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United Nations Economic Commission for Europe Background Guide 2020

Written by: Maike Weitzel and Johanna Barton, Directors
Allison Baker and Nader J. Mehrdadi, Assistant Directors



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www.nmun.org • info@nmun.org • 612.353.5649

Dear Delegates,

Welcome to the 2020 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 Maïke Weitzel (Conference A) and Johanna-Atyeno Barton (Conference B), and Assistant Directors Allison Baker (Conference A) and Nader Mehrdadi (Conference B). Maïke holds a BA in European Studies and currently pursues an MA in International Relations at the Technical University of Dresden. Johanna holds a BA in European Studies and is currently pursuing an MSc in Public Sector Innovation and eGovernance at the Tallinn Technical University. Allison currently lives in Alaska and works as a Sourcing Manager at a telecommunications company. She holds a BA in International Relations and an MBA with a concentration in Business Analytics. Nader currently studies Economics at Columbia University in the City of New York, holding several AAs across Political Science and the Social & Behavioral Sciences. Nader has extensive experience in supply chain fulfillment in emerging market sectors.

The topics under discussion for United Nations Economic Commission for Europe (UNECE) are:

1. Promoting the Development of Sustainable Transportation Infrastructure
2. Supporting Emerging Economies through Technical Cooperation
3. Strengthening Regional Cooperation to Ensure Sustainable Energy

UNECE was founded as one of the five regional commissions of ECOSOC to facilitate the reconstruction of Europe after World War II. Throughout its history, UNECE has continuously expanded its mandate and membership in order to adjust to the changing economic and political challenges of Europe and beyond. Today, UNECE promotes sustainable development and economic cooperation amongst its 56 Member States. The commission connects Member States, non-governmental organizations and civil society to find solutions for joint challenges and exchange best practices.

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 2020 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 Marleen Schreier (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

Maïke Weitzel, *Director*
Allison Baker, *Assistant Director*

Conference B

Johanna-Atyeno Barton, *Director*
Nader J. Mehrdadi, *Assistant Director*

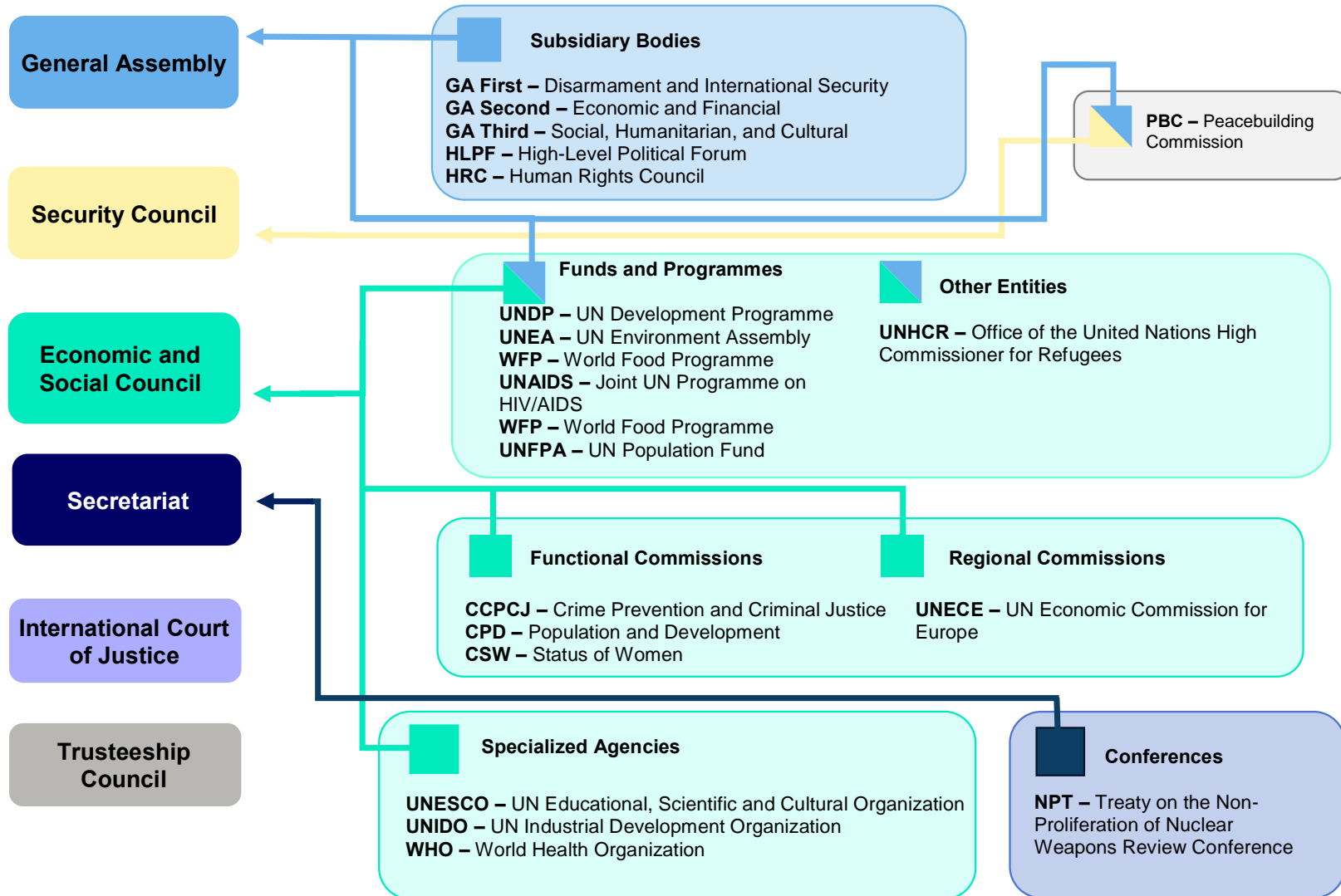


Table of Contents

United Nations System at NMUN•NY.....	2
Committee Overview.....	3
Introduction	3
Governance, Structure and Membership.....	3
Mandates, Functions and Powers	5
Recent Sessions and Current Priorities.....	6
Conclusion	7
Annotated Bibliography.....	8
Bibliography	8
I. Promoting the Development of Sustainable Transportation Infrastructure	11
Introduction	11
International and Regional Framework.....	12
Role of the International System	13
Achieving Sustainable Mobility Through THE PEP Framework	14
Financing for Transport Infrastructure	15
Conclusion	17
Further Research.....	17
Annotated Bibliography.....	18
Bibliography	19
II. Supporting Emerging Economies through Technical Cooperation	24
Introduction	24
International and Regional Framework.....	25
Role of the International System	26
Efficient Use of Financial Resources for Technical Cooperation	28
Technical Cooperation for Sustainable Urban Development	29
Conclusion	30
Further Research.....	30
Annotated Bibliography.....	30
Bibliography	31
III. Strengthening Regional Cooperation to Ensure Sustainable Energy	34
Introduction	34
International and Regional Framework.....	35
Role of the International System	37
Incentivizing Sustainable Energy Infrastructure Investment.....	38
Implementing Information and Communications Technologies for Sustainable Energy Production.....	39
Utilizing Emissions Trading Systems to Further Sustainable Energy Production	40
Conclusion	40
Further Research.....	41
Annotated Bibliography.....	41
Bibliography	42

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.



Committee Overview

Introduction

As part of its goal to promote interregional cooperation, the United Nations (UN) Economic and Social Council (ECOSOC) established five regional commissions according to article 68 of the Charter of the United Nations (1945).¹ Hence, the United Nations Economic Commission for Europe (UNECE) was founded by ECOSOC in 1946 to help rebuild Europe after World War II.² Until 1951, UNECE functioned as a provisional commission, while ECOSOC reviewed whether the commission was to be reformed or discontinued at the end of its fourth year.³ With the beginning of the Cold War, UNECE's role changed fundamentally from supporting the reconstruction of Europe to fostering economic dialogue and cooperation between the capitalist and the socialist states.⁴ UNECE helped achieve common standards for transportation, customs regulations, and trade regulations among others.⁵ Since the end of the Cold War, UNECE has focused on aiding economies in transition and adjusting the organization to the new geopolitical landscape.⁶

After the Cold War, UNECE was reformed twice in order to adapt to increased membership and a shift in its tasks.⁷ Today, UNECE's mission is to strengthen economic cooperation and sustainable development amongst its Member States.⁸ UNECE fosters the exchange of policies and best practices, negotiations of legal questions, and supports states in transition.⁹ Together with the other regional commissions, UNECE promotes the work of international UN bodies and standards, such as the Sustainable Development Goals (SDGs).¹⁰ 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.¹¹

Governance, Structure and Membership

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.¹² As the founding members of UNECE included all the participating states in the reconstruction of Europe, membership continues to be diverse to this day.¹³ For instance, through the dissolution of the Soviet Union and the Yugoslav Republic, UNECE rapidly gained new Member States.¹⁴ UNECE Member States represent about 17% of the world's population.¹⁵ The level of economic development differs greatly, as UNECE includes both some of the most developed and some still developing states.¹⁶

UNECE is a regional commission that reports to ECOSOC biennially.¹⁷ Since 2017, the commission is being led for a three-year term by Executive Secretary Olga Algayerova from Slovakia.¹⁸ UNECE is governed by an Executive Committee that prepares the biennial meetings of the commission, supervises

¹ *Charter of the United Nations*, 1945, Ch. X.

² UNECE, *History*, 2019.

³ *Ibid.*

⁴ *Ibid.*

⁵ *Ibid.*

⁶ *Ibid.*

⁷ *Ibid.*

⁸ *Ibid.*

⁹ *Ibid.*

¹⁰ *Ibid.*

¹¹ *Ibid.*

¹² UNECE, *Geographical Scope*, 2019.

¹³ *Ibid.*

¹⁴ UNECE, *History*, 2019.

¹⁵ UNECE, *Geographical Scope*, 2019.

¹⁶ *Ibid.*

¹⁷ UNECE, *Governance and Organizational Structure*, 2019.

¹⁸ UNECE, *Executive Secretary*, 2019.

its activities, and maintains relations with other international organizations.¹⁹ The Executive Committee leads eight sub-committees: the Committee on Environmental Policy, the Inland Transportation Committee, the Conference of European Statisticians; the Committee on Innovation, the 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.²⁰ These sub-committees further lead various working groups such as the Working Group on Ageing.²¹ The working groups are subsidiary bodies of the Executive Committee and connect Member States, NGOs and academia to work on transboundary challenges.²² UNECE cooperates with other UN bodies on certain issues.²³ For instance, the Working Party on Forest Statistics and Economics and Management was established in cooperation with the Food and Agriculture Organization (FAO) and aims to collect data on forest products, trade, consumption, policies, and the general economic development of the forestry sector across the region.²⁴

Another example is the Transport, Health and Environment Pan-European Programme (THE PEP), which is a long-term cooperation program between UNECE and the World Health Organization (WHO).²⁵ With THE PEP, UNECE, and the WHO make the link between the growing need for transportation and health concerns.²⁶ The program focuses on finding sustainable solutions for transportation needs while aiming to improve the health and wellbeing of citizens.²⁷ THE PEP has five key areas of work: sustainable urban transport, policy integration, health impacts of transport, cycling and walking, and green economy.²⁸ In 2009 at the Third High-Level Meeting on Transport, Health and Environment, the Amsterdam Declaration was adopted.²⁹ The declaration set four main priorities for achieving safe, efficient, health- and environmentally friendly transportation: contributing to sustainable economic development through investing in environmentally and health friendly transport, manage sustainable mobility and promote more efficient transport, reduce emissions from transport-related greenhouse gases, and promote policies and actions towards healthy and safe modes of transport.³⁰ However, progress of implementation was uneven amongst Member States and only few a Member Sates submitted progress reports.³¹ Thus at the Fourth High-Level Meeting on Transport, Health and Environment in 2014, the Paris Declaration was adopted.³² It reiterated the four priorities from the Amsterdam Declaration and added the goal of integrating transport, health and environmental objectives into urban and spatial planning initiatives.³³ The PEP is a specific example of UNECE's work of fostering sustainable economic cooperation within its region.³⁴

Furthermore, UNECE cooperates closely with the United Nations Economic and Social Commission for Asia and the Pacific on the implementation of the United Nations Special Programme for the Economies of Central Asia (SPECA).³⁵ This program was created in 1998 through the Tashkent Declaration to modernize and integrate the economies of Central Asian states, including Afghanistan, Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan, into Europe and Asia.³⁶ The program

¹⁹ UNECE, *Executive Committee*, 2019.

²⁰ UNECE, *Governance and Organizational Structure*, 2019.

²¹ Ibid.

²² UNECE, *Working Group on Ageing*, 2019.

²³ UNECE, *Governance and Organizational Structure*, 2019.

²⁴ Ibid.

²⁵ UNECE, *THE PEP*, 2019.

²⁶ Ibid.

²⁷ Ibid.

²⁸ Ibid.

²⁹ UNECE, *Amsterdam Declaration (ECE/AC.21/4)*, 2009.

³⁰ Ibid., p. 3-4.

³¹ WHO, *From Amsterdam to Paris and Beyond: the Transport, Health and Environment Pan-European Programme (THE PEP) 2009-2020*, 2014. pp.1.

³² UNECE, *Paris Declaration – City in Motion: People First (ECE/ENV/NONE/2014/3)*, 2014, p. 3.

³³ Ibid.

³⁴ UNECE, *Objectives and Mandate*, 2019.

³⁵ UNECE, *SPECA*, 2019.

³⁶ Ibid.

is based on equality, transparency, and cooperation between Member States and donor states.³⁷ SPECA is active in many sectors related to the economic growth of the region such as through trade, sustainable transportation, energy, water, and the environment.³⁸ 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.³⁹ Additionally, they also include rational and effective use of water and energy use in Central Asia, common regional development strategy and attraction of international investments, and regional cooperation in developing a multi-choice approach to the routes of hydrocarbon supply through pipelines.⁴⁰

Together with other UN agencies active in the region, UNECE organizes an annual Regional Forum on Sustainable Development in order to implement the *2030 Agenda for Sustainable Development*.⁴¹ The forum brings together more than 850 stakeholders from across the region to share policies, best practices, identify recent developments, and contribute to a regional perspective to the UN's High-level Political Forum on Sustainable Development.⁴² 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.⁴³

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 1946.⁴⁴ UNECE was founded in 1947 by ECOSOC in order to help Europe rebuild after World War II and to promote pan-European economic integration.⁴⁵ After gaining support from the UN General Assembly, ECOSOC founded UNECE during its fourth session in 1947 through resolution 36 (IV).⁴⁶ Its main task is to bring states in the region together to foster cooperation on common economic challenges.⁴⁷ UNECE is further mandated to 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.⁴⁸ 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.⁴⁹ UNECE also implements the outcomes of international UN summits and conferences, and it cooperates with other UN entities within the UN network.⁵⁰

As a multi-stakeholder platform, UNECE is able to bring together state representatives, international NGOs, and international organizations to develop joint programs and plans to implement the SDGs.⁵¹ UNECE connects various economic sectors from a large region to create cooperation through economic policies on common norms and regulations in order to solve joint challenges.⁵² Thus, SDG 17

³⁷ Ibid.

³⁸ Ibid.

³⁹ Ibid.

⁴⁰ Ibid.

⁴¹ UNECE, *Regional Forum on Sustainable Development for UNECE Region*, 2019.

⁴² Ibid.

⁴³ UNECE, *Mission*, 2019.

⁴⁴ UNECE, *Executive Committee*, 2019.

⁴⁵ UNECE, *History*, 2019.

⁴⁶ Ibid.

⁴⁷ UNECE, *Objectives and Mandate*, 2019.

⁴⁸ UNECE, *Terms of Reference and Rules of Procedure of the Economic Commission for Europe (E/ECE/778/Rev.5)*, 2009, p. 1.

⁴⁹ UNECE, *Objectives and Mandate*, 2019.

⁵⁰ Ibid.

⁵¹ UNECE, *Supporting Countries to Achieve the SDGs*, 2019.

⁵² Ibid.

(partnerships for the goals) is at the heart of UNECE's strategy to implement the SDGs.⁵³ 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).⁵⁴ 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.⁵⁵

UNECE receives funding through the UN regular budget, which is currently \$64.3 million for the period 2018-2019.⁵⁶ Additionally, UNECE received voluntary contributions, amounting to \$34.5 million for 2018-2019.⁵⁷ Approximately 60.5% of these contributions are donated by Member States, 28.6% by intergovernmental and NGOs, and 10.9% by the European Commission.⁵⁸ To further increase the amount of voluntary contributions, UNECE developed the Resource Mobilization Strategy in order to increase funds for the implementation of the SDGs and the Addis Ababa Action Agenda.⁵⁹ Funds for UNECE projects, advisory services, and other forms of cooperation are distributed in the form of grants.⁶⁰ These grants are based on recommendations made by the Grants Committee, established in 2000, to the Executive Secretary.⁶¹ Funds for grants are drawn from the regular and the voluntary budget of UNECE.⁶² In recent years, most grants were invested in environmental projects.⁶³

Recent Sessions and Current Priorities

A focus of UNECE's work in recent years has been technical cooperation.⁶⁴ Technical cooperation includes capacity building initiatives in the fields of environment, energy, transport, trade, statistics, and gender mainstreaming.⁶⁵ Technical cooperation projects foster regional and sub-regional integration and support transboundary solutions in various fields.⁶⁶ The aim of these efforts is to generate a sustainable impact on shared challenges.⁶⁷ 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.⁶⁸ The technical cooperation 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.⁶⁹ An example for this is the implementation of a cost-effective biogas plant in Kyrgyzstan that UNECE supported in order to help the country gain technology for more sustainable energy.⁷⁰ UNECE involves stakeholders from within the UN system and beyond in order to successfully provide technical cooperation.⁷¹ Technical cooperation projects are financed through the regular UN

⁵³ Ibid.

⁵⁴ Ibid.

⁵⁵ Ibid.

⁵⁶ UNECE, *Partnerships*, 2019.

⁵⁷ Ibid.

⁵⁸ Ibid.

⁵⁹ UNECE, *Resource Mobilization Strategy*, 2019.

⁶⁰ UNECE, *UNECE Grants Committee Annual Report 2016*, 2016.

⁶¹ UNECE, *Partnerships*, 2019.

⁶² Ibid.

⁶³ Ibid.

⁶⁴ UNECE, *Technical Cooperation*, 2019.

⁶⁵ Ibid.

⁶⁶ Ibid.

⁶⁷ Ibid.

⁶⁸ Ibid.

⁶⁹ Ibid.

⁷⁰ UNECE, *UNECE Annual Report*, 2019, p. 6.

⁷¹ UNECE, *Technical Cooperation*, 2019.

budget, most commonly the UN Development Account and the Regular Programme on Technical Cooperation, as well as extra-budgetary resources.⁷²

The most recent activities of UNECE focused strongly on the implementation of the SDGs, especially the sustainable use of natural resources, developing smart cities for all ages, sustainable mobility and smart connectivity, as well as measuring and monitoring the SDGs.⁷³ As part of its activities, UNECE published the 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.⁷⁴ In September 2019, together with local officials from the region, UNECE launched the “Trees in Cities” campaign, which calls on cities to pledge planting more trees.⁷⁵ 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.⁷⁶

The eleventh session of the SPECA Working Group on Knowledge-based Development was held in June 2019 in Kyrgyzstan and was preceded by the Regional Workshop Innovation and Technology Applications for Sustainable Development.⁷⁷ 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.⁷⁸ The annual meeting of THE PEP is taking place in late October 2019, discussing partnerships within the network of Member States, NGOs and other international organizations.⁷⁹ As part of its strategy for 2018-2019, UNECE has formed eight sub-programs to promote the *2030 Agenda for Sustainable Development*: environment, transport, statistics, economic cooperation and integration, sustainable energy, trade, forestry and timber, and housing.⁸⁰ 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.⁸¹

Conclusion

UNECE is a regional commission founded by and reporting to ECOSOC.⁸² 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.⁸³ 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.⁸⁴ In recent years, UNECE has focused strongly on the implementation of the SDGs by integrating them into all projects and programs.⁸⁵ Part of those efforts is THE PEP, a program developed to promote sustainable and health friendly transportation in cities.⁸⁶ A sub-regional focus of UNECE’s work has been SPECA, a program created to help integrate Central Asian

⁷² UNECE, *Technical Cooperation*, 2019.

⁷³ UNECE, *UNECE Annual Report*, 2019.

⁷⁴ *Ibid.*, p. 9.

⁷⁵ UNECE, *Climate Action Summit*, 2019.

⁷⁶ *Ibid.*

⁷⁷ UNECE, *Meetings and Events*, 2019.

⁷⁸ *Ibid.*

⁷⁹ UNECE, *THE PEP*, 2019.

⁸⁰ UN General Assembly, *Proposed Strategic Framework for the Period 2018-2019 (A/71/6(Prog. 17)*)*, 2016, p.2.

⁸¹ *Ibid.*

⁸² UNECE, *History*, 2019.

⁸³ *Ibid.*

⁸⁴ UNECE, *Objectives and Mandate*, 2019.

⁸⁵ UNECE, *Supporting Countries to Achieve the SDGs*, 2019.

⁸⁶ UNECE, *THE PEP*, 2019.

economies into Europe and Asia.⁸⁷ UNECE continues to strive towards more common norms and standards to promote economic cooperation in its region.⁸⁸

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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 20 July 2019 from:

http://www.unece.org/fileadmin/DAM/OPEN_UNECE/05_Partnerships/Grants/Grants_Anual_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 UNECE's 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.

United Nations, Economic Commission for Europe. (2019). *UNECE Annual Report*. Retrieved 20 July 2019 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 UNECE's 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.

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⁸⁷ UNECE, SPECA, 2019.

⁸⁸ UNECE, *Objectives and Mandate*, 2019.

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I. Promoting the Development of Sustainable Transportation Infrastructure

Introduction

The development of sustainable transportation infrastructure (STI) is a necessary step toward reducing harmful environmental impacts.⁸⁹ As of 2017, the transport industry produced between 25-30% of all global greenhouse gas emissions.⁹⁰ Many international and regional environmental frameworks do not explicitly mention the transport sector's involvement, despite the direct link that transport infrastructure has with negative environmental impacts.⁹¹ The development of sustainable transport infrastructure systems plays a key role in the efforts to overcome social, economic, political, and physical barriers to movement and migration.⁹² 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.⁹³ Currently, the global investment in transport is roughly between \$1.4 trillion to \$2.1 trillion.⁹⁴ In 2018, there were 49 key transport projects across Europe in which the European Union (EU) Commissioner for Transport pledged to invest more than €700 million EUR to facilitate the transition to low-emission mobility across the region.⁹⁵

One of the main areas of focus for the United Nations Economic Commission for Europe (UNECE) is transport.⁹⁶ The UNECE Transport Division oversees the movement of people and commodities by inland transport modes.⁹⁷ Transport infrastructure is defined as “rural roads, tracks, trails, paths, watercourse structures and footbridges, as well as rural waterways and their transfer facilities”.⁹⁸ UNECE highlights that sustainable transport infrastructure is crucial for social, economic, and environmental development and lists all modes of transport to include road, rail, air, and waterborne.⁹⁹ A main priority of UNECE is to promote sustainable transport that is safe, clean, and competitive through several channel improvements across the transport sector throughout Europe and Asia.¹⁰⁰ 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 infrastructure systems, along with being accessible.¹⁰¹ 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.¹⁰² Affordability in STI is the ability of people to be able to financially access adequate transport services.¹⁰³ 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.¹⁰⁴

⁸⁹ Kofi Annan Foundation, *Speech by Kofi Annan on Moving Towards a Future of Sustainable Development at the Sustainable Transport Forum on 23 August 2016*, in Paris, 2016.

⁹⁰ Rodrigue, *Transportation and the Environment*, 2017.

⁹¹ Partnership on Sustainable Low Carbon Transport, *Sustainable Development Goals & Transport*.

⁹² TRL & ICE, *The Importance of Transport Infrastructure to Sustainable Development*. p. 1.

⁹³ Yadav & Lefevre, *Sustainable Transport Investment Could Save \$300 Billion a Year – Within Existing Financial Flows*, 2016.

⁹⁴ Ibid.

⁹⁵ EC, *EU to Invest Nearly €700 million in Sustainable and Innovative Transport*, 2018.

⁹⁶ UNECE, *About us*.

⁹⁷ EC, *EU to Invest Nearly €700 million in Sustainable and Innovative Transport*, 2018.

⁹⁸ Cook et al., *The Contribution of Rural Transport to Achieve the Sustainable Development Goals*, p. 5.

⁹⁹ UNECE, *Transport*.

¹⁰⁰ UNECE, *Climate Change and Sustainable Transport*.

¹⁰¹ UNECE et al., *Transport for Sustainable Development*, 2015, p. XIX.

¹⁰² Ibid.

¹⁰³ Ibid., p. XX.

¹⁰⁴ EC, *EU to Invest Nearly €700 million in Sustainable and Innovative Transport*, 2018.

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.¹⁰⁵ The *Kyoto Protocol* (1997) is an international agreement that strengthened the UNFCCC by applying internationally binding emission reduction targets.¹⁰⁶ The *Kyoto Protocol* entered into force in 2005 but did not define any specific reduction targets for the transport sector.¹⁰⁷ Most recently, the *Paris Agreement* (2015), which was signed by all 56 UNECE Member States, also omitted mentioning the importance of sustainable transport.¹⁰⁸ This agreement, adopted within the UNFCCC, aims to mitigate the increase in global temperatures by focusing on reducing greenhouse gases.¹⁰⁹ As of 2018, the EU was on pace to fall just short of its commitment to reduce emissions by 40% by 2030 compared with 1990 levels.¹¹⁰ Nevertheless, European officials set new targets in June 2018 in order to meet their overall 2030 emissions targets for their *Paris Agreement* pledge.¹¹¹

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.¹¹² *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.¹¹³ 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.¹¹⁴ JPOI called for Member States to implement transport strategies and engage in partnerships to achieve greater development of sustainable infrastructure.¹¹⁵

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 2000.¹¹⁶ The 2030 Agenda identifies 17 Sustainable Development Goals (SDGs) that encompass thematic issues including water, climate change, partnerships, poverty, peace, and education.¹¹⁷ 13 out of the 17 SDGs have transport relevance, but most of the goals do not directly address the impact of the transport sector.¹¹⁸ One of the goals that identifies transport targets is SDG 7 (affordable and clean energy), which includes promoting energy-efficient transport.¹¹⁹ The other goal is SDG 9 (industry, innovation, and infrastructure), which addresses the topic of developing STI systems by providing frameworks and harnessing the potential of new technologies.¹²⁰ 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.¹²¹ The AAAA helped establish how the international community would fund the SDGs, and

¹⁰⁵ UNCED, *United Nations Framework Convention on Climate Change*, 1992.

¹⁰⁶ UNFCCC, *Kyoto Protocol to the United Nations Framework Convention on Climate Change*, 1997.

¹⁰⁷ Ibid.

¹⁰⁸ UNECE, *Member States and Member States Representatives*.

¹⁰⁹ COP 21, *Paris Agreement*, 2015.

¹¹⁰ Plumer, *The World Still Isn't Meeting Its Climate Goals*, *The New York Times*, 2018.

¹¹¹ Ibid.

¹¹² UN DESA, *Sustainable Transport*.

¹¹³ UNCED, *Agenda 21*, 1992.

¹¹⁴ UN DESA, *Sustainable Transport*.

¹¹⁵ Ibid.

¹¹⁶ UN General Assembly, *Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1)*, 2015.

¹¹⁷ Ibid.

¹¹⁸ Partnership on Sustainable Low Carbon Transport, *Sustainable Development Goals & Transport*.

¹¹⁹ UN General Assembly, *Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1)*, 2015.

¹²⁰ Ibid.

¹²¹ 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.

also recognized the importance of financing the development of STIs.¹²² In recognition of this link, the UN General Assembly adopted resolution 72/212 of 2018, which emphasized the role of sustainable transport in achieving the SDGs and the importance of partnerships in financial and technical assistance.¹²³

Regional actors such as the European Commission (EC) recently reevaluated the EU's energy policy framework and developed a *Clean Energy for All Europeans* policy package that consists of eight legislative acts.¹²⁴ The directives set binding targets to reduce energy consumption, increase energy efficiency, increase renewable energy, and increase energy performance.¹²⁵ UNECE works closely with international stakeholders, such as the EU, to promote pan-European collaboration for sustainable transport.¹²⁶ UNECE's work is reflected in more than 50 international agreements and conventions surrounding the promotion of sustainable transport.¹²⁷

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.¹²⁸ The ITC has 20 working parties that are intergovernmental decision-making bodies which work to improve lives through concrete actions to develop the transport sector.¹²⁹ 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.¹³⁰ The 81st session of the ITC was held in 2019 and provided updates on different areas such as progress towards the 2030 Agenda, intelligent transport systems, and climate change effects.¹³¹ Each year, the UNECE provides an annual report on the ITC to ECOSOC.¹³² 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.¹³³

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.¹³⁴ OECD created an International Transport Forum (ITF) that acts as an intergovernmental organization with 60 Member States and facilitates global dialogue.¹³⁵ 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 2050.¹³⁶

Furthermore, forums and partnerships also play a key role to further the agenda on sustainable transport.¹³⁷ In 2014, former UN Secretary-General Ban Ki-moon created the High-level Advisory Group on Sustainable Transport.¹³⁸ The advisory group works to promote and provide recommendations for

¹²² Hurley, *The Addis Ababa Action Agenda: A step Forward on Financing for Development?*, 2015.

¹²³ UN General Assembly, *Strengthening the Links Between all Modes of Transport to Achieve the Sustainable Development Goals (A/RES/72/212)*, 2018.

¹²⁴ EC, *Clean Energy for all Europeans Package*, 2019.

¹²⁵ EC, *Clean Energy for all Europeans Package Completed: Good for Consumers, Good for Growth and Jobs, and Good for the Planet*, 2019.

¹²⁶ UNECE, *About us*.

¹²⁷ *Ibid.*

¹²⁸ UNECE, *Inland Transport Committee*.

¹²⁹ UNECE, *TEM Project Strategic Plan 2017-2019*, 2017, p. iv.

¹³⁰ UNECE, *Inland Transport Committee*.

¹³¹ *Ibid.*

¹³² UNECE, *Report of the Inland Transport Committee on its Eighty-first Session (ECE/TRANS/288)*, 2019.

¹³³ UNECE, *Transport, Health, Environment (THE PEP)*.

¹³⁴ OECD, *Who we are*.

¹³⁵ ITF, *About ITF*.

¹³⁶ OECD, *Multilingual Summaries ITF Transport Outlook 2019*, 2019, p. 1.

¹³⁷ UNECE, *About us*.

¹³⁸ UN DESA, *Secretary-General's High-level Advisory Group on Sustainable Transport*.

sustainable transport systems on innovative policy, multi-stakeholder partnerships, and the implementation of the post-2015 development agenda.¹³⁹ The advisory group 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.¹⁴⁰ The International Road Transport Union collaborated with UN Global Compact to create the Global Partnership for Sustainable Transport (GPST), which was launched in 2015 in order to facilitate and oversee the implementation of UN transport-related declarations, resolutions, and recommendations.¹⁴¹ GPST helps support governments in strengthening international legal frameworks and works to identify best practices in the transport industry.¹⁴² 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 sustainable transport in achieving the SDGs to over 1500 global participants.¹⁴³ At the conference, participants discussed the importance of developing STI, especially investing in rural infrastructure to help reduce social and economic inequalities.¹⁴⁴

Another important partnership is the Institute for Transportation and Development Policy co-founded Partnership on Sustainable Low Carbon Transport (SLoCaT).¹⁴⁵ This partnership consists of over 90 organizations and is currently focusing on land transport in developing states in Asia, Latin America, and Africa.¹⁴⁶ 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.¹⁴⁷ The UITP also works with the World Bank and the ITF to influence the global sustainable transport sector.¹⁴⁸ UK Aid is a non-profit organization that developed the Research for Community Access Partnership.¹⁴⁹ 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.¹⁵⁰ 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.¹⁵¹

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.¹⁵² According to an analysis lead by the UN Human Settlements Programme (UN-Habitat), the UN Environment Programme (UNEP) and SLoCaT, in 2010, the transport sector produces approximately 23% of total energy-related CO₂ emissions.¹⁵³ In order to mitigate climate change, working towards adopting resilient transport infrastructures can help combat the impacts and reduce greenhouse gas emissions.¹⁵⁴ Given that one of the main themes of the UNECE is climate change and sustainable transport, sustainable transport infrastructure solutions are necessary to

¹³⁹ Ibid.

¹⁴⁰ UN DESA, *Thematic discussion 2: Reaching the most remote: Rural Transport Challenges and Opportunities*, 2016, pp. 1-3.

¹⁴¹ GPST, *What we do*.

¹⁴² Ibid.

¹⁴³ UN DESA, *Global Sustainable Transport Conference*.

¹⁴⁴ UN DESA, *Thematic Discussion 2: Reaching the most remote: Rural Transport Challenges and Opportunities*, 2016, pp. 1-3.

¹⁴⁵ UIPT, *Vision & Mission*.

¹⁴⁶ SLoCaT, *SLoCaT Partnership*.

¹⁴⁷ Ibid.

¹⁴⁸ UIPT, *Vision & Mission*.

¹⁴⁹ ReCAP & SLoCaT & UK Aid, *The Contribution of Rural Transport to the Sustainable Development Goals - Factsheet*, 2017, p. 1.

¹⁵⁰ SLoCaT, *ReCAP and SLoCaT Release Factsheet and Supporting Paper on the Critical Role of Rural Transport to Achieve the Sustainable Development Goals*. 2017.

¹⁵¹ ReCAP & SLoCaT & UK Aid, *The Contribution of Rural Transport to the Sustainable Development Goals - Factsheet*, 2017, p. 4.

¹⁵² TRL, *The Importance of Sustainable Transport Infrastructure to the Post-2015 Development Agenda*. p. 2.

¹⁵³ UN-Habitat, *Analysis of the Transport Relevance of Each of the 17 SDGs*, 2015, p. 16.

¹⁵⁴ Ibid.

achieve SDG 13 (climate action), specifically target 13.2 – integrate climate change measures into policies, strategies, and planning.¹⁵⁵

UNECE 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.¹⁵⁶ THE PEP was established by the first High-level Meeting on Transport, Health, and Environment in 2001.¹⁵⁷ 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.¹⁵⁸ Thus, THE PEP contributes to reducing environmental impacts of transport following SDG 13 by aiming to reduce greenhouse gas emissions with the development of STIs.¹⁵⁹

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.¹⁶⁰ THE PEP framework established THE PEP Partnerships by collaborating with Member States to support and implement THE PEP's priority goals.¹⁶¹ 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.¹⁶² Eco-Driving projects have been implemented across the European region and aim to achieve reductions in fuel consumption of 5-10% for trucks and buses, and up to 20% for cars.¹⁶³ 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.¹⁶⁴ 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.¹⁶⁵ Looking forward, THE PEP Partnerships and its achievements will be discussed at the Fifth High-level Meeting on Transport, Health, and Environment.¹⁶⁶ The meeting convenes in October 2019 in Vienna to consider the adoption of the Vienna Declaration on Transport, Health and Environment.¹⁶⁷ The declaration focuses on the challenges of achieving clean, zero-emission mobility and transport in Europe.¹⁶⁸

Financing for Transport Infrastructure

A key challenge in developing STI and networks is the cost.¹⁶⁹ According to The Global Commission on the Economy and Climate, \$90 trillion is needed to achieve growth expectations in infrastructure by

¹⁵⁵ UNECE, *SDGs and the UN Transport Convention*; UN-Habitat, *Analysis of the Transport Relevance of Each of the 17 SDGs*, 2015, p. 16.

¹⁵⁶ UNECE, *Transport, Health, Environment (THE PEP)*.

¹⁵⁷ *Ibid.*

¹⁵⁸ UNECE, *Paris Declaration – City in Motion: People First*, 2015, p. 4.

¹⁵⁹ WHO, *Making THE (Transport, Health, and Environment) Link*, 2018, p. 3.

¹⁶⁰ UNECE, *Transport, Health, Environment (THE PEP)*.

¹⁶¹ 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.

¹⁶² UNECE, *The PEP Partnerships*, 2019, pp. 13-16.

¹⁶³ *Ibid.*

¹⁶⁴ *Ibid.*

¹⁶⁵ *Ibid.*

¹⁶⁶ *Ibid.*, pp. 29-30.

¹⁶⁷ 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. 1.

¹⁶⁸ *Ibid.*

¹⁶⁹ GCEC, *The Sustainable Infrastructure Imperative: Financing for Better Growth and Development*, 2016, p. 6.

2030.¹⁷⁰ 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.¹⁷¹ 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.¹⁷² With globally more than 840 million people living more than two kilometers from all-weather roads, a viable source of financing for STI can come from international finance institutions such as the World Bank.¹⁷³ In recent years, the World Bank has focused on providing monetary assistance to states with a focus on transport, health, innovation, and land administration.¹⁷⁴ 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.¹⁷⁵ The *Sustainable Croatian Railways in Europe Project for Croatia* is a project lead by the World Bank that was created to improve the operational efficiency and the financial stability of the public railway sector.¹⁷⁶ The project requires more than \$200M of funding and is expected to be complete in 2021.¹⁷⁷

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.¹⁷⁸ 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.¹⁷⁹ The European PPP Expertise Centre (EPEC) initiative is comprised of the European Investment Bank, EC, and EU Member States and candidate countries.¹⁸⁰ EPEC publishes yearly statistics on PPPs in Europe and is a resource for standards, recommendations, and best practices in PPPs.¹⁸¹ 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.¹⁸² 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 2030.¹⁸³ 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 2050.¹⁸⁴ The EU estimates roughly €500 billion of investment is necessary between 2014-2020 in order to complete the implementation of the TEN-T.¹⁸⁵ 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.¹⁸⁶ 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.¹⁸⁷

Increasing Global Investment in Rural Transport Sectors

¹⁷⁰ GCEC, *The Sustainable Infrastructure Imperative: Financing for Better Growth and Development*, 2016, p. 6.

¹⁷¹ UNECE, *Innovative Ways for Financing Transport Infrastructure*, 2017, p. 2.

¹⁷² *Ibid.*, p. 46.

¹⁷³ *Ibid.*, p. 29.

¹⁷⁴ World Bank Group, *The World Bank in Croatia Country Snapshot*, 2019, pp. 1-4.

¹⁷⁵ *Ibid.*

¹⁷⁶ World Bank Group, *Sustainable Croatian Railways in Europe*.

¹⁷⁷ World Bank Group, *Sustainable Croatian Railways in Europe*.

¹⁷⁸ UNECE, *Innovative ways for Financing Transport Infrastructure*, 2017, p. 84; GFDRR, *About SISRI*.

¹⁷⁹ UNECE, *Innovative ways for Financing Transport Infrastructure*, 2017, p. 84.

¹⁸⁰ UNECE et al., *Transport for Sustainable Development*, 2015, p. XIX.

¹⁸¹ *Ibid.*

¹⁸² EC, *Trans-European Transport Network (TEN-T)*.

¹⁸³ *Ibid.*

¹⁸⁴ *Ibid.*

¹⁸⁵ EC, *EU Funding for TEN-T*.

¹⁸⁶ EC, *Connecting Europe Facility*.

¹⁸⁷ EC, *Trans-European Transport Network (TEN-T)*.

In 2017, more than one billion people had no access to weather-resistant roads.¹⁸⁸ Rural transport is the access for rural communities to main roads or waterway networks.¹⁸⁹ The International Labour Organization 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.”¹⁹⁰ Over the last 20 years, investment in inland transport infrastructure has been approximately 0.8 to 0.9 % of Western European states’ GDP.¹⁹¹ In Central and Eastern Europe, investment has been around one to two per cent of their GDP.¹⁹² 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.¹⁹³ Rural transport infrastructure is also identified in SDG target 9.1, which focuses on increasing rural access to transport infrastructure in order to fulfill the 2030 Agenda.¹⁹⁴ 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).¹⁹⁵ 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.¹⁹⁶

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.¹⁹⁷ UNECE and ITC are taking steps towards increasing the resiliency of transport networks within the European region through workshops, PPPs, and THE PEP.¹⁹⁸ A main challenge that UNECE faces in terms of achieving universal STI is “the encouragement of financial investment for sustainable rural transportation, which is essential to further regional development.”¹⁹⁹ Adequate transport infrastructure plays a key role in combatting the serious negative impacts on public health, climate change, and living conditions.²⁰⁰ European actors and stakeholders must collaborate in order to align sustainable transport infrastructure strategies and work towards a cohesive sustainable vision for the future.²⁰¹

Further Research

Looking forward, delegates should further research 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 are the following: 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?

¹⁸⁸ Sustainable Mobility for All, *Universal Access*.

¹⁸⁹ Cook et al., *The Contribution of Rural Transport to Achieve the Sustainable Development Goals*, p. 5.

¹⁹⁰ ILO, *A Strategy for the Rehabilitation of the Rural Transport System in Tsunami-affected Areas*.

¹⁹¹ UNECE et al., *Transport for Sustainable Development*, 2015, p. 73.

¹⁹² *Ibid.*, p. 73.

¹⁹³ *Ibid.*, p. 74.

¹⁹⁴ Cook et al., *The Contribution of Rural Transport to Achieve the Sustainable Development Goals*, p. 5.

¹⁹⁵ World Bank Group, *Sustainable Mobility for All (SuM4All)*, 2017.

¹⁹⁶ *Ibid.*, p. 5.

¹⁹⁷ UNECE, *SDGs and the UN Transport Conventions*.

¹⁹⁸ UNECE, *Supporting Countries to Achieve the SDGs*.

¹⁹⁹ EC, *EU to Invest Nearly €700 million in Sustainable and Innovative Transport*, 2018.

²⁰⁰ UN DESA, *UN Conference to Address Way Forward on Global Sustainable Transport Challenges*, 2016.

²⁰¹ New South Wales Government, *Future Transport Strategy 2056*, 2018, p. 2.

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https://www.unece.org/fileadmin/DAM/trans/publications/Transport_for_Sustainable_Development_UNECE_2015.pdf

UNECE published the Transport for Sustainable Development report in 2015 with the support of all five of the United Nations Regional Commissions, the International Road Transport Union, and the International Union of Railways. The report addresses five main topics related to sustainable transport: accessibility, affordability, safety, security, and environmental impact. The main objective is to identify areas of improvement needed in order to achieve intergovernmental cooperation and secure a transport sector that contributes to attaining the SDGs. This publication is a great start for delegates to understand how healthy and clean transport contributes to sustainable development.

United Nations, Economic Commission for Europe. (2017). *Innovative Ways for Financing Transport Infrastructure*. Retrieved 21 July 2019 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.

United Nations, Economic Commission for Europe. (2017). *TEM Project Strategic Plan 2017-2021*.

Retrieved 21 July 2019 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 21 July 2019 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 does a good job of outlining THE PEP and the 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 21 July 2019 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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Cook, J. et al. (n.d.). *The Contribution of Rural Transport to Achieve the Sustainable Development Goals*. Retrieved 24 August 2019 from: https://sustainabledevelopment.un.org/content/documents/16933The_Contribution_of_Rural_Transport_to_Achieve_the_Sustainable_Development_Goals.pdf

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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.”²⁰²

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*.²⁰³ 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.²⁰⁴ Even though there is an overall steady growth of the gross domestic product (GDP), there are still a number of emerging economies with comparably low incomes within UNECE, including Kyrgyzstan, Moldova, Tajikistan, and Uzbekistan.²⁰⁵

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.”²⁰⁶ The term “Emerging economies” can easily be confused with the term “economies in transition,” especially when talking about Member States of UNECE of which many historically belonged to the Soviet Union.²⁰⁷ Many of the emerging economies in UNECE are also economies in transition “that [were] once a communist state, and [are] now becoming a free market economy – changing from communism to capitalism, from central planning to free market.”²⁰⁸ One of the main characteristics of emerging economies is the lower-to-middle per capita income.²⁰⁹ On the other hand, “because emerging markets are striving to become more industrialized quickly, they often have higher growth per year than the most developed countries.”²¹⁰ Additionally, emerging economies can be characterized through a high level of sociopolitical instability and volatility caused by military conflicts, social tensions, natural disasters, and price shocks.²¹¹ These factors affect and impact the economic growth of emerging economies.²¹²

To assist these Member States in achieving the Sustainable Development Goals (SDGs) outlined in the *2030 Agenda for Sustainable Development* (2030 Agenda) and integrate their economies into the European and global economy, UNECE offers them support in form of technical cooperation.²¹³ This technical cooperation involves projects and capacity building activities that cover topics ranging from environment, energy, transport, trade, over statistics, and gender mainstreaming.²¹⁴ 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.”²¹⁵ The three main building blocks of UNECE’s technical cooperation efforts are advisory services, capacity building activities, and technical cooperation projects.²¹⁶

²⁰² UNECE, *Technical Cooperation*, 2019.

²⁰³ UNECE, *Technical Cooperation: Delivering as one*, 2012, p. 5.

²⁰⁴ World Bank, *World Bank Country and Lending Groups*, 2019.

²⁰⁵ Shelburne, *Financing Development in the UNECE Emerging Markets*, 2008.

²⁰⁶ Sraders, *What Are Emerging Markets? Characteristics and List in 2019*, 2019.

²⁰⁷ MBN, *Transition Economy – Definition and Meaning*, 2019.

²⁰⁸ *Ibid.*

²⁰⁹ Sraders, *What Are Emerging Markets? Characteristics and List in 2019*, 2019.

²¹⁰ *Ibid.*

²¹¹ MBN, *Transition Economy – Definition and Meaning*, 2019.

²¹² Sraders, *What Are Emerging Markets? Characteristics and List in 2019*, 2019.

²¹³ UNECE, *Technical Cooperation*, 2019.

²¹⁴ *Ibid.*

²¹⁵ *Ibid.*

²¹⁶ *Ibid.*

International and Regional Framework

The legal foundation for the work of UNECE in the field of technical cooperation was provided through General Assembly resolution 58(I) in 1946.²¹⁷ This resolution established the Regular Programme of Technical Cooperation (RPTC).²¹⁸ It 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.”²¹⁹ Today, the main focus of the RPTC lies on supporting emerging economies in achieving the SDGs.²²⁰ These were established by the General Assembly through the adoption of the 2030 Agenda in 2015, covering topics ranging from combatting poverty and inequality, over climate change, environmental degradation, to achieving prosperity, and peace and justice.²²¹ UNECE contributes to achieving all SDGs, through improving connectivity within the region, reducing environmental pressures and using resources more sustainably, and contributing to creating more dynamic and resilient economies.²²² Especially SDG 17 (partnerships for the goals) is guiding the work of UNECE.²²³ Partnerships are treated as an important component of the agenda, which is why UNECE has also put a focus on working in cooperation with other UN agencies.²²⁴ It underlines the principle of ‘delivering as one’, which was already introduced through General Assembly resolution 62/277 in 2008.²²⁵

In 2007, the *UNECE Technical Cooperation Strategy* was created in its 62nd session.²²⁶ The strategy defines technical cooperation activities as one pillar of the work of UNECE.²²⁷ In articles 4 and 5 of the strategy, the rationale for technical cooperation in the UNECE is defined, including to “ensure a direct link between intergovernmentally agreed norms and standards and technical cooperation” as well as using its capabilities to build effective networks.²²⁸ Furthermore, articles 6 and 7 describe the principles under which UNECE technical cooperation efforts are carried out.²²⁹ Examples, amongst others, are “selectivity,” “focus on countries with economies in transition in the UNECE region,” and “cooperation and partnership with others.”²³⁰ Furthermore, 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.²³¹ The work of UNECE in the field of technical cooperation 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.²³² With 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.²³³ The countries that SPECA includes are Afghanistan, Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan.²³⁴ In

²¹⁷ UNECE, *Regular Programme of Technical Cooperation*, 2019.

²¹⁸ Ibid.

²¹⁹ Ibid.

²²⁰ Ibid.

²²¹ UN General Assembly, *Transforming our World: the 2030 Agenda for Sustainable Development (A/RES/70/1)*, 2015; UN DESA, *About the Sustainable Development Goals*, 2019.

²²² UNECE, *Supporting Countries to Achieve the SDGs*, 2019.

²²³ UNECE, *Partnerships*, 2019.

²²⁴ Ibid.

²²⁵ UN General Assembly, *System-wide Coherence (A/RES/62/277)*, 2008.

²²⁶ UNECE, *UNECE Technical Cooperation Strategy*, 2007.

²²⁷ Ibid.

²²⁸ Ibid.

²²⁹ Ibid.

²³⁰ Ibid.

²³¹ Ibid.

²³² UNECE, *SPECA*, 2019; UNECE, *Tashkent Declaration*, 2019.

²³³ Ibid.

²³⁴ UNECE, *SPECA*, 2019.

order to implement the goals of the declaration, it calls for support of the UN system, Member States and the private sector in the form of monetary or other resources, like technical expertise.²³⁵

The work of SPECA is complemented by the European Union's (EU) strategy for Central Asia, which was adopted in 2007.²³⁶ The strategy defines the EU's activities of development aid in the region.²³⁷ The strategy has the objective to "undertake reforms and strengthen democracy, human rights, the rule of law and the independence of 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."²³⁸ In September 2019, the successor of this strategy was adopted with a focus on connectivity: *Connecting Europe and Asia – the EU Strategy*.²³⁹ Connectivity in that sense focuses on four areas: efficient transport, energy, digital, and the human dimension.²⁴⁰ 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."²⁴¹ Some of the partners inside and outside of the EU, that are supporting the strategy financially, are the European Structural and Investment Funds, the European Fund for Strategic Investments, the Investment Facility for Central Asia, Asian Investment Facility and the European Fund for Sustainable Development.²⁴² An example of a connectivity project that is financed under the framework of this strategy is the "construction of 4800 kilometers of road and rail, six ports, and 11 logistics centers across Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine by 2030."²⁴³

Role of the International System

The overall aim of UNECE is to promote economic integration across its region.²⁴⁴ The projects that UNECE initiates under its technical cooperation program all work towards that overall goal, as they focus on sub-regional and regional integration.²⁴⁵ UNECE uses a multisectoral approach in its technical cooperation activities, including, amongst others, the energy sector, trade, and sustainable transportation.²⁴⁶ 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.²⁴⁷ In 2018, UNECE published the report *Success Stories in Technical Cooperation Towards the 2030 Agenda* illustrating successful projects in technical cooperation by UNECE.²⁴⁸ These projects range from tackling cooperation on hydrology and environment between Tajikistan and Afghanistan to improving trade facilities in Ukraine.²⁴⁹

Established in 2004, the UNECE Working Group on Technical Cooperation is primarily responsible for the topic of technical cooperation with emerging economies.²⁵⁰ It consists 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.²⁵¹ Its main purpose is to support the UNECE Programme

²³⁵ UNECE, *Tashkent Declaration*, 2019.

²³⁶ UNECE, *SPECA*, 2019.

²³⁷ Ibid.

²³⁸ European Council, *Central Asia: Council Adopts a new EU Strategy for the Region*, 2019.

²³⁹ UNECE, *SPECA*, 2019.

²⁴⁰ EEAS, *Connecting Europe and Asia – the EU Strategy*, 2019.

²⁴¹ Ibid.

²⁴² Ibid.

²⁴³ Ibid.

²⁴⁴ UNECE, *Mission*, 2019; UNECE, *Case Study Compilation*, 2019.

²⁴⁵ UNECE, *Technical Cooperation?*, 2019.

²⁴⁶ Ibid.

²⁴⁷ Ibid.

²⁴⁸ UNECE, *Success Stories in Technical Cooperation - Towards the 2030 Agenda*, 2018.

²⁴⁹ Ibid.

²⁵⁰ UNECE, *Working Group on Technical Cooperation*, 2019.

²⁵¹ Ibid.

Management Unit in increasing overall coherence of UNECE's technical cooperation activities.²⁵² Each Regional Advisor is responsible for one of the following topics respectively: environment, transport, statistics, economic cooperation and integration, sustainable energy, and trade.²⁵³ 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.²⁵⁴ The work of UNECE in the field of technical cooperation has been documented through annual reports.²⁵⁵ The 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.²⁵⁶

Furthermore, 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 17.²⁵⁷ An example for cooperation within the UN system is the United Nations Development Account (UNDA).²⁵⁸ 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.²⁵⁹ These entities are the UN Department of Economic and Social Affairs (UN DESA), the regional commissions including UNECE, the UN Conference on Trade and Development, the UN Environment Programme (UNEP), the UN Human Settlements Programme (UN-Habitat), and the UN Office on Drugs and Crime.²⁶⁰ 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.”²⁶¹

Beyond the work of the UN, many different stakeholders provide support for emerging economies through technical cooperation.²⁶² 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.²⁶³ An example for such a project that is supported and run by ADB is the “Strengthening Tax Policy and Administration Capacity” project in Azerbaijan.²⁶⁴ 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.²⁶⁵ Technical cooperation in this project consists of providing operational support to help local ministries design tax administration and policy reforms.²⁶⁶

The private sector has also been actively involved in supporting UNECE in its technical cooperation efforts.²⁶⁷ An example is Microsoft, who has been supporting the development of information and communication technology (ICT) standards for e-business and e-commerce in transitioning economies.²⁶⁸ Additionally, Microsoft has founded the Technology for Emerging Markets research group, which is

²⁵² UNECE, *Working Group on Technical Cooperation*, 2019.

²⁵³ UNECE, *UNECE Regional Advisors*, 2019.

²⁵⁴ Ibid.

²⁵⁵ UNECE, *Reporting on Technical Cooperation Activities*, 2019.

²⁵⁶ UNECE, *Technical Cooperation: Delivering as one*, 2012, p. 5.

²⁵⁷ UNECE, *Supporting Countries to Achieve the SDGs*, 2019.

²⁵⁸ UNECE, *United Nations Development Account*, 2019.

²⁵⁹ Ibid.

²⁶⁰ Ibid.

²⁶¹ Ibid.

²⁶² UNECE, *Partnerships*, 2019.

²⁶³ Ibid.

²⁶⁴ ADB, *Azerbaijan: Strengthening Tax Policy and Administration Capacity*, 2019.

²⁶⁵ Ibid.

²⁶⁶ Ibid.

²⁶⁷ UNECE, *Partnerships*, 2019.

²⁶⁸ Ibid.

working on „designing, building and evaluating tools, services and platforms that boost health, education and incomes for technologically underserved rural and urban communities.“²⁶⁹

Efficient Use of Financial Resources for Technical Cooperation

“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.”²⁷⁰ The lack of resources of emerging economies when trying to achieve the Millennium Development Goals (MDGs) was described as the MDG financing gap..²⁷¹ The eight MDGs were the predecessor of the SDGs.²⁷² In the framework of achieving the MDGs – from the year 2000-2015, the international system was working towards eradicating poverty and hunger, achieving universal primary education, promoting gender equality, reducing child mortality, improving maternal health, combatting HIV, malaria, and other diseases, ensuring environmental sustainability, and creating global partnerships for development.²⁷³ The gap describes the discrepancy between the amount of additional resources that were needed to achieve the MDGs and the amount of resources that could have been reasonably raised domestically.²⁷⁴ In some of the poorest countries of the UNECE region this gap was estimated at around 20% of GDP.²⁷⁵

Today, to counter a similar financing gap when achieving the SDGs, UNECE and many other actors of the region mobilize financial resources for technical cooperation.²⁷⁶ In 2018-2019 UNECE had a budget of \$63.8 million available for technical cooperation activities.²⁷⁷ This is a notable increase from the budget of \$56.9 million in 2016-2017, and \$56 million in 2014-2015.²⁷⁸ In addition, ADB for example 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.”²⁷⁹ Also, EBRD has many funding instruments in place, which aim at “supporting authorities or partners with policy or legal reform, or build client capacity and know-how.”²⁸⁰ The EU has mainly supported Eastern Partnership countries like Moldova, Georgia, Armenia, and Azerbaijan through technical cooperation projects focusing on migration.²⁸¹

Additionally, to ensure the efficient use of these financial resources, the SDG snapshot report from 2019 suggests that UNECE Member States must continue efforts to build strong, accountable institutions.²⁸² The SDG snapshot report gathers information about the progress being made in the UNECE region towards the SDGs since 2015, and where the greatest gaps remain.²⁸³ Countries that scored notably low on the control of corruption indicator by the World Bank are Turkmenistan, Tajikistan, Uzbekistan, Kirgizstan, Azerbaijan, Kazakhstan, Moldova, Ukraine, Armenia, Albania, and Serbia.²⁸⁴ Although the control of corruption already shows some improvement throughout the region, further improvements and strengthened governance and rule of law, as outlined in SDG 16, as well as reformation of and innovation in the public sector are needed.²⁸⁵ Innovation, transparency, and accountability in the public sector, just

²⁶⁹ Microsoft, *Technology for Emerging Markets*, 2019.

²⁷⁰ Shelburne, *Financing Development in the UNECE Emerging Markets*, 2008.

²⁷¹ Ibid.

²⁷² UN, *News on Millennium Development Goals*.

²⁷³ Ibid.

²⁷⁴ Shelburne, *Financing Development in the UNECE Emerging Markets*, 2008.

²⁷⁵ Ibid.

²⁷⁶ UNECE, *Technical Cooperation*, 2019.

²⁷⁷ General Assembly, *Proposed Programme Budget for the Biennium 2018-2019 A/72/6(Sect.20)*, 2017.

²⁷⁸ UNECE, *Technical Cooperation*, 2019.

²⁷⁹ ADB, *Technical Assistance Special Fund*, 2019.

²⁸⁰ EBRD, *Donor Funding Instruments*, 2019.

²⁸¹ European Commission, *Financial and Technical Assistance*, 2019.

²⁸² UNECE, *Snapshot Report: SDGs in the UNECE Region*, 2019, p. 25.

²⁸³ Ibid.

²⁸⁴ Ibid., p. 25.

²⁸⁵ UNECE, *Innovation in the Public Sector*, 2017.

as in the business sector, can be “a major source of productivity growth, cost savings and improvements in service quality.”²⁸⁶ However, emerging economies of the UNECE region are still lagging behind in the implementation of these principles.²⁸⁷

Technical Cooperation for Sustainable Urban Development

The need for a “holistic approach to urban development and human settlements [and] an integrated approach to planning and building sustainable cities and urban settlements” was stressed at the Rio+20 UN Sustainable Development Conference in 2012.²⁸⁸ According to UNECE, most economies in transition face numerous challenges in the field of sustainable urban development.²⁸⁹ 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.²⁹⁰ In 2014-2017, UNECE addressed some of these issues in technical cooperation projects but a number of countries remain with these challenges where efforts have focused on other SDGs.²⁹¹

During 2014-2017, UNECE, together with UN-Habitat and ministries and local authorities in charge of housing and land management, implemented these projects in Armenia, the Republic of Moldova, Serbia, and Tajikistan to strengthen national capacities of these economies in transition for sustainable housing and urban development.²⁹² The challenges were tackled through a wide range of technical cooperation tools that UNECE offers.²⁹³ These include workshops to discuss goals and priorities of the respective countries’ governments for sustainable housing, assistance in the creation of country profiles and national action plans through the provision of guidelines or drafts together with international and national experts and stakeholders, and advisory services in order to fully implement the recommendations and policies that were created in country profiles and national action plans.²⁹⁴

Beyond country specific actions, UNECE actively supports smart cities that tackle the challenges described above.²⁹⁵ In 2014, UNECE established the United Smart Cities global initiative in cooperation with the Organization for International Economic Relations and other international organizations, cities, and representatives of the industry and finance sector.²⁹⁶ In 2016, UNECE was also involved in the launch of the United for Smart Sustainable Cities initiative in cooperation with the International Telecommunication Union and UN-Habitat to “make cities and human settlements inclusive, safe, resilient and sustainable.”²⁹⁷ Both initiatives serve as an international platform where stakeholders like international organizations, companies, governments, and high-level decision-makers can exchange information, share knowledge, and build partnerships.²⁹⁸ The work of these initiatives involves especially the integration of ICTs to facilitate the transition to smart sustainable cities.²⁹⁹ These initiatives also strive to provide capacity building and technology transfer to emerging economies that are located in the UNECE region.³⁰⁰

²⁸⁶ UNECE, *Innovation in the Public Sector*, 2017.

²⁸⁷ Ibid.

²⁸⁸ UNECE, *Sustainable Urban Development*, 2019.

²⁸⁹ UNECE, *Success Stories in Technical Cooperation - Towards the 2030 Agenda*, 2018, p. 45.

²⁹⁰ Ibid.

²⁹¹ Ibid.

²⁹² Ibid., pp. 42-43.

²⁹³ Ibid., p. 44.

²⁹⁴ Ibid., p. 44.

²⁹⁵ United Smart Cities, *United for a Smarter and More Sustainable World*, 2019.

²⁹⁶ Ibid.

²⁹⁷ ITU, *United 4 Smart Sustainable Cities*, 2019.

²⁹⁸ Ibid.

²⁹⁹ UNECE, *United for Smart Sustainable Cities*, 2019.

³⁰⁰ Ibid.

Conclusion

Technical cooperation is used by UNECE to achieve economic integration of all Member States of the UNECE region.³⁰¹ The 2018 report *Success Stories in Technical Cooperation - Towards the 2030 Agenda* presents a number of projects that have been implemented to support emerging economies in the UNECE region through technical cooperation and supported them in achieving 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).³⁰² As they so far have been implemented only in selected Member States, there is potential to learn from these success stories.³⁰³ This means that there is room for similar technical cooperation projects in emerging economies in the UNECE region that have had no or different support to foster economic integration.³⁰⁴

Further Research

Moving forward, delegates can consider questions such as: How can more financial resources for technical cooperation programs be gathered? 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?

Annotated Bibliography

United Nations Economic Commission for Europe. (2007). *UNECE Technical Cooperation Strategy*. Retrieved 19 July 2019 from: https://www.unece.org/fileadmin/DAM/operact/Revised_TCS_e_2007_.pdf
Delegates should read the UNECE Technical Cooperation Strategy from 2007, as it is laying the legal foundation for the work of this 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.

United Nations Economic Commission for Europe. (2017). *Innovation in the Public Sector*. Retrieved 19 July 2019 from: https://www.unece.org/fileadmin/DAM/ceci/publications/Innovation_in_the_Public_Sector/Public_Sector_Innovation_for_web.pdf
As businesses rely on an efficient public sector, the topic of public sector innovation is closely linked to the development of modern economies. The 2017 report on innovation in the public sector provides delegates with an overview of the main issues of the field. Also, policy challenges in the field of public sector innovation are addressed: two challenges are the lack of understanding of public sector innovation and the underestimation of the link between the public and the private sector. The document provides important information for delegates when researching the role of institutions in technical cooperation.

United Nations Economic Commission for Europe. (2018). *Success Stories in Technical Cooperation - Towards the 2030 Agenda*. Retrieved 19 July 2019 from: https://www.unece.org/fileadmin/DAM/operact/Technical_Cooperation/TC_Publications/1801961E_WEB.pdf

³⁰¹ UNECE, *Technical Cooperation*, 2019.

³⁰² UNECE, *Success Stories in Technical Cooperation - Towards the 2030 Agenda*, 2018; UNOSSC. *South-South and Triangular Cooperation for Sustainable Development - Volume 2*, 2018.

³⁰³ Ibid.

³⁰⁴ Ibid.

This document was compiled by UNECE in 2018, in an effort to show the wide variety of UNECE projects in the field of technical cooperation. Delegates should read this report, as it provides examples of successful stories that have been implemented in UNECE Member States. This can enhance their understanding of how UNECE provides technical support and how a successful project should look like. It also highlights the diversity of topics that UNECE operates in and can inspire delegates in their research and create potential solutions.

United Nations Economic Commission for Europe. (2019). *Case Study Compilation*. Retrieved 27 August from: http://www.unece.org/fileadmin/DAM/RCM_Website/RFSD_2019_Case_Study_Compilation.pdf

The given 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 should read this source because it can provide them with an overview of the challenges that different transitioning economies in the region face. It can serve as a starting point from where delegates could continue their research on the topic at hand.

United Nations Office for South-South Cooperation. (2018). *South-South and Triangular Cooperation for Sustainable Development - Volume 2*. Retrieved 19 July 2019 from:

https://drive.google.com/file/d/1pMjBpMwMDPPBD_EKtnp0zL9TxsQ3tmGT/view

Delegates should consider this report, as it provides a compilation of more than 100 good practice examples of cooperation. The recommendations are sorted by the 17 SDGs. Delegates are recommended to have a specific look at the published recommendations for SDGs 7, 11, 13 and 16, as these are covering the topics of building stronger institutions and provide support for sustainable urban development. Stronger institutions are important to ensure transparency and accountability to foster a more efficient use of resources in technical cooperation.

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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

The United Nations (UN) notes that energy is at the center of nearly every policy decision and challenge that the global community faces today.³⁰⁶ Whether the challenge is food production, job creation, security, climate change, or increasing individual incomes, access to clean and sustainable energy is essential.³⁰⁷ Most recent findings show that there are still 840 million people worldwide without access to energy, down from a peak of approximately 1.3 billion in 2010.³⁰⁸ However, enough energy is being produced globally, with a cumulative energy production across all sectors totaling 13,763.99 millions of tons of oil equivalent (MTOE), while total final consumption was at 9,555.32 MTOE in 2016.³⁰⁹ More than 4 million MTOE of produced energy were never consumed.³¹⁰ 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.”³¹¹

By 2030, 650 million people will still remain without access to energy if current efforts are not increased.³¹² While progress continues to be made, new challenges burden sustainable energy pursuits. Production optimization of low-carbon energy sources is limited by dated power grids, and the misallocation of energy resources due to an oversaturated sector.³¹³ Sustainable energy itself can be understood as energy that is produced in mind of its potential environmental impacts on ecosystems and climate change, and its positive social externalities towards advancing societal progress.³¹⁴ Access to clean and sustainable energy is essential towards a diverse range of challenges, from economic growth and agricultural security, to combatting climate change and preventing negative health outcomes.³¹⁵ 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 interrelated with many other SDGs to achieve economic, social, and environmental sustainability.³¹⁶

The UN Economic Commission for Europe’s (UNECE) commitment towards accelerating regional cooperation is showcased through its Regional Advisory Programme on Energy and its partnerships with regional UN Country Teams in establishing inter-agency coordination across multiple technical sectors.³¹⁷ While access to energy in the UNECE region is almost 100% across the 56 Member States, this figure

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.

³⁰⁶ UN DESA, *Ensure access to affordable, reliable, sustainable and modern energy*, 2019.

³⁰⁷ Ibid.

³⁰⁸ IEA et al., *Tracking SDG 7: The Energy Progress Report Highlights*, 2019, p. 3.

³⁰⁹ IEA et al., *World Energy Balances*, 2018, p. 59.

³¹⁰ Ibid.

³¹¹ Bacchi, End World’s ‘Coal Addiction’ to Avert Climate Devastation UN Chief Says, *Reuters*, 2019.

³¹² IEA et al., *Tracking SDG 7: The Energy Progress Report Highlights*, 2019, p. 3.

³¹³ Bogmans, *Our Common Energy Future*, 2019, p. 14.

³¹⁴ UN DESA, *Accelerating SDG 7 Achievement: SDG 7 Policy Briefs in Support of the High-Level Political Forum 2019*, 2019, p. 136.

³¹⁵ OECD & IEA, *OECD Green Growth Studies: Energy*, 2011.

³¹⁶ UN General Assembly, *Transforming Our World: The 2030 Agenda for Sustainable Development (A/RES/70/1)*, 2015.

³¹⁷ UNECE, *UNECE Regional Advisors*, 2019.

does not take into account the quality of energy and significant costs to poorer populations.³¹⁸ Moreover, over 80% of the total primary energy supply production originates from fossil fuels.³¹⁹ In 2017, UNECE reported on findings which showcased that energy production and consumption accounted for 65% of total global greenhouse gas (GHG) emissions.³²⁰ Coordination with international financial institutions (IFIs) in promotion of green finance continues to expand globally.³²¹ However, renewable energy investments in Europe declined from approximately USD30 billion in 2012 to USD16.8 billion in 2017, falling behind consumption demands.³²²

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.³²³ The Charter was a political declaration building 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.”³²⁴ Following the declaration, 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 entering into force in 1998.³²⁵ The ECT established the Energy Charter Conference as the governing body which counts 56 Member States from mostly Europe and Central Asia but also Australia, the European Union (EU), Japan, Jordan, and Yemen.³²⁶ The Russian Federation, though a signatory in 1991 and 1994, has not ratified the ECT, which is also the case for Australia, Belarus, and Norway.³²⁷ State parties to the ECT committed to working together in the areas of: energy trade, promoting competitive and open energy markets; energy transit, developing and modernizing means of transport for energy materials and products; promoting access to and transfer of energy technology; as well as promoting investment and access to capital.³²⁸ Most recently in 2015, 72 Member States, the EU, European Atomic Energy Community, and the Economic Community of West African States convened at a Ministerial conference and adopted the *International Energy Charter*.³²⁹ Though not legally binding and without financial commitment by the signatories, the International Energy Charter aims at strengthening energy cooperation between members.³³⁰ The document, meant as a political declaration of intent, addresses a wide range of current international energy challenges, including: “the growing weight of developing countries for global energy security; the ‘trilemma’ between energy security, economic development and environmental protection; the role of enhanced energy trade for sustainable development; the need to promote access to modern energy services, energy poverty reduction, clean technology and capacity building; the need for diversification of energy sources and routes; [and] the role of regional integration of energy markets.”³³¹

At the level of the UN in 2012, the General Assembly adopted resolution 66/288 on “The Future We Want” endorsing the outcome document of the United Nations Conference on Sustainable Development.³³² The document includes energy as a thematic area under its framework for action in

³¹⁸ UN DESA, *Accelerating SDG 7 Achievement: SDG 7 Policy Briefs in Support of the High-Level Political Forum 2019*, 2019, p. 131.

³¹⁹ *Ibid.*, p. 133.

³²⁰ UNECE, *Energy for Sustainable Development in the UNECE Region*, 2017, p. 3.

³²¹ UNEP, *Green Finance Progress Report*, 2017, p. 11.

³²² IEA & OECD, *World Energy Investment*, 2018.

³²³ Energy Charter Secretariat, *The European Energy Charter*, 2015.

³²⁴ The Hague Conference on the European Energy Charter, *European Energy Charter*, 1991, p. 8.

³²⁵ Energy Charter Secretariat, *The Energy Charter Treaty*, 2019.

³²⁶ *Ibid.*

³²⁷ Energy Charter Secretariat, *Member and Observers of the Energy Charter Conference*, 2019.

³²⁸ European Energy Charter Conference, *The Energy Charter Treaty*, 1994.

³²⁹ Energy Charter Secretariat, *The International Energy Charter*, 2016.

³³⁰ *Ibid.*

³³¹ *Ibid.*

³³² UN General Assembly, *The Future We Want (A/RES/66/288)*, 2012.

which Member States affirm 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.³³³ It is further 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 cleaner and energy-efficient technologies.”³³⁴ Energy is also identified as a cross-cutting concern for sustainable transportation and sustainable cities and human settlements.³³⁵

In 2015, the UN General Assembly unanimously adopted resolution 70/1 “Transforming Our World: The 2030 Agenda for Sustainable Development” and established 17 SDGs leading the international community’s efforts in achieving sustainable development and prosperity for all.³³⁶ Access to sustainable energy for all is pertinent towards ensuring progressive development towards achieving the SDGs, especially SDG 7 (affordable and clean energy) which aims to bring access to electricity to the everyone, including the poorest countries, to improve energy efficiency, and to increase the share of renewable energy, including for transportation and heating.³³⁷ SDG 7 cannot be achieved without significant developments in other SDGs and vice versa: 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).³³⁸ Also, SDG 17 (partnerships for the goals) is essential in guiding the work of UNECE, highlighting cooperation on the regional, national, and local levels.³³⁹ 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.³⁴⁰ It underlines the principle of ‘delivering as one’, which was already introduced through General Assembly resolution 62/277 in 2008.³⁴¹

In addition, the 2015 *Paris Climate Agreement* underlines the importance for the international community “to promote universal access to sustainable energy (...) through the enhanced deployment of renewable energy.”³⁴² The *Paris Climate Agreement* also promotes regional cooperation in line with UNECE’s aim to work together with all stakeholders to ensure sustainable energy. Regional cooperation is set out in the agreement to create synergies, share expertise and information in networks and partnerships, and build capacities across the region.³⁴³

On a regional level, the European Union recognized the need to set ambitious targets on increasing energy efficiency and renewable energy and reducing greenhouse gas emissions in its 2014 adopted climate and energy framework for 2030, which was revised to include higher targets in 2018.³⁴⁴ The targets set forth 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 2020.³⁴⁵ Considering the regional overlap between the EU and UNECE, the climate and energy framework’s call for National Climate and Energy Plans for the period 2021-2030 and its goals towards a low-carbon economy and clean energy, ensuring affordable energy for all, reducing air pollution,

³³³ Ibid., pp. 24-25.

³³⁴ Ibid., pp. 24-25.

³³⁵ Ibid., p. 26.

³³⁶ UN General Assembly, *Transforming Our World: The 2030 Agenda for Sustainable Development (A/RES/70/1)*, 2015.

³³⁷ UN DESA, *Sustainable Development Goal 7*, 2019.

³³⁸ Ibid.; UN DESA, *Accelerating SDG 7 Achievement: SDG 7 Policy Briefs in Support of the High-level Political Forum 2019*, 2019.

³³⁹ UNECE, *Partnerships*, 2019.

³⁴⁰ Ibid.

³⁴¹ UN General Assembly, *System-wide coherence (A/RES/62/277)*, 2008.

³⁴² COP 21, *Paris Agreement*, 2015.

³⁴³ Ibid.

³⁴⁴ EC, *2030 Climate & Energy Framework*.

³⁴⁵ Ibid.

increasing security of energy supply, reducing energy dependence, and creating new job opportunities, also affects UNECE's work.³⁴⁶

Role of the International System

The UN plays an instrumental role in sustainable energy developments around the world. The 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.”³⁴⁷ In this context, the former UN Secretary-General Ban Ki-moon launched the Sustainable Energy for All (SE4All) Initiative, now an independent organization, with the aim to mobilize all relevant stakeholders working towards SE4All, including governments, the private sector and civil society.³⁴⁸ The head of SE4ALL also holds the position as the UN Secretary-General's Special Representative for Sustainable Energy for All and Co-Chair of UN-Energy.³⁴⁹ 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.³⁵⁰ The UN Decade aims to increase efforts towards energy access, efficiency, and sustainability, as well as strengthening cooperation among relevant stakeholders, including the private sector, for research and development and enabling policies and investments on the national and international level.³⁵¹

In May 2019, the UN Department of Economic and Social Affairs (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.³⁵² The policy briefs published in this context included a review of SDG 7 in the UNECE region.³⁵³ The brief notes that, though the region is close to 100% access to energy, UNECE faces an ageing 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.³⁵⁴ Other issues the region faces are: a limited progress in implementing National Energy Efficiency Action Plans where Member States have adopted one, 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 because of inefficient and old energy infrastructure as well as industry and buildings.³⁵⁵

UNECE puts great focus on strengthening regional cooperation amongst Member States while promoting energy efficiency standards, climate change mitigation, and technology and information management.³⁵⁶ UNECE's role in the international sustainable energy strategy is to facilitate the transition to a more sustainable energy future, while introducing renewable energy sources that reduce the health and environmental impacts from non-renewable energy sources.³⁵⁷ This is done through multi-faceted approaches coordinated by UNECE between Member States through symposiums with other relevant UN bodies, the private sector, non-governmental organizations (NGOs), and civil society organizations

³⁴⁶ Ibid.

³⁴⁷ UN General Assembly, *International Year of Sustainable Energy for All (A/RES/65/151)*, 2011, pp. 2-3.

³⁴⁸ UN General Assembly, *International Year of Sustainable Energy for All, 2012 – Report of the Secretary-General (A/67/314)*, 2012.

³⁴⁹ SE4All, *About us*.

³⁵⁰ UN General Assembly, *Promotion of new and renewable sources of energy (A/RES/67/215)*, 2013.

³⁵¹ Ibid.

³⁵² UN DESA, *United Nations Decade of Sustainable Energy for All 2014-2019*, 2019.

³⁵³ UN DESA, *Accelerating SDG 7 Achievement: SDG 7 Policy Briefs in Support of the High-level Political Forum 2019*, 2019, pp. 129-134.

³⁵⁴ Ibid., pp. 130-131.

³⁵⁵ Ibid., pp. 130 & 132; ECA R-UNDG & RCM, *Building More Inclusive, Sustainable and Prosperous Societies in Europe and Central Asia*, 2017, p. 71.

³⁵⁶ UNECE, *Success Stories in Technical Cooperation Towards the 2030 Agenda*, 2018, p. 3.

³⁵⁷ UNECE, *Sustainable Energy*, 2019.

(CSOs).³⁵⁸ One of these forums is UNECE's Committee on Sustainable Energy, which fosters such progressions.³⁵⁹ 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.³⁶⁰ An essential component for achieving sustainable energy and climate targets is through empirical analysis of existing data inputs, and using the aggregate data to project possible outcomes for the future.³⁶¹

UNECE also established the Joint Task Force on Energy-Efficiency Standards in Buildings through its Committee on Urban Development Housing and Land Management in pursuit of achieving the SDGs through sustainable energy.³⁶² This is a step towards fulfilling a new target of achieving carbon-neutrality amongst UNECE Member States by 2050, as discussed during UNECE's 28th Session of the Committee on Sustainable Energy in September 2019 in support of SDG 7, SDG target 9.4, and SDG target 13.2.³⁶³ Fulfillment of this goal, and other targets within strengthening regional cooperation to ensure sustainable energy, rely on acceleration of technology modernization and public-private partnerships (PPPs) between national and local governments and the commercial sectors.³⁶⁴ Additionally, these partnerships rely on adequate education of operational personnel across chains of command, including most-senior administrative decision-makers.³⁶⁵

Incentivizing Sustainable Energy Infrastructure Investment

Transmission and Distribution Losses

While development of new infrastructure is only making slow progress, also existing energy grids continue to be a challenge for transporting clean energy from modern energy sources.³⁶⁶ 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.³⁶⁷ 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.³⁶⁸ T&D losses from old infrastructure and run down networks play a significant role in contributions towards the high-carbon footprints of some UNECE Member States.³⁶⁹ 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, which affects those with the least ability to pay for high energy costs the most.³⁷⁰

The Role of Private Markets in Infrastructural Expansions

Private sustainability finance addressing environmental, social, and governance issues has emerged out of industries' adoption of corporate social responsibility.³⁷¹ However, emerging alternative solutions in the energy sector that bear a high risk are difficult for institutional investment firms to sufficiently fund and

³⁵⁸ UNECE, *About Energy Programme*, 2019.

³⁵⁹ UNECE, *Committee Objectives*, 2019.

³⁶⁰ *Ibid.*

³⁶¹ UNECE, *About Pathways to Sustainable Energy*, 2019.

³⁶² 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.

³⁶³ UNECE, *List of Parliamentary Documents: Accelerating and Deepening the Transition to Sustainable Energy Systems*, 2019.

³⁶⁴ UNECE, *Standard on Public-Private Partnerships in Renewable Energy (ECE/CECI/WP/PPP/2018/7)*, 2018, p. 6.

³⁶⁵ UNECE, *Putting the Guiding Principles on People-first Public-Private Partnerships into Practice (ECE/CECI/2019/7)*, 2019, p. 3.

³⁶⁶ UNECE, *Pathways to Sustainable Energy*, 2019, p. 16.

³⁶⁷ *Ibid.*

³⁶⁸ REN21, *UNECE Renewable Energy Status Report*, 2017, p. 10.

³⁶⁹ UNECE, *Progress in the Areas of Energy Efficiency and Renewable Energy in Selected Countries of the UNECE Region*, 2019, p. 40.

³⁷⁰ CEER, *CEER Report on Power Loss*, 2017, p. 35.

³⁷¹ Goldman Sachs, *Sustainable Finance Innovation Forum 2018: Key Takeaways*, 2018, p. 9.

scale infrastructural developments.³⁷² This difficulty is due in part to the complexities of the market, not an unwillingness to act.³⁷³ The decentralization in the energy sector gives potential investors more variables to take into account before taking any opportunities to invest.³⁷⁴ Nonetheless, over 1,500 IFIs, with approximately USD 62 trillion worth of assets under management, committed to incorporating environmental, social, and governance issues in their development under the UN Environment Programme Finance Initiative (UNEP FI), a partnership between UNEP and the global financial sector to mobilize private sector finance for sustainable development.³⁷⁵ The sourcing of renewable energy by multinational corporations (MNCs) in 2018 grew by 216% from the previous year.³⁷⁶ Yet, global investment in sustainable energy green finance fell from USD 326.3 billion to USD 288.9 billion, despite the commitment under UNEP FI.³⁷⁷ This gives prominence to the difficulty businesses have in directly taking part in energy investment.³⁷⁸ As a result, the world is not on track to fulfill SDG 7 as global energy-related carbon dioxide increased by almost 1.7% from the previous year.³⁷⁹ This is all in spite of increased involvement by IFIs and MNCs in accordance to the Principles for Responsible Investment (PRI) established in 2006 by UNEP FI and the UN Global Compact.³⁸⁰ The six principles under this framework aim to incorporate environmental, social, and governance issues into investment analysis, decision-making, and practices leading to a more sustainable global financial system.³⁸¹

Between 2007 and 2014 UNECE managed the Financing Energy Efficiency and Renewable Energy Investments for Climate Change Mitigation (FEEI) project with the goal to promote an investment environment in which investment 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 (Bulgaria, Croatia, Romania, Albania, Bosnia and Herzegovina, North Macedonia, Serbia, Belarus, Kazakhstan, Moldova, the Russian Federation, and Ukraine) came together for several workshops and projects on business development of 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 To facilitate the exchange a web-supported network of selected municipalities and energy managers from project participating countries created sharing knowledge on policy reforms, financing, and energy management.³⁸⁵

Implementing Information and Communications Technologies for Sustainable Energy Production

According to scientific scholars, the utilization of energy networks equipped with ICTs and the innovation potential that comes with them is unavoidable when looking to achieve SDG 7.³⁸⁶ ICTs can support better data collection, processing, and analysis for networks known as Smart Grids, being defined by the

³⁷² Goldman Sachs, *Sustainable Finance Innovation Forum 2018: Key Takeaways*, 2018, p. 7.

³⁷³ UNCTAD, *World Investment Report 2018: Investment and New Industrial Policies*, 2018, p. 113.

³⁷⁴ Goldman Sachs, *Sustainable Finance Innovation Forum 2018: Key Takeaways*, 2018, p. 9.

³⁷⁵ UN Global Compact, *Integrate the Principles for Responsible Investment*, 2019; UNEP FI, *About United Nations Environment Programme Finance Initiative*.

³⁷⁶ Runyon, *Corporations More Than Double Commitment to Renewable Energy in 2018*, *Renewable Energy World*, 2019.

³⁷⁷ REN21, *Renewables 2019: Global Status Report*, 2019.

³⁷⁸ *Ibid.*

³⁷⁹ *Ibid.*, p. 17.

³⁸⁰ UNEP FI, *About United Nations Environment Programme Finance Initiative*.

³⁸¹ PRI Association, *About the PRI*.

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

³⁸³ *Ibid.*

³⁸⁴ *Ibid.*

³⁸⁵ *Ibid.*

³⁸⁶ Modi & Figueroa, *Sustainable Development Goal for Energy and Information and Communications Technologies*, *UN Chronicle*, 2019.

International Energy Agency as, “infrastructure that enables the delivery of power from generation sources to end-uses to be monitored and managed in real time.”³⁸⁷ UNECE is committed to this systematic approach in bringing Smart Grids online through assessment of faults in grid monitoring amongst Member States.³⁸⁸ Incorporating artificial intelligence (AI) in ICTs is a central aspect in securitizing energy stability.³⁸⁹ AI provides the ability to allocate energy flows and power voltages through real-time grid analysis.³⁹⁰ 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.³⁹¹

Utilizing Emissions Trading Systems to Further Sustainable Energy Production

The creation of markets where regulated emissions thresholds can be exchanged plays a critical role in limiting GHGs.³⁹² An emissions trading system (ETS) secures lower pollution levels while simultaneously encourage energy producers to develop more efficient methods of energy production.³⁹³ This is done by setting a “cap” on emissions or taxing additional output, or some combination of the two.³⁹⁴ 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.³⁹⁵ The EU’s ETS caps emissions from over 11,000 installations.³⁹⁶ 45% of the EU’s GHGs are under this system.³⁹⁷

On 7 October 2019, the amended version of UNECE’s 1999 Gothenburg Protocol from 2012 came into effect.³⁹⁸ The Gothenburg Protocol introduces the first legally binding emissions standards for pollutants derived from energy production, going forward from 2020.³⁹⁹ 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.⁴⁰⁰ Looking at the EU ETS’ inclusion of industries other than energy producers, a baseline is set looking forward for including other industries in ETSs which rely on energy for their production and their indirect contributions to GHG production.⁴⁰¹ However, globally ETSs are not widespread enough to limit volatility in emissions pricing, impeding the primary purpose of driving innovation and investment towards more sustainable methods of energy production in some areas.⁴⁰²

Conclusion

UNECE is committed to optimizing energy efficiency, increasing its share of renewable energy, and reducing negative externalities on health and the environment.⁴⁰³ With the Intergovernmental Panel on Climate Change warning of global temperatures exceeding 1.5° Celsius, swift implementation of cooperation and development between Member States is of utmost importance.⁴⁰⁴ Robust policy frameworks which foster investment and PPPs are at the core of sustainable energy.⁴⁰⁵ UNECE realizes the hurdles moving from targets to concrete actions and works with all UN Regional Commissions and

³⁸⁷ IEA & OECD, *Technology Roadmap: Smart Grids*, 2011, p. 1.

³⁸⁸ UNECE, *Electricity System Development: A Focus on Smart Grids*, 2015, p. 7.

³⁸⁹ ITU, *United Nations Activities on Artificial Intelligence (AI)*, 2018, p. 43.

³⁹⁰ Dragomir, *Solution Based on Artificial Intelligence in Smart Grid*, 2013, p. 3888.

³⁹¹ Sofana, *Future Generation 5G Wireless Networks for Smart Grid: A Comprehensive Review*, 2019, p. 1.

³⁹² UNECE, *Entry Into Force of Amended Gothenburg Protocol is Landmark For Clean Air and Climate Action*, 2019.

³⁹³ *Ibid.*

³⁹⁴ OECD, *Emission Trading Systems*, 2019.

³⁹⁵ EC, *EU Emissions Trading System (EU ETS)*.

³⁹⁶ *Ibid.*

³⁹⁷ EC, *EU Emissions Trading System (EU ETS)*.

³⁹⁸ UNECE, *Entry Into Force of Amended Gothenburg Protocol is Landmark For Clean Air and Climate Action*, 2019.

³⁹⁹ 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.

⁴⁰⁰ UNECE, *Entry Into Force of Amended Gothenburg Protocol is Landmark For Clean Air and Climate Action*, 2019.

⁴⁰¹ EC, *EU Emissions Trading System (EU ETS)*.

⁴⁰² EC, *Market Stability Reserve*.

⁴⁰³ UNECE, *About Energy Programme*, 2019.

⁴⁰⁴ UNECE, *28th Session of the Committee on Sustainable Energy*, 2019.

⁴⁰⁵ IEA et al., *Tracking SDG 7: The Energy Progress Report Highlights*, 2019, p. 32.

relevant stakeholders from the public and private sector as well as CSOs to make sustainable energy a reality for all.⁴⁰⁶ 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.⁴⁰⁷

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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International Energy Agency. (2018). *World Energy Balances*. Retrieved 7 October 2019 from: https://www.oecd-ilibrary.org/energy/world-energy-balances-2018_world_energy_bal-2018-en

To maximize progress in future sustainable energy development projects, it is important to understand inadequacies in the production of energy in the present. Currently, renewable methods of energy production which rely on dated energy grids are not working at their most optimal levels of output. T&D losses need to be taken into account and addressed in the development of new grid systems. The International Energy Agency's World Energy Balances report details this catastrophic 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.

United Nations Economic Commission for Europe. (2019). *List of Parliamentary Documents: Accelerating and Deepening the Transition to Sustainable Energy Systems*. Retrieved 11 October 2019 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](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)

It is encouraged of delegates to 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.

Renewable Energy Policy Network for the 21st Century et al. (2019). *Renewables 2019: Global Status Report*. Retrieved 12 October 2019 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 happen immediately by streamlining information for decision-makers. Chapter 5 of the comprehensive report, Renewables 2019: Global Status Report, gives special attention to the current status of investment flows for renewable energy sources. Delegates can use this information to decipher

⁴⁰⁶ UNECE, *10th International Forum on Energy for Sustainable Development*, 2019.

⁴⁰⁷ UN DESA, *Harnessing the Power of Data for Sustainable Development*, 2019.

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.

United Nations, Department of Economic and Social Affairs et al. (2019). *Accelerating SDG 7 Achievement: SDG Policy Briefs in Support of the High-Level Political Forum 2019*. Retrieved 7 October 2019 from:

https://sustainabledevelopment.un.org/content/documents/22877UN_FINAL_ONLINE_20190523.pdf

This collection of the 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.

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