

Achieving the United Nations Sustainable Development Goals with Important Energy Components

Dr. E. William Colglazier
Editor-in-Chief, *Science & Diplomacy* (www.sciencediplomacy.org)
Senior Scholar, Center for Science Diplomacy
American Association for the Advancement of Science
January 30, 2018
Roundtable on Science and Technology for Sustainability
Workshop on Deploying Sustainable Energy during Transition:
Implications of Recovery, Renewal, and Rebuilding



Our Common Journey

a transition toward

SUSTAINABILITY

NATIONAL RESEARCH COUNCIL

2030 AGENDA of the United Nations



GOAL 7: Ensure access to affordable, reliable, sustainable and modern energy for all

7.1 By 2030, ensure universal access to affordable, reliable and modern energy services

7.1.1 Proportion of population with access to electricity (Tier I)

7.1.2 Proportion of population with primary reliance on clean fuels and technology (Tier I)

7.2 By 2030, increase substantially the share of renewable energy in the global energy mix

7.2.1 Renewable energy share in the total final energy consumption (Tier I)

Goal 7 continued

7.3 By 2030, double the global rate of improvement in energy efficiency

7.3.1 Energy intensity measured in terms of primary energy and GDP (Tier I)

7.A By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology

7.A.1 International financial flows to developing countries in support of clean energy research and development and renewable energy production, including in hybrid systems (Tier II)

Goal 7 continued (2)

7.B By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, in accordance with their respective programs of support

7.3.1 Investments in energy efficiency as a percentage of GDP and the amount of foreign direct investment in financial transfer for infrastructure and technology to sustainable development services (Tier III)

United Nations Activities Related to SDG 7 in 2018

- Secretary General's Annual Progress Report
- Global Preparatory Meeting for High Level Political Forum (HLPF) Review of SDG 7 (Bangkok, February 2018)
- SE4All (Sustainable Energy for All) Forum (Lisbon, May 2018)
- Multi-Stakeholder Forum on STI for SDGs (New York, June 2018)
- HLPF Review of SDG 7 (New York, July 2018)

STI Forum & Youth Panel



Some Areas for Emphasis at 2017 STI Multi-Stakeholder Forum

1. Cross-cutting nature of the SDGs – their interdependencies, tradeoffs, and synergies – requires holistic approaches and systems analyses
2. STI capacity building in every country is essential, including building human capacity and strengthening the science advisory ecosystem and the STI policy framework
3. Action plans and roadmaps -- integrating SDGs and the role of STI into national planning efforts -- are essential. These roadmaps incorporate processes that require feedback loops, evaluate what is working and not working, and produce continual revisions that create a real learning environment. They are most effective if built up with stakeholder engagement and contribute to smart government.
4. Public-private partnerships are essential as are other efforts that expand involvement with the private sector in creating business opportunities in pursuing SDG solutions
5. Deep dives are needed for each SDG. Action plans and roadmaps are needed for each SDG and even for a number of individual targets.

Noteworthy Ongoing Efforts of International Scientific Groups

- The World in 2050
(<http://www.iiasa.ac.at/web/home/research/twi/TWI2050.html>)
- Future Earth (futureearth.org)
- Global Sustainable Development Report 2019
(sustainabledevelopment.un.org)

SDG Targets Related to Resilience

- 1.5 (build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social, and environmental shocks and disasters)
- 11.5 (reduce deaths and economic losses caused by disasters)
- 11.b (increase implementation of plans by cities for resilience to disasters)
- 11.c (support developing countries in building sustainable and resilient buildings)
- 13.1 (strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries)

Harnessing the Contribution of STI for the SDGs

- Advising on challenges
- Providing indicators for monitoring progress
- Advising on policies & actions with periodic feedback on what is working and not working
- Searching for new innovative solutions
- Building a robust science-policy interface in every country and internationally

Information on the SDGs is available at:

- United Nations Sustainable Development Knowledge Platform
(sustainabledevelopment.un.org)
- World Bank Group, “Atlas of Sustainable Development Goals 2017 From World Development Indicators”