



The social license to automate

What role do the middle actors have in realizing end-user flexibility?

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If the solution for the grid is end-user flexibility throw automation the question is: How to get a social license to automate?

*To articulate the **why** that is just as important as the **how** for the development of automated third-party Control of household loads. (Social license to automate/user TPC IEA, 2021)*

The **why** is more than then grid benefits, economical and environmental benefits. It can also be about **equality, fairness, comfort, playfulness etc.**

Middle actors can be organizations and people that work to coordinate, link, educate, train and in other ways facilitate work that is needed for the flexibility pilots to be implemented and maintained.

Examples of middle actors for the end-user flexibility:

- *Lady B* working at the grid company with recruitment of pilot users.
- *Mr C* working as at the key account manager for smart charging at the electricity company.
- Boards at housing cooperatives that are investing in EV charging infrastructure.
- *Mr D*, an electrician installing smart homes appliances.
- *Lady G*, working at the call center for the grid companies.
- *Mr A*, selling smarthome solutions.

How to work strategically with communication is in short supply (at the DSO). I feel like a unicorn. (middle actor)



Articulation of shared problems underpins a social license.

There are **no simple lessons** about user acceptance at different levels of automation.

Engage with publics to make new technologies work for them and with them

Support for renewable energy, or existing smart meters don't give a social license to automate

Culture frames problem scope.

Publication:
 • Adams S, Kuch D, Diamond L, Fröhlich P, Henriksen IM, Kattzeff C, Ryghaug M & Yilmaz S (2021). Social license to automate: A critical review of emerging approaches to electricity demand management. *Energy Research & Social Science*.
 • Adams S, Diamond L, Esterl T, Fröhlich P, Ghote R, Hemm R, Henriksen IM, Kattzeff C, Kuch D, Michellod JL, Lukszo Z, Nijssen K, Nystrøm S, Ryghaug M, Winzer C & Yilmaz S (2021) *Social License to Automate. Emerging approaches to demand side management*. Technology collaboration programme. IEA publication.