How can energy standards help to promote Gender Equality and Social Inclusion?

March 9, 2022 10h00 – 11h00



Leonardo ENERGY Webinar Channel copper.fyi/letube

26<sup>th</sup> Webinar of the UsersTCP Academy www.userstcp.org









Reihana Mohideen University of Melbourne



Anna Åberg, Chalmers University of Technology

IEEE standards association has launched the "Dignity, Inclusion, Identity, Trust, and Agency" (DIITA) Industry Connections Program to consider causes of exclusion which can be addressed by advancing technology for humanity through standardization and related solutions. The program identifies barriers to gender equality and social inclusion with a focus on technical standards for affordability and accessibility that support the progress of practical technologies to address these barriers. The key question: How to integrate GESI considerations in the development of technical standards with the view to incorporating GESI in system design, as well as policy and planning?





10:00 -10:05 Start, welcome, housekeeping (Hans de Keulenauer and Anna Åberg)

10:05-10:20 Presentation of the DIITA workstream on Gender Equality and Social inclusion (Reihana Mohideen, University of Melbourne, Leader of the IEEE Gender Equality and Social Inclusion (GESI) Workstream)

10:20- 10:30 Introduction of the DIGNITY, INCLUSION, IDENTITY, TRUST AND AGENCY (DIITA) program (Greg Adamson, Program Chair for the IEEE SA "Dignity, Inclusion, Identity, Trust, and Agency" (DIITA) Industry Connections Program)

10:30-10:35 Comment on the relation between the UsersCTP task on Gender and Energy and the IEEE standards work (Anna Åberg, Chalmers University of Technology, Task Leader of the UsersTCP Gender and Energy Task)

10:35-10:40 Presentation of the UsersTCP (Sam Thomas)

10:40-11:00 Q&A



## How can energy standards help to promote Gender Equality and Social Inclusion?

Reihana Mohideen, Nossal Institute, University of Melbourne 9 March 2022







### The Transition



## Background

- The GESI workstream draws from over ten years of development practice integrating GESI interventions in power sector projects in developing countries, amounting to over a billion dollars in investments. Our methodology and tools draw from this body of work.
- The activities of the workstream overlap with the scope of the Dignity, Inclusion, Identity, Trust and Agency (DIITA) IEEE program.
  - To identify barriers to gender equality and social inclusion with a focus on technical standards for affordability and accessibility that support the progress of practical technologies to address these barriers.
- The key question that we address: How to integrate GESI considerations in the development of technical standards with the view to incorporating GESI in system design, as well as policy and planning?



#### Dignity, Inclusion, Identity, Trust and Agency (DIITA) Program

#### Workstreams



Internet Affordability & Accessibility

Focuses on suggesting suitable network designs with reference to technologies, identify parameters which will lead to cost reduction, growth pattern of subscribers in rural areas, technology based capital expenditure and break-even time based on different technologies.



Gender Equality and Social Inclusion (GESI)

This workstream seeks to propose technical standards to integrate GESI in system design, policy and planning.

GESI Workstream Statement of Purpose (PDF) >



#### Dignity and Agency in Al

This workstream seeks to provide guidance and principles in examining dignity and agency in relation to digital inclusion.

DIITA Dignity and Agency Activity Report > Gender Equality and Technology: A Working Concept

"Gender equality and social inclusion to foster and advance technology to benefit humanity"

UN Women: "Equality between women and men (gender equality): refers to the equal rights, responsibilities and opportunities of women and men and girls and boys" and "Equality between women and men is seen both as a human rights issue and as a precondition for, and indicator of, sustainable people-centered development".

UN Sustainable Development Goals -- "Enhance the use of enabling technology ... to promote the empowerment of women" (Goal 5) and to "ensure universal access to affordable, reliable and modern energy services" (Goal 7).

https://www.un.org/womenwatch/osagi/conceptsandefinitions.htm

# Key Elements

- a) Technology, its development, and innovation should enable and not prevent gender equality. This requires that women are drawn into the processes by which technology is designed, developed, and used.
- b) That women and girls, as well as men and boys can *afford* and *access appropriate* technologies and are not excluded from doing so because of their gender.
- c) Creating an empowering environment through *policy, regulations and standards-based solutions*.

# Metrics based on the following areas

Evaluation of social and economic consequences are important and all efforts in this space should be monitored through appropriate metrics. The metrics will be based on the following key areas:

- Demographic information about access to electrical energy/power and internet and communication technology.
- Demographic information about access to education, safe water on demand, health services.
- Improved outdoor and indoor air quality.
- Policy statements on universal access to technology and their gender appropriate formulation, by state, province, jurisdiction.
- Information about major public and private infrastructure projects in support of the above.

## **Next Steps**

### A 'White Paper' to elaborate on the workstream concept.

Introduction

- 'Gender and Technology' historical perspective
- Lessons from the Covid-19 pandemic
- IEEE policy
- UN policy,
- GESI workstream 'statement of purpose'

The need for a GESI underpinning

- GESI considerations in energy production, distribution and use
- GESI benefits of electrification

Concluding points/Pathways

- Women in STEM employment and education
- Policy and 'policy evaporation'

# Thank You!

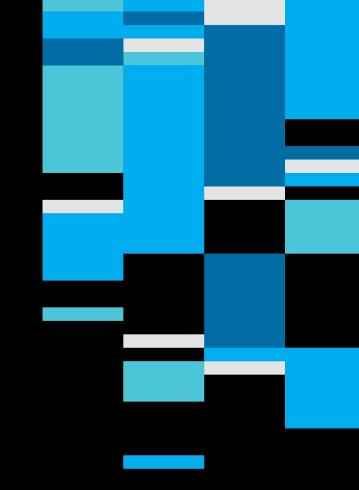
reihana.mohideen@unimelb.edu.au



# INTRODUCING DIGNITY, INCLUSION, IDENTITY, TRUST AND AGENCY (DIITA)

### WEBINAR ON HOW CAN ENERGY STANDARDS HELP TO PROMOTE GENDER EQUALITY AND SOCIAL INCLUSION

**Greg Adamson** Chair, Dignity, Inclusion, Identity, Trust and Agency (DIITA), an IEEE SA Industry Connection program



## BACKGROUND ON THE IEEE STANDARDS ASSOCIATION (SA)

IEEE is the world's largest technical professional association, with 400,000 members in 160 countries. It was originally founded in 1884. Its tagline is *Advancing Technology for the Benefit of Humanity*.

Being a professional association, our volunteers include those who are researching and building technologies that will be used in the future. We provide independent expertise on technology development, without commercial, political, or technological allegiance.

While technologists have a deep understanding of how technologies are made, we have no specialist expertise in their impact on society, and therefore collaborate with other professionals to understand this.

Based within IEEE, the IEEE Standards Association is a global *standards developing organization* (SDO) well known in both the power and energy field, in communications (the IEEE 802 series including LAN and Wi-Fi), and elsewhere.

An *industry connection* is a pre-standardization activity of IEEE SA that bring together individuals and organizations interested in initiating standards.



## DIGNITY, INCLUSION, IDENTITY, TRUST AND AGENCY (DIITA)

As the role of technology in society has grown, so has the scope of standards, far beyond purely physical parameters.

The IEEE industry connection *Global Initiative on Ethically Aligned Design*, for example, has initiated the suite of P7000 standards which address technical, ethical, and social dimensions of artificial intelligence systems.

Dignity, Inclusion, Identity, Trust and Agency (DIITA) was formed in early 2017 to consider barriers to the availability of socially beneficial technology. One of our earliest webinars looked at whether standards could address IoT-facilitated domestic abuse in the smart home.

Other workstreams and discussions examine:

- behavior in on-line gaming, a workstream based in Silicon Valley
- broadband affordability and availability in collaboration with IIT-Bombay
- ethical boundaries in using AI to monitor people with intellectual disabilities, in Australia
- the role of humans in the future of work.



## A STANDARDS-BASED APPROACH

As with many other emerging technologies, the energy transformation underway today will influence how people develop and use technology for decades. Any limitations we build in, or fail to identify, will remain barriers to technology use for many years.

Standards provide us a means of choosing technologies and technology features that benefit humanity. This extends from safe operation to the way that the community envisages its future opportunities.

DIITA provides a home for consideration of technologies beyond the traditional "technology adoption lifecycle". In addition to initiating standards, we can develop reports, white papers, and statements of best practice.

We find support beyond standards development. DIITA has a formal relationship with the *IEEE Society on Social Implications of Technology*, a multi-disciplinary society focused on the relationship between technology and society.

Please let us know if you would like to discuss these points further.





# WE INVITE YOU TO CONNECT WITH US.

#### **Greg Adamson**

Chair, Digital Inclusion, Identity, Trust and Agency g.adamson@ieee.org





445 Hoes Lane, Piscataway, NJ 08854 USA

+1 732 981 0060





Empowering all. Gender in policy and implementation for achieving transitions to sustainable energy

Anna Åberg, Task Leader.

Chalmers University of Technology



# 

# The clean energy transition is for and about people...The transition must be fair and inclusive, leaving nobody behind.

Dr. Fatih Birol, IEA Executive Director

# 3 subtasks

- Best practices of gender aware policy and technology implementation
- Barriers to gender aware policy formulation and implementation

 Designing inclusive and efficient technological interventions









## www.userstcp.org

## Contact: s.thomas@userstcp.org



User-Centred Energy Systems



About Us

The User-Centred Energy Systems mission is to provide evidence from socio-technical research on the design, social acceptance and usability of clean energy technologies to inform policy making for clean, efficient and secure energy transitions.

#### Webinars



Ľ,

UsersTCP





**Business** Models and Systems



Hard-to-**Reach Energy** 



Peer-to-Peer Energy Trading



**Behavioural** 





 $\equiv$