



United
Nations

Department of Economic and Social Affairs

CLIMATE REVIEW



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United Nations, Department of Economic and Social Affairs Climate Review
Published by the United Nations, Department of Economic and Social Affairs
New York, New York 10017, United States of America

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undesa@un.org

Designed and produced by:
Office of the Under-Secretary-General, Department of Economic and Social Affairs,
United Nations, New York

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Building on the lessons of the past 30 years is the best way that DESA, as a UN Department, can take action against climate change.

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– Liu Zhenmin, Under-Secretary-General for Economic and Social Affairs

01

Introduction

Learning from the past; acting for the future

By Liu Zhenmin, Under-Secretary-General for Economic and Social Affairs

Participation in climate change negotiations has occupied an important part of my career. Before I joined UN DESA in 2017, I had participated in 10 COPs—the annual UN Climate Change Conference—over 10 years, four years as a lead negotiator for the Chinese Government, six years as the deputy head of the delegation. Based on my experience I would say climate change negotiations have been one of the most consequential processes in human history. The process and its outcomes have implications for the survival of humanity and have changed human behaviors on a global scale.

In 1992 at the United Nations Conference on Environment and Development, also known as the Earth Summit, United

Nations Framework Convention on Climate Change was adopted. Since the Convention's entry into force in 1994, Parties have met annually in the Conference of the Parties (COP) to monitor its implementation and continue talks on how best to tackle climate change.

This process laid the groundwork for humans to address climate change. By linking environment and development, it was the start of sustainable development becoming not only the objective, but also the ideal for human beings. For me, personally, the climate change process consolidated my understanding of sustainable development. That's why, since joining UN DESA, I've worked to connect all aspects of our work with the climate change process.



At the Earth Summit, the world recognized the importance of addressing climate change by looking at the sources and the sinks. The sources, those things that contribute to climate change, such as greenhouse gas emissions (GHGs), emanate from different sectors and processes such as energy, transport, urbanization, industry and agriculture and have proliferated since the Industrial Revolution 250 years ago, when people started to make greater use of fossil fuels for energy. Since then, use of fossil fuels, especially coal, oil and gas, has become a critical part of energy consumption, and also of GHGs.

For thousands of years prior to the industrial revolution, people lived peacefully and harmoniously with nature. They

used energy; but used very little. Through most of human history there was a natural balance between the emissions and “the sinks”; or the natural parts of our planet that absorb GHGs, including carbon dioxide (CO₂). CO₂ is not always negative; plants rely on absorbing CO₂ for life. But we have lost the historic balance between emissions and their natural absorption; between sources and sinks; the Industrial Revolution and changing pattern of energy use led to a rapid increase in emissions. Nature can no longer keep up.

The UN Framework Convention on Climate Change was the first time in human history that we acknowledged that the climate is changing because of human activity and that



United Nations Secretary-General Boutros Boutros-Ghali opened the United Nations Conference on Environment and Development (UNCED) - or Earth Summit - on 3 June 1992.

human beings need to figure out how to slow and adapt to the change.

The Convention focused on how we can reduce the sources of climate change by reducing human-made emissions. As a result, policies have been developed to respond to climate change by controlling and mitigating emissions, reducing emissions, and controlling the increase of emissions.

Preserving the natural GHG sinks, such as the ocean and forests, is another essential aspect of addressing climate change. The ocean is the largest sink, covering 70 per cent of the Earth's surface. 30 per cent of the Earth's surface is land, and of that, 30 per cent is forests. Forests and other water-related surfaces such as reservoirs, lakes, and

wetland, can absorb GHG emissions effectively. Arable land – land that can be farmed – is a comparably limited part of the Earth's surface that is threatened by climate change and must also be preserved.

Extractive activities have damaged the ocean and reduced forest coverage, lessening their capacity to absorb GHGs. That's why addressing the issues of ocean health, deforestation, and reforestation to increase forest coverage, as well as land use management to avoid desertification, is urgent.

Even though the Convention was very comprehensive, immediately after its adoption Member States recognized they needed to do more to control greenhouse gas



Secretary-General Boutros Boutros-Ghali and British artist Edwina Sandys unveil Ms. Sandys' sculpture "Paradise Regained" on the grounds of Rio Centro on 4 June.

emissions. Commitments would not be sufficient to seriously tackle climate change. So, at the first COP in Berlin, Parties launched a new round of talks to formulate legally binding constraints on GHG emissions. This started the so-called Kyoto process. In 1997, at COP 3 in Kyoto, Japan, the Kyoto Protocol was agreed. For the first time in human history there was an agreement to limit the emissions of GHG by Member States. A target was set to reduce emissions by at least 5 per cent globally from 1990 levels during the period 2008-2012.

From the beginning of the climate negotiation process there was an acknowledgment that climate change was a result of GHG emissions accumulating since the Industrial Revolution. There was also an acknowledgment

that developed countries must take the lead in reducing emissions. It was agreed that the burden to reduce greenhouse emission would be shared by the developed economies, including European Union members and most OECD members, with differentiated targets. For European Union members, the target was to reduce emissions by 8 per cent; for Australia, the target was to increase no more than 8 per cent.

After the adoption of the Kyoto Protocol, people immediately started to assess what had been left out. The agreement deferred commitments for eight years with a mandate for after 2000. I think that was one of our shortcomings. The Convention was adopted in 1992 and entered into force in 1994. But not until 2008 would countries start to really

undertake this legally binding commitment, and even then, only until 2012. The question became, what is going to happen until 2008? and what would happen after 2012?

Also, immediately after the adoption of the Kyoto Protocol, several developed economies realized it was going to be too difficult to implement. There was a lack of agreement, even among developed economies. So, the Kyoto Protocol did not enter into force until 2005.

In this regard, the Copenhagen Accord in 2009, though many saw it as a failure, was in fact an important breakthrough. Although there was no legally binding agreement negotiated, the Copenhagen Accord was a political agreement, and it changed the so-called top-down approach of the Kyoto Protocol which had set a global cap for limitation and reduction.

The Copenhagen Accord started to focus on how Member States can really collaborate. It also laid the foundation for the Paris Agreement and its nationally determined contributions (NDCs). After the Kyoto Protocol in 2012, there was a gap until 2020. During that period, they agreed to implement the Copenhagen Accord. Negotiations started immediately after Copenhagen and continued in earnest after the Doha conference in 2012. In Doha, Parties recognized that the Kyoto Protocol was going to expire at the end of the year, so there was an urgency to the negotiations.

In 2015, the historical Paris Agreement was reached. It changed the top-down nature of the Kyoto Protocol, to a bottom-up approach with the NDCs, leaving it to Member States to decide what they can contribute to mitigating climate change. This was a major shift in approach to addressing climate change. There is no legal obligation to achieve carbon neutrality, but the concept of keeping the

global temperature rise this century to well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius was formulated in the Paris Agreement.

The new bottom-up approach of the Paris Agreement is why Glasgow is so critical. Glasgow will help determine whether the NDCs would really be met as laid down in the Paris Agreement. COP 26 in Glasgow will be an opportunity to push for further action, whether it's carbon neutrality, or whether it's preserving the increase of the global temperature to within 1.5 degrees Celsius. These are not new concepts; they are all included in the Paris Agreement. But whether these goals are achieved will depend on the concrete actions of the Member States. That is the critical issue for the forthcoming COP26.

Technology has become an important part of addressing mitigation and the reduction and limitation of emissions. Our capacity to really change the pattern of emissions and transition to sustainable energy depends on technology. During the Convention negotiations 30 years ago, the only readily available decarbonised energy sources were hydro and nuclear. Since then, technology has improved considerably in developed economies and emerging economies have increasing access to more sustainable technologies. In parallel with access to technology, financing for developing countries has become an important aspect of climate negotiation over the last 30 years.

People are talking about achieving carbon neutrality by 2050. But as living standards rise around the world, so will demand for energy. Make no mistake, carbon neutrality doesn't mean zero emissions. It means that the emissions can be absorbed. Consumption patterns must change; there must be a dramatic increase in renewable energy like solar, wind and hydro. Fossil fuel-based energy will remain a part



of the energy mix, to help ensure stability, but it will be a small part. We need to ensure the emissions are absorbed by improving our ocean, forests, wetlands and other GHG sinks. So by 2050, the goal is to achieve a balance of nature. There will be emissions, but they will be absorbed by sinks. That's carbon neutrality.

The Convention laid a good foundation and basic framework for climate action moving forward. It touched upon many of the basic issues relating to climate change. For a person like myself, who had been involved in climate change processes for some years, I see how the 2030 Agenda and the Sustainable Development Goals (SDGs) are closely linked with climate. Of course, the 2030 Agenda has SDG 13 devoted to climate change. But many of the other SDGs are also closely linked to climate action.

In the UN system we have the UNFCCC, which has been devoted for the past 30 years to supporting the negotiation of the climate change issues. In addition to this, all our agencies are being asked to focus on how their mandates in their respective areas contribute to climate action, both on the UNFCCC, under the 2030 Agenda, as well as on the Paris Agreement.

However, there's not a single entity to coordinate all these issues. This is difficult especially for agencies, because they have independent governing boards for their functions to ensure they stay within their original mandate.

That's why I think UN DESA has an important role to play. In UN DESA, our Divisions and Offices work on a range of interlinked issues including the SDGs, energy, transport, water, the ocean, technology, forests, and many

other issues. We are responsible for analytical work and for policy advice. And most important, we support the intergovernmental process.

That's why I'm pushing UN DESA to play an increasing role in supporting this process in partnership with the UN system. Since I arrived at UN DESA, we have worked with all agencies to identify synergies in our work. UN DESA has organized the SDG Pavilion at COPs and organized symposiums on the synergy between climate change and the 2030 Agenda. Through these efforts, UN DESA is working to improve our coordination with other entities. We use the 2030 Agenda as both our framework and our guiding principles to continue to improve our performance.

We also advise the Secretary-General on how to improve the implementation of the SDGs. In the next 9 to 10 years, we will continue to see our work pay off with improved synergies across the UN system in the service of climate action.

UN DESA has learned from the climate change process. We shall continue to work towards achieving the global peak of emissions by 2030 and to achieve the global carbon neutrality by 2050. At the same time, we need to be ready to respond to the impacts of climate change, such as extreme weather events. For example, low-lying coastal areas and small islands must prepare for the sea-level rise. We must also look ahead to the future, beyond 2030. Otherwise, we will not be able to preserve our Earth.



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Responding to climate change is a common objective for all human beings. For UN DESA, our work contributes to finding alternatives and options to control emissions, in order to preserve nature and ensure that our Earth can continue to develop sustainably for future generations.

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– Liu Zhenmin, Under-Secretary-General for Economic and Social Affairs

Key Messages

- By seeking out the inequalities and barriers that people face in accessing climate services, resources and opportunities, UN DESA has been working hard to put a spotlight on the discriminatory practices, laws and policies that leave particular groups of people further and further behind.
- Despite the many challenges of the COVID-19 pandemic, UN DESA continues to press forward in finding innovative ways to protect the planet for the most vulnerable by integrating climate goals with social and economic policies that aim to reduce vulnerabilities, support those affected by climate change and create decent jobs.

02

Leaving no one behind in the fight against climate change

The combined challenges of the COVID-19 pandemic and worsening climate conditions across the globe have strengthened UN DESA's resolve to align short-term solutions to these pressing problems with the medium and long-term sustainable development objectives of reducing poverty and improving the standards of living for the most vulnerable populations. In seeking these solutions, we have identified five megatrends that have broad implications for the future of policymaking. These are climate change; demographic shifts, particularly ageing populations; urbanization; digital technologies; and inequalities. We are working hard to highlight the challenges that vulnerable groups are facing considering these megatrends, such as how to reduce the impacts of consumption growth on the environment or how to preserve the Earth's resources while providing food and energy for a growing population.

The effects of climate change are experienced to varying degrees across and within countries due to differences in exposure, susceptibility, and coping capacities. If left unaddressed, climate change will lead to increased inequality both within and among countries and could leave a substantial part of the world further behind. Developing countries, particularly small island developing States (SIDS) and least developed countries (LDCs), face disproportionate risks from an altered climate.

Climate action strategies have the potential to reduce inequalities, but they may not always incorporate this objective. Beyond their core intended purposes, these strategies often have other effects—both positive and negative—that can differ greatly for individuals from different income levels and social groups. By highlighting



the inequalities and barriers that people face in accessing climate services, resources, and opportunities, UN DESA aims to put a spotlight on the discriminatory practices, laws and policies that leave particular groups of people further behind. Our activities in this area have been broad and wide-ranging, with particular attention paid to indigenous peoples, youth, women, older persons, persons with disabilities, and persons living in SIDS and LDCs. An equitable transition towards a green economy calls for integrating climate goals with social and economic policies aimed at reducing vulnerability, supporting those affected by climate change and creating decent jobs. Despite the many challenges posed by the pandemic and its faltering recovery, UN DESA continues to press forward in finding innovative ways to secure the planet for the most vulnerable.

Fighting for the furthest behind

People living in poverty are on the frontlines of the climate change crisis—severe droughts bring hunger and intense floods ruin crops. They often live in low-quality, unsafe housing in unhealthy environments or in unsafe areas along mountain edges or swamps. When an environmental disaster strikes, their homes and lives are the first to be affected and they are often forgotten by their governments. The COVID-19 pandemic has increased the hardship for those who suffer from extreme poverty—and is reversing decades of progress in the fight against poverty. According to the World Bank, “between 71 to 100 million people are being pushed into poverty as a result of the crisis, with the majority of the new extreme poor being found in South



Asian and Sub-Saharan countries where poverty rates are already high.”

This year’s **International Day for the Eradication of Poverty**, organized by UN DESA, called for strengthened global efforts to combine poverty eradication strategies with climate action and post-COVID-19 recovery efforts that focus most on the communities that have been pushed furthest behind. A worldwide consultation with the Permanent Forum on Extreme Poverty, a global network of people and organisations working to overcome poverty, found that these strategies should aim to “build forward” and actively encourage and support people living in poverty to be engaged in informed and meaningful participation in the decision-making processes that directly impact their lives.

Bridging gaps in access to environmental information

Being excluded from Internet connectivity means being shut out of the opportunities of the 21st century. Access to information is especially paramount in preparing for and responding to natural disasters—for example, people need the ability to access news and weather reports, and

social networks to find friends and family in the aftermath of a hurricane. With climate change causing more severe weather around the world, improving digital connectivity must be a key component of our preparedness efforts.

However, the COVID-19 pandemic has placed a spotlight on the complexities of global digitalization. The ability of most industries to rapidly shift to online operations to manage the effects of the pandemic laid bare persistent digital divides and the many concerns over Internet governance, including the infodemic—the rapid and far-reaching spread of accurate and inaccurate information—data privacy and cybersecurity. While maintaining social distancing and quarantine measures were essential for public health, Internet connectivity and digital technologies became vital to address isolation and keep people informed and engaged.

It was in this historic context that UN DESA provided substantive and administrative support to the 15th meeting of the **Internet Governance Forum (IGF)** on 2-17 November 2020. Under the overarching theme “Internet for human resilience and solidarity,” IGF 2020 provided a multistakeholder platform for engaged and informed discussions about policy issues pertaining to the Internet,



Efforts to identify gaps in access to environmental information were addressed at the 15th Internet Governance Forum in 2020.

amplifying digital cooperation and how the Internet can support and fulfil the nexus of respecting human rights and achieving the SDGs. The discussions took place under four thematic tracks: data, inclusion, trust and for the first time, the environment.

Of the many key messages put forth by the IGF, several were groundbreaking in their scope and intention. In particular, the Forum reported that the potential of data to contribute to sustainable development is not sufficiently tapped into. The Forum highlighted that consolidated multistakeholder efforts are needed to democratize access to the Internet and digital services to ensure that vulnerable and marginalized groups (for example, women, minorities and people in remote areas) can benefit from the opportunities that the Internet and digital technologies have to offer.

Following these discussions, the IGF now features an intersessional workstream focused on the intersections between the environment and digitalization processes, called the Policy Network on Environment (PNE). The vision of the PNE is a world in which digitalization is used as a force for good, and where progress is made towards the 2030 Agenda's climate and environmental goals. The PNE's work is spearheaded by a Multistakeholder Working Group, whose primary aim is to publish a report by December 2021 containing concrete, actionable policy recommendations, many of which are expected to support climate action.

Highlighting the use of indigenous peoples' traditional knowledge

Traditional knowledge plays a critical role in protecting the planet's biodiversity and maintaining the overall health of ecosystems. For indigenous peoples, such knowledge is



UN DESA supported the 18th Session of the Permanent Forum on Indigenous Issues in 2019 where members advocated for the rights of indigenous peoples to use their traditional knowledge and practices in the fight against climate change.

transmitted across generations and often communicated through indigenous languages. UN DESA, as the home to the Secretariat to the Permanent Forum on Indigenous Issues, has been seeking to highlight this knowledge and bring it to a wider audience through various mechanisms and forums.

In January 2019, UN DESA organized a three-day international expert group meeting on Conservation and the Rights of Indigenous Peoples in Nairobi, Kenya. The meeting highlighted the need to recognize indigenous peoples' traditional knowledge and institutions, and the role they play in sustainably managing their environment. Several proposals were made to engage Member States and global conservation organizations in the monitoring and evaluation of conservation activities and projects and their

effects on indigenous peoples, as well as the development of global standards on conservation and human rights.

In April 2019 UN DESA organized the 18th session of the Permanent Forum on Indigenous Issues with the main theme of Generation, Transmission and Protection of Traditional Knowledge. The Forum stated that:

- Although there is increasing awareness in international forums related to climate change, environmental degradation, food security and genetic resources, as well as science, technology and innovation, of the importance of traditional knowledge, Indigenous Peoples' traditional knowledge remains threatened by misappropriation, misuse and marginalization. Urgent action is needed to ensure that such knowledge

systems do not disappear. Furthermore, indigenous knowledge should be recognized as an equal source of information in the inter-scientific dialogue to meet the challenges mentioned above.

UN DESA continues to highlight the importance of traditional knowledge, with the publication of several policy briefs that show how traditional knowledge plays a central role in climate change mitigation and adaptation actions.

Helping small island developing States find solutions

SIDS are on the front lines of climate change impacts—they are increasingly vulnerable to rising sea levels, extreme weather events, and habitat degradation. Many SIDS lack the resilience to deal with the rising incidence of natural disasters and economic shocks. To help them face these challenges, UN DESA has developed various guides and toolkits to streamline processes that facilitate investment, such as the 2030 Agenda Partnership Accelerator.

Building multistakeholder partnerships in SIDS is more than a quick one-off project—they require considerable time and effort to develop, particularly when dealing with the far-reaching impacts of climate change. The 2030 Agenda Partnership Accelerator is a collaborative initiative by UN DESA and The Partnering Initiative, in collaboration with the UN Office for Partnerships, the UN Global Compact and the UN Development Coordination Office. UN DESA is spearheading the effort to accelerate effective partnerships in support of the SDGs with the goal of finding partnerships that align and combine the interests and resources of multiple national stakeholders—government, business, NGOs, communities, academia, media etc.—to support the implementation of the 2030 Agenda and the SAMOA



Partnering for environmental management services in the Maldives through the Small Island and Developing States (SIDS) Partnership Accelerator.

Pathway in SIDS.

Over the past two decades, as the field of multistakeholder partnering has matured as a professional discipline and field of practice, certain success factors have emerged, which are referred to as 'building blocks'. These partnership building blocks also hold true when it comes to setting up and managing multistakeholder partnerships in SIDS. Due to their peculiar vulnerabilities and characteristics, there are additional aspects to consider when developing such partnerships in SIDS. The partnership accelerator includes several tools and guides that provide insights to these special considerations and serve as a starting point for anyone seeking to understand the challenges and opportunities of partnering in SIDS.

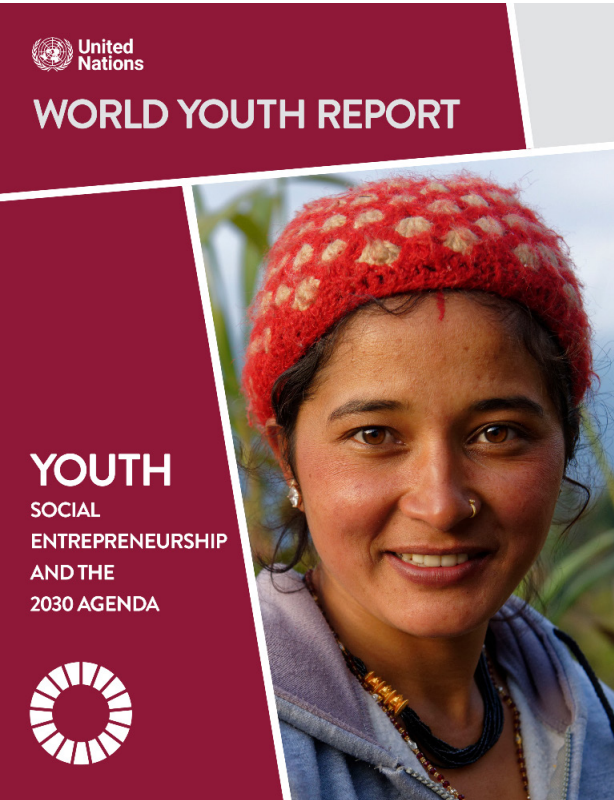
One country where the 2030 Agenda Partnership

Accelerator is being used to great effect in the Maldives. In close consultation with the UN Resident Coordinator's Office in the Maldives and the Government of the Maldives, the SIDS partnership accelerator is supporting a process to advance the implementation of the SDGs and build back better from COVID-19 by enhancing cohesion among sectors and stakeholders and inspiring new multistakeholder partnerships.

An initial online national workshop was held on 2 November 2020, which brought together leaders from across all sectors of society to celebrate examples of partnerships that are already delivering towards the SDGs, to build an understanding of what it takes to make partnerships successful, and to discuss how to scale up effective multistakeholder partnering in the Maldives. Following the workshop, a consultative process was organized with the government, the private sector, civil society, and key development partners, that resulted in the Maldives Partnership Landscape Assessment.

The assessment showed that there is a broad interest and willingness to partner among most of the stakeholders in the Maldives. Stakeholder and resource mappings were conducted as an integral part of the assessment to identify areas of interest, convergence, and available resources among national stakeholders. These mappings yielded a set of thematic areas which seem to have strong potential and interest among stakeholders and sectors in forging new partnerships. Two areas were prioritized by the Government to be explored further, namely waste management and mental health.

The 2030 Agenda is built on a fundamental shift in approach to international development: engaging the unique roles and resources of all sectors of society and requiring extensive collaboration across sectors to achieve its ambitious goals.



Partnership platforms for the SDGs are emerging as key mechanisms for brokering new partnerships, providing coherence and coordination among stakeholders, and aligning investments for SDG implementation. Such platforms are being developed around the world, including in Kenya, Uganda, and Samoa, among others, and appear to have great potential to accelerating progress towards the SDGs.

The 2030 Agenda Partnership Accelerator is continuing its support to the Maldives in advancing effective partnerships and to enhance engagement and cohesion among stakeholders and sectors, in the advancement of the SDGs.



Mobilizing the world's youth for sustainable development

When provided with the opportunities they need to thrive, youth can be a decisive force for peace, development and climate action. Young people's unprecedented mobilization around the world is already creating results. Youth actions around climate change are clearly demonstrating they are not only the victims of climate change, but also vital contributors of solutions. Through a multitude of sectors, young people are scaling-up their efforts and using their skills to accelerate climate action and to address this global crisis.

UN DESA in particular helps to build awareness of the global situation of young people, promotes their rights and aspirations, and seeks to increase their participation in decision-making processes as a means of advancing peace and development. Through trainings, meaningful engagement, research and innovation, policy advice and entrepreneurial solutions, UN DESA aims to ensure young people have their seat at the table so that they can be active participants as we strive to build back better from

the COVID-19 pandemic and the negative effects of climate change.

During the 2021 ECOSOC Youth Forum chaired by the President of the Economic and Social Council and co-organized by UN DESA and the Office of the Secretary General's Envoy on Youth (OSGEY), in collaboration with several partners, young people stated they are confident of their role as drivers of global environmental change. They called for increased opportunities to create awareness of common environmental challenges and the potential and importance of individual climate action. Youth should be given the opportunity to contribute to fight the existential threat of climate change, which will greatly impact their present and future.

As part of the 2021 International Youth Day, UN DESA hosted a webinar to provide a platform for young people to explore the theme of Transforming Food Systems: Youth Innovation for Human and Planetary Health. The forum allowed for a unique dialogue among youth working in this space and stakeholders from different walks of life, that promoted innovation, knowledge exchange, and youth

engagement. The webinar was structured around different roundtables, designed to boost interactions among the participants. The different segments focused on specific topics under the overarching theme of Transforming Food Systems, including: planetary health, nutrition, health, education, innovation, and Indigenous youth.

The World Youth Report: Youth Social Entrepreneurship and the 2030 Agenda, was launched by UN DESA in July 2020, to assess the potential of youth social entrepreneurship to support youth employment and development while helping us meet the SDGs and the goals of the Paris Agreement. The report examines the challenges faced by young social entrepreneurs and explores how innovative technologies can be used to help youth succeed. It offers policy guidance for developing enabling, responsive and sustainable national ecosystems for young social entrepreneurs.

SDG delivery for older persons: increasing resilience to natural and man-made disasters

Older persons are among those worst affected by disasters, both natural and man-made, and the COVID-19 pandemic has disproportionately affected older persons. The impact of climate change on older persons is severe, affecting their livelihoods, shelter and resources, and leading to displacement or insecurity. UN DESA is working hard to make their plight a part of the conversation when it comes to the delivering on the SDGs.

In June 2020, at an official side event to the **2020 High-level Political Forum on Sustainable Development**, a panel of experts looked at older persons' experience during the pandemic to identify opportunities to build a more age and disability inclusive world and accelerate action to achieve the SDGs for all. Some of these opportunities include filling the data gaps that exist regarding age—in particular, that the rights, capacities and needs of older persons remain overlooked in humanitarian relief situations. There is a pressing need to collect and collate information on older persons and include such information in humanitarian assessments and planning, and disaster preparedness and response strategies.

UN DESA remains committed to making sure the needs and the voices of the least represented and the most vulnerable are heard in the fight against climate change. UN DESA continues to advocate for policymaking that considers the interlinkages between the megatrends that will shape our society in the decades to come. These issues must be at the forefront of the global effort to achieve sustainable development— in a way that goes together with climate action and that leaves no one behind.



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The ocean belongs to every person and every creature that breathes, but it is changing dramatically and we need to preserve it. We have to make good use of all areas of our work to preserve nature.

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– Liu Zhenmin, Under-Secretary-General for Economic and Social Affairs

Key Messages

- UN DESA has been working hard to bring the impact of climate change on the ocean to the forefront of discussions on how to achieve the 2030 Agenda and highlight how our work towards SDG 14, Life on Water, also supports SDG 13 on Climate Action.
- Through our role coordinating and collaborating with the Communities of Ocean Action and the UN Secretary-General's Special Envoy for the Ocean, UN DESA has become a key partner to a vast network of public and private sector actors as they move forward on their commitments to conserve our ocean and marine resources.
- UN DESA is committed to providing breakthrough analytical work to the people and countries that need it most—and where it can have the greatest impact. Protecting the ocean and helping ocean-based economies to rebuild and improve their livelihoods sustainably are a key outcome of our efforts.

03

The Ocean

The ocean — including seas, coastal areas, and marine resources — forms an integrated and essential component of the Earth's ecosystem and is critical to sustainable development. It contributes to poverty eradication by creating sustainable livelihoods and is crucial for global food security and human health. The ocean is the primary regulator of the global climate, an important sink for greenhouse gases and hosts a huge reservoir of biodiversity. However, climate change is leading to the destruction of marine and coastal habitats and landscapes and is threatening the sustainability of this vast resource.

UN DESA has been working hard to bring the impact of climate change on the ocean to the forefront of discussions on how to achieve the 2030 Agenda and highlight how our work towards SDG 14, Life on Water, also supports

SDG 13 on Climate Action. Our broad expertise on the ocean — from economic and statistical analysis to support for intergovernmental processes — has placed us in a key position to inform the senior leadership of the United Nations as they work to address climate change and its impacts on marine systems.

Through our role coordinating and collaborating with the Communities of Ocean Action and the UN Secretary-General's Special Envoy for the Ocean, Mr. Peter Thompson of Fiji, UN DESA has become a key partner to a vast network of public and private sector actors as they move forward on their commitments to conserve our ocean and marine resources. This function, coupled with the ability to analyse and survey these efforts, places us in a unique position to provide decision-makers with a bird's eye view



of the current situation pertaining to the ocean.

Efforts to keep up the momentum on ocean action have continued despite the COVID-19 pandemic. UN DESA has been taking stock of the implementation of voluntary commitments registered with the Communities of Ocean Action since the 2017 UN Ocean Conference, with the aim of sharing best practices, identifying challenges and innovative solutions as well as to understand the impacts of the COVID-19 pandemic. From the available information, the voluntary commitments already have had some impressive results. For example, some 3.3 million km² was reported as newly conserved marine protected areas (an area slightly larger than the land area of India). Many grassroots initiatives have collected marine litter from beaches and under water, resulting in both massive amounts of litter removed, and awareness raised about

marine environmental issues. Bans on single-use plastics have been successfully implemented by governments, resulting in noticeable differences in the appearance of the local environment. In ocean science, networks of scientific cooperation have had a global reach, and have resulted in innovative efforts in capacity development and technology transfer. The heightened awareness of ocean acidification is evident in the increasing number of acidification action plans developed by both local and national governments.

Diving deeper, we have been able to focus efforts on some of the communities that are most immediately affected by the dire consequences of climate change—SIDS. As these countries face threats to their livelihoods and food security, UN DESA has developed strategies and toolkits specifically designed to use the ocean to their advantage through the

development of policies and practices for the sustainable development of a blue economy. UN DESA remains committed to finding new and innovative ways to save the ocean and tackle one of the most significant challenges to achieving the 2030 Agenda.

Committing to saving our ocean...

UN DESA is a staunch supporter of the global effort to save the ocean and has continued this work despite the disruption caused by the COVID-19 pandemic. Over the past several years, UN DESA has been coordinating and collaborating with the nine thematic multistakeholder **Communities of Ocean Action (COAs)** to follow-up on the implementation of the voluntary commitments made at the 2017 UN Ocean Conference and to mobilize new voluntary commitments ahead of the upcoming second UN Ocean Conference, to be held in Portugal in 2022. The nine COAs deal with Coral Reefs; Implementation of international law as reflected in United Nations Convention on the Law of the Sea; Mangroves; Marine and coastal ecosystems management; Marine pollution; Ocean acidification; Scientific knowledge, research, capacity development and transfer of marine technology; Sustainable blue economy; and Sustainable fisheries.

Some 1,650 pledges of ocean action have been made since the 2017 conference and the list is still growing. These commitments have been made by governments, the United Nations system, civil society organizations, academia, the scientific community, and the private sector and they are a significant milestone on the path to the sustainable management and conservation of the ocean, seas and marine resources.

The Department has organized workshops and webinars for



the COAs to share best practices and experiences, provide partnership opportunities and to catalyse additional pledges for ocean action. The quarterly Ocean Action Newsletter produced by the Department further promotes the work of the COAs and provides updates about the upcoming UN Ocean Conference and ocean news from around the UN system.

The voluntary commitments have shown us the power of inclusion, grassroots action and innovation, on levels ranging from the local to the global, but now we need to build on successes and scale up promising solutions. We need to build partnerships, increase capacity and expand our networks to ensure that no one is left behind.



UN Ocean Conference, Lisbon 2022.

...and protecting our future

The Department, in collaboration with related UN entities, informs UN senior leadership and the public about how climate change is significantly impacting the ocean in ways that are challenging the implementation of SDG 14, Life Below Water, and the rest of the goals.

To showcase the intricate and symbiotic link between the ocean and climate change, UN DESA has also been supporting the Governments of Kenya and Portugal to organize the **second UN Ocean Conference**, which will be held from 27 June to 1 July 2022, and its preparatory meetings..

The conference comes at a critical time as the world is

strengthening its efforts to mobilize, create and drive solutions to realize the 17 SDGs by 2030 in the context of an ongoing global pandemic. How we respond to COVID-19 beyond the immediate and necessary recovery of health and livelihoods will likely determine not only whether we will reach SDG 14, but also how sustainable the world of tomorrow will be.

Recently, UN DESA carried out an online survey on the implementation of the voluntary commitments published on the Ocean Conference Registry to get an update on the achievements and challenges as well as to receive suggestions on their implementation. The assessment, based on the survey and other available information, concluded that the ocean commitments have helped us make progress on SDG 14 from large increases in

protected marine areas to the removal of massive amounts of litter from the ocean and growing awareness of ocean environmental issues, such as acidification. Nevertheless, various challenges to their implementation have been reported, such as the lack of resources, funding, technical expertise, partner cooperation and political environment. Furthermore, the COVID-19 pandemic has exacerbated challenges to the implementation of the commitments. These and other topics are slated to be discussed during the Ocean Conference.

Building back blue

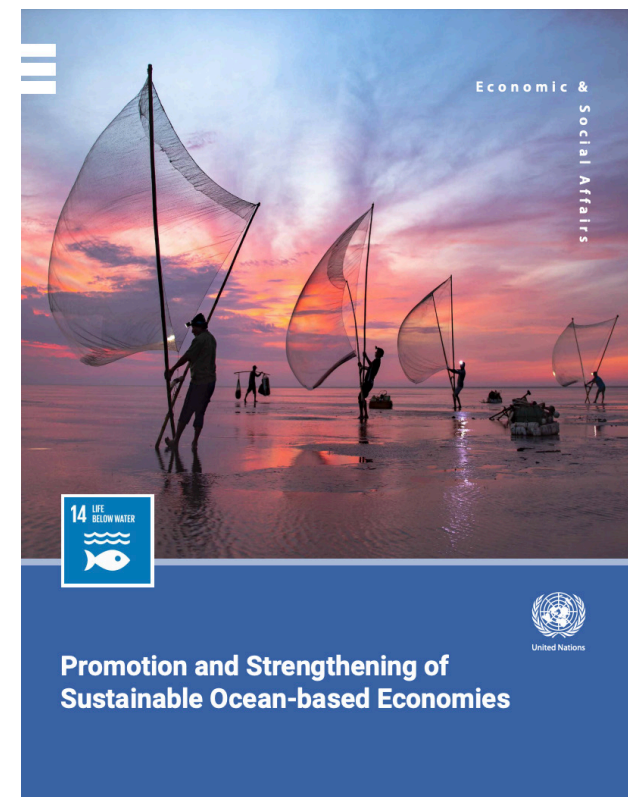
Although the COVID-19 pandemic has decimated the tourism industry and thus had a particularly significant impact on ocean-based economies, the road to recovery

provides an opportunity to build back better and a blue economy is the chance to do just that. Blue economies have the potential to build resilience to climate change, and create jobs and economic opportunities while achieving food security, reducing inequalities and eradicating poverty. Blue economies comprise a range of economic sectors and related policies that are interlinked and can ensure the sustainable use of ocean resources. An important challenge of the blue economy is to understand and better manage the many aspects of oceanic sustainability, ranging from sustainable fisheries to ecosystem health and the prevention and mitigation of pollution. The blue economy will also require collaboration across borders and sectors through a variety of partnerships, which is particularly challenging for SIDS and LDCs but for which UN DESA is particularly well-suited to assist.

UN DESA investigates the conditions and safeguards necessary to make ocean-based economies sustainable and develops guidance that can help countries transition from theory to practice. For example, in July 2021, UN DESA launched the publication **"Promotion and Strengthening of Sustainable Ocean-based Economies"**.

Many of the efforts to further grow ocean-based economic sectors focus not only on growing existing sectors such as fisheries, maritime tourism and shipping, but also on developing newer sectors such as renewable ocean energy, blue carbon sequestration, marine biotechnology and extractive activities, with due attention paid to the environmental impacts, including cumulative impacts, and carbon emissions of these activities. UN DESA's analysis provides insight to the financing and intergovernmental processes needed to achieve such goals and serves as a guide for policymakers and thought leaders as they embark on the road to build back better.

Building a sustainable blue economy is the backbone of the **SIDS Partnership Accelerator** launched by UN DESA in



2019 to aid these countries in finding suitable partnerships that align and combine the interests and resources of multiple national stakeholders—such as governments, the private sector, and local communities, among others—to support the implementation of the 2030 Agenda and the SAMOA Pathway, the sustainable development framework developed by and for SIDS. These partnerships intend to find long-term and sustainable solutions to the countries' pressing economic concerns while addressing the dire impact that climate change will have on these economies and populations.

A healthy ocean is essential to life on Earth and the future of our planet. We can, and must do more to protect our ocean by scaling up science and innovation and building on global awareness and cooperation. To this end UN DESA is committed to providing breakthrough analytical work to the people and countries that need it most—and

where it can have the greatest impact. Protecting the ocean and helping ocean-based economies to rebuild and improve their livelihoods sustainably are a key outcome of our efforts. More must be done. We look to the 2022 UN Ocean Conference, with its overarching theme of "Scaling up ocean action based on science and innovation for the implementation of Goal 14: stocktaking, partnerships and solutions" to launch a new chapter of global ocean action.



Key Messages

- UN DESA's efforts to help transform the way the world produces and consumes energy are focused on four key areas: reducing carbon emissions; closing energy access gaps; creating new green jobs; and facilitating a just and inclusive transition during the post-COVID-19 period.
- Ensuring universal access to affordable, reliable and clean energy is of dire importance if we are to slow the rapidly accelerating impacts of climate change and reduce carbon emissions from the energy sector. UN DESA will continue to provide in-depth analysis and bring together global leaders and changemakers to formulate policies that will have the greatest impact.

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Without ensuring universal access to affordable, reliable and modern energy services, many SDGs will be in jeopardy since energy is strongly interlinked with progress on poverty eradication, gender equality, food security, health, education, clean water and sanitation, jobs, innovation, transport and other objectives.

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– Liu Zhenmin, Under-Secretary-General for Economic and Social Affairs

04

Energy

Currently, 75 per cent of all greenhouse gas emissions stem from the energy sector, making it one of the main drivers of climate change. Almost 760 million people live without electricity, and 2.6 billion cook with dirty, unhealthy fuels. Global temperatures are already 1.2 degrees Celsius higher than in the late 1800s, with climate-related disasters displacing millions of people and destabilizing their energy access.

The COVID-19 pandemic has heightened these concerns as the rapidly accelerating impacts of climate change have produced more damaging effects. The growing need to stave off a potentially devastating climate crisis have given UN DESA's efforts to help transform the way the world produces and consumes energy a new sense of urgency and we have focused our efforts on four key areas: reducing

carbon emissions; closing energy access gaps; creating new green jobs; and facilitating a just and inclusive transition.

To address these concerns and the implementation of the SDGs, particularly SDG 7 on Affordable and Clean Energy, UN DESA led the organization of the 2021 UN High-Level Dialogue on Energy, the first global gathering on energy under the auspices of the General Assembly since 1981. This was a historic and game-changing meeting for action and cooperation on clean, affordable energy for all by 2030, on the way to net-zero emissions by 2050. The goal of the Dialogue was to secure concrete and ambitious commitments and actions by countries, businesses and cities to improve the lives of the billions of people who lack access to energy while accelerating energy transition to address the climate crisis.



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UN DESA also supports many intergovernmental processes that deal with the energy sector, such as convening the SDG 7 Technical Advisory Group that addresses universal access and clean energy transitions as part of the UN Decade of Sustainable Energy for All 2014-2024. UN DESA also provides support to the Secretary-General's Special Representative for Sustainable Energy for All. The Special Representative, Ms. Damilola Ogunbiyi of Nigeria, is committed to ensuring continued and rapid progress on access to sustainable modern energy for all, but particularly for the most vulnerable in society.

Paving the way for affordable and clean energy for all

The **High-Level Dialogue on Energy**, was the first gathering of leaders in more than 40 years at the UN solely devoted to energy issues. UN DESA Under-Secretary-General Liu Zhenmin served as the Secretary-General of the Dialogue to facilitate its organization. The event, convened in September 2021 and supported by UN DESA in collaboration with several other UN entities, brought together Heads of State and Government as well as leaders from business, foundations, international civil society and youth organizations, to mobilize commitments and actions to transform the way our world produces energy with the aim of tackling the climate crisis and the energy access crisis.



Leaders gathered to discuss energy issues at the UN in September 2021.

More than US\$400 billion in new finance and investment was committed by governments and the private sector, and over 35 countries—ranging from SIDS to major emerging and industrialized economies—made significant new energy commitments in the form of over 150 **energy compacts**. Additionally, several new partnership initiatives were announced, aiming to provide and improve access to reliable electricity to over a billion people. The new commitments will result in large increases in the installed capacity of renewable energy and significant improvements in energy efficiency around the world that will lead to hundreds of new renewable energy facilities and the creation of millions of new green jobs.

Commitments under the energy compacts will give a huge boost to renewable energy worldwide. National governments committed to install an additional 698 gigawatts (GW) of clean energy from solar, wind, geothermal, hydro and renewables-based hydrogen, and businesses, notably power utilities, pledged to install an additional 823 GW, all by 2030. Several partnerships and industry associations promised to mobilize an additional 3,500 GW of renewables by 2030. One gigawatt is roughly

equivalent to the output of 500 onshore wind turbines. The energy compacts also include commitments to save energy equivalent to more than 7,000 GW by implementing efficiency measures.

The Dialogue also produced a **global roadmap** for accelerated SDG 7 action in support of the 2030 Agenda for Sustainable Development and the Paris Agreement on Climate Change. The roadmap calls on governments, businesses and civil society organizations to halve the energy access gap by 2025, and accelerate the clean energy transition by tripling investments in clean energy and energy efficiency by 2030. It also calls for phasing out coal by 2030 for OECD countries and 2040 for all others, and shifting fossil fuel subsidies to renewable energy investments, while creating new, decent and healthy jobs and ensuring a just and inclusive transition. The roadmap draws on inputs from expert working groups and was discussed at Ministerial-level forums in June 2021.

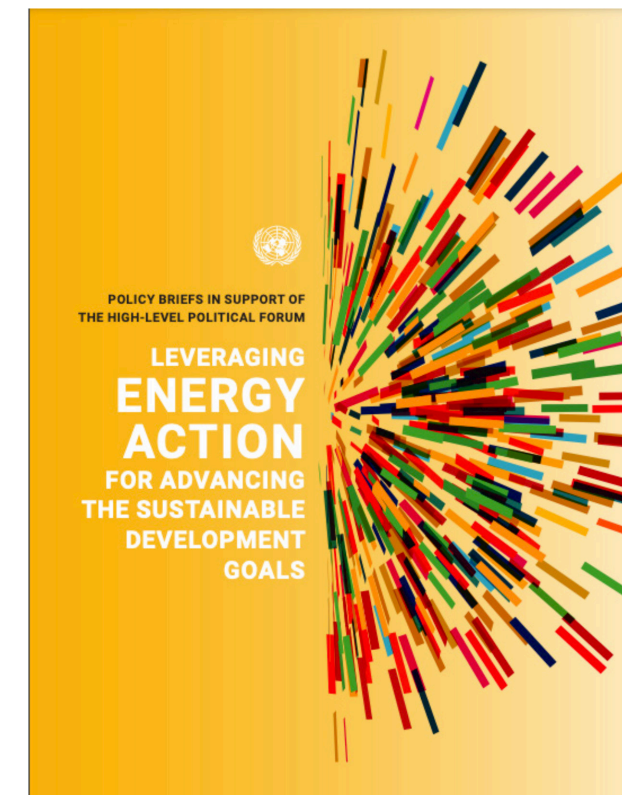
In line with the need to continue raising ambitions, additional energy compacts are expected to be registered in the months and years ahead, as momentum grows and

partnerships are expanded. Progress on the compacts will be tracked through the 2030 target year, with annual reporting through a publicly transparent online database.

As the Secretariat for UN-Energy, which brings together over 25 UN System entities and key partners for collaboration in the field of energy, UN DESA will continue to support these transformational commitments and partnerships, as the Department works tirelessly to sustain the momentum created by the Dialogue.

Making progress toward SDG 7

The SDG 7 Technical Advisory Group delivered a series of policy briefs on **Leveraging Energy Action for Advancing the Sustainable Development Goals in June 2021**, to inform intergovernmental discussions on universal access and clean energy transitions. Convened by UN DESA, the



more than 40-member multi-stakeholder group delivered a set of key messages, among which was the need to harness affordable, reliable, sustainable and modern energy solutions to scale up efforts aimed at ending hunger, strengthening global food security, reducing inequalities and ensuring a just and inclusive energy transition that leaves no one behind.

Indeed, the briefs place a special focus on the interlinkages of SDG 7 with all other SDGs. They underline that decisive action on sustainable energy can catalyse progress towards all the other SDGs, as well as towards global climate protection targets. In fact, energy is essential to all other SDGs.

UN DESA also co-developed the **Tracking SDG 7: Energy Progress Report 2021**. Prepared in partnership with other global custodians for SDG 7 indicators, the report presents comprehensive coverage and in-depth analysis of over 180 countries and their progress toward universal energy access and clean energy solutions. The report shows that during the last decade, a greater share of the global population gained access to electricity than ever before, but the number of people without electricity in Sub-Saharan Africa actually increased. Unless efforts are scaled up significantly in countries with the largest deficits, the world will still fall short of ensuring universal access to affordable, reliable, sustainable, and modern energy by 2030. While renewable energy has seen unprecedented growth over the last decade, its share of total final energy consumption remained steady as global energy consumption grew at a similar rate. UN DESA is committed to providing thoughtful and in-depth analysis to guide policy makers as they seek to make progress toward SDG 7.

UNDESA CAPACITY DEVELOPMENT PROGRAMME ON INTERNATIONAL TAX COOPERATION

VIRTUAL WORKSHOP ON THE HANDBOOK ON CARBON TAXATION
30 November – 1 December 2020 – From 8:00 am to 12:00 pm EST (i.e. New York time)

Virtual workshop on the Handbook on Carbon Taxation for Developing Countries.

Developing a Carbon Tax

The **UN Handbook on Carbon Taxation for Developing Countries** was developed by UN DESA over the course of several years—from 2017 until 2021—in response to the need, often expressed by developing countries, for clear and holistic guidance on the application of carbon taxes. Applying a carbon tax can be a policy option that is geared towards curbing carbon-based emissions that are responsible for climate change; and living up to the commitments assumed by countries under the Paris Agreement.

The handbook outlines some of the common reasons why countries might want to introduce a carbon tax, and provides options for policy design and administration that



can cater to the different needs and priorities of countries. It is meant as a practical guide, and it contains many real-world examples and practical tools, including checklists to guide on the design and administration of the tax.

Our goal is to help countries in every region and at all levels of development to reorient their domestic policies toward green fiscal reform. UN DESA's work in this regard is aimed to help countries align their fiscal policies with the 2030 Agenda for Sustainable Development and to help developing countries integrate the goal of carbon neutrality into their economic development policies.

Ensuring universal access to affordable, reliable and clean energy is of dire importance if we are to slow the rapidly accelerating impacts of climate change and reduce carbon emissions from the energy sector. UN DESA will continue to provide in-depth analysis and bring together global leaders and changemakers to formulate policies that will have the greatest impact. But there is still so much to do. We look forward to helping countries implement the Global Roadmap from the High-level Dialogue on Energy and develop additional energy compacts to help close the energy access gap and meet the targets of SDG 7.





“

The need for sustainable transport systems that leave no one behind and are inclusive, affordable, efficient, environmentally friendly and safe, are more apparent than ever. Let us use this moment to find concrete solutions to enhance sustainable transport worldwide, as a crucial enabler of the 2030 Agenda for Sustainable Development and the Paris Agreement.

”

Key Messages

- UN DESA is committed to ushering in a transport revolution that ensures a transition from the status quo to a transport sector that is sustainable, inclusive, efficient, and affordable.
- We are moving forward the global dialogue on sustainable transport, providing guidance on response and recovery to the COVID-19 crisis in the transport sector, producing forward-looking analysis on the current situation of transport across the world and providing policy guidance on the potential for progress in the transport sector.

– Liu Zhenmin, Under-Secretary-General for Economic and Social Affairs and Secretary-General of the Second UN Global Sustainable Transport Conference

05

Transport

Transport does not just take us from point A to point B; it is key for economic growth and livelihoods. This has become increasingly evident as the COVID-19 pandemic dramatically slowed road and air traffic and disrupted essential public transit all over the world. Transport enables the mobility of people and goods, while improving access to quality services, such as health, education and finance. It strengthens connectivity at all levels, helping integrate economies, improving social equity, enhancing rural-urban linkages and building resilience.

However, the negative environmental, social and health impacts of transport systems cannot be denied. Experts estimate that close to a quarter of all greenhouse gas emissions come from the transportation sector and these numbers are only expected to increase over time.

In short, transport is fundamental to the realization of key objectives of the 2030 Agenda for Sustainable Development and the Paris Climate Agreement. The world needs better and safer ways to move people and goods, and to reduce air pollution, traffic and fatalities. Accelerating the implementation of solutions to these problems is a critical part of the United Nations efforts to achieve the SDGs and address the global climate crisis.

UN DESA is committed to ushering in a transport revolution; one that ensures a transition from the status quo to a transport sector that is sustainable, inclusive, efficient, and affordable. We are doing this by moving forward the global dialogue on sustainable transport, providing guidance on response and recovery to the COVID-19 crisis in the transport sector, and by producing forward-looking analysis



on the current situation of transport across the world and providing policy guidance on the potential for progress in the transport sector.

Mapping out the opportunities...

The global commitment to sustainable transport was spotlighted in the first ever Global Sustainable Transport Conference in 2016 in Ashgabat, Turkmenistan. The Global Conference, organized by UN DESA, brought together key stakeholders to engage in a dialogue that emphasized the integrated and cross-cutting nature of sustainable transport and its multiple roles in supporting the achievement of the SDGs. The Conference addressed all modes of transport—road, rail, air, waterborne, including both passengers and freight—and gave particular attention

to the concerns of developing countries, especially those of Africa, LDCs, SIDS, and landlocked developing countries (LLDCs). In the “Ashgabat Statement on Commitments and Policy Recommendations”, participants reaffirmed the commitment to enhancing the role of sustainable transport in connecting people and communities to jobs, schools and health care and in the delivery of goods and services to rural and urban communities, thus providing all with equal opportunities and leaving no one behind.

The **second UN Sustainable Transport Conference, organized by UN DESA** in October 2021 in Beijing, China, further spurred commitments and steeled the resolve of key stakeholders from Governments, the UN system and other international organizations, the private sector, and civil society to advance action for sustainable transport.



The outcome document, the Beijing Statement, presented at the closing ceremony by China's Minister of Transport in his capacity as Conference Chair, put forward a framework to guide implementation for accelerating progress towards sustainable transport. The Declaration further called for participants to scale up existing partnerships for sustainable transport and engage stakeholders in sustainable transport initiatives, particularly in the scientific, technological and business fields.

With thousands of participants from over 100 countries this year, the conference served to accelerate the implementation of transport solutions that are affordable, realistic, socially acceptable and environmentally sound. This critical part of the United Nations efforts to achieve the SDGs comes at a key moment in the global effort to

address the climate crisis. The Conference and its follow-up aim to provide a roadmap toward achieving transport systems that will open economic opportunities and greater prosperity, improved health and well-being while protecting our environment.

The Conference was organized in part because, despite its multiple benefits, sustainable transport has yet to live up to its full potential. It was also an opportunity to highlight promising avenues, such as the electrification of buses, cars, trucks and trains. Building well-balanced and properly designed transport systems, with an emphasis on public transport and active modes, such as walking and cycling, will be critical for building safer and more livable cities, promoting economic growth, addressing inequalities and reducing the emissions that are contributing to the climate



United Nations
**Sustainable
Transport
Conference**

14-16
OCTOBER
2021
Beijing



emergency. The Conference paid particular attention to countries in special situations, namely LDCs, SIDS, and LLDCs, as transport and especially, access to affordable and reliable forms of transport, is central to both the challenges and potential solutions that many of these countries face.

The Conference focused on the critical role of transport as more than just a provider of services and infrastructure for the mobility of people and goods and highlighted new ideas and innovation that are leading to transport solutions that are affordable, realistic, socially acceptable and environmentally sound. All modes of transport—road, rail, aviation and waterborne—were addressed. The Conference considered the concerns of women, children and youth, older persons, persons with disabilities, the poor and other groups, and took into account the challenges and needs of developing countries. Key transport objectives, such as access for all while leaving no one behind, green mobility, efficiency and safety were discussed.

By organizing the conference, UN DESA was able to facilitate multi-stakeholder dialogues to identify solutions and build on previous high-level meetings, while also informing the UN Climate Change Conference (COP26) in November 2021 and the UN Ocean Conference to be held in 2022 in Portugal, in particular with regard to maritime transport.

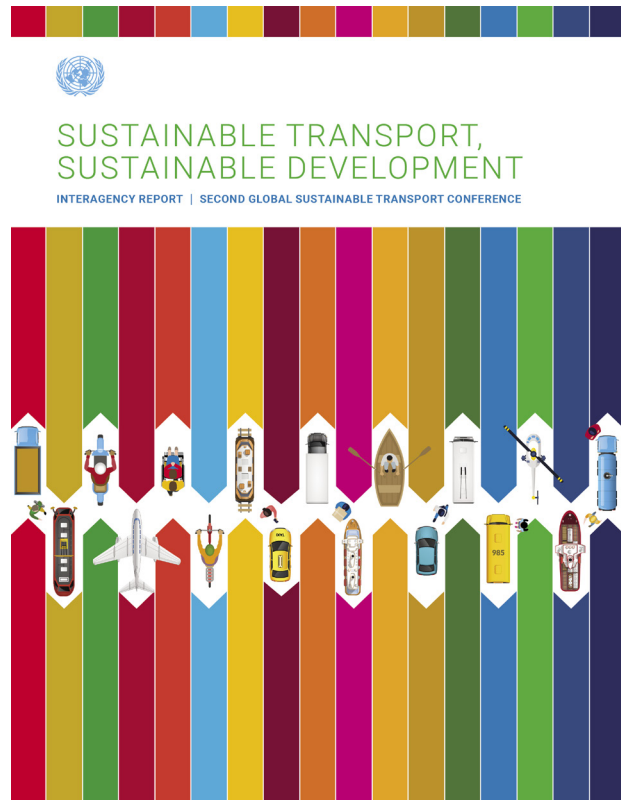
The Conference highlighted the many companies in the

transport sector that have made commitments to become carbon neutral as well as engaging the business and science and technology communities, through a dedicated Business Forum and Science, Technology and Engineering Forum. The Conference also identified incentives to encourage people to move towards sustainable transport, by promoting and highlighting the use of electric cars, public transport and bicycle lanes.

...as we find ways to recover

As the pandemic raged and governments across the globe took the unprecedented steps of closing borders and implementing stay-at-home orders to contain the spread of COVID-19, observers became more keenly aware of the impact of the transport sector on the economy and the environment. While they were successful at containing the spread of COVID-19, travel restrictions also endangered progress across multiple SDGs due to disruption of tourism, trade, global supply chains and labour movements, resulting in jobs lost, livelihoods placed at risk, increased food insecurity, and endangered supplies of medicines and other essentials. These impacts contributed to, and were exacerbated by, economic recessions and inequalities in countries.

The COVID-19 pandemic has prompted changes in both demand and supply for transport services—from the dramatic drop in international and domestic travel



during the initial lockdown phases of the pandemic to the diminished use of mass transit in key population centres to the growing use of bicycles and electric vehicles, to name just a few. It is a chance for all actors to rethink passenger and freight transport and come up with solutions which can not only withstand possible future crises of this nature, but also support the achievement of the 2030 Agenda and the Paris Agreement.

...while building on our technical knowledge to foster sustainable transport

Sustainable Transport, Sustainable Development, the interagency report on sustainable transport, coordinated by UN DESA, was launched in October 2021 just ahead of the UN Sustainable Transport Conference. The report includes a wealth of information on the cross-cutting nature and

potential for progress of the transport sector. The onset of the COVID-19 pandemic and the climate crisis have hastened the need to speed up the transition to sustainable transport, and although that transition is underway, there remains much to be done.

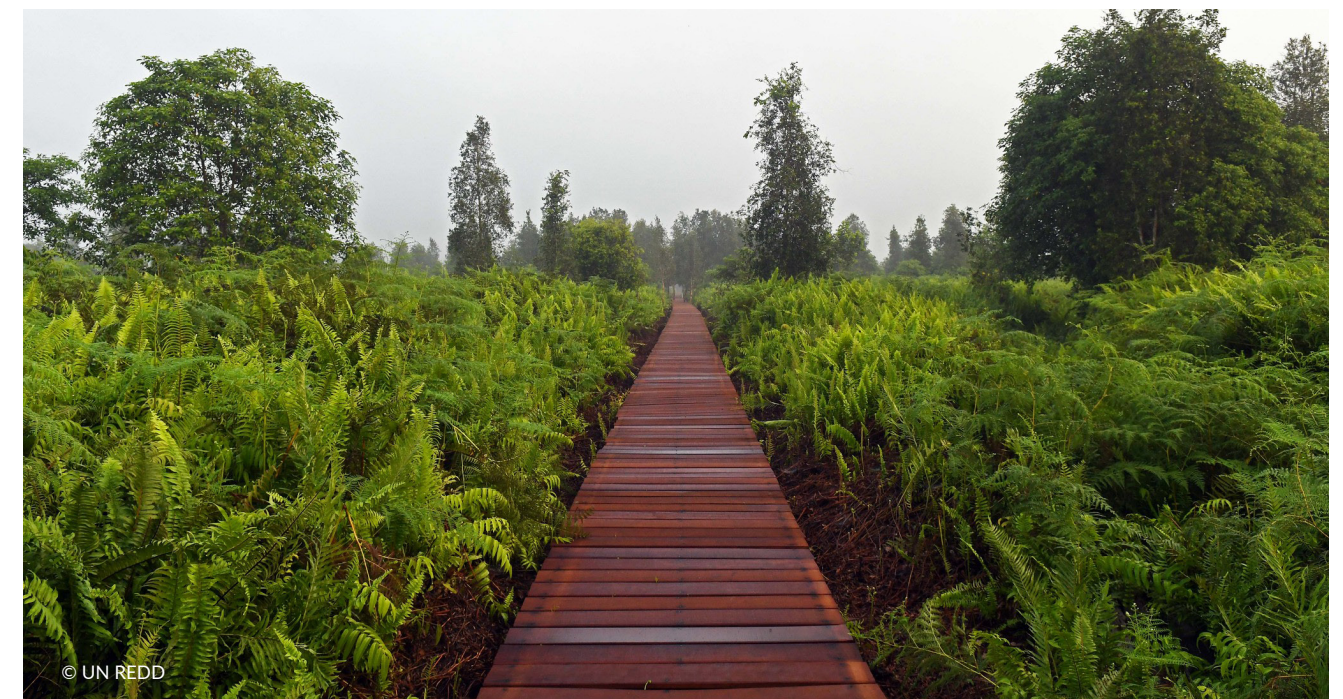
The report finds that over a billion people still lack access to an all-weather road, only about half the world's urban population have convenient access to public transport, road traffic injuries are the leading cause of death among young people aged 15 to 29, and transport systems and infrastructure are not resilient enough in the face of frequent and more intense extreme weather events. Transport is also responsible for about a quarter of direct CO2 emissions from fossil fuel combustion.

The research also indicates that all regions and people do not experience the shortcomings of transport equally. Countries in special situations, namely LDCs, LLDCs, and SIDS, face specific challenges like geographical location, insufficient infrastructure investment and limited capacity, poor cross-border connectivity, and greater exposure to climate change and extreme weather events. The poor, women, children and youth, older persons, those living in rural areas or informal urban settlements, persons with disabilities and other groups face the most difficulties in accessing and benefitting from mobility services.

The report urges policymakers to extend and deepen efforts to improve the energy efficiency of all modes of transport and to increase the use of low-carbon fuels without delay over the next decade, as waiting to act would noticeably increase the cost of reaching climate targets. Scientific advances and the rapid deployment of new technologies are essential for the transition to sustainable and green transport to take place at the scale and speed required. Measures to maintain and expand equitable

access to transport services as well as those that mitigate environmental impacts across the entire product cycle of vehicles must accompany any such efforts.

Sustainable transport solutions exist and need now to be put into action. The two-part webinar series on "Sustainable Transport and COVID-19: Response and Recovery" organized by UN DESA in June and July 2020 displayed current thinking on recent developments linked to COVID-19 and sustainable transport, and outlined options for the way forward. Among others, participants elaborated on the positive impacts of transportation restrictions due to the pandemic, such as reductions in greenhouse gas emissions, while envisioning the future of the sector and the improvements that could be undertaken if reduced supply and demand were to continue post-pandemic, due to increased telework, remote learning and changed behaviors such as increased walking and cycling. The webinar was also meant to inform work at UN DESA on the subject.



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In the area of sustainable transport, UN DESA is committed to helping global thought leaders and policymakers meet changing transport demands while preserving the planet for current and future generations. Sustainable transport is achievable, but it requires stakeholders collaborating at all levels to overcome the historical fragmentation within the sector. We must change the way we plan, develop and use transport modes and systems, while taking into account the challenges and needs of vulnerable groups. UN DESA is uniquely positioned to provide platforms and networking opportunities that bring together all segments of society to ensure that all voices are heard as we encourage sustainable development and individual and collective action all in the spirit of supporting the achievement of the 2030 Agenda and the Paris Agreement.

“

Forests offer nature-friendly solutions to many global challenges, from combatting climate change, land degradation and biodiversity loss, to building resilience against future crises. We must strengthen our global efforts to protect and restore forests and support the livelihoods of forest-dependent communities. Only then can we realize our shared vision for a more just, equitable and sustainable world.

”

– Liu Zhenmin, Under-Secretary-General for Economic and Social Affairs

Key Messages

- UN DESA is helping to protect our forests by supporting the development of forest policy, helping countries develop their capacity to monitor progress toward sustainable forest management, and mobilizing forest financing.
- UN DESA is working hard to ensure that countries are using the most up-to-date forest and land-use monitoring systems to generate the most transparent and accurate forest data.

06

Forests

UN DESA is working hard to promote the management, conservation and sustainable development of all types of forests. Limiting the average global temperature increase to 1.5°C will be impossible without a major role for forests, both because of the massive emissions reductions that can be achieved by ending deforestation and because of the additional carbon that can be sequestered through improved forest management and reforestation.

The world's forests are beset by changing weather patterns, unsustainable management practices and lack of financing to combat these and many other challenges. Sustainably managed forests, however, can help mitigate the worst effects of climate change and finding ways to preserve the “lungs of the planet” are vital to implementing and achieving the SDGs.

UN DESA is helping to protect our forests by supporting the development of forest policy. We help countries develop their capacity to monitor progress toward sustainable forest management and mobilize forest financing. Our work as the Secretariat for the UN Forum on Forests supports the implementation of the UN Strategic Plan for Forests and the UN Forest Instrument, and is guided by the 2030 Agenda for Sustainable Development and other global agreements. Our efforts have taken on greater importance as forest fires threaten the “lungs of the planet.” To this end, UN DESA aims to strengthen existing collaborative initiatives and to support new initiatives to promote technological collaboration and the exchange of scientific data in fire management and research.



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Measuring progress on protecting the world's forests

In April 2021, UN DESA launched the **Global Forest Goals Report 2021**, the first evaluation of where the world stands in implementing the United Nations Strategic Plan for Forests 2030. It provides a snapshot of the actions that are being taken for forests, while stressing that it is necessary to meet the 2030 deadline in the Plan. The report finds that while the world had been making progress in key areas such as increasing global forest area through afforestation and restoration, these advances are also under threat from the worsening state of our natural environment.

The world is combatting unprecedented, worldwide crises on multiple fronts, from the devastating impacts of the

COVID-19 pandemic, to the escalating effects of climate change and a biodiversity crisis. For each of these complex global challenges, forests and forest-dependent people are both a casualty and an important part of the solution. The path forward needs to be paved with greater sustainability and a greener, more inclusive economy—of which healthy forest ecosystems and forest-dependent communities are an integral part. Sustainably resourced and managed forests can bolster employment, disaster risk reduction, food security and social safety nets, for starters. They can also protect biodiversity and advance both climate mitigation and adaptation. And with regard to global health, safeguarding and restoring forests are among the environmental actions that can reduce the risk of future zoonotic disease outbreaks.



The Global Forest Goals Report provides an initial overview of progress towards achieving the six Global Forest Goals and their 26 associated targets as contained within the United Nations Strategic Plan for Forests 2030. Each chapter features actions taken by countries, and an overview of progress towards each Goal, as well as some success stories that illustrate best practices. The report draws upon 52 voluntary national reports and 19 voluntary national contributions, representing 75 per cent of the world's forests.

The Strategic Plan recognizes that achieving the Global Forest Goals and targets requires ambitious and transformational actions inclusive of all actors, at all levels. These entities include Member States, the Collaborative Partnership on Forests, the United Nations system and other intergovernmental partners and stakeholders, and

United Nations Strategic Plan for Forests 2017–2030



GLOBAL FOREST GOALS

The United Nations Strategic Plan for Forests 2017–2030 provides a global framework for action to sustainably manage all types of forests and trees outside forests, and to halt deforestation and forest degradation.

At the heart of the Strategic Plan are six Global Forest Goals (GFGs) which directly support the UN Sustainable Development Goals.



GFG 1
Reverse Forest Cover Loss

Reverse the loss of forest cover worldwide through sustainable forest management, including protection, restoration, afforestation and reforestation, and increase efforts to prevent forest degradation and contribute to the global effort of addressing climate change.



GFG 2
Improve Forest Benefits and Livelihoods

Enhance forest-based economic, social and environmental benefits, including by improving the livelihoods of forest-dependent people.



GFG 3
Protect Forests and Use Sustainable Forest Products

Increase significantly the area of protected forests worldwide and other areas of sustainably managed forests, as well as the proportion of forest products from sustainably managed forests.



GFG 4
Mobilize Resources

Mobilize significantly increased, new and additional financial resources from all sources for the implementation of sustainable forest management and strengthen scientific and technical cooperation and partnerships.



GFG 5
Promote Inclusive Forest Governance

Promote governance frameworks to implement sustainable forest management, including through the United Nations forest instrument, and enhance the contribution of forests to the 2030 Agenda for Sustainable Development.



GFG 6
Cooperate and Work Across Sectors

Enhance cooperation, coordination, coherence and synergies of forest-related issues at all levels, including within the United Nations system and across member organizations of the Collaborative Partnership on Forests, as well as across sectors and relevant stakeholders.

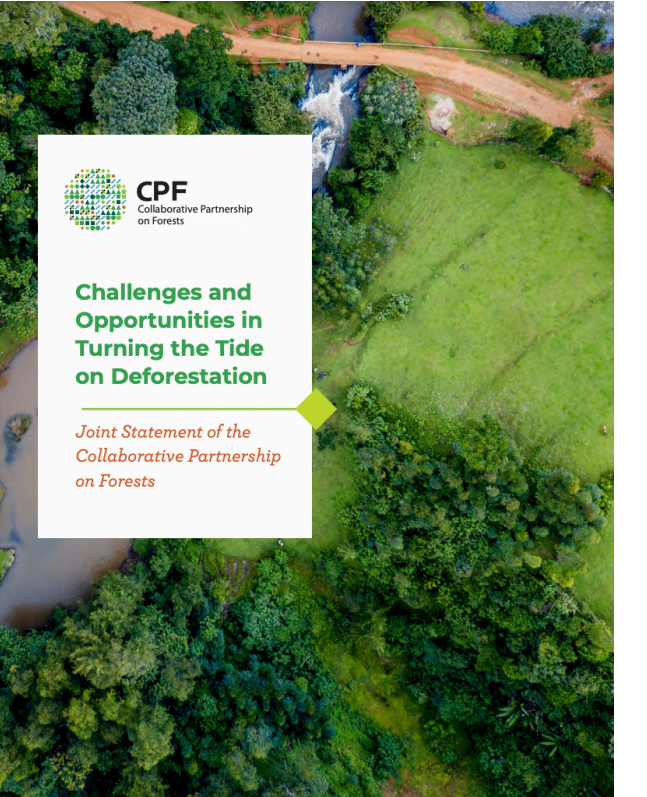
regional and subregional organizations and processes. While this first report primarily focuses on the actions taken by Member States, future reporting intends to include data and information from the many other actors that play a vital role in sustainable forest management and in the world's efforts to achieve the Global Forest Goals and targets.

Financing for sustainable forest management

The lack of adequate funding for sustainable forest management has been a long-standing challenge for countries, in particular developing countries and countries with economies in transition. To address this need, in 2015, the UN Forum on Forests established the **Global Forest Financing Facilitation Network (GFFFN)**. The Network works to facilitate access to forest financing, share data and best practices, and to achieve the Global Forest Goals of the United Nations Strategic Plan for Forests 2030.

Since its inception, the Network has worked with 34 countries and two sub-regions to help in their efforts to secure financing for sustainable forest management in their country or region. The Network assists in designing national forest financing strategies and project proposals for submission to funding institutions. To date, around 1,000 forestry professionals around the world have benefited from the capacity development and training provided by the GFFFN. As of September 2021, project support to 17 countries had been completed, while projects in other countries were still ongoing.

All projects conceptualized through the GFFFN include a climate focus and target securing funding from climate-related funding institutions, namely the Global Environment Facility and the Green Climate Fund. The conceptualized projects aim to benefit climate change mitigation and



adaptation, through sustainable forest management. For example, Thailand, Malawi and Guinea Bissau aim to secure funding for forest landscape restoration projects, which will, in turn, contribute to increasing carbon stocks and to building the resilience of ecosystems and forest-dependent communities.

Building consensus to sustainably manage our forests

The Collaborative Partnership on Forests has a unique role to play in building consensus and policy coherence to protect and sustainably manage all types of forests, providing data and analysis for solutions and agreements, and accelerating action in countries through the participation and technical support of its members. UN DESA serves as the Secretariat for the Partnership.

The core functions of the Partnership are to support the work of the UN Forum on Forests and its member countries, to enhance coherence, cooperation as well as policy and programme coordination at all levels, including through joint programming and the submission of coordinated proposals to members' governing bodies, consistent with their mandates; and to promote the implementation of the UN Forest Instrument and the United Nations Strategic Plan for Forests as well as the contribution of forests and trees to the 2030 Agenda for Sustainable Development and other major forest-related agreements.

Hearing the voice of the forest

Restoring balance to the world's forests requires concerted action by governments, the private sector and civil society to promote sustainable forest management. UN DESA has a key role in being the voice of the forest in this regard—helping to formulate forest policy that focuses on sustainable management, monitoring progress toward

that policy and finding ways to finance sustainable forest management. In addition to the work described in this chapter, UN DESA also supports the sustainable use and management of mangroves—the world's ocean forests—through the dedicated Community of Ocean Action described in Chapter 3.

Much remains to be done, and UN DESA is well-poised to continue our work in capacity development to ensure that countries are using the most up-to-date forest and land-use monitoring systems to generate the most transparent and accurate forest data. We will continue to use our financing databases and networks to mobilize global partnerships and cooperation and we will continue to work to ensure policy coherence across sectoral, environmental and economic policies to align public incentives and ensure consistent implementation across national and sub-national levels.





Key Messages

- The COVID-19 pandemic highlighted the importance of trustworthy and high-quality data to inform evidence-based decision-making and gauge progress. UN DESA is committed to supporting countries in every corner of the world to bolster their statistical capacities to measure the drivers and impacts of climate change and produce reputable information that is transparent, trustworthy and timely.
- High-quality data also helps us monitor progress and prepare for future challenges. UN DESA is committed to continuing to be the standard of excellence when it comes to high-quality, trustworthy data. We will continue to develop cutting-edge technologies to help Member States build their capacities to collect, report, and use data and statistics to formulate efficient and effective policies that best meet their needs.

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The pandemic has taught us that weaknesses in data and information systems present an added and enormous challenge to decision makers. Data deficiencies have serious consequences for people’s lives. Policies, programmes and resources aimed at protecting people during this challenging time will inevitably fall short without the evidence to focus and hone interventions.

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– Liu Zhenmin, Under-Secretary-General for Economic and Social Affairs

07

Data and statistics

The COVID-19 pandemic highlighted the importance of trustworthy and high-quality data to inform evidence-based decision-making and gauge progress. In fact, the lack of data and statistics to measure the drivers and impacts of climate change has been a major impediment to sound policymaking. UN DESA is committed to supporting countries in every corner of the world to bolster their statistical capacities to produce reputable information that is transparent, trustworthy and timely.

To this end, the Department has stepped up efforts to develop the Global Set of Climate Change Statistics and Indicators, which will benefit all countries and the international climate change reporting process under the Enhanced Transparency Framework of the Paris Agreement. The Global Set is a comprehensive framework of indicators

that countries will be able to pick from in order to set up their statistical systems for environmental monitoring. The purpose of the Global Set is to help countries at various stages of development that may not have the capacity to implement such sophisticated statistical systems. Such countries will need to tailor their data collection to meet the reporting requirements that stem from their commitments under international climate agreements.

UN DESA is also turning to cutting-edge technology to support countries as they work to build their statistical data sets. Employing open data systems and artificial intelligence allows countries to more quickly implement ecosystem accounting systems on a global scale. In addition, UN DESA is helping countries develop their capacities to implement coherent policymaking systems, incorporating



sophisticated modelling techniques and forward-looking planning perspectives into policymaking and planning strategies.

Developing climate change statistics and indicators

In the area of climate change, UN DESA has advanced its efforts to develop the Global Set of Climate Change Statistics and Indicators, in collaboration with the UNFCCC. The Global Set is a broad range of indicators and statistics that will help countries monitor the drivers and impacts of climate change, assess mitigation and adaptation measures, as well as evaluate vulnerability. The Global Set is also a way of linking the reporting requirements stemming from the Paris Agreement, the climate-related SDGs and the

necessary statistics or indicators to support climate policy action.

The Global Set contains a thematically comprehensive list of indicators and statistics structured according to the five areas defined by the Intergovernmental Panel on Climate Change (IPCC): drivers, impacts, vulnerability, mitigation and adaptation, and accompanied by metadata, including definitions, aggregations, measurement categories and data references.

Given the complexity of climate change monitoring, the Global Set provides a statistical framework with suitable indicators to serve as guidance for countries to prepare their own sets of indicators. This statistical framework will link the reporting requirements stemming from the Paris



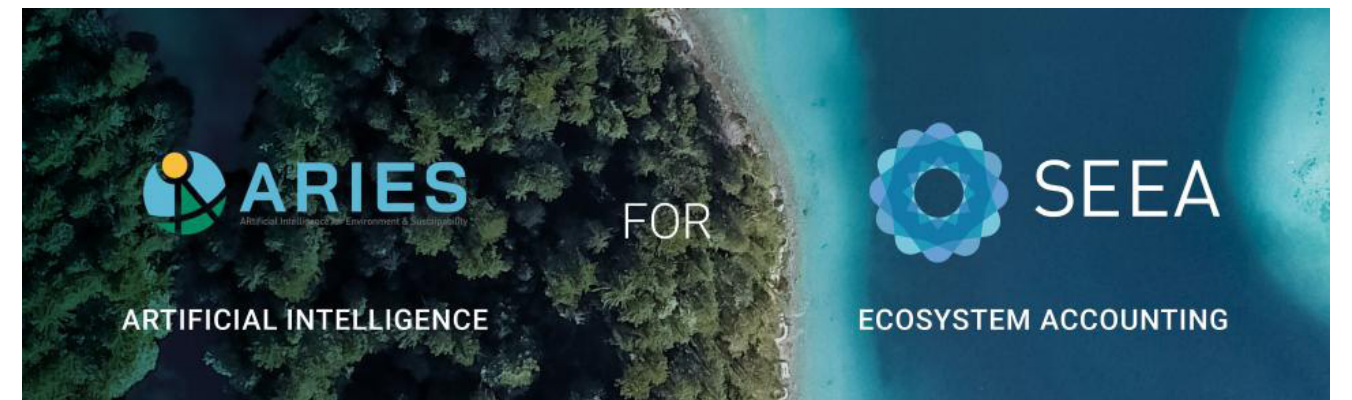
Agreement and the agreed reporting modalities known as the “Katowice package” to the indicators necessary to support climate policy action. Similar to the Basic Set of Environment Statistics in the Framework for the Development of Environment Statistics (FDES), the Global Set will be a comprehensive, but not exhaustive, set of indicators and statistics designed to support countries according to their individual concerns, priorities and resources.

A Global Consultation on the draft Global Set took place between May and September 2021. To help improve engagement in the Global Consultation, six online information sessions were offered in three official United Nations languages. Responses and feedback were received from 86 Member States from all regions and 26 agencies which were summarized and presented to the eighth meeting of the Expert Group on Environment Statistics (EGES) in October 2021 for review and discussion. Based

on the progress achieved, the EGES recommended that the final Global Set be submitted to the fifty-third session of the Statistical Commission in March 2022 for adoption.

Using cutting edge technology to help countries build their ecosystem accounts

Policymakers at all levels need access to data that considers the interlinkages between the environment and the economy. The **System of Environmental-Economic Accounting (SEEA)** provides a framework for just that. Data derived from the SEEA provide a valuable complement to emissions inventories and play an important role in understanding which “rapid and far-reaching transitions” governments should focus on, without damaging the economy. The SEEA provides this information through policy-relevant indicators as well as through supporting analytical and modelling techniques that can be used to assess the full impacts of climate change and policy



responses. UN DESA is helping Member States to implement SEEA in order for them to find the most effective policy responses to climate change, which is essential for meeting their targets under the Paris Agreement.

To further propel this effort, UN DESA launched the ARIES for SEEA Explorer in April 2021, which allows countries to create their SEEA ecosystem accounts in a matter of minutes, rather than months. The tool automates accounts production through the use of global datasets, models and artificial intelligence (AI). While many tools for ecosystem accounting make use of global datasets, the Explorer is the first and only one to use AI, through the Artificial Intelligence for Environment and Sustainability (ARIES) technology. Users can specify compilation for any area (such as a country, watershed or administrative region), and the application uses machine reasoning to select the “best available” models and data sources to generate the accounts, which users can then further refine through the use of particular datasets or parameters.

Users can compile accounts for land cover; ecosystem extent; ecosystem condition (forests); physical ecosystem services (crop provisioning, pollination, global climate regulation and sediment regulation); and monetary ecosystem services. More services, such as nature-based tourism and water regulation will be added in the future.

New functionalities will be developed to enable users to add their own datasets through a simple drag-and-drop function. This will allow users to incorporate local/national data into the Explorer and improve the quality of their results. Users will also be able to decide who accesses their additional datasets: they can keep their dataset confidential or give access to selected users or make it broadly available for further reuse. The goal is to increase interoperability and access, allowing users to more readily be able to build their accounts, and more efficiently formulate their policies, all while taking action to mitigate climate change.

Integrating climate change into policy making processes

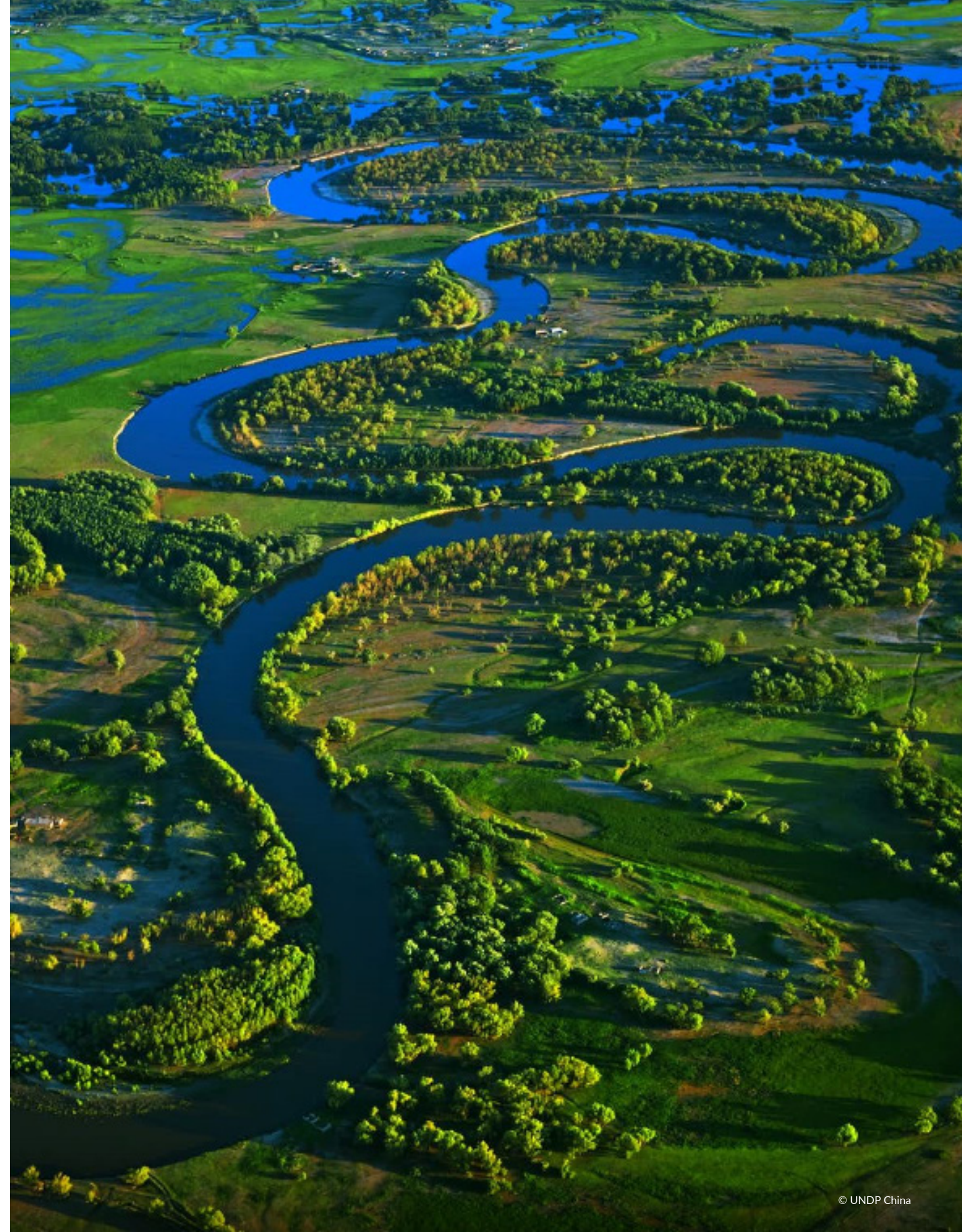
A large part of UN DESA's activities center on capacity development. The Department has been working hard to help countries identify tradeoffs and synergies in policy and strategy formulation. The Department's analysis and capacity development activities help governments reflect on how to organize, mobilize and equip all parts of national and local governments and public servants for implementing the SDGs, placing a special focus on policy integration, coherence and innovation.

Recently developed guidance notes on sound policymaking suggest ways to incorporate climate change objectives in policymaking processes, for example in connection with strategic planning and foresight. “Strategic foresight” is an organized, systematic way of looking beyond the expected to engage with uncertainty and complexity. Instead of attempting to provide solutions for current challenges, strategic foresight encourages policymakers and strategists to consider the nature of future challenges—such as the impacts of climate change—when formulating policy options.

A foresight-based approach is instrumental in ensuring that strategic policies and plans—such as policies to mitigate the risk of extreme weather events or policies to reduce emissions, for example—are developed to ensure a more equitable future and incorporate diverse voices and perspectives. By using sophisticated modelling techniques, policymakers can work out what impact potential policies might have on a given scenario. This forward-looking policymaking perspective is innovative because of the use of data sets and statistical modelling frameworks and also because it bases the policy options on possible future scenarios, rather than on historical precedents.

Helping countries to develop their capacity to implement such approaches is key to formulating efficient policies that will help to mitigate the effects of climate change. UN DESA held two virtual workshops to promote sound policymaking for regional sustainable development in February 2021. The first workshop focused on Ghana, Kenya, Mauritius, South Africa and Uganda. The second workshop focused on Bolivia, Colombia, Ecuador, Peru and Venezuela.

Now more than ever, transparent decision-making that is backed up by trusted data is critical to ensure that climate action meets the needs of all people. Efficient policies rely on high-quality data to determine the best solutions to some of our greatest challenges—including climate change, poverty and inequalities. High-quality data also helps us monitor progress and prepare for future challenges. UN DESA is committed to continuing to be the standard of excellence when it comes to high-quality, trustworthy data. The Department will continue to develop cutting-edge technologies to help Member States build their capacities to collect, report, and use data and statistics to formulate efficient and effective policies that best meet their needs.





Key Messages

- UN DESA is hard at work finding new and innovative ways to identify and address the weaknesses that are hindering progress on the SDGs and on climate change. To do so, the Department is developing tools to help countries implement new technologies to spur risk-informed decision-making, studying the need to build resilient cities, and researching megatrends and the impacts these will have on our collective future.
- UN DESA remains steadfast in our commitment to help countries build their capacities to undertake effective responses and increase their resilience to combat climate change.
- UN DESA will continue to provide thought-provoking research and analysis and transparent and trustworthy data to further the development of policies that will have the greatest impact on reducing the effects of climate change.

“

We live in a world of hope, possibility, and enormous achievement. We can build on what has been accomplished, but also shape new directions, realizing what has been promised to make a better future for all.

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– Liu Zhenmin, Under-Secretary-General for Economic and Social Affairs

08

Frontier issues

UN DESA is a global leader in advancing innovative scientific approaches to implementing the SDGs. We work to facilitate cooperation at the intersection of science, policy and society, and in multi-stakeholder engagement on science, technology and innovation for the goals. The Department provides cutting-edge research and policy analysis on frontier issues and how they affect countries and people in special situations.

Climate change affects countries and regions in different ways, with the biggest burdens falling on the most vulnerable groups of people and countries. SIDS, LDCs, older persons, and children are among those facing the greatest hardships from worsening climate conditions.

The COVID-19 pandemic has put the weaknesses that have hindered progress on the SDGs into stark relief. The pandemic has affected us all, but it has not affected us all equally. It has highlighted and deepened the fault lines of existing inequalities among and within countries and has had the greatest adverse impacts on those countries and groups least able to protect themselves, and already at greatest risk of being left behind. The vast disparities in resources available to finance recovery efforts have further worsened inequality.

In this context, UN DESA has focused its efforts on identifying and addressing the weaknesses that hinder progress on the SDGs, and on climate change, such as resource constraints, gaps in public administration and governance systems, and inadequate disaster preparedness.



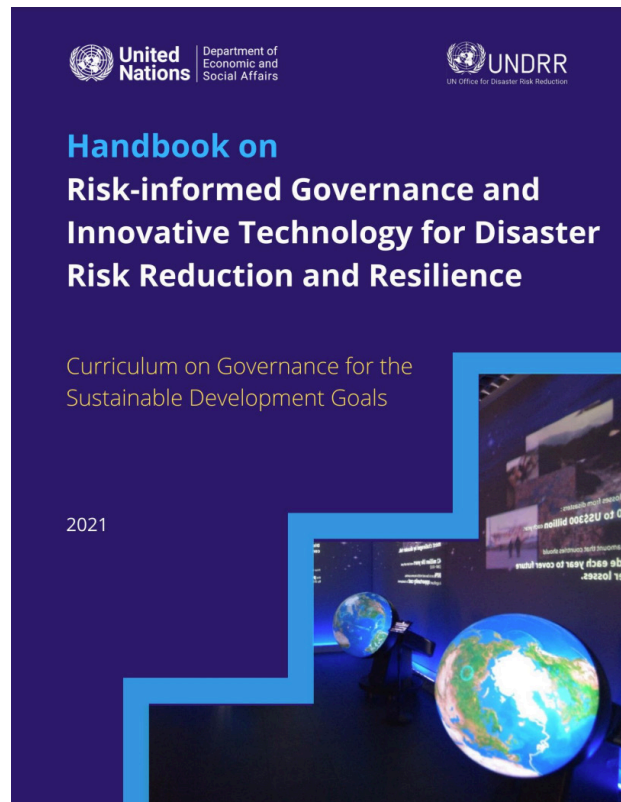
We have been hard at work finding new and innovative ways to face these challenges, from developing tools to help countries implement new technologies to spur risk-informed decision-making, to studying the need to build resilient cities, to researching megatrends and the impacts these will have on our collective future.

Risk-informed decision-making for climate change action

Incorporating disaster risks and climate impacts into development processes is necessary to achieve the key objectives of sustainability, resilience, poverty eradication and leaving no one behind—especially as the climate crisis worsens. To do so, policymakers need data that supports disaster risk reduction and climate adaptation and mitigation

interventions; strengthens national capacities; facilitates communication and application of risk information; and supports risk-informed development decision-making.

To this end, in September 2021, UN DESA published the **Handbook on Risk-informed Governance and Innovative Technology for Disaster Risk Reduction and Resilience**. The Handbook was based on the **Training of Trainer Toolkit on Risk-informed Governance and Innovative Technology for Disaster Risk Reduction (DRR) and Resilience**. The Handbook and the Toolkit seek to build national capacities to spearhead innovations and use information and communications technologies and key frontier technologies in government in order to drive DRR and resilience. Special emphasis is given to public service innovations that serve the needs of vulnerable states, including methods



for adapting and scaling these innovations to align with developing country contexts.

The materials explore the mechanisms for access, adoption, uptake, financing, and maintenance of emerging technology in practical formats that seek to advance public sector capacities for risk-informed policymaking and resilience. The goal is to help policy-makers close technology gaps and establish public governance frameworks for DRR and sustainable development in vulnerable states, with a particular emphasis on climate change impacts.

Identifying megatrends and their impacts

Five megatrends are profoundly affecting economic, social, and environmental outcomes. These are climate change; demographic shifts, particularly population ageing;



urbanization; the emergence of digital technologies; and inequalities. While these trends are not inherently good or bad, the way we react to them and how we address their implications, whether through coordinated, intentional, forward-looking efforts or not, will shape their positive or negative impacts on our collective future.

The **Report of the UN Economist Network for the UN 75th Anniversary: Shaping the Trends of Our Times**, published by UN DESA in September 2020, finds that five years into the implementation of the Sustainable Development Agenda, progress is off-track and may have even been reversed by the COVID-19 crisis, a view that is supported by UN DESA's annual SDG Progress Report.

In examining the roles of the megatrends in shaping our progress towards the SDGs, the report argues for greater



cooperation across seemingly unrelated areas, such as urban planning and energy production. For example, proper urban planning and sustainable energy production and usage can help to limit the emissions of greenhouse gases and waste that are generated by large urban centres. Properly managing urbanization can help mitigate and overcome negative climate change impacts and boost the benefits of sustainable cities.

The report warns that without an overhaul of policymaking, it is unlikely that we will achieve the SDGs and targets set by the Paris Agreement. It calls for governments and policymakers to design policies in a more holistic way. As such, the report encourages policymakers to implement policies with the right balance of sustainability and inclusiveness. Designing policies with the potential for co-benefits, where a positive result is achieved in one area through an intervention designed to generate change in another, can propel more effective, mutually reinforcing changes, and significantly greater impacts.

The report stresses that international cooperation, and the United Nations, have a crucial role in framing the responses to the global megatrends, by encouraging domestic political consensus for sustained action. The UN can also assist in mobilizing the global support needed for individual countries, particularly those with fewer resources, particularly in areas of dire need such as climate change.

Finding interlinkages between food security and climate action

The goal of the April 2021 Commission on Population and Development on “Population, food security, nutrition and sustainable development” was to help achieve the SDGs on ending poverty and hunger, improving health, achieving gender equality, ensuring responsible consumption and production, and urgently taking climate action, among others.

The Commission, supported by UN DESA, stressed that food production is a major driver of biodiversity loss and of air and water pollution, deforestation, soil degradation and water scarcity. Food production occupies 50 per cent of the Earth's habitable land, accounts for 70 per cent of freshwater consumption and produces around one quarter of global greenhouse gas emissions. The impacts are especially severe in low- and middle-income countries, where many people depend on agriculture for their livelihoods and where food security and adaptive capacity are low.

However, the Commission also stressed that policy approaches, including incentives, regulations and dietary guidelines, can encourage people to adopt healthy diets based on foods that have lower environmental burdens. Government policies can create market incentives to

encourage shifts in production, while also using consumer education and school curricula to affect consumption habits. There is an urgent need for affordable, nutrient-rich foods, including plant-based proteins, fruits and vegetables.

UN DESA is well poised to help policymakers find such synergies by encouraging dialogue at the highest levels and providing policymakers with the data and tools to develop and build their capacities to implement such policies.

Disruptive technologies for the SDGs

The fast pace of development in fields such as robotics, artificial intelligence, biotechnology and nanotechnology is having broad impacts on the economy, society and environment. Such disruptive technologies can be vital for breakthroughs in achieving the SDGs and combatting climate change, but they can also have unanticipated consequences, exacerbate inequalities, and constrain



UNITED NATIONS INTERAGENCY TASK TEAM ON STI FOR THE SDGs (IATT)

10-MEMBER GROUP TO SUPPORT THE TECHNOLOGY FACILITATION MECHANISM

MULTI-STAKEHOLDER FORUM ON SCIENCE, TECHNOLOGY AND INNOVATION FOR THE SDGs (STI FORUM)

ONLINE PLATFORM (2030 Connect) - GATEWAY FOR INFORMATION ON EXISTING STI INITIATIVES, MECHANISMS AND PROGRAMS

- **IATT:** A United Nations Interagency Task Team on Science, Technology and Innovation for the SDGs
- **10-Member group:** Group of High-level Representatives of Scientific Community, Private Sector and Civil Society appointed by the Secretary-General
- **STI Forum:** Annual Multi-stakeholder Forum on Science, Technology and Innovation for the SDGs
- **2030 Connect:** An online platform as a gateway for information on existing STI initiatives, mechanisms and programs



sustainable development. Calls for a more responsible and ethical deployment of such technologies must contend with concerns that such activity would hamper innovation and deprive society of technological advances and improvements. We must strike the right balance between fostering innovation and ensuring the ethical and responsible use of new technologies.

To harness the benefits and reduce any downside negative risks, countries need to be able to make informed decisions, while also building skills and capabilities for the future. Multi-stakeholder engagement is important, as many of these advances are initiated in the private sector and academia, but then have differentiated impacts across groups of people and societies. To aid in this process, UN DESA supports the **UN Technology Facilitation Mechanism (TFM)**. The TFM is made up of several components—the **Multi-stakeholder Forum on Science, Technology and Innovation for the SDGs (STI Forum)** and the **Inter-agency Task Team on Science, Technology and Innovation for the SDGs (IATT)**. The STI Forum works to strengthen the

science-policy interface and the IATT works closely with the 10-Member Group representing science, civil society, and the private sector, in order to assess the impacts of rapid technological change on the SDGs and climate change.

Most recently, UN DESA and the STI Forum have sought to highlight innovations and great new companies through an annual competition. The 2021 Call for Innovations sought cutting-edge initiatives developed or adapted to address COVID-19-associated disruptions, while the 2020 edition focused on innovations for transformative change to support the SDGs. Almost 1,000 applications were received during the two years, indicating the diversity, dynamism and depth of the initiatives underway. The winning solutions from both years have adapted to address the impacts of COVID-19 and will remain relevant beyond the pandemic as they promise to help accelerate progress towards one or more of the SDGs. For example, Lejan Energy, a Kenyan renewable energy company has developed a process to recycle biomass waste into biomass briquettes. These briquettes are of high calorific value, economical,

and 100 per cent eco-friendly for use by factories and institutions, with the goal of reducing carbon emissions and deforestation. Another winner, E-RTH of Malaysia, is a digital platform that provides an on-demand electronic waste recycling service to individuals and businesses and pays them in cash for their waste.

Harnessing climate and SDG synergies

The need for collective and coordinated action on the 2030 Agenda and the Paris Agreement has never been greater—as evidenced by the COVID-19 pandemic—and the sheer size and intensity of the many recent climate change crises highlight the need for concerted action. The SDGs are the blueprint for the recovery and necessary transformation needed to overcome the pandemic. The policy response to the climate change crisis and the pandemic should trigger that transformation. The objective of building back better through a sustainable recovery should also frame the interventions that will shape the megatrends and their impacts, so they reinforce and accelerate that transformation. Recovery offers the opportunity to address, head on, issues that under normal circumstances would have been very difficult to manage, and to do so in innovative ways.

Commitments to tackle climate change have increased in an encouraging way in recent months, but at the global level they still fall short of what is needed to achieve the goals of the Paris Agreement. Policy makers need to address urgently the interrelated major challenges of poverty, inequality, climate change, and the recovery from COVID-19 pandemic simultaneously.

UN DESA is working to support these interlinked SDG and climate frameworks through the Climate and SDG Synergies Knowledge Platform, which it created with the UN

Framework Convention on Climate Change (UNFCCC) in 2019 as a result of the Climate-SDG Synergies Conference the organizations hosted in Copenhagen. Since then, UN DESA and UNFCCC have collaborated on related learning series, and issued the synthesis report "Raising Ambition in the Era of Paris+5 and Pandemic Recovery," as well as a technical summary report, "Consultations on Climate and SDG Synergies for a Better and Stronger Recovery from the COVID-19 Pandemic."

In addition, UN DESA manages the UN Office for Sustainable Development (UNOSD) in Incheon, Republic of Korea, and the UN Centre for Regional Development (UNCRD) in Nagoya, Japan, which support Member States through SDG and climate capacity-building, research, training and partnership-building. For example, in May 2021, UNOSD hosted a Carbon Neutrality and SDGs Conference aimed at reducing global greenhouse gases, and UNCRD held in October 2021 an International Symposium on Water-related Disaster Management During the COVID-19 Pandemic.

The negative impacts of climate change are increasingly being felt by the most vulnerable. While the world's leaders struggle to implement policies and practices to reverse our current climate trajectory, we must also be pragmatic. The mainstreaming of disaster risk reduction and resilience mechanisms are essential to try and minimize the impacts of climate-induced catastrophes on the most vulnerable.

UN DESA remains steadfast in our commitment to help countries build their capacities to undertake effective responses and increase their resilience to combat climate change. We will also continue to provide thought-provoking research and analysis and transparent and trustworthy data to further the development of policies that will have the greatest impact on reducing the effects of climate change.



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