Development* (2013) 486.

[456] Stephen Marks and Bard Andreassen, "Conclusion' in Stephen Marks and Bard Andreassen (eds), *Development as a Human Right: Legal, Political and Economic Dimensions* (2010) 385.

[457] Omorogbe, above n 1, 371.

[458] Ibhawoh, above n 428, 86.

VI. THE DERIVATIVE AND CENTRALITY APPROACHES: ANALOGISING THE RIGHT TO WATER

A. *The Derivative Approach*

In locating the place of universal access to modern energy services within the human rights realm, the thesis has so far relied on two analytical techniques: the derivative approach and the centrality argument. Essentially, the derivative approach springs from the interpretative methodology pursued by the CESCR in deriving the human right to water by way of inference from the International Bill of Human Rights (e.g. right to life and human dignity) and Article 11 (1) of the ICESCR, particularly the CESCR's reliance on the word 'including' in the Article, which 'indicates that this catalogue of rights was not intended to be exhaustive'.[459] This reliance on the derivative approach is not new. As Salman M. A. Salman points out, '[t]he process of implying rights is undertaken by relying on a well-established method of statutory interpretation in the realm of rights'.[460] Thus, as mentioned earlier in the Chapter, such an approach is a plausible justification in locating access to modern energy services in the human rights realm.[461]

B. *The Centrality Argument*

In the same vein, the centrality argument in locating universal access to modern energy services in the human rights sphere is also guided by the approach taken by the CESCR with respect to the human right to water. In General Comment No. 15 (2002), the CESCR notes that the 'human right to water is indispensable for leading a life in human dignity' and that such a right 'is a prerequisite for the realization of other human rights'.[462] It goes on to say that the 'right to water clearly falls within the category of guarantees essential for securing an adequate standard of living, particularly since it is one of the most fundamental conditions for survival'.[463] Again, Salman explains that the centrality argument can reinforce the concept of a human right to water 'because, without water, many of the rights contained in the core international human rights instruments would be meaningless'.[464] Similarly, the same argument holds for access to modern energy services and maybe more, as 'access to clean

[459] UN Committee on Economic, Social and Cultural Rights, *General Comment No. 15 on the Right to Water (Arts. 11 and 12 of the International Covenant on Economic, Social and Cultural Rights)* (2002) 2.
[460] Salman M. A. Salman, 'The Human Right to Water – Challenges of Implementation' (2012) 106 *Am. Soc'y Int'l L. Proc.* 44, 44.
[461] See Bradbrook, Gardam and Cormier, above n 63, 544.
[462] UN Committee on Economic, Social and Cultural Rights, above n 459, 2.
[463] Ibid.
[464] Salman, above n 460, 45.

water that underpins a range of human rights is itself dependent on access to modern energy services'.[465]

C. *The Normative Content of the Right to Water*

With regard to the normative content of the human right to water, the CESCR explains that such a right includes 'both freedoms and entitlements', that is, freedom from interference and equal opportunity for people to enjoy the right to water.[466] It adds that the normative elements of the human right to water must be 'adequate for human dignity, life and health', as provided in Articles 11 (1) and 12 of the ICESCR, and thus, water 'should be treated as a social and cultural good, and not primarily as an economic good'.[467] Moreover, the concept of adequacy extends to: a) availability, meaning water must be sufficient and continuous for personal and domestic use; b) quality, that is, water must be safe; and c) physical, economic and information accessibility to water without discrimination.[468] This is interpreted to mean equal and non-discriminatory access.[469] Further, the 'manner of the realization of the right to water must be sustainable, ensuring that the right can be realised by present and future generations'.[470] Finally, the Human Rights Council recognises that the human right to water:

> [E]ntitles everyone, without discrimination, to have access to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic use and to have physical and affordable access to sanitation, in all spheres of life, that is safe, hygienic, secure, socially and culturally acceptable and that provides privacy and ensures dignity.[471]

It will be noted that 'affordable' does not, by default, translate to 'free', albeit in certain circumstances justified to be so. As the Report of the United Nations High Commissioner for Human Rights on the scope and content of the relevant human rights obligations related to equitable access to safe drinking water and sanitation under international human rights instruments elucidates:

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[465] Bradbrook, Gardam and Cormier, above n 63, 545.
[466] UN Committee on Economic, Social and Cultural Rights, above n 459, 2.
[467] Ibid.
[468] Ibid 5-6.
[469] Human Rights Council, *Report of the United Nations High Commissioner for Human Rights on the Scope and Content of the Relevant Human Rights Obligations Related to Equitable Access to Safe Drinking Water and Sanitation under International Human Rights Instruments* (2007) 13.
[470] UN Committee on Economic, Social and Cultural Rights, above n 459, 5.
[471] UN Human Rights Council, *Resolution A/HRC/24/18 - The Human Right to Safe Drinking Water and Sanitation* (8 October 2013) 3 <http://daccess-dds-ny.un.org/doc/UNDOC/GEN/G13/179/24/PDF/G1317924.pdf?OpenElement>

> The human rights framework does not imply, therefore, a right to free water and sanitation but highlights the fact that nobody should be deprived of access because of inability to pay. It therefore contemplates the possibility that safe drinking water and water should be provided for free in certain circumstances but does not set this as a rule. Consequently, the affordability requirement is not incompatible with the principle of cost recovery for water and sanitation services, which is also recognized in several international declarations. However, it defines limits to cost recovery and highlights the fact that it should not become a barrier to access to safe drinking water and sanitation, notably by the poor.[472]

Inga Winkler adds that 'prices must be set in such a way that at least a minimum amount can be accessed without having to compromise the realisation of the core content of other human rights'.[473] Again, it is reasonable to analogise the above-described normative contents of the human right to water to that of universal access to modern energy services,[474] which in the latter's case, is expressed as clean, adequate, reliable and affordable.[475] Also, the normative elements of universal access to modern energy services can be inferred from the obligations of the state to progressively realise socioeconomic rights under the international human rights regime.[476] As Steiner and Alston suggest, 'one way of understanding an expansion of the content of a given right…is to examine the duties related to that right, and to inquire whether and how they have expanded'.[477] Therefore, this expansion is a function of time that is demonstrable according to the extent a given right is implemented as a matter of state obligation.

D. *Crystallising a Human Right to Access Modern Energy Services*

At this point, Tully's suggestion for the issuance of a General Comment from the CESCR to nationally and internationally crystallise a human right to access modern energy services appears to be in the right direction.[478] As Bradbrook and Gardam explain, a non-binding soft law instrument is easier to accept than an internationally binding one such as treaties.[479] However, Alston cautions that the authoritative role of the UN General Assembly to determine which claim is or can be an international human right 'is in serious danger of being

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[472] Human Rights Council, above n 469, 15.
[473] Inga Winkler, *The Human Right to Water: Significance, Legal Status and Implications for Water Allocation* (2012) 138.
[474] Ibid 43.
[475] The Secretary-General's Advisory Group on Energy and Climate Change, above n 39, 7; *Secretary General Report on the International Year for Sustainable Energy for All, 2012*, above n 52, 2.
[476] See Winkler, above n 473, 125-6.
[477] Steiner and Alston, above n 362, 181.
[478] Tully, above n 71, 547.
[479] Adrian Bradbrook and Judith Gardam, 'Energy and Poverty: A Proposal to Harness International Law to Advance Universal Access to Modern Energy Services' (2010) LVII *Netherlands International Law Review* 1, 11-2.

undermined,' if running to the CESCR is regularly taken.[480] Still, it is an initial approach that is available for subsequent elevation to the UN General Assembly level.

Unlike the human right to water, access to modern energy services does not have the benefit of extensive, explicit and prior recognition as a human right in other international legal instruments.[481] As can be gleaned from the evolution of the human right to water, it takes considerable time for such a right to evolve from being a component of pre-existing human rights to an independent or singular human right.[482] It will be noted that the UN is still re-affirming and elaborating the human right to water since its formal conceptualisation as a human right in General Comment 15 in 2002 and the UN General Assembly's resolution in 2010 formally declaring the right to safe and clean drinking water and sanitation as a human right.[483] Although there is no denying that a human right to water exists under international law, there are multiple challenges to its implementation from 'the absence of legislation from most countries'[484] to the apparent incompatibility of water as a commodity and as a right.[485]

While Erik Bluemel asserts that the establishment of an independent human right 'should provide greater clarity and consistency in interpretation',[486] the thesis has pragmatically chosen to proceed on the basis of what is extant, that is, access to modern energy services as an essential component of established human rights and as a time-bound universal goal that is sought to be achieved by 2030, without precluding its later recognition as an independent human right. However, this is more of a prediction than an existing reality, albeit lack of access to modern energy services is deeply imbued with a human rights dimension. Fittingly, Alston's reminder on the proliferation of new human rights at the expense of established human rights and the process of recognising such rights comes to mind:

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[480] Philip Alston, 'Conjuring Up New Human Rights: A Proposal for Quality Control' (1984) 78 *The American Journal of International Law* 607, 607.
[481] See Human Rights Council, above n 469, 5-8; Bradbrook and Gardam, above n 478, 10-1.
[482] The UN first declared access to safe drinking water as a human right in the Mar del Plata Action Plan of 1977. Human Rights Council, above n 469, 6.
[483] The latest is from the UN Human Rights Council Resolution A/HRC/24/18 (2013), which lists all the normative contents of the human right to water.
[484] Salman, above n 460, 46.
[485] Itzhak Kornfeld, 'Water: A Public Good or a Commodity?' (2012) 106 *Am. Soc'y Int'l L. Proc.* 49, 50.
[486] Erik Bluemel, 'The Implications of Formulating a Human Right to Water' (2004) 31 *Ecology Law Quarterly* 957, 972.

> The challenge is to achieve an appropriate balance between, on the one hand, the need to maintain the integrity and credibility of the human rights tradition, and on the other hand, the need to adopt a dynamic approach that fully reflects changing needs and perspectives and responds to the emergence of new threats to human dignity and well-being.[487]

Thus, access to modern energy services, as a human right, needs to be carefully considered in order that the balance Alston describes above can be achieved.

VII. CONCLUSION

There is ample opportunity to express universal access to modern energy services in the legitimising language of the international human rights regime. In particular, universal access to modern energy services is acknowledged as a component part of the right to an adequate standard of living, the right to housing, the right to development, and other human rights instruments.[488] After reviewing the current global approach to universal access to modern energy services, however, there is a preference to engage in a language that noticeably avoids the human rights vocabulary. Along this line, the appeal is primarily focused on meeting basic human needs, eradicating poverty, and achieving internationally agreed development goals without an explicit human rights dimension. As a result, there is nothing in official UN documents on universal access to modern energy services that expressly establishes the nexus between universal access to modern energy services and the international human rights framework.

While deeper analysis of the underlying reasons for the disconnection is suggested, this can be inferred from the difficulty posed by the nature and status of socioeconomic rights and the right to development in the human rights firmament. They are perceived to be as contentious and as hotly debated since their emergence as human rights under the international human rights regime that seem to attract historical and conceptual controversies. It may turn out to be a case of opening old wounds that are yet to completely heal. However, the human rights edifice offers plausible arguments to provide universal access to modern energy services with a global legal framework for implementation by and among states. Accordingly, the next chapter investigates whether or not the proposition to couch universal access to modern energy services in the language of human rights is compelling enough to be the language of choice.

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[487] Alston, above n 480, 609.
[488] Tully, above n 71, 547.

CHAPTER 4

HUMAN RIGHTS VERSUS HUMAN NEEDS: DEBATING THE LANGUAGE FOR UNIVERSAL ACCESS TO MODERN ENERGY SERVICES

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I. INTRODUCTION

In the previous Chapter, the locus of access to modern energy services within the human rights edifice has been identified, including the opportunities and limits of the human rights-based approach in Chapter 2. However, one fundamental question that remains is whether universal access to modern energy services should be couched in the language of human rights instead of human needs. Surprisingly, it is an area of discourse that is still largely unexplored. This gap becomes even more pronounced when taken in the context of the generic rights versus needs debates. Accordingly, this part of the thesis provides an opportunity to assimilate access to modern energy services in the rights-needs conversation in order to understand the underlying reasons for proposing that such an initiative be couched in the language of human rights instead of human needs.

To gain a better appreciation of the intellectual joust between rights-talk and needs-talk, a brief historical sketch of the rights discourse is provided. This lays the background to the compelling critique of human rights by Critical Legal Studies scholar Mark Tushnet and his proposition to abandon the language of human rights. On the other hand, contemporary legal and political theorist Jeremy Waldron's forceful reasoning in defence of human rights

provides the antithesis to Tushnet's overture. The debate between Tushnet and Waldron exemplifies the kind of scholarly conversations that will likely occur in considering access to modern energy services as a human right or as a human need. Specifically, it is a plausible launching pad to propel the discussion in terms of attaining such a global initiative. Thus, after weighing their arguments, this Chapter explains the reasons for preferring to couch access to modern energy services in the language of human rights instead of expressing it in the language of human needs.

II. HISTORICAL OVERVIEW OF THE RIGHTS DISCOURSE

To understand the concept of human rights, there is a need briefly to revisit how it evolved. The descriptive and historical narrative that follows merely provides the backdrop to the human rights versus human needs debate. It is chiefly designed to describe some of the relevant theories on human rights for a better appreciation of the rights-needs conversation. Also, it helps frame later discussion on the proposition to couch access to modern energy services in the language of human rights rather than of human needs. Admittedly, the literature on the moral philosophy of human rights is vast, rich and complicated. As such, its deeper intellectual and critical exploration is highly encouraged, albeit a daunting exercise that requires more time and specialised attention than what this thesis will be able to cover and provide.

A. *Natural Law*

Although the great religions of the world do not use the term 'rights' – more specifically 'human rights' - theology offers the earliest basis for a rights theory stemming from a divine source.[489] This theological approach recognises humanity's common creation by the fatherhood of God thereby clothing certain rights with universality and inalienability that emanate from a deistic base.[490] Later, philosophers and jurists conceived the idea of rights based on the doctrine of natural law. Aristotle advanced the view that human nature is universal and 'justice' in human society is shaped by its natural and universal ends such as freedom, self-sufficiency and human flourishing.[491] By implication, Aristotle posited that 'what is by nature just has the same force everywhere and does not depend on what we regard

[489] Shestack, above n 99, 35
[490] Ibid.
[491] Winston, above n 107, 3 quoting Aristotle's *Nichomachean Ethics*.

or do not regard as just'.[492] This thinking influenced early Christian scholastics in the mediaeval period like St. Thomas Aquinas who argued that human beings, as God's rational creatures and partakers of Divine providence, are imbued with natural inclinations or capacities to become self-directed, to be aware of what is right or wrong, and to distinguish good from evil.[493] However, it is pointed out that Hugo Grotius detached natural law from religion by enunciating that the rationality and social nature of human beings dictated upon them to live peacefully and harmoniously with one another according to their impulse.[494] In effect, natural law shapes the rules of conduct among individuals.[495]

B. *Age of Enlightenment and the Natural Rights Theory*

From natural law theory, the Age of Enlightenment gave birth to the natural rights theory with Thomas Hobbes, John Locke and Jean Jacques Rousseau as lead advocates. During this time, the Enlightenment Doctrine of the Rights of Man asserted that prior to the establishment of a body politic, individuals had innate or natural rights in what was called a hypothetical 'state of nature'.[496] Hobbes argued that nature made all human beings equal 'in the faculties of body, and mind'.[497] This gives rise to a right of nature, that is, the liberty for the preservation of an individual's nature or life, which sits precariously in a condition of war.[498] For Locke, individuals in the state of nature are also in a state of perfect freedom and equality without being subject to another's will or sovereignty.[499] However, the inherent dangers and inconveniences under such a condition necessitated the establishment of a community and a body politic.[500] Although a body politic is established and derives legitimate powers through the consent of individuals under a 'contract', they retained their natural rights to life, liberty and property.[501] Additionally, Rousseau clarified that since individuals are born free they or their descendants' natural liberty cannot be disposed of

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[492] Ibid.
[493] St. Thomas Aquinas, *Summa Theologica: Treatise on Law, Question 91, Article 2* as translated by the Father of the English Dominican Province, Volume 1 (1947) 997.
[494] Shestack, above n 99, 37.
[495] Winston, above n 107, 4.
[496] Ibid.
[497] Thomas Hobbes, 'Leviathan, Chaps. XIII and XIV' in Richard Tuck (ed), *Cambridge Texts in the History of Political Thought* (1991) 86.
[498] Ibid 86-91.
[499] John Locke, 'Two Treatises of Government' in Peter Laslett, *A Critical Edition with an Introduction and Apparatus Criticus* (1960) 287-8: Locke explains that in a 'State of liberty' no one has the liberty to destroy himself or herself.
[500] Shestack, above n 99, 37.
[501] Winston, above n 107, 4.

except by their own account.[502] Thus, Rousseau departed from Locke, who did not argue against the institution of slavery.[503]

C. *Declaration of Independence and the Rights of Man*

By the eighteenth century, natural rights theory inspired the revolutions against absolutism in the United States and France. The United States Declaration of Independence adopted the philosophical theses of the natural rights theory holding the following truths 'to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness.'[504] In the same vein, the French Declaration of the Rights of Man proclaimed that 'under the auspices of the Supreme Being…the natural and imprescriptible rights of man… are liberty, property, security, and resistance to oppression'.[505]

However, the nineteenth century witnessed a raft of serious criticisms levelled against the natural rights theory. Most of its critics argued that rights deemed natural vary from one theorist to another, that is, the elements of natural rights depended to a large extent on the norm setter.[506] Instead of a priori source of rights, Jeremy Bentham supported the proposition of a right founded on the principle of utility or what tended to promote certain specified ends towards the greatest happiness of the greatest number of people.[507] For Bentham, there was no such thing as rights preceding the establishment of government and rejected the French Declaration of the Rights of Man as 'nonsense upon stilts'.[508] This aligns with the doctrine of legal positivism that directly challenges the basis of natural law by assuming that all authority emanates from what the government prescribes as opposed to a priori source of rights.[509] However, such an approach appears to encourage absolute obedience to law even if it lacks ethical and moral moorings.[510] Therefore, from a legal positivist's point of view, access to

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[502] See Donald Anton and Dinah Shelton, *Environmental Protection and Human Rights* (2011) 158.
[503] Winston, above n 107, 4.
[504] *The Declaration of Independence: A Transcription* at http://www.archives.gov/exhibits/charters/declaration_transcript.html
[505] *Declaration of the Rights of Man – 1789* at http://avalon.law.yale.edu/18th_century/rightsof.asp
[506] Shestack above n 99, 38
[507] Ibid 45.
[508] See Philip Schofield, Catherine Pease-Watkin and Cyrian Blamires (eds), *The Collected Works of Jeremy Bentham - Rights, Representation and Reform: Nonsense upon Stilts and Other Writings on the French Revolution* (2002). To quote Bentham: 'Natural rights is simple nonsense: natural and imprescriptible rights, rhetorical nonsense, nonsense upon stilts.'
[509] Shestack, above n 99, 38
[510] Ibid 39.

modern energy services cannot be recognised as a right, unless the government enacts a law that explicitly recognises such a right.

D. *Karl Marx and the Critique of the Natural Rights Theory*

Perhaps one of the most compelling critiques of the natural rights theory came from Karl Marx. For Marx, the idea of natural rights is 'idealistic and ahistorical'.[511] Marx disputed the notion of autonomous individuals with rights derived from a divine or inherent nature as a mere reflection of the interests of the bourgeoisie in eighteenth century France and America.[512] Instead of this bourgeois illusion that only perpetuates the capitalists' monopoly of the means of production, Marx referred to the individual as a 'species-being', whose full potential could be realised only in a society devoid of class conflict.[513] Because a few elites control the means of production, a capitalist society precludes the fulfilment of individual needs.[514] For this reason, Marx argued that until classlessness in society is attained the state, in the meantime, must function as the vehicle for transformation.[515] Conversely, such a proposition asserts that individual rights are granted by the state as an authoritarian political body.[516] Also, it is seen as the only entity to provide 'sole guidance in value choice'.[517] With the ascendancy of the authoritarian state – the dictatorship of the proletariat - however, systematic suppression of individual civil and political rights in communist countries ensued.[518] As a result, this development in history diminished the impact of Marxist thought on the contemporary conceptualisation of human rights.[519]

E. *Immanuel Kant and the Categorical Imperative*

Despite past criticisms, the natural rights theory had a form of revival through a qualified natural law approach that recognises the value of individual autonomy and freedom as core postulates underpinning any universal system of rights.[520] In this vein, Immanuel Kant's

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[511] Ibid 40.
[512] See Karl Marx, 'On the Jewish Question' in David McLellan (ed), *Karl Marx: Selected Writings* (1977) 54. Marx points out that citizenship – the political community – is degraded to being a servant of man as a bourgeois.
[513] Ibid 238: Marx argued that in lieu of the old bourgeois society a new association will be established 'in which the free development of each is a condition for the free development of all.'
[514] Shestack, above n 99, 40.
[515] Marx, above n 512, 341: Marx explains that the dictatorship of the proletariat 'only constitutes the transition to the abolition of all classes and to a classless society.'
[516] Shestack, above n 99, 40.
[517] Ibid.
[518] Ibid 41.
[519] Ibid.
[520] Ibid 43.

moral and political philosophy is often regarded as the quintessential representation in defence of the rights of the individual.[521] For Kant, individuals are autonomous rational beings with intrinsic worth or dignity. Such individuals are also 'called persons, because their very nature points them out as ends in themselves, that is, as something which must not be used merely as means, and so far therefore restricts freedom of action (and is an object of respect)'.[522]

By asserting the dignity and intrinsic worth of individuals, Kant sets the stage for his proposition about the categorical imperative: 'Act always on such a maxim as thou canst at the same time will to be a universal law'.[523] This means that every rational being is also a law-giving being or sovereign legislator, which makes the 'kingdom of ends' possible.[524] In effect, the very conception of morality is collectively drawn from each individual, which is predicated on freedom as a property of all rational beings.[525] Accordingly, Kant rejects the principle of utility contending that morality is not derived from social utility or general happiness as a specified end; but rests on the dignity of individuals as autonomous, rational, and law-giving beings.[526] This concept about human dignity in relation to universal access to modern energy services is further discussed in the later part of the Chapter.

F. *John Rawls' A Theory of Justice*

Kant left an indelible imprint and a profound influence on the modern philosophy of rights. One such contemporary legal philosopher who emerged and became a chief exponent of neo-Kantian theory was John Rawls.[527] In his colossal thesis on *A Theory of Justice*, Rawls expounds his alternative conception of justice that is implicit in the social contract tradition and which he argues 'best approximates our considered judgments of justice and constitutes the most appropriate basis for a democratic society'.[528] It must be emphasised that no modern

[521] See Immanuel Kant, *The Metaphysical Elements of Justice* translated by John Ladd (1965) ix.
[522] Immanuel Kant, *Fundamental Principles of the Metaphysics of Morals* translated by Thomas Kingsmill Abbott (2013)
[523] Ibid.
[524] Ibid: Kant describes the kingdom of ends as a world of rational beings where 'every rational being must so act as if he were by his maxims in every case a legislating member'.
[525] To quote Kant: 'It is not enough to predicate freedom of our own will, from whatever reason, if we have not sufficient grounds for predicating the same of all rational beings. For as morality serves as a law for us only because we are rational beings, it must also hold for all rational beings; and as it must be deduced simply from the property of freedom, it must be shown that freedom also is a property of all rational beings.' Ibid.
[526] Ladd, above n 521: Ladd explains that Kant espouses the belief that morality is founded on the rights of the individual and not on social utility, general happiness or the common good.
[527] See John Rawls, *A Theory of Rights* (1971) Preface, vii: Rawls admits that his theory is 'highly Kantian in nature'.
[528] Ibid viii.

day discourse on human rights is complete without understanding the role of justice in society; most especially with human rights being an end of justice itself.[529] After all, according to Rawls, 'justice is the first virtue of social institutions'.[530] What then is the role of justice in society and the principles associated with it as espoused by Rawls?

Initially, Rawls asserts that each individual possesses 'an inviolability founded on justice that even the welfare of society as a whole cannot override'.[531] Rawls adds that 'justice denies that the loss of freedom for some is made right by a greater good shared by others'.[532] For Rawls, a just society takes as settled the liberties of equal citizenship and the rights secured by justice as not open to political bargaining or the 'calculus of social interests'.[533] Moreover, Rawls explains that the primary subject of justice is the way in which the basic institutions of society distribute fundamental rights and duties, including the appropriate division of the advantages and disadvantages arising from social cooperation.[534]

In working out a theory of justice, Rawls imagines a group of individuals who choose to engage in social cooperation through what is called as the 'original contract'. The object of this contract is the principles of justice for the basic structure of society in contrast to the social contract conceived by Locke and Rousseau, which have for its object the setting up of a particular form of government.[535] In a hypothetical situation of equal liberty, the contractors are in an original position that corresponds to the traditional social contract theory's state of nature. Rawls explains that in such a situation 'no one knows his place in society, his class position or social status, nor does one know his fortune in the distribution of assets and abilities, his intelligence, strength, and the like'.[536] The contractors are under a 'veil of ignorance'[537] and not in a position to design principles that advances a particular contractor's condition. Accordingly, the original position is the 'appropriate initial status quo'[538] that allows rational men and women to arrive at the principles of justice under a fundamental

[529] Shestack, above n 99, 46.
[530] Rawls, above n 527, 3.
[531] Ibid.
[532] Ibid.
[533] Ibid 4.
[534] Ibid 7.
[535] Ibid 11.
[536] Ibid 12.
[537] Ibid.
[538] Ibid.

agreement that is reached in an initial situation of equality that is fair, and thus, the propriety of the name 'justice as fairness'.[539]

Next, Rawls claims that in the initial situation rational persons under a 'veil of ignorance' would select a basic structure for society fairly, including two principles of justice that would be chosen in the original position. Conceived by Rawls in a hierarchical fashion, the first principle and first priority is that 'each person is to have an equal right to the most extensive basic liberty compatible with a similar liberty for others.'[540] The basic liberties of citizens include political liberty, freedom of speech and assembly, liberty of conscience and thought, freedom of the person along the right to hold (personal) property, and freedom from arbitrary arrest and seizure.[541] It will be noted that the basic liberties identified by Rawls pertain to civil and political rights or the so-called 'negative rights' where there is a correlative duty not to violate such rights.

On the other hand, the second principle and second priority concerns distributive justice and provides that 'social and economic inequalities are to be arranged so that they are both (a) reasonably expected to be to everyone's advantage, and (b) attached to positions and offices open to all.'[542] The first part (a) of the second principle is commonly known as Rawls' Difference Principle that highlights his strong egalitarian conception of justice.[543] Although equal distribution is preferred, wealth and income distribution need not be equal if this situation must be to everyone's advantage.[544] This means that 'the higher expectations of those better situated are just only if they work as part of a scheme which improves the expectations of the least advantaged members of society'.[545] Together, the first and second principles offer Rawls' general conception of justice, which is expressed as:

> All social values – liberty and opportunity, income and wealth, and the bases of self-respect – are to be distributed equally unless an unequal distribution of any, or all, of these values is to everyone's advantage.[546]

In effect, Rawls believes in equality to basic liberties and places an expectation upon those better situated to improve the lot of those who are at a disadvantage in the distribution of social values. This is akin to imposing a positive duty on other people to act in a certain

[539] Ibid.
[540] Ibid 60.
[541] Ibid 61.
[542] Ibid 60.
[543] Shestack, above n 99, 48-9.
[544] Rawls, above n 527, 61.
[545] Ibid 75.
[546] Ibid 62.

way. For the same reason, it can be argued that universal access to modern energy services is a legitimate expectation in a modern society where the lot of the energy poor – the least advantage – is improved. Overall, Rawls' thesis on the principles of justice offers a moral structure that justifies a rights-based system founded on the values of liberty and equality that furthers human rights.

G. *The Interdependency Theory: Herman Shue and 'Basic Rights'*

Shue begins by explicating that a 'moral right provides (1) the rational basis for a justified demand (2) that the actual enjoyment of a substance be (3) socially guaranteed against standard threats'.[547] As a rational basis for a justified demand, rights not only insist, but also demand for their actual fulfilment.[548] Shue clarifies that the substance of a right is not 'a right to enjoy a right – it is a right to enjoy something like food or liberty'.[549] Also, rights can be fulfilled through the establishment of social arrangements that ensure that rights enjoyed are protected.[550] For Shue, this is the single most important aspect of a standard right – one that is socially guaranteed and imposes correlative duties.[551] Notably, those duties rest on 'some other people to make some arrangements so that one will still be able to enjoy the substance of the right even if – *especially* if – it is not within one's own power to arrange'.[552] Along this line, Shue raises two salient duties: (1) for the relevant other people to create the social guarantees as a duty if these are non-existent; and (2) the duty to preserve effective institutions for the continued enjoyment of rights.[553] Evidently, recognition of social guarantees, measures to prevent violations, and redress of wrongs are important elements of the rights envisioned by Shue.[554] But what kind of rights must be socially guaranteed and protected?

In response, Shue proposes a theory of 'basic rights'. Shue describes basic rights as the embodiment of 'everyone's minimum reasonable demands upon the rest of humanity'[555] that 'specify the line beneath which no one is allowed to sink'.[556] Moreover, basic rights serve as

[547] Shue, above n 343, 13.
[548] Ibid 15.
[549] Ibid.
[550] Ibid 16.
[551] Ibid.
[552] Ibid.
[553] Ibid 17.
[554] Winston, above n 107, 26.
[555] Shue, above n 343, 19.
[556] Ibid 18.

social guarantees that protect those who are weak, defenceless, deprived and powerless.[557] They are as Shue calls them 'the morality of the depths'[558] that are so fundamental to self-respect and human dignity.[559] What distinguishes basic rights from the rest is that their enjoyment 'is essential to the enjoyment of all other rights'.[560] For this reason, Shue argues that sacrificing a basic right is self-defeating and likens it to 'cutting the ground from beneath itself'.[561] Conversely, a non-basic right may be sacrificed for the purpose of protecting a basic right 'because it cannot be sacrificed successfully'.[562] As such, Shue suggests from the foregoing postulate that priorities can be set by fulfilling basic rights before non-basic rights. However, there can be no priorities among basic rights as 'the absence of any of these basic rights is sufficient normally to allow the thwarting of the enjoyment of any other rights'.[563] Accordingly, basic rights are interdependent and equally necessary for the enjoyment of any other rights.[564]

What are these basic rights? Shue identifies the basic rights as (1) liberty rights, (2) security rights; and (3) subsistence rights. Liberty rights pertain to traditional freedoms, including the freedom of speech, the right to economic and political participation, and physical movement. Security rights refer to physical security such as 'the right not to be subjected to murder, torture, mayhem, rape, or assault,'[565] which belongs to traditional political or civil rights. Subsistence rights involve 'minimal economic security' such as 'unpolluted air, unpolluted water, adequate food, adequate clothing, adequate shelter, and minimal preventive healthcare'.[566] This strongly suggests that access to modern energy services qualifies as part of subsistence rights especially as a necessary precondition for the enjoyment of other rights discussed in Chapter 3. Accordingly, Shue justifies that subsistence is a basic right by arguing that no one can enjoy any other right if members of society 'lacks the essentials for a reasonably healthy and active life',[567] because the absence of subsistence 'can just be as fatal, incapacitating or painful as violations of physical security'.[568]

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[557] Ibid.
[558] Ibid.
[559] Winston, n 107, 26.
[560] Shue, above n 343, 19.
[561] Ibid.
[562] Ibid.
[563] Ibid 86.
[564] Winston, above n 107, 28.
[565] Shue, above n 343, 20.
[566] Ibid 23.
[567] Ibid 24.
[568] Ibid.

Interestingly, Shue's basket of basic rights contains a mix of civil, political, economic and social rights. This indicates that Shue eschews the notional division of human rights into civil and political on one hand and economic and social on the other.[569] Instead, Shue propounds that some rights in either category can be considered as basic rights.[570] For Shue, it follows that distinctions between negative and positive rights are illusory, frail and simplistic.[571] Not only are both positive and negative actions required for the protection of rights, but there are rights that are strictly neither classifiable as economic nor political.[572] What is important, therefore, is that the right is basic and its enjoyment is essential to the enjoyment of the other rights.

III. MARK TUSHNET: THE LANGUAGE OF HUMAN NEEDS IN LIEU OF HUMAN RIGHTS

While the language of human rights has an impressive lineage and a deep intellectual allure in legal, moral and philosophical discourse, it has its fair share of criticisms and detractors from other thinkers, philosophers and scholars. One such critique comes from Mark Tushnet, who argued for the replacement of the language of human rights with that of human needs. Tushnet's proposition is mainly grounded on four related critiques of rights: (1) Rights are unstable; (2) Rights are indeterminate; (3) Rights reifies; and (4) Rights suffer from pragmatic disutility.[573] Each of these related critiques is discussed as follows.

A. *Instability of Rights*

Tushnet argues that rights in the abstract are meaningless and matters only in terms of being recognised or not recognised in a given social setting.[574] Once a right is recognised in a specific social setting, it becomes vulnerable, however, to instability due to any relative changes to the social setting.[575] To illustrate the instability of rights, Tushnet turns to Rawls' work and points out that the latter's analysis is limited to societies that meet the circumstances of justice, that is, where there is scarcity of material goods and differences in the conception of what constitutes the good for the people.[576] This results to the identification

[569] Winston, above n 107, 27.
[570] Ibid.
[571] Shue, above n 343, 37-8.
[572] Ibid 7.
[573] Mark Tushnet, 'An Essay on Rights' (1984) 62 *Texas Law Review* 1363, 1363-4.
[574] Ibid 1364.
[575] Ibid 1363.
[576] Ibid 1365.

of rights with certain cultures, and thus, effectively relativised.[577] The relativisation of rights is viewed as a constraint on the coherence of rights-talk the language of which is too broad and open.[578] For Tushnet, 'every specific right is contingent on sociological and technological facts'.[579] Accordingly, Tushnet elucidates that 'the conditions of the society define exactly what kind of rights-talk makes sense, and the sort of rights-talk that makes sense in turn defines what the society is'.[580] Following this argument, access to modern energy services as a right becomes contingent for its fulfilment in part on the technological fact, that is, it makes sense only if the technological reality allows for its enjoyment.

B. *Indeterminacy Critique*

Tushnet contends that there are two types of indeterminacy that affect rights-talk: (1) technical indeterminacy and (2) fundamental indeterminacy. Technical indeterminacy refers to contemporary rights-talk where at least three techniques are used to recognise the existence of rights.[581] The first technique is the use of the balancing process to define a right. This requires some common measure of value for all interests that must be guided by a substantive theory of rights.[582] However, Tushnet argues that there is no such theory and the interests involved in many instances are incommensurable.[583] As such, balancing that is either undertaken in an ad hoc manner according to a specific case or categorically in a broader context does not lead to any determinate results.[584] The second technique involves 'rights versus rights' where a right ordinarily acknowledged as protected is weighed against another right that is similarly protected. This situation results to indeterminacy as the fundamental law recognises a variety of generally protected interests from which a court can select and balance in a given case as a matter of choice.[585] The third technique is 'rights in legal contexts' where it is asserted that each right 'fits into a background of rights that can be used to define the limits of a right drawn into present controversy'.[586] However, this again leads to indeterminacy, as the description of what is foreground or background is indeterminate in

[577] Ibid.
[578] Ibid 1370.
[579] Ibid.
[580] Ibid.
[581] Ibid 1371.
[582] Ibid 1372.
[583] Ibid.
[584] Ibid.
[585] Ibid 1373.
[586] Ibid.

itself.[587] In effect, abstract rights become specified in particular legal contexts under technical indeterminacy.[588]

On the other hand, fundamental indeterminacy happens 'because rights have a social context'.[589] Since rights exist in a specific social setting, there is difficulty connecting the general concepts to particular results without detailing the social arrangements.[590] Tushnet emphasises that because rights have a social context right-holders must have the corresponding material and psychological resources to be able to exercise their rights.[591] Following this reasoning, the absence of access to modern energy services is seen as limiting the individual's ability to exercise his or her rights. Accordingly, specifying a particular right is 'either an act of political rhetoric or a commitment to social transformation' with liberal rights rhetoric usually failing in regard to the latter.[592] In Mary Ann Glendon's words, as more rights are recognised 'the catalog of individual liberties expands without much consideration of the ends to which they are oriented'.[593] Worse, rights allegedly offer promises more than what they can actually deliver.[594]

C. *Reification of Rights*

Tushnet continues that the concept of rights suffers from reification i.e. it reduces real experiences to an empty abstraction.[595] Tushnet illustrates this by citing the undeniable importance of experiences such as independence and solidarity. By characterising them as abstract rights instead of being real experiences in themselves, experiences of solidarity and individuality become reified.[596] As Costas Douzinas asserts, 'rights in the abstract does not mean much'.[597] For this reason, Tushnet submits that the 'language of rights should be abandoned to the very extent that it takes as a goal the realisation of the reified abstraction "rights" rather than the experiences of solidarity and individuality'.[598] Instead of letting solidarity and individuality to be filtered through the language of rights, Tushnet suggests that

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[587] Ibid 1374.
[588] Ibid 1375.
[589] Ibid 1379.
[590] Ibid 1375.
[591] Ibid 1380.
[592] Ibid.
[593] Mary Ann Glendon, *Rights Talk: The Impoverishment of Political Discourse* (1991) Preface, xi.
[594] David Kennedy, 'The International Human Rights Movement: Part of the Problem?' (2002) 15 *Harvard Human Rights Journal* 101, 116.
[595] Tushnet, above 573, 1364.
[596] Ibid 1382.
[597] Costas Douzinas, *The End of Human Rights* (2000) 232.
[598] Tushnet, above 573, 1382-83.

these experiences have to be considered as directly relevant to political discussions in order to appropriately address them as political issues.[599] In short, experiences of solidarity and individuality should not be reduced to insignificance by being abstracted under the language of human rights.

D. *Pragmatic Disutility of Rights*

Tushnet characterises the use of rights in contemporary discourse as a hindrance to progressive social forces.[600] Tushnet presses on by pointing out that not only is rights-talk useful until the critique of rights is discovered, but also positively harmful.[601] This is illustrated in the existing imbalance between positive rights to have various things and negative rights to be free from interference, that is, to create more positive rights without sacrificing negative rights, which is pragmatically difficult to implement.[602] Also, Tushnet notes that contemporary rights-talk is predominated by negative rights and merely 'by pretending that the abstract sphere of social life has content can we talk about positive rights'.[603] If ever society accords recognition to positive rights, it is only done through statutory entitlement programs with very limited constitutional protection.[604] Thus, the following statement of Circuit Judge Richard Posner of the Unites States Court of Appeals, Seventh Circuit, in the case of *Jackson v City of Joliet* appears to aptly describe the pragmatic disutility of the rhetoric of rights:

> The modern expansion of government has led to proposals for reinterpreting the Fourteenth Amendment to guarantee the provision of basic services such as education, poor relief, and, presumably, police protection, even if they are not being withheld discriminatorily. To adopt these proposals, however, would be more than an extension of traditional conceptions of the due process clause. It would turn the clause on its head. It would change it from a protection against coercion by state government to a command that the state use its taxing power to coerce some of its citizens to provide services to others. The Supreme Court has refused to go so far, except where indigence prevents an individual (a criminal defendant in particular) from protecting himself against coercion by the state. Whether the Court has refused because a guarantee of basic service cannot easily be squared with the text or intellectual ambience of the Fourteenth Amendment or because judges lack objective criteria for specifying minimum levels of public services or are reluctant to interfere with the public finance of the states need not trouble us. It is enough to note that, as currently

[599] Ibid 1384.
[600] Ibid 1364.
[601] Ibid 1386.
[602] Ibid 1392.
[603] Ibid 1393.
[604] Ibid.

> understood, **the concept of liberty** in the Fourteenth Amendment **does not include a right to basic services, whether competently provided or otherwise**.[605]

Accordingly, Tushnet suggests that abandoning the rhetoric of rights is the more pragmatic and better path to follow exclaiming that basic needs such as food and shelter are needed now instead of claiming such needs as rights to be enforced:

> People need food and shelter right now, and demanding those needs be satisfied – whether or not satisfying them today persuasively be characterized as enforcing a right – strikes me as more likely to succeed than claiming that existing rights to food and shelter must be enforced.[606]

Thus, as the argument goes, universal access to modern energy services is likely to be achieved as a need that must be immediately satisfied rather than one that must be enforced later as a right.

IV. JEREMY WALDRON: IN DEFENCE OF THE LANGUAGE OF HUMAN RIGHTS

Contrary to Tushnet's proposition to abandon the language of human rights in favour of the language of human needs, Jeremy Waldron holds the view that the language of human rights, which is underpinned by a moral system, is the preferred form of articulation for entitlement or claim. For Waldron, it appears that Tushnet has pushed the discourse to one of 'genuine choice between the language of rights and the language of needs'.[607] Given such a choice, Waldron rejects Tushnet's proposition and offers seven reasons for doing so.

A. *Definitional Determinacy Conundrum*

Waldron argues that claims of needs are at least as, if not probably more, indeterminate and contestable as claims of rights.[608] Waldron elucidates this point by explaining the two ways the term 'need' is used in political argument: 1) the instrumental sense and 2) the categorical sense. The instrumental sense of need usually expressed as '*P* needs *X* in order to *Y*' falls into complete indeterminacy, because the concept of a necessary condition *Y* places no limits on such a specification.[609] Similarly, Waldron describes the categorical sense of need expressed as '*P* needs *X*' as a ballpark formulation, which merely 'captures the flavor of many

[605] *Jackson v City of Joliet* (1983) 715 F.2d 1200, 1203-4; Emphasis added.
[606] Tushnet, above n 573, 1394.
[607] Jeremy Waldron, 'The Role of Rights in Practical Reasoning: "Rights" versus "Needs"' (2000) 4 *The Journal of Ethics* 115, 115.
[608] Ibid 119.
[609] Ibid 119-20

competing analyses that have been suggested in the literature'.[610] It follows that need in its categorical sense is not only contestable according to the analysis used, but also in the way abstract terms are understood.[611] Obviously, there is no point searching for definitional determinacy when political concepts 'simply are indeterminate and contestable'.[612] In effect, the indeterminacy critique of rights merely highlights the implausibility of providing any definitional determinacy to political concepts. Thus, indeterminacy is merely the product of the highly contestable nature of political concepts whether expressed in the language of human rights or that of needs, albeit indeterminacy is worse in the latter's case.

B. *Suppliant and Passive Language of Needs*

It is unlikely that needs-talk will be politically more compelling than rights-talk.[613] Rights-talk involves not only an acknowledgment that one has a duty or responsibility to secure whatever needs to be secured, but also an implicit commitment to action.[614] This makes a rights-statement more difficult to accept than a needs-statement.[615] However, action is still needed despite the comparative ease in the political acceptability of a needs-statement. Moreover, Waldron observes the passiveness of needs-talk i.e. 'a person with needs addresses others as a potential recipient of their concern and assistance',[616] which is not at all universal.[617] Admittedly, the language of human rights with its connotation of independence and self-sufficiency resonates with an active voice compared to the suppliant and passive language of human needs.[618]

C. *Rights-Talk as a Moral System*

Waldron notes that there is a closer and deeper conceptual relationship between rights and duties than there is between needs and duties.[619] Rights-talk is normally associated with a moral system of reciprocal and correlative rights and duties.[620] He cites the magnum opus of Kant about rights,[621] which has no counterpart in needs-talk.[622] In effect, it is pointed out that

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[610] Ibid.
[611] Ibid.
[612] Ibid 121.
[613] Ibid.
[614] Ibid.
[615] Ibid.
[616] Ibid 123.
[617] Ibid.
[618] Ibid.
[619] Ibid 124.
[620] Ibid.
[621] Waldron is referring to Immanuel Kant's *Metaphysical Elements of Justice*.

the systems of rights, including the relation of correlativity and reciprocity between rights and duties, 'have been thought through more carefully than systems of needs'.[623] Also, responsibilities, if any, arising from the idea of needs is connoted with lack of self-sufficiency.[624] This means that the mercy or empathy of others becomes the norm for action in needs-talk.[625]

Another difference between right-based and need-based responsibilities is that the former fosters a sense of morality involving as it does duties of omission that is essentially a conflict-free system of absolutes.[626] On the other hand, the morality of need-based responsibilities conceived as duties of assistance has 'a more compromised, less absolute or deontological aspect',[627] because such duties may conflict insofar as time and resources are concerned.[628] As a result, need-based responsibilities essentially become a matter of choice and discretion if the timing is right and resources are not in short supply. This resonates in achieving universal access to modern energy services, because time and resources function as indispensable variables to meet such a goal.

D. *Spirit of Rights-Talk and Shared Political Duty*

Waldron asserts that rights-talk captures with 'a certain style or spirit'[629] demands for assistance and positive action that needs-talk is unable to provide.[630] While it is observed that rights tend to be traditionally perceived as vindicating freedoms in the negative sense along the line of non-interference,[631] Waldron argues that the language of rights does not preclude expressions of both positive action and non-interference as seen in contracts.[632] Also, Waldron asserts that the idea of rights is synonymous with the 'sense of a shared political duty to provide a place for each individual in the fabric of common life'.[633] There is more than a fair chance to be woven into the fabric of common life because political duty calls for that moment to happen. In turn, this provides a platform that significantly enhances public participation and mutual respect in society.

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[622] Ibid.
[623] Ibid.
[624] Ibid 125.
[625] Ibid.
[626] Ibid 126.
[627] Ibid.
[628] Ibid.
[629] Ibid 128.
[630] Ibid.
[631] Ibid 126.
[632] Ibid 127.
[633] Ibid.

E. *Moral Status of the Claimant*

It is argued that only the language of rights can embrace in its very structure the idea self-respect and the respect for others.[634] Although both rights and needs result in a demand that certain interests be given attention, it is only rights-talk that is able to confer an elevated status to such interests as one coming from an autonomous and full-pledge member of society.[635] For this reason, the idea of rights affords the individual to make a continuing demand until a right in its fullness is satisfied.[636] Effectively, the language of rights supplies the indispensable framework that underpins the moral status of a claimant, which the language of needs cannot by its lonesome provide.[637]

F. *Needs as Basis of Rights*

It is suggested that instead of considering needs as alternative to rights the former can be taken as a basis for rights thereby imbuing needs with a certain sense of integrity and dignity.[638] As Waldron points out, a theory of rights establishes a viable system of relational responsibilities premised on equal respect for persons that gives formalism and substance to needs.[639] Also, a theory of rights transforms a list of demands to one that is capable of being organised into a vision of society grounded on equality.[640] This sets the language of human rights apart from that of needs, because notionally there is an undercurrent of presumed inequality among individual members of society. Consequently, it is highly sensible to couch and integrate needs into the language of human rights behind a heritage of theorising that spans at least three centuries.[641]

G. *Moral Framework for New Ideas*

Waldron concludes that rights-talk provides the moral framework to develop new ideas and approaches around the existing conception of rights. This opens up the opportunity to integrate social and economic needs into the rights theory in a manner that befits the challenge confronted. Accordingly, Waldron views the moral framework of the language of

[634] Ibid 131.
[635] Ibid.
[636] Ibid.
[637] Ibid.
[638] Ibid 132.
[639] Ibid.
[640] Ibid.
[641] Ibid.

human rights as extensive enough to accommodate the vocabulary of human needs. To quote Waldron:

> Nothing less is promised by the integration of social and economic needs into a theory of rights. By themselves, claims of needs are nothing more than particular suppliant pleas. But taking their place in a theory of rights, they challenge us to develop new structures of thought about personhood, citizenship, universality, community and equality. The language of rights offers a framework and a sense of responsibility for articulating that challenge.[642]

Therefore, the language of human rights arguably has the capacity to accommodate access to modern energy services as a basic need and a subsistence requirement within its vast moral framework.

V. THE SIGNIFICANCE OF COUCHING UNIVERSAL ACCESS TO MODERN ENERGY SERVICES IN THE LANGUAGE OF HUMAN RIGHTS

Tushnet and Waldron respectively offer compelling arguments in favour of the language of human needs or the language of human rights. At the same time, they raise convincing and corresponding critiques of rights-talk and needs-talk to bolster their propositions. For various reasons, it is submitted that the language of human rights has the greater potential to accommodate and articulate the significance of universal access to modern energy services within its moral and systematic framework. Accordingly, this part of the Chapter sets out the underlying rationales for favouring Waldron's proposition to integrate needs-talk into rights-talk in the context of the challenge to achieving universal access to modern energy services.

A. Needs Theory Revisited

Before delving further into the intellectual tussle between human needs and human rights, a brief introductory to the conceptual moorings of need will assist in the discussion. In the early part of this Chapter, the philosophical foundations of right have already have been described at the outset in the historical narrative. However, Tushnet and Waldron did not expound the meaning of need and the theoretical justification underpinning it in their discourse. To fill this gap, the Chapter mainly draws from the work of Christian Bay who advocated a needs theory of human rights that essentially propounds 'that acknowledgment of basic human needs *ipso facto* establishes human rights'.[643] Also, this part of the Chapter will quickly skim through Marx again and Abraham Maslow as background to Bay's proposition. While there is a

[642] Ibid 134.
[643] Christian Bay, 'Self-Respect as a Human Right: Thoughts on the Dialectics of Wants and Needs in the Struggle for Human Community' (1982) 4 *Human Rights Quarterly* 53, 61.

nagging temptation to engage extensively with the theory of needs, it will only serve to bring the thesis farther afield into psychology and the social sciences, and thus, outside its core. Accordingly, this modest undertaking simply aims to give a backdrop and a better appreciation of the language of needs, including the extent of the agreement or disagreement between Tushnet and Waldron.

Human need as a social theory has a long history that is traceable to the Ancient times.[644] Early on, Seneca pointed to the evils of artificial needs to all civilisations, while Plato stressed that the basis of the state rested on reciprocal needs and services.[645] The preoccupation over the pursuit of pleasures – of what was true or false - and the gratification of needs found Stoics, Epicureans and Sceptics locked in heated and interminable debates.[646] It is no wonder that the discourse on needs 'always thrived in an atmosphere of sceptism and inquiry'.[647] In early writings, Marx appears to be fascinated with the Stoics, Epicureans and Sceptics.[648] In particular, Marx is seen as subscribing to the notion that the ideal society is one that satisfies real and authentic needs.[649] This is mainly premised on the proposition that 'human needs are expressions of our deepest natures',[650] and that the satisfaction of these needs is a precondition to being human.[651] But which need must be satisfied first? Abraham Maslow proffers an answer with a seminal theory on the hierarchy of universal human needs. Maslow identifies as basic human needs that must be satisfied in descending order physiological (or biological), safety, love, esteem and self-actualisation needs.[652] Moreover, Maslow argues that satisfaction of human needs is necessary to be considered fully human, and thus, human needs are tantamount to natural rights.[653]

Influenced by such eminent predecessors, Bay finds affinity with their conception of needs and began with the premise that the justification and legitimacy of any government rests on its task of serving human need.[654] This need is defined as referring 'to any requirement for a person's survival, health or basic liberties; basic meaning that, to the extent

[644] Patricia Springborg, 'Karl Marx on Human Needs' in Ross Fitzgerald (ed), *Human Needs and Politics* (1977) 157.
[645] Ibid 173.
[646] Ibid 157.
[647] Ibid 159.
[648] Ross Fitzgerald (ed), *Human Needs and Politics* (1977) x.
[649] Ibid.
[650] Ibid.
[651] Ibid.
[652] Abraham Maslow, *Motivation and Personality* (1987) 15-22.
[653] Ibid xxi; Fitzgerald, above n 647, xi.
[654] Christian Bay, 'Needs, Wants and Political Legitimacy' (1968) 1 *Canadian Journal of Political Science* 241, 246-7.

that they are adequately met, mental or physical health is impaired.'[655] In addition, Bay continues that need pertains to those 'necessities for not only biological survival but also for the health and development (physical and mental growth) of persons as human beings.'[656] Moreover, Bay suggests that Maslow's needs-hierarchy provides a useful model in arranging priorities towards satisfying different human needs in the absence of a more feasible alternative.[657] However, Bay admits that need is only inferable and not observable, except for some biological necessities such as food and water.[658] As a result, need by itself is an obscure and controversial notion that is empirically difficult to validate - a candid criticism that bedevils the concept of need even up to the moment.[659] Can the language of human rights, therefore, accommodate the limitations of the language of human needs?

B. *Recasting Need in the Language of Human Rights*

There is no iron curtain that strictly separates needs from rights or one cannot be expressed in terms of the other. On the contrary, Waldron raises the plausibility of integrating needs-talk into the theory of rights in lieu of Tushnet's attempt to reduce the discourse, as inevitably a pure matter of choice between needs and rights. This proposition has the potential to translate needs into becoming a moral one – a human right - that is traditionally considered of the highest order.[660] While this suggestion is not new, it still has considerable currency.

Much earlier than Waldron, Maslow believes in the existence of a system of self-validating human values and goods that are intrinsically good and desirable.[661] For this reason, Maslow asserts that 'it is legitimate and fruitful to regard instinctoid basic needs and the metaneeds as *rights* as well as needs'.[662] Similarly, Bay articulated the notion that 'needs establish rights'.[663] For Bay, the recognition of basic human needs lays the foundation for human rights asserting that 'there can be no human right that does not meet, generally speaking, a human need'.[664] Thus, there is a closer relationship between needs and rights in the foundational sense than what Tushnet's proposition otherwise conveys.

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[655] Bay, above n 643, 67.
[656] Ibid.
[657] Bay, above n 654, 246-7.
[658] Bay, above n 643, 67.
[659] Donnelly, above n 101, 26-8.
[660] Ibid 23-4.
[661] Maslow, above n 652, xx.
[662] Ibid xxi.
[663] Bay, above n 643, 62.
[664] Ibid.

However, there is an inherent danger in rooting rights based on needs.[665] This becomes apparent in the absence of a list of needs sufficient enough to come up with a cogent set of human rights.[666] In such an instance, needs become merely descriptive as opposed to being normative. [667] In addition, Joel Feinberg argues that claims based on need alone without duty speaks in the 'manifesto sense' and offer mere 'permanent possibilities of rights',[668] that is, not rights in the actual and real sense. This is notably the point where the thesis slightly diverges from Waldron's suggestion of using needs as basis or source for rights. Instead of grounding the substance of rights on needs, this thesis propounds that the more cogent way to move forward is to take the moral dimension of needs and to utilise the language of human rights to express such a need, albeit David Wiggins and Sira Dermen explain that 'the connexion of needs with moral rights is subtle and indirect'.[669] It will not be amiss to state that the said proposition is not intended to force human needs 'to fit the theoretical straightjacket of the rights-preferences couple'. [670] Instead, it explores the possibility of couching the idea of human needs closer to the moral structure and authority of the language of human rights.

As early as 1986 when the Brundtland Commission alerted the world's attention to the importance of energy as a basic necessity and until the UN General Assembly's resolution adopted in 2013 declaring the UN Decade of SEFA, the appeal essentially remains grounded on the idea of providing for the most basic of human needs.[671] Also, it is framed as meeting not only a basic need (e.g. access to electricity itself) but also as enabling access to other basic needs such as health, education, lighting, cooling, and heating, among others.[672] Despite the apparent urgency of the matter, the number of people across the planet that lacks access to modern energy services remains staggering and unthinkable in the modern times.[673] This is because, as E. D. Watt points out:

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[665] Donnelly, above n 101, 26-8.
[666] Ibid.
[667] Ibid 28-9.
[668] Joel Feinberg, 'The Nature and Value of Rights' in Morton Winston (ed), *The Philosophy of Human Rights* (1989) 72
[669] David Wiggins and Sira Dermen, Needs, Need, Needing' (1987) 13 *Journal of Medical Ethics* 62, 66.
[670] Lawrence Hamilton, *The Political Philosophy of Needs* (2003) 22.
[671] The Secretary-General's Advisory Group on Energy and Climate Change, above n 39, 13.
[672] World Health Organization and United Nations Development Programme, *The Energy Access Situation in Developing Countries* (2009) 3.
[673] Ibid 1.

> [W]hatever physical, psychological or moral needs there may be reason to recognize human beings, these needs will still have no political significance unless it can be shown that there is something in the public forum that can be done, and **ought to be done**, to meet them.[674]

Alarmingly, lack of access to modern energy services poses a serious hindrance to eradicating absolute poverty that begets unwarranted inequities,[675] and 'inhibits the full and effective enjoyment of human rights'.[676] These have prompted the UN Secretary General to launch a global initiative to fast-track universal access to modern energy services by 2030, because the situation is not only acceptable; it is abjectly wrong in the normative and moral sense, as poverty equals needs deprivation.[677] Evidently, there is a clear moral imperative to this call to action.[678] However, the appeal to everyone to address the matter as a need amounts to but a universal plea for discretionary and benevolent action. As Michael Ignatieff writes, mere reliance on the claim of being human who deserves to live is 'the weakest claim that people can make to each other: it is the claim addressed to anyone, and therefore to no one'.[679] In effect, there is no one in particular or named juridical entity such as the UN itself or any of its organisations, which is duty-bound to act on such a plea because, in the words of Feinberg, it is merely stated in the 'manifesto sense'. This is arguably the most expedient way to approach the issue because, as Michael Freeman writes, 'human-rights declarations are cheap, whereas human-rights implementation is rather expensive'.[680] Accordingly, access to modern energy services as a need is something that is brought about adventitiously.

Alternatively, the thesis propounds a deeper consideration of the moral dimension of access to modern energy services to enable it to find its place within the language of human rights. To amplify, the notion that access to modern energy services must be universal can be linked closely to the concept of human dignity, subsistence and equality in rights-talk. In the language of human rights, access to modern energy services is deemed consistent with the intrinsic worth of the human person to enjoy a subsistence right (e.g. adequate housing),

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[674] E. D. Watt, 'Human Needs, Human Wants, and Political Consequences' (1982) 30 *Political Studies* 533, 543; Emphasis added.
[675] International Energy Agency, United Nations Development Programme and United Nations Industrial Development Organization, *Energy Poverty: How to Make Modern Energy Access Universal?* (2010) 7.
[676] World Conference on Human Rights, *Vienna Declaration and Programme of Action* (1993) art 14 <http://www.ohchr.org/Documents/ProfessionalInterest/vienna.pdf>
[677] Donnelly, above n 101, 241-3.
[678] The Secretary-General's High-level Group on Sustainable Energy for All, above n 46, 16: Chad Holliday and Yumkeh Kandella, Co-Chairs of the High –Level Group on Sustainable Energy for All, emphasise that '[s]upplying modern energy services to the billions who now lack electricity and clean fuels is not just a moral imperative but a unique business opportunity'.
[679] Michael Ignatieff, *The Needs of Strangers* (1984) 51.
[680] Michael Freeman, *Human Rights: An Interdisciplinary Approach* (2011) 205.

including its constitutive and enabling elements, for the enjoyment of other associated rights.[681] Also, it is presumably to be secured to all human beings equally because lack of access to modern energy services creates disparity in economic and social conditions in society.[682] This brings the global initiative a step closer and not twice detached from the moral imperatives of human rights. In effect, there is a greater possibility of a claim for access to modern energy services based on human need evolving later to an actual human right.[683] Otherwise, it will share the same frailties attributed to the concept of human need that makes a claim against the world, albeit to no one in particular, in the same way that 'natural needs are real claims if only upon hypothetical future beings not yet in existence'.[684]

C. *Claim Not Charity*

Waldron's observation about the suppliant and passive nature of the language of human needs highlights one of the fundamental differences between needs-talk and rights-talk. Under needs-talk, a plea that access to modern energy services must be provided as a need is essentially an appeal to the charity of others. Although this is politically easier to declare and accept, it lacks the moral imperative to meet the articulated need. As Gro Harlem Brundtland points out, need involves 'charity that flows from the benevolent -- when convenient'.[685] This means that in the case of needs-talk intended beneficiaries cannot make active claims, as no one is bound to meet the claimed need.[686] Thus, the divide between 'need' and 'act' looms larger in the language of human needs horizon.

In contrast, a human right entails 'obligations that, by definition, must be met by responsible duty-bearers'.[687] This, in turn, creates 'a field of rule-governed interactions centred on, and under the control of, the right-holder'.[688] By according recognition to beneficiaries as claim-holders, they are enabled to secure the fulfilment of the claim as a duty from those against whom it is held.[689] As Alan Gewirth asserts, 'such mandatoriness distinguishes the human rights from virtues and other goods whose moral status may be

[681] UN Committee on Economic, Social and Cultural Rights, above n 346.
[682] World Bank, above n 65, 17-9.
[683] Feinberg, above n 668, 72.
[684] Ibid.
[685] Gro Harlem Brundtland, 'Nutrition, Health and Human Rights' (1999) 18 *SCN News* 19, 20.
[686] Urban Jonsson, 'Historical Summary of the SCN Working Group on Nutrition, Ethics and Human Rights' (1999) *SCN News* 47, 48.
[687] Brundtland, above n 685, 20.
[688] Donnelly, above n 101, 21-2.
[689] Jonsson, above n 686, 48.

supererogatory, such as generosity or charity'.[690] Concomitantly, rights-talk introduces the element of accountability,[691] which gives rise to a parallel commitment to action[692] - a word that is sorely missing in the vocabulary of needs. Effectively, rights-talk converts human need as a matter of claim and not of charity;[693] and one that does not 'justify merely requests, pleas, [or] petitions'.[694] This is the beauty of the linguistic implications of 'making claims' in the language of human rights - it puts the holder in a position to make a rigorous claim and to stand up as a human being.[695] As Feinberg explains:

> Legal claim-rights are indispensably valuable possessions. A world without claim-rights, no matter how full of benevolence and devotion to duty, would suffer an immense moral impoverishment. Persons would no longer hope for decent treatment from others on the ground of desert or rightful claim. Indeed, they would come to think of themselves as having no special claim to kindness or consideration from others, so that whenever even minimally decent treatment is forthcoming they would think themselves lucky rather than inherently deserving, and their benefactors extraordinarily virtuous and worthy of great gratitude. The harm to individual self-esteem and character development would be incalculable.
>
> A claim-right, on the other hand, can be urged, pressed, or rightly demanded against other persons. In appropriate circumstances, the right holder can "urgently, peremptorily, or insistently call for his rights, or assert them authoritatively, confidently, [and] unabashedly. Rights are not mere gifts or favors, motivated by love or pity, for which gratitude is the sole fitting response. A right is something a man can stand on, something that can be demanded or insisted upon without embarrassment or shame. When that to which one has a right is not forthcoming, the appropriate reaction is indignation; when it is duly given there is no gratitude, since it is simply one's own or one's due that one received. A world without claim-right is one in which all persons, as actual or potential claimants, are dignified objects of respect, both in their own eyes and in the view of others. No amount of love and compassion, or obedience to higher authority, or noblesse oblige, can substitute for those values.[696]

Imagine 1.3 billion people in suppliant plea to be provided access to electricity. For this access to be universal, the investment required between 2016 and 2030 is estimated at US$477 billion.[697] This is the cost of benevolence. But whose kindness and beneficence is courted? Who is willing to shoulder the cost? From a human needs perspective, it is a petition

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[690] Alan Gewirth, 'The Epistemology of Human Rights' (1984) 1 *Social Philosophy and Policy* 1, 2.
[691] Jonsson, above n 686, 48.
[692] Joseph Raz, 'On the Nature of Rights' in Morton Winston (ed), *The Philosophy of Human Rights* (1989) 55.
[693] Brigitte Hamm, 'A Human Rights Approach to Development' (2001) 23 *Human Rights Quarterly* 1005, 1026.
[694] Shue, above n 343, 14.
[695] Feinberg, above n 668, 68-9.
[696] Joel Feinberg, *Social Philosophy* (1973) 58-9.
[697] International Energy Agency, United Nations Development Programme and United Nations Industrial Development Organization, above n 675, 22.

to those who are willing to be 'extraordinarily virtuous' benefactors, as Feinberg describes them.[698] The likely result: a waiting game between an unnamed lucky beneficiary and a first mover without advantage. And this can go on forever. Instead of the language of human needs, express access to electricity in the language of human rights and the call becomes authoritative, confident and unabashed. It is 'no longer just a service, a gift, an aid; it is a duty and a contribution to the creation of claims'.[699] Suddenly, the passive appeal becomes an active, insistent and justified demand, as Shue emphasises. Also, the Kantian argument that values individual autonomy and their intrinsic worth becomes relevant. One can even hear Rawls chanting the higher expectation from those in a better situation to improve the lot of the disadvantaged. Clearly, there is so much traction to be gained by couching access to modern energy services in the language of human rights with its active tenor and 'distinctive force and remedial logic',[700] as value added units to the human rights conversation.

D. *Empowering Language of Human Rights*

Another important point that Waldron raised that closely relates to accountability is the empowering language of human rights as compared to that of human needs. Aside from its empowering nature, rights also benefit those who hold them.[701] This becomes possible because the empowerment of citizens to make a claim and vindicate a right authorises them to insist on the realisation of certain standards,[702] or what Shue refers to as 'the line beneath which no one is allowed to sink'.[703] Moreover, human rights are taken as individual trumps over some collective goals that tend to justify the imposition of individual loss or injury for the greater number.[704] This serves not only as a form of counter weight to programs or actions in the name of utility or social policy, but also to check the over reach of political justification.[705] Furthermore, the use of the human rights language endows a specific goal an overwhelming priority in the use of resources and public policy,'[706] particularly when fulfilling a human right.

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[698] Feinberg, above n 696, 58-9.
[699] Uvin, above n 239, 179.
[700] Donnelly, above n 101, 21-2.
[701] Ibid.
[702] Ibid 25-6.
[703] Shue, above n 343, 18.
[704] See Ronald Dworkin, *Taking Rights Seriously* (1977) xi.
[705] Donnelly, above n 101, 19-21.
[706] Arjun Sengupta, 'The Human Right to Development' in Bard Andreassen and Stephen Marks (eds), *Development as a Human Right: Legal, Political and Economic Dimensions* (2010) 33.

On the other hand, it is asserted that rights are only prima facie trumps or not absolute because they may be overridden under justifiable circumstances.[707] Still, this does not substantially diminish the empowering language of human rights in elevating the individual to being an effective claimant against the state and those duty-bound to meet the claim.[708] In effect, the language of human rights has the potential to transform power relations in a way that the language of human needs is unable to provide. This is particularly relevant to lack of access to electricity as one of the undesirable facets of poverty that is deemed synonymous to 'vulnerability, voicelessness, and powerlessness'.[709] Lack of access to modern energy services represents a kind of social struggle that the language of human rights has historically dealt with itself.[710] For its potential alone to bring about a social arrangement that benefits specifically the poor and the weak, the language of human rights is definitely preferred than the emotional appeal of the language of human needs for any and all unnamed beneficiaries. After all, as Shue emphatically argues, the language of human rights 'provides the rational basis for a justified demand'[711] and not merely a passive plea for benevolence.

E. *Catalyst for Change*

Finally, the unique attraction of the language of human rights lies in its continuing insistence to question the status quo.[712] This is particularly significant in a society where many still remain trapped in the poverty quagmire. The language of human rights arms the citizenry the opportunity to fight and create a new order where they can enjoy the object of their rights.[713] Also, it offers a different view about the ills besetting society from the standpoint of dignity and not merely as a technical problem, which pushes 'the border of moral imagination and re-conceptualize[s] the nature of change' being sought.[714] In turn, current institutions, practices and norms are challenged until the enabling environment for the recognition, fulfilment, and enjoyment of the object of the right is put in place.[715] Donnelly aptly expounds that the

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[707] Alan Gewirth, 'The Basis and Content of Rights' in Morton Winston (ed), *The Philosophy of Human Rights* (1989) 194.
[707] Donnelly, above n 101, 21-2.
[708] Ibid 23-4.
[709] Uvin, above n 239, 123.
[710] Ibid 179: According to Uvin, human rights are 'but a subset of broader social struggles, many of which can properly be said to be about rights as well'.
[711] Shue, above n 343, 13.
[712] Uvin, above n 239, 191; See Anton and Shelton, above n 501, 154: 'The extensive legal protection for human rights that currently exists in national, regional, and international law is the product of millennia of struggle by individuals concerned with human justice and well-being'.
[713] Donnelly, above n 101, 25-6.
[714] Uvin, above n 239, 179.
[715] Donnelly, above n 101, 24-5.

language of human rights expresses claims not merely as 'aspirations, suggestions, requests or laudable ideas, but rights-based demands for change'.[716] Specifically, the language of human rights speaks of demands as entitlements where the clamour for social change is stronger compared to what the language of human needs will be able to conjure.[717] It is gifted with the ability to shape political society to realise the moral vision and possibilities of human nature.[718] Evidently, there is a sense of urgency that behoves society to bridge the gap between the 'haves' and 'have-nots'; between the now and the future; and between the vision and the reality. As Peter Uvin points out, the language of human rights 'demands that we…render explicit the concerns of the oppressed and the poor when thinking through policies, and not make resource constraints as natural givens but to treat them as the results of past choices'.[719]

Again, take the case of those still without access to electricity in many rural areas of the world. There is a wide consensus that renewable energy plays a key role in filling that gap. As the International Renewable Energy Agency notes, renewable energy technologies currently offer 'the most economic option for off-grid electrification in most areas and, in locations with good resources, they are the best option for centralised grid supply and extension'.[720] Also, renewables are seen as a critical enabler to improve access to electricity.[721] However, weak political support for renewable energy development gives an impression to preserve the status quo as long as possible, that is, keeping renewable energy 'marginalised by distortions in the world's electricity markets created by decades of massive financial, political and structural support to conventional power technologies'.[722] This is the kind of barrier that makes the language of human rights a strong medium to voice out the change that is needed to challenge the status quo. As such, the language of human rights is imbued with a dynamic capacity to 'generate new duties with changing circumstances',[723] which makes it an attractive way to articulate the change being sought in a society disconnected by systemic distortions in the electricity infrastructure and a skewed technology preference for the status quo.

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[716] Ibid.
[717] Ibid 29-30.
[718] Ibid.
[719] Uvin, above n 239, 191.
[720] International Renewable Energy Agency, *Summary for Policy Makers: Renewable Power Generation Costs: An Overview* (2012) 12.
[721] World Energy Council, *2013 World Energy Issues Monitor* (2013) 7.
[722] European Renewable Energy Council and Greenpeace, *Energy Revolution: A Sustainable World Energy Outlook* (2010) 16.
[723] Raz, above n 692, 59.

VI. CONCLUSION

The debate between human rights and human needs offers interesting perspectives on the proposition to couch universal access to electricity in the language of rights. Essentially, this finds justification in the extensive intellectual breadth and moral structure of the theory of rights developed over the centuries. However, the language of human needs provides a counterpart theory that asserts the centrality of basic human needs in establishing human rights. It also advances the view that satisfaction of human needs is a prerequisite to being human, and thus, serves as the reason for being of any government. Along this line, Tushnet suggests that the abandonment of the language of human rights in favour of human needs is the better path to follow due to the instability, indeterminacy, reification and pragmatic disutility of rights.

On the other hand, Waldron asserts that the language of human rights with its moral structure and reasoning is the preferred form of articulation for any claim or entitlement. The passiveness of the language of human needs, including its weak correlation to duty, does not result in lifting up an individual's moral status in society. Also, the suppliant nature of the language of human needs is inconsistent with the inherent worth and dignity of individuals as self-respecting human beings. Instead, Waldron argues for the integration of needs-talk into the theory of rights to enrich and lend robustness to a language that apparently lacks the moral depth to sustain its place in political, legal and moral discourse.

This Chapter agrees that the language of human rights has the greater potential to accommodate and articulate the significance of access to modern energy services within its moral and systematic fabric. First, access to modern energy services as a need has not resulted in bold immediate actions that are necessary to fight entrenched energy poverty in the last three decades despite its being deemed fundamental to human development, particularly in meeting other basic needs. Second, couching access to modern energy services in the language of human needs merely encourages charity that is not in accord with the dignity and intrinsic worth of the individual as a human being. Third, the language of human rights demands action and accountability that is continuous and insistent until the claim being sought is fully and actually enjoyed. This is the kind of insistence and demand that must be made in order that access to modern energy services becomes a universal reality especially in the developing world. Fourth, the empowering language of human rights extends the rational basis to demand the realisation of a minimum standard beneath which no one is allowed to

fall, that is, access to modern energy services as a justified demand and the minimum standard for everyone, particularly those living in rural areas. Finally, the language of human rights arms access to modern energy services with the zest and urgency of a continuing demand for change – targeting institutions, practices and norms - until its recognition, fulfilment and enjoyment is effectively satisfied.

The elaboration of the conceptual justification for couching universal access to modern energy services in the language of human rights sets the tone for the remaining chapters. As argued earlier, RE technology and rural electrification operate as separate legal regimes, albeit the recurrent reference in SEFA and associated documents to the centrality of both planks in achieving universal access to modern energy services. Accordingly, the thesis turns to the existing legal regimes governing RE technology and rural electrification in order to explore the significance of a human rights-based approach in bringing them together as interrelated rather than distinct legal paths towards a single goal - universal access to modern energy services.

CHAPTER 5

UNIVERSAL ACCESS TO MODERN ENERGY SERVICES AND RENEWABLE ENERGY: ENVIRONMENTAL LEAPFROGGING TO ACHIEVE SUSTAINABLE DEVELOPMENT

Table of Contents

I. INTRODUCTION

Chapter 3 outlined the intersection between the international human rights regime and universal access to modern energy services. Placed within the realm of human rights, universal access to modern energy services is considered a necessary component for the realisation of socioeconomic rights, particularly the right to adequate standard of living, the right to housing, and the right to development, including other human rights. Also, universal access to modern energy services is seen as essential to, and a subsistence requirement for, meeting basic human needs.[724] As the Intergovernmental Panel on Climate Change aptly notes, '[a]ll societies require energy services to meet basic human needs'.[725]

[724] The Secretary-General's Advisory Group on Energy and Climate Change, above n 39, 7: The UN Secretary-General's Advisory Group on Energy and Climate Change explains that the absence of a 'clean, efficient, affordable and reliable energy services' hampers poverty eradication, restricts access to clean water and sanitation, imperils health, and adversely affects food security, among others.

[725] Intergovernmental Panel on Climate Change, *Special Report on Renewable Energy Sources and Climate Change Mitigation* (2011) 2.

From a human rights perspective, governments must undertake all steps and use all appropriate means to the maximum of their available resources to protect, promote, and fulfil socioeconomic rights.[726] Under the Limburg Principles on the Implementation of the ICESCR,[727] 'available resources' pertain to those resources that are 'within a State and those available from the international community through international co-operation and assistance',[728] whether economic or technical, including the adoption of legislative measures.[729] In effect, any valuable resource that promotes the attainment of universal access to modern energy services such as renewable energy (RE) technologies[730] must be utilised whether available through external (international cooperation and assistance) or internal means (legislative measures) or both.[731] Clearly, the international legal framework for international cooperation and assistance and national legislation with regard to the deployment of RE technologies are highly relevant.

With the foregoing in mind, the Chapter initially describes the environmental concerns associated with universal access to modern energy services and the role of RE technology in environmental leapfrogging to achieve sustainable development. Next, it briefly reviews the global deployment of RE technologies, including the barriers to, and the arguments for and against, such technologies. For this purpose, it also canvasses the various legal and policy approaches to encourage the rapid deployment of RE technologies to demonstrate the abundance of national RE policies amidst the absence of any 'meaningful and binding international renewable energy obligations' and generation targets.[732] Moreover, this Chapter explores the potential of such legal regimes to achieve universal access to modern energy services, particularly in the Philippines. As mentioned earlier in Chapter 1, the Philippines is prominently listed among the top 20 high impact countries with the highest global deficit in

[726] Limburg Principles on the Implementation of the International Covenant on Economic, Social and Political Rights, above n 331, 453-4 paras 16-28.
[727] Ibid 451:The Limburg Principles refer to a set of interpretative principles to reflect the state of international law regarding the nature and scope of the obligations of States parties to the International Covenant on Economic, Social and Cultural Rights.
[728] Ibid para 26.
[729] International Council on Human Rights Policy, *Human Rights and Climate Change: A Rough Guide* (Rough Guides Ltd, 2008) 14: However, it is noted that developed countries are not obligated to provide assistance to other states to fulfil socioeconomic rights.
[730] Neel Maitra, 'Access to Environmentally Sound Technology in the Developing World: A Proposed Alternative to Compulsory Licensing' (2010) 35 *Columbia Journal of Environmental Law* 407, 445: According to Maitra, environmentally sound technologies are 'valuable as resources'.
[731] Sengupta, above n 408, 887: Sengupta explicates that resources are not limited to GDP but includes legal, technical and institutional resources.
[732] Stuart Bruce, 'International Law and Renewable Energy: Facilitating Sustainable Energy for All?' (2013) 14 *Melbourne Journal of International Law* 18, 38; 53.

access to modern energy services.[733] Yet a country-specific review of its RE legal framework is very limited. This is quite surprising as the Philippines is considered 'a leader in Southeast Asia in terms of policies, fiscal incentives, and public financing to accelerate the development and utilization of renewable energy'.[734] And thus, it is a country that is closely watched by its Southeast Asian neighbours insofar as RE deployment is concerned. Coupled with the gap in articulating an overarching legal theme that brings RE deployment and universal access to modern energy services together under a common logic and language, the thesis will add a separate section in this Chapter about the Philippines. Accordingly, RE technology as an available resource is analysed in such a context, including the prospects for environmental leapfrogging through the adoption and deployment of RE technologies in the Philippines.

II. ENVIRONMENTAL CONCERNS AND LEAPFROGGING

Concerns are raised about the negative impacts of trying to achieve universal access to modern energy services in the drive towards global prosperity. Numerous studies indicate that there is a strong correlation between economic growth and rise in energy consumption especially if the development momentum is to be sustained.[735] Also, it is posited that population increase correspondingly results in heightened energy supply to meet demand.[736] Electricity consumption is seen to grow fastest among primary fuels, which is predicated on the industrial, commercial and household sectors' shift from traditional fuels and their growing reliance on electricity.[737] In the next twenty years, attention is also drawn to the impact of total household electrification, which will further intensify electricity demand.[738] Economic and population growth raises special concerns in climate change mitigation as both are considered as 'the most important drivers of increases in CO_2 emissions from fossil fuel combustion'.[739] If it is any indication, the past development path has seen a tremendous spike

[733] World Bank and International Energy Agency, above n 97, 59.
[734] Linda Katz, 'Promoting Renewable Energies in the Philippines: Policies and Challenges' (2012) *Renewable Energy Law and Policy Review* 140, 140.
[735] The Institute of Energy Economics Japan, ASEAN Centre for Energy and National ESSPA Project Teams, *The 3rd ASEAN Energy Outlook* (2011) 61.
[736] Hari Bansha Dulal et al, 'Renewable Energy Diffusion in Asia: Can It Happen without Government Support' (2013) 59 *Energy Policy* 301, 301.
[737] The Institute of Energy Economics Japan, ASEAN Centre for Energy and National ESSPA Project Teams, above n 735, 63.
[738] Ibid.
[739] IPCC WGIII AR5, *Final Draft - Summary for Policymakers* (2014) 7 <http://report.mitigation2014.org/spm/ipcc_wg3_ar5_summary-for-policymakers_approved.pdf>

in global energy intensity[740] especially with the use of fossil fuels, which is largely blamed for the increased anthropogenic greenhouse gas (GHG) concentrations in the atmosphere and global climate change.[741]

Interestingly, a World Bank study reveals that climate change undermines a broad range of human rights, including the right to adequate housing.[742] Additionally, a study by the International Council on Human Rights Policy has reached the same conclusion and highlights that climate change poses a threat to the right to development.[743] Simon Caney further contends that climate change 'jeopardizes three key human rights: the human right to life, the human right to health, and the human right to subsistence'.[744] Clearly, climate change implicates human rights.

Other associated concerns touch on energy sufficiency and energy security[745] in light of the apparent rapid depletion of fossil fuels.[746] This shows that the old paradigm of untrammelled growth and unrestrained development is no longer acceptable because, as Ban Ki-moon puts it, 'we cannot continue to burn our way to prosperity'.[747] Evidently, there is an ethical dimension to development that calls 'for a kind of development that provides real improvements in the quality of human life and at the same time conserves the vitality and diversity of the Earth', that is, not 'at the expense of other groups and later generations'.[748]

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[740] The Secretary-General's Advisory Group on Energy and Climate Change, above n 39, *Footnote* 8, 9: This is measured by the quantity of energy per unit of economic activity or output (GDP).
[741] Intergovernmental Panel on Climate Change, above n 725, 3.
[742] McInerney-Lankford, Darrow and Rajamani, above n 120, 17.
[743] International Council on Human Rights Policy, above n 729, 73.
[744] Simon Caney, 'Climate Change, Human Rights, and Moral Thresholds' in Stephen Gardiner, Simon Caney, Dale Jamieson and Henry Shue (eds), *Climate Ethics: Essential Readings* (2010) 166.
[745] World Energy Council, *Pursuing Sustainability: 2010 Assessment of Country Energy and Climate Policies* (2010) 11: The World Energy Council defines 'energy security' as follows: 'For both net energy importers and exporters this includes the effective management of primary energy supply from domestic and external sources; the reliability of energy infrastructure; and the ability of participating energy companies to meet current and future demand'; Jim Falk, 'Rethinking Energy Security in a Time of Transition' in Luca Anceshi and Jonathan Symons (eds), *Energy Security in the Era of Climate Change: The Asia-Pacific Experience* (2012) 241-2: Falk argues that energy security should not be framed solely along economic lines and needs to be reconsidered in the face of climate transition; Robert Orttung, Jeronim Perovic and Andreas Wenger, 'The Changing International Energy System and Its Implications for Cooperation in International Politics' in Andreas Wenger, Robert Orttung and Jeronim Perovic (eds), *Energy and the Transformation of International Relations: Towards a New Producer-Consumer Framework* (2009) 4: Orttung et al. note that 'energy security also means implementing policies designed to reduce the demand for energy'.
[746] Ibid 5.
[747] A Vision Statement by Ban Ki-moon Secretary General of the United Nations, above n 9, 3.
[748] IUCN-World Conservation Union, United Nations Environment Programme and World Wide Fund for Nature, *Caring for the Earth* (1991) 8-9.

Thus, Robin Attfield describes this concept of sustainable development as 'widely recognized as offering possible solutions to many of our developmental and ecological problems'.[749]

From the foregoing, RE technologies are seen as paving the way to a low-carbon future by leapfrogging the pollution intensive stages of industrial development through the adoption and use of such technologies.[750] As Philippe Sands and Jacqueline Peel emphasise, the transfer of environmentally sound technologies such as RE technologies 'will allow developing countries to "leapfrog" the dirty and obsolete technologies that have been used to underwrite mass industrialisation'.[751] This is particularly relevant to developing countries where RE technologies are recognised as offering the least cost option in bringing electricity to rural areas that are far from the grid.[752] In a broader sense, RE technologies are considered indispensable to mitigating climate change and attaining energy security.[753] They also have the potential to decouple the correlation between increased energy use and heightened GHG emissions to attain sustainable development.[754] Other co-benefits include promotion of better health, education and gender equality outcomes, including job creation.[755] As a reminder, however, Dale Jamieson's satirical view about the role of technology needs to be borne in mind, because technology alone will not suffice without normative changes in society:

> Technological approaches are popular both with politicians and with the public because they promise solutions to environmental problems without forcing us to change our values, way of life, or economic systems.[756]

Although RE technologies are necessary to environmentally leapfrog, developing countries are admittedly capacity and resource-challenged, which poses an obstacle to enhancing access to modern energy services.[757] As Bradbrook, Gardam and Cormier point out, 'the lack of investment incentives and opportunities' and 'the lack of technological knowledge and expertise' hamper efforts to improve access to modern energy services.[758] Also, it is argued that developing countries do not only 'lack the capacity for technological

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[749] Robin Attfield, *Environmental Ethics* (2014) 138.
[750] Raphael Sauter and Jim Watson, *Technology Leapfrogging: A Review of the Evidence* (2008) 7.
[751] Philippe Sands and Jacqueline Peel, *Principles of International Environmental Law* (2012) 698.
[752] Guilio Volpi, 'Renewable Energy for Developing Countries: Challenges and Opportunities' in Volkmar Lauber (ed), *Switching to Renewable Power* (2005) 86.
[753] Sajed Kamal, *The Renewable Revolution: How We Can Fight Climate Change, Prevent Energy Wars, Revitalize the Economy and Transition to a Sustainable Future* (2011) 5.
[754] Intergovernmental Panel on Climate Change, *Renewable Energy Sources and Climate Change Mitigation: Special Report of the Intergovernmental Panel on Climate Change* (2012) 18.
[755] Renewable Energy Policy Network for the 21st Century (REN21), *Renewable 2013 Global Status Report* (2013) 65.
[756] Dale Jamieson, *Ethics and the Environment: An Introduction* (2008) 13.
[757] McInerney-Lankford, Darrow and Rajamani, above n 120, 61.
[758] Bradbrook, Gardam and Cormier, above n 63, 535.

development [but also] remain dependent on industrialised countries for their technology'.[759] Clearly, there is an imperative to put in place effective mechanisms such as technology transfer to ensure that RE technologies are available to developing countries, as Ivan Scrase et al emphasise.[760] Conversely, the lack of access to low-carbon technologies limits the ability of developing countries to environmentally leapfrog.[761] And this, in turn, is where one of the key challenges to achieving universal access to modern energy services lies. As Henry Shue asserts, 'if any contributions to a common effort [such as addressing global environmental problems] are expected of people whose minimum needs have not been guaranteed so far, guarantees must be provided; and the guarantees must be provided most heavily by the better-off'.[762]

III. THE BIG PICTURE: GLOBAL DEPLOYMENT OF RE TECHNOLOGIES

Since the industrial revolution, economic growth was driven by the exploitation and utilisation of fossil fuel resources with the corresponding technology and energy system infrastructure built around such energy sources.[763] This represented the first energy transition 'from human power to animal power, and then from animal power to mechanical power'.[764] However, the wave of innovations in how energy is harnessed and produced is paving the path towards another energy transition in today's carbon-constrained world.[765] Aptly, Baroness Mary Warnock points out that '[t]echnology has made all kinds of things possible that were impossible, or unimaginable in an earlier age'.[766]

From an access to modern energy services perspective, the energy transition is seen in terms of 'moving up the energy ladder and implies a progression from traditional to more modern devices/fuels that are more environmentally benign and have fewer negative health

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[759] Gregory Unruh and Javier Carrillo-Hermosilla, 'Globalizing Carbon Lock-In' (2006) 34 *Energy Policy* 1185, 1187.
[760] Ivan Scrase et al, 'Energy Policy Implications' in Ivan Scrase and Gordon MacKerron (eds), *Energy for the Future: A New Agenda* (2009) 245.
[761] See International Council on Human Rights Policy, International Council on Human Rights Policy, 'Summary and Recommendations', *Beyond Technology Transfer: Protecting Human Rights in a Climate-Constrained World* (2011) 1.
[762] Henry Shue, 'Global Environment and International Inequality' in Stephen Gardiner, Simon Caney, Dale Jamieson and Henry Shue (eds), *Climate Ethics: Essential Readings* (2010) 110.
[763] Geoffrey Hammond and Craig Jones, 'Sustainability Criteria for Energy Sources and Technologies' in Ibon Galarraga, Mikel Gonzalez-Eguino and Anil Markandya (eds), *Handbook of Sustainable Energy* (2011) 21.
[764] A Vision Statement by Ban Ki-moon Secretary General of the United Nations, above n 9, 2.
[765] Peter Droege, '100% Renewable Energy: The Essential Target' in Peter Droege (ed), *100% Renewable: Energy Autonomy in Action* (2009) 1-3.
[766] Roger Brownsword and Morag Goodwin, *Law and the Technologies of the Twenty-First Century* (2012) 8 quoting Baroness Mary Warnock, 'Philosophy and Ethics' in C. Cookson, G. Nowak and D. Thierbach (eds), *Genetic Engineering – The New Challenges* (Munich: European Patent Office, 1993), 67.

impacts'.[767] As a low-carbon or no emission technology,[768] RE technology is seen as playing a key role in the next energy transition to ultimately replace finite and dwindling fossil fuel supplies,[769] including conventional power technologies, towards a low-carbon future.[770] Similarly, increasing the share of RE technologies in the global energy mix has become one of the interlinked objectives together with energy efficiency to reinforce the attainment of universal access to modern energy services.[771] Consequently, a snapshot of the worldwide deployment of RE technologies exemplifies the feasibility and availability of such technologies in addressing the energy poverty challenge. By the same token, the different barriers to deployment of renewables especially in the developing world - legal, technical and financial, including the opportunities and limits of RE technologies - are also discussed in the process.

A. *International Legal Framework for Technology Transfer*

1. *United Nations Framework Convention on Climate Change*

International efforts to ensure access to low-carbon technologies by developing countries are essentially underpinned by the concept of technology transfer.[772] Technology transfer is embedded in the 1992 United Nations Framework Convention on Climate Change (UNFCCC). It provides that developed countries are obligated to 'take all practicable steps **to promote, facilitate and finance, as appropriate, the transfer of, or access to, environmentally sound technologies and knowhow** to …**developing country Parties** to enable them to implement the provisions of the Convention.'[773] Notably, the UNFCCC also provides that '[p]arties have a right to, and should, promote sustainable development'.[774] The

[767] Intergovernmental Panel on Climate Change, above n 754, 41.
[768] International Energy Agency, above n 5, 238.
[769] David Pimentel (ed), *Biofuels, Solar and Wind as Renewable Energy Systems: Benefits and Risks*, (2008) Preface, v: It is projected that petroleum and natural gas supplies have already peaked and 'will slowly decline over the next 40-50 years until depleted'.
[770] Hans-Josef Fell, 'The Renewable Imperative: Providing Climate Protection and Energy Security' in Peter Droege (ed), *100% Renewable: Energy Autonomy in Action* (2009) 57; 62.
[771] A Vision Statement by Ban Ki-moon Secretary General of the United Nations, above n 9, 4.
[772] See International Council on Human Rights Policy, above n 761, 1.
[773] *United Nations Framework Convention on Climate Change*, opened for signature 4-14 June 1992 and 19 June 1993, 1771 UNTS 107 (2000) (entered into force 21 March 1994) art 4 (5): The United Nations Framework Convention on Climate Change mandates developed countries to 'take all practicable steps to promote, facilitate and finance, as appropriate, the transfer of, or access to, environmentally sound technologies and knowhow to other Parties, particularly developing country Parties to enable them to implement the provisions of the Convention'; Emphasis added.
[774] Ibid art 3 para 4.

International Council on Human Rights Policy clarifies the ideal notion of technology transfer in the following manner:

> "[T]echnology" is not limited to hardware, but also involves know-how and IP [intellectual property], and that "transfer" is not limited to facilitation of trade and markets but involves proactive public policy measures to ensure technologies move between countries who need them most and are deployed in a manner that does not pose undue risks to human rights, security, the environment or livelihoods.[775]

To effectively implement the above provision, the Marrakesh Accords include a technology transfer framework comprising of five key components: technology needs and needs assessment, technology information, enabling environments, capacity building, and mechanisms for technology transfer. First, technology needs and needs assessment refer 'to a set of country-driven activities to identify and analyse mitigation and adaptation technology priorities' especially of developing countries.[776] Second, technology information 'defines the means, including hardware, software and networking, to facilitate the flow of information between the different stakeholders to enhance the development and transfer of environmentally sound technologies'.[777] The third component - enabling environments - 'focuses on government actions, such as fair trade policies, removal of technical, legal and administrative barriers to technology transfer, sound economic policy, regulatory frameworks and transparency, all of which create an environment conducive to private and public sector technology transfer'.[778] Fourth, capacity-building pertains to 'a process which seeks to build, develop, strengthen, enhance and improve existing scientific and technical skills, capabilities and institutions' especially of developing countries.[779] Lastly, the mechanisms for technology transfer 'are to facilitate the support of financial, institutional and methodological activities' to enhance coordination and cooperative action, including partnerships among the full range of stakeholders.[780] The mechanisms for technology transfer is further augmented by sub-themes on innovative options for financing, enhanced cooperation with relevant conventions and intergovernmental processes, promotion of endogenous development of technology

[775] International Council on Human Rights Policy, above n 761, 1.
[776] *Development and Transfer of Technologies*, FCCC Dec 4/CP.7, 8th plen mtg (10 November 2001) paras 3-4 <http://unfccc.int/resource/docs/cop7/13a01.pdf#page=22>
[777] Ibid para 8.
[778] Ibid para 12.
[779] Ibid para 15.
[780] Ibid para 22.

through provision of financial resources and joint research and development, and promotion of collaborative research and development on technologies.[781]

2. *Kyoto Protocol and Global Environment Facility*

The 1997 Kyoto Protocol echoes the obligation to transfer technology under the UNFCCC. Specifically, it provides for all parties to:

> Cooperate in the promotion of effective modalities for the development, application and diffusion of, and take all practicable steps to promote, facilitate and finance, as appropriate, the transfer of, or access to, environmentally sound technologies, know-how, practices and processes pertinent to climate change, in particular to developing countries, including the formulation of policies and programmes for the effective transfer of environmentally sound technologies that are publicly owned or in the public domain and the creation of an enabling environment for the private sector, to promote and enhance the transfer of, and access to, environmentally sound technologies.[782]

One of the flexibility mechanisms in the Kyoto Protocol, the Clean Development Mechanism (CDM), allows developed countries to meet their emission reduction commitments through activities or projects jointly undertaken with developing countries. The CDM is the only joint action that brings developing countries into the global GHG emission reduction framework.[783] While it is claimed that a developing country gains investment and technology transfer benefits under this mechanism, the CDM is essentially market-oriented and 'unlikely to reach those whose rights are put most at risk by climate change in a significant way'.[784] In the same vein, the Global Environment Facility (GEF) as the primary source of funding for activities under the UNFCCC is invoked as another mechanism for technology transfer.[785] However, it is not clear to what extent the GEF is successful in transferring RE technologies to developing countries, because 'transfers of technology were essentially incidental to wider mitigation goals and the degree to which technologies have, in fact, been transferred has not been tested'.[786]

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[781] *Development and Transfer of Technologies under the Subsidiary Body for Scientific and Technological Advice*, FCCC Dec 3/CP.13, 8th plen mtg (14-15 December 2007) paras 16-23. <http://unfccc.int/resource/docs/2007/cop13/eng/06a01.pdf#page=12>

[782] *Kyoto Protocol to the United Nations Framework Convention on Climate Change*, opened for signature 1-11 December 1997 and 16 March 1998 to 15 March 1999, 2303 UNTS 162 (2008) (entered into force 16 February 2005) art 10 (c).

[783] See Mindy Nigoff, 'The Clean Development Mechanism: Does the Current Structure Facilitate Kyoto Protocol Compliance?'(2006) 18 *Georgetown International Environmental Law Review* 249, 251.

[784] International Council on Human Rights Policy, *Beyond Technology Transfer: Protecting Human Rights in a Climate-Constrained World* (2011) 58.

[785] Ibid 52.

[786] Ibid.

3. *Bali Action Plan, Cancun Agreements and Beyond*

In 2007, the Bali Action Plan reiterated the need for an '[e]nhanced action on technology development and transfer…including…the removal of obstacles to, and provision of financial and other incentives for, scaling up of the development and transfer of technology to developing country Parties in order to promote access to affordable environmentally sound technologies'. [787] Consistent with this Plan, the 2010 Cancun Agreements decided to introduce a 'Technology Mechanism' to enhance technology development and transfer to developing countries. [788] This mechanism includes the establishment of a Technology Executive Committee to recommend policies to bolster technology cooperation. [789] Also, a Climate Technology Centre and Network is created to 'facilitate a network of national, regional, sectoral and international technology networks, organizations and initiatives with a view to engaging the participants of the Network effectively'. [790] Additionally, the Cancun Agreements established a Green Climate Fund as an operating entity of the financial mechanism of the UNFCCC to provide support to developing countries. [791] Accordingly, subsequent UN conferences and documents have moved towards the full implementation of the UNFCCC and the operationalisation of the Technology Mechanism and the Green Climate Fund. [792]

Despite putting in place an international legal framework for the transfer of technology to developing countries, there has been 'little practical movement on technology transfer'. [793] There are various reasons propounded to explain this mainly along the lines of market and structural barriers. "Market barriers' revolve around the absence of the enabling environment – technical, legal and administrative frameworks – that is conducive to investments in technology transfer. [794] On the other hand, 'structural barriers' pertain to those obstacles that

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[787] *Bali Action Plan*, FCCC Dec 1/CP.13, 8th plen mtg (14-15 December 2007) para 1 (d) (i) <http://unfccc.int/resource/docs/2007/cop13/eng/06a01.pdf>
[788] *The Cancun Agreements: Outcome of the Work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention*, FCCC Dec 1/CP.16, 9th plen mtg (10-11 December 2010) para 117 <http://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf#page=2>
[789] Ibid para 121.
[790] Ibid para 123.
[791] Ibid para 102.
[792] For example, the Durban Outcomes (2011), Doha Climate Gateway (2012) and Warsaw Outcomes (2013) sought the mobilization of funding and stimulation of technology cooperation and transfer to developing countries.
[793] International Council on Human Rights Policy, above n 761, 1.
[794] International Council on Human Rights Policy, above n 784, 60.

preclude 'widespread access to the world's public goods'.[795] In both instances, the recurring theme that emerges is the concern with international property rights protection.[796]

4. *Concerns with Intellectual Property Rights*

Without delving deeply into such a contentious issue that is a separate research topic in itself, one side of the argument claims that a strong intellectual property rights regime is needed in developing countries to support investments in technology.[797] On the other hand, there are claims to the effect that the international protection of intellectual property rights hampers public policies that promote technology transfer in developing countries.[798] This propensity to 'propertise' technology resonates in Paul Babie's proposition that the concept of private property, including its 'liberal triad' of use, exclusivity and disposition, has a 'climate change relationship'.[799] Babie goes on to expound that such a relationship can be seen in the kind of choices being made predicated on private property (e.g. producing green energy or undertaking energy efficiency measures) that 'occur in a web of social relationships within which consequences, or externalities, are visited upon others.[800] In effect, as Raphael Sauter and Jim Watson contend, intellectual property rights can impede environmental leapfrogging.[801] Ultimately, the opposing claims between technology transfer and intellectual property rights protections boils down to the issue of cost: 'How much will the transfer of technology cost and who is going to pay?'[802]

However, the intellectual property debate merely 'functions…at the symbolic level',[803] that is, there are strategies and approaches to overcome the obstacles that intellectual property rights may pose in the context of technology transfer that include compulsory licensing, open licensing and global voluntary patent pools.[804] In particular, the open source modality is

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[795] Ibid.
[796] International Council on Human Rights Policy, above n 761, 1.
[797] Ibid.
[798] Ibid.
[799] Paul Babie, 'Climate Change and the Concept of Private Property' in Rosemary Lyster (ed), *In the Wilds of Climate Law* (2010) 15.
[800] Ibid.
[801] Sauter and Watson, above n 750, 13.
[802] International Council on Human Rights Policy, above n 784, 69.
[803] Ibid 70.
[804] Ibid 71-5: Compulsory licensing' pertains to the 'regulatory power of a state to require holder of a patent in a given technology to grant access to the patented technology either to the state itself or a third party'. On the other hand, 'open licensing' refers to the 'adoption by right-holders of licenses that allow free access to licensees to use a given technology in a variety of ways without needing to pay royalties'. 'Global voluntary patent pools' involves 'right-holders placing technologies in exchange pools where they will be able to access

considered to be appropriate for RE development and deployment.[805] As Jason Wiener points out, '[a]dvancing proprietary systems of renewable energy technology will only deepen the isolation of developing countries and widen the inequity in access to such technology between the developed and developing world'.[806] On the other hand, Neel Maitra cautions that compulsory licensing is not effective due to the technological heterogeneity of the developing world as can be gleaned from the disparity between technology proficient developing countries such as Russia, China, and India and those which are not.[807] Still, bridging the technology gap to facilitate global deployment of RE technologies is a clear imperative in a carbon-constrained world.[808]

Interestingly, Gregory Unruh and Javier Carrillo-Hermosilla observe that environmental 'leapfrogging appears possible when technological leaders …have developed and deployed the technology successfully'. However, Letha Tawney, Mackay Miller and Morgan Bazilian suggest that a South-to-South technology transfer pathway is 'increasingly feasible' with the growth in innovation capabilities of developing countries such as China and India, among others.[809] Accordingly, the Chapter looks into the global deployment of RE technologies in both developed and developing worlds to explore such a possibility.

B. *Global RE Technology Deployment*

Since the 1990s, the worldwide use of RE sources and technology – geothermal, solar photovoltaic, wind, hydro, biomass, and biofuels - deployed either as a decentralised or centralised system had been on a steady growth trajectory.[810] This growth was punctuated in the 2000s when some stakeholders composed of industry experts, businesses and policymakers boldly declared RE as already 'mainstreamed' in the power sector.[811] By 2011, it is estimated that RE supplied about 19% of global final energy consumption[812] with more

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other technologies, as well as the know-how and capacity building to make the most effective use of these other technologies'.

[805] Jason Wiener, 'Sharing Potential and the Potential for Sharing: Open Source Licensing as a Legal and Economic Modality for the Dissemination of Renewable Energy Technology' (2006) 18 *Georgetown International Environmental Law Review* 277, 294-5.

[806] Ibid 300.

[807] Maitra, above n 730, 420-1.

[808] Ibid 441.

[809] Letha Tawney, Mackay Miller and Morgan Bazilian, 'Innovation for Sustainable Energy from a Pro-Poor Perspective' in *Climate Policy* (2013) 13.

[810] Eric Martinot, *Renewables Global Futures Report* (2013) 10.

[811] Ibid.

[812] Ibid 19.

than $260 billion invested in new RE capacity.[813] Notably, 9.3% out of this consumption came from traditional biomass for cooking and heating purposes in rural areas of developing countries, [814] while 9.7% were from modern renewables such as geothermal, hydro, wind, solar, and biofuels. [815] Countries that sourced at least 20% of their total energy from renewables include Austria, Brazil, Chile, Denmark, Finland, Iceland, New Zealand, Norway, Peru, Philippines, Uganda and Uruguay.[816] In 2012, total renewable power capacity in the world rose by 8.5% from the previous year.[817] Significantly, RE contributed more than 26% of global generating capacity and supplied about 22% of global electricity.[818] By end of 2012, the top countries in terms of RE capacity are China, the United States, Brazil, Canada, and Germany.[819] Thus, a variety of RE technologies and solutions are already widely applied and utilised in many parts of Asia, Europe, the Americas, and Africa, among other places, in the world for the past two decades or so.

Consistent with the Marrakesh Accords' enabling environment component for technology transfer, several national policy and regulatory tools were employed to stimulate and sustain the uptake of RE technologies, including changes in the energy system.[820] These tools are motivated by a number of objectives closer to home such as creating local environmental and health benefits, advancing energy security goals, generating employment opportunities, and enhancing energy access.[821] For developing countries, access to modern energy services is generally the primordial consideration.[822] For example, rural communities in Brazil and Ghana had enhanced access to electricity using off-grid RE technologies.[823]

[813] Ibid 10.
[814] This refers to fuel wood, charcoal, animal dung and agricultural residues.
[815] Martinot, above n 810, 19.
[816] Ibid 15.
[817] Ibid 13.
[818] Ibid 21.
[819] Ibid.
[820] Intergovernmental Panel on Climate Change, above n 754, 874.
[821] Ibid 197.
[822] Ibid 41.
[823] International Energy Agency, above n 5, 536: Brazil's *Luz Para Todos* programme is very impressive where an estimated 14.5 million people living in highly remote and dispersed areas of the Amazon gained access to electricity using decentralised renewable energy systems such as solar and biogas; World Energy Council, above n 745, 6.

From a relatively few developed countries in the early 1990s that enacted policies to promote RE, a growing number of developing countries had policy frameworks in place by the early 2000s with focus on the electricity sector.[824] However, Stuart Bruce rues 'the absence of any binding international instruments that regulate renewable energy'.[825] Despite the absence of such instruments, Jenna Goodward et al elucidate that a suite of RE policies is employed to address identified barriers at certain stages of the innovation chain from research and development to widespread deployment.[826]

The various barriers are generally categorised as sociocultural (e.g. social acceptance), information and awareness (e.g. deficient resource data), market failures and economic (e.g. cost barriers, financial risk, trade barriers, and negative externalities) and institutional and policy (e.g. energy regulation, infrastructure, and industry structure), albeit closely related.[827] These obstacles, as Dermot Duncan and Benjamin Sovacool assert, 'demonstrate how societies around the world continue to reject sources of electricity that would actually benefit them'.[828] Paul Curnow, Lachlan Tait and Ilona Millar counter that they 'are not, however, insurmountable, and regulatory and commercial solutions exist to make renewable energy project financially viable'.[829] As such, the following table indicates the categories of basic policy options, their description/benefits, the schemes and mechanisms, and example of countries that adopted such policy option/s to overcome the barriers:

[824] Intergovernmental Panel on Climate Change, above n 754, 874.
[825] Bruce, above n 732, 22.
[826] Jenna Goodward et al., 'Is the FIT Right? Considering Technological Maturity in Designing Renewable Energy Policy', *WRI Issue Brief* (2011) 2-3.
[827] Intergovernmental Panel on Climate Change, above n 754, 193.
[828] Dermot Duncan and Benjamin Sovacool, 'The Barriers to the Successful Development of Grid Connected Renewable Electricity Projects in Australia, Southeast Asia, the United Kingdom and the United States of America' (2011) *Renewable Energy Law and Policy Review* 283, 284.
[829] Paul Curnow, Lachlan Tait and Ilona Millar, 'Financing Renewable Energy Projects in Asia: Barriers and Solutions' (2010) *Renewable Energy Law and Policy Review* 101, 105.

Table 1. Policy Options to Support RE Deployment[830]

Policy category	Description/benefit	Schemes and mechanisms	Example countries
Quota-based	Guaranteed amount/share of generation to be renewable	Renewable portfolio standards/Renewable energy certificates	US, Sweden, Japan UK, Australia France, Brazil, China
Price-setting	Mandated prices for renewable energy	Feed-in-tariffs	Germany, Ontario (Canada), Algeria, Brazil, South Africa, Philippines
Financial incentive	Cost reduction	Tax credits Subsidies/grants Clean development mechanism	UK, US, France Finland, Poland Ghana, Mexico, China
Public investment/market facilitation	Equity or debt support	Direct investments Loans Guarantees	UAE, Norway Poland, Saudi Arabia Germany, Mexico

So far, price-based policies such as those with feed-in tariffs (FIT) regimes are found to be effective and efficient in the promotion of RE technologies,[831] which are relatively mature.[832] However, the FIT experience in Spain 'where generous subsidies (which were not passed on to consumers), the absence of a cap on capacity, and weak control of infrastructure quality resulted in an unsustainable boom' serves as a stark reminder of the policy downside if it is not properly designed and implemented.[833] As James Prest points out, 'FIT laws are under challenge in many jurisdictions largely due to perceptions on the part of governments that rapid rates of growth in RES-E [renewable energy sources] generating capacity…are creating an unsustainable burden of RES-E support costs'.[834] Along this line, it is recommended that a mix of RE policies and technologies with due regard to prevailing conditions such as technological maturity, availability of affordable capital, market changes, and resource base must be taken into account,[835] including complementarities with non-RE

[830] World Energy Council, above n 745, table 2, 21.
[831] Intergovernmental Panel on Climate Change, above n 754, 198.
[832] World Energy Council, above n 745, 21.
[833] Ibid 23.
[834] James Prest, 'The Future of Feed-in-Tariffs: Capacity Caps, Scheme Closures and Looming Grid Parity' (2012) *Renewable Energy Law and Policy Review* 25, 26.
[835] Intergovernmental Panel on Climate Change, above n 754, 198.

policies.[836] In terms of carbon emission reductions, it is noted that a combination of 'RE policies that address RE-specific market failures and carbon pricing policies [that] address the climate externality' [837] is the most efficient way to achieve climate change mitigation targets.[838] Overall, the exiting legal and policy approaches allow government to choose their own RE regulation apparently as a matter of domestic concern in contrast to Bruce's proposition to advance international RE cooperation under the banner of responsible sovereignty.[839]

C. *The Arguments: Pros and Cons of RE Technologies*

Although the present and future deployment of RE technologies looks bright, [840] they 'historically had many detractors'.[841] One of the oft-cited arguments against RE is that the technology is not only costly, but also suffers from technology uncertainty and is, therefore, risky.[842] However, this goes against the grain of current developments in RE technology, including its rapid deployment in many parts of the world. With widespread deployment, many RE technologies have graduated from the learning-by-doing stage and moved farther along the innovation path towards commercialisation, that is, technological maturity.[843] Apparently, the misconception that RE technologies is not mature still revolves around the concept of 'base load.'[844] It has been pointed out that RE technologies are unable to provide base load power, as they tend to be diffused, intermittent, and produce less electricity compared to conventional power plants, [845] and thus, 'inferior'. [846] This argument is understandable from the standpoint of a centralised grid system underpinned by conventional power plants, which by sheer economics and technology considerations require large-scale power production to feed a large consumer base, as Tony La Vina explains.[847] Also, as Richard Ottinger, Lily Mathews and Nadia Elizabeth Czachor observe, it arises from the power sector's bias for centralised power plants as the power sector is designed and built

[836] Ibid 920.
[837] Ibid 917.
[838] Ibid.
[839] Bruce, above n 732, 52-3.
[840] Martinot, above n 810, 8: The high renewables scenario projects a renewable energy share of 50-95% by 2050.
[841] Ibid 11.
[842] Greenpeace, *Green is Gold: How Renewable Energy Can Save Us Money and Generate Jobs* (2013) 38.
[843] Intergovernmental Panel on Climate Change, above n 754, 7.
[844] Martinot, above n 809, 25: There are different definitions of 'base load,' which can be technical, economic or institutional in nature. Arguably, however, it is becoming less meaningful for future energy systems, because 'according to some meanings, renewables themselves would be defined as "base load" [already]'
[845] Dean Tony La Vina, 'Our Energy Choices', Eagle Eyes, *Manila Standard Today* (3 July 2012).
[846] Martinot, above n 810, 25.
[847] Dean Tony La Vina, 'The Case for Renewable Energy', Eagle Eyes, *Manila Standard Today* (21 July 2012)

around fossil fuel technology.[848] However, it misses the point on the underlying salient objectives of RE development and deployment.

First, RE is not primarily intended as base load power (although possible), but designed as part of an elaborate hybrid system and integrated network of RE technology installations 'that allow for rapid adaptation and switching from one resource to another as needed.'[849] Hybridisation and the complementarity approach can catalyse the decentralisation of the existing electricity infrastructure, which leads to the second objective of renewable energy: localisation and distributed generation.[850] Through localisation and distributed generation, electricity is generated on site or near the source at the individual and community levels.[851] According to Steven Ferrey and Anil Cabraal, this has the significant potential to reduce transmission losses and costs commonly associated with a centralised large-grid system, which draws power from generation facilities that are situated far from the distribution network.[852] Third, RE provides an opportunity to tap into indigenous energy sources and enhance energy sufficiency, including electricity price stability.[853] Last but not the least, RE enhances rural electrification efforts in providing access to electricity services to remote and highly dispersed local communities where grid extension is expensive and not technically feasible.[854] As Ferrey notes, 'it is more cost effective to install a dispersed renewable energy technology to provide electricity [in off-grid areas] than it is to extend the grid to the region so as to supply centrally generated electricity'.[855]

In the past, RE technologies were admittedly expensive to make and develop. But recent developments indicate that some RE technologies are increasingly becoming cost-competitive. A 2013 report by the International Renewable Energy Agency reveals that the cost of RE technologies such as solar has been on the downtrend for quite some time[856] with

[848] Richard Ottinger, Lily Mathews and Nadia Elizabeth Czachor, "Renewable Energy in National Legislation: Challenges and Opportunities' in Donald Zillman, Catherine Redgwell, Yinka Omorogbe, Lilia Barrera-Hernandez and Barry Barton (eds), *Beyond the Carbon Economy: Energy Law in Transition* (2008) 189.
[849] Greenpeace, above n 842, 38.
[850] Martinot, above n 810, 27. Hybridisation and complementarity refers to the integration of RE technologies with other energy solutions that are designed to complement the existing electricity infrastructure.
[851] Intergovernmental Panel on Climate Change, above n 754, 165.
[852] Steven Ferrey and Anil Cabraal, *Renewable Power in Developing Countries: Winning the War on Global Warming* (2006) 58.
[853] La Vina, above n 847.
[854] Martinot, above n 810, 27.
[855] Steven Ferrey, 'Why Electricity Matters, Developing Nations Matter, and Asia Matters Most of All' (2007) 15 *N.Y.U. Environmental Law Journal* 113, 134.
[856] International Renewable Energy Agency, above n 720, 4.

the price of solar panels dropping by as much as 48.4% in 2011.[857] This is attributed to the high learning rates in solar photovoltaic technology and its rapid deployment globally. There is even unguarded optimism that the price of electricity generated from solar power technologies will reach grid parity or the same price as the electricity presently being distributed in the grid sooner than later.[858] From a cost per kilowatt-hour of electricity-generated basis, however, wind energy is identified as one of the most cost-effective RE technologies currently available in the global market.[859] Cost reductions in wind energy systems are also predicted in the coming years as increased competition from suppliers and improvements in the supply chain drive down prices.[860]

However, RE technologies as decentralised or off-grid solutions still have relatively high upfront and capital cost even at the household-scale application level especially for the rural poor.[861] It is also observed that most countries with FIT schemes do not clearly provide for the possibility of applying such an incentive to remote and off-grid areas.[862] Thus, Magda Moner-Girona suggests that innovative financial and subsidy schemes such as the Renewable Energy Premium Tariff (RPT), a locally adapted variation of the FIT, [863] for off-grid electrification in developing countries are needed to promote the uptake of RE technologies and make them affordable with the bulk of funding support expected to come from governments.[864]

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[857] Deutsche Gesselschaft fur Internationale and Federal Ministry of Economics and Technology, *It's More Sun in the Philippines: Facts and Figures on Solar Energy in the Philippines* (2012) 5.
[858] Ibid.
[859] International Renewable Energy Agency, *Renewable Technologies: Cost Analysis Series* (2012) 18.
[860] Ibid 41; 47-50.
[861] International Energy Agency, above n 17, 23.
[862] Magda Moner-Girona (ed), *A New Scheme for the Promotion of Renewable Energies in Developing Countries: The Renewable Energy Regulated Purchase Tariff* (2008) 17.
[863] Magda Moner-Girona, 'A New Tailored Scheme for the Support of Renewable Energies in Developing Countries' (2009) 37 *Energy Policy* 2037, 2037: The RPT introduces a locally-adapted variation of the FIT scheme (paying for renewable electricity generated) to encourage the production of renewable electricity in mini-grids of isolated areas in developing countries.
[864] International Energy Agency, above n 17, 27-8: Under the set-up, the user is expected to pay only part of the tariff and the rest is borne by the government with focus on those with low consumption.

III. DEPLOYMENT OF RE IN SOUTHEAST ASIA

For the past several years, Asia's rapid economic ascent amidst global doldrums is turning the attention of the world economy to this vast region.[865] This foreshadows the coming of the so-called 'Asian Century' when the regional economy is expected to generate more than half of the world's Gross Domestic Product by 2050.[866] Correspondingly, such economic expansion will see almost a parallel increase in energy demand and consumption to sustain the growth momentum.[867] Together with China and India, the country members of the Association of Southeast Asian Nations (ASEAN)[868] 'are shifting the gravity of the global energy system towards Asia'.[869]

Duncan and Sovacool explain the interest on Southeast Asia, because it 'represents a part of the world where electricity demand will grow rapidly'.[870] This is highly significant as the ASEAN economic integration looms in 2015.[871] Unfortunately, the Asian Development Bank predicts that Asia will remain substantially dependent on imported fossil fuels such as oil in the foreseeable future.[872] On the other hand, primary energy demand from renewables will fall from 24% in 2011 to 20% in 2035, albeit there will be an increased share of renewables in the power sector, particularly due to higher electricity demand from 14% to 20% for the same period.[873]

Although diverse in levels of economic development and energy resource endowments, Southeast Asia shares common energy related themes, namely: energy security, energy access, energy affordability, and energy efficiency.[874] Broader issues on the growing dependency on fossil fuel imports and climate change impacts serve as overarching motivations for higher deployment of RE technologies in Southeast Asia.[875] In terms of RE resource potential, an International Energy Agency-commissioned study reveals that the

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[865] Asian Development Bank, above n 96, 53.
[866] Ibid.
[867] Ibid 56.
[868] ASEAN is composed of Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam.
[869] International Energy Agency and Economic Research Institute for ASEAN and East Asia, *Southeast Asia Energy Outlook* (2013) 15.
[870] Duncan and Sovacool, above n 828, 292.
[871] See ASEAN, *Initiative for ASEAN Integration (IAI) Strategic Framework and IAI Work Plan 2 (2009-2015)* at http://www.asean.org/images/2012/Economic/AIA/IAI%20Work%20Plan%202%20(2009-2015).pdf (accessed 18 Sep 2014).
[872] Asian Development Bank, above n 96, 58.
[873] International Energy Agency and Economic Research Institute for ASEAN and East Asia, above n 869, 39.
[874] Ibid 15.
[875] Samantha Olz and Milou Beerepoot, *Deploying Renewable in Southeast Asia: Trends and Potentials* (2010) 8.

region has significant 'realisable potential' in the medium-term until 2030 for almost all RE technologies in the electricity and transport sectors. [876] For electricity, this means that the total potential for RE electricity in Southeast Asia in 2030 will almost be twice as big as its total 2007 electricity consumption. [877] Unfortunately, Samantha Olz and Milou Beerepoot observe that competition from least-cost conventional technology options rather than resource availability is hampering the faster deployment of renewables in the region. [878] However, Curnow, Tait and Millar assert that RE technologies can compete with conventional energy technologies if provided with 'specific regulatory support, including in the form of financial incentives'. [879]

A. *Access to Modern Energy Services Deficit in ASEAN*

Of particular interest in terms of access to modern energy services, it is estimated that 134 million people still do not have access to electricity and close to 280 million people rely on largely inefficient traditional use of biomass for cooking in Southeast Asia. [880] Except for Brunei Darussalam, Malaysia, Thailand and Singapore, which have high levels of access, Southeast Asia has a comparatively low level of access to modern energy services with 80% living in low population density rural areas, which highlights the energy access challenge in the region. [881] This challenge is magnified in the case of Indonesia and the Philippines as highly dispersed archipelagic countries where a combined 94 million people are still without access to electricity. [882] The following table shows the access to modern energy services deficit in ASEAN as of 2011:

[876] Ibid 9: It is explained that the 'realisable potential represents the maximum achievable potential for a specific technology, assuming that all barriers can be overcome and countries have effective policies in place'.
[877] Ibid.
[878] Ibid 10.
[879] Curnow, Tait and Millar, above n 829, 101-2.
[880] International Energy Agency and Economic Research Institute for ASEAN and East Asia, above n 868, 26.
[881] Ibid 26-7.
[882] Olz and Beerepoot, above n 875, 21.

Table 2. Access to Modern Energy Services Deficit in ASEAN, 2011[883]

Rank (per population size)	Countries	Population without access to electricity		Population relying on traditional use of biomass for cooking	
		Million	Share (%)	Million	Share (%)
1	Indonesia	66	27%	103	42%
2	Philippines	28	30%	47	50%
3	Myanmar	25	51%	44	92%
4	Vietnam	3	4%	49	56%
5	Cambodia	9	66%	13	88%
6	Thailand	1	1%	18	26%
7	Lao PDR	1	22%	4	65%
8	Malaysia	0	1%	1	3%
9	Brunei Darussalam	0	0%	0	0%
10	Singapore	0	0%	0	0%
	Total ASEAN	**134**	**22%**	**279**	**47%**

In countries with a large segment of the populace still without access to modern energy services such as Cambodia, Indonesia and the Philippines, the use of decentralised and stand-alone RE systems to provide access to electricity is promoted, particularly in off-grid rural communities. [884] Evidently, there is recognition of fostering the deployment of RE technologies to achieve universal access to modern energy services, among others, in the region. Curnow, Tait and Millar, however, note that the high transaction cost of RE projects in the region poses significant barriers to RE deployment, which can be addressed through 'targeted regulatory support measures'. [885]

[883] International Energy Agency and Economic Research Institute for ASEAN and East Asia, above n 869, 27.
[884] Ibid 28.
[885] Curnow, Tait and Millar, above n 829, 101-2.

B. *RE Target and Policy Support in ASEAN*

To overcome the identified barriers to RE deployment, ASEAN countries have introduced various financial and non-financial incentives to create the enabling environment for the exploitation of renewables.[886] The table below shows the general target and policy support, including level of support, for RE in ASEAN-6 focusing on Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam:

Table 3. Target and Policy Support for RE in ASEAN-6, 2010[887]

Policy Support	Indonesia	Malaysia	Philippines	Singapore	Thailand	Vietnam
RE targets (quantitative objectives)	Medium level of support	Medium level of support	Medium level of support	Not applicable	High level of support	Medium level of support
Financial incentives	Medium level of support	Low level of support	Medium level of support	Low level of support	High level of support	Medium level of support
Non-financial incentives	Low level of support	Medium level of support	Medium level of support	Low level of support	High level of support	Medium level of support

So far, there is a preference for tax exemptions and FITs as exemplified by Indonesia, Malaysia, the Philippines, and Thailand.[888] Although the FIT is an attractive financial incentive mechanism without using public funds because utilities are obligated to purchase RE at a premium price that are eventually passed on to all consumers, it may not be equitable due to price vulnerability especially of the poorest consumers.[889] As adverted to earlier, however, an appropriately designed FIT such as the RPT be can be implemented in either regulated or liberalised environments to promote RE and provide affordable electricity to remote areas in developing countries.[890]

[886] Olz and Beerepoot, above n 875, 8.
[887] Ibid table ES.1, 9.
[888] Ibid 55.
[889] Ibid 51, 54.
[890] Moner-Girona, above n 862, 14.

An international study notes that most government initiatives tend to focus on addressing economic barriers to the deployment of RE.[891] However, non-economic barriers need to be equally addressed, albeit more challenging than economic barriers to the deployment of RE.[892] This is especially true in the case of Southeast Asia where technical/infrastructure-related and regulatory and administrative barriers rank high as impediments to RE technology penetration in the region.[893] The table below shows the ranking of barriers to RE in the ASEAN-6 countries:

Table 4. Ranking and Type of Barriers to RE in the ASEAN-6, 2009[894]

Rank	Type of Barrier	Remarks
1	Technical/infrastructure (Remoteness, higher connection costs of connection for small-scale production, costs of grid connection, and grid access is not fully guaranteed)	These barriers range from relevant to very significant
2	Administrative and regulatory (Lack of coordination between different authorities, lack of recognition for side-benefits of distributed generation, energy market structure unclear grid connection rules, high number of authorities involved, complexity of regulatory/support framework for renewable electricity, and complexity obtaining permits and legal appeal procedures)	These barriers range from relevant to very significant
3	Financing (Lack of experience/trust among banks or investors)	This is considered a significant barrier
4	Market (Asymmetrical availability of market information, energy market structure, and invisibility of the full costs of electricity from renewable energy sources	These barriers range from relevant to significant
5	Socio-cultural (Perception of unrealistically high costs of renewable electricity)	This is considered a significant barrier

[891] International Energy Agency, *Deploying Renewables 2011: Best and Future Policy Practice* (2011) 75
[892] Ibid.
[893] Olz and Beerepoot, above n 875, 12.
[894] Ibid.

Accordingly, tackling both economic and non-economic barriers are essential to create the enabling conditions for the faster deployment of RE in the region.[895]

IV. DEPLOYMENT OF RE TECHNOLOGIES IN THE PHILIPPINES

A. *The Energy Situation*

With the upward trajectory of the Philippine economy – one of the fastest expansions in Asia - in the next two decades, a concomitant increase in energy demand and consumption is expected.[896] According to Japan's Institute of Energy Economics, the ASEAN Centre for Energy and National Energy Supply Planning for Asean (ESSPA) Project Teams, the country's primary energy consumption growth rate has risen to 2.3% from 1990 to 2007.[897] Notably, the Philippine economy is mainly spurred by services (trade, transport, real estate, finance, communications, and private/government services) and industry (manufacturing, construction, mining, electricity, and water), which are both energy-intensive sectors.[898] Under a business-as-usual scenario, the trajectory of total final energy consumption is predicted to go upwards to 4.4% until 2030.[899] However, oil and coal are still seen as major primary energy sources of supply in meeting energy consumption demand until 2030.[900] This, in turn, makes the electricity-generating sector the highest contributor to greenhouse gas emission in the country representing close to 40% of the total.[901] Considering that oil and coal are mainly sourced externally, the Philippines will remain highly reliant on fossil fuel imports to cover its present and future needs in the absence of innovative policy reforms.

To achieve energy security, the Philippines recognised the need to tap indigenous energy sources for adequate and reliable electricity supply, including the acceleration of rural electrification.[902] This is a critical strategy to inclusive economic growth as recurring power

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[895] International Energy Agency, above n 891, 29

[896] The Institute of Energy Economics Japan, ASEAN Centre for Energy and National ESSPA Project Teams, above n 735, 61: In recent times, the country has been enjoying an economic renaissance with real Gross Domestic Product (GDP) predicted to rise at least 5% per annum from 2011 to 2030; National Statistical Coordination Board, *National Accounts of the Philippines - Press Release* <http://www.nscb.gov.ph/sna/2012/4th2012/2012qpr4.asp> In 2012, the full-year GDP expanded by 6.6%; World Bank, *Data: Philippines* <http://data.worldbank.org/country/philippines#cp_wdi> However, the poverty headcount ratio at the national poverty level remains significant at 26.5%.

[897] The Institute of Energy Economics Japan, ASEAN Centre for Energy and National ESSPA Project Teams, above n 735, 67.

[898] Ibid.

[899] Ibid.

[900] Ibid 62.

[901] Greenpeace, above n 842, 17.

[902] National Economic Development Authority, *Socioeconomic Report: The First Two Years of the Aquino Administration 2010-2012*, 96 <http://www.neda.gov.ph/wp-content/uploads/2013/10/SER2010-2012.pdf>

shortages; especially in Mindanao imperil development in the Southern part of the country.[903] So far, the percentage share of RE in electricity generation in the country is encouraging with geothermal and hydropower contributing more than 17% and 14% to the total primary energy mix, respectively.[904] In sum, RE supplied about 41% to the total primary energy mix in 2011.[905] However, the Asian Development Bank predicts that the share of renewables in the country will fall to 14% in 2035, at the same time that the Philippines' proven indigenous gas and coal reserves will be depleted.[906]

B. *Institutional, Regulatory and Policy Framework*

As previously mentioned, the Philippines heavily depends on fossil fuel imports, particularly oil and coal, to meet domestic energy demand. To address such reliance and vulnerability to the fluctuations of the external energy market, including climate change and environmental concerns, the country has enacted several pieces of legislation to achieve energy self-sufficiency, energy security, and sustainable development as overarching themes. As Carolina Hernandez notes, the Philippines 'has sought energy self-sufficiency throughout most of the past half century'.[907]

1. *The Philippine Environmental Policy and Philippine Environmental Code*

In the 1970s, the Philippines recognised very early the strategic importance of RE to sustainable development. In its policy declaration, Presidential Decree (PD) No. 1151, otherwise known as the Philippine Environmental Policy, provides:

> It is hereby declared a continuing policy of the State (a) to create, develop, maintain and improve conditions under which man and nature can thrive in productive and enjoyable harmony with each other, (b) to **fulfill the social, economic and other requirements of present and future generations of Filipinos**, and (c) to **insure the attainment of an environmental quality that is conducive to a life of dignity and well-being**.[908]

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[903] World Bank, *Philippine Economic Update: Accelerating Reforms to Sustain Growth* (2012) 37 <http://www.worldbank.org/content/dam/Worldbank/document/ph_Philippine_Economic_Update_Dec2012.pdf >

[904] Olz and Beerepoot, above n 875, 26.

[905] Department of Energy, *Philippine Energy Plan 2012-2030* <http://www.doe.gov.ph/doe_files/pdf/01_Energy_Situationer/2012-2030-PEP.pdf>

[906] Asian Development Bank, above n 96, 59.

[907] Carolina Hernandez, 'Philippine Energy Policy: Implications for Human Security and Regional Cooperation' in Antonio Marquina (ed), *Energy Security: Visions from Asia and Europe* (2008) 218.

[908] *Presidential Decree No. 1151* (Philippines) s 1; Emphasis added.

It further provides as a goal that:

> In pursuing this policy, it shall be the responsibility of the Government, in cooperation with concerned private organizations and entities, to use all practicable means, consistent with other essential considerations of national policy, in promoting the general welfare to the end that the Nation may (a) recognize, discharge and fulfill the responsibilities of each generation as trustee and guardian of the environment for succeeding generations, (b) assure the people of a safe, decent, healthful, productive and aesthetic environment, (c) encourage the widest exploitation of the environment without degrading it, or endangering human life, health and safety or creating conditions adverse to agriculture, commerce and industry, (d) preserve important historic and cultural aspects of the Philippine heritage, (e) attain a rational and orderly balance between population and resource use, and (f) **improve the utilization of renewable** and non-renewable **resources**.[909]

Interestingly, this law explicitly recognises the right of the people to a healthy environment.[910] To promote economic and social development consistent with environmental protection policies,[911] PD No. 1152, otherwise known as the Philippine Environment Code, adopts as a national policy to 'undertake an energy development program encouraging the utilization of invariant sources such as solar, wind and tidal energy'.[912] Despite these early policy pronouncements, the barriers identified in the early part of the Chapter delayed RE development and deployment in the country.

2. *The Department of Energy Act 1992*

Pursuant to Republic Act (RA) No. 7638, the state declares as a matter of policy:

> a) to **ensure a continuous, adequate, and economic supply of energy with the end in view of ultimately achieving self-reliance** in the country's energy requirements through the integrated and intensive exploration, production, management and development of the country's indigenous energy sources, and through judicious conservation, renewal and efficient utilization of energy to keep pace with the country's growth and economic development and taking into consideration the active participation of the private sector in the various areas of energy resource development; and
> (b) to rationalize, integrate and coordinate the various programs of the Government towards **self-sufficiency and enhanced productivity in power and energy without sacrificing ecological concerns**.[913]

[909] Ibid s 2; Emphasis added.
[910] Ibid s 3.
[911] *Presidential Decree No. 1152* (Philippines) ss 2 and 36.
[912] Ibid s 36.
[913] *Republic Act No. 7638* (Philippines) s 2; Emphasis added.

Also, the Department of Energy (DoE) was created as the lead public agency tasked to 'prepare, integrate, coordinate, supervise, and control all plans, programs, projects, and activities of the Government relative to energy exploration, development, utilization, distribution, and conservation.'[914] In addition, the DoE is empowered, among other things, to:

> Develop and update the existing Philippine energy program which shall provide for an integrated and comprehensive exploration, development, utilization, distribution and conservation of energy resources, with **preferential bias for environment-friendly, indigenous, and low-cost sources of energy**. The program shall include a policy direction towards the privatization of government agencies related to energy, deregulation of the power and energy industry and **reduction of dependency on oil-fired plants**.[915]

The development of the Philippine energy program is critical in terms of promoting climate-friendly energy sources and reducing fossil fuel dependency, which must be regularly updated on an annual basis.[916] Moreover, the DoE has supervision over the Philippine National Oil Company (resource development), National Power Corporation (power generation, transmission and distribution) and the National Electrification Administration (regulation of electric cooperatives and rural electrification) as attached agencies and corporations.[917] It will be noted that the institutional set-up provides the DoE the opportunity to closely coordinate and supervise key public agencies involved in developing and implementing national policies and programs for the energy and electric power sector in an integrated, cohesive and consistent manner.[918]

3. *The Electric Power Industry Reform Act 2001*

In 2001, the Philippine Congress enacted RA No. 9136 otherwise known as '*The Electric Power Industry Reform Act of 2001'* to restructure the electric power industry and privatise the assets of the state-owned National Power Corporation (NPC), a national monopoly, which was in consonance with the privatisation and deregulation policies embodied in RA No. 7638. As an important plank of power sector reforms in the Philippines, privatisation as an approach will be discussed in the next Chapter. Focusing on RE development, in the meantime, RA No. 9136 enunciates several important policy declarations that are highly

[914] Ibid s 4.
[915] Ibid s 5 (b); Emphasis added.
[916] Ibid.
[917] *Presidential Decree No. 269* (Philippines) s 13: In 1973, the National Electrification Administration (NEA) was created under to pursue total electrification of the Philippines.
[918] *Executive Order No. 292, Series of 1987* (Philippines) book IV ch 9 s 42.

relevant to RE deployment and the provision of electricity services in the country, which are listed as follows:

> (a) To **ensure and accelerate the total electrification of the country**;
> (b) To ensure the **quality, reliability, security and affordability of the supply of electric power**;
> (c) To ensure transparent and reasonable prices of electricity in a regime of free and fair competition and full public accountability to achieve greater operational and economic efficiency and enhance the competitiveness of Philippine products in the global market;
> (d) To enhance the inflow of private capital and broaden the ownership base of the power generation, transmission and distribution sectors in order to minimize the financial risk exposure of the national government;
> (e) To ensure fair and non-discriminatory treatment of public and private sector entities in the process of restructuring the electric power industry;
> (f) To **protect the public interest as it is affected by the rates and services of electric utilities and other providers of electric power**;
> (g) To **assure socially and environmentally compatible energy sources and infrastructure**;
> (h) To **promote the utilization of indigenous and new and renewable energy resources in power generation in order to reduce dependence on imported energy**;
> (i) To provide for an orderly and transparent privatization of the assets and liabilities of the National Power Corporation (NPC).
> (j) To establish a strong and purely independent regulatory body and system to ensure consumer protection and enhance the competitive operation of the electricity market; and
> (k) To **encourage the efficient use of energy and other modalities of demand side management.**[919]

Moreover, RA No. 9136 expanded the original mandate of the DoE not only to oversee the restructuring of the electric power industry, but also to undertake the formulation of policies towards 'efficient supply and economical use of energy consistent…with the policies on environmental protection and conservation and maintenance of ecological balance',[920] and to 'implement a program for the accelerated development of non-conventional energy systems and the promotion and commercialization of its applications.'[921] Furthermore, the 'Philippine energy program' under RA No. 7638 was renamed to the 'Philippine Energy Plan' and incorporates a 'Power Development Program,'[922] which contains an indicative plan for electricity demand side management through energy efficient programs,[923] among others.

[919] *Republic Act No. 9136* (Philippines) s 2; Emphasis added.
[920] Ibid s 37.
[921] Ibid.
[922] Ibid.
[923] Ibid s 4.

Based on the Philippine Energy Plan 2012-2030, the DoE adopted as policy thrusts the wider use of RE to achieve energy security, promotion of a low-carbon future, climate proofing of the energy sector and the broadening of energy access.[924]

There are several key reform provisions embodied in RA No. 9136. One key feature introduced by RA No. 9136 is the creation of an independent quasi-judicial regulatory body, the Energy Regulatory Commission (ERC), to 'promote competition, encourage market development, ensure customer choice and penalize abuse of market power in the restructured electricity industry.'[925] Also, it establishes a Wholesale Electricity Spot Market (WESM) as a mechanism for identifying and setting the price of actual variations from the quantities transacted under contracts between sellers and buyers of electricity.[926] Another important reform provision under RA No. 9136 is the entry of qualified third parties[927] into remote and unviable villages to provide electric service or participate in rural electrification,[928] if a franchised utility is unable to do so for whatever reasons.[929] Also, missionary electrification or the delivery of basic electricity service to unviable areas[930] remains as a service domain of the NPC-Small Power Utilities Group (NPC-SPUG) in order to provide power and associated power delivery systems in areas that are not connected to the main transmission grid and cannot be serviced by distribution utilities or qualified third parties.[931] NPC-SPUG mainly generates power using diesel and bunker-fuelled generators, and notably admits that small islands and isolated grids are expensive to operate and maintain.[932]

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[924] Department of Energy, *Philippine Energy Plan 2012-2030* <https://www.doe.gov.ph/doe_files/pdf/01_Energy_Situationer/2012-2030-PEP.pdf>; See also Jan Glazewski and Debbie Collier, 'South Africa' in Richard Lord, Silke Goldberg, Lavanya Rajamani and Jutta Brunnee (eds), *Climate Change Liability: Transnational Law and Practice* (2012) 326: Other developing countries also set out similar future energy plans, for instance South Africa, which has an 'Integrated Resource Plan for Electricity: 2010 to 2030'.

[925] *Republic Act No. 9136* (Philippines) s 43.

[926] Ibid s 30.

[927] Ibid s 59: A 'Qualified Third Party' refers to the alternative electric service provider authorised to serve remote and unviable areas pursuant to Section 59 of RA No. 9136.

[928] *Implementing Rules and Regulations of Republic No. 9136* (Philippines) rule 4: 'Rural electrification' is defined as referring 'to the delivery of basic electric services, consisting of power generation, sub transmission and/or extension of associated power delivery system that would bring about important social and economic benefits to the countryside.'

[929] *Republic Act No. 9136* (Philippines) s 59.

[930] *Implementing Rules and Regulations of Republic No. 9136* (Philippines) rule 4 (ddd) and (ssss): Missionary electrification aims to ultimately bring operations in unviable areas to viability levels. 'Unviable areas' refer to a geographical area within the Franchise Area of a Distribution Utility where immediate extension of distribution line is not feasible.

[931] *Republic Act No. 9136* (Philippines) s 70.

[932] Department of Energy, *2012-2016 Missionary Electrification Development Plan* <https://www.doe.gov.ph/doe_files/pdf/01_Energy_Situationer/2012%20MEDP.pdf >

4. *The Biofuels Act 2006 and Renewable Energy Act 2008*

In 2006, RA No. 9367 was passed by Congress to direct the use of biofuels and establish the Philippine Biofuel Program. Explicitly, the law declares as a matter of state policy the following:

> [T]o **reduce dependence on imported fuels with due regard to the protection of public health, the environment, and the natural ecosystems consistent with the country's sustainable economic growth** that would **expand opportunities for livelihood** by mandating the use of biofuels as a measure to:
> a) Develop and utilize indigenous renewable and sustainable-sources clean energy sources to reduce dependence on imported oil.
> b) Mitigate toxic and greenhouse gas (GHG) emissions;
> c) **Increase rural employment and income**; and
> d) Ensure the availability of alternative and renewable clean energy without any detriment to the natural ecosystem, biodiversity and food reserves of the country.[933]

Since the passage of this law, the growth of the biodiesel industry, including production, is noted, albeit the development of bioethanol is observed to be lagging significantly behind biodiesel.[934] Also, the fuel-versus-food debate emerged,[935] which prodded several Philippine government agencies to issue a joint administrative regulation to 'ensure that lands devoted to food crops shall not be utilized for biofuel feedstocks production except in cases provided' in the regulation.[936]

In 2008, RA No. 9513 (REA) was enacted to provide a national framework for the promotion, development, utilisation and commercialisation of RE sources in the country. It declares as a matter of state policy:

> (a) **Accelerate the exploration and development of renewable energy resources** such as, but not limited to, biomass, solar, wind, hydro, geothermal and ocean energy sources, including hybrid systems, **to achieve energy self-reliance, through the adoption of sustainable energy development strategies to reduce the country's dependence on fossil fuels** and thereby minimize the country's exposure to price

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[933] *Republic Act No. 9367* (Philippines) s 2; Emphasis added.
[934] Ahmad Dermawan, Krystof Obidzinski and Heru Komarudin, 'Withering before full bloom? Bioenergy in Southeast Asia', *Working Paper 94* (2012) 7-8; Roselle Tenefrancia and Ma. Perpetua Unico, 'Refueling the Alternative Fuel: A Review of the Philippine Biofuels Act' (2009) *Ateneo Law Journal* 1004, 1015-8: Other concerns relate to land use conversion, impact on indigenous peoples and water resources, and GHG emissions.
[935] Dermawan, Obidzinski and Komarudin, above n 933, 5.
[936] *Department of Agriculture, Department of Agrarian Reform, Department of Energy, Department of Environment and Natural Resources, Department of Finance (DOF), Department of Labor and Employment, Department of Science and Technology, Department of Trade and Industry, Department of Transportation and Communications, National Biofuels Board, National Commission on Indigenous Peoples, Philippine Coconut Authority and Sugar Regulatory Administration, Joint Administrative Order No. 2008-1, Series of 2008* (Philippines) s2 (e).

> fluctuations in the international markets, the effects of which spiral down to almost all sectors of the economy;
> (b) Increase the utilization of renewable energy by **institutionalizing the development of national and local capabilities in the use of renewable energy systems, and promoting its efficient and cost-effective commercial application** by providing fiscal and nonfiscal incentives;
> (c) Encourage the development and **utilization of renewable energy resources as tools to effectively prevent or reduce harmful emissions and thereby balance the goals of economic growth and development with the protection of health and the environment**; and
> (d) Establish the necessary infrastructure and mechanism to carry out the mandates specified in this Act and other existing laws.[937]

Also, the law sets out the institutional arrangement and the fiscal and non-fiscal incentives available for on-grid and off-grid RE development, including various schemes and mechanisms to support RE development, utilisation and commercialisation.

Specifically, the DoE has been designated as the lead agency for the implementation of the provisions of REA. To support the DoE, the Renewable Energy Management Bureau (REMB) is created as a staff and support bureau to implement policies, plans and programs to accelerate the development, utilisation and commercialisation of RE resources and technologies.[938] Also, REMB is empowered to develop and maintain a national information database on RE sources, undertake technical research, conduct socio-economic and environmental impact studies, and ensure compliance with rules, regulations, guidelines and standards on RE resources development and utilisation.[939] Aside from the REMB, the National Renewable Energy Board (NREB) is established consisting of multi-sector representatives from different government line agencies, government-owned or controlled corporations and financial institutions, RE developers, private distribution utilities, electric cooperatives, electric suppliers and non-governmental organisations.[940] The NREB is tasked to evaluate and recommend to the DoE the Renewable Portfolio Standard (RPS)[941] and minimum RE generation capacities in off-grid areas.[942] It is also empowered to recommend specific actions, monitor and review the implementation of the National Renewable Energy Program (NREP), which seeks to attain consistency and preclude functional overlaps among

[937] *Republic Act No. 9513* (Philippines) s 2; Emphasis added.
[938] Ibid s 32.
[939] Ibid.
[940] Ibid s 27.
[941] Ibid s 4 (ss): 'Renewable Portfolio Standard' refers to a market-based policy that requires electricity suppliers to source an agreed portion of their energy supply from eligible renewable energy sources.
[942] Ibid.

the different government agencies involved in RE development.[943] Moreover, the NREB is mandated to oversee and monitor the RE Trust Fund, albeit administered by the DoE, to fund resource and market assessment, research, development, demonstration and promotion of RE systems.[944]

(a) Renewable Portfolio Standard

The RPS obligates electricity industry participants such as generators, distribution utilities or suppliers to source or produce a minimum percentage of their power requirements from eligible RE resources on a sector and per grid basis.[945] This is intended to diversify the supply of energy, while at the same time reducing greenhouse gas emissions in the country.[946] To facilitate compliance with the RPS, the DoE is authorised to create a Renewable Energy Market (REM) and to supervise the establishment of a Renewable Energy Registrar (RER) through the Philippine Electricity Market Corporation (PEMC). The RER can issue Renewable Energy Certificates (REC) as proof of compliance with the RPS, which can then be traded in the REM.[947] The RECs can also form part of an international trading emission and compliance scheme. However, the DoE has yet to issue the RPS rules as of the writing of the thesis.[948]

(b) Feed-In-Tariff (FIT)

The REA mandates the implementation of a FIT system for electricity from emerging renewable energy sources such as wind, solar, ocean, run-of-river hydro and biomass. The FIT obligates electricity power industry participants to source electricity from emerging RE sources at a guaranteed fixed price for a period of not less than twelve years.[949] In addition, it provides for priority connection to the grid for electricity generated from emerging RE sources as well as priority purchase and transmission of such electricity by grid system operators.[950] This means that generation for own use is excluded. Disturbingly, the process of issuing and promulgating the FIT Rules has been quite tedious taking two years from

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[943] Ibid.
[944] Ibid.
[945] *Department Circular DC 2009-05-0008-Rules and Regulations Implementing Republic Act No. 9513* (Department of Energy, Philippines) s 4.
[946] Ibid.
[947] Ibid s 8.
[948] See Myrna Velasco, 'Renewable Energy's Twisted Policy Track (Part One)', *Manila Bulletin*, (5 April 2013) <http://www.mb.com.ph/article.php?aid=6289&sid=2&subid=77#.UV6-Gr9RroA >
[949] *Department Circular DC 2009-05-0008-Rules and Regulations Implementing Republic Act No. 9513* (Department of Energy, Philippines) s 5.
[950] Ibid s 7.

effectivity of the REA to complete, instead of within the one year window provided to the ERC under the law.[951] It almost took another two years to announce the first round of tariffs in July 2012, including the target installation per emerging RE technology. And lastly, the issued FIT rules only cover on-grid RE systems[952] with separate implementation of the incentive mechanisms for off-grid areas.[953] However, there are still no FIT rules issued for off-grid RE systems.

(c) Green Energy Option

The DoE is mandated to establish a Green Energy Option program that allows end-users to choose RE as their source of power.[954] Subject to the determination of the DoE, end-users may directly contract from RE facilities their energy requirements through the relevant distribution utilities.[955] There are two simultaneous issuances that are necessary to the implementation of the Green Energy Option program. While the DoE "shall, upon consultation with the NREB, promulgate the appropriate implementing rules and regulations which are necessary, incidental or convenient to achieve the objectives of the Green Energy Option program,"[956] the ERC – an independent regulatory body - "shall issue the necessary regulatory framework to effect and achieve the objectives of the Green Energy Option program"[957] within six months from effectivity of REA's Implementing Rules and Regulations (IRR), i.e., from June 2009. An end-user who chooses to enrol in the Green Energy Option program must be informed by way of monthly electricity bills on how much is consumed from, and the generation charge provided by, RE facilities.[958] Both issuances from the DoE and ERC remain pending.

(d) Net-Metering

Net-metering is adopted as a consumer-based RE incentive scheme wherein distribution end-users generate electricity from an eligible on-site RE facility that is delivered to the local distribution grid.[959] The electricity generated can then be used by distribution end-users to

[951] Ibid.
[952] *Resolution No. 16, Series of 2010* (Energy Regulatory Commission, Philippines) rule 2.1.
[953] Ibid.
[954] *Department Circular DC 2009-05-0008-Rules and Regulations Implementing Republic Act No. 9513* (Department of Energy, Philippines) s 11.
[955] Ibid s 9.
[956] Ibid s 6.
[957] Ibid.
[958] Ibid.
[959] Ibid s 7.

offset electricity consumed from the distribution utility, or gain credit in case of electricity delivered to the grid from the on-site RE facility exceeds what is consumed therefrom.[960] The distribution utility is required to enter into a net-metering agreement upon request of a distribution end-user wishing to install an on-site RE facility, subject to the distribution utility's technical standards, including economic considerations, for the RE facility.[961] To make the scheme more attractive to the distribution utility, it will be entitled to any RECs issued under the arrangement, which in turn can be counted towards its compliance with the RPS.[962] Accordingly, the ERC is mandated to establish the net-metering interconnection standards, pricing methodology, and other commercial arrangements necessary to ensure the success of such a program within one year from effectivity of REA.[963] On 27 May 2013, the ERC issued the net-metering rules or guidelines, albeit delayed by more than four years since the REA took effect in 2009.

(e) Fiscal Incentives

In general, the fiscal incentives available to RE developers include income tax holiday for the first seven years of commercial operation of a renewable energy facility, duty-free importation of RE machinery, equipment and material, special realty tax and preferential corporate tax rates, zero value-added tax rate for sale of fuel or power generated from RE sources, and tax exemption of carbon credits, among others.[964] Also, fiscal incentives for RE commercialisation are extended to all manufacturers, fabricators and suppliers of locally produced RE equipment and components.[965] To avail of the fiscal incentives, RE developers and local manufacturers, fabricators and suppliers must register with the DoE through the REMB, which correspondingly issues a certification. They also need to comply with the requirements, if any, imposed by other relevant government agencies charged to administer the fiscal incentives under the REA.[966]

[960] Ibid.
[961] Ibid.
[962] Ibid.
[963] Ibid s 10.
[964] Ibid s 15.
[965] Ibid s 21.
[966] Ibid s 25.

C. *REA Implementation Challenges*

The FIT Scheme is relatively at an early stage of implementation, which makes it difficult to empirically assess the effectiveness of the various design elements of the FIT towards achieving the policy objectives enunciated in the REA. Also, it is challenging to predict the impact of the FIT together with the RPS without seeing how both schemes actually work when fully implemented. However, there are early indications that similar to the FIT Scheme, the available draft of the RPS rules will require separate issuances to effectively implement the entire RPS Scheme. Again, this will cause delays in its implementation. Separate rules for the REM, RER and the REC (ownership and value per unit), for instance, are still needed post issuance of the initial RPS rules.[967] Alarmingly, it has been pointed out that the implementation delays put in jeopardy more than US$2.5 billion worth of potential renewable energy investments in the country.[968] So far, initial drawbacks are already seen in the implementation of the FIT Scheme. As Antonio La Vina and Cecilia Guiao observe, 'while the Philippines is a global leader in terms of its policies, implementation continues, as always, to be a challenge'.[969] Accordingly, the implementation challenges are identified in order to contextualise the potential of the FIT as a policy mechanism and the REA as a legal framework to accelerate development of emerging RE technologies in the country.

1. *Concerns on a Customer-Based FIT*

One plausible reason that delayed the implementation of the FIT regime in the country is the apprehension that it is an enforced customer-based subsidy mechanism that will arguably lead to an increase in electricity prices.[970] According to the WWF, this design feature of the FIT raises payment distribution and equity concerns as it did in the Philippines.[971] Also, Linda Katz explains that '[s]elling renewable energy to Filipino consumers may pose a major challenge given that the FIT rates are expected to increase, what are already, very high power rates in the Philippines'.[972] In fact, the cost of electricity in the Philippines is the second

[967] Department of Energy, *Draft RPS Rules* rule 4 <http://www2.doe.gov.ph/Announcements/RPS%20Rules%20Oct%202011.pdf>
[968] WWF Report 2013, *Meeting Renewable Energy Targets: Global Lessons from the Road to Implementation* (2013) 61.
[969] Antonio La Vina and Cecilia Guiao, 'Climate Change and the Law: Issues and Challenges in the Philippines' (2013) 58 *Ateneo Law Journal* 612, 632.
[970] European Renewable Energy Council and Greenpeace, *Energy Revolution: A Sustainable World Energy Outlook* (2010) 21.
[971] WWF Report 2013, above n 968, 17.
[972] Katz, above n 734, 144.

highest in Asia, which is mainly attributed to the high intrinsic cost of supply.[973] Despite the strong opposition from various stakeholders, the FIT has the potential to lower the cost of electricity in the Wholesale Electricity Spot Market (WESM). To understand this proposition, the principle behind the WESM in the Philippines needs to be revisited.

Prior to WESM, the Philippines suffered prolonged power outages due to poorly maintained, inadequate and out-dated electric power infrastructure owned by the government-owned NPC.[974] The Electric Power Industry Reform Act 2001 introduced the WESM as a market-based competitive bidding mechanism to attract new power plant generators and to create additional capacity by 'matching' supply and demand in the market.[975] This works by driving competition among power plant generators, which sell electricity to off-takers at a market price during peak and off-peak demand times. The simple notion is that utility companies will not take the more expensive electricity, if a cheaper one is available in the spot market. However, it plays out differently if supply and demand does not 'match', as what usually prevails in WESM, that is, demand is higher than supply.

Due to the merit-order effect prevailing in WESM where the price for all bidders is set by the last and highest bid offer, the high-demand-low–supply situation benefits sellers, particularly during peak demand times.[976] As a result, electricity price in the spot market is higher due to opportunistic and predatory pricing among suppliers,[977] which is then passed off to consumers in the form of higher electricity bills. It will be noted that the electricity being sold in WESM are primarily generated from conventional power plants that are fuelled by imported coal and diesel, which makes electricity pricing vulnerable to the vicissitudes of the international market. This leads to the following question: How can RE and the FIT lower the cost of electricity in the spot market?

With a positive outlook on cost reduction for RE technologies and the full implementation of the REA, there is significant potential to bring down the cost of electricity in WESM that will ultimately redound to the benefit of consumers. Under a FIT regime, electricity generated from emerging RE sources has priority connection and transmission to the grid aside from being purchased under a guaranteed fixed price for a maximum of twenty

[973] International Energy Consultants, *Regional Comparison of Retail Electricity Tariffs Executive Summary* (2012) < http://www.meralco.com.ph/pdf/newsandupdates/2012/NW04812a_link.pdf>
[974] Ibid.
[975] Ibid.
[976] Ibid 38-9.
[977] Ibid.

years.[978] In effect, RE facilities are deemed 'unscheduled' generators, who do not have to bid and offer a price in WESM, in the same way conventional power plants do.[979] This allows emerging renewables under a FIT regime to significantly supply electricity for priority dispatch – as much as 70% of 2011 WESM sales - which in turn, constrain conventional power producers to compete for the remaining demand by offering lower prices, especially during peak demand times.[980] As the NREB Chairperson explains, a FIT regime provides relative predictability and stability to electricity rates throughout its duration without the 'pass through costing' of fossil fuel power plants.[981] Evidently, the FIT lies at the heart of the implementation of the REA.[982]

2. *Issues on FIT Entitlement*

Any semblance of implementation delay or lack of decisive action on the part of the government to fully operationalise FIT together with the RPS and the other incentive schemes under the REA will have deep repercussions in the drive towards energy security and sustainable energy development in the Philippines. Shifting policy pronouncements on the entitlement to the FIT are sending the wrong signals to the public and the investing community. As Marilyn Brown and Sharon Chandler point out, 'fluctuating short-term policies…can forestall commitments to clean energy or accelerate investments in carbon-intensive energy options'.[983] From the previous policy stance of giving conditional FIT entitlement guarantees to projects at the pre-construction stage, the DoE announced that FIT entitlement could only be endorsed at the post-construction phase.[984] In particular, Section 6 (g) of DC 2013-05-0009 issued by the DoE on 28 May 2013 clearly stipulates that only "RE developers holding Certificate of Confirmation of Commerciality shall be issued a [Certificate of Endorsement] COE for FIT eligibility." This means that the DoE needs to be satisfied first that a RE plant has been successfully commissioned before a COE for FIT eligibility is issued.[985] Effectively, the administrative issuance changes the investment risk consideration for a RE project and is seen by some sectors as favouring the big players or

[978] *Resolution No. 16, Series of 2010* (Energy Regulatory Commission, Philippines) rule 4.
[979] Greenpeace, above n 842, 16; 40.
[980] Ibid.
[981] Pete Maniego Jr., *Status of the RE Mechanisms: Sharing Experiences on RE Promotion* <http://eeas.europa.eu/delegations/philippines/documents/press_corner/renewable_energy_mechanisms_maniego_en.pdf>
[982] Dean Tony La Vina, 'Our Energy Choices', Eagle Eyes, *Manila Standard* (3 July 2012).
[983] Marilyn Brown and Sharon Chandler, 'Governing Confusion: How Statutes, Fiscal Policy, and Regulations Impede Clean Energy Technologies' (2008) 19 *Stanford Law and Policy Review* 472, 474.
[984] Velasco, above n 948.
[985] *Department of Energy Circular No. DC 2013-05-0009* (Department of Energy, Philippines) s 6 (e).

firms with strong balance sheets.[986] It also projects weakened political support for RE development and an impression to preserve the status quo as long as possible, that is, keeping RE 'marginalised by distortions in the world's electricity markets created by decades of massive financial, political and structural support to conventional power technologies.'[987] As Katz observes, '[t]here may not be sufficient political will to persevere with the renewable energy policy' especially when confronted with the politics surrounding the push for RE.[988]

3. *FIT Uncertainty upon Full Subscription of Installation Target*

Another area of concern that relates to the FIT Scheme is the conservative installation target set initially for the emerging RE technologies eligible to avail the FIT. The table below shows the gap among the DoE-approved installation target, NREB-approved installation target, the indicative target provided in the NREP, and the proposed target from RE developers:

Table 5. Comparative RE Installation Targets

Technology Type	Proposed by RE Developers (2010)[989]	Approved by NREB (2011)[990]	Approved by the Department of Energy (2011)[991]	2012 NREP Indicative Target (2012-2015)[992]
Wind	710	220	200	1,048
Solar	542	100	50	269
Run-of-River Hydro	131	250	250	343.3
Biomass	416	250	250	276.7
TOTAL	**1,799**	**820**	**750**	**1,937**

The comparatively low installation target has considerable implications with respect to attracting new RE projects, which look at the FIT to lower the cost of capital or offset the higher upfront investment costs. It will be noted that in the event that the installation target is fully subscribed the RE developer may avail the FIT only after the next installation target and

[986] Velasco, above n 948.
[987] European Renewable Energy Council and Greenpeace, above n 970, 16; 21.
[988] Katz, above n 734, 144.
[989] Maniego, above n 981.
[990] Ibid.
[991] Ibid.
[992] Jose Layug, Jr., *The National Renewable Energy Program: The Road Starts Here* <http://eeas.europa.eu/delegations/philippines/documents/press_corner/national_renewableenergy_prog_usec_layug_en.pdf>

FIT regime is approved.[993] While a RE developer has the option to enter into a bilateral agreement with a distribution utility or any off-taker or export the power generation directly to WESM if an installation target has reached full subscription,[994] it removes in the meantime the element of revenue certainty until the renewable energy plant is issued a COE for FIT eligibility under the succeeding installation target and FIT regime. The event of the installation target reaching full subscription appears imminent considering that as of 2011 about 384 RE service contracts equivalent to 6,046 megawatts of generation capacity were awaiting the DoE's approval.[995] With the complicated process associated with the determination of the next installation target and the FIT regime as witnessed in the past, a lot of uncertainty again ensues that only serves to frustrate and diminish whatever interests RE developers have in the country. Amidst all this, millions of isolated and poor rural folks are still awaiting their opportunity to access modern energy services, particularly electricity, for the first time. Thus, as the World Energy Council emphasises, significant work lies ahead to overcome the barriers and concerns to effective RE policy implementation at both the national and local levels.[996]

V. CONCLUSION

Innovation and technology are paving the way to an energy transition and a development path that allows developing countries to leapfrog environmentally into a low-carbon future. A review of the global deployment of RE technologies indicates the realisation of such a promise as demonstrated by the increasing share of renewables in the energy mix worldwide. This is enabled and sustained by a suite of international and national policy mechanisms to address both economic and non-economic barriers to the deployment of RE technologies. At the international level, technology cooperation and transfer are identified as indispensable to capacitate developing countries in tackling the climate change challenge and environmentally leapfrogging for sustainable development. However, it is observed that not much practical progress has been achieved in the technology transfer front. On the other hand, national legislative measures are enacted to create the enabling environment to stimulate and sustain the local uptake of RE technologies. Notably, RE technologies are recognised as offering the most cost-effective alternative to provide modern energy services to remote rural

[993] *Department of Energy Circular No. DC 2013-05-0009* (Department of Energy, Philippines) s 7 (c).
[994] Ibid s 7 (a).
[995] WWF Report 2013, above n 968, 62.
[996] World Energy Council, above n 745, 19.

communities that are far from the grid. And yet achieving universal access to modern energy services using RE technologies especially in the developing world remain disturbingly slow.

Despite a national framework to promote RE development and deployment in the country, the case of the Philippines exemplifies that much work needs to be done to overcome both economic and non-economic barriers to a low-carbon future. While the Philippines grapples with such issues, a considerable segment of the country's impoverished rural population is still without access to modern energy services. This is most unfortunate. The need to provide access to modern energy services is acknowledged and the appropriate technologies are identified. Yet the national legislation to make such technology accessible, affordable and available to those most in need remains wanting. As a result, off-grid RE development and deployment as a critical resource to enhance universal access to modern energy services has fallen on the wayside.

With legislative implementation of off-grid RE development and deployment for access to modern energy services far from desirable, there is an imperative to look at parallel legislative measures or initiatives that are implicated. One such measure that closely relates to RE technology deployment in achieving universal access to modern energy services is rural electrification. Accordingly, the next Chapter analyses the opportunities and challenges of rural electrification in the context of achieving universal access to modern energy services using RE technologies.

CHAPTER 6

BEYOND THE DISTANCE: UNIVERSAL ACCESS TO MODERN ENERGY SERVICES AND THE UNFINISHED BUSINESS OF RURAL ELECTRIFICATION IN DEVELOPING COUNTRIES

Table of Contents

I. INTRODUCTION

In Chapter 5, a brief review of the global deployment of RE technologies, including the barriers to, and the arguments for and against such technologies, was undertaken to determine their availability as a resource. In the process, it looked into the existing legal and regulatory frameworks at the international and national level to encourage the rapid deployment of RE technologies. At the national level, legislative measures to support and promote RE deployment were canvassed, which collectively showed the need to create an enabling environment to ensure the availability of RE technologies, particularly in capacity and resource-challenged developing countries.

As mentioned in the previous Chapter, the rapid deployment of RE technologies is ushering technological changes in the energy landscape and bringing solutions to development goals that are previously beyond reach.[997] These include attaining the targets of rural electrification, which is defined as 'the process by which access to electricity is provided to households or villages located in the isolated or remote areas of a country'.[998] In this vein, universal access to modern energy services can be realised by utilising grid, mini-

[997] A Vision Statement by Ban Ki-moon Secretary General of the United Nations, above n 9, 5.
[998] Alexander Niez (ed), *Comparative Study on Rural Electrification Policies in Emerging Economies* (2010) 12.

grid and off-grid electrification approaches that take into account the 'different population densities and geographic segments' according to relevant local circumstances.[999] Considering that energy poverty is prevalent in the countryside,[1000] RE technologies offer an opportunity to complete the business of rural electrification and facilitate universal access to modern energy services in remote and off-grid areas of developing countries. This linkage between RE technologies and rural electrification is demonstrated in many off-grid and rural development projects,[1001] albeit their interrelationship in the legal and regulatory space is not well articulated. Accordingly, this Chapter demonstrates that completing the business of rural electrification in off-grid areas cannot be divorced from RE technology deployment in the countryside.

Initially, Chapter 6 revisits the importance of rural electrification as a historical gateway to progress and bridging the gap between urban and rural life. This Chapter then turns to the imperatives of rural electrification to highlight the challenges, benefits and opportunities from a broad social and economic perspective. Next, the Chapter describes the various approaches to rural electrification from an institutional and ownership standpoint. It then examines the challenges and draws the lessons learned from successful rural electrification programs insofar as achieving universal access to modern energy services using RE technologies is concerned. Finally, this Chapter looks into the justifications for regulation and the emerging regulatory features for off-grid electrification in developing countries.

II. THE IMPERATIVES OF RURAL ELECTRIFICATION: CHALLENGES, BENEFITS AND OPPORTUNITIES

A. *Historical Background*

The advent of the age of electricity in the late 19th century brought about profound socioeconomic transformations to almost all facets of human activity that were never before seen in the pre-electricity era.[1002] It vastly improved household, business and farm productivity, which represented a defining shift in energy systems toward the modernisation

[999] World Bank, above n 65, 6.
[1000] World Bank and International Energy Agency, above n 97, 91.
[1001] Paul Cook, 'Rural Electrification and Rural Development' in Subhes Bhattacharyya (ed), *Rural Electrification Through Decentralised Off-grid Systems in Developing Countries* (2013) 20.
[1002] Vaclav Smil, *Creating the Twentieth Century: Technical Innovations of 1867-1914 and their Lasting Impact* (2005) 35-6.

of society.[1003] However, financial and resource constraints led to uneven access to electricity in the early development stage of many industrialised countries.[1004] Depression-era United States, for instance, mirrors many developing countries of today with a pronounced disparity in the level of development and electricity coverage between urban (85%) and rural (10%) areas.[1005] The lack of rural enterprises and population densities retarded rural electrification at that time.[1006] With an electric power industry designed around centralised and grid-based systems, Paul Wolman notes that the dictates of 'geography, resources, technology, and demography' also slowed rural electrification to the detriment of countryside households and farms.[1007] This uneven distribution and use of electricity 'raise important issues of economics, equity, and quality of life', as Douglas Barnes and Willem Floor emphasise.[1008] Moreover, a highly centralised electricity network results in what Unruh and Carillo-Hermosilla describe as a 'carbon lock-in' arising from a national energy infrastructure that is built around large energy-based conventional fuel systems.[1009] However, the electrification of rural United States, that is, those proportions of the rural population receiving central station electrical service reached 97% by 1960.[1010] As Wolman points out, this was spurred by a 'developmental and, to an extent, an egalitarian mindset among national and local leaders'.[1011] With a largely disinterested private sector, rural electrification in the United States was essentially a public undertaking that was imbued with socioeconomic and equity considerations.[1012] Along this line, electrification was expanded to bridge the urban and rural divide on the heels of intense political and social pressure, albeit the pace of electrification varied from country to country.[1013]

Today, the aforementioned considerations for rural electrification remain highly relevant. The United Nations Development Programme (UNDP) and the World Bank jointly describe rural electrification as the 'preferred program for promoting equity and economic

[1003] Ibid.
[1004] International Institute for Applied Systems Analysis, *Global Energy Assessment toward a Sustainable Future* (2012) 1413.
[1005] Paul Wolman, "The New Deal for Electricity in the United States, 1930-1950' in Douglas Barnes (ed), *The Challenge of Rural Electrification: Strategies for Developing Countries* (2007) 259.
[1006] Ibid 266.
[1007] Ibid 260.
[1008] Barnes and Floor, above n 15, 499.
[1009] Unruh and Carrillo-Hermosilla, above n 759, 1185-6.
[1010] Richard Keck, 'Reevaluating the Rural Electrification Administration: A New Deal for the Taxpayers' (1985) 16 *Environmental Law* 39, 40.
[1011] Wolman, above n 1005, 288.
[1012] Ibid 268.
[1013] International Institute for Applied Systems Analysis, above n 1004, 1413.

development in poor countries'.[1014] Notably, the first stages of electrification can be initially driven by social equity or fairness followed by economic development instead of the reverse.[1015] This is especially true in developing countries where rural areas significantly lag behind in access to modern energy services, [1016] which in turn leads 'to a perpetual low level development path'.[1017] From a broader perspective, the development chasm is also seen in terms of the inequitable access and use to energy - both quantitatively and qualitatively - between 'North and South, rich and poor, men and women'.[1018] Such dualism in developing countries is manifested in the rich trying to 'mimic the lifestyle prevailing in industrialized countries'; while the poor, in contrast, is more preoccupied with 'satisfying basic human needs'.[1019] As Gerald Foley notes, the rural populace perceives lack of access to electricity as tantamount to the deprivation 'of one of the most basic amenities of the modern world'.[1020] Undeniably, rural electrification has equity dimensions and 'can enhance the quality of life at the household level and stimulate the economy at the broader level'.[1021] Ultimately, however, policy-making decisions on electrification matters are influenced by multiple considerations that in reality seek to strike a balance between regional equitable development and financial viability.[1022]

Barnes succinctly describes the challenge of '[p]roviding electricity to remote, rural people is often easier said than done'.[1023] Barnes adds that '[s]ome challenges are unique, but many are inherent to the rural environment'.[1024] However, they are not insurmountable. As the International Institute for Applied Systems Analysis asserts, the electrification of communities still without access to electricity by 2030 is a feasible target, albeit more difficult with regard to attaining universal access to clean cooking services.[1025] As mentioned

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[1014] Joint United Nations Development Programme/World Bank Energy Sector Management Assistance Program (ESMAP), 'Rural Electrification and Development in the Philippines: Measuring the Social and Economic Benefits', *Report 255/02* (2002) 1.
[1015] Niez, above n 998, 10.
[1016] World Bank and International Energy Agency, above n 97, 91.
[1017] Subhes Bhattacharyya, 'Introduction' in Subhes Bhattacharyya (ed), *Rural Electrification Through Decentralised Off-grid Systems in Developing Countries* (2013) 8.
[1018] International Institute for Applied Systems Analysis, above n 1004, 1407.
[1019] Jose Goldemberg and Oswaldo Lucon, *Energy, Environment and Development* (2010) 38.
[1020] Gerald Foley, 'Rural Electrification – Institutional Dimension' (1992) 2 *Utilities Policy* 283, 284.
[1021] Shahidur Khandker, Douglas Barnes and Hussain Samad, 'The Welfare Impacts of Rural Electrification in Bangladesh' (2012) 33 *The Energy Journal* 187, 188.
[1022] World Bank, *Designing Sustainable Off-Grid Rural Electrification Projects: Principles and Practices* (2008) 3.
[1023] Douglas Barnes, 'The Challenge of Rural Electrification' in Douglas Barnes (ed), *The Challenge of Rural Electrification: Strategies for Developing Countries* (2007) 1.
[1024] Ibid 10.
[1025] International Institute for Applied Systems Analysis, above n 1004, 1403.

earlier despite differentiation in the pace of electrification among various countries, there is sufficient historical evidence that 'given the commitment, an appropriate level of investments, and appropriate institutional mechanisms, fast tracking the provision of electricity access is possible'.[1026] To understand the context of such a proposition, this Chapter turns, in the meantime, to the challenges that confront rural electrification.

B. *The Rural Electrification Challenges*

1. *Economic and Geographic Challenge*

The historical model of electrification that is notionally built around a centralised grid network underpinned by economies of scale and a mass market poses a major challenge in providing electricity access to rural communities.[1027] As mentioned earlier in Chapter 5, it renders rural electrification via grid extension in remote, fragmented and less densely populated areas of developing countries as not financially feasible.[1028] According to the UNDP/World Bank, the cost of extending the grid varies 'from $8,000 to $10,000 per kilometre, with costs of materials alone averaging $7,000.'[1029] In Mali, this will cost a little more than $19,000 per kilometre.[1030] Additionally, the difficult rural terrain adds to the expansion cost of the main electrical grid.[1031] Coupled with often poorly managed and financially-strapped utilities and low consumer ability to pay the full service cost, the prospect of providing electricity to unserved rural areas of developing countries through grid extension is quite remote.[1032] Thus, Paul Cook comments that the insistence on full cost recovery is often cited as one of the reasons for the delay in providing rural electricity.[1033]

If grid extension is chosen, the cost is 'generally subsidised and not recovered by electricity tariffs [, which] distorts the competitiveness of decentralised generation systems'.[1034] This means that the true cost of electrification is not reflected in the electricity tariffs.[1035] Moreover, poorly designed government subsidies only create more problems rather

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[1026] Ibid 1413.
[1027] Ibid.
[1028] Ibid.
[1029] Joint United Nations Development Programme/World Bank Energy Sector Management Assistance Program (ESMAP), above n 1014, 1.
[1030] Ibid 68.
[1031] Niez, above n 998, 12.
[1032] Hisham Zerriffi, *Rural Electrification: Strategies for Distributed Generation* (2011) 2.
[1033] Cook, above n 1001, 14.
[1034] Alliance for Rural Electrification, *Green Light for Renewable Energy in Developing Countries* (2013) 6.
[1035] Joint United Nations Development Programme/World Bank Energy Sector Management Assistance Program (ESMAP), above n 1014, 70.

than solutions that can invite unwarranted interference from politicians or detract electricity service providers from primarily serving rural consumers to maximising instead the subsidies that can be extracted from the government.[1036] Because grid extension is not the optimal choice in certain instances, there is a need to pursue diverse electrification solutions outside such a traditional approach.[1037]

2. *The Disconnect from Electrification Policy Decision-Making*

Aside from the economic and geographic challenge, another interesting dimension to complete the business of rural electrification is the apparent disconnect of the rural population from policy decision-making.[1038] Lacking political organisation and sophistication and without lobby support, poor rural communities often suffer from 'little visibility' in the eyes of policymakers.[1039] As Bruce Ziff points out, 'the poor often lack a sense of political efficacy and tend to abstain from participation in democratic processes'.[1040] This can result in rural electrification policies that do not necessarily 'target poor rural households.'[1041] Worse, there is a danger that rural electrification per se may not even be a key or priority agenda in national development policies.[1042] There is a risk of further marginalising the rural poor unless urgent attention is drawn to their plight, and they are brought within the fold of mainstream policy decision-making through their genuine and effective participation.[1043] As Barnes emphasises, 'ways have to be developed to involve communities in the process of rural electrification'.[1044] This means, as Tanja Winther clarifies, one that not only allows them to define their needs, but also to exercise a high degree of ownership in the planning, coordination and implementation process.[1045]

3. *Environmental Impact of Electrification*

Pertinently, the global environmental impact of electrification is a major concern in a carbon-constrained world.[1046] As noted in Chapter 5, one of the impacts of total household

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[1036] Barnes, above n 1023, 11.
[1037] International Institute for Applied Systems Analysis, above n 1004, 1413.
[1038] Alliance for Rural Electrification, above n 1034, 5.
[1039] Ibid.
[1040] Bruce Ziff, *Principles of Property Law* (2010) 26.
[1041] Niez, above n 998, 12.
[1042] Alliance for Rural Electrification, above n 1034, 14.
[1043] Ibid 5.
[1044] Barnes, above n 1023, 11.
[1045] Tanja Winther, *The Impact of Electricity: Development, Desires and Dilemma* (2008) 3.
[1046] Alliance for Rural Electrification, above n 1034, 14.

electrification will see the further intensification of electricity demand and consumption.[1047] This is especially applicable to providing access to electricity services to the sizable number of rural communities still lacking such services. However, it is argued that the environmental impact of achieving universal access to modern energy services on global CO_2 emissions is negligible.[1048] Hisham Zerriffi concedes 'that solving the most basic rural energy poverty problems do not significantly increase greenhouse gas emissions'.[1049] In addition, Jose Goldemberg and Oswaldo Lucon interestingly propound that economic development and energy consumption are not inextricably linked and can be decoupled.[1050] Thus, rural electrification can be successfully pursued with little, if any, environmental impact.

As part of the overall low-carbon development strategy, rural electrification's environmental footprint can be effectively mitigated, if not completely avoided, through the use of RE technologies.[1051] However, the choice of technology must not be arbitrary and has to take into account the 'financial and potential socioeconomic benefits to a community or region'.[1052] Also, it must be borne in mind that technical feasibility does not necessarily equate to social acceptability and economic desirability.[1053] Moreover, the technology option has to take into account the local conditions and the overarching goal of rural electrification.[1054] Nevertheless, it is asserted that 'a faster development and wider deployment of the full range of technologies is essential for universal energy access to be achieved'.[1055]

4. *Lack of Local Availability of RE Technologies*

Worryingly, RE technologies 'remain scarcely available in rural areas, as [local] entrepreneurs lack the technical skills and [financial] capacity to start or expand a renewable energy business'.[1056] Additionally, rural consumers have low-awareness about the benefits of

[1047] The Institute of Energy Economics Japan, ASEAN Centre for Energy and National ESSPA Project Teams, above n 735, 63.
[1048] International Energy Agency, above n 17, 19.
[1049] Zerriffi, above n 1032, 167.
[1050] Goldemberg and Lucon, above n 1019, 65.
[1051] See Alliance for Rural Electrification, *Rural Electrification with Renewable Energy: Technologies, Quality Standards and Business Models* (2011) 5.
[1052] Barnes, above n 1023, 11.
[1053] Bhattacharyya, above n 1017, 10.
[1054] Zerriffi, above n 1032, 163.
[1055] V. V. N. Kishore, Dattakiran Jagu and E. Nand Gopal, 'Technology Choices for Off-Grid Electrification' in Subhes Bhattacharyya (ed), *Rural Electrification Through Decentralised Off-grid Systems in Developing Countries* (2013) 71.
[1056] Alliance for Rural Electrification, above n 1051, 15.

RE technologies and often cannot afford upfront cash payment.[1057] Moreover, off-grid households appear to prefer the 'convenience and reliability of grid connections' rather than invest in RE technologies especially if connection to the grid is imminent.[1058] Thus, it is not surprising that off-grid solutions are often considered as transitional alternatives to grid connection.[1059] This perception has serious repercussions.

Subhes Bhattacharyya claims that the use of alternative off-grid energy systems as 'temporary' solutions 'creates a sense of "discrimination" or "isolation" in the minds of the users and can adversely affect the success of programmes for access to electricity'.[1060] However, it must be noted that even if grid electricity is available many developing countries experience supply problems related to availability, quality and affordability.[1061] Also, off-grid solutions can 'potentially serve as long-term solutions as well'.[1062] The International Energy Agency notes that as much as 60% of electricity supply to achieve universal access will be generated from decentralised energy systems,[1063] including mini-grid and off-grid solutions for rural areas.[1064] Clearly, then, building a sustainable supply chain, boosting awareness and improving affordability are key challenges to attaining universal access to electricity using RE technologies.[1065]

5. *'Poverty of Economics' Phenomenon and the 'Forgotten' Energy Efficiency*

The so-called 'poverty of economics' phenomenon poses a key social challenge.[1066] This pertains to the tendency of impoverished people to 'choose the lowest upfront investment and shy away from higher investments that pay off over time'.[1067] Also, there is a proclivity to focus on short-term impacts (e.g. high upfront cost) rather than long-term benefits (e.g. environmental gains).[1068] This puts RE technologies at a relative disadvantage as they usually

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[1057] Ibid 5.
[1058] World Bank, *Phase II: The Challenge of Low-Carbon Development* (2010) 27.
[1059] World Bank and International Energy Agency, above n 97, 79.
[1060] Subhes Bhattacharyya, 'Rural Electrification Experience from South-East Asia and South America' in Subhes Bhattacharyya (ed), *Rural Electrification Through Decentralised Off-grid Systems in Developing Countries* (2013) 180.
[1061] World Bank and International Energy Agency, above n 97, 79.
[1062] Ibid.
[1063] International Energy Agency, above n 17, 19.
[1064] World Bank and International Energy Agency, above n 97, 115.
[1065] Alliance for Rural Electrification, above n 1051, 15.
[1066] Ibid 43.
[1067] Ibid.
[1068] See Adam Hawkes, et al., 'A Change of Scale? Prospects for Distributed Energy Sources' in Jim Skea, Paul Ekins and Mark Winskel (eds), *Energy 2050: Making the Transition to a Secure Low Carbon Energy System* (2011) 239-40.

entail a high initial investment complicated by limited cash and lack of micro financing available to poor rural households.[1069] For example, even if energy-saving bulbs are provided as part of the initial package, they tend to be replaced with incandescent bulbs because of the above-mentioned phenomenon.[1070]

However, it is possible that too great a focus on the generation or supply side may mean that the energy efficiency side of the electrification equation is often forgotten, albeit 'clean energy supply and reduced energy demand are two sides of the same coin'.[1071] As Barry Barton describes the situation, energy efficiency is 'remarkably simple, and the most remarkably potent force to move us beyond carbon economy', yet it 'is often treated dismissively'.[1072] Energy efficiency critics argue that historically 'the effect of improving the efficiency of a factor of production, like energy, is to lower its implicit price and hence make its use more affordable, thus leading to greater use' or to the so-called 'rebound effect'.[1073] Although there are valid concerns associated with energy efficiency, Howard Geller and Sophie Attali assert that these tend to be 'overstated' as empirical evidence shows that 'considerable progress [in energy efficiency] has occurred' over time, which can address multiple challenges from climate change and energy security, among others.[1074] Along this line, Horace Herring sees the need to combine energy efficiency and RE, because 'the cash savings from the efficiency measures [can] pay for the extra cost of the 'green' electricity.[1075] This has the potential to address the 'poverty of economics' phenomenon. Moreover, Rosemary Lyster and Adrian Bradbrook show that there are various energy efficiency measures that can be utilised to reduce electricity consumption, including the demand for electric services.[1076] Clearly, there are plenty of opportunities to incorporate energy efficiency measures at any stage of the electrification process.[1077] As Daniel Kammen emphasises, "[i]f

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[1069] Alliance for Rural Electrification, above n 1051, 43.
[1070] Ibid.
[1071] Mark Lister, 'Unmasking the invisible Giant: Energy Efficiency in the Politics of Climate and Energy' in Luca Anceshi and Jonathan Symons (eds), *Energy Security in the Era of Climate Change: The Asia-Pacific Experience* (2012) 36.
[1072] Barry Barton, 'The Law of Energy Efficiency' in Donald Zillman, Catherine Redgwell, Yinka Omorogbe and Lila K Barrera-Hernandez (eds), *Beyond the Carbon Economy: Energy Law in Transition* (2008) 61; 67.
[1073] Horace Herring, 'Energy Efficiency – A Critical Review' (2006) 31 *Energy* 10, 10.
[1074] Howard Geller and Sophie Attali, *The Experience with Energy Efficiency Policies and Programmes in IEA Countries* (2005) 35-7.
[1075] Herring, above n 1073, 18.
[1076] Rosemary Lyster and Adrian Bradbrook, *Energy Law and the Environment* (2006) 169.
[1077] United Nations Development Programme, *Universal Access Towards 2030: Role of Multilateral Agencies* <http://www.undp.org/content/dam/aplaws/publication/en/publications/environment-energy/www-ee-library/sustainable-energy/universal-energy-access-towards-2030-the-role-of-multi-lateral-agencies/Universal%20Energy%20Access%20Towards%202030%20-The%20Role%20of%20Multi-lateral%20Angencies.pdf>

you build more efficiency in [sic] from the beginning of the process of electrification, you can dramatically increase the effective supply available'. [1078] Accordingly, behavioural change and the psychological aspect of the poverty of economics need to be addressed as well as part of the long-term strategy for addressing global environmental concerns.[1079]

6. *Standardisation and Regulatory Inconsistency*

Finally, community-based power systems using mini-grids and hybrid technologies based on RE resources have emerged as 'the most dynamic aspect of the global energy system over the past several years'. [1080] Such systems are seen as overcoming many of the impediments confronted by rural electrification using the traditional approach based on grid extension.[1081] However, these energy solutions are not without significant technical and regulatory concerns.[1082] While they have been installed worldwide, the 'lack of product standardisation and a problem of communication between different system components' raise planning, installation and maintenance issues.[1083] In effect, scaling up such a system with different components that do not communicate with one another will be costly and inflexible.[1084] Also, Bhattacharyya points out that the legal and regulatory loopholes, that is, institutional arrangements that spawn constant threats of grid extension from an incumbent electricity service provider can discourage investments in off-grid electrification.[1085] Together with unclear requirements on licensing, tariff systems, grid connection, and safety, among others, off-grid electrification projects, including mini-grids, become riskier undertakings.[1086] Accordingly, strengthening the legal and regulatory environment, enhancing energy management systems and standardising communication protocols are essential to bolster the deployment of micro-grids worldwide.[1087]

[1078] Ibid.
[1079] Alliance for Rural Electrification, above n 1051, 43.
[1080] Daniel Schnitzer, et al., *Microgrids for Rural Electrification: A Critical Review of Best Practices Based on Seven Case Studies* (2014) viii.
[1081] Ibid 1.
[1082] Alliance for Rural Electrification, above n 1051, 46.
[1083] Ibid.
[1084] Ibid.
[1085] Subhes Bhattacharyya, 'Business Issues for Mini-Grid based Electrification in Developing Countries' in Subhes Bhattacharyya and Debajit Palit (eds), *Mini-Grids for rural Electrification of Developing Countries* (2014) 148.
[1086] Ibid 149.
[1087] Alliance for Rural Electrification, above n 1051, 46.

C. *Benefits and Opportunities*

While there are challenges, the benefits and opportunities of rural electrification are extensively researched and documented.[1088] The Joint UNDP/World Bank Energy Sector Management Assistance Programme adopts a quantitative approach, that is, in monetary terms, to measure the socioeconomic benefits of rural electrification.[1089] At the outset, it must be stressed that the arguments for rural electrification mainly revolve around its transformative effect rather than on purely benefits versus costs basis.[1090] Also, the transformative effect operates at both the micro (household) and macro (productivity) levels.[1091]

There are four salient reasons advanced for employing a quantitative approach. First, this approach provides 'objective criteria for choosing between electrification projects or between electrification projects and those of other sectors, such as roads or public health'.[1092] Second, it can assist in determining the scale of rural electrification projects.[1093] Third, appropriate pricing policies, including the need for subsidies, can be determined according to the scale of societal benefits generated.[1094] And lastly, the quantification of benefits in monetary terms can help in assessing the economic efficiency, or achieving social objectives with fewer resources, of proposed rural electrification projects.[1095] However, qualitative information must not be disregarded simply because of the inability to translate this into monetary terms, as all relevant information on the benefits of rural electrification must be included as much as possible.[1096] The following table shows a summary of the principal benefits derived from the electrification of a typical rural household:

[1088] Niez, above n 998, 12.
[1089] Joint United Nations Development Programme/World Bank Energy Sector Management Assistance Program (ESMAP), above n 1014, 1.
[1090] Barnes, above n 1023, 4-5.
[1091] Ibid 5.
[1092] Joint United Nations Development Programme/World Bank Energy Sector Management Assistance Program (ESMAP), above n 1014, 1.
[1093] Ibid.
[1094] Ibid.
[1095] Ibid 1.
[1096] Ibid 7.

Table 6. Benefits of Rural Electrification in Households, 1998[1097]

Benefit Category	Benefit (US$) in Descending Value	Unit (per month)
Improved returns on education and wage income	37.07	Wage earner
Less expensive and expanded use of lighting	36.75	Household
Improved productivity of home business	34.00 (current business), 75.00 (new business)	Business
Time savings for household chores	24.50	Household
Less expensive and expanded use of radio and television	19.60	Household

In a 2010-2011 study, it was found that many poor households in Tanzania, the Philippines and Indonesia typically use kerosene for lighting.[1098] Interestingly, it was revealed that introducing alternative lighting options such as solar lights indicates that the same 'households are quick to change their kerosene [and] their consumption habits' resulting in significant savings and decreases in kerosene consumption.[1099] This supports an earlier World Bank finding that poor households are willing to increase their expenditure for energy services that improve their quality of life and productivity.[1100] Aside from economic benefits, gains in other development areas such as the environment (emission reductions), health, safety and education were also noticeable.[1101] Other small-scale RE technologies such as solar home systems, biogas digesters and gasifiers, household wind turbines, micro-hydro dams and improved cookstoves similarly provide positive social, economic and environmental benefits, including the expansion of income-generating activities, promotion

[1097] Ibid table E-1, 3.
[1098] Illumination, *An Empirical Study into the Benefits of Relieving Energy Poverty in the Developing World: Summary Results* <http://www.illuminationsolar.com/wp-content/uploads/2012/07/illumination-Empirical-study-into-relieving-energy-poverty-in-the-developing-world.pdf>
[1099] Ibid.
[1100] World Bank, *Meeting the Challenge: Rural Energy and Development* for *Two Billion People* (World Bank) 9.
[1101] Illumination, above n 1098.

of gender equity, reduction of vulnerability to external oil shocks through supply diversification, and the realisation of sustainable development goals.[1102]

In the long term, the critical role of rural electrification in developing countries lies in its potential to improve rural productivity, that is, from meeting basic electricity needs to expanding electricity for productive end-uses.[1103] This entails the utilisation of energy for mechanical power to support 'daily livelihood activities including agroprocessing, artisanal activities and small and micro enterprises'.[1104] As the International Institute for Applied Systems Analysis emphasises, '[m]echanical power is critical to enhancing productive end-uses of labor and poverty alleviation'.[1105] Thus, Zerriffi asserts that rural electrification can meet not only 'the most basic household needs', but also 'creating the necessary conditions for [rural] development'.[1106] What are the different rural electrification approaches taken so far?

III. THE DIFFERENT APPROACHES TO RURAL ELECTRIFICATION

There is no universal model that serves as a template successfully to implement a rural electrification program.[1107] However, three general types of electrification solutions are examined to exemplify the various approaches to rural electrification. Such solutions may overlap and are even combined to find the optimal arrangement for success, as can be gleaned from the following discussion. Therefore, it is important to consider the local conditions, the needs of the consumer, and 'match the institutional particularities of the particular country'.[1108]

A. *State-Owned Utilities and the 'Virtue' of a Public Monopoly*

Historically, grid extension by state-owned utilities or companies was the dominant electrification model in developing countries,[1109] as a product of the 'technical and economic

[1102] Sovacool and Drupady, above n 2, 45: The term 'improved' to qualify cookstoves pertains to a shift to cleaner fuels such as soft biomass and crop residues with improved combustion chambers. However, its meaning is subjective and evolving over time.
[1103] International Institute for Applied Systems Analysis, above n 1003, 1422: 'Productive use' 'involves the utilization of energy...in the forms of heat or mechanical energy, for activities that enhance income and welfare'
[1104] Ibid.
[1105] Ibid.
[1106] Zerriffi, above n 1032, 164.
[1107] Barnes, above n 1023, 14.
[1108] Zerriffi, above n 1032, 164.
[1109] Killian Reiche, Bernard Tenenbaum and Clemencia Torres de Mastle, 'Electrification and Regulation: Principles and a Model Law', *Energy and Mining Sector Board Discussion Paper No. 18* (2006) 9.

evolution' of the electricity industry largely underpinned by the logic of economies of scale.[1110] As previously mentioned in this Chapter, the private sector finds rural areas as economically unattractive due to its highly dispersed, low-income, low-electricity demand character.[1111] Accordingly, Njeri Wamukonya notes that the 'responsibility to electrify has largely been viewed as that of the public sector, and has been mainly undertaken by government'.[1112] In addition, Martin Minogue amplifies that the provision of electricity as a public service 'is designed and delivered in the context of the state which will have developmental social objectives'.[1113] Also, Charles Haanyika points out that as vertically integrated state-owned monopolies, that is, the government monopolised the generation, transmission and distribution of electricity, such 'utilities are considered part of essential social services and therefore carry responsibilities for unprofitable aspects such as RE [rural electrification]'.[1114] Accordingly, access to electricity is primordially seen as a social service and 'an essential public good' rather than as a subject matter of economic efficiency that is better left to the 'genius' of the market.[1115]

B. *Power Liberalisation and the Private Sector Approach*

Essentially, state-owned utility companies relied on cross-subsidies from existing customers or government grants to undertake rural electrification by extending the grid even at a loss.[1116] However, such an arrangement became untenable, as an underperforming and inefficient state-owned utility became a financial albatross on the government's shoulders in the face of dwindling public revenues and drying external sources of finance.[1117] As a result, reforms in the power sector were sought mainly anchored to the concept of 'power liberalisation',[1118] which includes a combination of privatisation, commercialisation,

[1110] John Byrne and Yu-Mi Mun, 'Power Liberalisation or Energy Transformation?' in Njeri Wamukonya (ed), *Electricity Reform: Social and Environmental Challenges* (2003) 50.
[1111] Charles Haanyika, 'Rural Electrification Policy and Institutional Linkages' (2006) 34 *Energy Policy* 2977, 2977.
[1112] Njeri Wamukonya, 'Power Sector Reform in Developing Countries: Mismatched Agendas' in Njeri Wamukonya (ed), *Electricity Reform: Social and Environmental Challenges* (2003) 24.
[1113] Martin Minogue, 'Regulatory Governance of Off-Grid Electrification' in Subhes Bhattacharyya (ed), *Rural Electrification Through Decentralised Off-grid Systems in Developing Countries* (2013) 264.
[1114] Haanyika, above n 1111, 2979.
[1115] Lawrence Agbemabiese, John Byrne and Daniel Bouille, 'Stakeholder Roles in Promoting Equity and Environmental Protection' in Njeri Wamukonya (ed), *Electricity Reform: Social and Environmental Challenges* (2003) 228.
[1116] Reiche, Tenenbaum and Torres de Mastle, above n 1109, 9.
[1117] Nils-Henrik von der Fehr and Jaime Millán, 'Power Sector Reform: Lessons Learned' in Jaime Millán and Nils-Henrik von der Fehr (eds), *Keeping the Lights On: Power Sector Reform in Latin America (*2003) 337.
[1118] Byrne and Mun, above n 1110, 49.

deregulation and competition as constituent parts of economic restructuring.[1119] As Nils-Henrik von der Fehr and Jaime Millán remark, 'privatization of the power sector was viewed not only as a means of stopping the sector's drain on government resources, but as a way to fill empty treasury coffers and improve government finances overall'.[1120] The paradigm shift was reflected in development thinking that saw international donors and multilateral financing institutions offering reform-targeted loans, including the roadmap, to facilitate the transition from public to private sector ownership and control of power sector assets and electricity services.[1121]

After almost a century of government-owned and regulated monopolistic structures, power sector reforms gained a foothold and hastened in the 1990s.[1122] This market-oriented framework shifted the treatment of electricity, as a form of social service to one described by John Byrne and Yu-Mi Mun as 'a commodity in need of optimal allocation'.[1123] In effect, 'market dynamics rather than socio-political considerations' dictated the structural changes to be introduced in the power sector.[1124] This means not only unbundling the generation, transmission and distribution side of the business, but also breaking up the distribution network from larger national into smaller regional units.[1125] Thus, Haanyika concludes that 'privatisation involves reduction of government provision of goods and services, reduction of subsidies and government department regulation'.[1126]

Although power liberalisation has been successful in some fronts such as reducing technical losses, improved reliability of electricity services,[1127] and financially strengthening utilities, it failed to deliver on other important reform promises or expectations.[1128] The underlying ideology of power liberalisation lies in the claim that improvements in resource allocation, market regulation, consumer choice, and environmental quality can be achieved through economic efficiency.[1129] It includes attaining universal access to electricity as a key

[1119] Njeri Wamukonya, 'Introduction' in Njeri Wamukonya (ed), *Electricity Reform: Social and Environmental Challenges* (2003) 1.
[1120] Fehr and Millán above n 1117, 337.
[1121] Wamukonya, above n 1112, 9.
[1122] Ibid 8.
[1123] Byrne and Mun, above n 1110, 49.
[1124] Haanyika, above 1111, 2978.
[1125] Ibid.
[1126] Ibid.
[1127] Douglas Barnes, 'Meeting the Challenge of Rural Electrification' in Douglas Barnes (ed), *The Challenge of Rural Electrification: Strategies for Developing Countries* (2007) 314.
[1128] Wamukonya, above n 1112, 38.
[1129] Byrne and Mun, above 1110, 52-3.

success indicator of the reforms in developing countries.[1130] However, Wamukonya notes that 'there is emerging evidence that reform has been designed to mainly address economic and, in particular, financial concerns, with insufficient consideration for social and environmental issues'.[1131] Wamukonya adds that it appears that the 'private sector only focuses on profitable customers' to the detriment of the remaining unserved rural populace – those in the 'Bottom of the Pyramid'[1132] - due mainly to financial considerations.[1133] In effect, it is argued that universal access to electricity will unlikely be achieved through the private sector, unless the government undertakes this by itself, or provides the corresponding policy support and incentives to the private sector in order to address the unattractiveness of, and discrimination against, the rural segment of electrification.[1134] As John Besant-Jones emphasises:

> [A] well-conceived reform program…offers the opportunity to introduce new ways for expanding access to electricity supply by the poor, and it also helps target subsidies efficiently on the poor in place of current approaches that largely favor the better-off consumers.[1135]

Another negative aspect of power liberalisation is its environmental impact. Although it promised to deliver an enhanced environmental quality by driving out old technologies and investing in new ones, the reforms did not only 'leave existing environmental problems unaddressed [but created] new challenges in meeting sustainability goals'.[1136] As Byrne and Mun argue, the promotion of a short term profit-driven electricity system neglects sustainable alternatives such as RE technologies and demand-side efficiency, because 'electricity as a commodity drives economic actors to focus on selling more kWhs [kilowatt-hours] – rather than providing more services with fewer kWhs'.[1137] As a result, there is a considerably reduced interest in capital-intensive RE projects and a preference for cheaper fossil fuel plants due to shortened time horizons, increased borrowing costs, and heightened demand for higher rates of return under a liberalised and privatised set-up.[1138]

[1130] Wamukonya, above n 1112, 8.
[1131] Ibid 7.
[1132] Zerriffi, above n 1032, 164: This refers to the 'vast majority of population that is usually ignored by commercial enterprises due to assumptions of their buying power'.
[1133] Wamukonya, above n 1112, 18.
[1134] Ibid 18; 27.
[1135] John Besant-Jones, 'Reforming Power Markets in Developing Countries: What Have We Learned?' *Energy and Mining Sector Board Discussion Paper No. 19* (2006) 93.
[1136] Byrne and Mun, above n 1110, 53; 59.
[1137] Ibid 59.
[1138] Agbemabiese, Byrne and Bouille, above n 1115, 231.

There are other concerns raised against the merits of power liberalisation. Lawrence Agbemabiese, John Byrne and Daniel Bouille observe that power liberalisation further suffers from social and political contradictions.[1139] For instance, 'inequity in access to, and consumption of, electricity services has worsened as private power providers cherry-pick the most profitable customers while dumping "loss-making" ones'.[1140] And typically, private utility companies will pursue the more profitable urban markets.[1141] In turn, this can 'further entrench unequal power relationships in the electricity sector, aggravating inequity between producers and consumers and between affluent and poorer consumers'.[1142] Power liberalisation can, thus, further marginalise the unserved and impoverished rural communities.[1143]

Moreover, power liberalisation has fostered centralisation instead of decentralisation of the electricity system 'in the form of utility mergers and acquisitions, and in the operation of transmission and distribution networks'.[1144] Byrne and Mun explain that 'the transmission system is operated mostly as sophisticated technocratic institutions that enable the transfer of large volumes of electrons (and private gains) among a small number of sizable companies'.[1145] With the commodification of electricity, it makes sense for such companies to merge and increase the scale of power generation in order to compete in a less restrictive electricity market for 'the delivery of large volumes of electricity to large, interconnected grids'.[1146] Therefore, decentralised electricity systems will not likely thrive in such a market environment, unless various support mechanisms are extended to encourage deployment of RE technologies and distributed generation alongside power liberalisation initiatives.[1147]

[1139] Ibid 230-1.
[1140] Ibid 231.
[1141] Reiche, Tenenbaum and Torres de Mastle, above n 1109, 10.
[1142] Agbemabiese, Byrne and Bouille, above n 1115, 231.
[1143] See Byrne and Mun, above n 1110, 62.
[1144] Ibid 53.
[1145] Ibid 54.
[1146] Ibid 55.
[1147] See Eric Martinot, 'Power Sector Restructuring and the Environment: Trends, Policies, and GEF Experience' in Njeri Wamukonya (ed), *Electricity Reform: Social and Environmental Challenges* (2003) 211-5.

C. *Rural Electric Cooperatives and the Decentralised Approach*

Another approach to rural electrification is through rural electric cooperatives, which is patterned after the US rural electrification model. The Philippines and Costa Rica are among the developing countries that utilised the rural electric cooperative model.[1148] In essence, rural electric cooperatives are organised as local distribution companies owned by the customers provided with the electricity service, albeit conducted 'according to business principles'.[1149] As such, P. R. Krithika and Debajit Palit describe them as 'an attractive alternative to public sector management or principally profit-motivated private sector involvement'.[1150] Although private in its ownership structure, Foley points out that 'the cooperative spirit…fosters a public-service management ethic,' and thus, 'the cooperative's management objective is that everyone in the service area is provided with reliable electricity supply at the lowest possible price'.[1151] As Annabel Yadoo and Heather Cruickshank assert, 'socially orientated cooperatives are more inclined to contribute to a sector that will improve local living conditions even if profit margins remain minimal'.[1152] However, Palit and Akanksha Chaurey caution that the cooperative model is 'vulnerable to cooption and coercion by local power brokers, if appropriate checks and balances are not put in place'.[1153] Thus, it is not surprising to see contrasting outcomes in utilising such a model for rural electrification, as exemplified in the tale of two developing countries: Costa Rica and the Philippines.

1. *Electric Cooperative Experience in Costa Rica*

One of the unique success stories in rural electrification based on the cooperative approach is Costa Rica. This is attributed to a 'variety of social, political and economic factors [that] created a particularly favorable environment within which to launch the country's rural electrification efforts'.[1154] First, all urban households had access to electricity service early in the electrification process, which provided the 'technical and financial foundation' or

[1148] P.R. Krithika and Debajit Palit, 'Participatory Business Models for Off-Grid Electrification' in Subhes Bhattacharyya (ed), *Rural Electrification Through Decentralised Off-grid Systems in Developing Countries* (2013) 191: Bangladesh, India, Nepal and Argentina also experimented with the cooperative model.
[1149] Barnes, above n 1023, 14.
[1150] Krithika and Palit, above n 1148, 190.
[1151] Gerald Foley, 'The Cooperative Experience in Costa Rica' in Douglas Barnes (ed), *The Challenge of Rural Electrification: Strategies for Developing Countries* (2007) 40.
[1152] Annabel Yadoo and Heather Cruickshank, 'The Value of Cooperatives in Rural Electrification' (2010) 38 *Energy Policy* 2941, 2946.
[1153] Debajit Palit and Akanksha Chaurey, 'Off-Grid Rural Electrification Experiences from South Asia' in Subhes Bhattacharyya (ed), *Rural Electrification Through Decentralised Off-grid Systems in Developing Countries* (2013) 96.
[1154] Foley, above n 1151, 18.

experience of extending the grid to rural areas where many residents own their farms and houses.[1155] This means that Costa Rica was able to put in place an infrastructure backbone that made rural electrification easier to undertake in prospective 'non-poor' rural consumers.[1156] Second, there is a strong egalitarian tradition among the country's well-educated and propertied populace that drives total electrification on top of the political agenda.[1157] And lastly, Costa Rica enjoys political stability and a responsive government that has a genuine commitment, strong resolve, and willingness to invest in rural development.[1158] As Adriaan Zomers notes, a 'politically and socially stable environment' enhances the success of rural electrification.[1159] However, Foley cautions that 'Costa Rica's success may or may not be replicable elsewhere,' albeit valuable lessons can be drawn from its experience.[1160]

2. *Electric Cooperative Experience in the Philippines*

On the other hand, the Philippines had a promising start with rural electric cooperatives that 'eventually got bogged down with multiple political demands for the cooperatives to do much more than just distribute and sell electricity to rural people'.[1161] Unlike Costa Rica, rural electric cooperatives operated within very challenging 'political, social and geographic environments' in the Philippines.[1162] For one, the country's infrastructure was in a poor state complicated by the wide dispersion of the islands, which characterised the archipelago.[1163] Because of this, a delicate balance between centralisation and devolution of rural electrification needed to be struck considering that it was implemented through island grids with centralised generation facilities and localised rural electric cooperatives for distribution.[1164] Notably, grid extension was the primary mode of rural electrification with alternative off-grid systems as 'temporary' or pre-electrification solutions despite the country's complex geographic configuration.[1165] However, there is an opportunity for electric

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[1155] Ibid 18-9.
[1156] Ibid.
[1157] Ibid.
[1158] Ibid.
[1159] Adriaan Zomers, 'The Challenge of Rural Electrification' (2003) 7 *Energy for Sustainable Development* 69, 74.
[1160] Foley, above n 1151, 18; 43.
[1161] Ibid 72.
[1162] Ibid.
[1163] Gerald Foley and Jose Logarta, Jr., 'Power and Politics in the Philippines' in Douglas Barnes (ed), *The Challenge of Rural Electrification: Strategies for Developing Countries* (2007) 48.
[1164] Ibid 48-9.
[1165] Bhattacharyya, above n 1060, 180; As stated in the fourth '*Whereas'* clause of PD No. 269, the original policy rationale for electrification on an area coverage basis was to extend the distribution lines, albeit costly, to

cooperatives to increase the deployment of RE technologies in off-grid areas as electrification instead of pre-electrification solutions with the enactment of a recent law, RA No. 10531, explicitly declaring as state policy the promotion of 'sustainable development in the rural areas through rural electrification', including in 'missionary or economically unviable areas'.[1166]

In another front, political interference in the implementation of the rural electrification program in the Philippines led to diminished professional standards from multiple standpoints: management, technical and financial.[1167] Minogue explains that such political interference is 'linked often enough to the usual kinds of regulatory capture by target groups, and in its worst forms to corrupt practices'.[1168] In the end, many of the rural electric cooperatives became commercially unviable, particularly with their inability to keep tariffs at pace with increasing costs of electricity supply, to accommodate political demands.[1169] As Foley and Jose Logarta, Jr. point out, leadership, accountability, discipline, and '[a]n adequate tariff system and clear framework of financial responsibility are keys to success'.[1170] Unfortunately, the absence of many of these elements led to multifarious problems that bedevilled rural electrification in the Philippines. As it stands, there are still 28 million people mostly from the countryside without access to electricity.[1171] Clearly, the imperatives of rural electrification remain as relevant now as in the past to the Philippines.[1172]

3. *Other Decentralised Approaches*

Aside from rural electric cooperatives, rural electrification is also pursued through private decentralised electricity companies,[1173] that is, 'local actors implement distributed generation activities'.[1174] Other variants include, among others, electricity distribution franchisees, fee-for-service models, community-managed models and public-private partnerships (PPPs).[1175]

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sparsely populated areas with the view of 'reasonably' absorbing the resulting loses from these lines by the more profitable ones. Not surprisingly, small and isolated systems are deemed impediments to the total electrification program of the government for being 'antithetical to the economies of scale'.

[1166] *Republic Act No. 10531* (Philippines) s 2 (a).

[1167] Foley and Logarta, above n 1163, 51-2.

[1168] Minogue, above n 1113, 265.

[1169] Foley and Logarta, above n 1163, 53.

[1170] Ibid 72.

[1171] International Energy Agency and Economic Research Institute for ASEAN and East Asia, above n 868, 27.

[1172] See National Economic Development Authority, above n 901, 96.

[1173] Barnes, above n 1023, 15.

[1174] Zerriffi, above n 1032, 142.

[1175] Krithika and Palit, above n 1148, 190, 199, 203, 207-212. 'Electricity distribution franchisees' refer to an entity licensed to either develop or operate distribution system within a specified territory for a given duration. 'Fee-for-service' models pertain to an entity that owns, operates, repairs and maintains the electricity system and

Also, there is a noticeable swing from public to private companies then back to public again across countries.[1176] Thus, Barnes concludes that 'the institutional form is not as important as the adherence to strict business principles in operating rural electricity distribution companies'.[1177]

IV. THE CHANGING REGULATORY FACE OF RURAL ELECTRIFICATION

As mentioned earlier in this Chapter, although expensive grid extension is the preferred mode of electrification in a number of developing countries,[1178] Killian Reiche, Bernard Tenenbaum and Clemencia Torres de Mastle argue that 'decentralized forms of electrification have the potential to provide basic service to remote, rural areas at a lower cost'.[1179] This is not to say that rural electrification via grid extension per se is not possible as demonstrated in other developing countries.[1180] However, the emergence of lower cost options using off-grid and decentralised technologies to serve distant rural households 'have improved and become more standardised' over time.[1181] Therefore, it 'makes little sense to spend scarce government resources on expensive grid extensions when basic electricity service could be provided through cheaper off-grid options'.[1182]

As substantial investments in the coming years will be poured into off-grid applications to complete the business of rural electrification and universal access to electricity, there is growing interest in, and acknowledgement of, the centrality of this approach to the Sustainable Energy for All Initiative.[1183] Yet Bhattacharyya and Stephen Dow lament that the regulatory aspects of off-grid electrification in developing countries 'have received limited attention' and remains a Greenfield area for research.[1184] A fundamental question, therefore, emerges: Is there is a need to regulate off-grid electrification

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provides the service for a fee to consumers. 'Community-managed' models are similar to the cooperative models except that the community organisation usually the village energy committee may or may not be registered under any law. 'PPPs' refer to the use of the private sector approach combined with government subsidy or support.

[1176] Barnes, above n 1023, 15.

[1177] Ibid.

[1178] Bhattacharyya, above n 1060, 180; 272.

[1179] Reiche, Tenenbaum and Torres de Mastle, above n 1109, 10.

[1180] See Bhattacharyya, above n 1060, 170.

[1181] Reiche, Tenenbaum and Torres de Mastle, above n 1109, 10.

[1182] Ibid.

[1183] Subhes Bhattacharyya, 'To Regulate or Not to Regulate Off-Grid Electricity Access in Developing Countries' (2013) 63 *Energy Policy* 494, 494.

[1184] Subhes Bhattacharyya and Stephen Dow, 'Regulatory Issues Related to Off-Grid Electricity Access' in Subhes Bhattacharyya (ed), *Rural Electrification Through Decentralised Off-grid Systems in Developing Countries* (2013) 272.

at all?[1185] Despite the paucity of available literature, it is still critical to discuss what likely regulatory features 'will "help" rather "hurt" [off-grid] electrification' in developing countries.[1186]

A. *The 'Whys' of Regulation: Market Failure, Human Rights and Solidarity Rationales*

There are various justifications advanced for regulation.[1187] Often, these revolve around the concept of market failure,[1188] that is, those 'instances where markets "failed" to produce allocatively efficient results' due to 'externalities, imperfect markets, information asymmetries and public goods',[1189] among others. On such grounds, regulation is justified 'because the uncontrolled marketplace will, for some reason, fail to produce behaviour or results in accordance with public interest'.[1190] Beyond the traditional 'market failures', however, other rationales exist outside market considerations, which justify regulation.[1191]

Tony Prosser writes that the market rationale 'is inadequate either to explain or justify normatively the range of regulatory tasks currently undertaken'.[1192] Along this line, it is observed that regulation has been justified not only on grounds of market failure, but also based on human rights and social solidarity.[1193] The human right justification is prominently articulated in Roger Brownsword's proposition that regulation 'should ensure that the rights of individuals are fully respected'.[1194] Similarly, Prosser argues that social solidarity as a social phenomenon, which is linked to socioeconomic rights and 'finds its ultimate justification in arguments drawn from human rights', offers 'a more appropriate description and justification for much of regulatory activity'.[1195] In effect, human rights standards provide legitimacy to regulations.[1196]

[1185] Ibid 497.
[1186] Reiche, Tenenbaum and Torres de Mastle, above n 1109, 5.
[1187] Roger Brownsword, *Rights, Regulation, and the Technological Revolution* (2008) 7: In its broad sense, regulation encompasses measures that 'regulators take to control and channel conduct in the desired way', including 'whatever controlling or channelling strategies government (and its agents) employ'.
[1188] Robert Baldwin, Martin Cave and Martin Lodge, *Understanding Regulation* (2012) 15 table 2.1, 24
[1189] Brian Dollery and Joe Wallis, *The Theory of Market Failure and Equity-Based Policy Making in Contemporary Local Government*, (2001) 61.
[1190] Baldwin, Cave and Lodge, above n 1187, 15.
[1191] Ibid.
[1192] Tony Prosser, 'Regulation and Social Solidarity' (2006) 33 *Journal of Law and Society* 364, 364.
[1193] Ibid 366.
[1194] Brownsword, above n 1187, 23.
[1195] Prosser, above n 1192, 365-6.
[1196] Brownsword, above n 1187, 26.

Prosser adds that social solidarity provides a justification for a law that 'serves to constitute market relations' and 'prevent or limit the socially fragmenting roles of the market' rather than one that corrects market failures.[1197] Accordingly, it justifies regulation in terms of ensuring 'equal treatment on grounds of citizenship and inclusivity',[1198] distributional justice, and rights protection,[1199] as exemplified in obliging regulated utilities to adopt geographically averaged tariffs or to provide universal service cover without bias or preference.[1200] Robert Baldwin, Martin Cave and Martin Lodge point out, however, that 'the case for regulating may well be based not on a single but on a combination of rationales – be these market failure-, human rights-, or social solidarity-based'.[1201] Thus, regulation of off-grid electrification can be justified from a combination of the aforementioned rationales such as but not limited to addressing market imperfections related to lack of long-term financing and information on specific investor opportunities,[1202] accounting for negative externalities (environmental impacts), meeting subsistence rights, and achieving socioeconomic inclusion, particularly in promoting universal access to modern energy services.

B. *Off-Grid Electrification and the Need for 'Light' Regulation*

A key question to ask in regulating off-grid electrification pertains to what type of entities and activities will be regulated.[1203] This requires describing and considering the operating, organisational, technical and institutional environment, including the changes and conditions that are evolving within it.[1204] To begin with, off-grid electrification can be delivered through either individual product-based or collective network-based solutions.[1205] Individual product-based solutions refer to the 'sale of a product or service that enables individual users to produce or generate a small quantity of electrical energy (often at a low voltage) to meet some basic household needs', particularly lighting and running small appliances: television, radio, fan or similar items.[1206]In this regard, stand-alone solar home systems or solar lanterns

[1197] Prosser, above n 1192, 382.
[1198] Ibid 383.
[1199] Baldwin, Cave and Lodge, above n 1188, 23.
[1200] Ibid.
[1201] Ibid.
[1202] World Bank, above n 1022, 11.
[1203] Reiche, Tenenbaum and Torres de Mastle, above n 1109, 13.
[1204] See Robert Baldwin and Julia Black, 'Really Responsive Regulation' (2008) 71 *The Modern Law Review* 59, 61; Reiche, Tenenbaum and Torres de Mastle, above n 1109, 9.
[1205] Bhattacharyya and Dow, above n 1184, 272.
[1206] Bhattacharyya, above n 1183, 496.

are commonly used.[1207] Typically, the transaction involves direct sales by dealers (on cash or credit basis), fee-for-service, leasing or a combination of such arrangements.[1208]

On the other hand, collective network-based solutions involve the provision of electricity to a number of users that is locally generated or procured from other electricity producers and distributed to prospective consumers.[1209] In essence, the service provider 'undertakes the business activities related to generation, procurement, distribution and sale of electricity'.[1210] Under such an approach, small-scale but 'full-pledged distribution and retail supply activity' at remote locations is required usually through local grids (mini or micro-grid) operated by electric distribution franchisees, cooperatives or community-managed organisations.[1211] Normally, RE technologies are utilised ranging from solar photovoltaic systems to small hydropower technologies, albeit these are combined with a supplementary source like diesel generators as backup power in the case of intermittent energy sources.[1212]

A common denominator shared by individual product-based and collective network-based solutions is putting the electricity system 'close to the users, but often away from the offices and facilities of existing utilities'.[1213] For this reason, Reiche, Tenenbaum and Torres de Mastle claim that off-grid solutions are 'often best owned by micro, small, and medium sized enterprises (MSMEs) or user associations' as opposed to large utilities.[1214] In addition, such solutions primarily resort to decentralised technologies and distributed generation to provide electricity service.[1215] It will be noted that these twin dimensions of technology and ownership are highly relevant in addressing regulatory design issues pertinent to off-grid electrification.[1216] Moreover, off-grid electricity providers operate in isolated areas where customers have low ability to pay.[1217] Not surprisingly, most of them survive on very thin margins, that is, 'on the "razor's edge" of commercial viability' to the point 'that any unnecessary regulation can [easily] destroy their viability'.[1218]

[1207] Ibid.
[1208] Ibid.
[1209] Ibid.
[1210] Ibid.
[1211] Bhattacharyya and Dow, above n 1184, 274.
[1212] Bhattacharyya, above n 1183, 497.
[1213] Reiche, Tenenbaum and Torres de Mastle, above n 1109, 11.
[1214] Ibid.
[1215] Ibid 5.
[1216] Ibid 12.
[1217] Ibid 13.
[1218] Ibid 5; 18.

From the foregoing, the traditional regulatory approaches to geographically integrated electricity systems may not work for geographically isolated ones.[1219] In this regard, 'light-handed' or minimal regulatory measures are suggested to simplify operations of many off-grid enterprises and limit the cost of doing business, while effectively protecting consumers especially the poor at the same time.[1220] Also, Bhattacharyya and Dow draw attention to the issue of centralised versus decentralised regulatory approaches 'given the limited size and coverage of most entities, and the potential for an overwhelming amount of regulatory intervention' in off-grid electrification.[1221] Moreover, Reiche, Tenenbaum and Torres de Mastle contend that 'successful electrification requires that the traditional functions and tasks of regulation are often best performed by entities other than the national electricity regulator'.[1222] As Julia Black writes, a more normative decentralised notion to regulation comes to mind wherein 'governments do not, and the proposition that they should not, have a monopoly on regulation', that is, regulation is 'occurring within and between other social actors'.[1223] However, such issues and dimensions of regulation require deeper consideration, which is better reserved for another research undertaking beyond the scope of this thesis.

C. *The Importance of Subsidies*

Interestingly, Barnes points out that, whether the approach is public, privatised or decentralised, subsidies play a critical role in rural electrification, 'and without them progress is likely to be limited'.[1224] Because universal access to electricity services aims to make prices affordable to the rural poor, Zerriffi agrees that 'urban/rural equity requires…subsidies' for rural electrification.[1225] Also, such subsidies are a major component to keep 'energy access affordable to consumers in developing countries'.[1226] However, the subsidies 'should be fairly easy to administer [efficient], they should have an effect on the desired population [effective], and they should reach the poorest of society [equitable]'.[1227]

[1219] Ibid 5; 9.
[1220] World Bank, above n 1022, 11.
[1221] Bhattacharyya and Dow, above n 1184, 281.
[1222] Reiche, Tenenbaum and Torres de Mastle, above n 1109, 5; 15.
[1223] Julia Black, 'Decentring Regulation: Understanding the Role of Regulation and Self-Regulation in a "Post-Regulatory" World' (2001) 54 *Current Legal Problems* 103, 103.
[1224] Barnes, above n 1023, 15.
[1225] Zerriffi, above n 1032, 153.
[1226] Hisham Zerriffi, 'Innovative Business Models for the Scale-Up of Energy Access Efforts for the Poorest' (2011) 3 *Current Opinion in Environmental Sustainability* 272, 273.
[1227] Barnes, above n 1127, 322.

Yannick Glemarec notes that 'upfront costs are likely to remain the major bottleneck to achieve universal clean energy access'.[1228] Along this line, Zerriffi favours a subsidy regime that focuses 'on bringing down first costs rather than controlling energy prices.[1229] Also, Glemarec claims that subsidies provided to conventional energy technologies 'are the single most important barrier to the growth of clean energy technologies'.[1230] Such subsidies artificially lower fossil fuel prices, which 'reduce the competitiveness of alternative fuels [like renewable energy] and their ability to gain market share', as Tara Laan explains.[1231] Moreover, this can result to consumers paying less attention to their energy use, 'and less reason to invest in energy efficiency'.[1232] Accordingly, subsidies on fossil fuels can be reduced and reinvested to clean energy initiatives such as using RE technologies for off-grid electrification to cover part of upfront and operation costs.[1233]

Ultimately, there is a need to achieve the right 'balance between too little or too much subsidy'.[1234] This is a difficult undertaking that can be informed by the experience of other countries, albeit the determination of the right subsidy level depends on country specific circumstances or conditions.[1235] Nevertheless, it is important to set subsidies, as Zerriffi suggests, at levels that 'bridge the gap for those households that need to take advantage of them but without undercutting possible commercial enterprises that can better meet the needs in higher income brackets'.[1236] In the long term, subsidies must neither be the main source of revenue nor become a permanent fixture of the off-grid electricity sector's financial regime.[1237] Instead, the revenue needs to flow from the customers in order to ensure that the focus is on quality service,[1238] and that subsidies are market enhancing rather than destroying in the rural sphere.[1239] Definitely, lifting the rural poor out of poverty requires access to modern energy services as a necessary condition for all these to happen.

[1228] Yannick Glemarec, 'Financing Off-Grid Sustainable Energy Access for the Poor' (2012) 47 *Energy Policy* 87, 89.
[1229] Zerriffi, above n 1226, 276.
[1230] Glemarec, above n 1228, 92.
[1231] Tara Laan, *Gaining Traction: The Importance of Transparency in Accelerating the Reform of Fossil-Fuel Subsidies* (2010) 13.
[1232] Barton, above n 1072, 63.
[1233] Glemarec, above n 1228, 92.
[1234] Barnes, above n 1127, 324.
[1235] Ibid 324-5.
[1236] Zerriffi, above n 1226, 276.
[1237] Barnes, above n 1127, 325.
[1238] Ibid.
[1239] Zerriffi, above n 1226, 276.

V. CONCLUSION

This Chapter highlights that finishing the business of rural electrification in developing countries is now within reach more than ever. Admittedly, there are still deeply embedded challenges to rural electrification, but bigger benefits and opportunities lie in wait for those with the resolve to go beyond the obstacles of distance. While there is no single rural electrification model that can be followed, the principles and the lessons drawn from various rural electrification approaches are instructive of current efforts to advance the global and national agenda for universal electricity coverage in rural areas of the developing world. So far, what is emerging is this: isolated rural areas previously out of reach are provided with electricity service by local and even grassroots actors using decentralised and distributed energy solutions from stand-alone systems to mini-grids, particularly utilising RE technologies, around the world.

Outside the large state-owned, heavily regulated and monopolistic utility approach, cooperatives and community-based organisations are getting more involved in off-grid electrification. This means that the traditional regulatory paradigm for geographically integrated systems may not be applicable to geographically isolated ones especially when it comes to off-grid electrification. Still, regulating off-grid electrification, although characterised as minimal, is justified not only on grounds of market failure, but more importantly based on human rights and social solidarity rationales. Undeniably, the regulatory features of off-grid electrification are evolving according to technology, ownership structure and the operating environment, among others. Some of the salient features of such a regulation are identified despite constraints posed by the limited literature available. However, one critical feature of off-grid electricity regulation stands out – the right balance of subsidies is indispensable until customers become the main source of revenue. This speaks of the long term, which also shows that rural electrification requires a prolonged and unwavering commitment to see it through its successful conclusion, that is, access to electricity service for all. It is a goal that can be strategically realised by developing countries where the integral components – universal access to modern energy services, RE technologies, and rural electrification - are bound together by a common logic and spoken in the same language instead of being implemented as separate legal regimes, which a human rights–based approach offers. Thus in the next Chapter, the thesis looks into the practical implications and significance of a human rights-based approach to universal access for modern energy services with the Philippines as country focus.

CHAPTER 7

FROM THEORY TO PRACTICE: A HUMAN RIGHTS-BASED APPROACH TO UNIVERSAL ACCESS TO MODERN ENERGY SERVICES IN THE PHILIPPINES

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I. INTRODUCTION

While the International Bill of Human Rights has received global assent, Donnelly asserts that its 'implementation remains almost exclusively national'.[1240] This strongly applies in the sphere of socioeconomic rights where the 'need for an active state has always been especially clear' with its emergence 'as both the principal threat to the enjoyment of human rights and the essential institution for their effective implementation and enforcement'.[1241] As mentioned in Chapter 2, a human rights-based approach operates with both result and procedure orientations in which the state plays a central role. Along this line, the guarantee of access to modern energy services represents the result aspect of the human rights-based approach, while the legal, policy and regulatory framework under which state action occurs embodies the procedural part.[1242] In turn, a human rights-based approach looks into the state's implementation – through the constitution or national legislation or both - of its commitments under the international human rights regime, particularly socioeconomic rights,[1243] in order to examine the challenge and the nature of the change being sought to achieve universal access to modern energy services in the domestic context. Also, this entails

[1240] Donnelly, above n 101, 44-6.
[1241] Ibid 46-8.
[1242] See Bourquain, above n 275, 56.
[1243] Hertel and Minkler, above n 292, 25.

an examination of institutions, practices and norms as targets for change.[1244] As Patricia Birnie and Alan Boyle write:

> [T]he degree and form of national implementation will largely determine how successful the treaty [or international agreement] is as an instrument of change, assuming its objectives are realistic, and that the parties intend to make more than symbolic gestures, which is not always the case.[1245]

Having this in mind, the Chapter embarks with a brief description of the legal, policy and institutional framework in the country that pertain to the implementation of socioeconomic rights relevant to universal access to modern energy services. In doing so, the Chapter will be able to identify the legal, regulatory and policy opportunities and challenges to attain universal access to modern energy services in the Philippines. Next, it examines the practical implications of a human rights-based approach to achieve universal access to modern energy services in order to demonstrate the transition from theory to practice in the domestic legal regime. Accordingly, the proposition of couching universal access to modern energy services in the human rights language is analysed in the Philippines for the first time as a scholarly exercise.

II. LEGAL, POLICY AND INSTITUTIONAL FRAMEWORK

As previously mentioned, the socioeconomic rights enshrined in the ICESCR can be institutionalised within the state through the basic law or constitution, which can be directive in nature, that is, expressed as policy goals or as 'an actual listing of enforceable rights'.[1246] This constitutionalisation of socioeconomic rights is not new as demonstrated by the incorporation of such rights in the basic law of a number of countries, albeit varied in expression, interpretation, and effect.[1247] Also, such rights can also be implemented through the acts of the legislature as part of the legal and regulatory framework of a country.[1248] Whether the implementation route is through the constitutional or legislative approach, Virginia Dandan remarks that 'renewed and vigorous efforts to integrate ESC rights into laws and policies at the national and international levels' are needed.[1249]

[1244] Donnelly, above n 101, 24-5.
[1245] Patricia Birnie and Alan Boyle, *International Law and the Environment* (2002) 8.
[1246] Hertel and Minkler, above n 292, 25.
[1247] Wiktor Osiatynski, above n 109, 121-125: For example, the countries include Italy, Ireland, India, Portugal, Spain and South Africa, among others.
[1248] Hertel and Minkler, above n 292, 25.
[1249] Virginia Dandan, 'Foreword' in Scott Leckie and Anne Gallagher (eds), *Economic, Social, and Cultural Rights: A Legal Resource Guide* (2006) x.

A. *The 1987 Philippine Constitution*

After over a decade of martial rule, the Philippines adopted a new fundamental law in 1987 as a product of the people's democratic struggle and quest for deep-seated good governance reforms. Against this backdrop, the 1987 Constitution features progressive policies and provisions designed to strengthen the various pillars of democracy, promote social justice and protect the basic rights of the citizenry. Under Article II on Declaration of Principles and State Policies, the State is mandated to 'promote a just and dynamic social order…and free the people from poverty through policies that provide adequate social services, promote full employment, a rising standard of living, and an improved quality of life for all.' [1250] Moreover, it provides that the State shall 'promote social justice in all phases of national development.' [1251] Further, the State 'values the dignity of every human person and guarantees full respect for human rights,' [1252] and is mandated to 'promote comprehensive rural development.' [1253]

The 1987 Philippine Constitution places such a high premium on social justice and human rights that it devotes one whole article on the subject matter. To reduce economic, social and political inequalities, the fundamental law mandates the legislature to give the highest priority to enacting measures that 'protect and enhance the right of all the people to human dignity,' [1254] and a commitment on the part of the state 'to create economic opportunities based on freedom of initiative and self-reliance.' [1255] Moreover, the state is mandated to undertake a continuing program on housing, 'which will make available at affordable cost decent housing and basic services to underprivileged and homeless citizens'. Likewise, the state 'shall endeavor to make essential goods, health and other social services available to all people at affordable costs' [1256] and giving 'priority for the needs of the underprivileged sick, elderly, disabled, women, and children'. [1257] Other constitutional provisions on education, women, and labour, among others, are provided in the fundamental law. Clearly, the 1987 Philippine Constitution echoes and reiterates the socioeconomic rights enshrined in the ICESCR.

[1250] *The 1987 Constitution of the Republic of the Philippines* (Philippines) art II s 9.
[1251] Ibid art II s 10.
[1252] Ibid art II s 11.
[1253] Ibid art II s 21.
[1254] Ibid art XIII s 1.
[1255] Ibid art XIII s 2.
[1256] Ibid art XIII s 9.
[1257] Ibid art XIII s 111.

B. *National Legislation*

To implement the above constitutional statements and policies, however, subsequent legislative action is needed to give flesh to many of these constitutional provisions. As the Supreme Court elucidates, 'the provisions of Article II of the 1987 Philippine Constitution, the declarations of principles and state policies are not self-executing'.[1258] It adds that '[l]egislative failure to pursue such policies cannot give rise to a cause of action in courts'. Similarly, the social justice provisions of the 1987 Philippine Constitution 'are not self-executing principles ready for enforcement through the courts.' And 'legislative enactment is required', as the Supreme Court declares in another case.[1259] In brief, these constitutional provisions are 'but guidelines for legislation'.[1260] The critical role of the Supreme Court in relation to the interpretation of Article II and related constitutional provisions will be further discussed in the following part of this Chapter.

Essentially, universal access to modern energy services is embedded in the legislative measures on renewable energy and rural electrification, which are identified and described in Chapters 5 and 6. The institutions mandated to oversee the electricity sector also pursue meeting this goal. It will be noted that achieving universal access to modern energy services will require 'a powerful political consensus and [must be] supported by legal institutions'.[1261] Pertinently, the Energy Regulatory Commission (ERC), as the independent regulator for the electricity industry in the Philippines, promulgated a Magna Carta for Residential Electricity Consumers in 2004 expressly recognising that a residential consumer has the right to electricity service.[1262] In addition, a residential consumer has the following basic rights:

> **Article 4. *Basic Rights.*** – All consumers shall be entitled to the following basic rights:
> (a) To have quality, reliable, affordable, safe, and regular supply of electric power;
> (b) To be accorded courteous, prompt and non-discriminatory service by the electricity provider;
> (c) To be given a transparent, non-discriminatory and reasonable price of electricity consistent with the provisions of RA 9136;

[1258] *Representatives Gerardo S. Espina, et al v Hon. Ronaldo Zamora, Jr. (Executive Secretary), et al*., Supreme Court of the Philippines, G.R. No. 1439855 (21 September 2010) < http://sc.judiciary.gov.ph/jurisprudence/2010/september2010/143855.htm>

[1259] *Bureau of Fisheries and Aquatic Resources Employees Union, Regional Office No. VII, Cebu City v Commission on Audit*, Supreme Court of the Philippines, G.R. No. 169815 (13 Aug 2008) <http://sc.judiciary.gov.ph/jurisprudence/2008/august2008/169815.htm>

[1260] Ibid.

[1261] See Richard Barnet, 'Human Right Implications of Corporate Food Policies' in Paula Newberg (ed), *The Politics of Human Rights* (1980) 148.

[1262] *Magna Carta for Residential Electricity Consumers* (Energy Regulatory Commission, Philippines) art 6.

(d) To be an informed electric consumer and given adequate access to information on matters affecting electric service of the consumer concerned;
(e) To be accorded prompt and speedy resolution of complaints by both the distribution utility and/or the ERC;
(f) To know and choose the electric service retailer upon the implementation of Retail Competition; and
(g) To organize themselves as an organization in the franchise area where they belong and where they are served by the distribution utility or as a network of organizations.[1263]

It will be noted that violation of any of the basic rights recognised under the Magna Carta for Residential Electricity Consumers carries a corresponding penalty, which the ERC may impose in accordance with law.[1264] This means that a residential consumer has an actionable or operable right that can be redressed before the ERC.

Other socioeconomic rights are expressed in, and pursued through, various pieces of legislation and government programs, including but not limited to, the implementation of mass housing projects,[1265] establishment of financial schemes that 'will make available, at affordable cost, decent housing and basic services to underprivileged and homeless citizens',[1266] and continuous support to 'the government's programs for urban and rural housing, resettlement, [and] the development of sites and services'.[1267] Undeniably, there is manifest legislative intent to give effect to the socioeconomic rights and human rights standards enshrined in the 1987 Philippine Constitution as overarching themes to such initiatives where coherence and consistency can be drawn. Also, this intent is reflected in the 'provisioning role' of the legislature with respect to the allocation of public funds or resources as captured in the national budget process.[1268] At times, such provisioning comes in the form of government subsidies to accelerate household electrification in off-grid areas, for instance, and to support rural electrification programs implemented by public agencies such as the Department of Energy.[1269] However, this kind of provisioning is vulnerable to the politics and dynamics of the national budget process. As Andy Norton and Dianne Elson aptly describe such process, '[t]he process of allocation of resources to different institutions and purposes is essentially a political, rather than purely technocratic one'.[1270] Therefore,

[1263] Ibid.
[1264] Ibid art 37.
[1265] See *Presidential Decree No. 757* (Philippines).
[1266] *Republic Act No. 7835* (Philippines) s 2.
[1267] Ibid s 3 (a).
[1268] Hertel and Minkler, above n 292, 26.
[1269] See *Department Circular No. DC 2014-07-0012* (Department of Energy, Philippines).
[1270] Andy Norton and Dianne Elson, *What's Behind the Budget? Politics, Rights and Accountability in the Budget Process* (2002) 6.

how to insulate key policy and development priorities from 'politicized attack' and 'creating safeguards for the weakest' members of society poses significant challenges in giving effect to socioeconomic rights in the domestic realm.[1271]

C. *The Supreme Court*

So far, the vital role of the executive and legislative branches of government can readily be seen in the implementation of socioeconomic rights, including those actions and measures undertaken that have implications on access to modern energy services. While notionally described as taking a passive role, the Supreme Court plays an equally significant function in giving effect to the various constitutional provisions for the promotion, protection and fulfilment of human rights, particularly socioeconomic rights. As mentioned earlier, the Supreme Court has reaffirmed in numerous instances the directive nature of the declarations of principles and state policies and the social justice provisions of the 1987 Philippine Constitution. However, the idea that the 1987 Philippine Constitution may immediately protect socioeconomic rights, including guaranteeing access to modern energy services, has its genesis from one landmark case – *Oposa v. Factoran*.[1272] In this case, which was a taxpayers' class suit seeking the cancellation of all timber license agreements in the Philippines, the Supreme Court pronounced the following legal precedent:

> **While the right to a balanced and healthful ecology is to be found under the Declaration of Principles and State Policies and not under the Bill of Rights, it does not follow that it is less important than any of the civil and political rights** enumerated in the latter. Such a right belongs to a different category of rights altogether for it concerns nothing less than self-preservation and self-perpetuation - aptly and fittingly stressed by the petitioners - the advancement of which may even be said to predate all governments and constitutions. As a matter of fact, **these basic rights need not even be written in the Constitution for they are assumed to exist from the inception of humankind. If they are now explicitly mentioned in the fundamental charter, it is because of the well-founded fear of its framers that unless the rights to a balanced and healthful ecology and to health are mandated as state policies by the Constitution itself, thereby highlighting their continuing importance and imposing upon the state a solemn obligation to preserve the first and protect and advance the second, the day would not be too far when all else would be lost not only for the present generation, but also for those to come** - generations which stand to inherit nothing but parched earth incapable of sustaining life.[1273]

[1271] Hertel and Minkler, above n 292, 26.
[1272] *Juan Antonio, Anna Rosario and Jose Alfonso, all surnamed Oposa, et al. v The Honorable Fulgencio S. Factoran, in his capacity as the Secretary of Department and Natural Resources, and The Honorable Eriberto U. Rosario, Presiding Judge of the RTC, Makati, Branch 66*, Supreme Court of the Philippines, G.R. No. 101083 (30 July 1993) <http://www.lawphil.net/judjuris/juri1993/jul1993/gr_101083_1993.html>
[1273] Ibid; Emphasis added.

In arriving at this conclusion, the Supreme Court cited the duty of a government agency to protect and advance the right to a balanced and healthful ecology pursuant to its statutory mandate under various legislative enactments. In a separate concurring opinion, however, Justice Florentino Feliciano cautioned that the 'result will…propel courts into the uncharted ocean of social and economic policymaking' considering that 'no specific, operable norms and standards are shown to exist'.[1274] In effect, concerns are raised regarding the application of the doctrine separation of powers entrenched in the 1987 Philippine Constitution, that is, 'the policy making departments – the legislative and executive departments – must be given a real opportunity to fashion and promulgate those norms and standards, and to implement them before the courts should intervene'.[1275] As Richard Posner observes, '[t]he more the Court is seen as pre-occupied with "hot-button" constitutional cases, the more it looks like a political body exercising discretion comparable in breadth to that of a legislature'.[1276]

While Dante Gatmaytan expresses some other reservations and shortcomings about the case,[1277] there is still occasion to 'celebrate' *Oposa v Factoran* for holding that 'the constitutional right to a balanced and healthful ecology is an actionable right that is superior to the Bill of Rights.[1278] On the other hand, Ma. Socorro Manguiat and Vicente Paolo Yu III contend that the ultimate value of this case 'lies in the extent to which the decision advances the state of the law in pursuit of the public welfare' even 'where the law itself is unclear or ambiguous in order to clarify the meaning of the law as enacted by the legislature'.[1279] This resonates in Duncan Kennedy's observation regarding adjudication:

> At a minimum, judges often have the job of resolving gaps, conflicts or ambiguities in the system of legal norms. In some cases, no amount of reformulation based on the underlying definitions of the words composing the arguably applicable rules produces a deductively valid resolution. When it is agreed there is a gap, conflict or ambiguity in this sense, then it is also agreed that the judge who resolves it "makes" a new rule and then applies it to the facts, rather than merely applying a preexisitng rule.[1280]

Thus, the judiciary is expected to fill the gap especially when the law is ambiguous and conflicts need to be resolved.

[1274] Ibid.
[1275] Ibid.
[1276] Richard Posner, *How Judges Think* (2008) 271.
[1277] Dante Gatmaytan, 'The Illusion of Intergenerational Equity: *Oposa v. Factoran* as Pyrrhic Victory' (2003) 15 *The Georgetown International Environmental Law Review* 457, 459-60.
[1278] Ibid 460.
[1279] Ma. Socorro Manguiat and Vicente Paolo Yu III, 'Maximizing the Value of *Oposa v. Factoran*' (2003) 15 *The Georgetown International Environmental Law Review* 487, 488.
[1280] Duncan Kennedy, *A Critique of Adjudication* (1997) 28.

Speaking of the value and potential of jurisprudential pronouncements, the words of Albie Sachs, former judge of the Constitutional Court of South Africa, come to mind regarding fundamental rights, the role of the Supreme Court, and what is needed about jurisprudence in light of the *Grootboom, Soobramoney, and Treatment Action Campaign* cases on the implementation of socioeconomic rights in South Africa:[1281]

> The fact that we are not up for election is an advantage. We are not running for office; we are not doling money to people who are going to vote for us, or trying to be seen to do that. We are simply sticking to the principles, the deep principles of what makes a society basically decent and politically moral, when attempting to adhere to fundamental rights. The fact that we are not up for election is a strength, not a weakness.
>
> Each of the fundamental rights – the dignity rights, material rights, bread rights, litigation rights, voting rights, freedom rights – might in a particular case come to the fore, but they are interrelated. They are all part and parcel of the character of the society in which we live. The phrase that all human rights are universal, interrelated, and indivisible, sounds good, but it does not only sound good, it is actually needed in jurisprudence.[1282]

Similar to human rights, as argued in Chapter 3, many of the constitutional rights under the 1987 Constitution require access to modern energy services in order to be respected, protected and fulfilled. At the very least, access to modern energy services (e.g. electricity) is arguably part of Philippine society's constitutive commitment, which Cass Sunstein describes as helping 'to create, or to constitute, a society's basic values', the denial of which 'would amount to a kind of breach – a violation of a trust'.[1283] For this reason, it is very tempting to analogise and explore the approach taken in *Oposa v Factoran* in considering whether access to modern energy services is guaranteed, by way of derivation and centrality discussed in Chapter 4, under the various laws enacted by the legislature in implementing the socioeconomic provisions of the 1987 Philippine Constitution, including international human rights commitments. Thus, universal access to modern energy services as a 'judicialized matter'[1284] is a fascinating but controversial proposition that adds scope for further research.

[1281] *Government of the Republic of South Africa v Irene Grootboom & Others*, Case CCT 11/00 (4 October 2000) <http://www.saflii.org/za/cases/ZACC/2000/19.pdf>; *Thiagraj Soobramoney v Minister of Health, Kawazulu-Natal*, Case CCT 32/97 (27 October 1997) <http://www.saflii.org/za/cases/ZACC/1997/17.pdf>; *Minister of Health & Others v Treatment Action Campaign & Others*, Case CCT 8/02 (5 July 2002) <http://www.saflii.org/za/cases/ZACC/2002/15.pdf>.

[1282] Albie Sachs, 'Enforcement of Social and Economic Rights' (2007) *22 Am. U. Int'l L. Rev*. 673, 694.

[1283] Cass Sunstein and Randy Barnett, 'Constitutive Commitments and Roosevelt's Second Bill of Rights: A Dialogue' (2005) 53 *Drake Law Review* 205, 217.

[1284] Paul Carrese, *The Cloaking of Power: Montesquieu, Blackstone, and the Rise of Judicial Activism* (2003) 261: Carrese refers to the tendency to 'judicialize matters, that, while in need of moral principle and order,

D. *The Commission on Human Rights*

The Philippines has constitutionally mandated the creation of an independent constitutional commission on human rights, as a significant inroad to institutionalising human rights into the legal, policy and regulatory framework of the country. In carrying out its mandate, the 1987 Philippine Constitution empowers the Commission on Human Rights (CHR), among other things, to:

> 1. Investigate, on its own or on complaint by any party, all forms of human rights violations involving civil and political rights;
> 2. Provide appropriate legal measures for the protection of human rights of all persons within the Philippines, as well as Filipinos residing abroad, and provide for preventive measures and legal aid services to the underprivileged whose human rights have been violated or need protection;
> 3. Recommend to the Congress effective measures to promote human rights and to provide for compensation to victims of violations of human rights, or their families;
> 4. Monitor the Philippine Government's compliance with international treaty obligations on human rights; and
> 5. Grant immunity from prosecution to any person whose testimony or whose possession of documents or other evidence is necessary or convenient to determine the truth in any investigation conducted by it or under its authority.[1285]

By virtue of Executive Order No. 163, Series of 1987, the CHR was formally constituted. In 1991, the Supreme Court elucidated in the case of *Cariño v. The Commission on Human Rights* that the CHR primarily exercises only investigatory power, that is, the power to receive evidence and make findings of fact on claimed violations of civil and political rights.[1286] It does not, however, possess adjudicatory power similar to a court of justice or a quasi-judicial agency that calls for 'applying the law to those factual conclusions to the end that the controversy may be decided or determined authoritatively, finally and definitively, subject to such appeals or modes of review as may be provided by law'.[1287] Notably, the CHR's investigatory power and fact-finding function is also confined to violations of civil and political rights, and does not extend to economic, social and cultural rights transgressions based on the present constitutional and statutory wordings of its creation.

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nonetheless properly lie either largely or completely outside the competence of courts of law, in the domains of legislative and executive power'.

[1285] This can include socio-economic and cultural rights under the International Covenant on Economic, Social and Cultural Rights.

[1286] *Hon. Isidro Cariño v The Commission on Human Rights*, Supreme Court of the Philippines, Supreme Court of the Philippines, G.R. No. 96681 (2 December 1991) <http://www.chanrobles.com/scdecisions/jurisprudence1991/dec1991/gr_96681_1991.php>

[1287] Ibid.

However, Congress has the prerogative to expand the authority of the CHR to include other cases of human rights violations.[1288] This has prompted some legislators to initiate legislative proposals or Bills in 2011 to empower the CHR not only to investigate all forms of human rights violations, including economic, social and cultural rights violations, but also the power to prosecute such violations and provide corresponding legal and preventive measures for the protection of human rights.[1289] Unfortunately, the legislative process can be very slow and tedious. Without political pressure and urgency, the legislative proposals were not enacted into law, albeit these can be re-filed depending on the legislative priorities of the government of the day.

Despite the present limitations on its functions, the CHR came out with significant findings that touch on the application of international and national laws on human rights in the Philippines. In one instance, the Catholic Bishops' Conference of the Philippines (CBCP), the National Secretariat for Social Action-Justice and Peace (NASSA) and the Caritas-Philippines (CP) sought a human rights advisory from the CHR alleging that the Purchased Power Adjustments (PPA) - a cost adjustment mechanism to reflect changes in the cost of power bought from State-owned and private power producers[1290] - imposed by a private power utility company on consumers were onerous contracts that violated human rights. Specifically, CBCP, NASSA and CP relied on Section 9, Article II of the 1987 Philippine Constitution. Also, the groups alleged that the PPA violated Section 25 (1) of the Universal Declaration of Human Rights that emphasised every individual's right 'to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services.'[1291] In responding to the request for advisory, the CHR took into consideration the social implications of the PPA on the lives of the citizenry, including the impact to the government, the private sector and the general public.[1292] The CHR then came out with the following interesting conclusion, which demonstrates the type of rationalisation that is expected from applying a human rights-based approach to matter:

[1288] *The 1987 Constitution of the Republic of the Philippines* (Philippines) art XIII s 19.
[1289] Committees on Justice and Human Rights, Civil Service and Government Reorganization, and Finance, Senate of the Philippines, *Committee Report No. 37* (2011) <http://www.senate.gov.ph/lisdata/112399558!.pdf>
[1290] The Commission on Human Rights, *On Purchased Power Adjustments* (2002) <http://www.chr.gov.ph/MAIN%20PAGES/about%20hr/advisories/abthr026-030.htm#ppa>
[1291] United Nations, *The Universal Declaration of Human Rights* <http://www.un.org/en/documents/udhr/index.shtml#a25>
[1292] The Commission on Human Rights, above n 1290.

> For the past seven (7) or eight (8) years of its imposition, the PPA has been the cause of deprivation to Filipinos, not only because they were not consulted in its ordination in the statements of accounts of electric consumption, but more so because the rights enshrined in the Constitution and Universal Declaration of Human Rights have been curtailed when the amount paid for the PPA may have been the same amount that may be utilized to alleviate the lot of the Filipinos for the period past.
>
> These are pressing issues that need to be responded to and revisited by the Government and the entities charged with the distribution of power supply, since it is a State obligation to regulate non-state actors in their impositions that affect the lives of the ordinary people.
>
> In the meantime, more deprivation may occur and the long years of PPA imposition may reach to a decade prolonging the Filipino's sufferance. This should somehow be tempered by the suspension of the PPA imposition in the meantime that other measures are being resorted to ensure sustained and efficient delivery of the electricity.[1293]

Another significant human rights dimension that the CHR had the occasion to explain was the relevance of the Rights-Based Approach (RBA) to development and governance in the Philippines. It begins by noting the fact that the country is a signatory to at least 23 international human rights instruments under the auspices of the UN.[1294]According to the CHR, these instruments contain the human rights standards to be observed in the development process, which can be achieved by purposely 'mainstreaming human right standards in development and governance.'[1295] The CHR clarifies that:

> The realization of human rights is the goal of all development efforts. Governance manages development. This brings to the fore the importance of consciously and deliberately mainstreaming human rights standards in development and governance.
>
> The Rights Based Approach (RBA for short) is a mainstreaming process to link human rights to development. As an approach to development, it essentially integrates the norms, standards and principles of the international human rights system into plans, policies and processes of development.
>
> The RBA is founded on the UN Declaration on the Right to Development and on the various international human rights instruments to which the Philippines is a state

[1293] The Commission on Human Rights, *On Applying the Rights-Based Approach (RBA) to Development and Governance* (2004) <http://www.chr.gov.ph/MAIN%20PAGES/about%20hr/advisories/abthr036-040.htm#applyrba> The Philippines has ratified or is a party to, among others, the Universal Declaration of Human Rights (UDHR), International Covenant on Civil and Political Rights (ICCPR), International Covenant on Economic, Social and Cultural Rights (ICESCR), Convention on the Rights of the Child (CRC), Convention Against Torture (CAT), Convention on the Elimination of Discrimination Against Women (CEDAW), Convention on the Elimination of Racial Discrimination (CERD), International Convention on the Protection of the Rights of All Migrant Workers and Members of their Families, and UN Declaration on the Right to Development (RTD).
[1294] Ibid.
[1295] Ibid.

> party. Being a State Party means that the Philippine government has the primary responsibility, duty or obligation to comply with all the obligations in the ratified or signed treaties/instruments. The Philippine government and all its branches, agencies, instrumentalities and institutions will be able to comply with its obligations as it applies the RBA in governance and development.[1296]

Accordingly, the CHR as the primary and constitutional authority on human right matters and issues in the country has unequivocally affirmed the relevance and applicability of using a human rights-based approach and the need to mainstream human rights standards into the development process and governance framework of the Philippines.

III. THE SIGNIFICANCE OF A HUMAN RIGHTS-BASED APPROACH TO ACCESS MODERN ENERGY SERVICES IN THE PHILIPPINES

A. *Operationalising the Concept of Equality and Non-Discrimination*

The persistent poverty and pronounced socioeconomic inequality that has dogged Philippine society for decades is one of the unwanted by-products of uneven and non-inclusive economic growth in the past.[1297] Also, discrimination creeps in as a result, which is incompatible with the ideal of inclusive growth in the country.[1298] The CESCR elucidates that an individual or group's socioeconomic situation in tandem with poverty may give rise to 'pervasive discrimination, stigmatization and stereo-typing',[1299] which can spawn unequal access to the same quality of basic social services available to others.[1300] Stephen Tully points out to the example of Bolivia, which reformed its electric power industry set-up by unbundling generation, transmission and distribution into separate functions. Also, Tully notes that 'although electricity became more accessible to urban residents, rural households enjoyed no discernible improvement after more than a decade, and the coverage for the poor declined'.[1301] Accordingly, this constrains government to directly confront issues of discrimination and inequality, including the elimination of formal and de facto

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[1296] Ibid.
[1297] National Economic Development Authority, *Philippine Development Plan 2011-2016*, 18-21 <http://www.neda.gov.ph/wp-content/uploads/2013/09/CHAPTER-1.pdf>
[1298] Ibid 18: The National Economic Development Authority defines 'inclusive growth' as, 'first of all, growth that is rapid enough to matter, given the country's large population, geographical differences, and social complexity'. Also, '[i]t is sustained growth that creates jobs, draws the majority into the economic and social mainstream, and continuously reduces mass poverty'.
[1299] UN Committee on Economic, Social and Cultural Rights, *General Comment No. 20: Non-discrimination in Economic, Social and Cultural Rights (Art. 2, para. 2, of the Covenant* (2009).
[1300] Ibid.
[1301] Tully, above n 71, 520.

discrimination [1302] of those who particularly suffer from 'historical and persistent prejudice',[1303] such as the poverty-stricken and off-grid rural populace.

Interestingly, socioeconomic inequality and discrimination is manifested in the phenomena called 'regulatory capture', which Michael Livermore and Richard Revesz describe as occurring in 'situations where organized interest groups successfully act to vindicate their goals through government policy at the expense of the public interest'.[1304] As mentioned earlier in Chapter 5, the massive financial, political and structural support to conventional power technologies over a substantial period of time had not only distorted electricity markets, but also made the electricity industry vulnerable to regulatory capture. This has spawned inequality and discrimination on who should have access to electricity services as can be gleaned from the prolonged inability of the government to extend electricity access to the rural poor in remote areas on oft-cited socioeconomic grounds mentioned in Chapter 6. With historical support and preference for conventional power technologies, the rural poor will remain at a relative disadvantage and systemically discriminated against, [1305] unless all appropriate measures and means are adopted by government to ensure that access to electricity services is available to everyone regardless of socioeconomic status.

The CESCR explains that an active and comprehensive approach is required to overcome systemic discrimination, behaviour, attitudes and practices in relation to vulnerable and disadvantaged individuals and groups such as the rural poor.[1306] This entails a range of laws, policies and programs, including temporary measures, to eliminate inequality and systemic discrimination. Since RE technology is acknowledged as the default technology for least cost electrification of off-grid rural areas, a human rights-based approach to access modern energy services opens the door for RE technologies to overcome cost-related and technical impediments consistent with the equality, non-discrimination and adequacy norms under the international human rights legal regime. Along this line, this approach has, what Ellen Wiles describes, 'an ameliorative effect on the process of policy development, by

[1302] UN Committee on Economic, Social and Cultural Rights, above n 1299.
[1303] Ibid.
[1304] Michael Livermore and Richard Revesz, 'Regulatory Review, Capture, and Agency Inaction' (2013) 101 *The Georgetown Law Journal* 1337, 1340.
[1305] UN Committee on Economic, Social and Cultural Rights, above n 1299: The CESCR notes that 'systemic discrimination' can be understood in terms of 'legal rules, policies, practices or predominantly cultural attitudes in either the public or private sector which create relative disadvantages for some groups, and privileges for other groups'.
[1306] Ibid.

increasing the precision of diagnosing problems and prescribing future developments'.[1307] Also, a human rights-based approach to access modern energy services gives effect to the constitutional mandate of the government to promote rural development, reduce social and economic inequalities, and demonstrate a firm commitment on its part to create economic opportunities for all Filipinos. Therefore, guaranteeing access to modern energy services not only satisfies the fulfilment of the country's obligation to effectively implement Article 11.1 of the ICESCR in the domestic context, but also gives life to the constitutional rights, aspirations and directives enshrined in the 1987 Philippine Constitution.

B. *Shifting the Accountability from Private Franchisee/Contractor to the State*

While the government remained at the forefront of policy-making, regulating and monitoring national electrification programs, several modes such as privatisation, deregulation and franchising were resorted to as the anchor for electricity industry reform to attain energy efficiency and complete the electrification of the entire country, among others. After more than a decade, figures indicate that the number of impoverished families and individuals mostly in rural areas, who are still without access to electricity services, remain alarmingly significant. While private sector participation was anticipated to provide better electricity service to consumers, it did not necessarily result in the expansion of access to electricity services in rural areas, particularly for the poor.[1308] Aside from systemic discrimination and possible state capture, another plausible explanation that prolongs the total electrification process especially of off-grid areas is the inherent compliance weakness of shifting the obligation to private contractors or franchisees from one that is clearly reposed on the government. Tully notes that although 'governments have historically made little effort to improve electricity access, particularly for the poor' under a monopolistic arrangement in the provision of electricity services, the energy sector efficiency and liberalisation model had not been equally up to the task in improving electricity access by disadvantaged socioeconomic groups.[1309] Worse, the lack of political commitment at the national level and the overwhelming concern for financial viability seem to ensure that 'market reforms would not support greater access' to electricity services by impoverished rural households.[1310]

[1307] Ellen Wiles, 'Aspirational Principles or Enforceable Rights? The Future for Socio-Economic Rights in National Law' (2006) 22 *Am. U. Intl L. Rev.* 35, 44.
[1308] Tully, above n 71, 519.
[1309] Ibid 518-9.
[1310] Ibid.

In the Philippines, a private franchised utility can justify the non-delivery of electricity services to unviable areas and, in turn, exclude such areas from its service coverage.[1311] The current regulatory weakness in ensuring access to electricity services by the rural poor is reflected in the remedial measure that seeks to authorise entry by qualified third parties into remote and unviable villages covered by a franchised utility's obligation. The scheme does not only guarantee that there will be qualified third party applicants for the declared unviable areas, but also arguably provides a justification to exclude non-profitable areas from a franchisee's responsibility. In the absence of qualified third parties, the unviable areas are included in the government's missionary electrification program thereby effectively shifting back the obligation to provide such service to the government.[1312] Until this shift happens, the service vacuum in the meantime is further prolonged.

From the foregoing, applying a human rights-based approach to access electricity services becomes an attractive proposition when a weak private party compliance regime is unable to extend access to a basic service, particularly for the rural poor. As David Bilchitz asserts:

> Since people live within societies, it is likely that they will be unable to live well, achieve their goals and have positive experiences if they are forced to live below standards that are regarded as acceptable by those communities.[1313]

By applying such an approach, the obligation is imposed on the government not only in light of its commitments under the ICESCR, but also pursuant to positive declarations embodied in the 1987 Philippine Constitution without going through the bureaucratic rigmarole of the qualified third party scheme. Dinah Shelton explains that a human rights-based approach is preferable over a legal approach that puts a premium on responsibility since 'human rights are maximum claims on society',[1314] which enhances the 'compliance pull'.[1315] The existing emphasis on contractual responsibility in the Philippines where a franchisee commits to deliver electricity services within its coverage areas until the concern on financial viability overtakes such a commitment demonstrates the shortcoming of a private sector-driven and

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[1311] *Republic Act No. 9136* (Philippines) s 59.
[1312] *Department Circular No. DC-2005-12-011* (Department of Energy, Philippines) s 3 (e).
[1313] David Bilchitz, *Political Philosophy in Action: Developing the Minimum Core Approach to Socio-Economic Rights* (2008) 193.
[1314] Dinah Shelton, *Draft Paper on Human Rights and Environment: Past, Present and Future Linkages and the Value of a Declaration* (2009) 3 <http://www.unep.org/environmentalgovernance/Portals/8/documents/draftpaper%20Humanrightsnenvironment%20pastpresentandfuturelinkages.pdf>
[1315] Ibid.

responsibility-focused approach, as discussed in Chapter 6. Moreover, a human rights-based approach elevates the provision of electricity services, particularly in off-grid areas, to a direct government obligation under international and national law, instead of being relegated to the level of a changeable policy choice or program for the government, or left to the 'genius' of the market when it is failing in the first place. As the Supreme Court explains in the case of *Land Bank of the Philippines v. Esther Anson Rivera, et al.* by reiterating and quoting an earlier decision:

> Justice Isagani A. Cruz avers: "[**I]t is now obligatory upon the State itself to promote social justice, to provide adequate social services to promote a rising standard of living**, to afford protection to labor to formulate and implement urban and agrarian reform programs,.....These functions, while traditionally regarded as merely ministrant and optional, have been made compulsory by the Constitution."[1316]

It is important to stress that the direct obligation of government to ensure access to modern energy services by everyone admittedly cannot be realised in a short period of time. For this reason, the concept of progressive realisation is recognised under the ICESCR.[1317] Although progressive realisation is considered a flexibility device for compliance to reflect realities and difficulties involved in ensuring the full realisation of the rights under the ICESCR, it remains incumbent upon governments to ensure that 'minimum core obligations' are satisfied even at 'minimum essential levels.'[1318] This is interpreted by the CESCR as the exertion of every effort using all available resources by the government to satisfy its minimum core obligations.[1319] In effect, the presumption is that the government cannot easily excuse itself from failing to discharge its obligations on the convenient ground of resource constraints. As Karin Lehman contends, '[u]rgent interests need to be prioritized'.[1320] Also, there must be a sense of urgency to 'address those in a condition where their minimal interests cannot be satisfied'[1321] such as those still anachronistically lacking access to modern energy services.

[1316] *Land Bank of the Philippines v Esther Anson Rivera, et al.*, Supreme Court of the Philippines, G.R. No. 182431 (17 November 2010) <http://sc.judiciary.gov.ph/jurisprudence/2010/november2010/182431.htm>; Emphasis added.
[1317] UN Committee on Economic, Social and Cultural Rights, *General Comment No. 3: The Nature of States Parties Obligations (Art. 2, para. 1, of the Covenant)*, (1990).
[1318] Ibid.
[1319] Ibid.
[1320] Karin Lehman, 'In Defense of the Constitutional Court: Litigating Socio-Economic Rights and the Myth of the Minimum Core' (2006) 22 *Am. U. Intl L. Rev.* 163, 185.
[1321] Bilchitz, above n 1313, 208.

Significantly, the CESCR underscores the importance of ensuring that vulnerable and disadvantaged groups in society are protected by espousing 'relatively low-cost targeted programmes',[1322] even under trying 'times of severe resource constraints, whether caused by a process of adjustment, of economic recession, or by other factors'.[1323] Clearly, accountability squarely falls upon the Philippine government's shoulders to ensure that access to modern energy services is available to all Filipinos by whatever means and resources available at its disposal in meeting minimum core obligations under the ICESCR and the 1987 Philippine Constitution – a legal mechanism that is preferable to attain total electrification, particularly in off-grid areas, given the inadequacy of the existing franchising scheme that is primarily reliant on private sector initiatives.

C. *Ensuring the Availability of Effective Legal Redress*

A key feature that works in favour of a human rights-based approach to access modern services in the Philippines is the creation of a constitutional commission on human rights to give effect to the provisions of the 1987 Philippines Constitution on social justice and human rights. This explicitly institutionalises the role of legal remedies in the implementation of the fundamental law, including the international legal framework on human rights in the country. The CECSR explains that an effective legal remedy is not necessarily one that is equated with judicial remedy or requires the involvement of the courts at the first instance.[1324] It also amplifies that an administrative remedy is adequate as long as there is 'a legitimate expectation, based on the principle of good faith, that all administrative authorities will take into account the requirements of the Covenant in their decision-making'.[1325] However, ultimate resort to the courts from administrative decisions may be proper especially if judicial review is indispensable in giving full effect to a right recognised and/or recognisable under the ICESCR.[1326]

Judicial remedy to effectively vindicate economic, social and cultural rights raises one important benchmark: 'justiciability' or the ability of courts to provide effective relief or remedy to a claimed violation of rights under the ICESCR, which observers contend as ultimately defining what a 'real' human right is.[1327] This point and the counter-arguments to

[1322] UN Committee on Economic, Social and Cultural Rights, above n 1317.
[1323] Ibid.
[1324] Ibid.
[1325] Ibid.
[1326] Ibid.
[1327] Henry Steiner, Philip Alston and Ryan Goodman, *International Human Rights in Context* (2008) 313.

it have already been discussed in Chapter 3. To reiterate, however, it is observed that the ICESCR has been receiving mixed treatment in the domestic courts of various jurisdictions ranging from applying directly the ICESCR, using it as interpretive standards, or refusing to give it legal effect at all.[1328]

In the Philippines, the CHR was established as an investigatory and fact-finding body without power of adjudication. This lessens the efficacy of its workings to being persuasive in contrast to being binding or authoritative. As a result, it falls short of the standard that the administrative remedy must be effective in the sense that it satisfies the requirements of the ICESCR, including accessibility, affordability and timeliness.[1329] While this may be the prevailing situation, the CHR's power to monitor, report and recommend measures to promote human rights and ensure compliance with international human rights obligations remain compelling and relevant. To exemplify, the CHR showed a glimpse of what could have been when it issued edifying advisories on the domestic interplay of the constitutional directives, the international human rights framework on the delivery of electricity services, and the application of a human rights-based approach to governance and development. It is, thus, as Aryeh Neier describes, a national human rights body that can be the 'trustworthy and knowledgeable' link between national and 'global efforts to promote human rights'.[1330] In the alternative, as pointed out earlier, the availability of seeking redress before the ERC for violations of the Magna Carta for Residential Electricity Consumers is an interesting pathway for ultimately seeking judicial pronouncement and clarification, particularly on the meaning and extent of the right to electricity service recognised in the regulatory issuance.

Notably, the 1987 Philippine Constitution expressly grants Congress the prerogative to expand the authority of the CHR. The impetus for this can be found by importing the salience of the right to adequate housing and standard of living in Article 11.1 of the ICESCR and giving effect to the constitutional directives of: 1) freeing the people from poverty through policies promoting adequate social services and rising stand of living; 2) guaranteeing the full protection of human rights; and 3) promoting and enhancing the right to human dignity. Indubitably, there are sound constitutional and international human rights law bases underpinning the proposition for the enactment of a national legislation explicitly

[1328] Ibid.
[1329] UN Committee on Economic, Social and Cultural Rights, above n 1317.
[1330] Aryeh Neier, *International Human Rights Movement – A History* (2012) 12-3.

guaranteeing access to modern energy services in relation to Article 11.1 of the ICESCR and the 1987 Philippine Constitution.

Since access to modern energy services is derivable from the ICESCR and underpins the enjoyment of other rights embedded in the 1987 Philippine Constitution, coherence and consistency are achievable by incorporating all the innate elements and norms of the ICESCR into domestic law by way of legislation. To preclude any doubts, a human right to access modern energy services enshrined in legislation makes it legally demandable and enforceable. As Kenneth Roth asserts, '[i]t is clearly in the interest of those who believe in ESC rights that these rights be codified in enforceable national law'.[1331] One meaningful consequence of such recognition is, in the words of Mary Robinson, where 'those who are poor and marginalized are empowered, and their participation rendered effective'.[1332] This is seen, for instance, in the availability of an effective legal remedy to enforce legal obligations, which the CESCR notes is usually 'reinforced or complemented by judicial remedies',[1333] unless it can be shown that such remedies are not the 'appropriate means' contemplated by the ICESCR in the domestic legal order.[1334]

Having that in mind, the CHR's narrow powers can be expanded to not only investigate, but also to adjudicate all human rights violations (civil, political, economic, social and cultural),[1335] including the power to issue and enforce legal measures appropriate to address such transgressions. Transformed as a quasi-judicial constitutional body, the CHR will be able to provide the effective legal remedy called for under the ICESCR. With experience and expertise on human right matters institutionally built for over two decades, the CHR is ideally placed to competently adjudicate human rights cases. This extenuates the apprehension that the judiciary is not competent to adjudicate socioeconomic rights.[1336] In addition, judicial appeal or review becomes available considering that the 1987 Philippine Constitution explicitly grants judicial power to the Supreme Court, including the lower courts, to determine whether or not there has been a grave abuse of discretion amounting to

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[1331] Kenneth Roth, 'Defending Economic, Social and Cultural Rights: Practical Issues Faced by an International Human Rights Organization' (2004) 26 *Human Rights Quarterly* 63, 66.
[1332] Mary Robinson, 'Where Rights Can Add to Good Development Practices' in Philip Alston and Mary Robinson (eds), *Human Rights and Development: Towards Mutual Reinforcement* (2005) 39.
[1333] UN Committee on Economic, Social and Cultural Rights, above n 1317.
[1334] Ibid.
[1335] Committee on Economic, Social and Cultural Rights, *General Comment No. 10 on the Role of National Human Rights Institutions in the Protection of Economic, Social and Cultural Rights* (1998) para 3: The CESCR explains that 'national institutions have a potentially crucial role to play in promoting and ensuring the indivisibility and interdependence of all human rights'.
[1336] See Cecile Fabre, Constitutionalising Social Rights, (1998) 6 *The Journal of Political Philosophy* 263, 280.

lack or excess of jurisdiction on the part of any branch or instrumentality of the government,[1337] which includes a quasi-judicial CHR. This puts a check and balance system in place that seamlessly fits into the constitutional and legal regime availing in the Philippines. As Wiles argues, 'unless rights are made legally enforceable, rather than remaining aspirational, they cannot truly be considered to constitute law at all, and will remain a pipe dream for those who need them most'.[1338]

IV. CONCLUSION

In this Chapter, it is shown that the Philippines has constitutionalised and enacted various legislative measures to respect, protect and fulfil the various human rights embodied under the International Bill of Human Rights, particularly socioeconomic rights. Also, the three branches of government – executive, legislative and judiciary - have a critical role in their respective spheres in giving meaning and effect to human rights in the domestic context. Having said this, access to modern energy services is not explicitly guaranteed in, albeit inferred or derived from, the commitments of the Philippines under the ICESCR, the 1987 Philippine Constitution, and the different legislative enactments that give flesh to the aspirations and goals of the country for inclusive growth. To a reasonable degree, there is a manifest and serious intention to pursue the realisation of the aforementioned commitments in the domestic context. Unfortunately, these are not enough in the face of millions of Filipinos still lacking access to modern energy services deemed so basic for human development and progress in today's world. For this reason and to preclude any doubts, a human right-based approach to access to modern energy services enshrined in legislation is the preferred implementation path. The Chapter, thus, highlights the significance of a human rights-based approach to universal access to modern energy services in three important areas: (a) Operationalising the concept of equality and non-discrimination; (b) shifting the accountability from private franchisees/contractors to the state in off-grid areas; and (c) ensuring the availability of effective legal redress to citizens. As long as energy poverty and inequality persist, a human rights-based approach to access modern energy services remains significant and relevant in seeking changes to national institutions, practices, and norms for a better Philippines where the struggles, concerns and basic needs of those who have less - in some instances none - become the clamour and claim of all.

[1337] *The 1987 Constitution of the Republic of the Philippines* (Philippines) art VIII s 1.
[1338] Wiles, above n 1307, 64.

CHAPTER 8

CONCLUSION

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I. SYNOPSIS OF THE ARGUMENT

The thesis re-introduces the human rights-based approach to achieve universal access to modern energy services to offer an integrated and coherent legal strategy and implementation framework that brings renewable energy (RE) technology and rural electrification under the common logic and language of human rights. Also, such an approach is purposively used to revisit the 'conventional human rights principles, analyses, and methodologies'[1339] in framing issues, setting priorities and operationalising the key ideas that are pertinent to move forward the universal access to modern energy services agenda. Accordingly, the thesis not only traverses the theoretical grounds for proposing a human rights-based approach to the energy poverty challenge, but also examines the added value of this proposition in catalysing the change that is sought to existing institutions, norms, and practices towards achieving universal access to modern energy services.

It will be recalled that the global community is confronted with 'two urgent and interconnected challenges related to energy': Lack of access to modern energy services; and where these are 'plentiful' the heightened concerns about climate change.[1340] In response, international efforts, particularly the Sustainable Energy for All (SEFA) initiative, successfully brought to the world's attention the need to achieve universal access to modern energy services to meet international and national sustainable development goals. Unfortunately, the tenor and language of the global initiative conveyed a surprising disconnect from the international human rights framework despite a clear human rights dimension to the multifaceted issues that the global initiative seeks to address such as

[1339] Paul Nelson, 'Local Claims, International Standards, and the Human Right to Water' in Clifford Bob (ed), *The International Struggle for New Human Rights* (2009) 133.
[1340] Sustainable Energy for All, *Our Vision* <http://www.se4all.org/our-vision/>

marginalisation, disempowerment, inequality, and inequity. Without a clear legal response or basis as SEFA moves into the critical stage of implementation, the thesis advances a human rights-based approach to universal access to modern energy services - one of the key planks of SEFA - to fill this gap.

The human rights discourse, however, poses its own challenges. Aside from the definitional indeterminacy of many key human right terms such as 'human dignity', 'universality', 'indivisibility', 'interdependency', and 'interrelatedness', the unwanted implications of the historical division of human rights into civil and political on one hand and economic, social and cultural on the other arguably still appear to hound the international human rights regime even today. Because universal access to modern energy services derives from socioeconomic rights, it is conceptually synonymous to positive rights, subsistence rights, welfare rights, and collectively 'a right not to suffer poverty'.[1341] However, placing universal access to modern energy services within the sphere of socioeconomic rights only resuscitates the polarising debate between the different categories of human rights, particularly the purported impracticality, non-justiciability, and non-enforceability of socioeconomic rights. Therefore, Tushnet's contention that the language of human needs is more likely to succeed in satisfying basic needs compared to the language of human rights becomes an attractive proposition.

Yet the thesis adopts Waldron's argument that it is plausible to integrate the language of human needs into the language of human rights by considering the former's 'moral force'.[1342] Also, the language of human rights is found to have the greater potential to accommodate and articulate the significance of universal access to modern energy services within its vast moral and systematic framework. It elaborated the potential of the language of human rights to recast universal access to modern energy services from a human need to a human right, from a passive and suppliant plea to an active demand, from an appeal to charity to a justified claim, from powerlessness to empowerment, and from status quo to change. As such, the thesis expounds the conceptual and practical implications of couching universal access to modern energy services in the language of human rights as compared to the language of human needs.

[1341] Spagnoli, above n 119.
[1342] David Braybrooke, 'Where Does the Moral Force of the Concept of Needs Reside and When?' (2005) 57 *Royal Institute of Philosophy Supplement* 209, 209.

With the centrality of universal access to modern energy services as a subsistence requirement to meet basic human needs and to satisfy socioeconomic rights established, the thesis argues from a human rights standpoint that the state as the primary duty-bearer must undertake all steps and use all appropriate means to the maximum of their available resources to protect, promote, and fulfill socioeconomic rights. The term 'available resources' was explained as referring to those available within a state and those available from the international community through international cooperation and assistance, which included the adoption of effective national legislative measures. In the process, the thesis was able to bring together, for the first time, RE technology and rural electrification as a critical resource and as a necessary legislative measure, under the common logic and language of human rights instead of being viewed and implemented as separate legal regimes to attain universal access to modern energy services. Accordingly, the thesis demonstrates that a human rights-based approach can provide a coherent legal strategy and integrated implementation framework to achieve universal access to modern energy services.

II. GOING FORWARD: FUTURE RESEARCH DIRECTIONS

The issue of energy poverty is multidimensional, complex, and extensive. This means that opportunities to extend the research abound. The thesis analyses, explores and investigates the human rights-based approach to achieve universal access to modern energy services based on a substantial body of scholarship available in the field. However, the thesis recognises that it can cover only so much. For this purpose, the limitations described in the scope of the thesis also serve as initial directions for future research. A number of such directions emerge.

First, the thesis focuses on highly dispersed and isolated rural areas, because energy poverty is most prevalent in such places. However, urban and peri-urban areas also suffer, to varying degrees, a lack of access to modern energy services such as the lack of quality supply.[1343] Even if grid electricity is available, intermittent supply and issues on affordability regarding connection costs and electricity charges, which result in illegal and unsafe secondary connections, also arise in many developing countries.[1344] This will become more pronounced due to the projected rapid growth of the non-rural segment of the population.[1345] Coupled with the urbanisation phenomenon, Steven Ferrey observes that rural migration to

[1343] Morgan Bazilian et al, 'Improving Access to Modern Energy Services: Insights from Case Studies' (2012) 25 *The Electricity Journal* 93, 95.
[1344] World Bank and International Energy Agency, above n 97, 79.
[1345] Bazilian et al, above n 1343, 95.

cities pose a formidable challenge to improving access to modern energy services.[1346] Interestingly, Ferrey remarks that '[d]eveloping nations view electrification and a higher carbon economy to be the signature of progress and development'.[1347] Clearly, there is significant scope for further research involving urban and peri-urban areas.

Second, the likelihood of success of any legal strategy formulated such as applying a human rights-based approach to achieve universal access to modern energy services depends on a variety of conditions or factors that are specific to a given context.[1348] Also, Daniel Bell and Joseph Carens point out that '[d]ifferent approaches have different advantages and disadvantages that vary in importance from context to context, and any satisfactory solution must bear this in mind'.[1349] In effect, the focus on the Philippines merely represents a single developing country analysis that may or may not be replicated in other countries. This was demonstrated in Chapter 6 where the cooperative approach in rural electrification adopted by the Philippines and Costa Rica showed contrasting outcomes. Consequently, country case studies, assessments, and analytical reports are strongly encouraged to populate the literature with as many contexts as possible in order to build both general and specific insights that can assist in formulating future legal strategies and actions, including the application of a human rights-based approach, to achieve universal access to modern energy services.

Third, while the thesis emphasises the central role of the state in the human rights firmament, there are other key actors in the international and national human rights stage, particularly in constructing a new right such as a human right to access modern energy services. Along this line, international organisations such as the UN and nongovernmental organisations (NGOs) such as Human Rights Watch act as human rights champions and gatekeepers, which Clifford Bob describes as the 'entities at the core of the human rights movement'.[1350] For this reason, the struggle for new human rights is as much a story of their support and participation that 'signal the worthiness of certain causes and, by implication, the dubiousness of others'.[1351] As pointed out in the thesis, there is a noticeable disconnection

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[1346] Steven Ferrey, 'Power Paradox: The Algorithm of Carbon and International Development' (2008) 19 *Stanford Law and Policy Review* 510, 513.
[1347] Ibid.
[1348] Bazilian et al, above n 1343, 103.
[1349] Daniel Bell and Joseph Carens, 'The Ethical Dilemmas of International Human Rights and Humanitarian NGOs: Reflections on a Dialogue between Practitioners and Theorists' (2004) 26 *Human Rights Quarterly* 300, 302.
[1350] Clifford Bob, 'Introduction: Fighting for New Rights' in Clifford Bob (ed), *The International Struggle for New Human Rights* (2009) 6.
[1351] Ibid.

between the human rights regime and the universal access to modern energy services initiative. Also, there is an unexpected silence from the human rights movement. Why? Roth offers a glimpse by explaining that 'the principal power of groups like Human Rights Watch is our ability to hold official conduct up to scrutiny and to generate public outrage'.[1352] This requires the confluence of three issues: 'violation, violator, and remedy'.[1353] However, Roth admits that '[i]n the realm of ESC rights, the three preconditions for effective shaming operate much more independently'.[1354] Accordingly, this is an intriguing topic for extending the scope of the research, particularly on whether or not such key actors will likely or eventually embrace universal access to modern energy services as part of the human rights agenda.

Finally, the thesis flagged several themes and issues that would benefit from further research. In Chapter 3, derivation as a teleological approach for inferring a human right to access modern energy services is relied upon to tease out the normative elements of such a right. However, Thoko Kaime and Robert Glicksman point out that '[i]t is difficult to articulate the contours of a right founded upon derivation', including the resulting imprecision and uncertain normative status of the right.[1355] For this reason, defining, delineating, and pinning down the normative content of a human right to access modern energy services will benefit from future work on the interpretation of the UDHR and the ICESCR, particularly Article 11, jurisprudence emerging from major human rights tribunals, and existing and evolving state practice as regards universal access to modern energy services.

In addition, Chapter 5 touched on the technology transfer mechanism to promote wider deployment of RE technologies in developing countries. While there are significant market and structural barriers that impede the transfer of RE technologies to developing countries, the overarching concern associated with the protection of intellectual property rights is emphasised as a recurring topic in the technology transfer conversations to mitigate climate change impacts. These conversations need to be pursued further especially in coming up with strategies and approaches that are appropriate, relevant and applicable to developing countries, including the feasibility of Letha Tawney, Mackay Miller and Morgan Bazilian's

[1352] Roth, above n 1331, 67.
[1353] Ibid.
[1354] Ibid 68.
[1355] Thoko Kaime and Robert Glicksman, *A General Comment on the Right to Access Modern Energy Services*, 12th IUCNAEL Colloquium, 30 June to 5 July 2014 <http://www.iucnael2014.cat/wp-content/uploads/2014/07/A-general-comment-on-the-right-of-access-to-energy.pdf>

South-to-South proposition where technology transfer flows between or among developing countries instead of principally pursuing a North-to-South pathway.

Moreover, Chapter 6 identified several concerns that would greatly benefit from further research. It directed attention to the shift in the primordial treatment of electricity from an essential public good to a commodity or economic good in a free and competitive market place. This divergence has significant implications due to the purported conceptual incompatibility between commodity and right, as Itzhak Kornfeld contends.[1356] Accordingly, the extent of such incompatibility in relation to achieving universal access to modern energy services is an interesting dimension that needs further investigation.

Furthermore, Chapter 6 examined the regulation of off-grid electrification with reference to emerging operational, technical, and institutional realities on the ground. The regulation of off-grid electrification, however, remains a rich area for continuing research, as the body of scholarship in this regard is still limited especially in light of the increasing feasibility of decentralised approaches to the regulation of off-grid electrification. These approaches range from government sharing the responsibilities for regulation to one where it is occurring among and between actors or entities without government intervention at all. Again, context is important.

Lastly, Chapter 7 posited that exploring the judicial approach taken in the Philippine case of *Oposa v Factoran* was a bold proposition to derive a human right to access modern energy services under the 1987 Philippine Constitution and various laws passed by the legislature vis-à-vis the country's international human rights commitments. This proposition pushes the debate into the boundaries of constitutional adjudication, which highlights 'the tension between judicial activism and judicial restraint'.[1357] As former High Court of Australia Justice Michael Kirby remarks, the challenge to the modern judiciary 'is to find where the line lies in a particular case, at a particular time and place'.[1358] To find where this line falls in the context of achieving universal access to modern energy services in the Philippines today is a scholarly undertaking worthy to be explored.

[1356] See Kornfeld, above n 485.
[1357] Michael Kirby, 'Judicial Activism' (1997) 23 *Commonwealth Law Bulletin* 1224, 1226.
[1358] Ibid 1234.

To reiterate, the arguments developed in proposing a human rights-based approach to achieve universal access to modern energy services do not purport to hold the answer to every question that may arise regarding the matter. Accordingly, the ideas and propositions presented in the thesis would undeniably be enriched and refined by extending the research especially into those areas where the academic literature remains limited.

III. FINAL REFLECTION

In expounding his vision for SEFA, Ban Ki-moon draws attention to the key issue of path dependence, which is attributed to the existing global energy infrastructure largely built on fossil-fuel technology over the past century. [1359] He continues that '[p]olicies and politics too often favor the status quo in government and industry, locking in institutional frameworks and protecting existing arrangements even where better alternatives exist'. [1360] In short, the status quo fears change. However, as George Bernard Shaw once quipped, 'progress is impossible without change'. [1361] This change can be seen in the narrative of what Jeremy Rifkin describes as the 'Third Industrial Revolution' where the next energy transition is envisioned to take place. [1362] What can one do during this time of extraordinary revolution and change? To answer this question, Martin Luther King, Jr.'s counsel on 'Remaining Awake through A Great Revolution' is remembered:

> The wind of change is blowing, and we see in our day and our age a significant development. Victor Hugo said on one occasion that there is nothing more powerful than an idea whose time has come. In a real sense, the idea whose time has come today is the idea of freedom and human dignity. Wherever men are assembled today, the cry is always the same, "We want to be free." And so we see in our own world a revolution of rising expectations. **The great challenge facing every individual...today is to remain awake through this social revolution**. [1363]

[1359] A Vision Statement by Ban Ki-moon, Secretary General of the United Nations, above n 9, 7.
[1360] Ibid.
[1361] George Bernard Shaw, *BrainyQuote.com Xplore Inc.,2014* <http://www.brainyquote.com/quotes/authors/g/george_bernard_shaw.html>
[1362] Jeremy Rifkin, *The Third Industrial Revolution: How Lateral Power is Transforming Energy, the Economy, and the World* (2013) 36-7; Joseph Camilleri, 'Energy Governance in the Era of Climate Change' in Luca Anceshi and Jonathan Symons (eds), *Energy Security in the Era of Climate Change: The Asia-Pacific Experience* (2012) 255: Camilleri points out that energy 'has played a decisive role in the changing forms of interaction and levels of organisational complexity'.
[1363] Martin Luther King, Jr., 'Remaining Awake through a Great Revolution' in *Graduation Moments* (Bordon Books, 2004) 215; Emphasis added.

Definitely, unshackling those who remain bound by the prison of energy poverty is an expectation and an elemental part of an idea whose time has come. And the human rights-based approach to achieve universal access to modern energy services is a modest contribution on the part of the thesis to advance the realisation of an idea where modern energy services is accessible to all.

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