NMUN•NY

New York City, NY, USA
28 March - 1 April (Conf. A) / 5-9 April (Conf. B)

United Nations Economic Commission for Europe
Background Guide 2021

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Nader J. Mehrdadi and Jacob Sarasin, Assistant Directors

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Dear Delegates,

Welcome to the 2021 National Model United Nations New York Conference (NMUN•NY)! We are pleased to introduce you to our committee, the United Nations Economic Commission for Europe (UNECE). This year's staff is: Directors Kelsea Gillespie (Conference A) and Allison Baker (Conference B), and Assistant Directors Nader Mehrdadi (Conference A) and Jacob Sarasin (Conference B). Kelsea holds a B.A. in English from Concordia University of Edmonton and is pursuing a joint JD/MA at the University of Ottawa and Carleton University with an emphasis on international law. Allison currently lives in Alaska and works in finance for a telecommunications company. She holds a B.A. in International Relations from Syracuse University, and a M.B.A from the University of Alaska Anchorage. Nader studies Economics at Columbia University in New York City, holding several Associate of Arts degrees across Political Science and the Social & Behavioral Sciences. Jacob graduated in 2019 from Manhattan College where he studied Political Science, Psychology, and Chinese. He currently works for a law firm in NYC and is the founder of the Institute for Qualified Representation, an elections information non-profit.

The topics under discussion for United Nations Economic Commission for Europe are:
  I.   Promoting the Development of Sustainable Transportation Infrastructure
  II.   Supporting Emerging Economies through Technical Cooperation
  III. Strengthening Regional Cooperation to Ensure Sustainable Energy

Established by ECOSOC in 1947, UNECE is one of five regional commissions created to promote pan-European economic integration. The UNECE participates in this integration by having policy discussions, regulation development, and knowledge sharing. While achieving its goals, UNECE promotes the UN's more universal goals outlined in its various economic mandates adopted, cooperation amongst stakeholders, and engaging the private sector.

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 March 2021 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, that serve as essential instruments in preparing for the Conference and as a reference during committee sessions are the:
  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 the Under-Secretaries-General for the ECOSOC Department, Aiskell Roman (Conference A) and Chase Mitchell (Conference B), at usg.ecosoc@nmun.org.

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

Sincerely,

Conference A
Kelsea Gillespie, *Director*
Nader J. Mehrdadi, *Assistant Director*

Conference B
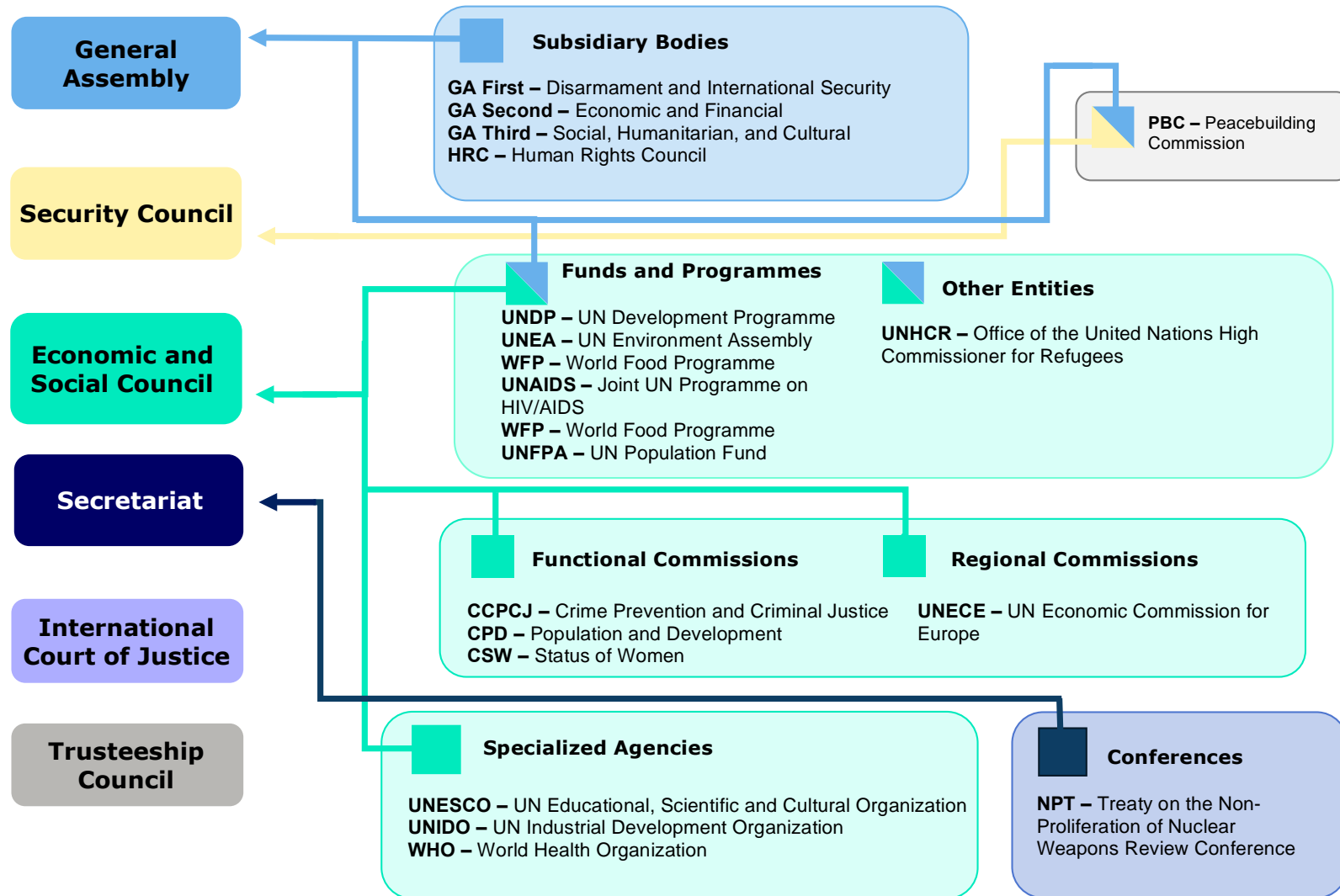Allison Baker, *Director*
Jacob Sarasin, *Assistant Director*

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United Nations System at NMUN•NY

This diagram illustrates the UN system simulated at NMUN•NY and demonstrates 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.

General Assembly

Security Council

Economic and Social Council

Secretariat

International Court of Justice

Trusteeship Council

Subsidiary Bodies

GA First – Disarmament and International Security
GA Second – Economic and Financial
GA Third – Social, Humanitarian, and Cultural
HRC – Human Rights Council

PBC – Peacebuilding Commission

Funds and Programmes

UNDP – UN Development Programme
UNEA – UN Environment Assembly
WFP – World Food Programme
UNAIDS – Joint UN Programme on HIV/AIDS
WFP – World Food Programme
UNFPA – UN Population Fund

Other Entities

UNHCR – Office of the United Nations High Commissioner for Refugees

Functional Commissions

CCPCJ – Crime Prevention and Criminal Justice
CPD – Population and Development
CSW – Status of Women

Regional Commissions

UNECE – UN Economic Commission for Europe

Specialized Agencies

UNESCO – UN Educational, Scientific and Cultural Organization
UNIDO – UN Industrial Development Organization
WHO – World Health Organization

Conferences

NPT – Treaty on the Non-Proliferation of Nuclear Weapons Review Conference

Committee Overview

Introduction

The United Nations Economic Commission for Europe (UNECE) was established by United Nations (UN) Economic and Social Council (ECOSOC) in 1946 to help promote regional cooperation and rebuild Europe after World War II.[1] With the beginning of the Cold War in 1947, UNECE's role changed from supporting the reconstruction of Europe to fostering economic dialogue and cooperation between the capitalist and socialist states while helping achieve common standards for transportation, customs regulations, and trade regulations.[2] Since the end of the Cold War, UNECE has focused on aiding economies in transition and promoting cooperation in the context of the current geopolitical landscape.[3]

UNECE was reformed in 1997 and 2005 to adapt to increased membership and shifts in priorities.[4] Today, UNECE's mission is to strengthen economic cooperation and sustainable development amongst its Member States.[5] UNECE fosters the exchange of policies and best practices, discussion of legal norms, and support for states in transition.[6] Together with the other regional commissions, UNECE promotes the work of international UN bodies and frameworks, such as the Sustainable Development Goals (SDGs).[7] UNECE also partners with many other UN organizations, non-governmental organizations (NGOs) and civil society to connect Member States and relevant actors in its projects.[8]

Governance, Structure and Membership

As the founding members of UNECE included all the participating states in the reconstruction of Europe, membership has consistently been diverse.[9] UNECE has 56 Member States that not only include states in the European continent, but also the United States of America, Canada, and several Member States from Central and Western Asia.[10] UNECE Member States represent about 17% of the world's population and include both developed and still developing states.[11] In addition to the 56 Member States of the committee, UNECE allows all interested UN Member States to participate in the work of the Commission.[12]

UNECE is a regional commission that reports to ECOSOC biennially.[13] Since 2017, the commission is being led for a three-year term by Executive Secretary Olga Algayerova from Slovakia.[14] UNECE is governed by an Executive Committee that prepares the biennial meetings of the commission, supervises its activities, and maintains relations with other international organizations.[15] The Executive Committee is comprised of the Chairperson and two Vice-Chairpersons, elected every two years.[16] Each Member State receives one vote, with decisions made by simple majority.[17] The current Chairperson is the Belarusian

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[1] UNECE, *History*; *Charter of the United Nations*, 1945.
[2] UNECE, *History*.
[3] Ibid.
[4] Ibid.
[5] UNECE, *Mission*.
[6] Ibid.
[7] Ibid.
[8] Ibid.
[9] UNECE, *Geographical Scope*.
[10] Ibid.
[11] Ibid.
[12] UNECE, *History*.
[13] UNECE, *Governance and Organizational Structure*.
[14] UNECE, *Executive Secretary*.
[15] UNECE, *Executive Committee*.
[16] UNECE, *Governance and Organizational Structure*.
[17] UNECE, *Terms of Reference and Rules of Procedure of the Economic Commission for Europe (E/ECE/778/Rev.5)*, 2009, p. 12.

representative and the Vice-Chairs are the representatives of Romania and Switzerland.[18] The Executive Committee leads eight sub-committees: the Committee on Environmental Policy; the Inland Transport Committee (ITC); the Conference of European Statisticians; the Committee on Innovation; the Committee on Competitiveness and Public-Private Partnerships; the Committee on Sustainable Energy; the Steering Committee on Trade Capacity and Standards; the Committee on Forests and the Forest Industry; and the Committee on Housing and Land Management.[19] These sub-committees further lead various working groups such as the Working Group on Ageing and Team of Specialists on Sustainable Fisheries.[20] The committees and working groups bring together Member States, NGOs, and academia to collaborate on transboundary challenges.[21]

UNECE regularly cooperates with other UN bodies.[22] The Working Party on Forest Statistics and Economics and Management was established in cooperation with the Food and Agriculture Organization of the United Nations (FAO) and aims to collect data on forest products, trade, consumption, policies, and the general economic development of the forestry sector across the region.[23] UNECE cooperates closely with the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) on the implementation of the United Nations Special Programme for the Economies of Central Asia (SPECA).[24] This program was created in 1998 through the Tashkent Declaration to modernize and integrate the economies of Central Asian states.[25] The Tashkent Declaration identifies four priority objectives for Member States, which include development of transport infrastructure and simplification of transportation of goods, and services and labor resources.[26] The Transport, Health and Environment Pan-European Programme (THE PEP) is a long-term joint program between UNECE and the World Health Organization (WHO) that focuses on finding sustainable solutions for transportation needs in the European region, whilst aiming to improve the health and wellbeing of citizens.[27] In 2009 at the Third High-Level Meeting on Transport, Health and Environment, the *Amsterdam Declaration* was adopted, which set priorities for achieving safe, efficient, health, and environmentally friendly transportation.[28] A follow-up, the *Paris Declaration*, was adopted at the Fourth High-Level Meeting on Transport, Health and Environment in 2014.[29] The *Paris Declaration* reiterated the main priorities from Amsterdam and added the goal of integrating transport, health, and environmental objectives into urban and spatial planning initiatives.[30]

Together with other UN agencies, UNECE organizes an annual Regional Forum on Sustainable Development (RFSD) in order to implement the *2030 Agenda for Sustainable Development*.[31] The forum brings together more than 850 stakeholders from across the region to share policies, best practices, identify recent developments, and contribute a regional perspective to the UN's High-level Political Forum on Sustainable Development (HLPF).[32] Other activities in the region include cooperation in the housing and land management sector, in the forestry and timber sector, in the trade sector, and efforts to overcome the challenges of demographic change, and to improve the access to sustainable energy.[33]

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[18] UNECE, *Governance and Organizational Structure*.
[19] Ibid.
[20] Ibid.
[21] UNECE, *Working Group on Ageing*.
[22] UNECE, *Governance and Organizational Structure*.
[23] Ibid.
[24] UNECE, *SPECA*.
[25] Ibid.
[26] Ibid.
[27] UNECE, *THE PEP*.
[28] UNECE, *Amsterdam Declaration (ECE/AC.21/4),* 2009.
[29] UNECE, *Paris Declaration – City in Motion: People First (ECE/ENV/NONE/2014/3),* 2014, p. 3.
[30] Ibid., p. 3.
[31] UNECE, *2019 Regional Forum on Sustainable Development for UNECE Region*, 2019.
[32] Ibid.
[33] UNECE, *Mission*.

Mandates, Functions and Powers

UNECE's mandate was based on a recommendation made by the Temporary Sub-Commission on the Economic Reconstruction of Devastated Areas to the ECOSOC in 1946.[34] After gaining support from the UN General Assembly, ECOSOC created UNECE in 1947 through resolution 36 (IV) to promote pan-European economic integration.[35] UNECE's main task is to bring states in the region together to foster cooperation on common economic challenges, but it may also initiate and sponsor studies on technological issues and developments within Member States or the region generally, collect and evaluate statistics on the economic development of the region, make recommendations to Member States and specialized agencies, and create subsidiary bodies.[36] While UNECE is unable to pass binding resolutions, it has the authority to create or discontinue sub-commissions or other subsidiary bodies for the performance of its functions.[37] One of its key goals is to promote sustainable economic development and prosperity through joint debates on policy; negotiating international legal instruments; setting norms, standards and regulations; exchanging best practices and technical expertise; and fostering cooperation between industrial states and economies in transition.[38] UNECE also implements the outcomes of international UN summits and conferences and cooperates with other UN entities.[39]

As a multi-stakeholder platform, UNECE brings together state representatives, NGOs, and international organizations to develop joint programs and plans to implement the SDGs.[40] UNECE connects various actors from a large region to create cooperation through economic policies on common norms and regulations in order to solve joint challenges.[41] SDG 17 (partnerships for the goals) is at the heart of UNECE's strategy to implement the SDGs.[42] UNECE has defined three strategic areas of its work where several SDGs overlap: increasing connectivity in the region (SDGs 7-9, 11, 13), decreasing environmental pressure and increasing sustainable resource allocation (SDGs 3, 6, 7, 12, 13, 15), and creating dynamic and resilient communities (SDGs 7-9, 11, 13).[43] UNECE supports Member States through statistics, analysis, and monitoring in order to inform decision-making processes, increase cooperation between stakeholders on national and international levels, and foster capacity building.[44]

UNECE receives annual funding, which is currently budgeted at $53.1 million for the 2020 fiscal year, through the UN regular budget and voluntary contributions.[45] Approximately 60.5% of these contributions are donated by Member States, 28.6% by intergovernmental and non-governmental organizations, and 10.9% by the European Commission.[46] To further increase the amount of voluntary contributions, UNECE developed the Resource Mobilization Strategy in order to increase funds for the implementation of the Sustainable Development Goals and the *Addis Ababa Action Agenda*.[47] Funds for UNECE projects, advisory services, and other forms of cooperation are distributed in the form of grants.[48] These grants are based on recommendations made by the Grants Committee, established in 2000, to the Executive

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[34] UNECE, *Executive Committee*.
[35] UNECE, *History*.
[36] UNECE, *Terms of Reference and Rules of Procedure of the Economic Commission for Europe (E/ECE/778/Rev.5)*, 2009, p. 1.
[37] Ibid., p. 2.
[38] UNECE, *Objectives and Mandate*.
[39] Ibid.
[40] UNECE, *Supporting Countries to Achieve the SDGs*.
[41] Ibid.
[42] Ibid.
[43] Ibid.
[44] Ibid.
[45] UN General Assembly, *Proposed Programme Budget for 2020 (A/RES/74/6.Sect.20)*, 2019, p. 45.
[46] UNECE, *Partnerships*.
[47] UNECE, *Resource Mobilization Strategy*.
[48] UNECE, *UNECE Grants Committee Annual Report 2016*, 2016.

Secretary.[49] Funds for grants are drawn from the regular and voluntary budgets of UNECE.[50] In recent years, most grants were invested in environmental projects.[51]

Recent Sessions and Current Priorities

A focus of UNECE's work in recent years has been technical cooperation, which includes capacity building initiatives in the fields of environment, energy, transport, trade, statistics, and gender mainstreaming.[52] UNECE's technical cooperation is demand driven, results oriented, focused on Member States and economies in transition, and connected to UNECE's work in sharing best practices.[53] These efforts can be divided into three types: policy-related advisory services, advice on the implementation of legal instruments, regulations and norms, and the creation of specific programs or projects.[54] An example is support for the construction of a cost-effective biogas plant in Kyrgyzstan that helped the country advance its efforts to generate sustainable energy.[55] UNECE involves stakeholders from within the UN system and beyond in order to successfully provide technical cooperation, with projects being financed through the regular UN budget as well as extra-budgetary resources.[56]

The most recent activities of UNECE focused strongly on the achieving the SDGs, especially through the sustainable use of natural resources, the development of smart cities, the advancement of sustainable mobility and connectivity, as well as measurement and monitoring of progress.[57] As part of its strategy for 2018-2019, the UN General Assembly (GA) created Programme 17, Economic Development in Europe, under the responsibility of UNECE.[58] The goal of the program is to ensure an integrated, regional approach for the effective implementation of the *2030 Agenda for Sustainable Development*.[59] To advance environmental efforts, UNECE published Environmental Performance Reviews of several Member States, extended the application of the UN Framework Classification for Resources, and supported Member States in developing national strategies to implement the SDGs.[60] In September 2019, together with local officials from the region, UNECE launched the "Trees in Cities" campaign, which calls on cities to plant more trees.[61] The goal is to promote green urban spaces, which help store carbon dioxide, decrease air pollution, limit heat islands in cities, increase biodiversity, and generally improve wellbeing of citizens.[62] In March 2020, UNECE hosted a virtual RFSD in Geneva.[63] Ms. Algayerova announced at the RFSD that UNECE will host a "SDG 15 Day" in November 2020 where Member States will present plans to support the 2021-2030 UN Decade on Ecosystem Restoration.[64] The eleventh session of the SPECA Working Group on Knowledge-based Development was held in June 2019 in Kyrgyzstan.[65] Delegates presented innovative policies for the implementation of the SDGs in the respective Member States and discussed opportunities to implement new technologies in a sustainable manner.[66] UNECE further aims to increase its efforts to implement the UN System-wide *Action Plan for Gender Equality* in accordance with SDG 5 (gender equality) across all of its programs.[67]

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[49] UNECE, *Partnerships*.
[50] Ibid.
[51] Ibid.
[52] UNECE, *Technical Cooperation*.
[53] Ibid.
[54] Ibid.
[55] UNECE, *UNECE Annual Report*, 2019, p. 6.
[56] UNECE, *Technical Cooperation*.
[57] UNECE, *UNECE Annual Report*, 2019.
[58] UN General Assembly, *Proposed Strategic Framework for the Period 2018-2019 (A/71/6(Prog. 17)*)*, 2016, p.2.
[59] Ibid., p.2.
[60] UNECE, *UNECE Annual Report*, 2019, p. 9.
[61] UNECE, *Climate Action Summit*, 2019.
[62] Ibid.
[63] UNECE, *2020 Regional Forum on Sustainable Development for the UNECE Region*, 2019.
[64] Algayerova, A Paradigm Lost? Making Sense of 2020, the 'Super Year' for Nature, *UNECE*, 2020.
[65] UNECE, *Meetings and Events*.
[66] Ibid.
[67] UN General Assembly, *Proposed Strategic Framework for the Period 2018-2019 (A/71/6(Prog. 17)*)*, 2016, p. 2.

In response to the COVID-19 pandemic, which has affected all UNECE members, the Commission created an *Action Framework for Responses to the COVID-19 Crises*.[68] This framework addresses topics such as facilitating connectivity, addressing transboundary and other risks, and supporting a green and resilient recovery.[69] In 2020, most conferences and events hosted by UNECE have either been cancelled, postponed, or moved to an online format.[70]

Conclusion

UNECE is a regional commission founded by and reporting to ECOSOC.[71] With the political changes in Europe throughout the last century, UNECE's work has changed fundamentally from its roots as an organization established to help reconstruct Europe by fostering cooperation between Western European industrial nations and economies in transition in Central Asia.[72] The goal of UNECE is to bring together all stakeholders to solve common challenges in the region in order to foster economic integration, common standards, and sustainable economic development.[73] In recent years, UNECE has focused strongly on the implementation of the SDGs by integrating them into all projects and programs.[74] UNECE continues to strive towards more common norms and standards to promote economic cooperation in its region.[75]

Annotated Bibliography

United Nations, Economic Commission for Europe. (2009). *Terms of Reference and Rules of Procedure of the Economic Commission of Europe (E/ECE/778/Rev.5)*. Retrieved 22 August 2020 from: http://www.unece.org/fileadmin/DAM/oes/mandate/Commission_Rev5_English.pdf
> *This is the updated version of UNECE's Terms of Reference and Rules of Procedure, which are the founding documents of UNECE. Because of the significant changes in the political landscape of Europe, this document has been adapted several times. The first 20 paragraphs constitute the Terms of Reference, which define the mandate of UNECE. Attached to those are the Rules of Procedure, which further identify the roles and purposes of UNECE's organs. Delegates should read this document thoroughly in order to closely familiarize themselves with the organization, its goals and methods of working.*

United Nations, Economic Commission for Europe. (2016). *UNECE Grants Committee Annual Report 2016.* Retrieved 22 August 2020 from: http://www.unece.org/fileadmin/DAM/OPEN_UNECE/05_Partnerships/Grants/Grants_Annual_Report_2016.pdf
> *This is the most recent report of UNECE Grants Committee. It provides an overview over the projects that were funded. Most funding was allocated to environmental projects, supporting UNECEs goal to foster sustainable development. The report shows that the funding and number of grants has significantly decreased in the reviewed period. An important issue highlighted in the report is that most grant applications were lacking clarity and thus had to be reviewed intensely before being accepted or denied. It is important that delegates familiarize themselves with the available funds and the process of spending them in order to be able to allocate the accurate funding for proposed projects.*

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[68] UNECE, *Responding to the Socio-Economic Impacts of the COVID-19 Pandemic in the UNECE Region*, 2020.
[69] Ibid.
[70] Ibid.
[71] UNECE, *History*.
[72] Ibid.
[73] UNECE, *Objectives and Mandate*.
[74] UNECE, *Supporting Countries to Achieve the SDGs*.
[75] UNECE, *Objectives and Mandate*.

United Nations, Economic Commission for Europe. (2019). *UNECE Annual Report.* Retrieved 22 August 2020 from:
http://www.unece.org/fileadmin/DAM/UNECE_Annual_Report_2018_23x25_final_for_WEB.pdf
> *UNECE meets annually and reports to the ECOSOC. The UNECE Annual Report gives delegates an overview over the wide field of tasks UNECE has accomplished throughout 2018. Delegates should read the report because it summarizes the individual activities in the larger perspective of UNECEs mission to increase cooperation in the region and to achieve the SDGs. This document introduces delegates to the current work of the commission such as the increasing membership of UNECE sponsored conventions, current field projects such as introducing biogas plants to Kyrgyzstan and new projects with other international organizations such as FAO and WHO.*

United Nations Economic Commission for Europe. (2020*). Responding to the Socio-Economic Impacts of the COVID-19 Pandemic in the UNECE Region.* Retrieved 22 August 2020 from:
https://www.unece.org/fileadmin/DAM/UNECE_COVID_Brochure_EN.pdf
> *UNECE created an Action Framework to address the global pandemic crises. The framework highlights the impacts of COVID-19 within UNECE region through a three-part multifaceted response; facilitate connectivity, address transboundary and other risks, support a green and resilient recovery. The framework also provides delegates with information on how UNECE is supporting member states during the COVID-19 crisis through evidence-based analysis and the state of longer-term development efforts. This source will be useful for delegates to understand the specific challenges that COVID-19 poses within UNECE region.*

United Nations, General Assembly, Seventy-fourth session (2019). *Proposed Programme Budget for 2020 (A/RES/74/6.Sect.20).* Retrieved 22 August 2020 from: https://undocs.org/A/74/6(Sect.20)
> *The UN General Assembly reviews and approves the proposed budget each year for UNECE. This document outlines the proposed 2020 budget and includes the mandates and objects of the Commission for context. Recently, UN General Assembly has shifted from addressing the budget from a biennial to an annual basis. Delegates will find this source useful when they are researching the function and overview of UNECE and how it aligns with UN programs and agendas.*

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I. Promoting the Development of Sustainable Transportation Infrastructure

Introduction

One of the main areas of focus for the United Nations Economic Commission for Europe (UNECE) is transport.[76] The UNECE Transport Division oversees the movement of people and commodities by inland transport modes.[77] Transport infrastructure is defined as "rural roads, tracks, trails, paths, watercourse structures and footbridges, as well as rural waterways and their transfer facilities."[78] Sustainable transportation includes modes, as well as infrastructure and operations.[79] Sustainable transport infrastructure (STI) is crucial for social, economic, and environmental development.[80] One of UNECE's priorities is to promote sustainable transport that is safe, clean, and competitive through several channel improvements across the transport sector throughout Europe and Asia.[81] STI helps to enable sustainable mobility, which is broadly defined as means of mobility that are universally accessible, efficient, safe, and green.[82]

Many international and regional environmental frameworks do not explicitly mention the transport sector, despite the direct link between transport infrastructure and environmental impacts.[83] Transport emissions are predicted to increase at a faster rate than emissions from other sectors, with passenger transport expected to increase threefold before 2050.[84] As of 2017, the transport industry produced between 25-30% of all global greenhouse gas emissions, having more than doubled since 1970.[85] While the COVID-19 pandemic has had a temporary impact on transport emissions, the long-term effects on travel and transport are unknown, and there is concern that a long-term consequence of the pandemic might be a shift away from public transportation and towards car use.[86] Given that public transit has generally not been designed to accommodate social-distancing requirements, people perceive driving cars, walking, or cycling as safer modes of transport.[87] The London Underground, under physical-distancing requirements, will only be able to carry 13-15% of its normal ridership, even when operating at full-service.[88]

A shift of transport investments from high-carbon to low-carbon sustainable transport systems can help states increase their gross domestic product (GDP), reduce road congestion, and mitigate negative environmental impacts.[89] Globally, public and private investment in transport is in the trillions of dollars.[90] In 2019, the European Union announced an investment of over €117 for sustainable transport infrastructure in Europe.[91] UNECE considers sustainable transport to be a form of mobility that is sustainable, energy-efficient, environment friendly, and encompasses the safety and security of transport

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[76] UNECE, *About us*.
[77] Ibid.
[78] Cook et al., *The Contribution of Rural Transport to Achieve the Sustainable Development Goals*, p. 5.
[79] Rodrigue, *Sustainable Transportation*, 2020.
[80] UNECE, *Transport*.
[81] UNECE, *Climate Change and Sustainable Transport*.
[82] SuM4All, *Global Roadmap of Action: Toward Sustainable Mobility*, 2019.
[83] Partnership on Sustainable Low Carbon Transport, *Sustainable Development Goals & Transport*.
[84] IPCC, *Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, 2014, p. 605.
[85] Rodrigue, *Transportation and the Environment*, 2017; IPCC, *Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, 2014, p. 605.
[86] OECD, *COVID-19 and the low-carbon transition: Impacts and possible policy responses*, 2020.
[87] McKinsey & Company, *Restoring public transit amid COVID-19: What European cities can learn from one another*, 2020.
[88] Ibid.
[89] Yadav & Lefevre, *Sustainable Transport Investment Could Save $300 Billion a Year – Within Existing Financial Flows*, 2016.
[90] Lefevre et al., *The Trillion Dollar Question: Tracking Public and Private Investment in Transport*, 2014.
[91] European Commission, *€117 million for sustainable transport infrastructure in Europe*, 2019.

infrastructure systems, along with being accessible.[92] The *Transport for Sustainable Development Report* (2015), drafted by the five United Nations (UN) Regional Commissions, defines accessibility in transport as a person's ability to reach a destination from a given location using transportation.[93] Affordability in STI is the ability of people to be able to financially access adequate transport services.[94] In order to make progress towards developing STI, it is necessary for the international community, including UNECE Member States, to consider ways to mitigate environmental impacts and overcome financial barriers.[95]

International and Regional Framework

The *United Nations Framework Convention on Climate Change* (UNFCCC) was adopted at the *Rio Earth Summit* in 1992 with the goal of stabilizing greenhouse gas levels, which are affected by the oil reliance and carbon emissions of the transport sector.[96] The *Kyoto Protocol* (1997) is an international agreement that strengthened the UNFCCC by applying internationally binding emission reduction targets.[97] The *Kyoto Protocol* entered into force in 2005 but did not define any specific reduction targets for the transport sector.[98] Most recently, the *Paris Agreement* (2015), which was signed by all 56 UNECE Member States, also omitted mentioning the importance of sustainable transport.[99] This agreement, adopted within the UNFCCC, aims to mitigate the increase in global temperatures by focusing on reducing greenhouse gases.[100]

In 1992, the United Nation's Conference on Environment and Development created *Agenda 21*, a comprehensive plan of action that first recognized the role of transportation in sustainable development.[101] *Agenda 21* was adopted by more than 178 UN Member States and set the standards for achieving global sustainable development in the 21st century at the international, regional, and local levels.[102] Furthermore, the importance of sustainable transport infrastructure was highlighted in the Johannesburg Plan of Implementation (JPOI), which was an outcome of the 2002 World Summit on Sustainable Development.[103] JPOI called for Member States to implement transport strategies and engage in partnerships to achieve greater development of sustainable infrastructure.[104]

The *2030 Agenda for Sustainable Development* (2030 Agenda) was adopted in 2015, and it replaced the Millennium Development Goals established at the *Millennium Summit* in 2000.[105] The 2030 Agenda identifies 17 Sustainable Development Goals (SDGs) that encompass thematic issues including water, climate change, partnerships, poverty, peace, and education.[106] 13 out of the 17 SDGs have transport relevance, but most of the goals do not directly address the impact of the transport sector.[107] One of the goals that identifies transport targets is SDG 7 (affordable and clean energy), which includes promoting energy-efficient transport.[108] SDG 9 (industry, innovation, and infrastructure) addresses the topic of

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[92] UNECE et al., *Transport for Sustainable Development: The case of Inland Transport*, 2015, p. XIX.

[93] Ibid., p. XIX.

[94] Ibid., p. XX.

[95] European Commission, *EU to Invest Nearly €700 million in Sustainable and Innovative Transport*, 2018.

[96] UNCED, *United Nations Framework Convention on Climate Change*, 1992.

[97] UNFCCC, *Kyoto Protocol to the United Nations Framework Convention on Climate Change*, 1997.

[98] Ibid.

[99] UNECE, *Member States and Member States Representatives*.

[100] COP 21, *Paris Agreement*, 2015.

[101] UN DESA, *Sustainable Transport*.

[102] UNCED, *Agenda 21*, 1992.

[103] UN DESA, *Sustainable Transport*.

[104] Ibid.

[105] UN General Assembly, *Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1)*, 2015.

[106] Ibid.

[107] Partnership on Sustainable Low Carbon Transport, *Sustainable Development Goals & Transport*.

[108] UN General Assembly, *Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1)*, 2015.

developing STI systems by providing frameworks and harnessing the potential of new technologies.[109] At the Third International Conference on Financing for Development in 2015, the *Addis Ababa Action Agenda* (AAAA) was adopted as a global framework for financing sustainable development.[110] The AAAA helped establish how the international community will fund the SDGs, and also recognized the importance of financing the development of STIs.[111] In 2018, the UN General Assembly adopted resolution 72/212 on "Strengthening the Links Between all Modes of Transport to Achieve the Sustainable Development Goals," emphasizing the role of sustainable transport in achieving the SDGs and the importance of partnerships in financial and technical assistance.[112]

UNECE works closely with international stakeholders, such as the EU, to promote pan-European collaboration for sustainable transport.[113] UNECE's work is reflected in more than 50 international agreements and conventions that constitute the international legal and regulatory framework for the development of international transport systems.[114] The UNECE's Inland Transport Committee released a Capacity Development Action Plan in 2019, which focuses on measures to boost implementation of UN transport legal instruments for inland transportation, and by extension, the SDGs.[115]

Regionally, the European Union (EU) is on track to meet its *Paris Agreement* target to reduce greenhouse gas emissions to 40% below 1990 levels, but there is evidence to suggest that this target is insufficient to meet the overall objectives of the *Paris Agreement*.[116] The EU also announced the European Green Deal in December 2019, an action plan to make the EU's economy sustainable and achieve climate neutrality by 2050, where activities are climate- or carbon dioxide-neutral and do not produce greenhouse gases.[117] The European Green Deal aims to reduce 90% of emissions from transport by 2050, and includes initiatives to develop sustainable and smart mobility.[118] In 2019, the European Commission (EC) developed a *Clean Energy for All Europeans* policy package consisting of eight legislative acts, which EU countries have 2 years to implement.[119] The directives set binding targets to reduce energy consumption, increase energy efficiency, increase renewable energy, and increase energy performance.[120]

Role of the International System

UNECE established the Inland Transport Committee (ITC) in 1947 to act as an intergovernmental forum that focuses on the field of transport.[121] The ITC has 20 working parties that are intergovernmental decision-marking bodies which work to improve lives through concrete actions to develop the transport sector.[122] The goal of the ITC is to bring together UNECE and UN Member States to forge tools for economic cooperation and adopt international legal instruments on inland transport.[123] The 81st session of the ITC was held in 2019 and provided updates on different areas such as progress towards the 2030

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[109] UN General Assembly, *Transforming our World: the 2030 Agenda for Sustainable Development (A/RES/70/1)*, 2015.

[110] UN General Assembly, *Addis Ababa Action Agenda of the Third International Conference on Financing for Development (Addis Ababa Action Agenda) (A/RES/69/313)*, 2015.

[111] Hurley, *The Addis Ababa Action Agenda: A step Forward on Financing for Development?,* 2015.

[112] UN General Assembly, *Strengthening the Links Between all Modes of Transport to Achieve the Sustainable Development Goals (A/RES/72/212)*, 2018.

[113] UNECE, *About us.*

[114] Ibid.

[115] UNECE, *Inland Transport Committee Capacity Development Action Plan (ECE/TRANS/2020/18)*, 2019.

[116] Climate Action Tracker, *Country Summary: EU*, 2019.

[117] European Commission, *A European Green Deal*, 2020.

[118] European Commission, *Sustainable Mobility*, 2019; EC, *Green Deal call area 5: Sustainable and smart mobility*, 2020.

[119] European Commission, *Clean Energy for all Europeans Package*, 2019.

[120] European Commission, *Clean Energy for all Europeans Package Completed: Good for Consumers, Good for Growth and Jobs, and Good for the Planet*, 2019.

[121] UNECE, *Inland Transport Committee.*

[122] UNECE, *TEM Project Strategic Plan 2017-2021*, 2017, p. iv.

[123] UNECE, *Inland Transport Committee.*

Agenda, intelligent transport systems, and climate change effects.[124] Each year, the UNECE provides an annual report on the ITC to ECOSOC.[125] The report also includes updates on the Transport, Health and Environment Pan-European Programme (THE PEP), which is a partnership between UNECE and the World Health Organization (WHO) that addresses sustainable and healthy transport.[126]

In addition, the Organisation for Economic Co-Operation and Development (OECD) is an international organization that works with governments, policy makers, and citizens to mitigate social, economic, and environmental challenges.[127] OECD created an International Transport Forum (ITF) that acts as an intergovernmental organization with 60 Member States and facilitates global dialogue.[128] The 2019 ITF annual summit focused on the topic "Transport Connectivity for Regional Integration" and produced an overview of the recent transport sector trends at a global level, which highlighted that passenger transport will increase by 78 trillion between 2015 and 2050.[129] The 2020 ITF annual summit on "Transport Innovation for Sustainable Development" has been postponed to 2021.[130] In 2020 ITF convened a virtual conference focusing on the decarbonization of transportation in times of crisis, and have since posted all conference proceedings online.[131]

Forums and partnerships also play a key role to further the agenda on sustainable transport.[132] In 2014, former UN Secretary-General Ban Ki-moon created the High-level Advisory Group on Sustainable Transport to produce recommendations on how to the transport sector can help advance sustainable development.[133] The Advisory Group's outcome document recommends that governments discuss with a wide range of stakeholders when making decisions related to transport planning, policy, infrastructure, and system decisions for knowledge sharing and transparency.[134] In 2016 at the Climate Action Summit, the World Bank highlighted the need to bring stakeholders together to support the SDGs and achieve sustainable mobility, which resulted in the creation of the Sustainable Mobility for All (SuM4All) initiative.[135] SuM4ALL acts as a platform to bring together transport stakeholders with the main goal of achieving a mobility system that has universal access for rural communities, increased efficiency, lower environmental impacts, and better safety standards.[136] In 2019, SuM4All published the "Global Roadmap of Action: Toward Sustainable Mobility," which includes over 180 policy recommendations spanning regulatory and institutional change, engineering and technology, financing, and communications, which detail how to develop sustainable transport systems and promote sustainable mobility.[137]

The International Road Transport Union collaborates with the UN Global Compact, creating the Global Partnership for Sustainable Transport (GPST) that was launched in 2015 in order to facilitate and oversee the implementation of UN transport-related declarations, resolutions, and recommendations.[138] GPST helps support governments in strengthening international legal frameworks and works to identify best practices in the transport industry.[139] In 2016, former UN Secretary-General Ban Ki-moon convened the first Global Sustainable Transport Conference hosted in Ashgabat, Turkmenistan to promote the role of

[124] Ibid.
[125] UNECE, *Report of the Inland Transport Committee on its Eighty-first Session (ECE/TRANS/288),* 2019.
[126] UNECE, *Transport, Health, Environment (THE PEP).*
[127] OECD, *Who we are.*
[128] ITF, *About ITF.*
[129] OECD, *Multilingual Summaries ITF Transport Outlook 2019*, 2019, p. 1.
[130] ITF, *Transport Innovation for Sustainable Development*, 2020.
[131] ITF, *Outputs from Decarbonising Transport in an Unprecedented Global Crisis: A virtual conference*, 2020.
[132] UNECE, *About us.*
[133] UN DESA, *Secretary-General's High-level Advisory Group on Sustainable Transport.*
[134] High-level Advisory Group on Sustainable Transport, *Mobilizing Sustainable Transport for Development: Analysis and Policy Recommendations from the United Nations Secretary-General's High-level Advisory Group on Sustainable Transport*, 2016.
[135] World Bank Group, *Sustainable Mobility for All (SuM4All)*, 2017.
[136] World Bank Group, *Sustainable Mobility for All*, 2017, p. 5.
[137] SuM4All, *Global Roadmap of Action: Toward Sustainable Mobility*, 2019.
[138] GPST, *What we do.*
[139] Ibid.

sustainable transport in achieving the SDGs to over 1500 global participants.[140] At the conference, participants discussed the importance of developing STI, especially investing in rural infrastructure to help reduce social and economic inequalities.[141]

Another important partnership is the Institute for Transportation and Development Policy co-founded Partnership on Sustainable Low Carbon Transport (SLoCaT).[142] This partnership consists of over 90 organizations and is currently focusing on land transport in developing states in Asia, Latin America, and Africa.[143] SLoCAT partners with the International Association of Public Transport (UITP), which acts as a global network to bring together all public transport stakeholders and sustainable transport modes.[144] The UITP also works with the World Bank and the ITF to influence the global sustainable transport sector.[145] UK Aid is a non-profit organization that developed the Research for Community Access Partnership.[146] This framework is implemented by SLoCaT, and aims to educate the global community on the importance of addressing rural transport issues to achieve the SDGs.[147] The partnership encourages knowledge sharing between states to help enhance the uptake of low cost solutions for rural transport infrastructure access that increases the use of local resources.[148]

Achieving Sustainable Mobility Through THE PEP Framework

Traditional transport infrastructure systems are widely dependent on fossil fuels, which have contributed to the sharp rise in greenhouse gas emissions.[149] In order to mitigate climate change, working towards adopting resilient transport infrastructures can help combat the impacts and reduce greenhouse gas emissions.[150] STI solutions are necessary to achieve SDG 13 (climate action), specifically target 13.2 – integrate climate change measures into policies, strategies, and planning.[151] UNECE also works in coordination with WHO to oversee THE PEP, which is a policy framework that fosters partnerships and aims to identify and address challenges to achieve sustainable transport patterns.[152] THE PEP was established by the first High-level Meeting on Transport, Health, and Environment in 2001.[153] THE PEP's five main priority goals are: (1) contributing to sustainable economic development through investment in sustainable transport, (2) promoting more efficient transport systems, (3) reduce greenhouse gas emissions, (4) promote policies around health and safe modes of transport, and (5) to integrate sustainable transport objectives into planning policies.[154] Thus, THE PEP contributes to reducing environmental impacts of transport in line with SDG 13 by aiming to reduce greenhouse gas emissions with the development of STIs.[155] In the advent of the COVID-19 pandemic, THE PEP launched a task force to develop a set of principles towards a more sustainable, environmentally-friendly, and healthy

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[140] UN DESA, *Global Sustainable Transport Conference.*

[141] UN DESA, *Thematic Discussion 2: Reaching the most remote: Rural Transport Challenges and Opportunities,* 2016, pp. 1-3.

[142] UIPT, *Vision & Mission.*

[143] SLoCaT, *SLoCaT Partnership.*

[144] Ibid.

[145] UIPT, *Vision & Mission.*

[146] ReCAP & SloCaT & UK Aid, *The Contribution of Rural Transport to the Sustainable Development Goals - Factsheet,* 2017, p. 1.

[147] SLoCAT, *ReCAP and SLoCAT Release Factsheet and Supporting Paper on the Critical Role of Rural Transport to Achieve the Sustainable Development Goals,* 2017.

[148] ReCAP & SloCaT & UK Aid, *The Contribution of Rural Transport to the Sustainable Development Goals - Factsheet,* 2017, p. 4.

[149] TRL, *The Importance of Sustainable Transport Infrastructure to the Post-2015 Development Agenda*, p. 2.

[150] UN-Habitat, *Analysis of the Transport Relevance of Each of the 17 SDGs*, 2015, p. 16.

[151] UNECE, *SDGs and the UN Transport Convention*; UN-Habitat, *Analysis of the Transport Relevance of Each of the 17 SDGs*, 2015, p. 16.

[152] UNECE, *Transport, Health, Environment (THE PEP).*

[153] Ibid.

[154] UNECE, *Paris Declaration – City in Motion: People First*, 2015, p. 4.

[155] WHO, *Making THE (Transport, Health, and Environment) Link*, 2018, p. 3.

transport system.[156] The task force will be examining how mobility patterns have shifted during the pandemic (for example, less use of public transport, more uptake of walking and cycling in cities), and developing principles for a green transition to a "new normal" for sustainable mobility.[157]

THE PEP Partnerships
By improving fuel consumption of renewable energy through the development of STI systems, the global community can contribute to the reduction of carbon emissions.[158] THE PEP framework established THE PEP Partnerships by collaborating with Member States to support and implement THE PEP's priority goals.[159] One of the current THE PEP Partnership on Eco-Driving contributes to priority goals 1, 2, and 3 and defines Eco-Driving as a way to save energy, reduce greenhouse gas emissions, reduce health risks, and enhance traffic safety.[160] Eco-Driving projects have been implemented across the European region and aim to achieve reductions in fuel consumption of 5-10% for tracks and buses, and up to 20% for cars.[161] Since 2014, the Partnership on Eco-Driving has created an Eco-Driving Task Force, which has organized the International THE PEP Eco-Driving Workshop (2016) and developed national and regional eco-driving programmes.[162] Priority goal 2 relates to promoting more efficient transport systems, and eco-driving not only reduces greenhouse gas emissions, but also encourages smart transport infrastructure through the use of technology and sensors that collect data on traffic patterns, high-risk traffic situations, and carbon emissions.[163] Looking forward, THE PEP will adopt a new workplan for 2021-2026 at the Fifth High-level Meeting on Transport, Health, and Environment in 2021; the meeting will also take stock of the impact of the COVID-19 pandemic on THE PEP's work.[164]

Financing for Transport Infrastructure

A key challenge in developing STI and networks is the cost.[165] According to The Global Commission on the Economy and Climate, $90 trillion is needed to achieve growth expectations in infrastructure by 2030.[166] There are different sources and instruments that can be used to fund transport infrastructure, and the two primary sources are taxpayers and the users of the transport infrastructure.[167] In addition to financing transportation infrastructure through different revenue sources, there are also financing instruments that are available to governments and institutions through debt and equity instruments.[168] With globally more than 840 million people living more than 2 kilometers from all-weather roads, a viable source of financing for STI can come from international finance institutions such as the World Bank.[169] In recent years, the World Bank has focused on providing monetary assistance to states with a focus on transport, health, innovation, and land administration.[170] Currently, the World Bank is facilitating a project in partnership with the Croatian Ministry of Sea, Transport and Infrastructure to create resilient transport infrastructures through support for restructuring public roads and railways.[171] The *Sustainable Croatian Railways in Europe Project for Croatia* is a project lead by the World Bank to improve the operational

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[156] UNECE, *Governments in Pan-European region launch UN Task Force to make post-COVID-19 pandemic mobility more environmentally sound, healthy and sustainable*, 2020.

[157] Ibid.

[158] UNECE, *Transport, Health, Environment (THE PEP).*

[159] UNECE, *Draft Vienna Declaration of the Fifth High-Level Meeting on Transport, Health, and Environment: Green and Healthy Mobility for Happiness and Prosperity*, 2019, p. 3.

[160] UNECE, *The PEP Partnerships*, 2019, pp. 13-16.

[161] Ibid., pp. 13-16.

[162] Ibid., pp. 13-16.

[163] Ibid., pp. 13-16.

[164] UNECE, *High-level Meeting on Transport, Health and Environment: Draft workplan for the period 2021-2026*, 2020.

[165] GCEC, *The Sustainable Infrastructure Imperative: Financing for Better Growth and Development*, 2016, p. 6.

[166] Ibid., p. 6.

[167] UNECE, *Innovative Ways for Financing Transport Infrastructure*, 2017, p. 2.

[168] Ibid., p. 46.

[169] Ibid., p. 29.

[170] World Bank Group, *The World Bank in Croatia Country Snapshot*, 2019, pp. 1-4.

[171] Ibid., pp. 1-4.

efficiency and the financial stability of the public railway sector.[172] The project requires more than $200M of funding and is expected to be complete in 2021.[173]

UNECE published a report in 2017 on "Innovative ways for Financing Transport Infrastructure" that highlighted the importance of public-private-partnerships (PPPs) in the transport sector as another way to fund infrastructure and development.[174] PPP models can help with not only the financing for development of new transport infrastructure, but also operations, maintenance, and enhancement of existing transport facilities.[175] The European PPP Expertise Centre (EPEC) initiative is comprised of the European Investment Bank, EC, and EU Member States and candidate countries.[176] EPEC publishes yearly statistics on PPPs in Europe and is a resource for standards, recommendations, and best practices in PPPs.[177] The Trans-European Transport Network (TEN-T) is an EC initiative funded by the EU that covers all European regions to focus on closing gaps, removing barriers, and strengthening the creation of a single European transport network.[178] To promote STI, TEN-T focuses on the Core Network layer, which is comprised of linking the most important transportation connections in terms of cities and hubs across the European region by 2030.[179] The second layer of TEN-T is the Comprehensive Network, which connects all European regions by transport infrastructure and is estimated to be completed by 2050.[180] TEN-T is funded in part through a variety of EU grant programs.[181] The Connecting Europe Facility is one of the EU funding instruments dedicated to the implementation of TEN-T and promotes sustainability and digitalization through investment in transport, energy, and digital infrastructure.[182] EU utilizes additional regional funding instruments such as the European Fund for Strategic Investment and the European Regional Development Fund for financial support in implementing TEN-T.[183]

Increasing Global Investment in Rural Transport Sectors
In 2017, more than one billion people had no access to weather-resistant roads.[184] Rural transport is the access for rural communities to main roads or waterway networks.[185] The International Labour Organization (ILO) defines rural transport as "the movement of people and goods in rural areas by any conceivable means, for any conceivable purpose along any conceivable route."[186] Over the last 20 years, investment in inland transport infrastructure has been approximately 0.8 to 0.9 % of Western European states' GDP.[187] In Central and Eastern Europe, investment has been around one to two per cent of their GDP.[188] A reason that investment has been so low, especially in rural transport infrastructure, is the lack of financial resources and inadequate planning and decision-making.[189] Rural transport infrastructure is also identified in SDG target 9.1, which focuses on increasing rural access to transport infrastructure.[190]

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[172] World Bank Group, *Sustainable Croatian Railways in Europe.*
[173] Ibid.
[174] UNECE, *Innovative ways for Financing Transport Infrastructure*, 2017, p. 84; GFDRR, *Small Island States Resilience Initiative.*
[175] UNECE, *Innovative ways for Financing Transport Infrastructure*, 2017, p. 84.
[176] UNECE et al., *Transport for Sustainable Development*, 2015, p. XIX.
[177] Ibid.
[178] European Commission, *Trans-European Transport Network (TEN-T).*
[179] Ibid.
[180] Ibid.
[181] European Commission, *TEN-T funding.*
[182] European Commission, *Connecting Europe Facility.*
[183] European Commission, *Trans-European Transport Network (TEN-T).*
[184] Sustainable Mobility for All, *Universal Access.*
[185] Cook et al., *The Contribution of Rural Transport to Achieve the Sustainable Development Goals*, p. 5.
[186] ILO, *A Strategy for the Rehabilitation of the Rural Transport System in Tsunami-affected Areas.*
[187] UNECE et al., *Transport for Sustainable Development*, 2015, p. 73.
[188] Ibid., p. 73.
[189] Ibid., p. 74.
[190] Cook et al., *The Contribution of Rural Transport to Achieve the Sustainable Development Goals*, p. 5.

Conclusion

The development of STI is critical to achieving the 2030 Agenda, and UNECE has worked continuously to promote and improve transport connectivity amongst Member States and the rest of the European region.[191] UNECE and ITC are taking steps towards increasing the resiliency of transport networks within the European region through workshops, PPPs, and THE PEP.[192] A main challenge that UNECE faces in terms of achieving universal STI is encouraging financial investment for sustainable rural transportation, which is essential to further regional development.[193] Adequate transport infrastructure plays a key role in combating the serious negative impacts on public health, climate change, and living conditions.[194] European actors and stakeholders must collaborate in order to align sustainable transport infrastructure strategies and work towards a cohesive sustainable vision for the future.[195]

Further Research

Looking forward, delegates should consider how the UNECE can further strengthen regional partnerships to obtain funding and to promote resilient and healthy transport infrastructures. Other questions that delegates should consider include: How can the European region offset rising transport infrastructure costs to promote financial sustainability? How can Member States mitigate the risks of climate change and foster environmental resilience in transport infrastructure systems? What channels exist to further collaborate with THE PEP Partnerships with the goal of achieving zero net greenhouse gas emissions by 2050 through smart transport infrastructure? What is required to achieve climate neutrality in the transportation sector?

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> *Sustainable Mobility for All (SuM4All) published this comprehensive, global roadmap that contains over 180 policy recommendations, spanning regulatory, technical, communications, and financing aspects of sustainable transport infrastructure. The roadmap contains key information, statistics, and definitions that provide an excellent overview of sustainable transportation and infrastructure. Delegates will find this roadmap useful when beginning their research and in developing recommendations for the UNECE.*

United Nations, Economic Commission for Europe. (2017). *Innovative Ways for Financing Transport Infrastructure.* Retrieved 23 August 2020 from: https://www.unece.org/fileadmin/DAM/trans/main/wp5/publications/ECE_TRANS_264_E_Web_Optimized.pdf

> *This report was published by UNECE in 2017 to highlight ways of obtaining financing for transport infrastructure. The main topics discussed surround the theory and practice of transport infrastructure financing, which is useful when researching alternative mechanisms for financing through transport users and regional banks. This source is useful for understanding current transport financing and potential future economic models involving PPPs. Delegates interested in a detailed description of recommendations on how actors can best utilize financing tools and instruments for sustainable transport development will find this report helpful.*

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[191] UNECE, *SDGs and the UN Transport Conventions.*
[192] UNECE, *Supporting Countries to Achieve the SDGs.*
[193] European Commission, *EU to Invest Nearly €700 million in Sustainable and Innovative Transport*, 2018.
[194] UN DESA, *UN Conference to Address Way Forward on Global Sustainable Transport Challenges*, 2016.
[195] New South Wales Government, *Future Transport Strategy 2056*, 2018, p. 2.

United Nations, Economic Commission for Europe. (2017). *TEM Project Strategic Plan 2017-2021.* Retrieved 23 August 2020 from: https://www.unece.org/fileadmin/DAM/trans/main/tem/TEM_SP_17-2021_E_WEB.pdf

> *The UNECE Trans-European Motorways (TEM) Project published a strategic roadmap that outlines a new plan, which extends beyond the existing frameworks and objectives. The report identifies new challenges faced by the project in international cooperation and the need for an updated implementation plan as the catalysts for the new strategic plan. The outcomes stated in the report are that the TEM Project will continue to support UNECE and the ITC in achieving the SDGs, and the SDGs will be translated into strategic initiatives. This source will be useful for delegates when thinking about the future state of sustainable transportation development and in making recommendations.*

United Nations, Economic Commission for Europe. (2019). *Report of the Inland Transport Committee on its Eighty-first session (ECE/TRANS/288).* Retrieved 23 August 2020 from: http://undocs.org/ECE/TRANS/288

> *Each year, the ITC produces an annual report which is delivered to ECOSOC that highlights the work of the committee and recognizes the calls to action for Member States. This report outline. THE PEP and its work over the year in regards to partnerships and intelligent transport systems. Environment and climate change are also topics of the annual report in which the ITC urges Member States to continue implementing their transport-related targets to achieve the SDGs. Delegates looking to start research on the current topics and recommendations being made by the UNECE and the ITC should begin with this document.*

World Health Organization. (2018). *Making THE (Transport, Health, and Environment) Link.* Retrieved 23 August 2020 from: https://thepep.unece.org/sites/default/files/2018-09/online%20version.pdf

> *The World Health Organization created this informational report that showcases the links between THE PEP and the SDGs in order to encourage Member States to continue using the programme. THE PEP focuses on making the link between the harmful effects of transport on health and the environment. The report highlights how THE PEP is linked to 12 of the SDGs and utilized targets and case studies to show the benefits of participation. Delegates will find the sections on SDG 9, 13 and 17 helpful in gaining a better understanding of the work that is done by THE PEP.*

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II. Supporting Emerging Economies through Technical Cooperation

*"Improving daily lives of people is at the heart of our technical assistance. By helping our Member States'
capacity to accede to, adopt and implement its legal instruments and standards, we support their efforts
to achieving the Sustainable Development Goals."*[196]

Introduction

The United Nations Economic Commission for Europe (UNECE) region is described as "the most
advanced but also the most diverse region of the world" in the 2012 UNECE report *Technical
Cooperation: Delivering as One.*[197] This is mainly due to the diversity in economic strength of its 56
Member States, ranging from one low-income country, to 19 lower and upper-middle-income countries,
and 36 high-income countries, with several of them being emerging economies.[198] By definition, emerging
economies "are economies of countries that are in the progress of becoming a developed country and
typically are moving toward mixed or free markets. Emerging market economies often have lower per
capita income than developed countries, and often have liquidity in equity markets, are instituting
regulatory bodies and exchanges, and see rapid growth."[199] The term "emerging economies" can easily
be confused with the term "economies in transition," especially in the UNECE context.[200] Many of the
emerging economies in UNECE are also economies in transition as they "[were] once a communist state,
and [are] now becoming a free market economy – changing from communism to capitalism, from central
planning to free market."[201] Additionally, some emerging economies experience high levels of
sociopolitical instability and volatility caused by armed conflicts, social tensions, natural disasters, and
price shocks.[202] These factors affect and impact the economic growth of emerging economies.[203]

Overall, UNECE's Gross Domestic Product has benefited from stable growth over the last decade, with
early 2020 forecasts, before the COVID-19 pandemic, indicating continued overall growth, particularly in
UNECE's emerging economies.[204] However, even with steady growth, there are UNECE Member States
with emerging economies that have comparably lower incomes than other UNECE Member States, such
as Kyrgyzstan, Moldova, Tajikistan, and Uzbekistan.[205] With the onset of the COVID-19 pandemic,
economic growth severely contracted across the entire region.[206] By the second quarter of 2020, in just
the Eurozone, economic growth collapsed 17.9% compared to the first two quarters of the year before.[207]
Ensuring technical cooperation amongst Member States is especially critical now given current global
economic conditions, which project the number of those in extreme poverty to rise to between 703 and
729 million worldwide and affecting mostly countries with higher numbers of poor.[208]

UNECE supports its Member States with emerging economies through technical cooperation to achieve
the Sustainable Development Goals (SDGs) ranging from combatting poverty and inequality, over climate
change, environmental degradation, to achieving prosperity, and peace and justice, outlined in the *2030
Agenda for Sustainable Development* (2030 Agenda) and integrate their economies into the European
and global economy.[209] Technical cooperation involves projects and capacity-building activities related to

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[196] UNECE, *Technical Cooperation*, 2019.
[197] UNECE, *Technical Cooperation: Delivering as One*, 2012, p. 5.
[198] World Bank, *World Bank Country and Lending Groups*, 2019.
[199] Sraders, *What Are Emerging Markets? Characteristics and List in 2019*, 2019.
[200] MBN, *Transition Economy – Definition and Meaning*, 2019.
[201] Ibid.
[202] Ibid.
[203] Sraders, *What Are Emerging Markets? Characteristics and List in 2019*, 2019.
[204] UN DESA, *World Economic Situation and Prospects*, 2020, pp. 3-4.
[205] Shelburne, *Financing Development in the UNECE Emerging Markets*, 2008.
[206] IMF, *World Economic Outlook Report*, 2019, p. 10.
[207] *GDP Main Aggregates and Employment Estimates for the Second Quarter of 2020*, Eurostat, 2020, p. 7.
[208] World Bank, *Poverty*, 2020.
[209] UNECE, *Technical Cooperation*, 2019.

the environment, energy, transport, trade, data analysis, and gender-mainstreaming.[210] Based on the principle of *leaving no one behind*, the work of UNECE in the field of technical cooperation is focused on four approaches: "demand driven, results oriented, focused on economies in transition, and linked to UNECE's normative work."[211] The three main building blocks of UNECE's technical cooperation efforts are advisory services, capacity-building activities, and technical cooperation projects.[212] It is used by UNECE to maintain ongoing communications with local staff and regional advisors within the UN system and external collaborators to achieve these objectives.[213]

International and Regional Framework

The legal foundation for the work of UNECE in the field of technical cooperation is General Assembly resolution 58(I) from 1946.[214] Resolution 58(I) established the Regular Programme of Technical Cooperation (RPTC).[215] The program was originally designed "to respond to urgent needs of developing countries in technical assistance when funding from other parts of the regular budget is not available."[216] Today, the main focus of the RPTC is to support emerging economies to achieve the SDGs.[217] By doing so, UNECE improves connectivity and cooperation within the region and creates more dynamic and resilient economies.[218]

UNECE's technical cooperation efforts for emerging economies is also guided by the 1998 *Tashkent Declaration* that launched the United Nations Special Programme for the Economies of Central Asia (SPECA) together with the UN Economic and Social Commission for Asia and the Pacific.[219] Under the *Tashkent Declaration*, UNECE aims to strengthen sub-regional cooperation in Central Asia and its integration into the world economy and prioritizing, amongst other things, cooperation in the fields of infrastructure development and simplification of trade procedures.[220] To implement the goals of the declaration, it calls for the UN system, Member States, and the private sector to provide support in the form of fiscal and technical expertise.[221] In 2007, SPECA was further expanded through UNECE's *Technical Cooperation Strategy*.[222] Articles 4 and 5 of the strategy define technical cooperation in the UNECE context as "ensur[ing] a direct link between intergovernmentally agreed norms and standards and technical cooperation" as well as using its capabilities to build effective networks.[223] Furthermore, articles 6 and 7 describe the principles under which UNECE technical cooperation efforts are carried out.[224] The strategy sets out the main goals of technical cooperation, the types of technical cooperation activities, goals for cooperation with other organizations, funding of UNECE technical cooperation, and roles of intergovernmental bodies and the secretariat.[225]

The work of SPECA is complemented by the European Union's (EU) strategy for Central Asia, which was adopted in 2007.[226] The strategy defines the EU's development aid in the region.[227] The strategy objective to "undertake reforms and strengthen democracy, human rights, the rule of law and the independence of

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[210] UNECE, *Technical Cooperation*, 2019.
[211] Ibid.
[212] Ibid.
[213] Ibid.
[214] UNECE, *Regular Programme of Technical Cooperation*, 2019.
[215] Ibid.
[216] Ibid.
[217] Ibid.
[218] UNECE, *Supporting Countries to Achieve the SDGs*, 2019.
[219] UNECE, *SPECA*, 2019.
[220] Ibid.
[221] UNECE, *Tashkent Declaration*, 2019.
[222] UNECE, *UNECE Technical Cooperation Strategy*, 2007.
[223] Ibid.
[224] Ibid.
[225] Ibid.
[226] European Council, *The EU and Central Asia: Strategy for a New Partnership*, 2007.
[227] Ibid.

the judiciary, as well as to modernize and diversify the economy, including by supporting the private sector, in particular small and medium-sized enterprises, in a free market economy."[228] In September 2019, the strategy was replaced with a new one: *Connecting Europe and Asia – the EU Strategy*.[229] The strategy emphasizes the importance of connectivity focusing on four areas: efficient transport, energy, digital, and the human dimension.[230] The EU and Asia plan to improve these four areas "by strengthening bilateral, regional, and international partnerships based on commonly agreed standards and rules; and by leveraging sustainable financing for investments."[231] An example of a connectivity project financed under this strategy is the Indicative Ten-T Investment Action Plan, identifying approximately EUR 12.8 billion worth of infrastructure and logistics opportunities through 2030, 15% of which includes 4,800km of railway spanning through Europe and Asia.[232] Financial supporters of the strategy include the European Structural and Investment Funds, the European Fund for Strategic Investments, the Investment Facility for Central Asia, the Asian Investment Facility and the European Fund for Sustainable Development.[233]

Role of the International System

The overall aim of UNECE is to promote economic integration across its region.[234] The projects UNECE initiates under its technical cooperation program all work towards this overall goal, as they focus on sub-regional and regional integration.[235] UNECE uses a multisectoral approach in its technical cooperation activities, including energy, trade, and sustainable transportation.[236] It designs its technical cooperation projects to have a long-term impact, meaning that projects can be sustained by the Member State without further assistance once it is implemented.[237] The 2018 UNECE report, *Success Stories in Technical Cooperation Towards the 2030 Agenda,* highlights successful projects in technical cooperation by UNECE in support of the SDGs, such as SDG 7 (achieving affordable and clean energy), SDG 11 (achieving sustainable cities and communities), SDG 13 (climate action), and SDG 16 (achieving peace, justice, and stronger institutions).[238] These projects range from tackling cooperation on hydrology and environment between Tajikistan and Afghanistan, to improving trade facilities in Ukraine.[239]

Furthermore, UNECE established the Working Group on Technical Cooperation in 2004 with the primary responsibility to facilitate technical cooperation amongst emerging economies.[240] The Working Group is composed of the Chief of the Programme Management Unit, six Regional Advisors, representatives from programs without a Regional Advisor, and a representative of the Executive Office.[241] Its main purpose is to support the UNECE Programme Management Unit in increasing overall coherence of UNECE's technical cooperation activities.[242] Each Regional Advisor is responsible for one of the following topics: environment, transport, statistics, economic cooperation and integration, sustainable energy, and trade.[243] In cooperation with UN Country Teams, the Regional Advisors provide advisory services and channel requests on technical support from Member States in need to the UNECE Secretariat.[244] The work of UNECE in the field of technical cooperation has been documented through annual reports.[245] The

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[228] Ibid.
[229] European Council, *Central Asia: Council Adopts a new EU Strategy for the Region*, 2019.
[230] EEAS, *Connecting Europe and Asia – the EU Strategy*, 2019.
[231] Ibid.
[232] European Commission, *Indicative Ten-T Investment Action Plan*, 2020, p. 6.
[233] EEAS, *Connecting Europe and Asia – the EU Strategy*, 2019.
[234] UNECE, *Case Study Compilation*, 2019.
[235] UNECE, *Technical Cooperation*, 2019.
[236] Ibid.
[237] Ibid.
[238] UNECE, *Success Stories in Technical Cooperation - Towards the 2030 Agenda*, 2018.
[239] Ibid.
[240] UNECE, *Working Group on Technical Cooperation*, 2019.
[241] Ibid.
[242] Ibid.
[243] UNECE, *UNECE Regional Advisors*, 2019.
[244] Ibid.
[245] UNECE, *Reporting on Technical Cooperation Activities*, 2019.

landmark 2012 report *Technical Cooperation: Delivering as One*, provides an overview of the UNECE technical cooperation activities implemented at the country, sub-regional and regional levels of the region.[246]

The work of UNECE in the field on technical cooperation for emerging economies is characterized through "partnerships between stakeholders including governments, international and regional organizations, businesses, academia and civil society" in alignment with SDG 17.[247] In the wake of the COVID-19 pandemic, the Economic and Social Council's Inter-Agency Task Force's report, titled *Financing for Sustainable Development 2020*, highlights the importance of multilateral cooperation and coordination across sectors and it calls for varied finance strategies, to provide emerging markets with needed capital, stabilize market activity, promote trade, suspend or reduce debt payment, and encourage growth.[248] Furthermore, an example of cooperation within the UN system is the United Nations Development Account (UNDA).[249] UNDA is financed through the regular UN budget and serves as a platform for entities within the Economic and Social Council that work on technical cooperation.[250] These entities are the UN Department of Economic and Social Affairs, the UN's regional commissions (including UNECE), the UN Conference on Trade and Development, the UN Environment Programme, the UN Human Settlements Programme and the UN Office on Drugs and Crime.[251] The goal of this platform is to foster "collaboration of entities of the UN Secretariat on innovative, cross-sectoral regional or interregional projects which draw mainly on the technical, human and other resources available in beneficiary countries."[252]

Beyond the work of the UN, many different stakeholders provide support for emerging economies through technical cooperation.[253] Examples of regional and sub-regional actors are the European Commission, the World Bank, the European Bank for Reconstruction and Development (EBRD), and the Asian Development Bank (ADB), which are all donors of financial assistance for technical cooperation projects.[254] An example for such a project that is supported and run by the ADB is the "Strengthening Tax Policy and Administration Capacity" project in Azerbaijan.[255] Approved in September 2019, the project aims at reducing Azerbaijan's dependency on oil revenues by more efficiently managing its tax revenues and building policy analysis capacity to mobilize other domestic resources.[256] Technical cooperation in this project consists of providing operational support to help local ministries design tax administration and policy reforms.[257]

The private sector has also been actively involved in supporting UNECE in its technical cooperation efforts.[258] For example, Microsoft has supported the development of information and communication technology (ICT) standards for e-business and e-commerce in transitioning economies.[259] Additionally, Microsoft has founded the Technology for Emerging Markets research group, which is working on designing, building, and evaluating tools, services, and platforms that boost health, education, and incomes for technologically underserved rural and urban communities.[260] In May of 2019, Microsoft undertook a joint-partnership with Deutsche Telekom to expand services for cloud networks across

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[246] UNECE, *Technical Cooperation: Delivering as One*, 2012, p. 5.
[247] UNECE, *Supporting Countries to Achieve the SDGs*, 2019.
[248] Inter-Agency Task Force on Financing for Development, *Financing for Sustainable Development Report*, 2020, p. 81.
[249] UNECE, *United Nations Development Account*, 2019.
[250] Ibid.
[251] Ibid.
[252] Ibid.
[253] UNECE, *Partnerships*, 2019.
[254] Ibid.
[255] ADB, *Azerbaijan: Strengthening Tax Policy and Administration Capacity*, 2019.
[256] Ibid.
[257] Ibid.
[258] UNECE, *Partnerships*, 2019.
[259] Ibid.
[260] Microsoft, *Technology for Emerging Markets*, 2019.

Europe.[261] Today, with respect to the COVID-19 pandemic, Deutsche Telekom assists with contact tracing efforts in partnership with German software company, known as SAP, and guidelines from other groups such as Apple and Google.[262]

Efficient Use of Financial Resources for Technical Cooperation

The lack of resources for emerging economies when trying to achieve the Millennium Development Goals (MDGs) – the precursors to the SDGs – was described as the MDG financing gap.[263] "Developing and emerging market economies need more resources than are usually accessible domestically in order to fully exploit the investment opportunities available to them while also addressing the basic needs of their populations."[264] Today, Member States are encountering similar discrepancies between progress on the SDGs and resource allocation.[265] As a result, UNECE adopted a revised edition of its Resource Mobilization Strategy in 2020, which calls attention to the achievements of following a decentralized approach of resource allocation under the purview of the respective RPTC regional advisers in determining their budget and allocate based on local needs.[266] In 2018-2019, UNECE had a budget of USD 64.3 million, with an additional USD 34.5 million in extrabudgetary contributions.[267] In addition, the ADB has set up the Technical Assistance Special Fund in order to finance "technical assistance grants to borrowing members to help prepare projects and undertake technical or policy studies."[268] Also, EBRD has many funding instruments in place, aimed at "supporting authorities or partners with policy or legal reform, or build client capacity and know-how."[269] The EU has mainly supported Eastern Partnership countries like Moldova, Georgia, Armenia, and Azerbaijan through technical cooperation projects focusing on migration.[270] As of October 2020, in the Eurozone, the European Central Bank set a EUR 1.35 trillion Pandemic Emergency Purchase Programme to assist local economies through the pandemic.[271] Globally, central banks have enacted at least USD 10 trillion in monetary policy to assist with relief.[272] The International Monetary Fund (IMF) warns of the pertinence of revising monetary policy guidelines to reassure investment backers and secure funding.[273] Additionally, over USD 4.3 trillion in the form of bonds and loans, and USD 730 billion in foreign exchange debt will be due by the end of 2020 in emerging markets alone to creditors, according to the International Institute of Finance.[274] Relief efforts in the wake of the COVID-19 pandemic to address global health and the debt crisis continue to prove to be a paramount challenge.[275] In Europe, private equity groups alone have been allocating USD 600 billion on standby showcasing the private sector's investment ambition, and their reliance on governments to enact policies stabilizing markets for them to partake in.[276]

Emerging economies in UNECE have been hit particularly hard by the COVID-19 pandemic.[277] The IMF finds that "one-third of emerging economies have limited or no room for fiscal policy to counter a prolonged crisis," meaning other measures beyond central bank policies need to be enacted.[278] UNECE's

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[261] Leibiger, *Telekom and Microsoft Partner to Drive Cloud Innovation in Europe*, 2019.
[262] Syed, *Germany Taps SAP, Deutsche Telekom for Contact Tracing App*, 2020.
[263] Shelburne, *Financing Development in the UNECE Emerging Markets*, 2008.
[264] Ibid.
[265] UNECE, *Technical Cooperation*, 2019.
[266] UNECE, *Resource Mobilization Strategy*, 2020, p. 7.
[267] UNECE, *Partnerships: Memoranda of Understanding (MoUs)*, 2020.
[268] ADB, *Technical Assistance Special Fund*, 2019.
[269] EBRD, *Donor Funding Instruments*, 2019.
[270] European Commission, *Financial and Technical Assistance*, 2019.
[271] ECB, *Europe's Response to the Crisis*, 2020.
[272] Cassim et al, *The $10 Trillion Rescue*, 2020, p. 2.
[273] IMF, *COVID-19: Impact and Policy Considerations*, 2020.
[274] IIF, *Global Debt Monitor: COVID-19 Lights a Fuse*, 2020.
[275] Ibid.
[276] De Vusser, *How European Private Equity is Taking Coronavirus' First Punch*, 2020.
[277] UNECE, *UN Supports Socio-Economic Response to COVID-19 Crisis in Europe and Central Asia*, 2020.
[278] Gudmundsson et al, *COVID-19 Response in Emerging Market Economies: Conventional Policies and Beyond*, 2020.

UN Centre for Trade Facilitation and Electronic Business (UN/CEFACT) outlines the methodology for UNECE Member States to protect trade and investments promoting public private partnerships (PPPs).[279] In line with the objectives of SDG 16 (peace, justice and strong institutions), transparency and trustworthy institutions are paramount for PPPs to prosper.[280] UNECE members that scored notably low on the control of corruption indicators are Turkmenistan, Tajikistan, Uzbekistan, Kirgizstan, Azerbaijan, Kazakhstan, Moldova, Ukraine, Armenia, Albania, and Serbia.[281] Although corruption controls are already improving, further strides towards anti-corruption strands in accordance with UN/CEFACT and SDG 16's targets are necessary to achieve the SDGs.[282] Innovation, transparency, and accountability in the public sector, as in the private sector, can be "a major source of productivity growth, cost savings and improvements in service quality." [283] However, pre-pandemic emerging economies in the UNECE region are still behind in the implementation of these principles.[284]

Technical Cooperation for Sustainable Urban Development

The *Sustainable Development Goals Report 2020* warns that the stagnating, and in some cases declining, growth towards achieving the SDGs has been exacerbated by the COVID-19 pandemic – where all areas of focus are now threatened.[285] According to UNECE, most economies in transition, for instance, face numerous challenges in the field of sustainable urban development.[286] Three of these challenges are underdeveloped rental markets with a lack of social and subsidized housing for low-income households, underdeveloped "management structure for multi-family housing blocks," and poor energy efficiency in most buildings.[287]

UNECE found in 2015 that at least 100 million people in the region are overburdened when it comes to housing security.[288] The term "overburdened" refers to individuals spending a minimum of 40% of their disposable income on housing.[289] Between 2014 and 2017, UNECE, together with UN-Habitat and ministries and local authorities in charge of housing and land management, implemented sustainable housing infrastructure projects to provide weather resilience, equitable and sustainable power delivery, and mitigate other hazards from below-standard housing.[290] To facilitate these efforts, UNECE employed workshops with Member States and other stakeholders to draft national action plans tailored for the respective urban development needs of each Member State.[291] As a result, UNECE has co-established the United Smart Cities global initiative.[292] UNECE also helped launch the United for Smart Sustainable Cities initiative to "make cities and human settlements inclusive, safe, resilient and sustainable."[293] Both initiatives work to bring policy makers and experts from the public and private sector to exchange knowledge, build partnerships and enact change.[294] The work of these initiatives involves the integration of ICTs to facilitate the transition to smart sustainable cities.[295] These initiatives also strive to provide

[279] UNECE, *UN/CEFACT Digital Standards Can Help Governments Reduce the Risk of Disease Transmission from Animals and Facilitate Legal Trade*, 2020.
[280] UN SDG, *Goal 16: Promote just, peaceful and inclusive societies*, 2020.
[281] UNECE, *Snapshot Report: SDGs in the UNECE Region*, 2019, p. 25.
[282] UNECE, *Innovation in the Public Sector*, 2017.
[283] Ibid.
[284] Ibid.
[285] UN DGC, *The Sustainable Development Goals Report 2020*, 2020, p. 2.
[286] UNECE, *Success Stories in Technical Cooperation - Towards the 2030 Agenda*, 2018, p. 45.
[287] Ibid., p. 45.
[288] UNECE, *Social Housing in the UNECE Region*, 2015, p. 3.
[289] Ibid., p. 3.
[290] UNECE, *Success Stories in Technical Cooperation - Towards the 2030 Agenda*, 2018, pp. 42-43.
[291] Ibid., p. 44.
[292] United Smart Cities, *United for a Smarter and More Sustainable World*, 2019.
[293] ITU, *United 4 Smart Sustainable Cities*, 2019.
[294] Ibid.
[295] UNECE, *United for Smart Sustainable Cities*, 2019.

capacity-building and technology transfer to emerging economies that are located in the UNECE region.[296]

Most recently, UNECE approved the study, *Improving Housing Affordability in the UNECE region* to commence in October 2019 to aid its sustainable urban housing commitments.[297] When the COVID-19 pandemic began to affect the region, these issues were only exacerbated with the seizure of infrastructure construction projects, and pandemic-related economic hardship burdening households and further destabilizing housing security.[298] Pre-pandemic, the gap to adequately finance housing in Europe was estimated to be EUR 57 billion a year.[299] There is now an additional urgent need to rethink sustainable urban development for cities to be better prepared to face future pandemics.[300] Sustainable housing and transportation infrastructure guidelines will need to be revisited as the way day-to-day conduct and movement may change in a post-pandemic global climate as habits shift.[301]

Conclusion

UNECE uses technical cooperation as a means to achieve economic integration amongst its Member States.[302] The COVID-19 pandemic poses a significant challenge and it is important to note that the other social, economic, and environmental issues facing the UNECE region have not subsided because of the pandemic; instead, they have largely been exacerbated by the pandemic.[303] The pandemic has heavily impacted the global economy and social development and now, global support and cooperation is of utmost importance to ensure continuous financial stability and social well-being and prosperity.[304] Solutions to both the pandemic and UNECE's routine challenges regarding cross-border advancements in economic, infrastructural, and social challenges encompassing technical cooperation may be addressed in unison.

Further Research

Moving forward, delegates can consider questions such as: How can capital markets distressed from the COVID-19 pandemic see partnerships with the public sector as strategic to help recover from the economic downturn? How can the efficient use of resources for technical cooperation programs be ensured? How can technical cooperation help to build stronger institutions and fight corruption in UNECE's emerging economies? How can UNECE continue to assist emerging economies in addressing challenges related to sustainable urban development and other pressing challenges? In what ways has the COVID-19 pandemic called attention to the existing inadequacies towards climate change negation through urban development?

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https://developmentfinance.un.org/sites/developmentfinance.un.org/files/FSDR_2020.pdf
> *This document is the highest-level report put out by the United Nations regarding financing and economic undertakings to continue the efforts to achieve the SDGs during*

[296] Ibid.
[297] UNECE, *Extrabudgetary Project: Improving Housing Affordability in the UNECE Region*, 2020.
[298] OECD, *Housing Amid COVID-19: Policy Responses and Challenges*, 2020, p. 4.
[299] PES Group, *Affordable Housing for All: Our Common Answer to COVID-19*, 2020.
[300] UN DGC, *Policy Brief: COVID-19 in an Urban World*, 2020, pp. 4-5.
[301] World Bank, *No Urban Myth: Building Inclusive and Sustainable Cities in the Pandemic Recovery*, 2020.
[302] UNECE, *Technical Cooperation*, 2019.
[303] Fu & Schweinfest, *COVID-19 Widens Gulf of Global Data Inequality, While National Statistical Offices Step Up to Meet New Data Demands*, 2020.
[304] Inter-Agency Task Force on Financing for Development, *Financing for Sustainable Development Report*, 2020, pp. 3-4.

the COVID-19 pandemic. The document highlights the urgencies facing climate change and prosperity amongst peoples at the global and local levels across all sectors. The guidance will provide a strong framework for delegates to familiarize themselves with the technical knowledge required in understanding how financial flows allow for investments to be made in furthering the progress of the SDGs.

United Nations Economic Commission for Europe. (2007). *UNECE Technical Cooperation Strategy*. Retrieved 31 October 2020 from:
https://www.unece.org/fileadmin/DAM/operact/Revised_TCS_e_2007_.pdf
> *The UNECE Technical Cooperation Strategy from 2007 lays the legal foundation for the work of UNECE committee in the field of technical cooperation. It describes the main principles of the work of UNECE in the provision of technical cooperation support to emerging economies in the UNECE region, addresses cooperation with other organizations, and explains the responsibilities of UNECE bodies involved in the provision of technical cooperation. Delegates should consider how the initial calls to action within this document were implemented, and how they were challenged over the time since drafting. In doing so, delegates will be afforded with the insight needed to analyze the broader scope of today's challenges.*

United Nations Economic Commission for Europe. (2015). *Social Housing in the UNECE Region*. Retrieved 19 September 2020 from:
https://www.unece.org/fileadmin/DAM/hlm/documents/Publications/Social_Housing_in_UNECE_region.pdf
> *This report predates the COVID-19 pandemic and enumerates all of the challenges individuals within the UNECE region have regarding housing security and quality of life. Delegates are encouraged to look into how the COVID-19 pandemic created further challenges to these objectives, as policy makers in the UNECE are trying to come to these solutions alongside delegates in real-time. This is a unique learning opportunity in that there are no previous guidelines to fall back on. Delegates will find this source useful as they consider solutions that address the goals of the past (as contained in this document) and adapt those solutions to solve present problems as well.*

United Nations Economic Commission for Europe. (2019). *Case Study Compilation*. Retrieved 27 August 2020 from:
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> *The UNECE Case Study Compilation document provides delegates with a number of case studies that were prepared for the 2019 Regional Forum on Sustainable Development for the UNECE region in order to create a space for peer learning and sharing of practical solutions. Delegates will find this source useful because it provides an overview of the challenges that different transitioning economies in the region faced pre-pandemic. It serves as a starting point from where delegates can continue their research on the technical cooperation to support emerging economies through the COVID-19 pandemic.*

United Nations, Department of Public Information. (2020). *The Sustainable Development Goals Report 2020*. Retrieved 18 September 2020 from: https://unstats.un.org/sdgs/report/2020/The-Sustainable-Development-Goals-Report-2020.pdf
> *Following the Inter-Agency Task Force's aforementioned report, this publication outlines the greater macro challenges facing the SDGs in light of the COVID-19 pandemic, emphasizing particular importance on the uneven impacts facing Member States. This report is rich with data and infographics, making the current progress, and lack thereof in certain cases, of the 17 SDGs easily understood. This report help delegates expand their research considering areas that they may not necessarily be familiar with, pertaining to the topic at hand, thanks to the document's all-encompassing accounts of the SDGs' status in current conditions.*

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III. Strengthening Regional Cooperation to Ensure Sustainable Energy

"Sustainable energy is the golden thread that connects economic growth, increased social equity and an environment that allows the world to thrive."[305]

Introduction

In line with the *2030 Agenda for Sustainable Development*, the United Nations Economic Commission for Europe (UNECE) works to promote international dialogue and communication to develop policies and frameworks around sustainable access to high-quality energy in the European region.[306] The international community has consistently recognized that access to clean and sustainable energy is essential to addressing challenges in food production, job creation, security, climate change, and increasing individual incomes.[307] There are still 789 million people worldwide without access to energy, down from a peak of approximately 1.2 billion in 2010, despite there being a global energy surplus.[308] On 11 October 2019, UN Secretary-General António Guterres addressed the C40 Climate Leadership Group regarding the inefficiencies in the world's production of energy and warning of humanity's waste, and how such a reliance on inefficient, pollutant energy "threatens the viability of human societies."[309]

Current projections indicate that by 2030 650 million people will remain without access to energy.[310] While progress continues to be made, new challenges inhibit access to sustainable energy.[311] Production optimization of low-carbon energy sources is limited by dated power grids and the misallocation of energy resources due to an oversaturated sector.[312] Sustainable energy generally refers to energy that is produced with its potential environmental impacts on ecosystems or climate change and its positive social externalities towards advancing societal progress kept in mind.[313] Access to clean and sustainable energy is a component of addressing a diverse range of challenges, from economic growth and agricultural security to combatting climate change and preventing negative health outcomes.[314] The *2030 Agenda for Sustainable Development* (2030 Agenda) highlights the need to ensure access to affordable, reliable, sustainable, and modern energy for all in its Sustainable Development Goals (SDGs), specifically SDG 7 (affordable and clean energy), and outlines how clean energy is crucial to the achievement of economic, social, and environmental sustainability.[315]

UNECE's commitment to accelerating regional cooperation in energy is showcased by its Regional Advisory Programme on Energy, which has established inter-agency coordination across multiple technical sectors and with UN country teams.[316] While access to energy in the UNECE region is almost 100% across the 56 Member States, this figure does not take into account the quality of energy and significant costs to poorer populations.[317] Currently, over 80% of the total primary energy supply

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[305] Clean Energy Ministerial Meeting, *Speech by Secretary-General Ban Ki-moon on Sustainable Energy "Golden Thread" Connecting Economic Growth, Increased Social Equity* at the *Clean Energy Ministerial Meeting on 12 May 2014, in Seoul*, 2019.

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[311] Ibid., p. 1.

[312] Bogmans, *Our Common Energy Future*, 2019, p. 14.

[313] UN DESA, *Accelerating SDG 7 Achievement: SDG 7 Policy Briefs in Support of the High-Level Political Forum 2019*, 2019, p. 136.

[314] Organisation for Economic Co-operation and Development & International Energy Agency, *OECD Green Growth Studies: Energy*, 2011.

[315] UN General Assembly, *Transforming Our World: The 2030 Agenda for Sustainable Development (A/RES/70/1)*, 2015.

[316] UNECE, *UNECE Regional Advisors*.

[317] UN DESA, *Policy Briefs in Support of the High-Level Political Forum 2020: Accelerating SDG7 Achievement in the Time of COVID-19*, 2020, p. 98.

production originates from fossil fuels.[318] In 2017, UNECE reported on findings which showcased that energy production and consumption accounted for 65% of total global greenhouse gas (GHG) emissions.[319] Efforts to promote green finance, including by international financial institutions, continues to expand globally but renewable energy investments in Europe declined from approximately USD 30 billion in 2012 to USD 16.8 billion in 2017, falling behind consumption demands.[320]

International and Regional Framework

In 1991, with the motivation of cooperation in the aftermath of the Cold War, 69 countries signed the *European Energy Charter* setting principles of cooperation in the energy sector.[321] The Energy Charter was a political declaration that built the foundation for Europe-wide and global energy cooperation with the objective of "improving security of energy supply and of maximizing the efficiency of production, conversion, transport, distribution and use of energy, to enhance safety and to minimize environmental problems."[322] The Energy Charter process led to the adoption of the legally binding *Energy Charter Treaty* (ECT) and the *Protocol on Energy Efficiency and Related Environmental Aspects* in 1994, both of which entered into force in 1998.[323] The ECT established the Energy Charter Conference as the governing body; it is made up of 56 Member States from Europe, Central Asia, Australia, Japan, Jordan, and Yemen.[324] The Russian Federation, though a signatory in 1991 and 1994, has not ratified the ECT, along with Australia, Belarus, and Norway.[325] States parties to the ECT are committed to working cooperatively in support of tackling a variety of modern sustainable energy issues including: promoting competitive open energy markets; developing and modernizing means of transport for energy materials and products; and promoting access to and transfer of energy technology.[326]

The International Energy Charter (IEC), which was adopted by 72 Member States, the EU, the European Atomic Energy Community, and the Economic Community of West African States at a Ministerial Conference in 2015, is the most recent multilateral sustainable energy pact affecting UNECE members.[327] Though not legally binding and without financial commitment by the signatories, the IEC aims to strengthen energy cooperation between members.[328] The document addresses a wide range of current international energy challenges related to fostering regional cooperation in the pursuit of secure and environmentally sustainable energy that stimulates economic development.[329]

The outcome of the 2012 United Nations Conference on Sustainable Development (Rio +20), *The Future We Want*, defined a common vision for ensuring the promotion of an economically, socially, and environmentally sustainable future for the planet.[330] The document includes energy as a thematic area under its framework for action and affirms the importance of sustainable, modern, and affordable energy for poverty eradication, improving health and other basic services, promoting social inclusion and gender equality, and increasing production capacities.[331] It recognized that achieving sustainable energy requires sufficient financial commitment and that efforts towards sustainable development and combatting climate change requires "improving energy efficiency, [and] increasing the share of renewable energy and

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[318] UN DESA, *Policy Briefs in Support of the High-Level Political Forum 2020: Accelerating SDG7 Achievement in the Time of COVID-19*, 2020, p. 18.
[319] UNECE, *Energy for Sustainable Development in the UNECE Region*, 2017, p. 3.
[320] UNEP, *Green Finance Progress Report*, 2017, p. 11; International Energy Agency & Organisation for Economic Co-operation and Development , *World Energy Investment*, 2018.
[321] Energy Charter Secretariat, *The European Energy Charter*, 2015.
[322] The Hague Conference on the European Energy Charter, *European Energy Charter*, 1991, p. 8.
[323] Energy Charter Secretariat, *The Energy Charter Treaty*, 2019.
[324] Ibid.
[325] Energy Charter Secretariat, *Members and Observers of the Energy Charter Conference*, 2019.
[326] European Energy Charter Conference, *The Energy Charter Treaty*, 1994.
[327] Energy Charter Secretariat, *The International Energy Charter*, 2016.
[328] Ibid.
[329] Ibid.
[330] UN General Assembly, *The Future We Want (A/RES/66/288)*, 2012.
[331] Ibid., pp. 24-25.

cleaner and energy-efficient technologies."[332] Energy is also identified as a cross-cutting concern for sustainable transportation and sustainable cities and human settlements.[333]

In 2015, the UN General Assembly unanimously adopted resolution 70/1, "Transforming Our World: The 2030 Agenda for Sustainable Development," and established 17 SDGs to guide the international community's efforts in achieving sustainable development and prosperity for all.[334] Access to sustainable energy for all is integral to the achievement of many of the SDGs, notably SDG 7 (affordable and clean energy), which aims to: bring access to electricity to everyone, including the poorest countries; improve energy efficiency; and increase the share of renewable energy, including for transportation and heating.[335] SDG 7 is interconnected with other SDGs and likely cannot be achieved without significant developments in: SDG 4 (quality education), SDG 8 (decent work and economic growth), SDG 9 (industry, innovation, and infrastructure), SDG 11 (sustainable cities and communities), and SDG 13 (climate action).[336] SDG 17 (partnerships for the goals) also guides the work of UNECE by highlighting cooperation on the regional, national, and local levels.[337] Partnerships are treated as an important component of the 2030 Agenda and UNECE has put a focus on working in cooperation not only with other Member States but also with other UN agencies.[338] It underlines the principle of 'delivering as one', which was already introduced through General Assembly resolution 62/277 in 2008.[339] In addition, the 2015 *Paris Climate Agreement* underlines the importance for the international community to foster synergistic regional cooperation and promote universal access to sustainable energy.[340]

On a regional level, the European Union (EU) recognized the need to set ambitious targets on increasing energy efficiency and renewable energy and reducing greenhouse gas emissions in its *2030 Climate & Energy Framework* (2014), which was revised to include higher targets in 2018.[341] The targets set by the framework were to reach a 40% cut in greenhouse gas emissions compared to 1990 levels and improve energy efficiency at the regional level by at least 32.5%, following the 20% target for 2020.[342] The regional overlap with the EU ensures a deeply intertwined approach for UNECE when navigating the climate and energy framework's call for National Climate and Energy Plans for the period 2021-2030, with its goals towards a low-carbon economy and clean energy, ensuring affordable energy for all, reducing air pollution, increasing security of energy supply, and reducing non-sustainable energy dependence.[343] In 2019 under the *Clean Energy for All Europeans* package, the EU comprehensively revised their energy policy to deliver on their *Paris Climate Agreement* commitments, with specific updates regarding energy efficient infrastructure, electricity market management, and new regulatory mechanisms.[344] The *Clean Energy for All Europeans* package also created the National Energy and Climate Plans (NECPs), published for the first time in 2020, which are a set of national plans published and defined by each EU Member State outlining the plans of each country, and the region as a whole, to address a great number of climate and energy issues, such as energy efficiency, renewable energy, research and innovation.[345]

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[332] Ibid., pp. 24-25.

[333] Ibid., p. 26.

[334] UN General Assembly, *Transforming Our World: The 2030 Agenda for Sustainable Development (A/RES/70/1)*, 2015.

[335] UN DESA, *Sustainable Development Goal 7*, 2019.

[336] UN DESA, *Policy Briefs in Support of the High-Level Political Forum 2020: Accelerating SDG7 Achievement in the Time of COVID-19*, 2020.

[337] UNECE, *Partnerships*.

[338] Ibid.

[339] UN General Assembly, *System-wide coherence (A/RES/62/277)*, 2008.

[340] COP 21, *Paris Agreement*, 2015.

[341] European Commission, *2030 Climate & Energy Framework*.

[342] Ibid.

[343] Ibid.

[344] European Commission, *Clean energy for all Europeans package*, 2019.

[345] European Commission, *National Energy and Climate Plans*, 2020.

Role of the International System

UN General Assembly resolution 65/151 (2011) declared 2012 the International Year of Sustainable Energy for All in support of promoting "access to energy and energy services and the use of new and renewable energy technologies."[346] In this context, former UN Secretary-General Ban Ki-moon launched the Sustainable Energy for All (SEforALL) Initiative with the aim of mobilizing all relevant stakeholders, including governments, the private sector, and civil society, to promote access to sustainable energy.[347] The head of SEforALL also holds the position as the UN Secretary-General's Special Representative for Sustainable Energy for All and Co-Chair of UN-Energy.[348] Following that the UN General Assembly adopted resolution 67/215 on "Promoting of new and renewable sources of energy" (2013), in which Member States declared 2014-2024 the UN Decade of Sustainable Energy for All.[349] The decade aims to increase energy access, efficiency, and sustainability; strengthen cooperation among relevant stakeholders, including the private sector, for research and development; and enable policies and investments on the national and international level.[350]

In May 2019, UN DESA, together with the UN General Assembly President, the Group of Friends of Sustainable Energy, UN-Energy, and the Technical Advisory Group on SDG 7, hosted a High-Level Dialogue to conduct a mid-point review of the progress made during the UN Decade of Sustainable Energy for All.[351] The policy briefs published for the event included a review of SDG 7 in the UNECE region.[352] The brief notes that, though the region is close to 100% access to energy, UNECE faces an aging energy infrastructure, lack of diversity in energy sources, and tariffs, which lead to vast differences in energy quality and costs leading to energy poverty among poor and rural populations.[353] This report highlights other issues the region faces, such as: limited progress in implementing National Energy Efficiency Action Plans, a low rate of renewable energy consumption of only 12% across the region in 2016 resulting in a concerning fossil fuel dependency, and a high carbon footprint especially in Central Asia and Eastern Europe due to inefficient and old energy infrastructure including industry and buildings.[354] The dedication to universal access to affordable, reliable, sustainable, and modern energy for all was reaffirmed at the 2020 High-level Political Forum on Sustainable Development (HLPF) follow up and review of the *2030 Agenda for Sustainable Development* and the SDGs.[355] In the Ministerial Declaration of the 2020 HLPF, Member States committed to accelerating the deployment of sustainable energy technologies, including through the promotion of access to and investment in clean and advanced energy technologies and energy infrastructure.[356] The review also acknowledged the vital impact that reliable, sustainable, and modern energy for all, and achieving universal access by 2030 could have on the facilitation of recovery from the COVID-19 pandemic.[357] The most recent report on tracking the progress of SDG 7 indicates that although the world continues to advance toward achievement of the goals for 2030, the COVID-19 pandemic has had negative impacts on all levels of society and the full impact of COVID-19 is still yet to be seen.[358]

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[346] UN General Assembly*, International Year of Sustainable Energy for All (A/RES/65/151)*, 2011, pp. 2-3.
[347] UN General Assembly*, International Year of Sustainable Energy for All, 2012 – Report of the Secretary-General (A/67/314)*, 2012.
[348] SEforALL, *About us*.
[349] UN General Assembly, *Promotion of new and renewable sources of energy (A/RES/67/215)*, 2013.
[350] Ibid.
[351] UN DESA, *United Nations Decade of Sustainable Energy for All 2014-2019*, 2019.
[352] UN DESA, *Accelerating SDG 7 Achievement: SDG 7 Policy Briefs in Support of the High-level Political Forum 2019*, 2019, pp. 129-134.
[353] Ibid., pp. 130-131.
[354] UN DESA, *Accelerating SDG 7 Achievement: SDG 7 Policy Briefs in Support of the High-level Political Forum 2019*, 2019, pp. 130-132; ECA R-UNDG & RCM, *Building More Inclusive, Sustainable and Prosperous Societies in Europe and Central Asia*, 2017, p. 71.
[355] ECOSOC, *Draft ministerial declaration of the high-level segment of the 2020 session,* 2020, p. 6.
[356] Ibid., p. 6.
[357] Ibid., p. 6.
[358] International Energy Agency et al., *Tracking SDG 7: The Energy Progress Report Highlights*, 2020, p. 1.

UNECE is involved in a variety of work on sustainable energy, such as sustainable resource management, deep transformation of energy systems, reducing the environmental footprint of fossil fuels, and regional cooperation through projects and partnerships.[359] To focus on sustainable resource management, UNECE created the UN Framework for Classification for Resources, which provides a variety of relevant shareholders with a tool for sustainable development of energy and mineral resource endowments.[360] UNECE has long worked to strengthen regional cooperation in energy efficiency standards, climate change mitigation, and technology and information management.[361] UNECE's role in the international sustainable energy strategy is to facilitate the transition to a future of sustainable energy, while introducing renewable energy sources that reduce the health and environmental impacts from non-renewable energy sources.[362] This is done through multi-faceted approaches coordinated by UNECE between Member States, other relevant UN bodies, the private sector, non-governmental organizations, and civil society organizations (CSOs).[363] UNECE's Committee on Sustainable Energy is an example of a forum that fosters such progressions.[364] Another example is the International Geothermal Association, which encourages the development and utilization of geothermal resources worldwide through the publication of scientific and technical information.[365] These partnerships enhance mutual capacities with respect to procuring financial investments, drafting comprehensive energy policies, sharing of information and technical expertise, and modernizing energy systems to maximize optimization of new technologies.[366] Empirical analysis of existing data inputs, and using the aggregate data to project possible outcomes for the future, is also a useful component for achieving sustainable energy and climate targets.[367]

UNECE also established the Joint Task Force on Energy-Efficiency Standards in Buildings through its Committee on Urban Development Housing and Land Management.[368] This is a step towards fulfilling a new target of achieving carbon-neutrality amongst UNECE Member States by 2050, in support of SDG 7, SDG target 9.4, and SDG target 13.2.[369] Fulfillment of this goal and other targets relies on enhanced regional cooperation, acceleration of technology, and modernization and public-private partnerships (PPPs) between national and local governments and the commercial sectors.[370]

Incentivizing Sustainable Energy Infrastructure Investment

While the development of new infrastructure is making slow progress, existing energy grids continue to be a challenge for transporting clean energy from modern energy sources.[371] Dated energy grid systems are centralized and do not have the capacity to fully incorporate the addition of newer energy technologies in a modular manner.[372] Traditional grid systems (TGSs) already experience transmission and distribution (T&D) losses during energy transportation that will only continue to occur and grow with the addition of renewable energy production sources feeding into these grids as they age.[373] T&D losses from old infrastructure and run down networks play a significant role in contributions towards the high carbon

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[359] UNECE, *Energy: Key Areas of Work*.
[360] UNECE, *UNFC and Sustainable Resource Management*.
[361] UNECE, *Success Stories in Technical Cooperation Towards the 2030 Agenda*, 2018, p. 3.
[362] UNECE, *Sustainable Energy*.
[363] UNECE, *About Energy Programme*.
[364] UNECE, *Committee Objectives*.
[365] UNECE, *MOUs*.
[366] UNECE, *Committee Objectives*.
[367] UNECE, *About Pathways to Sustainable Energy*.
[368] UNECE, *Terms of Reference for the Joint Task Force on Energy Efficiency Standards in Buildings of the ECE Region for 2018-2019 (ECE/ENERGY/2017/5)*, 2017, p. 1.
[369] UNECE, *List of Parliamentary Documents: Accelerating and Deepening the Transition to Sustainable Energy Systems*, 2019.
[370] UNECE, *Standard on Public-Private Partnerships in Renewable Energy (ECE/CECI/WP/PPP/2018/7)*, 2018, p. 6.
[371] UNECE, *Pathways to Sustainable Energy*, 2019, p. 16.
[372] Ibid., p. 16.
[373] REN21, *UNECE Renewable Energy Status Report*, 2017, p. 10.

footprints of some UNECE Member States.[374] These energy producers in the UNECE region lack the incentive to upgrade their TGSs to more advanced infrastructure, due in part by their ability to pass on the costs of T&D losses to consumers.[375]

The adoption of corporate social responsibility initiatives by private entities has begun to shift this paradigm and encouraged greater investment in the development of sustainable energy infrastructure.[376] As of 2019, over 1,500 international financial institutions, with approximately USD 62 trillion worth of assets under management, pledged to commit to financing environmental, social, and governance development under the UN Environment Programme's Finance Initiative (UNEP FI), a partnership between UNEP and the global financial sector to mobilize private sector finance for sustainable development.[377] The sourcing of renewable energy by multinational corporations in 2018 grew by 216% from the previous year.[378] In spite of this, global investment in sustainable energy green finance fell from USD 326.3 billion to USD 288.9 billion, despite the commitment under UNEP FI. [379] This gives prominence to the difficulty businesses have in directly taking part in energy investment.[380] As a result, the world is not on track to fulfill SDG 7 with global energy-related carbon dioxide increasing by almost 1.7% from the previous year.[381]

Between 2007 and 2014, UNECE managed the Financing Energy Efficiency and Renewable Energy Investments for Climate Change Mitigation project with the goal to promote an investment environment in which funds are inclined to finance self-sustaining energy efficiency and renewable energy projects through institutional capacity building and policy reforms.[382] In cooperation with other UN Regional Commissions and UN bodies, 12 UNECE Member States came together for several workshops and projects on business development and investment in energy efficiency and renewable energy in public and private sectors.[383] The countries implemented recommendations on policy reforms and capacity building creating case studies and collecting best practices and success factors for other governments and markets to learn from their experience.[384] According to the 2020 progress report on SDG 7, prior to the COVID-19 pandemic, a drastic and urgent increase in international efforts was needed in order to meet the requirements of SDG 7 by 2030.[385] This need can provide UNECE Member States to consider options for economic stimulus, in the form of infrastructure development that not only responds to the immediate crisis, but also ensures longer-term social, economic, and environmental sustainability.[386]

Implementing Information and Communication Technologies for Sustainable Energy Production

The utilization of energy networks equipped with information and communication technologies (ICTs) has the potential to greatly assist the achievement of SDG 7.[387] ICTs can support better data collection, processing, and analysis for networks known as smart grids, being defined by the International Energy

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[374] UNECE, *Progress in the Areas of Energy Efficiency and Renewable Energy in Selected Countries of the UNECE Region*, 2019, p. 40.

[375] Council of European Energy Regulators, *CEER Report on Power Loss*, 2017, p. 35.

[376] Goldman Sachs, *Sustainable Finance Innovation Forum 2018: Key Takeaways*, 2018, p. 9.

[377] UN Global Compact, *Integrate the Principles for Responsible Investment*; UNEP FI, *About United Nations Environment Programme Finance Initiative*.

[378] Runyon, Corporations More Than Double Commitment to Renewable Energy in 2018, *Renewable Energy World*, 2019.

[379] REN21, *Renewables 2019: Global Status Report*, 2019.

[380] Ibid.

[381] Ibid., p. 17.

[382] UNECE, *Financing Energy Efficiency and Renewable Energy Investments for Climate Change Mitigation – Final Report*, 2018.

[383] Ibid.

[384] Ibid.

[385] International Energy Agency et al., *Tracking SDG 7: The Energy Progress Report Highlights*, 2020, p. 1.

[386] Ibid., p. 1.

[387] Modi & Figueroa, Sustainable Development Goal for Energy and Information and Communications Technologies, *UN Chronicle*, 2019.

Agency (IEA) as, "infrastructure that enables the delivery of power from generation sources to end-uses to be monitored and managed in real time."[388] UNECE is committed to this systematic approach in bringing smart grids online through assessment of faults in grid monitoring amongst Member States.[389] UNECE has identified concrete opportunities for developing the global dialog regarding smart grids by working with international organizations such as the IEA, the European Commission, or the Asian Development Bank, to develop smart grid systems in areas currently lacking in such infrastructure, such as some regions in Central Asia.[390] Incorporating artificial intelligence (AI) in ICTs has the potential to secure further energy stability.[391] AI provides the ability to allocate energy flows and power voltages through real-time grid analysis.[392] However, end-to-end communication of ICTs between areas of final consumption and areas of production continues to be the main challenge for smart grid analysis.[393] Despite the potential that these technological advancements provide for the production of sustainable energy, the COVID-19 pandemic threatens the progress that has been made.[394] According to the IEA, although notable progress has been made, prior to the COVID-19 pandemic the vast majority of the technologies and sectors were quite off track from necessary changes needed to achieve the SDGs.[395] The IEA have identified the coming months and years as a pivotal time for our energy future, and the sustainable use and development of beneficial ICTs can play a impactful role.[396]

Utilizing Emissions Trading Systems to Further Sustainable Energy Production

The creation of markets where regulated emissions thresholds can be exchanged plays a unique role in limiting GHGs.[397] An emissions trading system (ETS) secures lower pollution levels while simultaneously encouraging energy producers to develop more efficient methods of energy production.[398] This is done by setting a "cap" on emissions or taxing additional output, or some combination of the two.[399] Additionally, plants which perform under their pollution threshold can sell their remaining allotment of emission to plants that are in need of continuing their productions.[400] The EU's ETS caps emissions from over 11,000 installations.[401] In the EU, 45% of GHGs are under this system.[402]

On 7 October 2019, the amended version of UNECE's *Gothenburg Protocol* from 2012 came into effect.[403] The *Gothenburg Protocol* introduced the first legally binding emissions standards for pollutants derived from energy production, going forward from 2020.[404] The *Gothenburg Protocol* reinforces the abatement incentives behind ETS, creating a well-defined market where producers are pushed in the direction of sustainable energy expansion.[405] The EU is looking to include industries other than energy producers, which rely on energy for their production and their indirect contributions to GHG production, in ETSs.[406] However, globally ETSs are not widespread enough to limit volatility in emissions pricing,

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[388] International Energy Agency & Organisation for Economic Co-operation and Development, *Technology Roadmap: Smart Grids*, 2011, p. 1.
[389] UNECE, *Electricity System Development: A Focus on Smart Grids*, 2015, p. 7.
[390] Ibid., p. 11.
[391] ITU, *United Nations Activities on Artificial Intelligence (AI)*, 2019, p. 43.
[392] Dragomir, *Solution Based on Artificial Intelligence in Smart Grid*, 2013.
[393] Sofana, *Future Generation 5G Wireless Networks for Smart Grid: A Comprehensive Review*, 2019, p. 1.
[394] International Energy Agency, *The Impact of the Covid-19 Crisis on Clean Energy Progress*, 2020.
[395] Ibid.
[396] Ibid.
[397] UNECE, *Entry Into Force of Amended Gothenburg Protocol is Landmark For Clean Air and Climate Action*, 2019.
[398] Ibid.
[399] Organisation for Economic Co-operation and Development, *Emission Trading Systems*, 2019.
[400] European Commission, *EU Emissions Trading System (EU ETS)*.
[401] Ibid.
[402] Ibid.
[403] UNECE, *Entry Into Force of Amended Gothenburg Protocol is Landmark For Clean Air and Climate Action*, 2019.
[404] UNECE, *Amendment of the text of and annexes II to IX to the 1999 Protocol to Abate Acidification, Eutrophication and Ground-level Ozone and the addition of new annexes X and XI (ECE/EB.AIR/111/Add.1)*, 2012.
[405] UNECE, *Entry Into Force of Amended Gothenburg Protocol is Landmark For Clean Air and Climate Action*, 2019.
[406] European Commission, *EU Emissions Trading System (EU ETS)*.

impeding innovation and investment towards more sustainable methods of energy production in some areas.[407]

Conclusion

UNECE has adopted resolutions related to optimizing energy efficiency, increasing the share of renewable energy, and reducing negative externalities of energy production on health and the environment.[408] With the Intergovernmental Panel on Climate Change warning of global temperatures exceeding 1.5 degrees Celsius, the international community has consistently reaffirmed that swift action by and cooperation between Member States is of utmost importance.[409] UNECE realizes the hurdles moving from targets to concrete actions and works with all UN Regional Commissions and relevant stakeholders from the public and private sector as well as CSOs to make sustainable energy a reality for all.[410] UNECE works on better collection and analysis of data regarding the various energy markets in the region to help develop comprehensive policies and programs towards achieving affordable sustainable energy in line with the SDGs.[411]

Further Research

Moving forward, delegates can consider questions such as: What are the driving factors in the discrepancy between commitments and actions in sustainable energy investments? How can relevant stakeholders in achieving sustainable energy influence policies and undertakings? What challenges are prevalent during construction and scaling of newer technologies and upgrading of existing infrastructure and how could these be addressed? How can regional cooperation among UNECE's Member States be strengthened while needs and progress vary significantly among them?

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> *To maximize progress in future sustainable energy development projects, it is important to understand common structural inadequacies, such as, outdated grid systems or T&D loss. The IEA's World Energy Balances report details this inefficiency in energy markets. Delegates should look to understand how much energy is produced and the amount in wasted resources that occurs in their Member States. There is also the factor of additional pollution impacting the environments of Member States that is derived from energy that was never even used due to T&D losses. Delegates should understand the impact from T&D losses and how they play a role in all aspects of sustainable energy development.*

Renewable Energy Policy Network for the 21st Century et al. (2019). *Renewables 2019: Global Status Report*. Retrieved 16 July 2020 from: https://www.ren21.net/gsr-2019/chapters/chapter_05/chapter_05/
> *The mandate of REN21 is to compile and analyze renewable energy data from across the globe. Composed of members from a broad range of sectors, REN21's goal is to facilitate the transition to renewable energy by streamlining information for decision-makers. Chapter 5 of the report gives special attention to the current status of investment flows for renewable energy sources. Delegates can use this information to understand challenges on the private sector's end in allocating more resources towards energy investment. It is also important to seek to understand where financial flows may be redirected in lieu of sustainable energy investment complications.*

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[407] European Commission, *Market Stability Reserve*.
[408] UNECE, *About Energy Programme*.
[409] UNECE, *28th Session of the Committee on Sustainable Energy*, 2019.
[410] UNECE, *10th International Forum on Energy for Sustainable Development*, 2019.
[411] UN DESA, *Harnessing the Power of Data for Sustainable Development*, 2019.

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https://sustainabledevelopment.un.org/content/documents/22877UN_FINAL_ONLINE_20190523.pdf
> *This collection of various policy briefs developed by participants at the 2018 High-Level Political Forum on Sustainable Development was coordinated by UN DESA in order to shed light on the current strategies for SDG 7's expansion. This document showcases the challenges policymakers and Member States face in pursuit of energy efficiency. Delegates should pay particular attention to the policy brief specifically looking at the perspective of the UNECE region.*

United Nations Economic Commission for Europe. (n.d.). *Sustainable Energy: Key Areas of Work*. Retrieved 19 July 2020 from: https://www.unece.org/energy.html
> *This webpage lays out the key areas of work where UNECE is encouraging development and provides a detailed overview of the relevant projects and committees that are currently in operation related to sustainable energy. This page describes in detail the current projects of UNECE organizations such as the International Forum on Energy for Sustainable Development, the Committee on Sustainable Energy, and the Group of Experts on Renewable Energy, among many others. Delegates can use this resource to familiarize themselves with the specific areas of work where the UNECE is operating, by understanding where and how each UNECE entity dedicated to sustainable energy is operating.*

United Nations Economic Commission for Europe. (2019). *List of Parliamentary Documents: Accelerating and Deepening the Transition to Sustainable Energy Systems*. Retrieved 15 July 2020 from:
https://www.unece.org/fileadmin/DAM/energy/se/pdfs/CSE/comm28.2019/room_documents/CSE_28_2019_INF.2_-_List_of_parliamentary_and_room_documents.pdf
> *Delegates should develop a whole understanding of UNECE, its mandate, and what the body is currently doing to shape global energy policies and projects. UNECE most recently held its 28th session of its sustainable energy committee. This list of parliamentary documents should serve delegates as a guide as to what some of the concerns UNECE is most recently discussing. The list contains the titles of documents discussed during the session. From there delegates can conduct further research into the documents themselves and the participating actors.*

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