

Response from the United States
UNEA Bureau President Siim Kiisler's Request for Input on UNEA-4 Outcomes

The United States appreciates the opportunity to provide input on possible outcomes of UNEA-4.

First, the United States notes that in terms of the outcome document, we believe negotiating a Ministerial Declaration at UNEA-4 would be time consuming and are concerned it would detract from other important substantive work of the Assembly. We prefer a non-negotiated Chair's Summary as an outcome document to encapsulate views expressed at the Assembly, summarize areas of convergence and divergence among Ministers, and identify key issues and messages.

Without prejudice to this position, we offer the following comments:

- A Ministerial Declaration would have most impact if it is short and focused on realistic, practical outcomes. In addition, a Declaration should be non-political and should not be used as an opportunity to debate controversial issues.

Key Priority Areas, Elements, and Messages:

- The United States suggests that priority areas, elements, and messages be distinct and well-defined, and offer opportunities for concrete progress. Examples of areas in which innovation can spur far-reaching positive impacts include preventing food waste, improving air quality, and expanding data/information technology access and use.
 - **Food Waste:** About one third of food produced globally is lost or wasted, which corresponds to roughly 1.3 billion tons of waste per year. The UN Food and Agricultural Organization (FAO) concluded in 2013 that unconsumed food uses a volume of water equivalent to the annual flow of the Volga River and adds 3.3 billion tons of greenhouse gases to the planet's atmosphere. Reducing this waste is critical to making food systems more sustainable. Over the past few years, support from governments, the private sector, non-profits and the philanthropic community has coalesced to drive innovative solutions to this major environmental challenge and economic opportunity. Emerging innovations address a full spectrum of opportunities, including prevention of food waste (shelf life extension technology and technology for supply chain efficiencies), recovery (from locally organized food donations for insecure communities to industry solutions in the form of new products), and recycling (upcycling opportunities or other beneficial uses for industry or energy and innovations in anaerobic digestion and producing specialty non-food recycled products). Highlighting food waste also allows for follow up on the UNEA-2 resolution.
 - **Air Quality:** Air quality is essential to human health, yet an estimated 92 percent of the world's population lives in areas with levels of air pollution that exceed World Health Organization (WHO) guidelines. Innovations in air pollution emissions control technologies

allow countries to dramatically reduce emissions while growing their economies. Air quality monitoring technologies are also rapidly evolving and, combined with the innovations in data sharing, citizen science, and communications described below, have the potential to transform the collection and dissemination of air quality data around the world. Highlighting air quality as a key priority area provides an opportunity to build on resolutions at UNEA-1 and UNEA-3, and demonstrate high-level support for UNEP's heightened focus on air quality. Critical elements of this work include expanding and strengthening regional air quality networks, building capacity and sharing best practices for air quality management, improving air quality monitoring, and cooperating with WHO and the World Meteorological Organization (WMO) on air quality. UNEP's progress on the latter is demonstrated by the January 10, 2018 MOU between UNEP and WHO, as well as the initiation of the first Global Conference on Air Pollution and Health, planned for October 2018.

- **The Fourth Industrial Revolution:** The World Economic Forum has stated we are on the cusp of an exciting era in which data can drive decision-making and innovative solutions that have a pronounced and lasting impact on public good. While the explosion of data offers valuable opportunities to address environmental issues, the data is not always shared or widely available. We encourage governments and businesses to share data, as appropriate; greater access to data can both expand understanding of environmental problems, and spur innovative applications and solutions. Moreover, citizen science can significantly expand our knowledge. The broad collaborations that occur through citizen science support investigations at local, regional, national, and global scales. Individual involvement in scientific information collection also improves the public's understanding and appreciation of environmental issues. Information and communications technology can better link science and policy.
- A sustainable materials management (SMM) approach to using and reusing materials more productively over their entire life cycles could be another key element. SMM focuses on finding new opportunities to reduce environmental impacts, conserve resources, and reduce costs. SMM areas include the built environment, sustainable electronics, and sustainable packaging, in addition to food waste discussed above. Applying SMM to packaging includes encouraging the shift in construction towards more lightweight or efficient materials, which helps companies save money while decreasing the amount of waste generated when the packaging is discarded.
- A key element of the UNEA-4 theme is the identification of new or insufficiently disseminated technologies and other science-based innovative approaches, processes, and best practices to address resource recovery, resource efficiency, reducing waste, and renewable energy production/energy storage.

Possible Elements for an Implementation Plan against Pollution:

- We are pleased with the UNEP Science Division's expanded programming on air quality, which should be considered a critical part of the Implementation Plan against Pollution. UNEP has also begun implementing the actions called for in UNEA-3's lead resolution, and it is critical that UNEP continue work in this area.

Strategic Partnerships, Initiatives, and Innovative Solutions:

- A key outcome of UNEA-4 should be to build partnerships to overcome barriers and find solutions. Effective strategic partnerships unite representatives of the public and private sectors, academia, and nongovernmental organizations. The private sector and finance community are essential partners in ensuring development is sustainable. One example of an effective partnership between universities and communities is Educational Partnerships for Innovation in Communities (EPIC), which is part of the UNEP's Global Adaptation Network (GAN). The EPIC Network (EPIC-N) <http://www.epicn.org/>, which leverages university expertise to foster community innovation, has promoted sustainability and resilience in vulnerable communities. Communities are often in the best position to introduce new and practical solutions or to readapt former traditional practices that make sense today. When innovation is grounded in the community, it has the transformative power needed to build sustainable economies that alleviate poverty while protecting human health and the planet.
- The Global Learning and Observation to Benefit the Environment (GLOBE) Program, <https://www.globe.gov/>, unites primary and secondary schools, other institutions, and citizen scientists to collect and analyze scientific data, creating a worldwide community working together to understand and improve the environment . GLOBE facilitates critical partnerships, such as partnerships with NASA Earth Science Missions, which generate global data that can assist in flood and landslide prediction, drought monitoring, vector borne disease risk, and estimating global water and energy fluxes, among other topics. GLOBE has reached more than 10 million students in more than 120 countries since its inception 23 years ago. UNEP is expected to sign a renewed agreement with GLOBE in the near future.
- The Local Environmental Observer (LEO) Network, is another good partnership model. LEO uses a mobile application and web-accessible maps to display environmental observations to encourage actions to reduce emissions and other releases of pollutants. Through cooperation with the Arctic Council and North American Commission for Environmental Cooperation, LEO connects community and technical experts in regions around the world.
- Innovative solutions and approaches are not always technological. Environmental challenges provide a multitude of opportunities for innovation at all scales and levels of development. Creative approaches exist in policy, financing, partnerships, processes, and the use of data. For example, when waste pickers formed a workers' cooperative at a Moroccan landfill, adding a recycling and sorting center to its operations, they improved working conditions, compensation,

and environmental outcomes. Fishermen in Kerala, India, frustrated when their nets collected more plastic than fish, began hauling the plastic back to land, and with help from government agencies established the first-ever recycling center in their region. Innovative approaches to address sustainability and improve resource efficiency also offer opportunities for growth, cost reduction, and prosperity. If the “business as usual” approach continues, we will not effectively address the urgent environmental challenges we confront.

