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## LOW CARBON ENERGY SOURCES AS A TOOL IN ACTUALISING THE RIGHT TO DEVELOPMENT IN AFRICA: A NIGERIAN CASE STUDY

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### Abstract

Climate change and energy poverty are critical development issues affecting Africa's development agenda. A transiting from carbon-intensive energy sources to more environmentally-friendly, low carbon energy sources, such as solar, wind and hydro, provides a ready solution to addressing the twin challenges, hence the present attention on the low carbon development model as a viable option for development in Africa. Energy is vital to the realisation of the right to development. Shortages in access to energy services in Africa increasingly are gaining attention as a potential human rights issue and a fundamental component of the right to development. National policies and laws are crucial in promoting equitable and affordable energy access, but it is not clear to what extent states can be held accountable for their failure to respect, protect and fulfil emerging economic and social rights such as access to energy services. This chapter explores the possibility of state accountability for the provision of energy services in actualising the right to development using Nigeria as a case study. It argues that although the jurisprudence on the right to energy access is yet to be developed, the low carbon model of development serves as a fundamental tool in driving universal access to energy and energy services, thus performing a vital role towards fulfilling the controversial right to development.

**Key words:** *development; energy; right to development; low carbon*

## 1 Introduction

A shared quality among human beings of diverse backgrounds and geographical locations is the impetus to attain better living standards and satisfy individual and collective needs. As seen in the International Bill of Rights and several other United Nations (UN) treaties, a central underlying theme is to free humanity from want in all its forms.<sup>1</sup> Thus, at

1 The International Bill of Rights consists of five key human right treaties that are central to human freedom and the fulfilment of economic and social rights, namely, the Universal Declaration of Human Rights; the International Covenant on Economic, Social and Cultural Rights; the International Covenant on Civil and Political Rights; the Optional Protocol to the International Covenant on Civil and Political Rights; and

the individual, family, national and global levels, the continuous strive to actualise aspirations and the subsequent changes that occur within these units points towards development. For countries on the African continent, the quest for rapid 'development' is pressing.

Development as a concept has evolved and at present may be interpreted to mean an integrated approach to economic, social, human and institutional advancement, which can further be broken into components such as health, infrastructure and education. The question arises as to what type of development is a priority for African countries. Agenda 2063 of the African Union (AU) (Agenda) summarises Africa's priority objective as the achievement of economic growth driven by inclusive and sustainable development.<sup>2</sup> Enumerated in the Agenda are goals such as a better standard of living, better health, education, increased agricultural productivity, environmental sustainability and increased energy access.<sup>3</sup> A key expected outcome is to improve the standards of living of the African people by increasing access to electricity supply.<sup>4</sup>

Through the African Renewable Energy Initiative (AREI) and in line with the African Regional Flagship Programme on Sustainable Energy, African countries are to expect support from the AU in developing their energy sectors through low carbon energy systems. The advantages of such low carbon sources include an ease in reaching people off-grid; increased competition; local content; and diversification in ownership base due to an increase in the number of energy service providers. Low carbon or renewable energy sources also increase energy source options and overall-improved energy access, thus improving population welfare and opportunities for Africans to fulfil their right to development.<sup>5</sup>

On the international scene, Agenda 2030 reveals global development priority goals from a contemporary interpretation of development, that is,

the Second Optional Protocol to the International Covenant on Civil and Political Rights, aimed at the abolition of the death penalty. International Bill of Human Rights, <https://www.eschr-net.org/resources/international-bill-human-rights> (accessed 7 July 2021). See also A Sengupta 'Right to development as a human right' (2001) 36 *Economic and Political Weekly* 2527.

- 2 'Agenda 2063: The Africa we want', <https://au.int/en/agenda2063/overview> (accessed 20 March 2021).
- 3 Goals and Priority Areas of Agenda 2063, <https://au.int/agenda2063/goals> (accessed 9 January 2021).
- 4 Key Transformational Outcomes of Agenda 2063, <https://au.int/agenda2063/outcomes> (accessed 18 March 2021).
- 5 Africa Renewable Energy Initiative, [http://www.arei.org/wp-content/uploads/2016/09/AREI-Summary-english\\_web.pdf](http://www.arei.org/wp-content/uploads/2016/09/AREI-Summary-english_web.pdf) (accessed January 2021).

a sustainable low carbon development perspective. Agenda 2030 recognises the gaps in actualising the erstwhile Millennium Development Goals (MDGs) and sets out a wider range of economic, social and environmental objectives to be achieved. Identified in Agenda 2030 are 17 Sustainable Development Goals (SDGs), which the international community has committed to achieving within 15 years. SDG 7 aims to achieve universal access to energy services by 2030. Energy, therefore, is a key subject in the global development and climate change agenda. In this chapter the description of energy access as ‘access to clean, reliable and affordable energy services for cooking and heating, lighting, communications and productive uses’ given by the United Nations (UN) Secretary General’s Advisory Group on Energy and Climate Change (AGECC) is adopted.<sup>6</sup>

The AU and global agenda, both of soft law nature, call for more sustainable development models. The low carbon development model attempts to achieve economic development, in line with sustainable practices, through low carbon energy sources to achieve wider energy access and address climate change concerns.

Omorogbe notes the crucial role that energy plays in any development strategy, stating that energy is the most critical component of any development strategy.<sup>7</sup> She is of the view that energy hitherto has been completely overlooked in development planning.<sup>8</sup> This observation holds, especially in African countries. A disintegrated approach to development planning in African countries has until recent times set the vital ingredient of energy planning at the back-burner. Presently, initiatives in Africa are pushing the renewable energy (low carbon) agenda forward. As a result, improvements are being witnessed in the quality of life and overall well-being. This is especially true in the medical sector and the educational sector, as shown in Nigeria’s illustrations below.

The chapter examines upcoming low carbon development (LCD) initiatives under the AU. It subsequently looks closely at a few positive

6 United Nations Secretary-General’s Advisory Group on Energy and Climate Change Energy for a sustainable future: Report and recommendations 28 April 2010 13, [www.un.org/millenniumgoals/pdf/AGECCsummaryreport\[1\].pdf](http://www.un.org/millenniumgoals/pdf/AGECCsummaryreport[1].pdf) (accessed 28 October 2020).

7 O Omorogbe ‘Promoting sustainable development through the use of renewable energy: The role of the law’ in D Zillman et al (eds) *Beyond the carbon economy: Energy law in transition* (2008) 41-43; see also O Owoeye ‘Access to energy in sub-Saharan Africa: A human rights approach to the climate change benefits of energy access’ (2016) 18 *Environmental Law Review* 295; A Bradbrook et al ‘A human dimension to the energy debate: Access to modern energy services’ (2008) 26 *Journal of Energy and Natural Resources Law* 526.

8 Omorogbe (n 7).

strides taken in Nigeria against the backdrop of fulfilling the right to development. It notes that an opportunity exists for advocates on the African continent to seek to enforce the right to development through the requirements of the African Charter on Human and Peoples' Rights (Africa Charter), which is the only hard law document conferring a legally-binding right to development on individuals and peoples.<sup>9</sup> The chapter finds that with the appropriate regulatory and legislative framework, adequate implementation and political will, the LCD model can serve as a viable tool in actualising the right to development in Nigeria.

## 2 Climate change, low carbon development and energy nexus

Access to energy services is essential for the attainment of better living standards.<sup>10</sup> The unchecked combustion of fossil-based energy sources without factoring environmental and social costs has resulted in irreversible environmental consequences, one of which is the climate change crisis. Most countries classified as 'developed' today followed aggressive development models powered by high carbon fossil-based energy sources with a focus on economic development, causing ecological and environmental damage and in some cases damage to human and other living species.<sup>11</sup> At the time, states paid scant attention to the harmful implications of their economic development activities on their environment, and on other states, a development that necessarily raises the question regarding the equity in expecting present African states to participate in the LCD. However, presently it is widely accepted that to address climate change, 'all societies, including those in Africa, need to transition to low and zero carbon energy systems' by embracing LCD.<sup>12</sup> Thus, scaling up low carbon energy sources in Africa will support global efforts to address climate change as well as tackle the problem of energy poverty.

The LCD model is a component of sustainable development which could be instrumental in advancing the cause of development and the right to development in developing countries. It focuses on the reduction of greenhouse gases and carbon emissions while increasing economic

9 O Oduwole 'International law and the right to development: A pragmatic approach for Africa' Inaugural lecture as Professor to the Prince Claus Chair in Development and Equity 2013/2015 delivered on 20 May 2014 at the International Institute of Social Studies, The Hague, The Netherlands 4.

10 A Ayoade 'Bridging the gap between climate change and energy policy options: What next for Nigeria?' in P Kameri-Mbote et al (eds) *Law | Environment | Africa* (2019) 84.

11 H Daly & J Farley *Ecological economics: Principles and applications* (2003).

12 Africa Renewable Energy Initiative (n 5).

development. Addressing the challenge of energy poverty through low carbon innovations will positively impact socio-economic development in African countries. Additionally, there is a strong economic case in favour of low carbon investments for developing countries to meet the needs of rapidly-growing populations and their development aspirations as falling costs of renewable technologies are opening new prospects for transformation in the energy sector.<sup>13</sup> The LCD model calls for an integrated approach to development which is more likely to produce multiple sustainable development outcomes.<sup>14</sup>

### **3 Development as a right: The right to development**

‘All human rights and fundamental freedoms are indivisible and interdependent.’<sup>15</sup> Eleanor Roosevelt, a former first lady of the United States, is credited for identifying and advocating a right to development during the drafting of the Universal Declaration on Human Rights (Universal Declaration) in 1948.<sup>16</sup> Most strongly, the push for a right to development came from newly-independent, struggling developing countries seeking a new international economic order in which they would enjoy better trade terms with colonialists that had dominated the international market, leaving them mostly import dependent.<sup>17</sup>

In 1986 the United Nations Declaration on the Right to Development (UNDRTD) was adopted with one dissenting vote from the United States. However, it was the first indication of the international cooperation necessary to ‘free the entire human race from want’.<sup>18</sup> The UNDRTD affirms the right to development as an inalienable human right at the centre of which is the human person, the main beneficiary of development. Also, it recognises the concept of ‘people’, which connotes that people everywhere are eligible to partake in and benefit from economic, social, cultural and political development in which all human rights and essential

13 S Colenbrander et al ‘The economic case for low-carbon development in rapidly growing developing world cities: A case study of Palembang, Indonesia’ (2015) 25 *Energy Policy* 80.

14 Ayoade (n 10) 100-101; see also P Newell et al ‘The political economy of low carbon energy in Kenya’ Institute of Development Studies, Working Paper (2014) 7-8.

15 UN Declaration on the Right to Development Resolution 41/128 art 6(2).

16 Declaration of Human Rights by Eleanor Roosevelt, <https://www.unmultimedia.org/avlibrary/asset/1093/1093412/> (accessed 5 January 2021).

17 Sengupta (n 1).

18 UN Declaration on the Right to Development (n 15).

liberties can be fully realised.<sup>19</sup> The right to development, therefore, comprises the fulfilment of the International Covenant on Economic Social and Cultural Rights (ICESCR) as well as the International Covenant on Civil and Political Rights (ICCPR).<sup>20</sup>

The right holders thus are every human person and all peoples, while the duty bearers are states both at the national and international levels. States at the national level primarily are responsible for the development of their citizens and people. States bear the responsibility of ensuring the respect, protection and fulfilment of the right to development by formulating appropriate national development policies.<sup>21</sup> In the *SERAC* case<sup>22</sup> the African Commission on Human and Peoples' Rights (African Commission) made profound pronouncements relating to states' responsibility to respect and protect the socio-economic rights of the Ogoni people. According to the African Commission, states have an obligation to encourage the satisfaction of all human rights and ensure that people can exercise their rights and freedoms through positive action, including actions such as building infrastructure. The African Commission has also upheld a right to cultural development,<sup>23</sup> a right to equal treatment<sup>24</sup> and a right to choice and personal liberty as being part of the right to development as contained in article 22 of the African Charter.<sup>25</sup>

Internationally, states are obliged to cooperate to facilitate the realisation of the right to development.<sup>26</sup> As contained in the preamble to the UNDRTD, the overarching thought is to aid in achieving the purpose of the UN, which is promoting international cooperation in addressing 'international problems of economic, social, cultural or humanitarian nature'.<sup>27</sup> However, the soft law nature of the UNDRTD has hindered progress in the advancement of the right to development. As various

19 Art 1 Declaration on the Right to Development (n 15).

20 Art 2 Declaration on the Right to Development (n 15).

21 Art 2(3) Declaration on the Right to Development (n 15).

22 *Social and Economic Rights Action Centre (SERAC) & Another v Nigeria* (2001) AHRLR 60 (ACHPR 2001).

23 *Democratic Republic of the Congo v Burundi, Rwanda and Uganda* (2004) AHRLR 19 (ACHPR 2003).

24 *Sudan Human Rights Organisation & Another v Sudan* (2009) AHRLR 153 (ACHPR 2009), <https://www.refworld.org/cases,ACHPR,51b890c24.html> (accessed 10 January 2021).

25 *Centre for Minority Rights Development & Others v Kenya* (2009) AHRLR 75 (ACHPR 2009), <https://www.refworld.org/cases,ACHPR,4b8275a12.html> (accessed 10 January 2021).

26 Sengupta (n 1).

27 Declaration on the Right to Development (n 15) Preamble.

scholars have noted, further obstacles to progress in actualising a right to development, especially at the international level, lie in the unclear definition of the extent of states' responsibilities and the scope of the right itself.<sup>28</sup> The question remains as to how far the right to development can be expanded and to what extent states can be held responsible by their people for a failure to provide basic social amenities, such as medical services, access to electricity, good housing and education, in the pursuit of economic development. At the national level, this question may be more easily resolved as state constitutions contain clearer provisions on what is justiciable and what is not.

Despite these clogs in the wheel, the right to development has continued to evolve, enjoying unanimous consensus. At the Second UN World Conference on Human Rights in 1993, the right was affirmed as an integral part of fundamental human rights and thus began to receive greater attention as an important part of the UN Agenda. Following this was the articulation of core aspects of the right to development by the Working Group on the Right to Development appointed by the UN Economic and Social Council (ECOSOC) to include peoples' rights to the constant improvement of their well-being and to a national and global milieu favourable to just, equitable human-centred development respectful of all human rights.<sup>29</sup> The global consensus in actualising development efforts and the right to development was manifest in the Millennium Summit where the Millennium Development Goals were adopted in the year 2000. Due to the soft law nature of the UNDRTD, its provisions are not enforceable as they have more a hortatory and persuasive nature than an obligatory nature. On the other hand, article 22 of the African Charter with similar provisions confers a 'hard law' status on the right to development.

Energy is a basic resource that is vital to the realisation of the right to development. Access to energy is an inseparable aspect of international economic, social and cultural rights.<sup>30</sup> Thus, states are obliged to ensure the creation of conditions that will support access to energy as a socio-economic right. Although the right to development is yet to be fully recognised as an enforceable human right internationally, African jurisprudence lends credence to the position that the right to development

28 Oduwole describes the RTD as nebulous 'in terms of concrete entitlements and obligations, justiciability and enforcement'; see Oduwole (n 9) 4; see also Sengupta (n 1).

29 'Right to development' Report of the high-level task force on the implementation of the right to development on its sixth session, Geneva, Switzerland 14–22 January 2010, A/HRC/15/WG.2/TF/2.

30 Owwoeye (n 7) 295.

is enforceable under the African Charter. Applying the reasoning of the Court in *Gbemre*, it is possible to institute legal proceedings against state parties to the African Charter for failure to meet their economic and social obligations, including access to energy, as energy access is crucial to the maximum standard of health care and, invariably, the right to life.<sup>31</sup>

#### 4 LCD initiatives and the right to development in Africa

LCD is a concept rooted in the United Nations Framework Convention on Climate Change (UNFCCC).<sup>32</sup> Embedded in the LCD model is the need to increase opportunities for better energy access by expanding energy sources for power generation. Attempts at addressing the energy challenge in Africa are yet to yield fully tangible fruits and with the absence of adequate energy services.<sup>33</sup> Described as low emission development strategies under the UNFCCC, LCD involves aligning climate change priorities with economic development to advance national policy in a more coordinated manner.<sup>34</sup>

In terms of its population, the African continent is the second most populated in the world.<sup>35</sup> Snail-paced development in the energy services sector has failed to meet the increase in demand for energy services, leading to severe energy shortages, best described as energy poverty.<sup>36</sup> The situation has hindered economic and human development in no small measure with grave and sometimes fatal implications for industries, the health sector, education, agriculture and domestic life, to mention a few. The present challenge, therefore, is not merely to provide energy but to provide affordable, clean and accessible energy.<sup>37</sup> The LCD model provides a platform to address this challenge as the model addresses energy poverty and environmental pollution from carbon-intensive sources.

31 *Gbemre v Shell* (2005) AHRLR 151 (NgHC 2005).

32 United Nations Framework Convention on Climate Change 9 May 1992 1771 UNTS 107, 165; S Treaty Doc 102-38 (1992); UN Doc A/AC.237/18 (Part II)/Add.1; 31 ILM 849 (1992).

33 Omorogbe, (n 7) 43, Africa Energy Outlook 2019, International Energy Agency, <https://webstore.iea.org/download/direct/2892> (accessed 18 March 2021).

34 C Clapp et al 'Low emissions development strategies: Technical, institutional and policy lessons' OECD, IEA, COM/ENV/EPOC/IEA/SLT (2010) 2.

35 African countries with the largest population as of 2021, <https://www.statista.com/statistics/1121246/population-in-africa-by-country/> (accessed 22 March 2021).

36 Africa Energy Outlook 2019 (n 33) 21.

37 K Kaygusuz 'Energy for sustainable development: A case of developing countries' (2012) 16 *Renewable and Sustainable Energy Review* 1116.

The concept is yet to have a formal, generally-agreed definition. However, various attempts have been made to define the model. Yuan et al consider LCD as a three-stage process that starts from a low carbon economy to a low carbon society and then a low carbon world. They also identify related concepts such as low-carbon economy, low-carbon society, low-carbon city, low-carbon community, and low-carbon life as being part of LCD.<sup>38</sup> Eleri et al refer to LCD as a synergy between climate change (environmental concerns) and sustainable development, which involves the mainstreaming of climate change concerns in development practices.<sup>39</sup>

LCD is inextricably linked to the SDGs. A major essence of the global Agenda 2030, as summarised in the SDGs, is eradicating all forms of poverty, including energy poverty.<sup>40</sup> The AU's response to the climate and energy challenge may be said to be increasing in momentum as seen in Agenda 2063. Other related programmes exist, including the African Regional Programme on Sustainable Energy; the Programme for Infrastructure Development in Africa (PIDA); the African Bioenergy Policy Framework and Guidelines; Renewable Energy in African Island States; Developing the Potential of Small Hydropower Plants in Africa; and the Geothermal Risk Mitigation Facility – to increase renewable energy usage. These initiatives, though laudable, have had limited impacts so far as they are yet to be fully implemented. Furthermore, they are yet to attract the type of support needed to speed up investments into large-scale energy programmes.<sup>41</sup> The AREI framework document and action plan summarises the position and direction for the AU in assisting member countries in the transition to LCD between 2016 and 2030.<sup>42</sup> The AREI seeks to align with the renewable energy components of other existing initiatives, such as the PIDA; Sustainable Energy for All (SE4ALL); Power Africa; the Africa-EU Energy Partnership; and the Africa Clean Energy Corridor of the International Renewable Energy Agency (IRENA).<sup>43</sup>

38 H Yuan et al 'What is low-carbon development? A conceptual analysis' (2011) 5 *Energy Procedia* 1707-1708.

39 E Eleri et al 'Making progress towards low carbon development' The SUNGAS Project, International Institute for Environment and Development (2013) 6.

40 The 2030 Agenda for sustainable development UN General Assembly Transforming our world: The 2030 Agenda for Sustainable Development, 21 October 2015 A/RES/70/1 <https://www.refworld.org/docid/57b6e3e44.html> (accessed 10 January 2021).

41 African Green Stimulus Programme, <https://wedocs.unep.org/bitstream/handle/20.500.11822/34409/AGSP.pdf?sequence=3> (accessed 19 March 2021).

42 Africa Renewable Energy Initiative (n 5).

43 As above.

The Department of Infrastructure and Energy is the coordinating body for achieving the energy and infrastructure goals and projects under the AU's Agenda 2063. The African Energy Commission (AFREC), an agency under the Department of Infrastructure and Energy, oversees the coordination, development and integration of energy resources on the African continent. According to Agenda 2063, a critical energy project to be achieved is the Grand Inga dam projects of the Democratic Republic of the Congo (DRC). Proposed to be the world's greatest hydropower scheme, the Grand Inga dam will harness up to 43 200 megawatts from the Congo river, exported to South Africa, Nigeria and other African countries.<sup>44</sup> The African Union Commission (AUC) has recently partnered with the International Renewable Energy Agency (IRENA) to assist in some of the initiatives mentioned above, such as the PIDA) the African Bioenergy Policy Framework and Guidelines, and Renewable Energy in African Island States. The partnership also seeks to improve access to energy in Africa in response to the COVID-19 pandemic. This partnership is designed to support Africa in responding to the pandemic by positioning low carbon energy sources to support the provision of essential social services, including clean water and healthcare services.<sup>45</sup>

The European Union (EU), United Kingdom, Germany, United States and other developed countries are also rising to the occasion to support the vision for better access to energy and development in African countries through partnerships, grants and training opportunities to support renewable energy projects in Africa.<sup>46</sup> USAID Power Africa is an example of such partnerships. The programme provides finance, technical assistance and grants to local investors involved in renewable energy projects in sub-Saharan Africa. International and regional organisations, such as the World Bank and the African Development Bank (AfDB) also play a role as development partners. Worth noting is the partnership between the World Bank and the Rural Electrification Agency (REA) in executing the Nigerian Electrification Project (NEP).<sup>47</sup> The Green Climate Fund (GCF), which was established to fund climate change projects, also provides support and funding opportunities for low carbon technologies

44 Flagship Projects of Agenda 2063, <https://au.int/agenda2063/flagship-projects> (accessed 19 March 2021).

45 African Union and IRENA to Advance Renewables in Response to COVID-19, <https://www.irena.org/newsroom/pressreleases/2020/Apr/African-Union-and-IRENA-to-Advance-Renewables-in-Response-to-Covid19> (accessed 19 March 2021).

46 The USAID Power Africa Initiative is an example; Power Africa, <https://www.usaid.gov/powerafrica> (accessed 19 March 2021).

47 Nigerian Electrification project overview 2018, <http://rea.gov.ng/wp-content/uploads/2018/08/OVERVIEW-OF-THE-NIGERIA-ELECTRIFICATION-PROJECT-NEP.pdf> (accessed 9 January 2021).

for climate change mitigation and adaptation. African countries are benefiting from GCF funds, with renewable energy projects ongoing in the DRC, Kenya, Niger, Zimbabwe, Namibia, Nigeria, Ghana, Sudan and Ethiopia.<sup>48</sup> An example is the solar mini-grid pilot projects in DRC which is expected to generate 30 megawatts of power by 2024, thus supporting the country in meeting its clean energy targets by reducing reliance on diesel-powered generators and the consequent carbon emissions.<sup>49</sup>

The current global push towards a zero-carbon future indicates that a transition to low carbon development is imminent in most countries. This integrated approach shows that inter-state cooperation and global partnerships are becoming a reality.

## **5 Low carbon development as a tool in actualising the right to development in Nigeria**

Chapter 2 of the 1999 Constitution of the Federal Republic of Nigeria (as amended) contains the government's economic, political and social objectives.<sup>50</sup> The overriding purpose of the Nigerian government is to promote the security and welfare of the Nigerian people.<sup>51</sup> Thus, the Nigerian state is expected to facilitate planned and balanced economic development to ensure that adequate shelter, adequate food, reasonable national minimum wages and other social services are provided for all citizens.<sup>52</sup> Although energy access is not expressly contained in the list of social objectives, as Owoeye argues, access to modern energy services may be implied in the right to an adequate standard of living, food and housing.<sup>53</sup> Furthermore, energy access is fundamental in promoting the welfare of Nigerian people and achieving balanced economic development.

The omission of energy access in chapter 2 of the Nigerian Constitution may be a crucial missing link in fulfilling the government's social and economic development responsibilities as without energy access, social and economic development will remain a mirage. However, the social, political and economic objectives contained in chapter 2 are

48 GCF Data Interactive map on programme and project-level data by country, [https://unfccc.int/climatefinance/gcf/gcf\\_data](https://unfccc.int/climatefinance/gcf/gcf_data) (accessed 10 December 2021).

49 'DRC green mini-grid programme', <https://www.greenclimate.fund/project/fp096> (accessed 8 July 2021).

50 1999 Constitution of the Federal Republic of Nigeria (as amended) CAP. C23 L.F.N. 2004.

51 Sec 14(2)(b) 1999 Constitution of the Federal Republic of Nigeria.

52 Sec 16(2)(a) 1999 Constitution of the Federal Republic of Nigeria.

53 Owoeye (n 7) 294.

non-justiciable under section 6(6)(c) of the Constitution. Oguogua has criticised the non-justiciability of social and economic rights under the Nigerian Constitution as an obstruction to development.<sup>54</sup>

Nigerian courts have shown judicial activism in interpreting first generation rights, such as the right to life and dignity of a human person guaranteed under the Nigerian Constitution, to include otherwise non-justiciable rights such as the right to a healthy environment. In *Gbemre v Shell Petroleum Development Company Nigeria & ors*<sup>55</sup> the Federal High Court affirmed the plaintiffs' right to a clean environment by relying on sections 33(1) and 34(1) of the Constitution of the Federal Republic of Nigeria as reinforced by articles 4, 16 and 24 (right to life, right to health and right to environment, respectively) of the African Charter on Human and Peoples' Rights (Ratification and Enforcement) Act.<sup>56</sup> Thus, social and economic rights, although not explicitly guaranteed by the Nigerian Constitution, may be inferred by the courts to have been violated in certain circumstances, as seen in the case above.

The Nigerian economy has for a long time been solely dependent on oil to meet its development aspirations.<sup>57</sup> In 2018 the World Bank estimated that approximately 43,5 per cent of Nigeria's population is without energy access.<sup>58</sup> Many of the people without energy access live in off-grid areas. Natural gas is the dominant energy source for grid electricity, supplying approximately 80 per cent. However, gas generation and supply are faced with many challenges, including poor gas infrastructure, gas supply interruptions, and related challenges within the electricity value chain.<sup>59</sup> The government planned to increase electricity access from the 2015 level of 40 per cent to 75 and 90 per cent by 2020 and 2030, respectively. So far, this target has not been met and renewable energy sources have not been sufficiently explored.<sup>60</sup>

54 O Ikepeze 'Non-justiciability of chapter II of the Nigerian Constitution as an impediment to economic rights and development' (2015) *Developing Country Studies* 48.

55 *Gbemre* (n 31).

56 African Charter on Human and Peoples' Rights (Ratification and Enforcement) Act Cap A9, Vol 1, LFN 2004.

57 National Energy Policy (Draft Revised Edition) Energy Commission of Nigeria 2018 4.

58 Access to electricity (%) of population: Nigeria, <https://data.worldbank.org/indicator/EG.ELC.ACCS.ZS?locations=NG> (accessed 19 March 2021).

59 National Energy Policy (n 57).

60 Rural Electrification Strategy and Implementation Plan approved July 2016 8, <http://rea.gov.ng/wp-content/uploads/2017/09/RESIP.pdf> (accessed January 2021); see also the 2016 Renewable Energy for All Action Agenda (SEE4ALL-AA) adopted

Although efforts are yet to yield the desired results, low carbon energy options, including renewable energy expansion and energy efficiency, are increasingly making socio-economic development a reality in Nigeria. Progress towards LCD is being witnessed against the existing backdrop of renewable energy policies more out of necessity than any other driving force. Some outstanding low carbon innovations, which are promoting the right to development in Nigeria, are examined below.

### **5.1 Educational sector initiatives**

In the education sector, low carbon solutions are assisting to address the situation of energy poverty, improve the quality of research, enhance technical capacity and educational productivity.<sup>61</sup> Recently, the federal government introduced an Energising Education Programme, which is anticipated to provide clean energy to 37 federal universities and seven teaching hospitals. The Rural Electrification Agency (REA) is handling the project, which is to be developed in phases with power generated from solar hybrid/and or gas-fired captive power plants. The project is to benefit 127 000 students and 28 000 staff at universities, 4 700 staff in teaching hospitals (including 819 doctors), power 2 850 streetlights, and result in the abandonment of hundreds of power generators.<sup>62</sup> The programme has kicked off with an 8.25 megawatt solar hybrid power plant at the Federal University of Agriculture Makurdi. Its implementation incorporates gender mainstreaming and capacity building by targeting female students for training in renewable energy power plant deployment.

### **5.2 Health sector initiatives**

The 2020 COVID-19 pandemic brought to the fore the intricate link between energy and health, and particularly revealed weaknesses in the current energy system, thus paving the way for alternative energy interventions. In seeking fast and reliable options for immediate deployment of electricity to the emergency isolation centres, solar mini grid-powered systems were

by the Inter-Ministerial Committee on Renewable Energy and Energy Efficiency (ICREEE), [https://www.seforall.org/sites/default/files/NIGERIA\\_SE4ALL\\_ACTION\\_AGENDA\\_FINAL.pdf](https://www.seforall.org/sites/default/files/NIGERIA_SE4ALL_ACTION_AGENDA_FINAL.pdf) (accessed 9 January 2021).

61 Power for all factsheet 'Decentralised renewables: Education', [https://www.powerforall.org/application/files/3815/3314/7452/Power\\_For\\_All\\_Fact\\_DRE\\_Education.pdf](https://www.powerforall.org/application/files/3815/3314/7452/Power_For_All_Fact_DRE_Education.pdf) (accessed 8 July 2021).

62 'Powering Nigeria's universities', <https://rea.gov.ng/powering-nigerias-universities-thisday/> (accessed 10 January 2021).

assessed to be the fastest and best option.<sup>63</sup> Locations such as Abuja, Lagos and Ogun state witnessed interventions of over 70 kilowatt of energy powered by solar power.<sup>64</sup> These interventions were made possible through partnerships between the World Bank, the African Development Bank and the REA under the Rural Electrification Project as national objectives met with international opportunities.<sup>65</sup>

Due to the project's success, it is expected that the NEP will provide energy access to more healthcare facilities in the country as other pipeline projects are meant to take off. These efforts are being implemented in conjunction with the Federal Ministry of Health, the National Centre for Disease Control and the National Primary Health Care Development Agency.<sup>66</sup>

### **5.3 Public-private partnership**

Increased private sector involvement in the energy industry has been made possible through the provision of incentives to private sector investors involved in low carbon, renewable energy technology, particularly investors involved in off-grid projects. Under the NEP, private investors involved in providing electricity access to households, public institutions and local enterprises have an opportunity to access partial grants to support their electrification projects.<sup>67</sup> As a result, several renewable energy companies have received government support in bridging the gaps in energy access.

### **5.4 Emerging low carbon development interventions and benefits**

The success being achieved, particularly in the health sector, has inspired more government buy-in. In response to the pandemic, the government announced its economic stimulation plan, which includes the Solar Power Naija Project plan to provide five million households located off-grid with

63 World Bank Energy Sector Management Assistance Programme: Mini grids for half a billion people: Market outlook and handbook for decision makers ESMAP Technical Report; 014/19 (2019), <https://openknowledge.worldbank.org/handle/10986/31926> 'f (accessed 10 January 2021).

64 'Nigeria: Rural Electrification Agency provides relief amid COVID-19', <https://www.esi-africa.com/industry-sectors/renewable-energy/nigeria-rural-electrification-agency-provides-relief-amid-covid-19/> (accessed 10 January 2021) .

65 As above.

66 As above.

67 'The Nigeria electrification project', <https://rea.gov.ng/nigeria-electrification-project-nep/> (accessed 8 January 2021).

electricity supply powered by solar energy.<sup>68</sup> The programme commenced in April 2021 and is to take the form of public-private-partnerships.<sup>69</sup> A key objective of the project is to expand energy access to 25 million individuals. Co-benefits expected from the project include local capacity building; health and environmental benefits; import substitution in the renewable energy industry; and the plan to create approximately 250 000 jobs in the energy sector.<sup>70</sup>

## **6 Conclusion**

The provision of energy services and energy access is essential, if not the most critical feature, in stimulating development in Africa. The current challenges of energy poverty and climate change present opportunities for innovative responses. As with the SDGs, the LCD model supports an integrated approach to development involving vertical and horizontal synergies across government sectors. An integrated approach to development potentially is a winning approach, as seen through recent low carbon initiatives in Nigeria. A close look at the other SDGs and Agenda 2063 reveals that they are interdependent. Without access to energy services, hunger, poor health, poor-quality education, poor infrastructural development and gender inequality are likely to persist. Recent initiatives in line with LCD in Nigeria lend support to the position of LCD to help achieve sustainable development and actualise the right to development. With appropriate national policies, regulations and laws in place, a LCD model can yield rapid economic and social benefits as is needed on the African continent. The main components of the right to development, including international cooperation and financial assistance, as well as appropriate national policies and regulations, are falling in place, thus making a strong case for African countries to continue or commence the journey towards LCD. Stronger international cooperation and an increase in political will being witnessed in Africa under the AU are additional opportunities for willing countries and their people to embrace a low carbon pathway towards the right to development.

68 'Nigeria's Economic Sustainability Plan 2020', <https://media.premiumtimesng.com/wp-content/files/2020/06/ESC-Plan-compressed-1.pdf> (accessed 8 January 2021).

69 'Solar roll out for 25 million Nigerians to begin', <https://www.esi-africa.com/industry-sectors/generation/solar/solar-rollout-for-25m-nigerians-to-begin/> (accessed 8 July 2021).

70 'What you need to know about the Nigeria economic sustainability plan', <https://statehouse.gov.ng/news/what-you-need-to-know-about-the-nigeria-economic-sustainability-plan/> (accessed 8 July 2021).