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## Economic and Social Council Plenary Background Guide 2023

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and Crege Elisha La Ronde



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Dear Delegates,

Welcome to the 2023 National Model United Nations New York Conference (NMUN•NY)! We are pleased to introduce you to our committee, the Economic and Social Council Plenary (ECOSOC). The topics under discussion are:

1. Building Sustainable and Resilient Infrastructure to Achieve Sustainable Development Goal (SDG) 9
2. Promoting Access to Affordable, Reliable, Sustainable, and Modern Energy for All

Members of our dais this year include:



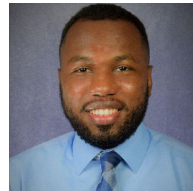
Brian Tomblin, Director, holds an M.S. in Biomedical Engineering and an M.P.H. in Health Policy. He is currently working as a research analyst in the U.S. Department of Health and Human Services, Office of Inspector General.



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Crege Elisha La Ronde, Assistant Director, received his BS in Mechanical Engineering from Midwestern State University and currently works as a Senior Account Manager for a national fire protection company in the US.

This Background Guide serves as an introduction to the topics for this committee. However, it is not intended to replace individual research. We encourage you to explore your Member State's policies in depth and use the Annotated Bibliography and Bibliography to further your knowledge on these topics. In preparation for the Conference, each delegation will submit a Position Paper by 11:59 p.m. (Eastern Time) on 1 March 2023 in accordance with the guidelines in the [Position Paper Guide](#) and the NMUN•NY [Position Papers website](#).

Two resources, available to download from the [NMUN website](#), serve as essential instruments in preparing for the Conference and as a reference during committee sessions:

1. [NMUN Delegate Preparation Guide](#) - explains each step in the delegate process, from pre-Conference research to the committee debate and resolution drafting processes. Please take note of the information on plagiarism, and the prohibition on pre-written working papers and resolutions. Delegates should not start discussion on the topics with other members of their committee until the first committee session.
2. [NMUN Rules of Procedure](#) - include the long and short form of the rules, as well as an explanatory narrative and example script of the flow of procedure.

In addition, please review the mandatory [NMUN Conduct Expectations](#) on the NMUN website. They include the Conference dress code and other expectations of all attendees. We want to emphasize that any instances of sexual harassment or discrimination based on race, gender, sexual orientation, national origin, religion, age, or disability will not be tolerated. If you have any questions concerning your preparation for this committee, please contact the Economic and Social Council Department, Caitlin M Hopper (Conference A) and Martin Schunk (Conference B), at [usg.ecosoc@nmun.org](mailto:usg.ecosoc@nmun.org).

We wish you all the best in your preparations and look forward to seeing you at the Conference!

Brian Tomblin, Director  
Kendrick King, Assistant Director  
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Laila Fouad, Director  
Crege Elisha La Ronde, Assistant Director  
Conference B

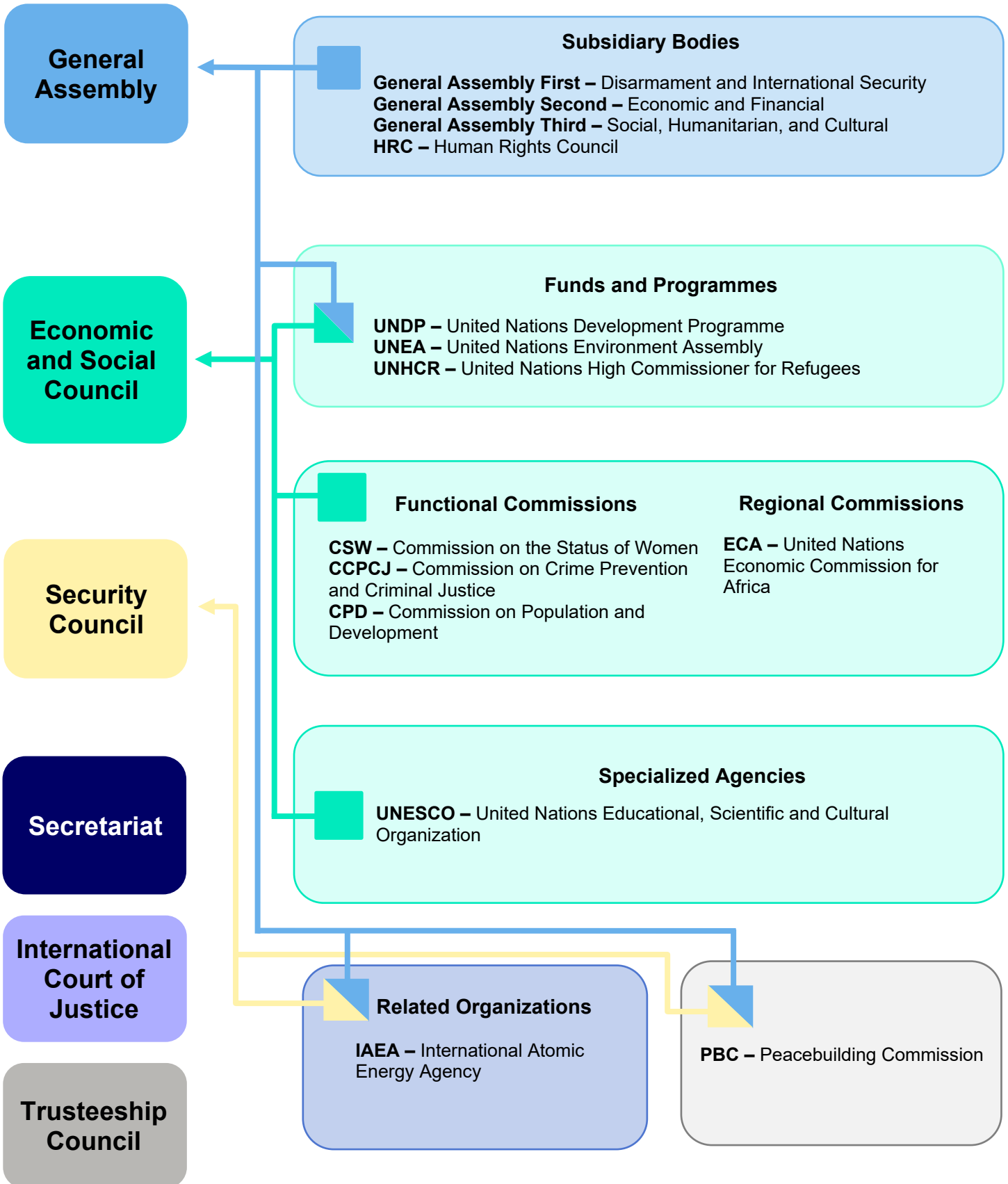


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## United Nations System at NMUN•NY

This diagram illustrates the UN system simulated at NMUN•NY. It shows where each committee “sits” within the system to demonstrate the reportage and relationships between entities. Examine the diagram alongside the Committee Overview to gain a clear picture of the committee’s position, purpose, and powers within the UN system.



## Committee Overview

### **Introduction**

As per the *Charter of the United Nations* (1945), the Economic and Social Council (ECOSOC) is one of the six main organs of the United Nations (UN).<sup>1</sup> It serves as the primary body for policy dialogue on economic, social, cultural, educational, and health-related topics, advises and coordinates the activities of its subsidiary bodies on these topics, and leads discussions on the implementation of the international development framework.<sup>2</sup> As such, ECOSOC is at the center of UN efforts to achieve the *2030 Agenda for Sustainable Development* (2030 Agenda) (2015) and key to the follow-up of several UN conferences and summits.<sup>3</sup>

### **Mandate, Functions, and Powers**

The main function of ECOSOC is to coordinate the activities of its subsidiary bodies and other UN specialized agencies working on sustainable development.<sup>4</sup> Article 62 (1) of the *Charter of the United Nations* also allows ECOSOC to "make or initiate studies and reports with respect to international economic, social, cultural, educational, health, and related matters," including human rights and freedoms, to present to the General Assembly and to UN specialized agencies.<sup>5</sup> ECOSOC may further call for or convene international conferences and hold special meetings on global development emergencies and humanitarian crises.<sup>6</sup> A prominent example of this is the High-Level Political Forum on Sustainable Development (HLPF), which is held annually under the auspices of ECOSOC (apart from every fourth year, when it is held under the auspices of the General Assembly).<sup>7</sup>

Broadly speaking, the following non-exhaustive list summarizes ECOSOC's mandate:

- ECOSOC **will generally**: provide policy recommendations on matters related to sustainable development; coordinate efforts by its subsidiary bodies and UN specialized agencies; follow-up and review progress towards these activities; create commissions and convene international conferences.<sup>8</sup>
- ECOSOC **will not generally**: design and implement projects or programming on sustainable development; direct UN specialized agencies to develop or implement specific projects or programs; decide on budgetary matters of UN entities.<sup>9</sup>

### **Governance, Structure, and Membership**

ECOSOC is comprised of 54 Member States, of which 18 are elected each year by the General Assembly for overlapping three-year terms.<sup>10</sup> ECOSOC proceedings are overseen by a President and four Vice-

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<sup>1</sup> United Nations, Economic and Social Council. *About us*. 2022; United Nations Conference on International Organization. *Charter of the United Nations*. 1945. art. 7.

<sup>2</sup> United Nations, Economic and Social Council. *About us*. 2022; United Nations Conference on International Organization. *Charter of the United Nations*. 1945. art. 62.

<sup>3</sup> Ibid.; United Nations, General Assembly. *Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1)*. para. 47.

<sup>4</sup> United Nations, Economic and Social Council. *About us*. 2022.

<sup>5</sup> United Nations Conference on International Organization. *Charter of the United Nations*. 1945. art. 62.

<sup>6</sup> Ibid. art. 62; United Nations, Economic and Social Council. *ECOSOC Special Meetings on Emerging Issues and Emergency Situations*. 2022.

<sup>7</sup> United Nations, High-Level Political Forum on Sustainable Development. *Structure*. 2022.

<sup>8</sup> United Nations, Economic and Social Council. *ECOSOC Brochure*. 2021. p. 3.

<sup>9</sup> United Nations Development Programme. *About us*. 2022; United Nations Development Programme. *Executive Board*. 2022; United Nations, General Assembly. *Administrative and Budgetary Committee (Fifth Committee)*. 2022.

<sup>10</sup> United Nations, General Assembly. *Rules of Procedure of the General Assembly (A/520/Rev.19)*. 2021. p. 39.

Presidents, which together comprise the Bureau.<sup>11</sup> The Bureau sets ECOSOC's agenda, devises action plans, and collaborates with the Secretariat on administrative duties.<sup>12</sup>

ECOSOC oversees the work of five regional commissions, eight functional commissions, 12 specialized agencies, six funds and programs, and several other related UN bodies.<sup>13</sup> The functional commissions focus on specific issues and the regional commissions are geographically focused.<sup>14</sup> Other subsidiary bodies include standing, ad hoc, expert, and other related bodies.<sup>15</sup> Each subsidiary body adopts specific methods of work to align with its mandate, and methods are updated regularly.<sup>16</sup> ECOSOC also allows for non-governmental organizations (NGOs) to consult on the work of the UN.<sup>17</sup> More than 6,000 NGOs have been granted ECOSOC consultative status, enabling them to attend and participate in various UN meetings, conferences, and special sessions and participate in international discussions.<sup>18</sup>

The ECOSOC meeting cycle lasts one year from July to July and is divided into four groups.<sup>19</sup> The first group consists of the Partnership Forum and the Coordination Segment, which are held in February.<sup>20</sup> While the Partnership Forum aims to bring together a wide array of stakeholders from civil society and the private sector to academia and local governments to discuss and exchange ideas to achieve the 2030 Agenda, the Coordination Segment is set up to coordinate the work of ECOSOC's subsidiary bodies and UN specialized agencies through general policy recommendations.<sup>21</sup> The second group of meetings includes various fora established by ECOSOC, including the Forum on Financing for Development Follow-up and the Youth Forum among others, which take place between April and May of each year.<sup>22</sup> The Development Cooperation Forum, which is also part of the second group, takes place every two years.<sup>23</sup> The third group comprises of the Operational Activities for Development Segment, the Humanitarian Affairs Segment, and the Meeting on the Transition from Relief to Development.<sup>24</sup> The fourth group focuses on the review of the implementation and progress towards the 2030 Agenda, comprising of the HLPF under the auspices of ECOSOC and the High-level Segment of ECOSOC, both of which take place in July at the end of a meeting cycle.<sup>25</sup> The ECOSOC meeting cycle is further complemented by the Management Segment in June, which focuses on procedural questions and considers the reports and recommendations of its subsidiary bodies and UN specialized agencies.<sup>26</sup>

## Annotated Bibliography

United Nations, Economic and Social Council. *ECOSOC Brochure*. 2021. Retrieved 25 August 2022 from: [https://www.un.org/ecosoc/sites/www.un.org.ecosoc/files/files/en/2022doc/ecosoc-brochure-12\\_2021.pdf](https://www.un.org/ecosoc/sites/www.un.org.ecosoc/files/files/en/2022doc/ecosoc-brochure-12_2021.pdf)

*This brochure provides a snapshot overview of ECOSOC, its mandate, and modalities as well as actions in 2022. It compiles the most relevant and recent information on ECOSOC into one publication and presents that information in a succinct and visually appealing*

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<sup>11</sup> Ibid.

<sup>12</sup> Ibid.

<sup>13</sup> United Nations, Economic and Social Council. *ECOSOC Coordination Segment*. 2022.

<sup>14</sup> United Nations, Economic and Social Council. *ECOSOC Subsidiary Bodies*. 2022.

<sup>15</sup> Ibid.

<sup>16</sup> United Nations, General Assembly. *Review of the implementation of General Assembly resolution 72/305 on the strengthening of the Economic and Social Council (A/RES/75/290 A)*. 2021. p. 9.

<sup>17</sup> United Nations, Department of Economic and Social Affairs. *Introduction to ECOSOC Consultative Status*. 2022.

<sup>18</sup> United Nations, Economic and Social Council. *ECOSOC Brochure*. 2021. p. 23.

<sup>19</sup> United Nations, General Assembly. *Review of the implementation of General Assembly resolution 72/305 on the strengthening of the Economic and Social Council (A/RES/75/290 A)*. 2021. pp. 4-5.

<sup>20</sup> Ibid. pp. 4-5.

<sup>21</sup> Ibid. p. 5.

<sup>22</sup> Ibid. p. 5.

<sup>23</sup> Ibid. p. 5.

<sup>24</sup> Ibid. p. 5.

<sup>25</sup> Ibid. p. 5.

<sup>26</sup> United Nations, General Assembly. *Review of the implementation of General Assembly resolution 68/1 on the strengthening of the Economic and Social Council (A/RES/72/305)*. 2018. p. 6.

manner. Delegates might find this brochure useful as it provides a comprehensive, yet succinct introduction to how ECOSOC functions.

United Nations, Economic and Social Council. *ECOSOC Coordination Segment*. 2022. Retrieved 4 August 2022 from: <https://www.un.org/en/content/ecosoc-coordination>

*This website contains information on the ECOSOC Coordination Segment. The General Assembly established the ECOSOC Coordination Segment per its resolution 75/290 A on the “Review of the implementation of General Assembly resolution 72/305 on the strengthening of the Economic and Social Council” in 2021 to reinforce the coordinating role of ECOSOC within the UN system. The Coordination Segment website provides background information, video recordings, and a program overview. Thus, delegates will find this website useful to help them understand how ECOSOC takes up its coordination role in practice.*

United Nations, Economic and Social Council. *ECOSOC Subsidiary Bodies*. 2022. Retrieved 17 August 2022 from: <https://www.un.org/ecosoc/en/content/ecosoc-subsidiary-bodies>

*This website presents a list of all ECOSOC subsidiary bodies, including its regional commissions, functional commissions, and expert bodies, standing committees and ad hoc bodies. It also presents a timeline of sessions of ECOSOC’s subsidiary bodies and includes links to the respective sessions and bodies. For delegates, this website is the ideal starting point to explore the wider ECOSOC system and research the various subsidiary bodies of ECOSOC. Additionally, delegates will be able to use this website to inform themselves about the ongoing review process of the subsidiary bodies.*

United Nations, General Assembly. *Review of the implementation of General Assembly resolution 72/305 on the strengthening of the Economic and Social Council (A/RES/75/290 A)*. 2021. Retrieved 4 August 2022 from: <https://undocs.org/en/A/RES/75/290%20A>

*This General Assembly resolution is the latest of a series of resolutions aimed at strengthening the role of ECOSOC within the UN system. It introduced reforms to the governance structure of ECOSOC that divided the ECOSOC meeting cycle into four groups in addition to the Management Segment. It further replaced the Integration Segment with the Coordination Segment. While the reform process of ECOSOC is constantly evolving, this resolution will help delegates understand the rationale behind the current governance structure of ECOSOC.*

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United Nations, Economic and Social Council. *About us*. 2022. Retrieved 4 August 2022 from: <https://www.un.org/ecosoc/en/content/about-us>



United Nations, Economic and Social Council. *ECOSOC Coordination Segment*. 2022. Retrieved 4 August 2022 from: <https://www.un.org/en/content/ecosoc-coordination>

United Nations, Economic and Social Council. *ECOSOC Special Meetings on Emerging Issues and Emergency Situations*. 2022. Retrieved 4 August 2022 from: <https://www.un.org/ecosoc/en/content/ecosoc-special-meetings-emergency-situations>

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United Nations, General Assembly. *Review of the implementation of General Assembly resolution 72/305 on the strengthening of the Economic and Social Council (A/RES/75/290 A)*. 2021. Retrieved 4 August 2022 from: <https://undocs.org/en/A/RES/75/290%20A>

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## 1. Building Sustainable and Resilient Infrastructure to Achieve Sustainable Development Goal (SDG) 9

*“Infrastructure investment is a key tool for improving productivity, stimulating economic growth, generating decent jobs, addressing inequalities, and building resilience. But infrastructure will only deliver on these objectives if sustainability is embedded at its core.”<sup>27</sup>*

### Introduction

The Global Commission on the Economy and Climate, a globally recognized independent research group, defined infrastructure in 2016 as “structures and facilities that underpin energy systems ... transport, telecommunications, water, and waste management.”<sup>28</sup> The term “infrastructure” can apply to many different aspects of human life, ranging from railroads and telephone lines to affordable housing and clean energy.<sup>29</sup> These infrastructure systems are generally categorized as either hard infrastructure, comprised of physical assets, or soft infrastructure, which includes knowledge and frameworks.<sup>30</sup> Infrastructure is also commonly characterized as being grey or green, meaning either human-built or a natural system, respectively.<sup>31</sup> The Organisation for Economic Co-operation and Development (OECD) estimated that, from 2016-2030, a global infrastructure investment of \$95 trillion, or \$6.3 trillion per year, would be needed to sustain economic growth.<sup>32</sup> Current investment trends estimate, however, that only \$79 trillion will be invested in that time, leaving an “investment gap” of \$16 trillion in needed infrastructure resources.<sup>33</sup> Each Member State’s gap varies based on development and income levels, with middle-income Member States representing up to 70% of future infrastructure needs.<sup>34</sup> While the need for new infrastructure becomes more apparent, Member States relying on ageing physical and technological infrastructure experience increased vulnerability to shocks like natural disasters, economic shutdowns, cyberattacks, and military conflict.<sup>35</sup>

In both creating new and replacing old systems, sustainable and resilient infrastructure has become a key concept for ensuring that infrastructure investment is used correctly.<sup>36</sup> However, there is no internationally accepted definition for “sustainable infrastructure.”<sup>37</sup> As of 2022, there are three broad models that attempt to describe the characteristics necessary for sustainable infrastructure.<sup>38</sup> The 2018 Inter-American Development Bank’s “Four Dimensions of Sustainable Infrastructure” model (IDB-4) defines sustainable infrastructure as projects that ensure economic and financial, social, environmental, and institutional sustainability.<sup>39</sup> In 2020, the UN Economic Commission for Europe (UNECE) defined sustainable infrastructure in the context of the *2030 Agenda for Sustainable Development* (2030 Agenda) (2015) and its Sustainable Development Goals (SDGs) through five outcomes: access and equity, economic effectiveness, environmental sustainability and resilience, replicability, and stakeholder

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<sup>27</sup> United Nations Environment Management Group. *Updated UN guidelines on infrastructure promote sustainable development and cuts in GHG emissions*. 2022.

<sup>28</sup> Inter-American Development Bank. *What is Sustainable Infrastructure? A Framework to Guide Sustainability Across the Project Cycle*. 2018. p. 10.

<sup>29</sup> United Nations Environment Programme. *International Good Practice Principles for Sustainable Infrastructure*. 2022. p. 9.

<sup>30</sup> Ibid. p. 9.

<sup>31</sup> Ibid. p. 9.

<sup>32</sup> Organisation for Economic Co-operation and Development. *Investing in Climate, Investing in Growth*. 2017. pp. 92-95.

<sup>33</sup> Global Infrastructure Hub. *Forecasting infrastructure investment needs and gaps*. 2021.

<sup>34</sup> Organisation for Economic Co-operation and Development. *Investing in Climate, Investing in Growth*. 2017. p. 93.

<sup>35</sup> Drzik. World Economic Forum. *Infrastructure around the world is failing. Here’s how to make it more resilient*. 2019.

<sup>36</sup> Global Future Council on Infrastructure. World Economic Forum. *Six Qualities of Sustainable Infrastructure*. 2020.

<sup>37</sup> Ibid.

<sup>38</sup> Ibid.

<sup>39</sup> Inter-American Development Bank. *What is Sustainable Infrastructure? A Framework to Guide Sustainability Across the Project Cycle*. 2018. p. 11.

engagement.<sup>40</sup> These outcomes, referred to as the UN-5, were chosen to ensure infrastructure projects focus on people's needs and to promote public-private partnerships.<sup>41</sup> Finally, in 2020, the Global Future Council on Infrastructure, an international economic think-tank, created the Six Sustainable Infrastructure Qualities (GFC-6) definition which combined parts of the IDB-4 and the UN-5 along with new concepts like technological sustainability and infrastructure maintenance.<sup>42</sup>

Even without a universally-accepted definition, the United Nations (UN) has recognized infrastructure as “the backbone of a functioning society” and highlighted how it connects the economic, social, and environmental dimensions of sustainable development.<sup>43</sup> The United Nations Economic and Social Council (ECOSOC) has a significant role in achieving sustainable and resilient infrastructure through its coordination efforts and complex network of subsidiary bodies, which allow it to facilitate policy guidelines, research, and financial investment across all aspects of infrastructure.<sup>44</sup>

### ***International and Regional Framework***

The 2030 Agenda established the SDGs, which address many facets of sustainable and resilient infrastructure across almost every goal.<sup>45</sup> The primary SDG for infrastructure, SDG 9 (industry, innovation and infrastructure), focuses on developing infrastructure through economic development, inclusive industrialization, environmentally efficient technology, accessible transportation, and improved telecommunication access.<sup>46</sup> Infrastructure is both a beneficiary from and mutually reinforcing driver of economic development.<sup>47</sup> It has been noted that investments in infrastructure create “virtuous circles,” encouraging greater economic growth and, in turn, further investment in infrastructure.<sup>48</sup> While these targets apply to all Member States, specific consideration is given to least developed countries (LDCs).<sup>49</sup> While sustainable and resilient infrastructure is central to achieving SDG 9, it is also directly mentioned in other SDGs, such as SDG 2 (zero hunger), SDG 5 (gender equality), and SDG 7 (affordable and clean energy).<sup>50</sup> Infrastructure systems are so integrated into the SDGs that over 90% of the individual SDG targets are either directly or indirectly influenced by infrastructure development.<sup>51</sup>

Adopted during the Third International Conference on Financing for Development in 2015, the *Addis Ababa Action Agenda of the Third International Conference on Financing for Development* (Addis Ababa Action Agenda) details a global framework for financing sustainable development.<sup>52</sup> As an expansion

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<sup>40</sup> United Nations, Economic Commission for Europe. *People-first Public-Private Partnerships Evaluation Methodology for the Sustainable Development Goals (ECE/CECI/WP/PPP/2021/3)*. 2021.

<sup>41</sup> Ibid.; United Nations, Economic Commission for Europe. *Public-Private Partnerships (PPP)*. n.d.

<sup>42</sup> Global Future Council on Infrastructure. World Economic Forum. *Six Qualities of Sustainable Infrastructure in Action*. 2020. p. 6.

<sup>43</sup> United Nations Office for Project Services. *Infrastructure*. 2022; United Nations, Economic and Social Commission of Asia and the Pacific. *Economic and Social Survey of Asia and the Pacific 2021: Towards post-COVID-19 resilient economies*. 2021.

<sup>44</sup> United Nations, Economic and Social Council. *ECOSOC Subsidiary Bodies*. 2022.

<sup>45</sup> United Nations, General Assembly. *Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1)*. 2015.

<sup>46</sup> Ibid. pp. 20-21; United Nations, Department of Economic and Social Affairs. *Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation*. n.d.

<sup>47</sup> Guild. Asian Development Blog. *How Quality Infrastructure Investment Sparks a Virtuous Circle of Benefits*. 2019.

<sup>48</sup> Ibid.

<sup>49</sup> United Nations, General Assembly. *Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1)*. 2015. pp. 20-21; United Nations, Department of Economic and Social Affairs. *Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation*. n.d.

<sup>50</sup> United Nations, General Assembly. *Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1)*. 2015. pp. 15-16, 18-19.

<sup>51</sup> United Nations Environment Programme. *International Good Practice Principles for Sustainable Infrastructure*. 2022. p. 13.

<sup>52</sup> United Nations, General Assembly. *Addis Ababa Action Agenda of the Third International Conference on Financing for Development (Addis Ababa Action Agenda) (A/RES/69/313)*. 2015; United Nations, Department of Economic and Social Affairs. *Addis Ababa Action Agenda of the Third International Conference on Financing for Development*. 2022.

from the 2002 *Monterrey Consensus on Financing for Development* and the 2008 *Doha Declaration on Financing for Development*, over 100 policy actions are discussed, including domestic public resources, international development cooperation, science, technology, innovation, and capacity building.<sup>53</sup> The Addis Ababa Action Agenda highlights the need for bridging the infrastructure gap through incentivizing private and public sector financing and investing in national and regional financial infrastructure such as multilateral development banks (MDBs).<sup>54</sup> Despite the wide acceptance of the agenda's recommendations for financing sustainable infrastructure, efforts to monitor and evaluate the progress of its goals and recommendations have proven difficult.<sup>55</sup>

Adopted in 2015, the *Paris Agreement* serves as the international community's primary framework for responding to climate change.<sup>56</sup> While infrastructure is not directly mentioned in the *Paris Agreement*, infrastructure is centrally important to its realization, as energy, transportation, and building infrastructure are responsible for nearly 80% of global greenhouse gas emissions.<sup>57</sup> The 2022 United Nations Environment Assembly resolution EA.5/Res.9 on "Sustainable and resilient infrastructure" connects infrastructure and climate solutions more directly by promoting investment in natural infrastructure through nature-based solutions, environmental impact assessments, knowledge sharing, and sustainable consumption.<sup>58</sup> In addition to more natural solutions, the 2016 *New Urban Agenda* highlights the need for sustainable urbanization.<sup>59</sup> This framework details how urban planning and governance mechanisms can produce sustainable cities and human settlements with resilient infrastructure in transportation, energy access, telecommunications, and resource management.<sup>60</sup>

Regionally, the 2022 5<sup>th</sup> UN Conference on the Least Developed Countries adopted the *Doha Programme of Action for the Least Developed Countries* (DPoA) to help LDCs address the negative socioeconomic impacts caused by the ongoing COVID-19 pandemic.<sup>61</sup> DPoA highlights how resilient and sustainable infrastructure development in LDCs is a major factor in improving not only economic growth in the region but also telecommunication access, technological innovation, climate change recovery, and public-private partnerships.<sup>62</sup> In 2016, the Association of Southeast Asian Nations (ASEAN) developed the *Master Plan on ASEAN Connectivity 2025* (MPAC) as a regional framework for connecting the people and infrastructure of Southeast Asia.<sup>63</sup> Focusing on digital innovation, logistics, regulations, and human mobility, MPAC details both the current infrastructure challenges of the ASEAN Member States and possible projects and initiatives that can overcome those challenges.<sup>64</sup> As part of the 2006 *European Programme for Critical Infrastructure Protection*, the European Union adopted Council Directive 2008/114/EC in 2008 on "the identification and designation of European critical infrastructures and the assessment of the need to improve their protection" to establish a procedure for identifying and protecting critical infrastructures that are essential for Member States to function and whose disruption would cause cross-border impacts.<sup>65</sup>

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<sup>53</sup> Ibid.

<sup>54</sup> United Nations, General Assembly. *Addis Ababa Action Agenda of the Third International Conference on Financing for Development (Addis Ababa Action Agenda) (A/RES/69/313)*. 2015. pp. 8, 24-25.

<sup>55</sup> Chhibber. *Assessing and Evaluating the Addis Ababa Action Agenda*. n.d.

<sup>56</sup> Conference of the Parties to the United Nations Framework Convention on Climate Change. *Paris Agreement*. 2015.

<sup>57</sup> Ibid.; United Nations Environment Programme. *International Good Practice Principles for Sustainable Infrastructure*. 2022. p. 13; Environmental Change Institute. University of Oxford. *Infrastructure centrally important to achieving the Paris Agreement and the SDGs*. 2021.

<sup>58</sup> United Nations Environment Assembly. *Sustainable and resilient infrastructure (UNEP/EA.5/Res.9)*. 2022.

<sup>59</sup> United Nations, General Assembly. *New Urban Agenda (A/RES/71/256)*. 2016.

<sup>60</sup> Ibid.; United Nations Conference on Housing and Sustainable Urban Development. *The New Urban Agenda*. 2016.

<sup>61</sup> 5<sup>th</sup> United Nations Conference on the Least Developed Countries. *Doha Programme of Action for Least Developed Countries*. 2022.

<sup>62</sup> Ibid.; United Nations, General Assembly. *Doha Programme of Action for the Least Developed Countries (A/76/L.47)*. 2022.

<sup>63</sup> Association of Southeast Asian Nations. *Connecting ASEAN: An Overview*. 2019.

<sup>64</sup> Association of Southeast Asian Nations. *Master Plan on ASEAN Connectivity 2025*. 2016.

<sup>65</sup> European Commission. *European Critical Infrastructure*. 2020; Council of the European Union. Official Journal of the European Union. *Council Directive 2008/114/EC of 8 December 2008 on the identification and*

## ***Role of the International System***

As the UN's primary coordinating body for economic, social, and cultural matters, ECOSOC oversees seven agencies responsible for monitoring SDG 9 progress, with the most prominent being the United Nations Industrial Development Organization (UNIDO).<sup>66</sup> UNIDO has worked on a wide range of sustainable infrastructure topics, including modernizing industrial development and LDC economic development.<sup>67</sup> The International Energy Agency (IEA), the main international forum for energy policy, is the ECOSOC custodian agency for upgrading energy infrastructure to be resource-efficient and environmentally clean.<sup>68</sup> For telecommunication access, the International Telecommunication Union (ITU) is the custodian due to its history of developing technical standards for and facilitating access to sustainable communication infrastructure.<sup>69</sup> While not directly referenced for SDG 9, the United Nations Environment Programme (UNEP) is the most cited ECOSOC custodian agency for SDGs related to environmental sustainability.<sup>70</sup> UNEP has consistently produced guidelines and frameworks related to infrastructure and environmental protection, including their 2022 *International Good Practice Principles for Sustainable Infrastructure*.<sup>71</sup> The 10 guiding principles in this framework, such as strategic planning and enhancing economic impacts, have already succeeded in supporting global infrastructure projects, such as digital infrastructure improvements in Afghanistan and the development of green buildings in Singapore.<sup>72</sup>

A subsidiary body of both ECOSOC and the General Assembly, the High-level Political Forum (HLPF) is tasked with evaluating progress towards the SDGs and strengthening sustainable development governance.<sup>73</sup> HLPF's work culminates in their voluntary national review reports from Member States and their annual meetings where they review the overall progress towards the 2030 Agenda.<sup>74</sup> The most recent meeting was in 2022 and focused on building back from COVID-19 and, in 2023, the HLPF will convene an in-depth review of SDG 9.<sup>75</sup> SDG 9 was last discussed by HLPF at their 2017 meeting, with

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*designation of European critical infrastructures and the assessment of the need to improve their protection.* 2008.

<sup>66</sup> United Nations, General Assembly. *Review of the implementation of General Assembly resolution 72/305 on the strengthening of the Economic and Social Council (A/RES/75/290A)*. 2021; United Nations, Economic Commission for Europe. *Understanding the system of custodian agencies for Sustainable Development Indicators - Note by the Secretariat (ECE/CES/2018/39)*. 2018.

<sup>67</sup> United Nations Industrial Development Organization. *A brief history*. 2022; United Nations Industrial Development Organization. *Industry 4.0: Opportunities and Challenges of the New Industrial Revolution for Developing Countries and Economies in Transition*. 2017; United Nations Industrial Development Organization. *Safeguarding the Environment*. 2022; United Nations, General Assembly. *Third Industrial Development Decade for Africa (2016-2025) (A/RES/70/293)*. 2016.

<sup>68</sup> International Energy Agency. *Mission*. 2022; United Nations, Economic Commission for Europe. *Understanding the system of custodian agencies for Sustainable Development Indicators - Note by the Secretariat (ECE/CES/2018/39)*. 2018. p. 16; United Nations, Department of Economic and Social Affairs. *Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation*. n.d.

<sup>69</sup> International Energy Agency. *Mission*. 2022; United Nations, Economic Commission for Europe. *Understanding the system of custodian agencies for Sustainable Development Indicators - Note by the Secretariat (ECE/CES/2018/39)*. 2018. p. 16; International Telecommunication Union. *About International Telecommunication Union (ITU)*. 2022.

<sup>70</sup> Ibid.

<sup>71</sup> United Nations Environment Programme. *International Good Practice Principles for Sustainable Infrastructure*. 2022.

<sup>72</sup> Ibid.; United Nations Environment Programme. *Integrated Approaches in Action: A Companion to the International Good Practice Principles for Sustainable Infrastructure*. 2021.

<sup>73</sup> United Nations, General Assembly. *The future we want (A/RES/66/288)*. 2012. pp. 16-17; United Nations, General Assembly. *Format and organizational aspects of the high-level political forum on sustainable development (A/RES/67/290)*. 2013; United Nations, High-Level Political Forum. *High-Level Political Forum*. 2022.

<sup>74</sup> United Nations, High-Level Political Forum. *High-Level Political Forum*. 2022.

<sup>75</sup> Ibid.; United Nations, General Assembly. *Review of the implementation of General Assembly resolutions 67/290 on the format and organizational aspects of the high-level political forum on sustainable development and 70/299 on the follow-up and review of the 2030 Agenda for Sustainable Development at the global level (A/RES/75/290B)*. 2021.

their outcome document emphasizing the need for infrastructure in promoting sustainable economic development.<sup>76</sup>

The Commission on Science and Technology for Development is a functional commission under ECOSOC assigned to provide high-level advice on issues related to science, technology, innovation, and development.<sup>77</sup> Their most recent work includes discussing how sustainable infrastructure and modern industrial development can be used to reduce inequalities in the manufacturing and economic sectors.<sup>78</sup> The UN Department of Economic and Social Affairs (UNDESA) works to promote the SDGs and translate global commitments for economic, social, and environmental development into national policies through norm-setting, data analysis, and capacity building.<sup>79</sup> One of UNDESA's primary focus points has been infrastructure development, which is shown in their numerous reports on the topic, including the 2021 *Sustainable Transport, Sustainable Development* report that highlighted the global need for sustainable transportation infrastructure.<sup>80</sup> UNDESA also prepares an annual *SDG Progress Report* with input from Member States, national and international organizations, and civil society organizations.<sup>81</sup> The most recent report was released in 2022 and highlights how consistent crises such as COVID-19 and military conflicts have significantly hindered or even reversed progress towards every SDG target, including SDG 9.<sup>82</sup> The United Nations Office for Project Services (UNOPS) is a UN agency dedicated to planning, designing, constructing, and maintaining infrastructure projects internationally.<sup>83</sup> Sustainable infrastructure in particular has been a focus of UNOPS, with recent reports including their 2020 sustainability report *Build the Future* and their 2021 report *Infrastructure for Climate Action* which tasks policymakers with key infrastructure actions like prioritizing nature-based solutions and promoting social and environmental protections.<sup>84</sup>

In addition to the international scope of ECOSOC's efforts to achieve SDG 9, ECOSOC's regional commissions allow for more directed solutions to promote sustainable infrastructure unique to their respective regions.<sup>85</sup> For example, Latin America and the Caribbean has one of the highest rates of urbanization in the developing world but a significant lack of urban infrastructure to support it, so the Economic Commission for Latin America and the Caribbean (ECLAC) worked with the United Nations Human Settlements Programme (UN-Habitat) to develop Caribbean-specific roadmaps for informal settlements and increased financing for sustainable urbanization.<sup>86</sup> The Economic and Social Commission for Asia and the Pacific (ESCAP) issues an annual *Economic and Social Survey of Asia and the Pacific* to provide regional progress updates, policy guides, and studies on significant challenges

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<sup>76</sup> United Nations, Sustainable Development Goals Knowledge Platform. *High-Level Political Forum 2017*. 2017; United Nations, Economic and Social Council. *Ministerial declaration of the 2017 high-level political forum on sustainable development, convened under the auspices of the Economic and Social Council, on the theme "Eradicating poverty and promoting prosperity in a changing world" (E/HLS/2017/1)*. 2017.

<sup>77</sup> United Nations Conference on Trade and Development. *Commission on Science and Technology for Development*. 2022.

<sup>78</sup> United Nations, Commission on Science and Technology for Development. *Industry 4.0 for inclusive development - Report of the Secretary-General (E/CN.16/2022/2)*. 2022.

<sup>79</sup> United Nations, Department of Economic and Social Affairs. *What We Do*. 2022.

<sup>80</sup> United Nations, Department of Global Communications. *Sustainable Development Goals: Monitoring and Progress*. 2022; United Nations, Department of Economic and Social Affairs. *Sustainable Transport, Sustainable Development*. 2021.

<sup>81</sup> Ibid.

<sup>82</sup> United Nations, Department of Economic and Social Affairs. *The Sustainable Development Goals Report 2022*. 2022.

<sup>83</sup> United Nations Office for Project Services. *Infrastructure*. 2022.

<sup>84</sup> United Nations Office for Project Services. *Build the Future*. 2020; United Nations Office for Project Services. *Infrastructure for Climate Action*. 2021.

<sup>85</sup> United Nations, Economic and Social Council. *ECOSOC Subsidiary Bodies*. 2022.

<sup>86</sup> Jaitman. *Latin American Economic Review. Urban infrastructure in Latin America and the Caribbean: public policy priorities*. 2015; United Nations, Department of Economic and Social Affairs. *Economic Commission for Latin America and the Caribbean (ECLAC)*. 2020.

relevant to Asia-Pacific economies.<sup>87</sup> Regional financial support for sustainable infrastructure can be found in the MDBs, which are international financial institutions under a multinational partnership to encourage economic development in LDCs.<sup>88</sup> While the World Bank facilitates the role of an international MDB, regional MDBs such as the African Development Bank have produced publications and conferences on how to build and finance sustainable infrastructure in their regions.<sup>89</sup>

### **Building Digital Infrastructure**

Digital infrastructure is defined by the United Nations Development Programme (UNDP) as digital solutions that enable basic public and private services like commerce and governance.<sup>90</sup> Similar to other infrastructure systems, digital infrastructure comes in many different forms, including online platforms, open-source software, personal devices, internet networks, and cell towers.<sup>91</sup> Sustainable and resilient digital infrastructure supports target 9.c of SDG 9 in particular, which outlines an ambition for universal accessibility to information and communication technologies.<sup>92</sup> In 2020, the number of global internet users grew by 7.5%, an estimated increase of 332 million people.<sup>93</sup> Additionally, when the COVID-19 pandemic tested the resiliency of the current global digital infrastructure in 2020, businesses accelerated the adoption of digital technologies and passed expected growth metrics by several years.<sup>94</sup>

Despite the increased growth of digital infrastructure, developing Member States and vulnerable populations continue to face difficulties accessing these technologies.<sup>95</sup> In 2017, the World Bank reported that over 80% of individuals within developed Member States possessed internet access while only 35% of individuals within developing Member States had similar access.<sup>96</sup> These disparities are further exasperated with the divide between urban and rural populations.<sup>97</sup> The 2021 ITU report *ITU Measuring digital development - Facts and figures 2021* found that people in urban areas are twice more likely to use the internet than those in rural areas and are significantly more likely to be covered by a mobile broadband network.<sup>98</sup> Cost and education for digital access also remain barriers for populations in LDCs.<sup>99</sup> The same report revealed that the median price for entry-level mobile plan in most LDCs is above the means of the

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<sup>87</sup> United Nations, Economic and Social Commission for Asia and the Pacific. *Economic and Social Survey of Asia and the Pacific*. 2022.

<sup>88</sup> Kenton. *Multilateral Development Bank (MDB)*. 2021.

<sup>89</sup> Ibid.; European Investment Bank. *Infrastructure and the EIB*. 2022; Asian Development Bank. *Investing in Sustainable Infrastructure: Improving Lives in Asia and the Pacific*. 2009; Asian Development Bank. *Regional: Sustainable Infrastructure for Asia and the Pacific*. 2022; African Development Bank. *Building sustainable Infrastructure for the Future: African Development Bank and World Bank host global roundtable on infrastructure governance*. 2018.

<sup>90</sup> Shivkumar. World Economic Forum. *How to bring digital inclusion to the people who need it most*. 2021; Opp. World Economic Forum. *How 'digital highways' could boost inclusion and advance the SDGs*. 2021.

<sup>91</sup> Ibid.

<sup>92</sup> United Nations, General Assembly. *Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1)*. 2015. pp. 20-21; United Nations, Department of Economic and Social Affairs. *Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation*. n.d.

<sup>93</sup> Karihaloo. *Digital Infrastructure for Sustainable Growth*. 2021.

<sup>94</sup> United Nations, Department of Global Communications. *Report of the Secretary-General: Roadmap for Digital Cooperation*. 2020; McKinsey and Company. *How COVID-19 has pushed companies over the technology tipping point – and transformed business forever*. 2020.

<sup>95</sup> International Telecommunication Union. *Measuring digital development: Facts and figures 2021*. 2021; Zhao. International Telecommunication Union. *Sustainable development in danger: My message for UN economic and social coordination*. 2022; Whitaker. United Nations, Department of Global Communications. *Sustainable Development Goal 9: Investing in ICT access and Quality Education to Promote Lasting Peace*. 2017.

<sup>96</sup> Whitaker. United Nations, Department of Global Communications. *Sustainable Development Goal 9: Investing in ICT access and Quality Education to Promote Lasting Peace*. 2017.

<sup>97</sup> International Telecommunication Union. *Measuring digital development: Facts and figures 2021*. 2021. p. 12.

<sup>98</sup> Ibid. pp. 12, 18; Zhao. International Telecommunication Union. *Sustainable development in danger: My message for UN economic and social coordination*. 2022.

<sup>99</sup> International Telecommunication Union. *Measuring digital development: Facts and figures 2021*. 2021. pp. 21, 26.

average consumer.<sup>100</sup> Even for those with digital access, ITU found that less than 40% of individuals stated knowing how to carry out a “basic digital skill”, such as sending an email with an attachment.<sup>101</sup> Finally, the digital gender gap remains a factor in digital infrastructure, as on average 62% of men access the internet globally compared with 57% of women, with wider gaps present in LDCs.<sup>102</sup>

Under UN Secretary-General António Guterres, the 2018 High-Level Panel on Digital Cooperation was held to deliberate on methods to combat the “digital divide” amongst Members States and other disenfranchised groups while also building a foundation for future digital infrastructure.<sup>103</sup> The result was the 2019 *Age of Digital Interdependence* report that highlighted five recommendations: build an inclusive digital economy and society; protect human rights and human agency; develop human and institutional capacity; foster global digital cooperation; and promote trust, security, and stability.<sup>104</sup> These recommendations were expanded upon in the 2020 Secretary-General’s report on the *Roadmap to Digital Cooperation*, which recommended the creation of digital inclusion frameworks and the utilization of artificial intelligence.<sup>105</sup>

In 2019, the United Nations Conference on Trade and Development (UNCTAD) released a report, *The Impact of Rapid Technological Change on Sustainable Development*.<sup>106</sup> Despite being released before COVID-19, UNCTAD describes the opportunities and drawbacks that come from rapid technological changes and discusses how Member States could address these changes in national policies.<sup>107</sup> Recognizing that most digital infrastructure is privately owned, the World Bank established a digital development platform in 2022 that provides Members States, civil society actors, and other private entities with a knowledge hub to combine best practices on combating the digital divide and building better digital infrastructure.<sup>108</sup> The World Bank expects this flow of information to allow Members States access to more comprehensive data on privatized infrastructure to better inform more efficient policies and infrastructure investments nationally.<sup>109</sup>

### ***Making Infrastructure Resilient to Natural Disasters***

The United Nations Office for Disaster Risk Reduction (UNDRR) has defined natural disasters as any natural occurrence that causes a serious disruption in the functioning of a community and the loss of human, environmental, or economic resources, and includes tornados, hurricanes, wildfires, and floods.<sup>110</sup> The UN’s *Global Assessment Report on Disaster Risk Reduction (2022)* predicts that the annual number of natural disasters worldwide may increase by as much as 40% by 2030.<sup>111</sup> According to the UNDRR’s Center for Research on the Epidemiology of Disasters, natural disasters accounted for over

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<sup>100</sup> Ibid. p. 21.

<sup>101</sup> Ibid. p. 26.

<sup>102</sup> Ibid. p. iii; Zhao. International Telecommunication Union. *Sustainable development in danger: My message for UN economic and social coordination*. 2022.

<sup>103</sup> United Nations, Department of Global Communications. *Report of the Secretary-General: Roadmap for Digital Cooperation*. 2020.

<sup>104</sup> United Nations, High-level Panel on Digital Cooperation. *The Age of Digital Interdependence*. 2019. p. 5.

<sup>105</sup> United Nations, Department of Global Communications. *Report of the Secretary-General: Roadmap for Digital Cooperation*. 2020.

<sup>106</sup> United Nations, General Assembly. *Impact of rapid technological change on the achievement of the Sustainable Development Goals (A/RES/72/242)*. 2018; United Nations, General Assembly. *Impact of rapid technological change on the achievement of the Sustainable Development Goals and targets (A/RES/73/17)*. 2018; United Nations Conference on Trade and Development. *The Impact of Rapid Technological Change on Sustainable Development*. 2019.

<sup>107</sup> United Nations Conference on Trade and Development. *The Impact of Rapid Technological Change on Sustainable Development*. 2019.

<sup>108</sup> World Bank. *Making it Possible for the World to Log On*. 2022.

<sup>109</sup> Ibid.

<sup>110</sup> United Nations Office for Disaster Risk Reduction. *Disaster*. 2022.

<sup>111</sup> Achuthan. The Asia Foundation. *Disaster Resilience unlocks Economic Potential*. 2022; United Nations Office for Disaster Risk Reduction. *Global Assessment Report on Disaster Risk Reduction 2022*. 2022.

1.3 million deaths and an annual revenue loss of \$340 billion from 1998-2017.<sup>112</sup> The risks of natural disasters are also disproportionately severe for developing states, with populations in these countries six times more likely to be injured, lose their homes, or face severe infrastructure disruption compared with developed states.<sup>113</sup>

In 2015, the Third World Conference on Disaster Risk Reduction produced the *2015-2030 Sendai Framework for Disaster Risk Reduction* (Sendai Framework), a comprehensive framework on managing the risks of disasters.<sup>114</sup> It outlines a specific target to “substantially reduce the disaster damage to critical infrastructure” by 2030, alongside appropriate measurement indicators.<sup>115</sup> As a targeted follow-up to the Sendai Framework, the UNDRR published the *2022 Principles for Resilient Infrastructure* to provide a guideline on achieving infrastructure resiliency.<sup>116</sup> It articulates six principles that are supported by definitions and key actions.<sup>117</sup> The principles include the need for Member States to be continuously learning, to protect infrastructure proactively, to design infrastructure in a way that is environmentally integrated, to involve all levels of society, to coordinate on risks both nationally and internationally, and to be sufficiently flexible to adapt to changing needs.<sup>118</sup>

The International Monetary Fund has developed the *Climate-Public Investment Management Assessment* (2021), which provides Member States with guidance on resource management and public investment strategies to help build resilient infrastructure against natural disasters and climate change.<sup>119</sup> The assessment helps Member States identify potential areas of improvement within their infrastructure while building resource capacity through improved infrastructure governance.<sup>120</sup> The World Bank’s Global Facility for Disaster Reduction and Recovery also provides support in infrastructure governance and resource management through their disaster risk management programs in partnership with Member States, financial entities, and other private organizations.<sup>121</sup>

## Conclusion

Sustainable and resilient infrastructure encompasses many of the public systems that humans rely upon daily, including energy, transport, telecommunications, and water management.<sup>122</sup> However, ageing physical and technological infrastructure and a global infrastructure investment gap slowing progress towards future infrastructure have increased national vulnerability to shocks such as natural disasters and other international events.<sup>123</sup> The COVID-19 pandemic in particular has tested the limits of current infrastructure systems and has both hampered and accelerated development in various economic sectors.<sup>124</sup> Being the main coordinator for economic and social issues, ECOSOC has been a primary

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<sup>112</sup> United Nations Office for Disaster Risk Reduction. *Economic Losses, Poverty & Disasters 1998-2017*. 2018.

<sup>113</sup> Ibid. p. 21.

<sup>114</sup> United Nations, General Assembly. *Sendai Framework for Disaster Risk Reduction 2015-2030 (A/RES/69/283)*. 2015.

<sup>115</sup> Ibid. p. 7.

<sup>116</sup> United Nations Office for Disaster Risk Reduction. *Principles for Resilient Infrastructure*. 2022.

<sup>117</sup> Ibid.

<sup>118</sup> Ibid.

<sup>119</sup> International Monetary Fund. *Strengthening Infrastructure Governance for Climate-Responsive Public Investment*. 2021.

<sup>120</sup> Ibid.

<sup>121</sup> Global Facility for Disaster Reduction and Recovery. *Resilient Infrastructure*. 2022.

<sup>122</sup> Inter-American Development Bank. *What is Sustainable Infrastructure? A Framework to Guide Sustainability Across the Project Cycle*. 2018; United Nations Environment Programme. *International Good Practice Principles for Sustainable Infrastructure*. 2022.

<sup>123</sup> Global Infrastructure Hub. *Forecasting infrastructure investment needs and gaps*. 2021; Organisation for Economic Co-operation and Development. *Investing in Climate, Investing in Growth*. 2017; Drzik. World Economic Forum. *Infrastructure around the world is failing. Here’s how to make it more resilient*. 2019.

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forum for promoting sustainable infrastructure through information sharing and agency collaboration.<sup>125</sup> Through consistent international recommendations and funding through ECOSOC bodies, creating sustainable and resilient infrastructure globally continues to be at the forefront of achieving SDG 9 and sustainable development overall.<sup>126</sup>

### **Further Research**

As delegates continue with their research, they should consider: Which subsidiary bodies can ECOSOC coordinate with to reach SDG 9? Should ECOSOC define “sustainable infrastructure,” and, if so, should any of the three current definitions be used? What resources do LDCs require to reach the infrastructure capacity of developed countries? How can regional organizations be utilized to understand the unique infrastructure needs of each Member State? Could the rapid technological change experienced due to COVID-19 be learned from when increasing digital infrastructure nationally? How can disenfranchised groups’ access to digital infrastructure be improved? How can public infrastructure be made more resilient against natural disasters?

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[https://www3.weforum.org/docs/WEF\\_GFC\\_6\\_Sustainable\\_Infrastructure\\_2020.pdf](https://www3.weforum.org/docs/WEF_GFC_6_Sustainable_Infrastructure_2020.pdf)

*Following the 2019 Annual Meeting of the Global Future Councils, the group determined that a significant hurdle in growing investment and support for sustainable development projects was the lack of a universal definition of “sustainable infrastructure.” Utilizing the two main definitions at the time from IDB and UNECE, this report developed six infrastructure qualities that combined the efforts of the previous definitions while also expanding to key concepts such as technological design. This report discusses not only their created GFC-6 definition for sustainable infrastructure but also summarizes the ideas of the IDB-4 and UN-5 definitions. Delegates will therefore be able to use this resource to compare and contrast all three available definitions of sustainable infrastructure to determine if a globally accepted definition can be accepted.*

International Telecommunication Union. *Measuring digital development: Facts and figures 2021*. 2021. Retrieved 16 October 2022 from: [https://www.itu.int/en/ITU-](https://www.itu.int/en/ITU-D/Statistics/Documents/facts/FactsFigures2021.pdf)

[D/Statistics/Documents/facts/FactsFigures2021.pdf](https://www.itu.int/en/ITU-D/Statistics/Documents/facts/FactsFigures2021.pdf)

*Released in 2021, this report continues ITU’s annual snapshot of important indicators for information and telecommunication infrastructure. Summarized from numerous sources, the statistics in this report attempt to show metrics such as internet use, cellphone network subscriptions, and technological skill gains. ITU then stratifies these measures by unique characteristics such as age, gender, region, and socioeconomic status. As the most recent statistics on how different regions and population groups are utilizing digital infrastructure, delegates will be able to understand how their digital infrastructure level and where they can look to improve access.*

United Nations, Department of Economic and Social Affairs. *The Sustainable Development Goals Report 2022*. 2022. Retrieved 7 August 2022 from: <https://unstats.un.org/sdgs/report/2022/The-Sustainable-Development-Goals-Report-2022.pdf>

*The 2030 Agenda committed the UN system to conduct regular reviews of the progress made towards the SDGs. The most recent of these reports was released in 2022 and*

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<sup>125</sup> United Nations, General Assembly. *Review of the implementation of General Assembly resolution 72/305 on the strengthening of the Economic and Social Council (A/RES/75/290A)*. 2021; United Nations, Economic Commission for Europe. *Understanding the system of custodian agencies for Sustainable Development Indicators - Note by the Secretariat (ECE/CES/2018/39)*. 2018.

<sup>126</sup> Ibid.; United Nations Environment Programme. *International Good Practice Principles for Sustainable Infrastructure*. 2022.

*provides a global review of SDG 9's indicators, including the effects COVID-19 and global conflict has had on infrastructure. Through this report, delegates will be able to understand the current state of the progress towards achieving SDG 9 as well as any gaps in information not reported to this UNDESA review.*

United Nations Environment Programme. *International Good Practice Principles for Sustainable Infrastructure*. 2022. Retrieved 7 August 2022 from: [https://wedocs.unep.org/bitstream/handle/20.500.11822/39811/infrastructure\\_practices2.pdf?sequence=1&isAllowed=y](https://wedocs.unep.org/bitstream/handle/20.500.11822/39811/infrastructure_practices2.pdf?sequence=1&isAllowed=y)

*Serving as a UN-wide normative framework that policymakers can utilize to integrate sustainability and resiliency into infrastructure planning, these 10 principles provide a foundation for any Member State hoping to improve its infrastructure. Written by UNEP and endorsed by the UN Environment Management Group and the Global Environment Facility, these principles not only discuss the complex decisions needed across an infrastructure's life cycle but also heavily emphasizes the environmental impact that all infrastructure projects must consider. Delegates can use this document to understand how the UN recommends Member States develop sustainable infrastructure projects and implements those recommendations in real world scenarios.*

United Nations Office for Disaster Risk Reduction. *Principles for Resilient Infrastructure*. 2022. Retrieved 16 October 2022 from: <https://www.undrr.org/media/78694/download>

*Written by UNDRR to support the implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030 and the SDGs, this report consists of principles and guidelines meant to improve infrastructure resilience against natural disasters. The principles include social engagement, environmental integration, proactive protection, adaptive transformation, shared responsibility, and continuous learning. In the report, each principle is expanded upon with background information, definitions, key actions, and numerous national and international examples. From this report, delegates can get a strong understanding of what resilient infrastructure requires and what the UN has recently recommended to guide any Member State working towards resiliency*

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## 2. Promoting Access to Affordable, Reliable, Sustainable, and Modern Energy for All

### Introduction

The *2030 Agenda for Sustainable Development* (2030 Agenda) (2015) recognizes that access to energy for all is an important component of sustainable development.<sup>127</sup> Sustainable Development Goal (SDG) 7 (affordable and clean energy) aims to ensure access to affordable, reliable, sustainable, and modern energy for all to maintain economic stability and to achieve climate change targets.<sup>128</sup> Sustainable energy is the efficient collection and distribution of energy from sources which can meet the current global energy demand without disadvantaging future generations.<sup>129</sup> In addition, modern energy access in this context refers to consistent and affordable access to electricity, as well as clean cooking facilities, safe cooking and heating fuels, and energy access that empowers sustainable economic growth.<sup>130</sup> The United Nations (UN) Sustainable Energy for All (SEforALL), an international organization within the UN system dedicated to SDG 7, defines renewable energy as energy derived from natural sources that are replenished faster than they are consumed.<sup>131</sup> Common renewable energy sources include solar, wind, geothermal, hydropower, and marine sources.<sup>132</sup> As of 2018, the share of renewable energy sources, excluding biomass, in the global energy mix, which refers to the total energy consumption by each type of energy source, stood at 10.5% and is expected to increase to 16% in 2030.<sup>133</sup>

Achieving SDG 7 is vital to increasing the proportion of renewable energy that is a part of the total global energy mix.<sup>134</sup> This would substantially increase energy efficiency and make energy more affordable, promoting economic development in the process.<sup>135</sup> Progress on SDG target 7.1, ensuring “access to affordable, reliable and modern energy services”, varied over the last decade, as the annual rate of growth in electricity access decreased from 0.8% from 2010–2018 to 0.5% from 2018–2020.<sup>136</sup> Reliable energy access ensures the availability of constant and continuous energy, and reduces the scarcity of energy resources, particularly to those in the developing world.<sup>137</sup> In addition, a key component of SDG 7 is ensuring that energy is also affordable, mainly through the prioritization of energy efficient practices and the adoption of clean energy technologies and infrastructure.<sup>138</sup>

While access to electricity globally rose from 83% in 2010 to 91% in 2020, 733 million people remain without electricity access.<sup>139</sup> The number of people without access to clean cooking fuels, which emit low levels of pollutants when burned, has slowly declined from 3 billion in 2010 to 2.4 billion in 2020.<sup>140</sup> Progress is tightly linked to SDG targets 7.2 and 7.3, which focus on increasing renewable energy use globally and increasing energy efficiency respectively.<sup>141</sup> However, the impact of COVID-19 on energy

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<sup>127</sup> United Nations, General Assembly. *Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1)*. 2015. p. 2.

<sup>128</sup> Ibid. p. 19.

<sup>129</sup> Ibid. p. 2.

<sup>130</sup> International Energy Agency. *World Energy Outlook 2021*. 2021. p. 358.

<sup>131</sup> United Nations, Economic Commission for Europe. *Specifications for the application of the United Nations Framework Classification for Fossil Energy and Mineral Reserves and Resources 2009 to Renewable Energy Resources (ECE/ENERGY/2016/4)*. 2016. p. 4.

<sup>132</sup> Ibid. p. 4.

<sup>133</sup> United Nations, Department of Economic and Social Affairs. *SDG Tracker: Sustainable Development Goal 7. 2020*; United Nations, Department of Economic and Social Affairs. *Leveraging Energy Action for Advancing the Sustainable Development Goals*. 2021. p. 21.

<sup>134</sup> United Nations, Department of Economic and Social Affairs. *Leveraging Energy Action for Advancing the Sustainable Development Goals*. 2021. p. 201.

<sup>135</sup> Ibid. pp. 5-11.

<sup>136</sup> International Energy Agency et al. *Tracking SDG 7: The Energy Progress Report 2022*. 2022. pp. 2-13.

<sup>137</sup> International Energy Agency. *World Energy Outlook 2021*. 2021. p. 358.

<sup>138</sup> International Energy Forum. *Energy Infrastructure*. 2020.

<sup>139</sup> International Energy Agency et al. *Tracking SDG 7: The Energy Progress Report 2022*. 2022. pp. 2-13.

<sup>140</sup> Ibid. pp. 2-13.

<sup>141</sup> Ibid. pp. 2-13.

systems slowed down progress towards universal energy access, partially due to disruptions in global supply chains, suspensions in energy infrastructure development projects, and reductions in financing for SDGs.<sup>142</sup> Particularly, lack of financing for SDG 7 is a prevalent issue, as many countries continue to struggle from limited funding options for renewable energy projects.<sup>143</sup>

### ***International and Regional Framework***

Access to sustainable energy was first addressed during the United Nations Conference on Environment and Development (UNCED), also known as the Rio Earth Summit, in 1992.<sup>144</sup> At UNCED, Member States adopted the *Rio Declaration on Environment and Development* (1992), which considered environmental protection and the achievement of sustainable development an international responsibility.<sup>145</sup> *Agenda 21* (1992) was also adopted during UNCED, which acknowledged that a change in unsustainable global production and consumption was necessary.<sup>146</sup> *Agenda 21* provided an action plan with implementation principles to promote the shift to more environment-friendly and cost-effective energy sources, particularly in developing countries and rural areas, countries whose income is highly dependent on fossil fuel intensive production or consumption, and countries vulnerable to the adverse effects of climate change, most notably Small Island Developing States (SIDS).<sup>147</sup> In 2002, the World Summit on Sustainable Development adopted the *Johannesburg Plan of Implementation*, which linked access to affordable and sustainable energy to poverty eradication.<sup>148</sup>

In 2015, the General Assembly adopted the 2030 Agenda, which introduced SDG 7.<sup>149</sup> Later that year, the 21<sup>st</sup> Conference of the Parties (COP21) to the United Nations Framework Convention on Climate Change adopted the *Paris Agreement*.<sup>150</sup> As part of its commitment to reduce greenhouse gas emissions, the *Paris Agreement* promotes energy efficiency and the use of more renewable, environmentally friendly sources of energy, and emphasizes the needs of Least Developed Countries (LDCs) and SIDS, such as efficient access to financial resources, technology development, and education and capacity building.<sup>151</sup> During the same year, the *Addis Ababa Action Agenda of the Third International Conference on Financing for Development* (Addis Ababa Action Agenda) was adopted.<sup>152</sup> The Addis Ababa Action Agenda focuses on aligning financing with sustainable development objectives, with the ECOSOC Forum on Financing for Development follow-up mandated to review the agenda and other financing for development outcomes through intergovernmental processes.<sup>153</sup> The agenda promotes public and private investment in energy infrastructure and clean energy technologies to improve access to sustainable energy to developing countries, particularly LDCs and SIDS.<sup>154</sup>

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<sup>142</sup> International Energy Agency. *The impact of the COVID-19 crisis on clean energy progress*. 2020.

<sup>143</sup> United Nations Development Programme. *Accelerating SDG 7 Achievement: Policy Brief 3 - Financing SDG 7*. 2022.

<sup>144</sup> United Nations, General Assembly. *Report of the United Nations Conference on Environment and Development (A/CONF.151/26 (Vol. I))*. 1992.

<sup>145</sup> Ibid.

<sup>146</sup> United Nations Conference on Environment and Development. *Agenda 21*. 1992.

<sup>147</sup> Ibid, pp. 77-79.

<sup>148</sup> United Nations, World Summit on Sustainable Development. *Report of the World Summit on Sustainable Development (A/CONF.199/20)*. 2002.

<sup>149</sup> Ibid.

<sup>150</sup> Conference of the Parties to the United Nations Framework Convention on Climate Change. *Paris Agreement*. 2015.

<sup>151</sup> Ibid.

<sup>152</sup> United Nations, General Assembly. *Addis Ababa Action Agenda of the Third International Conference on Financing for Development (Addis Ababa Action Agenda) (A/RES/69/313)*. 2015.

<sup>153</sup> United Nations, Economic and Social Council. *Report of the Economic and Social Council forum on financing for development follow-up (E/FFDF/2018/3)*. 2018.

<sup>154</sup> United Nations, General Assembly. *Addis Ababa Action Agenda of the Third International Conference on Financing for Development (Addis Ababa Action Agenda) (A/RES/69/313)*. 2015.

## **Role of the International System**

The Economic and Social Council (ECOSOC) promotes the development of sustainable energy, and has reviewed progress towards SDG 7 in a multitude of outcome documents and resolutions.<sup>155</sup> For example, ECOSOC resolution 73/8 on “Strengthening regional cooperation for sustainable energy development in Asia and the Pacific” (2017) encourages LDCs to shift dependency from fossil fuels to more cost-efficient and renewable sources of energy, stressing the importance of regional cooperation with respect to improving energy infrastructure and security.<sup>156</sup> In addition, the High-level Political Forum on Sustainable Development (HLPF), overseen by ECOSOC, is critical to the review and follow-up on the 2030 Agenda and the SDGs.<sup>157</sup> In 2018, HLPF reviewed progress made on the implementation of SDG 7, and issued a Ministerial Declaration that outlined its commitment to international cooperation and encouraged multi-stakeholder partnerships to facilitate access to clean energy, research, and technology.<sup>158</sup> It also stressed the need for more collaborative financing to be able to achieve SDG 7 in the long-term.<sup>159</sup> Additionally, the declaration called upon governments and stakeholders to prioritize clean cooking solutions, and encouraged the use of decentralized renewable energy solutions, which are not part of the main grid of an energy system, to close the electricity access gap.<sup>160</sup>

The General Assembly also regularly addresses access to affordable, reliable, sustainable, and modern energy for all.<sup>161</sup> In 2012, General Assembly resolution 67/215 on the “Promotion of New and Renewable Sources of Energy” established the UN Decade of Sustainable Energy for All from 2014 to 2024 as part of the Secretary-General’s Sustainable Energy for All Initiative launched in 2011.<sup>162</sup> In 2014, General Assembly resolution 69/225 on “Promotion of New and Renewable Sources of Energy” stressed the importance of collective action and international cooperation in the implementation of SDG 7.<sup>163</sup>

In 2021, the High-level Dialogue on Energy (HLDE) was held under the auspices of the General Assembly.<sup>164</sup> HLDE resulted in the global roadmap for universal energy access and energy transition, highlighting targets, transformational actions, and investments towards achieving universal energy access and net-zero emissions.<sup>165</sup> In 2016, SEforALL was established as an international organization, with the Special Representative of the Secretary-General for Sustainable Energy for All tasked with streamlining the UN system’s efforts to accelerate the achievement of SDG 7.<sup>166</sup>

Five UN entities primarily are responsible for the achievement SDG 7: the International Energy Agency (IEA), the International Renewable Energy Agency (IRENA), the UN Statistics Division, the World Bank, and the World Health Organization, with each entity responsible for one SDG 7 target.<sup>167</sup> Together, they publish a yearly report, titled *Tracking SDG7: The Energy Progress*.<sup>168</sup> The 2022 report concludes that

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<sup>155</sup> United Nations, Economic and Social Council. *Progress towards the Sustainable Development Goals: Report of the Secretary-General (E/2022/55)*. 2022.

<sup>156</sup> United Nations, Economic and Social Commission for Asia and the Pacific. *Strengthening regional cooperation for sustainable energy development in Asia and the Pacific (E/ESCAP/RES/73/8)*. 2018.

<sup>157</sup> United Nations, General Assembly. *The Future We Want (A/RES/66/288)*. 2012.

<sup>158</sup> United Nations, Economic and Social Council. *Ministerial declaration of the 2018 high-level political forum on sustainable development (E/HLS/2018/1)*. 2018.

<sup>159</sup> United Nations, Department of Economic and Social Affairs. *2018 HLPF Review of SDG implementation: SDG 7*. 2018.

<sup>160</sup> United Nations, Economic and Social Council. *Ministerial declaration of the 2018 high-level political forum on sustainable development (E/HLS/2018/1)*. 2018.

<sup>161</sup> United Nations, General Assembly. *Promotion of New and Renewable Sources of Energy (A/RES/67/215)*. 2012.

<sup>162</sup> Ibid.

<sup>163</sup> United Nations, General Assembly. *United Nations Decade of Sustainable Energy for All: Report of the Secretary-General (A/70/422)*. 2015.

<sup>164</sup> United Nations, High-level Dialogue on Energy. *Leadership*. 2021.

<sup>165</sup> United Nations, High-level Dialogue on Energy. *Global Roadmap for Accelerated SDG7 Action in Support of the 2030 Agenda for Sustainable Development and the Paris Agreement on Climate Change*. 2021.

<sup>166</sup> Sustainable Energy for All. *Governance and Accountability*. n.d.

<sup>167</sup> International Energy Agency et al. *The Energy Progress Report*. 2022.

<sup>168</sup> International Energy Agency et al. *Tracking SDG 7: The Energy Progress Report 2022*. 2022.

despite recent gains, the world is not on track to achieve SDG 7 due to the lingering effects of the COVID-19 pandemic on access to affordable electricity.<sup>169</sup>

UN-Energy was established in 2004 as the main mechanism to streamline efforts and collaboration within the UN system in the field of energy on national, regional, and global levels.<sup>170</sup> UN-Energy is co-chaired by the UNDP Administrator and the Special Representative of the Secretary-General for Sustainable Energy for All, and includes multiple international organizations as members, including the five primary UN entities responsible for SDG 7.<sup>171</sup> As part of its *Plan of Action: Towards 2025* (2022), UN-Energy aims to scale up collective UN action to accelerate the achievement of SDG 7.<sup>172</sup> This includes leveraging relevant energy compacts to launch joint programs in areas such as electricity access and efficiency, access to clean cooking solutions, creating jobs in renewable energy, and redirecting fossil fuel subsidies towards clean energy.<sup>173</sup>

On the regional level, the European Union committed to accelerating clean energy innovation after the *Paris Agreement*, agreeing to transition their economies to ones that are low-carbon and energy efficient.<sup>174</sup> It has shifted policies and frameworks to introduce “green bonds”, promoting investment in renewable energy.<sup>175</sup> In addition, the African Union (AU) recently launched its *Green Recovery Action Plan 2021-2027* (2021), which focuses on transitioning to renewable energy and net-zero carbon emissions, climate finance, resilient agriculture, biodiversity, and green cities.<sup>176</sup> In collaboration with the African Development Bank and the World Bank, the African Resilient Investment Facility has been established to increase capacities for the energy transformation agenda.<sup>177</sup> The AU Commission also established the Programme for Infrastructure Development in Africa, which carries out programs for hydro, geothermal, and solar power.<sup>178</sup>

### ***Income and Regional Disparities in Achieving SDG 7***

Progress towards SDG 7 is unequal across country income-levels and among regions.<sup>179</sup> Although energy access in LDCs increased from 33% in 2010 to 55% in 2020, there are still 479 million people without access to energy.<sup>180</sup> Nevertheless, increasing the rates of access to electricity and clean cooking fuels amongst the most vulnerable populations and in LDCs is vital to further improving global energy access.<sup>181</sup>

In LDCs, average renewable energy consumption as a percentage of total final energy consumption decreased from 75.6% in 2010 to 70.8% in 2017.<sup>182</sup> This overall share is significantly higher than the global average, however, it is disproportionately comprised of traditional uses of biomass for cooking and heating, including wood, charcoal, dung, and others.<sup>183</sup> Globally, 2.4 billion people still rely on biomass use for cooking and heating, which, while categorized as renewable, produce indoor air pollution and result in an estimated 4.3 million premature deaths yearly, mostly in Southeast Asia, Latin America, and

<sup>169</sup> Ibid.

<sup>170</sup> United Nations, UN-Energy. *About*. 2022.

<sup>171</sup> United Nations, UN-Energy. *UN-Energy Members*. 2022.

<sup>172</sup> United Nations, UN-Energy. *UN-Energy Plan of Action: Towards 2025*. 2022.

<sup>173</sup> Ibid.

<sup>174</sup> European Commission. *Accelerating Clean Energy Innovation*. 2016.

<sup>175</sup> Ibid.

<sup>176</sup> African Union. *African Union Launches a Continental Green Recovery Action Plan*. 2021.

<sup>177</sup> African Union. *African Energy Ministers Call for Accelerated Energy Access on the Continent*. 2018.

<sup>178</sup> African Union. *Program Infrastructure for Development (PIDA)*. n.d.

<sup>179</sup> International Energy Agency et al. *Tracking SDG 7: The Energy Progress Report 2021*. 2021. p. 29.

<sup>180</sup> Ibid. p. 32.

<sup>181</sup> United Nations, Department of Economic and Social Affairs. *Theme Report on Energy Access: Towards the Achievement of SDG 7 And Net-Zero Emissions*. 2021.

<sup>182</sup> United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries, and the Small Island Developing States. *Advancing SDG 7 in Least Developed Countries*. 2019. p. 6.

<sup>183</sup> Ibid. p. 6.

Africa.<sup>184</sup> For example, the Sub-Saharan African region had the highest share of renewable energy sources as part of energy supply, yet biomass accounts for more than 85% of that use.<sup>185</sup> Lack of affordable and accessible alternatives, coupled with a lack of education and awareness of the benefits of cleaner cooking materials, has hindered the adoption of clean cooking energy practices in low-income regions.<sup>186</sup> Nonetheless, discounting biomass use, the Latin America and the Caribbean region accounts for the highest share of renewable energy consumption due to its extensive use of hydropower.<sup>187</sup>

Population growth also poses a regional challenge in implementing sustainable energy practices.<sup>188</sup> While the population of Sub-Saharan African is projected to increase from 1.02 billion people in 2017 to over 2.1 billion by 2050, the lack of diversity in power sources has restricted the ability of many low-income countries in the region to build a more secure and sustainable energy system to meet this growing demand.<sup>189</sup> Economic dependence on the production and export of fossil fuels serves as a further hindrance to the development and expansion of renewable energy resources across Africa, which currently relies on fossil fuels for over three-quarters of all electricity generated on the continent.<sup>190</sup> According to IEA, half of the total export value in Sub-Saharan Africa comes from fossil fuels, which hinders the transition to a low-carbon power supply system and cutting CO<sub>2</sub> emissions.<sup>191</sup>

However, over the last decade, new developments in technology and infrastructure, such as adopting mini-grids in certain high-energy regions, have increased expansion of renewable resource amongst LDCs.<sup>192</sup> Mini-grids are smaller, more central power chains, with a limited range for transmitting electricity.<sup>193</sup> They provide a cost-effective solution to extend electricity to households, mainly in remote and rural communities without access to the main power grid.<sup>194</sup> Furthermore, technological improvements in mini-grids and solar powered systems allow developers to better track and assess each community's energy needs, enabling them to better regulate electricity supply according to demand.<sup>195</sup> However, attracting public and private investments remains a challenge for mini-grid development worldwide.<sup>196</sup>

### **Financing for Development of SDG 7**

In 2019, IEA estimated that \$1.3 to \$1.4 trillion was needed annually until 2030 to meet the global financing requirement for SDG 7.<sup>197</sup> At the time of that estimate, there was already a global financing gap of \$800-\$900 billion per year, with developing countries receiving the least funding despite having the largest gaps in financing.<sup>198</sup> For example, more than \$190 billion is needed each year from 2026-2030 to achieve Africa's energy and climate goals.<sup>199</sup> In addition, only \$3 billion per year is invested in the energy

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<sup>184</sup> Elisha et al. *Opportunities for Achieving Universal Energy Access through the Energy Transition in the Least Developed Countries*. 2021. p. 82.

<sup>185</sup> International Energy Agency. *SDG7: Data and Projections*. 2022.

<sup>186</sup> Corfee-Morlot et al. *Carbon Limits Nigeria. Achieving Clean Energy Access in Sub-Saharan Africa*. 2019.

<sup>187</sup> International Energy Agency et al. *Tracking SDG 7: The Energy Progress Report 2022*. 2022.

<sup>188</sup> International Renewable Energy Agency. *Africa 2030: Roadmap for a Renewable Energy Future*. 2015.

<sup>189</sup> United Nations, Department of Economic and Social Affairs. *World Population Prospects: The 2017 Revision*. 2017. p. 12; International Renewable Energy Agency. *Africa 2030: Roadmap for a Renewable Energy Future*. 2015.

<sup>190</sup> International Energy Agency. *Africa Energy Outlook 2022*. 2022. pp. 31, 45.

<sup>191</sup> *Ibid.* p. 45.

<sup>192</sup> International Energy Agency. *World Energy Outlook 2020 – Analysis*. 2020.

<sup>193</sup> International Energy Agency. *World Energy Outlook 2017 – Analysis*. 2017.

<sup>194</sup> International Renewable Energy Agency. *Innovation landscape brief: Renewable mini-grids*. 2019.

<sup>195</sup> *Ibid.*

<sup>196</sup> *Ibid.*

<sup>197</sup> United Nations Development Programme. *Accelerating SDG 7 Achievement: Policy Brief 3 - Financing SDG 7*. 2021.

<sup>198</sup> *Ibid.* p. 5.

<sup>199</sup> International Energy Agency. *Africa Energy Outlook 2022*. 2022.

sector in LDCs as part of official development assistance, while low-income countries continue to suffer from rising public debt and higher debt-servicing costs.<sup>200</sup>

Large-scale domestic and external financial investments in energy infrastructure, clean energy, and storage technologies are needed to ensure that electricity and clean cooking is made available to all, including to the most vulnerable populations.<sup>201</sup> IRENA encourages developed economies to effectively manage their energy demand, as well as contribute to financing the funding gap for SDG 7.<sup>202</sup>

International financial cooperation, aid, and investments, coupled with domestic and private sector resources, can help low-income countries improve their energy production capacity, strengthen resilience against negative economic shocks, and properly facilitate the energy transition away from fossil fuels without intensifying energy poverty.<sup>203</sup> During the HLDE in 2019, governments and the private sector pledged more than \$400 billion in the form of Energy Compacts, with the aim of speeding up the global transition to renewable energy by developing new renewable energy facilities and creating millions of new jobs.<sup>204</sup>

Partnerships with the private sector can enable faster market transformation for energy efficient products and services.<sup>205</sup> According to UNDESA, \$52 billion is needed in private sector financing to deliver electricity for all by 2030.<sup>206</sup> Different policies, regulations, and incentive structures can be implemented to ensure market growth and to mobilize affordable financing to close this gap.<sup>207</sup> These include risk-mitigation measures, such as clear targets, loan guarantees, risk insurance, and public loans to encourage private investment.<sup>208</sup>

Green banks, which are banks developed specifically to invest in green energy assets, have proven to be valuable in providing necessary funding for green energy projects; yet, two-thirds of these banks are located only in high-income countries.<sup>209</sup> Challenges to the development of green banks in low-income countries include access to finance, political and regulatory environment, and human capacity and availability of staff with the right skill sets.<sup>210</sup> Green bonds and climate transition bonds have also been proposed by the International Finance Cooperation as financing solutions for both developed nations and emerging market and developing communities.<sup>211</sup> Green bonds serve as a fixed-income tool where profits are specifically reserved for both new and ongoing environmental projects.<sup>212</sup>

In addition to existing challenges to achieving SDG 7, supply chain and economic disruptions due to the COVID-19 pandemic have hindered the achievement of key targets on a global scale, such as the development of new renewable power installations.<sup>213</sup> For example, supply chain disruptions increased prices of essential raw materials, such as those required for producing batteries and solar panels, which affected the availability of new renewable energy products such as electric vehicles.<sup>214</sup> Furthermore,

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<sup>200</sup> Elisha et al. *Opportunities for Achieving Universal Energy Access through the Energy Transition in the Least Developed Countries*. 2021. p. 33.

<sup>201</sup> United Nations, General Assembly. *Addis Ababa Action Agenda of the Third International Conference on Financing for Development (Addis Ababa Action Agenda) (A/RES/69/313)*. 2015. p. 25.

<sup>202</sup> International Renewable Energy Agency. *The Post-COVID-19 recovery: An agenda for resilience, development, and equality*. 2021. p. 41.

<sup>203</sup> International Renewable Energy Agency. *World Energy Transitions Outlook 2022*. 2022.

<sup>204</sup> United Nations, High-level Dialogue on Energy. *New commitments at UN energy summit a major stride towards affordable and clean energy, but much work ahead to halve energy access gap by 2025*. 2021.

<sup>205</sup> United Nations Development Programme. *Accelerating SDG 7 Achievement: Policy Briefs in Support of the First SDG 7 Review at the UN High-Level Political Forum 2018*. 2021.

<sup>206</sup> Ibid.

<sup>207</sup> Ibid.

<sup>208</sup> Ibid.

<sup>209</sup> International Energy Agency. *Financing Clean Energy Transitions in Emerging and Developing Economies*. 2021.

<sup>210</sup> Ibid.

<sup>211</sup> Ibid.

<sup>212</sup> Ibid.

<sup>213</sup> International Energy Agency. *Renewable Energy Market Update Outlook for 2020 and 2021*. 2020.

<sup>214</sup> International Energy Agency. *Securing Clean Energy Technology Supply Chains*. 2022.

existing energy access programs, which already faced slow growth due to the prevailing complexity in reaching remote and unserved populations, experienced further implementation delays due to economic disruptions.<sup>215</sup>

### **Conclusion**

Given the current global state of energy access, the world is not on track to meet SDG 7 by 2030.<sup>216</sup> Sustainable energy is an international responsibility, with access to energy essential to achieving broader sustainable development outcomes.<sup>217</sup> As a result, ensuring access to energy, environmental protection, and net-zero carbon emissions requires the involvement of all stakeholders on the regional and global level.<sup>218</sup> Member States' progress towards achieving SDG 7 is also influenced by income-level, regional placement, and dependency on fossil fuels, since these factors impact access to energy and vulnerability to climate change.<sup>219</sup> Country and region-specific energy development strategies and action plans can help achieve SDG 7.<sup>220</sup> Mobilizing sufficient financing for development is also essential in shifting dependency from fossil fuels to renewable energy.<sup>221</sup>

### **Further Research**

Starting their research, delegates should ask themselves the following questions: How can ECOSOC coordinate efforts to ensure universal access to energy, while meeting the different needs and capacities of both developed and developing countries? How can Member States support expanding access to clean and renewable sources of energy in developing countries? How can equitable access to energy across income-levels and regions be achieved? What are the major financing gaps faced in achieving SDG 7, and what are innovative ways to close those gaps? What are examples of financing partnerships across the world that can be established to achieve SDG 7?

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*This report is prepared annually by the five custodians of SDG 7. The most recent report contains vital information on the progress made towards achieving SDG 7. The report further outlines the most feasible policy recommendations and assesses the impact of COVID-19 on progress made. Delegates should use this document as a base for understanding the current state of the world regarding SDG 7 and should further use the document to develop their proposals on actions which need to be taken to ensure that 2030 targets are achieved.*

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*This 2020 report outlines IRENA's agenda on recovery after COVID-19. The report highlights the energy sector as pivotal to maintaining, rebuilding, and growing the global economy. It explains the effects of the COVID-19 global response on the expansion of*

<sup>215</sup> World Bank. *COVID-19 Slows Progress Toward Universal Energy Access*. 2022.

<sup>216</sup> International Energy Agency et al. *Tracking SDG 7: The Energy Progress Report 2022*. 2022.

<sup>217</sup> United Nations, General Assembly. *Report of the United Nations Conference on Environment and Development (A/CONF.151/26 (Vol. I))*. 1992.

<sup>218</sup> United Nations, Department of Economic and Social Affairs. *2018 HLPF Review of SDG implementation: SDG 7 - Ensure access to affordable, reliable, sustainable and modern energy for all*. 2018. pp. 7-10.

<sup>219</sup> International Energy Agency et al. *Tracking SDG 7: The Energy Progress Report 2022*. 2022.

<sup>220</sup> World Bank. *Energy – Overview: Strategy*. 2022.

<sup>221</sup> United Nations Development Programme. *Accelerating SDG 7 Achievement: Policy Brief 3 - Financing SDG 7*. 2021. p. 4.

*renewable energy, noting the many challenges faced throughout 2020. It expounds on the resilience of renewable energy, and provides key contextual details on recovery plans, the energy transition, and the approach needed to increase access to energy. Delegates should use this document as a guide to develop realistic proposals on navigating the challenges brought by COVID, pertaining to the energy industry.*

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*This source provides the most recent HLPF review on SDG 7, including detailed analysis of the relationship between SDG 7 and the rest of the 2030 Agenda, as well as policy solutions that delegates might consider. It discusses the various targets and indicators of the goal, how the goal might be achieved, and methods for financing. Moreover, it contains a section dedicated to each region, discussing case studies on implementation. It also includes progress made on SDG 7 by sector, identifying sectors where more global effort is needed, such as heating and transportation.*

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*The Addis Ababa Action Agenda is the key UN document on financing for development and supports the implementation of the 2030 Sustainable Development Agenda. This source will be extremely useful for delegates, particularly when addressing the issue of leveraging financing for access to affordable, reliable, sustainable, and modern energy. The agenda includes a chapter on energy, highlighting the role of public and private investment in promoting renewable energy worldwide. For delegates, this resolution is also useful as it provides clear guidance on how ECOSOC is embedded into the follow-up process to the agenda.*

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*The UN High-Level Dialogue on Energy is one of the most recent summit-level meetings on energy, bringing together 130 global leaders. This resource is the main outcome document of the dialogue and serves as the first-ever roadmap for clean energy for all by 2030. It provides details on action items to promote the execution of energy-related goals and targets of the 2030 Agenda. This document further highlights major milestones towards achieving sustainable, renewable, and modern energy for all, and includes recommended partnerships to implement the global roadmap. This source will be very helpful to delegates as it will allow them to gain an understanding of the current global landscape on energy development.*

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*This press release is important for delegates since it provides a concise overview of the commitments made at the HLDE and the progress towards SDG 7. It also provides a breakdown of necessary actions to achieve SDG 7, as well as milestones in 2025 and 2030 to benchmark progress towards achieving SDG 7 and broader 2030 Sustainable Agenda and Paris Agreement targets. This press release includes a list of energy compacts submitted during the dialogue, which are sustainable energy commitments made by governments to be matched financially or in-kind by donors. Delegates may*



consider reviewing this document to gain insight on the current work being done on this topic globally.

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