

Community-Data Loops for energy-conscious lifestyles

Towards a policy for energy conscious lifestyles: insights and policy relevance

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The present document lists insights on and policy interventions to reduce the energy use of urban households in contemporary cities. The research on which this list is based aimed at dissecting the barriers and opportunities to adapt energy practices of urban households now and into the future considering the challenge of reducing energy use overall. It did so to advance a new approach to policymaking oriented to energy 'decency' rather than energy 'efficiency'. This implies a shift from a paradigm of technological improvement to increase efficiency of existing energy use, to a paradigm of bottom-up social innovation oriented to tackle the source of energy use itself, namely the demand for energy from practices of dwelling, eating, travelling and spending free time. The following recommendations are based on the research assumption that the change of behaviour is today a necessary and urgent intervention to achieve environmental targets of CO2 reduction. The project – Codaloop – at the source of these recommendations was a three-year international research project funded by the Joint Program Initiative 'Urban Europe' between 2016 and 2019. It involved the University of Amsterdam, Yildiz Technical University of Istanbul, Graz University of Technology, Delft University of Technology, Stadtlabor Graz (an NGO) and P1M1 (a software developer).

Insight #1: Social acceptancy (Draagvlak)

Current policy approaches to energy efficiency privilege top-down technological interventions. These measures are motivated by the conviction that large-scale interventions in both production and consumption systems can bring higher cost-benefit ratios at a faster pace. Yet, these interventions often clash against the challenge of 'social acceptance' (in Dutch *draagvlak*), and often become targets of both popular dissent and industrial conservatism. Our result shows that individuals are not primarily nor exclusively driven by economic and monetary calculation. Their change in the patterns of energy consumption is also driven by processes of group imitation and identity building.

Relevance for policy: we advise to engage more directly and extensively with context sensitive social interventions aiming at *emotional mobilization*, building on existing local initiatives in the field of energy use reduction. Even more than rational arguments, emotions play a crucial role in changing behavior and need to be tackled in a context specific way. Examples of these include targeted campaigning and advertising, but also initiatives specifically oriented at upscaling virtuous examples of initiatives that have explicitly attempted to build a community around the goal of lifestyle change. Facts and numbers can play a role in this process, but 'they need a face', that is, need to be embedded in softer, emotional strategies and interpersonal relationships.

Insight #2: Environmental targets

The energy transition is a complex and multi-faceted process that is today mostly approached in a sectoral way (CO2, biomass, building sector, mobility infrastructure etc.). Because of this complexity it is often translated in terms of measurable reductions of emissions, such as CO2 (necessary for a range of measures including emission offsetting). Energy as well as CO2 remain however abstract concepts to most people. Individuals do not easily relate to the urgency of reducing emissions or changing energy sources to renewables.

Relevance for policy: In order to mobilize citizens around energy issues, it is necessary to link abstract issues of CO2 reduction to more concrete concerns, such as monetary savings, personal physical and mental health, the quality of public space and of community bonds in their neighborhoods of residence, or the future welfare of their own children and grandchildren (and perhaps more distant others). Communication and education campaigns need to be targeted towards tangible lifestyle concerns rather than abstract measures of environmental footprint reduction. These involve capillary communication at the small scale on the benefits of living sustainably, consuming less, simplifying lifestyles and reducing energy needs, in terms of health, community feeling, social capital, knowledge, self-organization, independency and pleasure.

Insight #3: Education and motivations

While there is an increased concern for the climate within the public opinion, this is still very embryonic in most contexts. The motivation to reduce energy demand is not a given and needs to be actively triggered, primarily at the local level.

Relevance for policy: Education campaigns promoting sustainable lifestyles in schools, housing blocks and neighborhoods seem to be crucial for this. Awareness campaigns for adults, based on health concerns and lifestyle quality (see point 2) are equally important. This requires concerted action by education institutions, governmental agencies and associations of the eco-social sector active in cities.

Insight #4: from global challenges to local practices

Climate policymaking today suffers a large gap between international and nationwide sectorial policies, city-regional implementation strategies and the spaces of community interaction (eg. the neighbourhood, the school, the social centre).

Relevance for policy: It is necessary to connect global challenges with local lifestyles by means of intermediary social projects and social cooperatives. Examples range from neighbourhood facilities, to energy coaches and educational activities for children. 'Sustainability teams' could be instituted to enable change on the ground in communities and neighborhoods and to allow citizens to have a direct and understandable access to regional and national climate policies. They should proactively show citizens potential benefits of reducing energy demand, but perhaps more importantly show concrete opportunities to act and give guidance through the practical steps of the implementation process. Teams rather than individuals are needed to support this because one person or guide is not enough; also, more issues and sectors need to be connected (for example, energy, housing, retail, transport, public space).

Insight #5: Infrastructures and subsidies

An essential condition for changing behavior is that different behavioral options are available. However, this is not always the case, particularly in late industrializing and urbanizing contexts, as in our project in the case of Turkey. In these contexts, also policies and investments are needed to establish different behavioral options, such as subsidies for the insulation of buildings, or the development of energy efficient transportation alternatives (e.g. public transport services, bicycle lanes). This lesson is applicable to also other countries.

Relevance for policy: There is a minimum level of infrastructure to be provided in any neighborhood, including basic sanitary conditions, electric supply, alternative modes of transportation, infrastructure for slow mobility, safe public space and the like. Yet, in many Western European contexts this minimum level of infrastructure is often already present. In those cases, resources should be shifted from efficiency targets to decency targets: subsidies can be redirected from 'greening' infrastructures to developing 'alternative' lifestyles and eventually *divest* from energy consuming infrastructures.

Insight #6: Experiments and pre-trials

Experimental policymaking is one of the key tools mobilized to explore new ways to tackle environmental targets. This is particularly the case in interventions to advance a circular economy, shared living, shared mobility, off-grid housing, energy cooperatives and the like. The role of policy makers in such experimental projects should be that of an active and peer partner of an action research aiming to inform policymaking. A model where policy makers only provide the input (issues to address) and receive an output (knowledge to apply) will not suffice.

Relevance for policy: The continuous and long-term engagement of policy makers – and their research agencies – is needed to continuously connect emergent findings to potential policy options and position them against opportunities and constraints in the policy environment that are not visible to academic researchers. This is particularly the case in 'pre-trial' phases of these experimental projects. Furthermore, continuous confrontation with emergent findings can cultivate a reflective attitude in policy makers.

Insight #7: digital tools

Digital platforms can have an added value to community learning about energy-related behaviour but the specific features, the specific goals of its use with the policy process and the position that these tools have in the policy-citizens relation is crucial.

Relevance for policy: Such platforms should not be imposed top-down, but build upon what is already in place, both in terms of existing communities and existing ways of communicating within these communities. Furthermore, on-line interaction should not be a substitute, but as a complement to face to face interactions. Face to face interactions remain essential to build and maintain trust. Without the latter, there will be no genuine sharing of experiences and beliefs, and thus an understanding of the deeper drivers and barriers of lifestyle changes. Face to face interaction are also essential for the unpredictable and often messy social interaction dynamics that are an essential condition for the generation of new, transformative ideas.