



United Nations Development Programme Background Guide 2024

Written by Lauren Kiser and Lilia Stefanía Aguilar Medina





NATIONAL MODEL UNITED NATIONS

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Dear Delegates,

Welcome to the 2024 National Model United Nations Galápagos Conference (NMUN•Galápagos)! We are pleased to introduce you to our committee, United Nations Development Programme (UNDP). This year's staff are: Director Lauren Kiser and Assistant Director Lilia Stefanía Aguilar Medina. Lauren holds a double degree in International Relations and International Economics from Texas Christian University and a Master's degree in International Economic Policy with a concentration in Corporate Social Responsibility and Sustainability from the Josef Korbel School of International Studies. She has served on NMUN volunteer staff for the New York conference since 2016, most recently as Secretary-General in 2023. Lauren works in renewable energy developing wind and solar projects from greenfield to construction. Lilia graduated with a double degree in Law and International Relations from Universidad San Francisco de Quito. She is currently working as a judicial aide for a judge in the National Court of Justice in Ecuador.

The topics under discussion for UNDP are:

1. Energy Transition and Electrification
2. Water Security

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) on 1 November 2024 in accordance with the guidelines in the [Position Paper Guide](#) and the [NMUN•Galápagos 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 the committee or the Conference itself, please contact Lauren Kiser at dsg.galapagos@nmun.org.

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

Sincerely,

Lauren Kiser, Director
Lilia Stefanía Aguilar Medina, Assistant Director

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Committee Overview

Introduction

The United Nations Development Programme (UNDP) draws its purpose from Article 55 of the *Charter of the United Nations* (1945), which outlines that the organization should promote “higher standards of living, full employment, and conditions of economic and social progress and development.”¹ UNDP is the leading United Nations agency on sustainable development and assists Member States with achieving the Sustainable Development Goals (SDGs) and implementing the *2030 Agenda for Sustainable Development* (2030 Agenda) (2015).²

NMUN simulates the **Executive Board** in terms of composition and size; however, delegates are not limited to the strict mandate of the Executive Board. For the purposes of NMUN, the committee can make programmatic and policy decisions on issues within the mandate of UNDP in line with the overall function of the organization.

Mandate, Functions, and Powers

As the lead United Nations agency on international development, UNDP’s core mandate is to “end poverty, build democratic governance, rule of law, and inclusive institutions.”³ As articulated in its *Strategic Plan 2022-2025* (2021), UNDP now structures its work through a “3 x 6 x 3” framework, comprised of three areas of focus, six signature solutions it can provide to partners, and three enablers to allow these solutions to be effective.⁴ The areas of focus are structural transformation, leaving no one behind, and resilience.⁵ Its signature solutions are poverty and inequality, governance, resilience, environment, energy, and gender equality.⁶ These are predicated on three enablers, which are development financing, strategic innovation, and digitalization.⁷

While the following list is not exhaustive, UNDP’s mandate can be summarized as:

- **UNDP will generally:** support country-led efforts to achieve the SDGs with its projects and programs; work with governments to identify funding, investment, and partnership opportunities for programs focused on development; support Member States to develop their governance structures, institutional capacities, and legislative approaches; provide data and analysis to Member States; develop and foster partnerships between local, national, and international actors; make recommendations to and coordinate with Member States, regional bodies, and other international actors on the achievement of development goals.⁸
- **UNDP will not generally:** direct Member States, non-governmental organizations, other United Nations agencies, and stakeholders to carry out specific development activities or actions; create new development frameworks or policy that doesn’t align with those adopted by the General Assembly and Economic and Social Council.⁹

¹ United Nations Development Programme. *About us*. 2023; United Nations Conference on International Organization. *Charter of the United Nations*. 1945. art. 55.

² United Nations Development Programme. *The SDGs in Action*. 2023; United Nations Development Programme. *About Us*. 2023.

³ United Nations Development Programme. *About Us*. 2023.

⁴ United Nations Development Programme. *United Nations Development Programme Annual Report 2022*. 2023.

⁵ *Ibid.* p. 7.

⁶ *Ibid.* p. 7.

⁷ *Ibid.* p. 7.

⁸ *Ibid.*; Executive Board of the United Nations Development Programme, the United Nations Population Fund and the United Nations Office for Project Services. *UNDP Strategic Plan, 2022-2025 (DP/2021/28)*. 2021.

⁹ *Ibid.*

Governance, Funding, and Structure

UNDP reports annually to the Economic and Social Council (ECOSOC).¹⁰ Its leadership consists of an Administrator and an Executive Board.¹¹ The Administrator leads a team of five Regional Bureaus and provides support to other Bureaus, such as the Bureau for External Relations and Advocacy and the Crisis Bureau, to carry out UNDP's programs.¹²

The Executive Board oversees all of UNDP's projects, approves budgets, and ensures that projects adapt to changing situations and the unique needs of each Member State.¹³ The Executive Board consists of 36 rotating Member States from five geographic groups: eight from the group of African states, seven from the group of Asian and Pacific states, four from the group of Eastern European states, five from the group of Latin America and the Caribbean states, and 12 from the group of Western European and other States.¹⁴ Generally, Member States of the Executive Board are elected by ECOSOC each year for three-year terms.¹⁵ Only the group of Western European and other States decides on its rotation internally.¹⁶ The Executive Board holds three sessions each year: one annual session and two regular sessions, typically held in New York City.¹⁷

UNDP's work is carried out by its offices in different Member States, which are focused on helping governments develop policies, institutional abilities, leadership skills, and resilience to achieve poverty eradication and reduce inequalities.¹⁸ UNDP also administers and utilizes the United Nations Volunteers program and the United Nations Capital Development Fund.¹⁹ UNDP also works with prominent individuals as Goodwill Ambassadors and Advocates to raise awareness on important global development issues.²⁰

To achieve its mandate, UNDP relies entirely on voluntary contributions from Member States, multilateral organizations, the private sector, and other sources.²¹ In 2022, the total annual contributions to UNDP decreased by 7% to \$4.9 billion from \$5.3 billion the year before.²² The top contributors in 2022 were multilateral organizations and Member State governments.²³

¹⁰ United Nations Development Programme. *Information Note About The Executive Board Of UNDP, UNFPA And UNOPS*. 2023.

¹¹ Ibid.

¹² United Nations Development Programme. *Leadership*. 2023; United Nations Development Programme. *2023 Organizational Chart*. 2023.

¹³ United Nations Development Programme. *Information Note About The Executive Board Of UNDP, UNFPA And UNOPS*. 2023; United Nations Development Programme. *Executive Board*. 2023.

¹⁴ United Nations Development Programme. *Executive Board*. 2023; United Nations Development Programme. *Members of the Executive Board*. 2023.

¹⁵ United Nations Development Programme. *Executive Board*. 2023.

¹⁶ Ibid.

¹⁷ United Nations Development Programme. *Reports on Sessions*. 2023.

¹⁸ United Nations Development Programme. *About Us*. 2023.

¹⁹ New Zealand Ministry of Foreign Affairs and Trade. *United Nations Handbook 2023-2024*. 2023.

²⁰ United Nations Development Programme. *Goodwill Ambassadors and Advocates*. 2023.

²¹ United Nations Development Programme. *Funding*. 2023.

²² United Nations Development Programme. *Funding Compendium 2022*. 2023.

²³ Ibid.

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New Zealand Ministry of Foreign Affairs and Trade. *United Nations Handbook 2023-2024*. 2023. Retrieved 20 October 2023 from: <https://www.mfat.govt.nz/assets/Peace-Rights-and-Security/Our-work-with-the-UN/UN-Handbook-2023-24.pdf>

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United Nations, General Assembly. *Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1)*. 2015. Retrieved 20 October 2023 from: <http://undocs.org/en/A/RES/70/1>

1. Energy Transition and Electrification

Introduction

Underlined in Sustainable Development Goal (SDG) 7, by 2030 Member States need to substantially increase the share of renewable energy in the energy mix and ensure universal access to modern energy services.²⁴ Renewable energy is derived from sources that are replenished faster than they are consumed; common sources of renewable energies include wind, solar, geothermal, hydropower, bioenergy, and ocean energy.²⁵ To meet decarbonization goals, the energy transition, a process away from fossil fuel derived energy, to net-zero energy sources and technologies, requires global support and an estimated US \$35-40 billion in annual investment.²⁶ Simultaneously, over the last two decades major strides in electricity access have been made; 90% of the world's population has access to electricity, up from 73% in 1998.²⁷ However, over 733 million people still do not have access to electricity and all while the energy transition to renewable sources of energy has begun to stall.²⁸

The energy transition is further complicated by electrification, which is the process by which technologies that use fossil fuels, for example vehicle engines, or gas heating systems, are transferred to electrically-powered technologies.²⁹ While this will significantly reduce the global reliance on fossil-fuel and carbon-intensive technologies, it puts a further strain on the electricity sector to not only transition existing infrastructure to net-zero sources of energy, but add additional renewable energies to meet rising demand of electrification and meet universal access to electricity.³⁰ In 2023, renewable sources of energy accounted for 30.2% of the global energy mix and in order to achieve net-zero emissions by 2050, annual energy use must increase on average 15% each year from now to 2050, twice as much as its annual increase over the past five years.³¹

In 2022, significant policies such as the REPowerEU in the European Union, the Inflation Reduction Act (IRA) in the United States, and China's 14th Five-Year Plan for Renewable Energy, were enacted with the goal to accelerate the renewable energy transition.³² However, under current policies, the International Energy Agency (IEA) estimates that 660 million people will remain without access to electricity by 2030.³³ Progress towards net-zero emissions is unbalanced with the most significant gains made in sectors where clean technology is already available and costs are decreasing, such as in electricity generation and passenger vehicle technology.³⁴ To achieve broader decarbonization, significant innovation and investment in new technologies will be required.³⁵ Additionally, there are regional inequities in the energy transition; an estimated 85% of people without access to electricity will reside in Sub-Saharan Africa, while many developing countries in Asia are nearly on track to achieve universal access.³⁶

²⁴ United Nations, Department of Economic and Social Affairs. *Goals: 7 Ensure access to affordable, reliable, sustainable and modern energy for all*. N.d.

²⁵ United Nations. *What is renewable energy?*. N.d.

²⁶ United Nations Development Programme. *Our work areas: energy transition*. 2024; United Nations Development Programme. *Energy Access, Access to Electricity*. 2024.

²⁷ United Nations Development Programme. *Energy Access, Access to Electricity*. 2024; World Economic Forum. *Fostering Effective Energy Transition 2023*. 2023.

²⁸ Ibid.

²⁹ International Energy Agency. *Electrification*. 2023.

³⁰ Ibid..

³¹ International Energy Agency. *Renewables*. 2023.

³² Ibid.

³³ International Energy Agency. *Access to electricity*. 2023.

³⁴ Ibid..

³⁵ International Energy Agency. *Access to electricity*. 2023; International Energy Agency. *Renewables*. 2023.

³⁶ International Energy Agency. *Access to electricity*. 2023.

International and Regional Framework

Beginning in 1990, the United Nations General Assembly began negotiations for a Framework Convention on Climate Change, resulting in the adoption of the United Nations Framework Convention on Climate Change (UNFCCC) in May 1992.³⁷ The UNFCCC entered into force on March 21, 1994 with the objective to limit anthropogenic (human caused) greenhouse gas (GHG) emissions and interference with the climate.³⁸ UNFCCC directs funds from industrialized countries to developing countries to help support action on climate change.³⁹ These funds, through a system of grants and loans directed by the Convention, are managed by the Global Environment Facility.⁴⁰

In 1995, the first Conference of the Parties (COP 1) to the Convention met and resulted in the Berlin Mandate, which called for a process to strengthen commitments under the Convention ultimately leading to the adoption of the Kyoto Protocol in 1997, which entered into force on February 16, 2005.⁴¹ The Kyoto Protocol commits industrialized countries and economies in transition, as identified in Annex B of the Protocol, to reduce GHG emissions.⁴² In 2002, the World Summit on Sustainable Development was held in Johannesburg, South Africa resulting in the adoption of the Johannesburg Plan of Implementation of the World Summit on Sustainable Development (the Plan), which linked climate change to other important global issues such as poverty eradication, human health, access to water, and land preservation.⁴³ The Plan urged states that had not already done so to adopt the Kyoto Protocol and to improve techniques for addressing the effects of climate change under the monitoring and assessment by the Intergovernmental Panel on Climate Change.⁴⁴

While the Kyoto Protocol laid an important framework and was the first international treaty to set legally binding targets to reduce GHG emissions, it did not result in significant GHG emissions and, by 2012, global emissions had risen 44% above 1997 levels, driven primarily by economic growth in developing nations.⁴⁵ The Protocol only bound developed and economies in transition, which did not take into account future economic growth and increases in GHG emissions in developing nations and by 2015 at COP 21, the Paris Agreement was adopted, which recognized the shared global problem of climate change.⁴⁶ The Paris Agreement requires all countries to reduce emissions through set targets known as nationally determined contributions.⁴⁷ Its ultimate goal is to reduce the global average temperature from rising more than 2 degrees Celsius above pre industrial levels.⁴⁸

³⁷ Conference of the Parties to the United Nations Framework Convention on Climate Change. *Interactive Timeline*. N.d.

³⁸ Conference of the Parties to the United Nations Framework Convention on Climate Change. *Interactive Timeline*. N.d; Conference of the Parties to the United Nations Framework Convention on Climate Change. *What is the United Nations Framework Convention on Climate Change?*. N.d.

³⁹ Conference of the Parties to the United Nations Framework Convention on Climate Change. *What is the United Nations Framework Convention on Climate Change?*. N.d.

⁴⁰ Ibid.

⁴¹ Conference of the Parties to the United Nations Framework Convention on Climate Change. *Interactive Timeline*. N.d.

⁴² Conference of the Parties to the United Nations Framework Convention on Climate Change. *What is the Kyoto Protocol?*. N.d.

⁴³ United Nations. *World Summit on Sustainable Development, 26 August-4 September 2002, Johannesburg*. N.d; United Nations. *Plan of Implementation of the World Summit on Sustainable Development (A/CONF.199/20)*. 2002. p. 27.

⁴⁴ United Nations. *Plan of Implementation of the World Summit on Sustainable Development (A/CONF.199/20)*. 2002. p. 28.

⁴⁵ United Nations. *Marking the Kyoto Protocol's 25th anniversary*. N.d; Bassetti. *Climate Foresight. Success or failure? The Kyoto Protocol's troubled legacy*. 2022.

⁴⁶ United Nations. *Marking the Kyoto Protocol's 25th anniversary*. N.d; Conference of the Parties to the United Nations Framework Convention on Climate Change. *The Paris Agreement*. N.d.

⁴⁷ Conference of the Parties to the United Nations Framework Convention on Climate Change. *The Paris Agreement*. N.d.

⁴⁸ Ibid.

Additionally in 2015, the United Nations General Assembly adopted the *2030 Agenda for Sustainable Development* (2030 Agenda) with its 17 Sustainable Development Goals (SDGs).⁴⁹ SDG 7 (affordable and clean energy), with five targets aiming to ensure universal access to energy and increase the share of renewable energy in the global energy mix.⁵⁰ Additionally, SDG 7 aims to double the rate of energy efficiency technologies, enhance international cooperation to increase research and technology investment in clean energy, energy efficiency, and upgrade the energy infrastructure.⁵¹

Adopted at COP 26, the Glasgow Climate Pact set to turn the 2020s into a decade of climate action and support and for the first time called upon Member States to phase-out coal power generation, reduce subsidies for fossil fuels, and to transition to low-emission energy systems through the deployment of clean energy generation and increases in energy efficiency to reduce global energy demand.⁵²

Role of the International System

The United Nations Development Programme (UNDP) is the lead agency on international development and coordinates the international community's efforts toward the achievement of the SDGs.⁵³ UNDP's work is guided by six core development areas, of which two are energy and the environment.⁵⁴ UNDP supports Member States' transition to net-zero energy emissions through its Sustainable Energy Hub, a network of partners that work with governments to build actionable policy solutions to enable the energy transition.⁵⁵ UNDP's work centers on "energy for development," an approach to ensure that no-one is left behind in the energy transition, taking a people-centered approach to net-zero.⁵⁶ People-centered approaches can ensure that those that benefit from the energy transition are people and local communities, through emphasizing affordability, reliability, and economic opportunities.⁵⁷ UNDP's Energy for Social Protection is a framework that strives to reduce negative impacts of the energy transition on people and families.⁵⁸ For example, the transition away from fossil fuel powered energy will impact workers in those sectors and a people-centered approach ensures that there are opportunities for re-training people impacted by the changing energy industry dynamics, or other social protections such as early retirement.⁵⁹ The energy for development approach is driven by three main goals: to transition the energy sector to net-zero while also reducing energy consumption and increasing energy efficiency; building strong partnerships to help Member States create new systems through information-sharing; and, ensuring that financing for the energy transition is directed to where it will drive the most meaningful change.⁶⁰ Moreover, UNDP's approach links climate, energy, and development to take a holistic strategy to the energy transition through helping Member States enact policies that drive investment in renewable energy, ensuring that the energy transition and electrification process incorporates gender equality and social protection through promoting "good energy governance."⁶¹ UNDP set up a global advisory group on energy governance and launched the Alliance for a Just Energy Transition for COP27.⁶²

⁴⁹ United Nations, General Assembly. *Transforming our World: the 2030 Agenda for Sustainable Development (A/RES/70/1)*. 2015.

⁵⁰ United Nations. *Sustainable Development Goals Ensure access to affordable, reliable, sustainable and modern energy*. N.d.

⁵¹ Ibid.

⁵² Conference of the Parties to the United Nations Framework Convention on Climate Change. *Glasgow Climate Pact (FCCC/CP/2021/12/Add.1)*. 2022. p. 4.

⁵³ United Nations Development Programme. *About us*. 2024.

⁵⁴ Ibid.

⁵⁵ Ibid.

⁵⁶ United Nations Development Programme, Sustainable Energy Hub. *Who are we?*. 2024.

⁵⁷ International Energy Agency. *Latin America Energy Outlook*. 2023. p. 22.

⁵⁸ United Nations Development Programme. *Energy for Social Protection*. 2024.

⁵⁹ Ibid.

⁶⁰ United Nations Development Programme, Sustainable Energy Hub. *Who are we?*. 2024.

⁶¹ Ibid.

⁶² Ibid.

Sustainable Energy for All (SEforALL), an international organization that works closely with the United Nations, governments, private sector, civil society, and more, mobilizes action on SDG7.⁶³ SEforALL was launched by former United Nations Secretary-General Ban Ki-moon in 2011 and is now an independent organization with close links to the United Nations, for example acting as Co-Chair of UN-Energy.⁶⁴ SEforALL works with countries on their energy transition ensuring they have data, technical knowledge, and finance.⁶⁵ For example, SEforALL supports countries' development of Energy Transition and Investment Plans, which are strategic roadmaps for countries to meet their energy, climate, and development goals.⁶⁶ These plans help countries to focus on the key areas needed to support their energy transition and unlock targeted investment in their energy sectors.⁶⁷

Created in 2004, UN-Energy coordinates the United Nations's inter-agency collaboration on energy-related issues, co-chaired by UNDP and SEforALL.⁶⁸ Through UN-Energy's members, 28 United Nations Entities, and two partner non-United Nations Entities, UN-Energy facilitates collaboration across the spectrum of needs for energy and sustainable development.⁶⁹ In 2021, the High-Level Dialogue on Energy resulted in the creation of the *Global Roadmap for Accelerated SDG 7 Action in Support of the 2030 Agenda for Sustainable Development and the Paris Agreement on Climate Change* (the Roadmap).⁷⁰ The Roadmap calls for strengthened efforts across the United Nations system, supported by UN-Energy, to meet SDG 7 and net-zero emissions. In order to meet this goal, the *UN-Energy Plan of Action Towards 2025*, adopted in 2021, identifies eight milestones for 2025, and seven for 2030, required to support the implementation of the Roadmap.⁷¹ For example, the 2030 milestones call for trebling global renewable energy capacity, phase-out coal-fired power plants by 2030 in the Member States of the Organisation for Economic Co-operation and Development (OECD) and globally by 2040, and tripling the annual investment in renewable energy and energy efficiency.⁷²

One of UN-Energy's non-United Nations entity partners is the International Renewable Energy Agency (IRENA), an intergovernmental organization (IGO) that supports countries in their transition to net-zero and sustainable energy.⁷³ Founded in 2009, IRENA analyzes and monitors policies on renewable energy in order to share and collect best practices and share information on impactful policies, technologies, and systems that drive adoption of renewable energy.⁷⁴ IRENA supports the capacity building of its members by knowledge-sharing, training, and education, and advice on financing for renewable energy, among other priorities.⁷⁵ On the other hand, the International Energy Agency (IEA), created in 1974 to initially respond to oil disruptions, takes an "all-fuels, all-technology approach," meaning that all sources of energy are considered in their energy policy recommendations and supports countries with data, policy recommendation, and solutions to enhance countries capability to provide secure and sustainable energy.⁷⁶ IEA has several programs dedicated to renewable energy and electrification, such as the Clean Energy Transitions Programme, that helps countries develop work projects for the transition to net-zero through data and analytical work, policy advice, and training.⁷⁷

⁶³ Sustainable Energy for All. *Who we are*. N.d.

⁶⁴ Ibid.

⁶⁵ Sustainable Energy for All. *Energy Transition and Investment Plans*. N.d.

⁶⁶ Ibid.

⁶⁷ Ibid.

⁶⁸ United Nations Development Programme. *What is UN-Energy?*. N.d; United Nations, UN-Energy. *UN-Energy Plan of Action Towards 2025*. 2022.

⁶⁹ United Nations, UN-Energy. *UN-Energy Plan of Action Towards 2025*. 2022.

⁷⁰ Ibid.

⁷¹ Ibid.

⁷² Ibid.

⁷³ International Renewable Energy Agency. *About IRENA*. 2022.

⁷⁴ Conference on the Establishment of the International Renewable Energy Agency. *Statute of the International Renewable Energy Agency (IRENA) (IRENA/FC/Statute)*. 2009.

⁷⁵ Ibid.

⁷⁶ International Energy Agency. *At the heart of global dialogue on energy*. 2024.

⁷⁷ International Energy Agency. *Clean Energy Transitions Programme*. N.d.

Energy Transition in Latin America and the Caribbean

The Latin America and the Caribbean (LAC) region currently has the least carbon-intensive energy sector in the world, with 60% of LAC's electricity generated by renewables.⁷⁸ In contrast, renewable energy generated sources in the European Union accounted for just 23% of energy consumption, driven largely by solar energy production.⁷⁹ Globally the share of renewable energy in the power generation mix is 30%, driven by large hydroelectric power supply in Brazil, Colombia, Canada, New Zealand, Sweden and Norway, accounting for nearly two-third of the energy production in those countries.⁸⁰ Oil and natural gas still play an important role in the region, especially in transportation.⁸¹ Total energy supply (TES) refers to all energy produced and imported in a country and represents all energy required for end-users in the country, for example not just energy for electricity.⁸² While renewable energy's share in the electricity energy mix in LAC has significantly increased, oil is still dominant as a fuel source in the region.⁸³ The proportion of oil in TES ranges across countries in LAC; for example, oil is low in Trinidad and Tobago at only 7% while it is significantly more in Guyana, over 95%.⁸⁴

In many countries in LAC oil is the predominant source for transportation even though biofuels are widely available.⁸⁵ According to IEA, demand for oil is gradually flattening though natural gas has increased to 23% of TES, particularly driven by its use for electricity generation.⁸⁶ Though many LAC countries have targets to reach net-zero emissions in their electricity sectors, oil is projected to remain a dominant fuel in the transportation sector, despite growth in both biofuels for transport and electric vehicles (EV).⁸⁷ Transport is the largest end-use of energy in LAC, accounting for 36% of energy consumption and road transportation accounts for 94% of transport energy demand.⁸⁸ UNDP's work in LAC tailors their support to each Member State's specific needs across three major pillars: driving investment, building sustainable and efficient cities, and supporting Small Island Developing States (SIDs) transition from fossil fuel reliance.⁸⁹

For example, from 2018-2022 UNDP implemented "MOVÉS," a sustainable mobility project in Uruguay, funded by the Global Environment Fund, a private equity fund focused on sustainable investments.⁹⁰ The goal of the project was to promote a low-carbon transportation network in Uruguay and resulted in 32 electric buses and an avoided 3,888 tonnes of CO₂, as well as an increase in end-users preferences for electric vehicles, among other notable achievements.⁹¹ In 2023, 90% of electricity supply in Uruguay was from renewable energy sources, although the country still relies heavily on fossil fuels in the transportation sector.⁹² Promotion of sustainable mobility in Uruguay continues to be of importance and in 2022 the Ministry of Industry, Energy and Mining announced a grant program for 100 electric vehicles in

⁷⁸ International Energy Agency. *Latin America Energy Outlook*. 2023. p. 22.

⁷⁹ European Environment Agency. *Share of energy consumption from renewable sources in Europe*. 2024.

⁸⁰ Enerdata. *Share of Renewables in Electricity Production*. 2024.

⁸¹ International Energy Agency. *Latin America Energy Outlook*. 2023. p. 38.

⁸² International Energy Agency. *North America*. N.d.

⁸³ International Energy Agency. *Latin America Energy Outlook*. 2023. p. 38.

⁸⁴ Ibid.

⁸⁵ Ibid. p. 3.

⁸⁶ Ibid. p. 38.

⁸⁷ Ibid. p. 17.

⁸⁸ Ibid. p. 40.

⁸⁹ United Nations Development Programme, Sustainable Energy Hub. *Where we work: Latin America and the Caribbean*. 2024.

⁹⁰ United Nations Development Programme, Sustainable Energy Hub. *Where we work: Latin America and the Caribbean*. 2024; MOVÉS Uruguay. *The project*. 2019; Global Environment Fund. *About us*. 2024.

⁹¹ MOVÉS Uruguay. *The project*. 2019.

⁹² Statista. *Distribution of electricity production before and after the energy transition in Uruguay in selected years from 2008 to 2023*. 2023.

high-use public transportation uses, such as taxis.⁹³ Uruguay has policies in place to incentivize the purchase of EVs, biofuels mixing standards, and green-hydrogen production.⁹⁴

Electrification within the region and globally presents unique opportunities for LAC.⁹⁵ The energy transition requires a significant supply of critical minerals for clean energy technologies.⁹⁶ For example, electrification of transportation will drive the demand for minerals such as copper, lithium, and rare earth metals, of which LAC has ample reserves.⁹⁷ LAC could expand its reach in mining of critical minerals needed for clean technology such as EV motors, wind turbines, and components for batteries and electrolyzers that are used to produce hydrogen.⁹⁸ Beyond mining, LAC has the potential to be a major actor in the low-carbon processing sector, manufacturing and exporting clean-tech to other countries, and supporting the global energy transition.⁹⁹ Mining and processing growth in the region will require governments to establish frameworks to grow sustainably.¹⁰⁰ Policies that drive investment to the sector will need to ensure private investment is “de-risked” and protected from nationalism, a government action of seizing private companies for their own control.¹⁰¹ Additionally, export-restrictions, and trade barriers disincentivize investment and slow the growth process.¹⁰² On the other hand, creating clear incentives for new flows of private investment and ensuring compliance with Environmental, Social and Governance (ESG) standards are significant opportunities for LAC to lead the sector.¹⁰³ Growth of minerals is vital to the clean energy transition but, without proper management, can pose risks to the environment, rising GHG emissions from extraction and processing, and social impacts such as human rights abuses and negatively impacting indigenous populations.¹⁰⁴ ESG standards not only help to protect the environment, but ensure that there is greater stakeholder investment in new projects, can help to improve equity and equality in the sector’s growth, and decrease human rights violations.¹⁰⁵

Many Member States in LAC connect sustainability to social action and are pursuing policies that ensure the energy transition takes a people-centered approach.¹⁰⁶ Affordability, increasing access to clean energy, and ensuring that the transition creates new jobs, especially for those working in the fossil fuel sectors, will be key to maintaining a people-centered approach.¹⁰⁷ Around 17 million people in LAC do not have access to electricity and those without are primarily concentrated in rural areas.¹⁰⁸ Poor communities are disproportionately without access to electricity, and even those that are connected do not have reliable electricity.¹⁰⁹ In order to reach universal access by 2030, electricity investment needs to reach USD \$1.6 billion annually, which accounts for 2% of the clean energy investments today.¹¹⁰ According to the IEA *Latin America Energy Outlook* report published in 2023, universal access to electricity in LAC is

⁹³ Government of Uruguay, Ministry of Industry, Energy and Mining. *MIEM will subsidize \$5,000 per unit for the purchase of taxis, remises and vehicles for electric transportation apps*. 2022.

⁹⁴ International Energy Agency. *Latin America Energy Outlook*. 2023. pp. 76-77, 130.

⁹⁵ International Energy Agency. *Latin America Energy Outlook*. 2023; World Economic Forum. *Fostering Effective Energy Transition 2023 Edition*. 2023. p. 24.

⁹⁶ World Economic Forum. *Fostering Effective Energy Transition 2023 Edition*. 2023. p. 24.

⁹⁷ International Energy Agency. *Latin America Energy Outlook*. 2023. p. 3.

⁹⁸ *Ibid.* p. 123.

⁹⁹ *Ibid.* pp. 127-128.

¹⁰⁰ *Ibid.* pp. 48-49.

¹⁰¹ Center for Strategic and International Studies. *Derisking Critical Mineral Supply Chains: The Role of Latin America*. 2024.

¹⁰² *Ibid.*

¹⁰³ International Energy Agency. *Latin America Energy Outlook*. 2023. pp. 48-49; Center for Strategic and International Studies. *Derisking Critical Mineral Supply Chains: The Role of Latin America*. 2024.

¹⁰⁴ United Nations Environment Programme. *Critical minerals*. 2024.

¹⁰⁵ International Energy Agency. *Latin America Energy Outlook*. 2023. pp. 123-125

¹⁰⁶ *Ibid.* p. 137.

¹⁰⁷ *Ibid.* p. 137.

¹⁰⁸ *Ibid.* p. 137.

¹⁰⁹ *Ibid.* p. 137.

¹¹⁰ *Ibid.* p. 138.

well within reach and attracting investment to LAC for electricity access is less of a problem than devising policies and projects that electrify remote communities.¹¹¹

Mini-grids: connecting communities

Mini-grids and off-grid solutions can be one of the areas where the needed USD \$1.6 billion annual investment in electricity access programs can have a major impact in the LAC region and globally.¹¹² Mini-grids are small electric grid systems, not connected to a country's main power-grid, that link households and other consumers to local power sources.¹¹³ Mini-grids are distinct from stand-alone systems, such as a singular home solar system which can be well-suited for homes that utilize a small amount of electricity and are more dispersed.¹¹⁴ Mini-grids can be an effective method to connect mid-density communities that are isolated from the main power-grid but can sustain their own reliable energy supply through local renewable resources.¹¹⁵

SEforAll partnered with BloombergNEF, a private research provider, to launch the *State of the Global Mini-Grids Market Report 2020*, which found three key challenges to driving investment in mini-grids.¹¹⁶ The report found a lack of investment in rural electrification because governments do not have policies in place to protect mini-grid owners.¹¹⁷ Investors in mini-grids are not protected from expanded investment in main grid expansions and could become stranded or nationalized by the state without adequate compensation.¹¹⁸ Additionally, mini-grids bring electricity to very rural communities that often have little income, exposing mini-grid owners to the possibility of customers' defaulting on their bills, which is a risk to revenue streams.¹¹⁹ Lastly, small project sizes tend to discourage private investment.¹²⁰ A portfolio approach, combining multiple small projects into one financing opportunity, was a successful approach in Tanzania in 2019, and could make financing more attractive for private investors in future projects.¹²¹

For example, The Africa Minigrids Program (AMP), led by UNDP, works to drive investment and bring down costs in renewable energy mini-grids, which help to connect hard-to-reach areas to electricity.¹²² Scaling mini-grids is challenging as there is a lack of private sector investment interest, and the majority of investment is through grants.¹²³ UNDP estimates that through AMP's 21 national projects, an estimated 265 million people can have access to electricity at the lowest-cost investment required.¹²⁴ However, these projects will still need to secure approximately USD \$65 billion.¹²⁵

According to the *State of Global Mini-Grids Market Report*, published by Bloomberg Finance in 2022, policy and regulatory frameworks will determine how and which countries are able to successfully deploy mini-grids as a solution to increasing access to electricity, especially in places where access to the main power-grid is difficult or costly.¹²⁶ Using a "least-cost approach" can be helpful for governments to

¹¹¹ International Energy Agency. *Latin America Energy Outlook*. 2023. p. 138.

¹¹² Ibid. p. 138.

¹¹³ Ibid. p. 264.

¹¹⁴ International Energy Agency. *Latin America Energy Outlook*. 2023. p. 265; United States Agency for International Development. *When are renewable energy mini-grids more cost-effective than other options?*. N.d.

¹¹⁵ United States Agency for International Development. *When are renewable energy mini-grids more cost-effective than other options?*. N.d.

¹¹⁶ Soni. SEforALL. *Three key challenges to scale up the mini-grid sector*. 2020.

¹¹⁷ Ibid.

¹¹⁸ Ibid.

¹¹⁹ Ibid.

¹²⁰ Ibid.

¹²¹ Ibid.

¹²² United Nations Development Programme. *Our flagship initiatives: The Africa Minigrids Program*. 2024.

¹²³ Ibid.

¹²⁴ United Nations Development Programme. *Africa Minigrids program*. 2022.

¹²⁵ Ibid.

¹²⁶ Bloomberg Finance. *State of the Global Mini-Grids Market Report*. 2020. p. 29.

determine which areas would be best for the main power-grid expansion and which would be best to deploy mini-grids.¹²⁷ In addition to this, when developing electrification targets and roadmaps, governments that explicitly detail their goals for mini-grids can be an important signal to stakeholders, outlining key priority areas for support and investment.¹²⁸ Clear rules to protect mini-grid investors from potential future grid-expansion and absorption into the main-power grid can encourage investment in mini-grid systems, protecting financial backers, consumers, and future utilities.¹²⁹ For example, Nigeria offers a three-pronged approach to protect mini-grids operators in case the main grid reaches these areas.¹³⁰ The regional distribution company can buy excess electricity from the mini-grid to distribute on its own systems, it can buy all the generated electricity and incorporate it into its system, or it can compensate the developer of the mini-grid for revenue loss due to the main-grid expansion.¹³¹

Conclusion

While major strides have been made in increasing the proportion of the world's population with access to electricity, significant work is required to achieve universal access by 2030.¹³² Without significant changes in global investment and policy, an estimated 660 million people will still be without access to electricity by 2030.¹³³ Efforts to increase energy access, electrification, and the energy transition require increased investment and innovative solutions.¹³⁴ The LAC region is poised to be a leader in the energy transition and electrification through its significant deployment of renewables in its electricity sector and its abundant resources are necessary critical minerals for clean-energy technology.¹³⁵ In order to ensure that the development of these sectors and increased deployment of renewables take a holistic approach, LAC countries have placed an emphasis on a people-centered approach.¹³⁶ People-centered approaches can ensure that those that benefit from the energy transition are the people and local communities, through emphasizing affordability, reliability, and economic opportunities.¹³⁷ Lastly, mini-grids can be an interesting and innovative way to reach areas that are far away from the main power-grid where expansion would be costly and difficult.¹³⁸ Mini-grids pose challenges to developers, such as uncertain revenue streams, and risky investments, which can stall growth.¹³⁹ Member States can drive investment in these solutions to electrify hard to reach areas by prioritizing policies that protect private investment and set clear objectives and goals for mini-grid deployment.¹⁴⁰

Further Research

As delegates conduct further research and consider how to address this topic, they should consider: what are other critical sectors that will need to be supported, such as mining of critical minerals, in order to successfully transition to net-zero emissions? What are the challenges posed to not only replacing the existing energy and electricity system but when taken into account the push for electrifying other areas, such as home-heating or transportation? How can Member States ensure that policies for driving renewable deployment and the replacement of fossil fuels protect communities and individuals that currently rely on the fossil fuel industry?

¹²⁷ Bloomberg Finance. *State of the Global Mini-Grids Market Report*. 2020. p. 29.

¹²⁸ Ibid.

¹²⁹ Ibid.

¹³⁰ Ibid.

¹³¹ Ibid.

¹³² United Nations Development Programme. *Energy Access, Access to Electricity*. 2024; World Economic Forum. *Fostering Effective Energy Transition 2023*. 2023.

¹³³ International Energy Agency. *Access to electricity*. 2023.

¹³⁴ International Energy Agency. *Access to electricity*. 2023; International Energy Agency. *Renewables*. 2023.

¹³⁵ International Energy Agency. *Latin America Energy Outlook*. 2023. p. 22.

¹³⁶ Ibid.

¹³⁷ Ibid.

¹³⁸ Soni. SEforALL. *Three key challenges to scale up the mini-grid sector*. 2020; Bloomberg Finance. *State of the Global Mini-Grids Market Report*. 2020.

¹³⁹ Bloomberg Finance. *State of the Global Mini-Grids Market Report*. 2020.

¹⁴⁰ Ibid.

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2. Water Security

“Freshwater on Earth is finite. Climate change is shifting our reliable access to water, upon which civilization depends, and pollution restricts its uses.”¹⁴¹

Introduction

There are approximately 2 billion people around the world who do not have access to safely managed drinking water services, and the estimated number of people who do not have access to even basic drinking water services is 771 million.¹⁴² Safely managed drinking water services are defined as taking drinking water from an upgraded on-site water source, accessible when required and uncontaminated by priority chemical contamination and feces.¹⁴³ Basic water services are defined as drinking water close to home from an improved source which protects against contamination as long as the total collection time, including waiting in line and commuting, is no more than thirty minutes.¹⁴⁴

Water security is the ability of a population to maintain an adequate and sustainable supply of safe water for human consumption.¹⁴⁵ Maintaining water security requires effective, and integrated development and management of the resource base.¹⁴⁶ The resource base refers to the natural assets available within a region, which include water resources, land, minerals, and biodiversity.¹⁴⁷ These resources are fundamental for any society, forming the backbone of its economy and environmental health for human survival and well-being.¹⁴⁸ Integrated and effective management of the resource base calls for the balance of the needs of agriculture, and other economic endeavors, with concern for the resource base itself.¹⁴⁹ Water security ensures protection against water-borne pollution and water-related disasters, and preserves ecosystems in a climate of peace and political stability.¹⁵⁰ It is achieved when a society has the capacity to have sufficient access to clean water for different productive and survival uses.¹⁵¹ Additionally, water security can reduce poverty and improve living standards.¹⁵²

Water is needed for practically all human activities and is essential for sustainable development, making potable or safe drinking water crucial to human life and development.¹⁵³ Reports state that between now and 2030, over 255 billion euros will be required annually for water infrastructure worldwide: at least 155 billion euros will be required to update and upgrade equipment to mitigate global warming and adapt to climate change, and another 100 billion euros will be required for adequate new water infrastructure.¹⁵⁴

Numerous issues are closely related to water, but none are possibly more urgent than climate change.¹⁵⁵ Nine out of ten climate events are linked to water, making it the central theme of this crisis.¹⁵⁶ Water is becoming more scarce, unpredictable, polluted, or all three as a result of extreme weather events.¹⁵⁷

¹⁴¹ United Nations Development Programme. *At the core of sustainable development water*. 2024.

¹⁴² Haruna Kashiwase and Tony Fujs. World Bank Blogs. *World Water Day: Two billion people still lack access to safely managed water*. 2023.

¹⁴³ World Health Organization. *Safely managed drinking water*. 2017. p. 12.

¹⁴⁴ Ibid.

¹⁴⁵ Ibid.

¹⁴⁶ Global Water Partnership. *Towards Water Security: A Framework for Action*. 2000. p. 1.

¹⁴⁷ International Institute for Sustainable Development. *The Sustainable Use of Natural Resources: The Governance Challenge*. 2021.

¹⁴⁸ Ibid.

¹⁴⁹ Ibid.

¹⁵⁰ United Nations, UN-Water. *What is Water Security? Infographic*. 2013. p. 1.

¹⁵¹ Globalwaters.org. *What is Water Security?*. 2022.

¹⁵² World Health Organization. *Safely managed drinking water*. 2017. p. 12.

¹⁵³ Ibid. p. 13.

¹⁵⁴ United Nations Chronicle. *The Quest for Water*. 2018.

¹⁵⁵ Ibid.

¹⁵⁶ Collins Onyebuchi Okafor, et al. *Safe Drinking Water: The Need and Challenges in Developing Countries*. 2022. p. 16.

¹⁵⁷ United Nations. UN Water. *Water and Climate Change*. ND.

Access to water and sanitation, biodiversity, and sustainable development are all at risk due to these effects on the water cycle.¹⁵⁸ A number of factors are important to ensure that potable water is available.¹⁵⁹ Making sure there is enough water is not the only problem; managing it well when there is too much of it in the wrong place at the wrong time or of dangerous quality is also a challenge.¹⁶⁰

International and Regional Framework

The *International Covenant on Economic, Social and Cultural Rights* was adopted by the United Nations General Assembly on 16 December 1966.¹⁶¹ Despite the fact that the *International Covenant on Economic, Social and Cultural Rights* does not explicitly mention the right to water, in November 2002, the Committee on Economic, Social and Cultural Rights (CESCR) adopted General Comment No. 15 on the right to water, emphasizing that water is a public good essential to life and health as well as a finite natural resource.¹⁶² Article 1.1 states that "The human right to water is indispensable for a human life in dignity".¹⁶³ CESCR concluded that, despite the term "water" not being mentioned specifically in the International Covenant, the right to water is obviously implied in the rights outlined in Covenant articles 11 and 12.¹⁶⁴ Comment No. 15 also defines the right to water as the right to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic uses.¹⁶⁵ Water is a public good essential for life and health, but it is a limited natural resource; the human right to water is essential for life with dignity and is a precondition for the realization of other human rights.¹⁶⁶ General Assembly resolution 64/292 on "The human right to water and sanitation", adopted in 2010, recognizes as a human right the right to safe and clean drinking water and sanitation as essential for the full enjoyment of life and realization of human rights.¹⁶⁷

The Protocol on Water and Health to the 1992 *Convention on the Protection and Use of Transboundary Watercourses and International Lakes* (Water Convention), has the goal to safeguard human health and welfare through improved water management, which includes safeguarding aquatic ecosystems, as well as by preventing, controlling, and minimizing illnesses associated with water.¹⁶⁸ The Protocol is the first global agreement of its kind that has been ratified with the express purpose of ensuring that everyone has access to a sufficient supply of clean drinking water, proper sanitation, and effective protection of water sources for drinking water.¹⁶⁹ By encouraging collaboration, the Water Convention is a distinctive piece of international law and an intergovernmental forum that works to guarantee the sustainable use of transboundary water resources.¹⁷⁰ It was first negotiated as a regional instrument, and in 2016 it became available for accession to all UN members.¹⁷¹

The *United Nations Convention on the Law of the Non-Navigational Uses of International Watercourses* was adopted by more than 100 Member States in 1997.¹⁷² It is a flexible and comprehensive global legal

¹⁵⁸ Ibid.

¹⁵⁹ Ibid.

¹⁶⁰ United Nations Chronicle. *Coming to Grips with Water Security in the Face of Climate Change*. 2018.

¹⁶¹ United Nations, Office of the High Commissioner for Human Rights. *General Comment No. 15. The Right to Water*. United Nations Committee on Economic, Social and Cultural Rights. 2002.

¹⁶² Ibid.

¹⁶³ Ibid.

¹⁶⁴ Ibid.

¹⁶⁵ Ibid.

¹⁶⁶ Ibid.

¹⁶⁷ United Nations, General Assembly. *The human right to water and sanitation (A/RES/64/292)*. 2010. p. 2.

¹⁶⁸ United Nations, Economic and Social Council. *Protocol on Water and Health to the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes*. 1999. p. 3.

¹⁶⁹ Ibid.

¹⁷⁰ United Nations. *The Convention on the Protection and Use of Transboundary Watercourses and International Lakes*. 2013. p. 5.

¹⁷¹ Ibid.

¹⁷² United Nations. *Convention on the Law of the Non-Navigational Uses of International Watercourses*. 1997.

framework that establishes fundamental guidelines and regulations for cooperation between states on the use, management, and protection of international watercourses.¹⁷³ The Convention is the only international treaty that regulates shared freshwater resources that sets fundamental norms and standards for cooperation between Member States sharing watercourses and its principles and guidelines can be tailored to the specific needs of international watercourses.¹⁷⁴

The United Nations General Assembly adopted the *2030 Agenda for Sustainable Development* (2030 Agenda) in 2015 which laid out 16 associated Sustainable Development Goals (SDG).¹⁷⁵ The 2030 Agenda includes a stand-alone water goal, SDG 6 (Clean water and sanitation for all), and is intended to ensure availability and sustainable management of water and sanitation for all.¹⁷⁶ SDG 6 was established to ensure availability and sustainable management of water and sanitation for all.¹⁷⁷ This goal aims, among others, to achieve equitable and universal access to safe and affordable drinking water for all, provide access to adequate and equitable sanitation and hygiene, focusing on the needs of women, girls and people in vulnerable situations, reduce pollution and minimize the discharge of hazardous substances, and significantly increase recycling and safe reuse on a global scale to improve water quality, among other targets.¹⁷⁸

Role of the International System

The United Nations' efforts on water and sanitation are coordinated by UN-Water.¹⁷⁹ The United Nations Educational, Scientific and Cultural Organization (UNESCO) Intergovernmental Hydrological Programme (IHP) is the only United Nations' intergovernmental cooperation program devoted to water-related education and capacity building, research, and management.¹⁸⁰ By fostering the growth of resilient and sustainable communities, it tackles water-related issues on a national, regional, and worldwide scale.¹⁸¹ In 2000, UNESCO established the World Water Assessment Programme (WWAP) in respect to a request made by the UN Commission on Sustainable Development (CSD) to create a periodic worldwide assessment of the state, use, and management of freshwater resources for the entire United Nations system.¹⁸² The United Nations Environmental Programme (UNEP) also plays a role in supporting the SDGs and water, and contributes to freshwater aspects as they relate to other areas of sustainable development, since many other SDGs are closely related to freshwater.¹⁸³

The United Nations Development Programme (UNDP) fights poverty and safeguards the environment by assisting Member States in building institutions, alliances, policies, and expertise to maintain their development.¹⁸⁴ With a focus on applied water management across all SDGs, UNDP is the major contributor to the Water Action Agenda and Water Action Decade (2018–2028).¹⁸⁵ Water access, water security, and water quality are the three pillars around which UNDP focuses its integrated water management efforts.¹⁸⁶ UNDP is able to combine established best practices with a dedication to

¹⁷³ Ibid. pp. 1-2.

¹⁷⁴ Ibid.

¹⁷⁵ United Nations, General Assembly. *Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1)*. 2015. p.1.

¹⁷⁶ Ibid. p.18.

¹⁷⁷ Ibid.

¹⁷⁸ Ibid. p. 18.

¹⁷⁹ United Nations, UN Water. *About UN-Water*. N.d.

¹⁸⁰ United Nations Educational, Scientific and Cultural Organization. *Intergovernmental Hydrological Programme*. 2024.

¹⁸¹ Ibid.

¹⁸² United Nations Educational, Scientific and Cultural Organization. *World Water Assessment Programme*. 2024.

¹⁸³ United Nations, United Nations Environment Programme. *Supporting the Sustainable Development Goals and water*. 2024.

¹⁸⁴ United Nations Development Programme. *What we do*. 2024.

¹⁸⁵ United Nations Development Programme. *Water at the core of sustainable development*. 2024.

¹⁸⁶ United Nations Development Programme. *Water at the core of sustainable development*. 2024.

innovation in sustainable and integrated water resource management.¹⁸⁷ In 2018, the General Assembly, adopted resolution 73/226 on “ Midterm comprehensive review of the implementation of the International Decade for Action, “Water for Sustainable Development”, 2018–2028” in order to successfully implement the goals and objectives of the Water Action Decade, including SDG 6 and other internationally agreed water-related goals and targets.¹⁸⁸ The General Assembly passed resolution 75/212, “United Nations Conference on the Midterm Comprehensive Review of the Implementation of the Objectives of the International Decade for Action, “Water for Sustainable Development”, 2018–2028” (2020) outlining the specifics of the United Nations Water Conference which was held in New York in March 2023.¹⁸⁹ The conference discussed the progress of the implementation of the Secretary-General’s Plan: Water Action Decade 2018–2028, shared best practices and discussed challenges related to the implementation of the plan.¹⁹⁰

The Global Water Partnership (GWP) is an international action network that offers knowledge and enhances capabilities to improve water management.¹⁹¹ Its networking strategy enhances the work of numerous other important development partners and offers a way for coordinated action, knowledge sharing and capacity building to enhance water management on all fronts—global, regional, national, and local.¹⁹² Another organization is the World Water Council, their goal is to bring together the world community to persuade policymakers that water resources are a political priority for the planet’s equitable and sustainable development.¹⁹³

In order to strengthen water operators’ capacity, improve their performance, and allow them to serve more people with better services, the Global Water Operators’ Partnerships Alliance (GWOPA) is an international network that was established to support water operators through Water Operators Partnerships (WOPs), which are peer support exchanges between two or more water operators on a not-for-profit basis.¹⁹⁴ Water and sanitation service providers collaborate through peer-support agreements called Water Operators’ Partnerships (WOPs).¹⁹⁵ WOPs function by utilizing the abilities, know-how, and goodwill of a powerful water utility to strengthen the capabilities and enhance the performance of a weaker water utility that requires support or direction.¹⁹⁶

A regional program in the Americas, the Inter-American Program for Sustainable Development (PIDS), aims to support member states in achieving SDG 6 (Clean Water and Sanitation) by aligning its goals with other SDGs, integrated water resources management, and recognizes the human right to water and sanitation.¹⁹⁷ The International High-Level Panel on Water Investments for Africa’s report, *Africa’s Rising Investment Tide*, suggests strategies for public-private financing collaborations to develop water projects.¹⁹⁸ Meanwhile, the *Asian Water Development Outlook* highlights the need for efficient water resource management in Asia and the Pacific, considering the region’s rapid economic and population

¹⁸⁷ United Nations Development Programme. *Water at the core of sustainable development*. 2024.

¹⁸⁸ United Nations. *Vision statement UN 2023 Water Conference*. 2021. p. 2.

¹⁸⁹ United Nations, General Assembly. *United Nations Conference on the Midterm Comprehensive Review of the Implementation of the Objectives of the International Decade for Action, “Water for Sustainable Development”, 2018–2028 (A/RES/75/212)*. 2020.

¹⁹⁰ Ibid.

¹⁹¹ Global Water Partnership. *What is the Network?* 2023.

¹⁹² Ibid.

¹⁹³ The World Water Council. *Who we are*. 2021.

¹⁹⁴ United Nations, UN Habitat. *Global Water Operators’ Partnerships Alliance*. 2024.

¹⁹⁵ Ibid.

¹⁹⁶ Ibid.

¹⁹⁷ Organization of American States. *Department of Sustainable Development. Inter-American Program for Sustainable Development (PIDS): 2017–2021 : Adopted at the second plenary session, held on June 14, 2016*. 2016. p. 21.

¹⁹⁸ African Union. *Global leaders say Africa can achieve water security by 2030, present three pathways supported by action plan*. 2023. p. 1.

growth.¹⁹⁹ This assessment informs investment decisions and promotes public-private partnerships for water security.²⁰⁰

Environmental impact of water resources

According to the United Nations World Water Development Report 2024, 3.5 billion people lack access to properly managed sanitation systems and 2.2 billion people lack access to clean drinking water globally.²⁰¹ Lack of water is the main effect of climate change, which will continue to exacerbate the global water cycle and increase the frequency and intensity of floods and droughts.²⁰² Access to water and sanitation, biodiversity, and sustainable development are all at risk due to these effects on the water cycle.²⁰³ Freshwater makes up just 0.5% of Earth's total water, and climate change is drastically reducing its availability.²⁰⁴ Terrestrial water storage, which includes soil moisture, snow, and ice, has decreased at a rate of 1 centimeter per year over the previous 20 years.²⁰⁵ This has significant implications for water security such as shrinking aquifers.²⁰⁶ Cooperation can ensure that transboundary water systems are well managed and conserve the resources.²⁰⁷ For example, the Governance of Groundwater Resources in Transboundary Aquifers (GGRETA) project has encouraged trans-boundary cooperation of the conservation of the Stampriet aquifer system, which is situated in a sizable arid region of Southern Africa that is shared by Botswana, Namibia, and South Africa.²⁰⁸ This was the first integrated water project that incorporated both transboundary surface water and groundwater integrated water projects in sub-Saharan Africa, contributing to SDG 6.5.2 which calls for operational agreements within a country for transboundary basins.²⁰⁹

Currently, severe water scarcity affects about half of the world's population for at least some portion of the year.²¹⁰ Some regions only face severe water scarcity during a few months of the year, while others experience it all year long.²¹¹ Water scarcity describes the extent to which freshwater resources are plentiful or lacking in volume, and water stress refers to the capacity, or lack thereof, to fulfill both human and ecological demands for freshwater.²¹² Water stress and scarcity remain a concern in many parts of the world, 2.4 billion people were living in water-stressed nations in 2020 despite a 9% increase in water use efficiency.²¹³ Climate change and conflict exacerbate water security and contribute to scarcity.²¹⁴ Climate change changes precipitation patterns, impacting the water cycle with each increase in the degree of global average temperatures, the likelihood of drought and flood, as well as the societal costs

¹⁹⁹ Asian Development Bank. *Asian Water Development Outlook (AWDO): Advancing Water Security across Asia and the Pacific*. 2024.

²⁰⁰ Ibid.

²⁰¹ Ibid.

²⁰² United Nations, UN Water. *Water and Climate Change*. 2024.

²⁰³ United Nations Educational, Scientific and Cultural Organization World Water Assessment Programme. *The United Nations World Water Development Report 2024: water for prosperity and peace*. 2024. p. 14.

²⁰⁴ World Meteorological Organization. *Wake up to the looming water crisis, report warns*. 2021.

²⁰⁵ Ibid.

²⁰⁶ Ibid.

²⁰⁷ Ibid.

²⁰⁸ United Nations Educational, Scientific and Cultural Organization. *The United Nations World Water Development Report 2024: water for prosperity and peace*. 2024. p. 95.

²⁰⁹ United Nations Educational, Scientific and Cultural Organization. *The United Nations World Water Development Report 2024: water for prosperity and peace*. 2024. p. 95; United Nations, UN-Water. *Indicator 6.5.2 "Proportion of transboundary basin area with an operational arrangement for water cooperation"*. N.d.

²¹⁰ United Nations Educational, Scientific and Cultural Organization. *The United Nations World Water Development Report 2024: water for prosperity and peace*. 2024. p. 12.

²¹¹ Ibid.

²¹² CEO water mandate. *What do "water scarcity", "water stress", and "water risk" actually mean?* 2017.

²¹³ United Nations, United Nations Statistics Division. *Clean water and sanitation*. 2024.

²¹⁴ Ibid.

associated with them, are expected to rise.²¹⁵ All regions will see an increase in the frequency of significant damages to freshwater ecosystems, as well as increasingly irreversible losses, due to climate-related water- and vector-borne diseases.²¹⁶ The least developed nations will experience some of the worst effects, which will especially hurt low-income households and small-scale food producers.²¹⁷

It is becoming more crucial to address how climate change affects the water cycle generally and floods and droughts in particular.²¹⁸ In regions where water resources are still plentiful today, climate change will exacerbate the situation in some already water-stressed areas and cause water stress in other regions, according to the sixth IPCC Assessment Report (IPCC, 2021) and UNWATER (2020).²¹⁹ Changes in seasonal water availability throughout the year are predicted to occur in several regions due to climate change.²²⁰ There is still a great deal of uncertainty in estimating climate change's impacts for smaller geographical areas, despite this fact evidence shows that there will be significant impacts on the global hydrological cycle.²²¹ Practically managing uncertainty in flood and drought risk planning, however, while also streamlining with other investments in climate adaptation and sustainable development, is a significant challenge.²²² According to a UNESCO report, "Best Practices on flood and drought risk management", access to clean water is essential for fostering peace and that growing water scarcity worldwide is escalating conflicts and contributing to instability.²²³ Collaboration on water resources has produced constructive and peaceful results, from community-led, participatory projects that have diffused local tensions to conflict resolution and peacebuilding in post-conflict environments and transboundary watersheds.²²⁴

Between 2000 and 2020, droughts and floods claimed the lives of over 166,000 people globally and caused damages totaling hundreds of millions of US dollars.²²⁵ Recent floods have demonstrated that, in the face of climate uncertainty, the current suite of instruments, including flood risk maps, contingency plans, and early warning systems, are insufficient to avert disasters.²²⁶ In order to lower the risk of a hydroclimatic disaster, a proactive, coordinated strategy is required.²²⁷ The Italian province of Potenza has introduced a territorial development plan that incorporates, at the provincial and local levels, environmental sustainability, territorial safety, and climate change mitigation.²²⁸ The objective of the #WeResilient strategy is to assist and facilitate the implementation of local resilience and sustainable development strategies and actions in 100 municipalities across the Province.²²⁹ The strategy consists of a long-term goal, a workable plan, a series of specific actions, and robust community and multi-stakeholder involvement.²³⁰ The province encouraged the establishment of local frameworks for risk

²¹⁵ United Nations, United Nations Statistics Division. *Clean water and sanitation*. 2024.

²¹⁶ United Nations Educational, Scientific and Cultural Organization. *The United Nations World Water Development Report 2024: water for prosperity and peace*. 2024. p. 14.

²¹⁷ Ibid.

²¹⁸ United Nations Educational, Scientific and Cultural Organization. *Best practices on flood and drought risk management*. 2023. p.14.

²¹⁹ Ibid.

²²⁰ Ibid.

²²¹ Ibid. p.15.

²²² Ibid.

²²³ Ibid.

²²⁴ United Nations Educational, Scientific and Cultural Organization World Water Assessment Programme. *The United Nations World Water Development Report 2024: water for prosperity and peace*. 2024. p. 16.

²²⁵ United Nations Educational, Scientific and Cultural Organization. *Best practices on flood and drought risk management*. 2023. p.3.

²²⁶ Ibid.

²²⁷ Ibid.

²²⁸ Ibid. p.26.

²²⁹ Ibid.

²³⁰ Ibid.

mitigation, hazard management, and enhanced local sustainable development using a multilevel, multiscale, holistic approach.²³¹

Water must be the primary focus of action plans created by climate policymakers.²³² By fostering resilience, preserving health, and preventing death, sustainable water management aids in society's adaptation to climate change.²³³ By preserving ecosystems and cutting carbon emissions from the transportation and treatment of water and sanitation, it also helps to mitigate climate change directly.²³⁴ In order to balance the water needs of communities, industry, agriculture, and ecosystems, politicians must work together across national boundaries.²³⁵ To help governments meet their water and climate goals, attract investment, and create jobs, innovative financing for water resource management will be necessary.²³⁶

Water and development

Billions of people still lack access to clean water, sanitary conditions, and good hygiene despite significant advancements.²³⁷ It will take a significant acceleration of current global rates of progress to reach universal coverage by 2030: six times for drinking water, five times for sanitation, and three times for hygiene.²³⁸ Water is central in achieving all 17 SDGs.²³⁹ Water connects all the 17 SDGs and offers opportunities for partnership for the Goals.²⁴⁰ For example, the availability of running water eliminates obstacles to both individual and societal economic progress.²⁴¹ Water smart agriculture approach focuses on the efficient collection, storage, and distribution of green water throughout the entire year, irrespective of the season and can preserve resources by producing more nutrition per drop.²⁴²

The relationship between water and development is intrinsically linked, as water is a fundamental resource for human survival, economic activities, and environmental sustainability.²⁴³ Water is crucial for economic development, supports thriving ecosystems, and is essential for sustaining life.²⁴⁴ Due to its numerous advantages, including better health outcomes, increased food security, and more time for work and education, access to clean water and proper sanitation is crucial for economic development.²⁴⁵ In addition, people can maintain their health and have access to resources that can help them improve their standard of living by having access to clean, safe water and proper sanitation.²⁴⁶

There are some initiatives that the international community is undertaking, first and foremost the 2030 agenda for sustainable development.²⁴⁷ Integrated water resources management is a process that

²³¹ United Nations Educational, Scientific and Cultural Organization. *Best practices on flood and drought risk management*. 2023. p.26.

²³² United Nations, UN Water. *Water and Climate Change*. N.d.

²³³ Ibid.

²³⁴ Ibid.

²³⁵ Ibid.

²³⁶ Ibid.

²³⁷ United Nations, Sustainable Development Goals. *Goal 6: Ensure access to water and sanitation for all*. 2023.

²³⁸ Ibid.

²³⁹ Stockholm International Water Institute. *Water is central in achieving all 17 SDGs. But how?* 2023.

²⁴⁰ Ibid.

²⁴¹ Ibid.

²⁴² Ibid.

²⁴³ United Nations, United Nations Department of Economic and Social Affairs. *Water and sustainable development*. N.d.

²⁴⁴ Ibid.

²⁴⁵ World Bank Group. *Water As the world's largest multilateral source of financing for water in developing countries, the World Bank is committed to Water for People and Planet*. N.d.

²⁴⁶ United Nations, University United Nations. *Report Examines Links Between Water and Economy to Advance Sustainable Development*. 2022.

²⁴⁷ Global Water Partnership. *GWP IN ACTION 2020 ANNUAL REPORT*. 2020. p. 14.

encourages coordinated development and management of water, land, and related resources to maximize economic and social welfare without compromising the sustainability of essential ecosystems.²⁴⁸ It is supported by the Global Water Partnership and endorsed by various international organizations.²⁴⁹ Water-related projects that seek to advance equitable access to water resources, improve water management techniques, and improve water infrastructure are supported financially and technically by the World Bank and other international financial institutions.²⁵⁰

UNEP works on a number of initiatives, such as the Global Environment Monitoring System for Water (GEMS/Water), which tracks global water quality and provides information to guide practices and policies that safeguard water resources and encourage sustainable use.²⁵¹ UNDP is the primary provider of Integrated Water Resources Management (IWRM) solutions in transboundary contexts and the main contributor to water governance policy within the United Nations system.²⁵² It has a long history of collaborating with governments, other United Nations sister agencies and partners to improve lives on the ground while also being a leading voice in discussions about water policy.²⁵³ UNDP tackles water challenges by focusing on governance, aiming to enhance the lives of the most vulnerable populations.²⁵⁴ This involves taking a comprehensive view of the institutional frameworks and systems that regulate water usage, advocating for fair and efficient use and protection of water resources.²⁵⁵

The 2030 Water Resources Group (2030 WRG), a multi-donor trust fund hosted by the World Bank, is transforming the water industry through collaboration.²⁵⁶ Communities in Bangladesh are dealing with a serious pollution crisis, as evidenced by this.²⁵⁷ In addition to pollution accounting for 28% of deaths, many rivers during the dry season, where there is no aquatic life.²⁵⁸ The country's funding deficit for managing water pollution is too large to be filled solely by public funds; it is projected to reach \$6.6 billion by 2040.²⁵⁹ In order to help address Bangladesh's pressing water pollution problem, 2030 WRG is bringing together public and private stakeholders to expedite investments, including \$450 million in public financing and \$100 million in private capital, this as part of the financing support.²⁶⁰

Conclusion

The relationship between water and development is deeply intertwined, with water being a fundamental resource for human survival, economic activities, and environmental sustainability.²⁶¹ Access to clean and safe water is crucial for public health, food security, energy production, and overall socio-economic development.²⁶² The international community has recognized this interdependence and has implemented

²⁴⁸ Global Water Partnership. *GWP IN ACTION 2020 ANNUAL REPORT*. 2020. p. 14.

²⁴⁹ Ibid..

²⁵⁰ The World Bank. International Bank for Reconstruction and Development. *Funding A Water Secure Future*. 2024. p. 32.

²⁵¹ United Nations. UN Environment Programme. *Measuring Progress: Water-related ecosystems and the SDGs*. 2023.

²⁵² United Nations, United Nations Development Programme. *Water governance*. 2024.

²⁵³ Ibid.

²⁵⁴ Ibid.

²⁵⁵ Ibid.

²⁵⁶ World Bank. *Why water security is our most urgent challenge today*. 2023.

²⁵⁷ Ibid.

²⁵⁸ Ibid.

²⁵⁹ Ibid.

²⁶⁰ Ibid.

²⁶¹ United Nations Educational, Scientific and Cultural Organization, International Centre for Water Security and Sustainable Management. *Water security and the sustainable development goals*. 2019. p. 24.

²⁶² Ibid.

various initiatives to address water-related challenges and promote sustainable development.²⁶³ International frameworks and agreements, such as the United Nations Sustainable Development Goals (SDGs), particularly SDG 6, which emphasizes the importance of water for sustainable development.²⁶⁴ Initiatives like Integrated Water Resources Management (IWRM) support the equitable and sustainable use of water resources.²⁶⁵ Regional collaborations and global financial support also play pivotal roles in enhancing water infrastructure and management practices.²⁶⁶

Further Research

As delegates conduct further research and consider how to address this topic, they should consider: What are the barriers to water security and development? What other initiatives for sustainable development need to be present to increase water security? Where can the United Nations system improve on fulfilling the obligations and responsibilities of water security?

²⁶³ United Nations Educational, Scientific and Cultural Organization, International Centre for Water Security and Sustainable Management. *Water security and the sustainable development goals*. 2019. p. 24.

²⁶⁴ Ibid.

²⁶⁵ Integrated Water Resources Management. *IWRM Explained*. 2024.

²⁶⁶ World Economic Forum. *How can we ensure water resilience in a climate-altered world?* 2024.

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https://sdgs.un.org/sites/default/files/2021-11/Vision_Statement_UN2023_Water_Conference.pdf

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<https://sdgs.un.org/goals/goal6>

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