SMARTEES
local social innovation

SMARTEES – Social innovation Modelling Approaches to Realizing Transition to Energy Efficiency and Sustainability

SSH in Clean Energy Transition Workshop, Brussels

Presented by: Dr. Jed Cohen (cohen@energieinstitut-linz.at)

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Policy-related GOALS of SMARTEES

1. Improve modelling tools for energy policy
    - Agent-based models
2. Why have some local social innovations in energy worked so well?
    - City mobility plans
    - Renewable energy islands
    - District regeneration
    - Superblocks in cities
    - Energy efficiency fighting fuel poverty
3. Can these practices be transferred to other regions?

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Success factors of local social innovation

- A pro-active public administration
- Participatory and extended mechanisms for inclusive decision-making
- Knowledge-sharing
- Fostering local identity

For more information please see Deliverable 3.3. Policy Brief: Social innovation in the energy transition in action.

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Social innovation is a necessary complement to technological progress

A research-based example: E-mobility uptake

- Plug-in electric vehicles enjoy a market share of ~1% of vehicle purchases[1]
- E-mobility and charging technology are well-developed, but a lack of charging infrastructure is a big barrier to adoption[2]
- This is a 'chicken or the egg problem',
  - Adopters needed to spur charging infrastructure growth
  - Charging infrastructure needed to spur adoption

[1] ICCT (2017). European vehicle market statistics pocketbook 2017/18. Technical report, International Council on Clean Transportation.

[2] Biresselioglu, M.E., et. al (2018). Electric mobility in Europe: A comprehensive review of motivators and barriers in decision making processes. *Transportation Research Part A, 109*. 1-13

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What policy action can crack the chicken or the egg problem?

I. Subsidize EV adoption
   a) Shown in ECHOES to be linked to PV adoption so that policies incentivizing adoption can pay double dividends![1]
   b) Consider policies linking PV to EV purchases (e.g. cross subsidies)

II. Follow the Norwegian model of pro-active infrastructure buildup (>10,000 charge points!)

Both options are expensive…

Solution: Try to support social innovations in charge point access!

Image from VisitNorway.com

[1] Cohen, Jed, et al (2019). Q-complementarity in household adoption of photovoltaics and electricity-intensive goods: The case of electric vehicles. *Energy Economics, 83*. 567-577.

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Social innovations under consideration

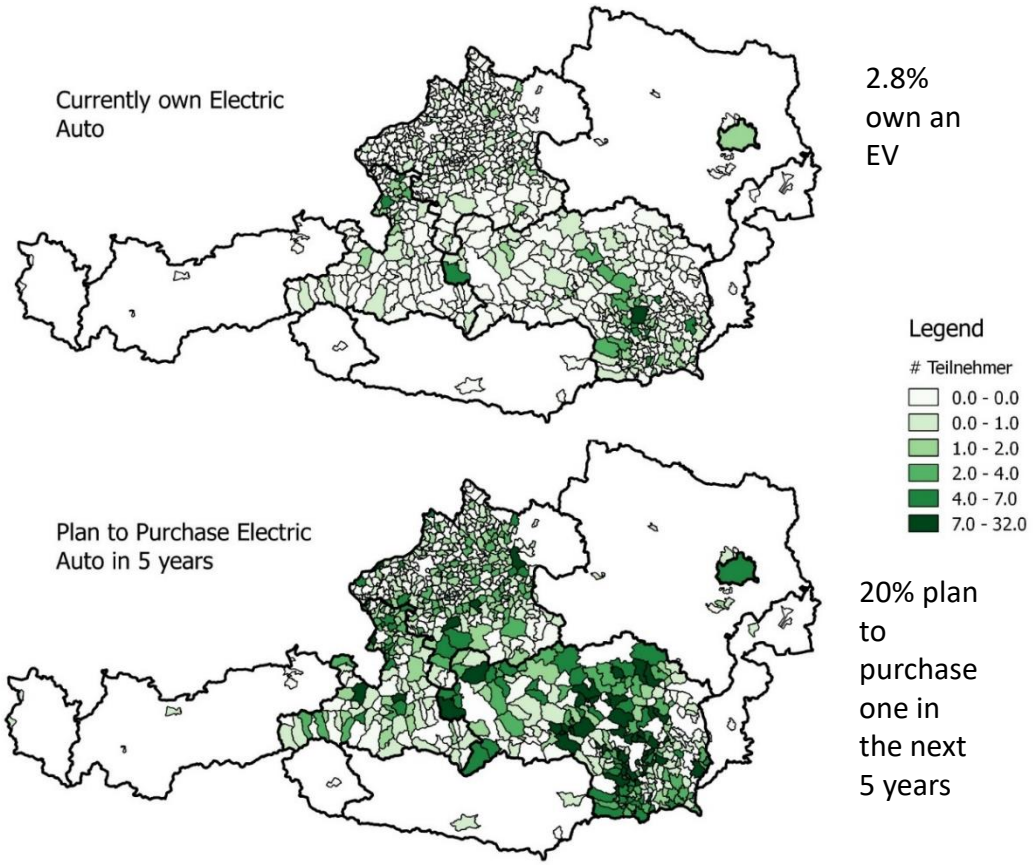
I. Community-owned charging stations.
- ✓ Neighborhood joint purchases and manages a charge point
- ✓ Most critical factors in success are the purchase cost and flexibility of use: i.e. it requires a planning app or scheduler

II. CrowdStrom Project – the Uber app for charge stations
- With the app you can rent your charge point out when you are not using it!

TAKEAWAY: Policy environments could focus on framework conditions for such social innovations and not just on subsidy programs; both are encouraged by the ED II (Figure (40), p129.)

leafs

Project survey of ~14,000 Austrians



2.8% own an EV

20% plan to purchase one in the next 5 years

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Thank you!

Stay in touch!

For more information see: local-social-innovation.eu

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