The UsersTCP Task Social License to Automate 2.0 (SLA2.0) aims to support the transition to a sustainable and smart energy system with automated demand side management through the application of the Social Licence to Automate (SLA) concept.

To achieve this, the project builds on the insights gained on deciding factors for the granting of a social license for automated DSM in the previous Task “Social License to Automate” (concluded in October 2021) and considers the role of gender and other diversity factors in energy consumption flexibility, identifies the contribution potential of energy communities, and defines flexibility consumption profiles and criteria for their standardization. Thus, the SLA2.0 will adapt the social license concept towards an integration of more diverse user groups and develop stakeholder-specific recommendations regarding flexibility profiles, engagement approaches, and energy community projects.

Results from the first project year underline that diversity dimensions impact demand side flexibility and need to be considered in program design to support participation of disadvantaged groups such as women, the energy-poor and older consumers. In relation to this they further show that the ability to address social factors plays a role in the success of energy communities and that not all types of energy communities are currently in a good position to do so. Finally, they emphasize the importance of developing solutions that allow not just single users but households to participate, therefore supporting the overcoming of information gaps resulting from chore distribution.
Major achievements during 2023/24

Within the first project year, Subtask 1 has conducted a systematic literature analysis to identify existing knowledge and gaps regarding the role of gender and other diversity dimensions in demand side management, covering papers ranging from attitudes and motivators to household dynamics, household flexibility, and energy poverty. Three workstreams for the data collection have been defined based on these results: Workstream Attitudes and Motivations provides insights into group-specific differences regarding attitudes and behaviour on a large scale; workstream Middle Actors looks at how the role of middle actors is interpreted and carried out, how this impacts the adoption of automated DSM, and who is engaged; workstream Household Dynamics explores the interrelation between household composition, household dynamics and automated DSM. Data collection and analysis are currently underway in all workstreams and results from Subtask 1 were presented at the Behaviour and Energy Efficiency Conference BEHAVE23 in Maastricht, NL (November 28-29, 2023).

Subtask 2 has developed a conceptual framework which encompasses energy community initiative's essential characteristics to inform how different types address social aspects and hence influence the likelihood of a social license (to automate). This enables a nuanced understanding of the role of social aspects in diverse EC initiatives, specifically regarding energy justice and democracy, social capital and community empowerment. An initial form of the conceptual framework was presented at the International Association for Energy Economics (IAEE) European Conference in Milan, Italy (24-27 July 2023) and a journal paper expanding on this work is currently being revised. Interview to confirm the developed typology and expand gained insights through case studies are being conducted by the team this spring.

Subtask 3 has developed a methodology for analyzing available case study datasets, identifying consumption profile markers and assessing user flexibility under consideration of different diversity dimensions. Data analysis is ongoing, and first results were presented at the BEHAVE23 Conference in Maastricht, NL.

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