General Assembly Second Committee

Topic A: Ensuring Access to Affordable, Sustainable, and Reliable Energy for All

“The availability of adequate, affordable and reliable energy services is essential for alleviating poverty, improving human welfare, raising living standards and, ultimately, achieving sustainable development.”

- Wu Hongbo, Under-Secretary-General for Economic and Social Affairs

In the context of international development, energy refers to electricity generated from nuclear, wind, solar, geothermal, and fossil fuel, as well as heat and electrical energy produced from solid fuel sources like coal, wood, cotton, and biomass. Providing access to energy involves ensuring that there is adequate know-how or infrastructure such that individuals’ energy demands are met with available supply. Energy infrastructure does not exist in a vacuum and relies on other forms of infrastructure, just as other forms of infrastructure require electricity to operate effectively. For this reason, building up energy infrastructure is often a high priority for least developed countries (LDCs). Generating electricity is however only the first step towards its utilization. Once it is generated, it needs reliable transportation infrastructure, usually power lines, although in very rural areas this is often not possible, and other sources of energy, such as solid fuel or local renewables, are often used.

Energy is necessary for the full enjoyment of human rights and is needed for hygiene and sanitation. Three billion people rely on solid fuel sources for all or part of their energy production. Every year, more than 3.5 million people die prematurely due to household pollution resulting from the use of these fuels as alternatives to lacking electricity. It directly affects access to other forms of infrastructure, and is among the most basic needs in early stages of development. A lack of energy inhibits development, keeping countries and communities poor; the regions with the least energy access are also the least developed. There are currently about 1.4 billion people without access to energy and another billion people have access that is inconsistent and unreliable,

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4 Ibid.
8 Ibid.
with faulty or incomplete infrastructure that frequently experiences disruptions in service. These realities have made access to energy a focus area for the international community and the United Nations.

**Background:**

There is no universal definition of access to energy, but commonalities exist amongst different governments and organizations. Access to energy is generally thought of as household access to a minimum level of electricity, safer and more sustainable fuels and stoves for cooking and heating, modern energy services that enable engagement in the formal economy, and modern energy for public services, such as health, education, and transportation infrastructure. Historically, access to energy has been recognized and addressed in binary measurement: whether or not there is electricity available to a community. However, as international discussions on access to energy have shifted over the last decade, so has this binary outlook.

The Programme of Action for the Least Developed Countries for the Decade 2011-2020, also known as the Istanbul Programme of Action (IPoA), was adopted by the 4th United Nations Conference on LDCs in May 2011. The IPoA set clear goals and strategies on overcoming development obstacles that LDCs face, with an emphasis on sustainable development. The first strategic objective in the IPoA is productive capacity, which is aimed at building the capacity of least developed countries so that they are able to develop more quickly and efficiently. Within those objectives, insufficient access to energy is highlighted as a significant hindrance to development and is a prominent theme throughout. The IPoA includes the short, medium, and long term goals of working towards the same total primary energy supply per capita as other developing countries, significantly increasing electricity generation through renewable energies by 2020, and ensuring universal access to energy by 2030.

The mentality of binary measurement shifted more abruptly with the adoption of the Rio+20 outcome document, *The Future We Want*. The 2012 document highlighted the need not only for the sustainable use of traditional energy sources, but also for the energy-efficient technologies and

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14 Ibid.

15 Ibid
development of renewable energy sources.\(^\text{16}\) \textit{The Future We Want} addressed energy access primarily as a way to end poverty, while the focus since then has shifted towards the negative environmental impact of traditional energy sources, as well as the beneficial impact that access to energy has on poverty alleviation.\(^\text{17}\)

The most recent major energy framework came in the form of the \textit{2030 Agenda for Sustainable Development}, which included the Sustainable Development Goals (SDGs).\(^\text{18}\) The SDGs include 17 goals with 169 targets, with SDG 7 aiming to “ensure access to affordable, reliable, sustainable, and modern energy for all.”\(^\text{19}\) Within this goal are several targets that include renewable energies, energy efficiency, triangular cooperation for energy development, a focus on vulnerable groups like LDCs and Small Island Developing States, and the widespread goal of ensuring universal access to affordable, reliable, and modern energy services by 2030.\(^\text{20}\) The SDGs constitute the most prominent international commitment to universal energy and ensure that increasing access to energy is done in a sustainable manner that does not threaten the long term health of the planet.

\textbf{Current Issues:}

Climate change and energy access are inherently linked, due in large part to the effect that accessing energy historically has had on the environment.\(^\text{21}\) Using fossil fuels like coal and petrol, as well as solid fuels like wood and biomass, to generate energy releases several gases that get trapped in the atmosphere, which then do not allow heat to escape and thus contributes to climate change.\(^\text{22}\) Many gases cause this greenhouse effect, but the main greenhouse gases are carbon dioxide, methane, nitrous oxide, and tropospheric ozone, all of which are released at the consumption of fossil fuels.\(^\text{23}\) With the increasing popularity of sustainable development and the effort to decrease the emission of greenhouse gases, the role of fossil fuels, and therefore access to energy in general, is changing.\(^\text{24}\)

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\begin{enumerate}
\item[20] Ibid.
\end{enumerate}
The Paris Agreement is an agreement meant to combat climate change; it was the outcome document from the 2016 United Nations Climate Change Conference, also known as the 21\textsuperscript{st} yearly session of the Conference of Parties to the 1992 United Nations Framework Convention on Climate Change (COP21), and the 11\textsuperscript{th} session on the conference of parties to the 1997 Kyoto Protocol (CMP11).\textsuperscript{25} The major goal of this agreement is to combat the effects of climate change, to curb the global average temperature to “well below 2 °C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change.”\textsuperscript{26} The Paris Agreement has reaffirmed the international focus on not simply increasing access to energy, but ensuring that such energy is sustainable.\textsuperscript{27} Many Member States have already begun to implement the Paris Agreement, but action and commitments are varied, and some are concerned that the document will not be translated into action.\textsuperscript{28}

Monitoring and Defining Access to Energy

Former Secretary-General Ban Ki-Moon launched Sustainable Energy for All (SE4ALL) in 2011 as a global development effort to mobilize all sectors of society in support of its three interlinked objectives: ensure global access to modern energy services, double the rate of improvement in energy efficiency, and double the share of renewable energy.\textsuperscript{29} It is through this initiative that the international community first adopted the goal of ensuring access to modern energy services by 2030.\textsuperscript{30} SE4All propelled the cause of universal energy access forward into the forefront of popular development efforts, and comprehensively addressed all aspects of energy access in unprecedented scope.\textsuperscript{31} The SE4ALL’s Global Tracking Framework of 2013 introduced a 5-tier measurement methodology based on a comprehensive set of aspects of energy access, including quantity, quality, affordability, and duration of supply.\textsuperscript{32} This comprehensive approach is the lens through which all energy development efforts are now developed and measured, and is significant due to the beneficial impact that these aspects have on sustainable energy development initiatives.

The multtier approach laid out by SE4ALL helps to address two fundamental challenges in defining and measuring access to energy: the absence of a universal definition of energy access

\textsuperscript{28} “From Commitment to Action: Signs of Progress Since the Paris Climate Talks,” World Resources Institute, accessed on August 10, 2017, \url{http://www.wri.org/blog/2016/04/commitment-action-signs-progress-paris-climate-talks}.
\textsuperscript{29} “Our Mission,” Sustainable Energy for All, accessed on August 10, 2017, \url{http://www.se4all.org/our-mission}.
\textsuperscript{31} Ibid.

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and the difficulty of measuring any definition in an accurate manner.\textsuperscript{33} Access to energy is difficult to monitor because it is difficult to define. The fuel ladder is an expression that places modern energy services towards the top, with biomass at the bottom. For example, the top of the energy ladder houses solar, hydrogen, and wind power, while the bottom of the ladder includes burning dung. Fuel stacking, the parallel use of several fuels especially for cooking purposes, further complicates data capture because it bypasses the concept of the energy ladder with simultaneous use of several fuels.\textsuperscript{34} By focusing on targets based on a set of five aspects of energy access, SE4ALL simplifies this issue and focuses the attention on substance rather than nomenclature.\textsuperscript{35} SE4ALL also addresses energy poverty, which is being deprived of certain energy services that fulfill basic human needs in a healthy, convenient, and effective manner.\textsuperscript{36}

**Future Outlook:**

With the 2020 deadline for the IPoA approaching, it is not likely that the energy goals will be met.\textsuperscript{37} Only Equatorial Guinea and Bhutan have surpassed the total primary energy supply per capita for LDCs. In order to for LDCs to reach the short term goal of ensuring the total primary energy supply per capita of non-LDC developing countries, LDCs will need country-specific growth rates, which vary between 6.5 percent to 33.7 percent.\textsuperscript{38} As a relative leader in LDC energy access, Angola will need a 6.5 percent yearly increase in access to energy, which may very well happen by 2020. Afghanistan, however, will need a yearly 33.7 percent increase, which is not likely to happen.

There are no fundamental technical barriers to achieving universal access to modern energy services by 2030.\textsuperscript{39} Proven innovative solutions exist, and the capital requires represents only 3% of the current total global energy investment.\textsuperscript{40} Unlike many development issues, universal access to energy is realistically achievable in the medium-term future, but it requires practical and large-scale development efforts and engagement of all sectors of society.

\textsuperscript{33} “SE4ALL Global Tracking Framework.”
\textsuperscript{35} “SE4ALL Global Tracking Framework.”
\textsuperscript{36} Ibid.
\textsuperscript{40} Ibid.
Focus Questions:

1. In what ways is the cooperation of other Member States necessary for the fulfillment of your Member State’s goals on access to energy?
2. How does your Member State’s position on access to energy differ from the position of other Member States in different regions/blocs?
3. What is your Member State’s sustainable development plan?
4. What step has your Member State taken to address universal access to energy?
5. Does your Member State have any plans to reduce fossil fuel reliance, or to invest in renewable energy sources?
6. How has your Member State worked within the UN context on access to energy?
Bibliography


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World Resources Institute. “From Commitment to Action: Signs of Progress Since the Paris Climate Talks.” Accessed on August 10, 2017. 