



7th Economic and Social Council Youth Forum

CONCEPT NOTE

Thematic Breakout Session

“Sustainable Energy for climate resilient communities”

30 January 2018

3:00 pm – 5:00 pm

Room 12

United Nations Headquarters, New York

Background and Context:

The call for affordable and clean energy is captured in a stand-alone goal –SDG 7- within Agenda 2030. SDG 7 seeks to “ensure access to affordable, reliable, sustainable and modern energy for all”, and includes targets on renewable energy and energy efficiency, as well as on international cooperation on clean energy research and technology, and the promotion of investment in and expansion of energy infrastructure and clean energy technology. With the adoption of SDG7, the first-ever universal goal on energy, the international community recognized the imperative of creating a sustainable, affordable, secure and inclusive energy system to underpin global sustainable development. In recent years, a virtuous cycle of cost declines in renewable energy technologies, rising investments and technological innovations, are giving strong momentum to the achievement of SDG7. However, with more than 1 billion people lacking access to electricity, and 3 billion people still cooking without clean fuels and efficient technologies, progress still falls short in reaching any of the SDG7 targets and action must be accelerated if we are to meet the objectives of the 2030 Agenda.

Energy is inextricably linked to many SDGs, including those relating to poverty eradication, food security, clean water and sanitation, health, education, prosperity, job creation, and the empowerment of youth and women. Access to affordable, reliable, sustainable and modern energy for all is fundamental to human development. A shift toward sustainable energy solutions is also essential to achieve climate change goals.

Together with the 2030 Agenda, the Paris Agreement on Climate Change provides a powerful framework for collective action, aligning countries towards a shared objective to limit global warming by reducing their greenhouse gas emissions. With the majority of greenhouse gas emissions originating in the energy sector, the Paris Agreement sets renewable energy and energy efficiency targets, and so do the majority of the plans submitted by countries - the Nationally Determined Contributions (NDCs). Recent analysis shows that an energy transition in line with the below 2 degrees objective of the Paris Agreement by 2050 is both technically and economically feasible, and would bring about a set of social and economic benefits in terms of increased economic activity and job creation.



Realizing the ambition of the 2030 Agenda, including SDG7, and the Paris goals, will require bold policy commitments, enabling institutional and regulatory environments, scaled-up investments, supporting innovation in technologies as well as in policies, business models and market design, and enhancing international cooperation, with concerted efforts and partnerships by governments, the private sector, research and academia, as well as civil society groups. In addition, in order to harness the economic, social and environmental potential of SDG 7, policy-makers need to adopt a more holistic view that considers the impact of sustainable energy plans within and beyond the energy sector. Energy sector strategies need to take into account the wide range of potential technology applications and the enormous opportunities created by those applications in terms of jobs, income and human welfare. To realize these benefits, a mix of policies is needed that covers deployment and industrial policies as well as education and training.

Youth are an integral driver to achieve SDG 7, especially considering today's reality with the largest youth population under the age of 25. Young women and men are highly responsive to prevailing economic, social, and environmental challenges and fostering their empowerment has been shown to hold great potential for widespread positive impact. They can contribute to ensuring that technological advancements, policy and regulatory frameworks, and behavioral change are utilized in ways to improve energy and resource consumption and production patterns. They can also contribute to shaping and directing incentives, including future investment and national policies for socially and environmentally responsible behavior.

Actions and initiatives led by young women and men can trigger the necessary momentum for local innovation and development. In particular, businesses, including youth-led social enterprises, youth activists, scientists, practitioners and other sources of good practices can play a key role to support these endeavors, especially as these increasingly cover a wide range of industries and services. They are key in developing breakthrough technologies, particularly clean technologies, and providing innovative solutions to support mitigation and adaptation efforts. Furthermore, data generated by youth-led activities and initiatives can greatly contribute to measuring the social impact and can consequently inform further research and innovation to ensure sustainable energy for climate resilient communities.

Objectives:

The breakout session on *Sustainable energy for resilient communities* through youth-led action (SDG7) will seek to:

- Share analysis and experiences of young people affected by and working in matters relating to energy access, energy efficiency and renewable energy, and leverage on respective experience and expertise in promoting youth-led activities, including youth-led social entrepreneurship, research and innovation;
- Create more awareness about SDG 7 and relevant policy and regulatory frameworks at the global, national and local levels; identify the technologies and business models that are translating the goal of universal access to energy into reality on the ground



- Explore how youth social entrepreneurs, activists, scientists and practitioners, amongst others, can provide support in building more resilient communities through sustainable energy;
- Inform the deliberations of the HLPF on SDG 7;
- Seek renewed commitment from partners to support the implementation and monitoring of SDG 7, and strategize on how to further promote the message of SDG 7 and the role of youth within it.

Organization:

- The session will be organized by UNIDO, IRENA and the MGCY

- **Session structure and format:**

- The session will be an open discussion facilitated by the moderator (representatives of the lead organizations) based on the guiding questions and the expected outcomes. There will be no panelists, but the moderator/facilitator will have the opportunity to call upon resource persons.
- The rapporteur, chosen from the organizing members, will be responsible to redact and share the recommendations produced by the participants

- **Questions to be addressed:**

- How can youth-led actions and initiatives contribute to improving access to clean and affordable energy, renewable energy and energy efficiency?
- What experiences and good practices can you share with us, including examples of mentorship programmes, incubators, etc?
- What do you think is the biggest challenge to achieving SDG 7? And how can youth address this challenge?
- Which technologies offer the greatest potential to provide cost effective, clean energy solutions to different communities, both urban and rural?

- **Questions for the audience:**

- Explore the the potential of youth-led actions and initiatives in contributing to energy access, the deployment of renewable energy solutions and energy efficiency for improved resilience of rural and urban communities;
- Identify different barriers that society faces in achieving energy efficiency, higher penetration of renewable energy solutions and access to clean and affordable energy for all;
- Identify policy and regulatory frameworks that support progress towards the achievement of SDG 7;



Reading suggestions:

- [UN Secretary-General's report on Ensuring access to affordable, reliable, sustainable and modern energy for all](#)

Global transformation

- [Turning to renewables: climate-safe energy solutions](#). This set of briefs, released during COP23, highlights challenges and opportunities as the world seeks climate-safe energy solutions.
- [REthinking Energy 2017: Accelerating the global energy transformation](#)
- [Perspectives for the energy transition: Investment needs for a low carbon energy system](#)
- [Renewable Energy in Cities](#)

Access to Energy – Off-grid sector

- [Accelerating off-grid renewable energy: Key findings from IOREC 2016](#)

Socio-economic impacts

- [Renewable Energy and Jobs – Annual Review 2017](#)
- [Renewable Energy Benefits: Measuring the Economics](#)
- [Solar Pumping for Irrigation: Improving livelihoods and sustainability](#)
- [Renewable Energy Benefits: Decentralised solutions in agri-food chain](#)
- [Renewable Energy Benefits: Leveraging Local Capacity for Onshore Wind](#) (summary)
- [Renewable Energy Benefits: Leveraging Local Capacity for Solar PV](#) (summary)

Long-term sustainability

- [Water Use in China's Power Sector: Impact of Renewables and Cooling Technologies to 2030](#) (February 2016)
- [End-of-life management: Solar photovoltaic panels](#) (June 2016)

Energy Efficiency

- Industrial Development Report 2011. Industrial Energy Efficiency for Sustainable Wealth Creation: Capturing Environmental, Economic and Social Dividends <http://www.unido.org/publications/flagship-publications/industrial-development-report-series/industrial-development-report-2011.html>
- Capturing the Multiple Benefits of Energy Efficiency, IEA, 2015
 - <http://www.energyefficiencycentre.org/Publications/SE4All-Partner-Publications>
- Energy Efficiency - Lessons Learned from Success Stories, World Bank, 2013
 - <http://www.energyefficiencycentre.org/Publications/SE4All-Partner-Publications>
- Best Practices and Case Studies for. Industrial Energy Efficiency Improvement – An Introduction for Policy Makers



Renewable Energy + EE

- Toward Sustainable Communities: Resources for Citizens and Their Governments, Mark Roseland, David C. Hendrickson, Sean Connelly, Chris Lindberg, Michael Lithgow, Jeb Brugmann

General

- World Energy Outlook 2017 - https://www.iea.org/bookshop/750-World_Energy_Outlook_2017
- Global Energy Assessment - <http://www.globalenergyassessment.org/>

Clean Tech:

- The Global Cleantech Innovation Index 2017 - WWF - <https://wwf.fi/mediabank/9906.pdf>