

## IEEE WORKSHOP AT WSIS FORUM 2021

# ICTS AND SMART ENERGY: ACCELERATING THE USE OF ICTS FOR SUSTAINABILITY

TUESDAY, 20 APRIL 2021 | 14:00-15:00 CET

**ACCESS RECORDED SESSION**

### ABOUT THE WORKSHOP

Digital innovation has produced groundbreaking technologies that could help propel us toward the achievement of the Sustainable Development Goals. Information Communication Technologies (ICTs), in particular, act as powerful catalysts in the three domains of sustainable development--economic development, social inclusion and environmental protection. ICTs enable all manner of digital solutions like smart agriculture, smart buildings, smart mobility, smart manufacturing, and smart conservation, among many others.

These smart solutions need electricity to function, however, and realizing their full impact in achieving the SDGs can be impeded by lack of access to clean, affordable and sustainable energy.

The world faces many challenges with respect to ICTs and energy:

- How to underpin ambitious sustainability goals while at the same time reducing carbon emissions?
- How to incorporate reliable renewable energy solutions in an affordable way?
- How to increase access in developing countries and beyond? Could distributed power sources and the use of Direct Current help?
- How to approach mushrooming data storage needs and the resultant energy demands?
- How to address electronic waste recycling difficulties while new devices proliferate?

Smart energy, with its focus on affordable, sustainable, and renewable energy resources, forms an important part of effective ICT-powered solutions. Smart energy helps improve energy efficiency and access to affordable and safe energy, and it supports an increase in the share of renewable energies in the energy mix.

This workshop will outline the energy challenges faced by ICTs. Experts will share real-world experiences and solutions, and address the question of how to leverage smart resilient energy solutions to enable ICT for sustainable development.



**SPEAKERS**



**Rajesh Kunnath** is a seasoned hardware engineer with over two decades of experience spanning a wide array of electronics specialties from RF design to power supply design. He is the founder of a design services firm based in Chennai, India that offers board design services and product design services in electronics. Rajesh is an IEEE standards expert, an IEC standards expert, and he is a passionate advocate of LVDC (Low Voltage DC). He is part of the Indian National Committee - ETD50 of the Bureau of Indian Standards where he was involved in the drafting of an Indian Standard “Guidelines for 48V distribution”. Rajesh is the Secretary of the IEEE P2030.10.1 Working Group for the creation of a standard for Electricity Access with a 48V DC supply. He also participates in an IEC Systems Committee SyC LVDC and in Working Group 1 focused on the development of standards for low-voltage electricity access.



**Maïke Luiken** PhD, SMIEEE, IEEE-HKN, is 2021 IEEE Vice President - Member & Geographical Activities. She served as President of IEEE Canada in 2018-2019, and, in 2018 as Chair, Policy Track, IEEE Internet Initiative (2018). Currently Adjunct Research Professor at Western University, she was the founding Director of the Bluewater Technology Access Centre (now Lambton Manufacturing Innovation Centre) following eight years as Dean at Lambton College with a number of portfolios: School of Technology and Applied Sciences, in Business Development, Sustainable Development and Applied Research. Her areas of interest and expertise span diverse technical areas from ICT, energy and water to advanced manufacturing and nanotechnologies as well as technology design principles, ethics in design and policy associated with their implementation.



**Dr. Julio Romero Agüero** is Vice President, Strategy & Business Innovation at Quanta Technology. Having 25 years’ experience, he provides leadership to Quanta Technology in technology and business strategy, innovation, grid modernization, distribution systems planning, resiliency, and integration of distributed energy resources and emerging technologies. Julio has developed solutions for electric utilities and regulatory boards in the USA, Canada, Latin America, the Caribbean and Asia. He is a Senior Member of IEEE and currently serves as Vice President, Membership & Image in the IEEE PES Governing Board. Julio is Adjunct Professor at University of North

**MODERATOR**



**Eve Gadzikwa** is the Past President of African Organization for Standardization (ARSO) headquartered in Nairobi, Kenya (2016-2019). She is Chair of the Africa Standardization Strategy & Road Map for Africa 4th Industrial Revolution (A4IR) project that is being implemented in partnership with IEEE SA (USA) under the Industry Connections Program. Eve was appointed as Director General for the Standards Association of Zimbabwe in (SAZ) in 2008. In 2020, she was elected onto ISO Council for the period 2021-2023. Eve was appointed as a member of the IEEE SA Strategic and Emerging Standards Committee (SESCoM) for calendar year 2021.

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