LUT University

Exploring energy citizenship at a community level

Kumar A., Naqvi S., Rahman T.

Exploring energy citizenship at a community level

Ajesh, Kumar
Software Engineering, LENS, LUT
University
ajesh.kumar@lut.fi

Bilal, Naqvi
Software Engineering, LENS, LUT
University
syed.naqvi@lut.fi

Tahsinur, S M, Rahman
Software Engineering, LENS, LUT
University
Tahsinur.Rahman@lut.fi

ABSTRACT

The perceptions and attitudes towards energy in communities on the use of renewable energy may vary. The workshop aims to explore diverse perceptions and attitudes toward energy citizenship in energy-transitioning communities. This workshop aims to explore energy citizenship at a community level, taking into consideration the various factors that enable or hinder individuals from taking sustainable actions. The workshop's goals are to bring diverse perspectives on energy citizenship, build a community around understanding energy citizenship, and identify important avenues for research in this area. This workshop hopes to contribute to a more nuanced understanding of energy citizenship and its potential for creating positive change by creating a space for dialogue and collaboration.

CCS CONCEPTS

• **energy citizenship**; • **energy literacy**; • **energy technology**; • **communities**;

KEYWORDS

energy citizenship, energy literacy, energy technology, communities

1 WORKSHOP THEME

Energy citizenship refers to the positive actions taken towards a green transition. Energy citizenship is a concept that has been gaining attention in recent years, as it goes beyond the traditional understanding of energy as a commodity and instead focuses on the role of individuals and communities in shaping energy systems [1]. It is typically considered from an individual perspective, however, it has been recognized that energy citizenship is not just an individual matter, but rather, transitioning to energy citizenship, by taking positive energy actions can be made easier, or harder, depending on barriers and enablers that exist at local, national, and international levels, such as policies, access to resources, socio-demographic

factors, and many more [2]. As such, it is important to explore the diverse perceptions and attitudes toward energy within energy citizenship communities and understand barriers and enablers at the individual, community, local, national, and international levels.

The workshop will focus on themes such as energy literacy where we will be interested to explore the role of energy literacy in energy citizenship, energy citizenship in the context of the aged population, the role of energy technology such as digitalization of energy information and its role in the context of energy citizenship actions, with specific attention to the digitalization of energy systems and its impact on energy citizenship, the use of energy information for fostering sustainable actions, and energy citizenship within the aged population. Additionally, the workshop will explore relevant themes from energy informatics in relation to energy citizenship.

Understanding energy and its impact on communities is essential to energy citizenship. The aging population is often overlooked in discussions on energy citizenship. This workshop will explore the theme of understanding the perspectives of older people towards energy and identifying ways to engage them in energy-related decision-making. Energy technology is rapidly evolving and transforming the way we generate and use energy. This workshop will include activities to focus on understanding the perspectives of participants towards energy technology and its impact on energy citizenship. Energy citizenship has the potential to promote sustainable and equitable community development. Through a series of interactive activities, the workshop will also seek to identify important avenues of research in this area. We hope to contribute to a more sustainable energy future for all by building a community around understanding energy citizenship. Themes of interest will include, but are not limited to:

- Digitalization of energy systems and its effect on energy citizenship
- Use of energy information for fostering sustainable actions
- Energy citizenship within the aged population

2 GOALS

The main goal is: (a) to identify the diverse perceptions of participants, (b) to enhance the understanding of communities on the subject matter including individual and communal perspectives and different barriers, and (c) to identify important avenues of research in this area. The workshop will be designed to focus on themes of energy citizenship and energy literacy, especially in the context of the aged population and energy technology.

2.1 Activities

The activities of the workshop are grouped into three distinct phases, with different types of collaborative activity within each:

- Intro on energy citizenship and presenting cases and lenses: Presentations by organizers and participants. 5-minute presentation, 2 minutes 'response' and posing questions and ideas.
- Cases and lenses – position papers unwrapped: Based on the position papers' contribution from cases and lenses, we will set up group discussions where the contributed lenses can be used for analyzing the contributed cases. The organizers will also provide cases and lenses from their own work, in case of insufficient contributions.
- Provocations: In order to understand what types of interventions should be considered for supporting communities towards energy citizenship, organizers will bring some of their own tools that are designed to gather perspectives and capture attitudes towards energy. In groups, participants will use these to provoke discussion and new ideas and approach to intervention based on either formal/informally building energy literacy or creating civic interfaces for energy citizenship. The aim is to open avenues for discussion and future research.

2.2 Outputs

Through a series of activities and discussions, the workshop aims to promote a deeper understanding of energy citizenship and its various dimensions while fostering collaboration among participants and developing new research agendas. Ultimately, the workshop seeks to contribute to the ongoing discourse on energy citizenship and its potential to create more sustainable and equitable energy systems.

3 PARTICIPANTS

The maximum number of participants is 30. The intended audience is energy researchers, social scientists, organizational actors, civic actors, energy company executives, community practitioners, and policymakers who are interested to explore how energy citizenship manifests at the community level, both in terms of individual perspective and communal perspectives.

For recruitment, the organizers will first create a publicity template with information describing the workshop and will disseminate the information through multiple websites and through the organizer's own networks. The event will be also publicized through standard channels such as Twitter and other social media channels as well as through subscribed mailing lists.

4 PUBLIC DESCRIPTION

Through a series of activities and discussions, the workshop aims to promote a deeper understanding of energy citizenship and its various dimensions while fostering collaboration among participants and developing new research agendas. Ultimately, the workshop seeks to contribute to the ongoing discourse on energy citizenship and its potential to create more sustainable and equitable energy systems. The maximum number of participants is 30. The intended audience is energy researchers, social scientists, organizational actors, civic actors, energy company executives, community practitioners, and policymakers who are interested to explore how energy

citizenship manifests at the community level, both in terms of individual perspective and communal perspectives. For recruitment, the organizers will first create a publicity template with information describing the workshop and will disseminate the information through multiple websites and through the organizer's own networks. The event will be also publicized through standard channels such as Twitter and other social media channels as well as through subscribed mailing lists.

This workshop focuses on the potentials and barriers to energy citizenship action. We invite participants interested in the mechanisms through which energy citizenship manifests at the community level, both in terms of individual and communal perspectives and the methodologies that support them. There is a growing understanding that energy citizenship is not just an individual matter, but rather, transitioning to energy citizenship, by taking positive energy actions can be made easier, or harder, depending on barriers and enablers that exist at local, national, and international levels, such as policies, access to resources, socio-demographic factors, and many more. There is a similar notion that organizations can utilize this understanding, either in improving their own practice or in creating value from this insight, such as in the design of new smart products and services. This workshop allows participants to meet with researchers and collaborate with them in energy citizenship. Participants will also gain new knowledge about energy transition, such as new research topics, new energy technology, challenges in energy transition, and understanding the individual's role in energy transition as well as communal aspects of the energy transition. The participants of the workshop will have the opportunity for research collaboration on a topic related to energy citizenship, access to cutting-edge research and leading researchers, new research topics, gain familiarity with new energy technology, knowledge about community-based energy initiatives, and understanding of individual roles in the energy transition. The participants will get an opportunity to be involved in animated and rich conversations with leading researchers and academics from varied backgrounds in the backdrop of beautiful Finnish summer. The participants will also receive a participation certificate. Details: https://coder.lut.fi/workshop/

5 ORGANIZERS

Ajesh Kumar is a doctoral student at LUT University, Finland pursuing a Ph.D. in energy informatics and energy citizenship. His research interests are in the field of Energy informatics, energy citizenship, energy interfaces, and UED (User experience design). His other research interests include Artificial Intelligence (AI), citizen science, and social aspects of software technology. He has more than 10 years of experience in the software industry.

S M Tahsinur Rahman is an MSc student at LUT University with a major in Software product management and business. His research interests are in the field of UED (User experience design) and currently working on his master's thesis in a similar field. His other research interests include Artificial Intelligence (AI), CRM, and SCRUM.

Dr. Bilal Naqvi is a post-doctoral researcher at LUT University, Finland. He received Ph.D. from LUT University, Finland. His main research interests include human aspects of security and security

implications of digitalization schemes. In addition, he is also interested in behavioral aspects such as literacy, citizenship, reskilling, and upskilling in various domains including energy. Previously he received a B.E. degree in computer software engineering and an M.S. degree in information security from the National University of Sciences and Technology, NUST, Pakistan.

REFERENCES

[1] McDonald, N.C. and Pearce, J.M., 2013. Community voices: Perspectives on renewable energy in Nunavut. Arctic, pp.94-104.
[2] Action, P., 2018. Poor people's energy outlook 2018: achieving inclusive energy access at scale. Rugby: Practical Action Publishing.