Role of IEEE Standards and Awareness Building in Climate Change Mitigation

Invited Talk
IEEE SA 50th Anniversary Meeting
06 November 2023
Shenzhen, China

Prof. Saifur Rahman
2023 IEEE President & CEO
www.srahman.org
IEEE 2023
Board of Directors
Retreat Focus
Synergy among IEEE’s areas of focus

**MEMBER**
- 430,000 + Members in 190 Countries
- 10 Regions
- 39 Societies

**TECHNOLOGY**
- Over 2,000 Conferences
- Over 200 Periodicals

**EDUCATION**
- IEEE Learning Network (ILN)

**STANDARDS**
- Over 1300 Standards Published

**CLIMATE CHANGE**
- Cross-cutting Program Across All of IEEE

**IEEE**

Advancing Technology for Humanity
https://climate-change.ieee.org
How Are We Serving the Humanity?

Clean-tech Solutions for Climate Sustainability
Ecosystem for IEEE’s Climate Sustainability Work

IEEE Spectrum: Climate Change News Feed; Podcasts; Features; Archives; Journal Watch
Posts (Xplore); The Institute (Engineers of Climate Change; Coverage of Conferences and Standards)

Xplore: Engineers to Follow; Journal Watch
Articles (free); Climate Change Articles

Jobs From IEEE Job Site

IEEE Technology Center for Climate

Conferences

Standards

IEEE Climate Change newsletter

Social Media

Sponsored Content From Industry

https://climate-change.ieee.org

Advancing Technology for Humanity
The IEEE Technology Center for Climate

UPCOMING WEBINAR

The Progress on the Green Digital Transformation

9 November 2023

Learn More
Awareness Building and Participation in International Events

Webinar Series
Empowering The Green Tech Revolution: From Design to Deployment

IEEE Technology for Humanity
Awareness Building and Participation in International Events

Panel

- Saifur Rahman, 2023 IEEE President and CEO
- Katharina Tomoff, Global SVP, Environment, Social & Governance (ESG), DHL Supply Chain
- Francisco Laverón Simavilla, Iberdrola Direction of Energy Policies Head of Energy Policy, Iberdrola
- Moderator: Ursula Woodburn, the Cambridge Institute for Sustainability Leadership Europe
IEEE Discusses 6 Simple Solutions to Climate Change at COP27
They include switching to LEDs and making coal plants more efficient

By Kathy Pretz 26 Jan 2023
Opportunities of Decarbonization in the Electric Power Supply Industry

Reduce Carbon Emissions

1. Use less electricity, energy efficiency
2. Use low carbon fossil fuel power plants
3. Use H₂ & other storage technologies
4. Promote more renewables
5. Accept some nuclear
6. Promote cross-border power transfer

Source: IEEE Spectrum, Jan 2023
A Few Relevant Standards
IEEE 2747-2020

IEEE 1547-2018
IEEE Standard for Interconnection and Interoperability of Distributed Energy Resources with Associated Electric Power Systems Interfaces

IEEE 2030.3-2016
IEEE 1547a-2020
IEEE Standard for Interconnection and Interoperability of Distributed Energy Resources with Associated Electric Power Systems Interfaces--Amendment 1: To Provide More Flexibility for Adoption of Abnormal Operating Performance Category III

IEEE 765-1983
IEEE Standard for Preferred Power Supply for Nuclear Power Generating Stations

IEEE 3001.5-2013
IEEE Recommended Practice for the Application of Power Distribution Apparatus in Industrial and Commercial Power Systems
The Integration of DER into the Distribution Network

IEEE 1547-2018

IEEE Standard for Interconnection and Interoperability of Distributed Energy Resources with Associated Electric Power Systems Interfaces
Standards Relevant to Building Automation

P2688
Recommended Practice for Energy Storage Management Systems in Energy Storage Applications

IEEE 2030.3-2016
IEEE’s Presence at the UN Conference on Climate Change (COP27)
Egypt, November 2022
IEEE at UN Climate Change Conference
Partnership with International Renewable Energy Agency (IRENA)

Founding Partners: Energy Transition Education Network
Speakers at the IRENA Panel at COP27

International Renewable Energy Agency
COP27 Event by IRENA

Energy Transition Education Network
IEEE/WFEO/EIC Participants at COP27
Energy Day 15 November 2022
IEEE at UN COP28
Dubai, December 2023
As the world’s largest organization of technical professionals, IEEE has both the opportunity and the responsibility to assist in organizing the response of engineers, scientists, and technical professionals across the world to address the causes, mitigate the impact, and adapt to climate change.

IEEE’s scholarly publications, events, conference proceedings, technical standards, and other materials help foster the exchange of technical knowledge and information for the critical climate issues that our planet faces today.

https://climate-change.ieee.org
IEEE MEETINGS, CONFERENCES & EVENTS—DRIVING INNOVATION IN CLIMATE CHANGE

Register for events from IEEE related to climate change and sustainable resources. IEEE sponsors over 2,000 annual conferences and events worldwide, curating cutting-edge content for all of the technical fields of interest within IEEE.

LEARN MORE

https://climate-change.ieee.org
Sign up today to receive newsletters related to climate change.

First Name: *

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IEEE Climate Change Engagement Opportunities

Sections, Regions, Globally
The Climate Change Pavilions in the Sections Congress in Canada and the IEEE TenCon Conference in Chiang Mai, Thailand
2023 IEEE President and CEO Social Media Channels

There are four social media channels for the IEEE President:

https://www.facebook.com/ieeepresident

https://www.instagram.com/ieeepresident/

https://www.linkedin.com/showcase/ieeepresident

https://twitter.com/ieeepresident
Thank you

web: www.srahman.org