GUIDELINE: HOW TO GATHER COMMUNITY SUPPORT FOR YOUR SMART GRID

Abstract

This guideline examines how the development of the smart grid can intersect with the dynamics of energy community initiatives. It addresses not only how a particular smart grid project can facilitate the formation of an energy community, but also how community dynamics can influence consumer engagement in a project. Do's and don'ts are spelled out for the planning, recruitment and execution phase. The guideline is mainly aimed at project managers, both from community groups as well as utilities or non-energy actors, of community-involving smart energy projects.

What is it?

Humans are social beings. We learn from our peers, we compare ourselves to each other, and we draw a sense of fun and achievement from contributing to common goals. By drawing upon our social nature you can facilitate the behavioral changes needed for a successful roll out of smart grid pilots or programs. Social dynamics are the key component of energy community initiatives: a relatively recent development in the energy system that is attracting attention of policy makers and energy companies. Although smart grid pilots and roll-outs are often initiated by market parties (e.g. utilities, network operators) and government institutions, in many cases a sense of place and a sense of community may be present in the consumers.

This guideline shows you how to draw upon such community dynamics to:
- Recruit people for your smart grid program;
- Generate long term commitment among participants;
- Challenge people to change lifestyle routines in order to reduce energy consumption and costs;
- Motivate people to get involved more actively by switching roles from energy consumers to prosumers (consumers feeding their own micro-generation into the grid).

This guideline is useful both for projects led by community groups as well as projects led by utilities or existing non-energy actors (e.g. local authorities, non-profit organisations) targeted at communities.

When to use?

Is your project suitable for a community engagement approach?

Community engagement requires a lot of resources and skills, so it is useful to first consider whether and how you want to gather support for your smart grid project or rollout. The following checklist can be helpful:

- What type of community engagement is needed? What are the intended outcomes?
- Has something similar been done in the area over the last few years? Could you use this or update/adapt it?
- Is someone else already looking at this issue? Would it be better to contribute to their work instead?
- Do you have the resources (staff time, expertise and money) to do this work? Will you need to buy in specialist support?
- Do you really know your area and/or community? Have you identified local stakeholders or gatekeepers that should be involved at an early stage?
- How do you plan to communicate? How will you let others know what is happening and show that the outcomes have been achieved and the work has made a difference?

Community of place or community of interest?

Generally, two types of community can be identified:

- *Communities of place:* networks of people within a defined geographical area, e.g. a particular housing block, neighbourhood, municipality, region, island, etc.
- *Communities of interest:* networks of people who share a particular experience, demographic characteristic or interest.

As numerous smart grid pilots are currently being deployed in geographically bounded areas, such as a neighbourhood, a village or an island, these test beds open a window of opportunity for community engagement: not only by building upon existing social dynamics within communities, but also by utilizing an energy project goal that potentially unifies citizens or groups of consumers in order to add a social dimension to the social practice of energy consumption. This makes the community approach less suitable for areas with low pre-existing community dynamics.

This guideline applies primarily to communities of place with a particular interest in managing local energy resources. This could be integration of local renewable energy, helping the management of the local distribution network, offering demand side flexibility, lowering local energy-related CO_2-emissions, etc.

Use the projects' surroundings: strong sense of community (Texel Cloud Power, NL)

Texel Cloud Power (TCP) is a smart grid project on the Dutch island of Texel. The project accommodates 300 households and aims to contribute to an energy independent Texel, meaning that with the help of renewable resources the electricity demand of Texel can be served by local production – which is a policy goal of the municipality of Texel for 2020. In other words, the island has the aim of becoming self-reliant. Considering the down to earth mentality of the islanders, TCP doesn't try to push the project too hard, as this might put people off. The project manager used a Dutch expression which literally translates into: "act normal, and you'll be acting weird enough already". Due to the geographical boundaries, being surrounded by sea, there is a strong sense of place and the Texel residents share a distinct local identity. Therefore, it was decided to rename to project to 'Texel slim zelfvoorzienend' (translated as 'Texel smart and self-reliant'). The in-house display provided to participants has been named 'Kiek!', which means 'Look!' in local dialect. Although a strong sense of place can serve as a solid basis to engage participants, it can also be a possible barrier because people's expectations are high and many people know the project representatives personally, so they may not easily accept mistakes or system failures.

More information: www.texelenergie.nl/texel-slim-zelfvoorzienend/67/

Community engagement: on process or outcome?

It is of key importance to clarify why your smart grid rollout or project is portrayed as a community project. Does it relate to the outcome dimension or the process dimension of community engagement?

- The *outcome dimension,* refers to distributing of the outcomes of the initiative so that the community (socially and geographically) benefits from it (i.e. the benefits should be spread more or less evenly over members of the community);
- The *process dimension* implies that the initiative is developed and run by the community (i.e. the community participates in setting up the project and influences and/or shapes the project's contents and progress).
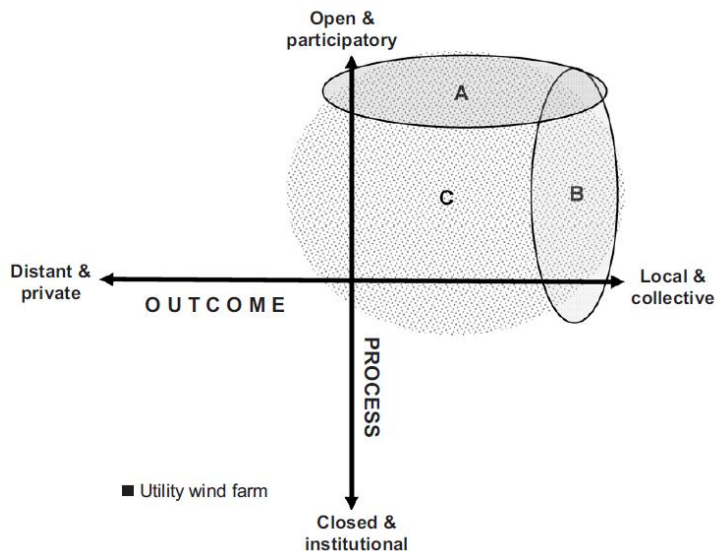
Open &
participatory

A

C   B

Distant &
private   OUTCOME   Local &
collective

PROCESS

■ Utility wind farm

Closed &
institutional

Fig. 1: Characterisation of a community project in relation to process and project outcomes (Walker and Devine-Wright, 2008):

- **Project type A puts emphasis on community involvement throughout the entire project;**
- **Project type B puts emphasis on the fair distribution of costs and benefits over the community;**
- **Project type C represents projects with a fairly 'loose' definition of the community aspects (these projects show aspects of either process or outcome community dynamics).**

It is recommended to use the S3C guideline <u>User-centred KPIs for the evaluation of smart grids</u> to check to what extent your project actually lives up to the 'community label' based on the judgement of the people involved.

Do's and don'ts

- **Build engagement in: don't bolt it on.** Effective community engagement should be thought about at the beginning of a project, not at the end. Engaging with people at every stage of the process can improve the quality of your work and create a sense of ownership amongst the people you have included.
- **Check for community engagement fatigue.** Has the community been engaged on other issues recently?
- **Start early and take time.** Engagement cannot be arranged, carried out, or used if you hurry. The most common outcome of rushed engagement is a poor one. It will make you feel that you wasted your time and the public will feel the same.

- **Be clear about the constraints.** Don't promise things you can't deliver. This is a common failure of community engagement. Be clear where the boundaries are, who makes the final decisions and what resources are available.
- **Engagement is a marathon, not a sprint.** Delivering change can take a long time. Be prepared for the long haul; everyone gets disheartened if things take forever to happen, so be realistic about timescales.
- **Communicate, communicate, communicate.** Keep people informed. Everyone involved should stay informed about the results of their involvement, especially if you eventually chose to do something differently.
- **Celebrate success.** Show what has been achieved. It fosters a sense of ownership and it can enhance your reputation as a project, utility or public body.
- **Have a champion.** The most successful strategies involve a local contact person, a gatekeeper or ambassador –often even many within a community – who really believes in the cause pushing them forward.
- **Make it meaningful.** Remember that any plans you make should lead to action. Everyone gets bored of taking part when nothing actually happens.
- **Assess your goals at every stage.** Targets should be clear and achievable – keep asking "is what we are trying to do realistic?". Announce milestones along the way. If the direction of your project does change, make sure to tell everyone why.

What do you need to do?

In the *planning phase*:
- **Engage a local energy company**. Especially in areas that are relatively isolated from the main grid (e.g. an island or remote rural areas) and thus may rely stronger on locally produced electricity, the local energy company can probably enlist support for a project that aims to solve a problem of common community interest, especially if this company is highly visible (e.g. owner of a lot of wind mills) and a trusted partner. When a local energy company initiates and manages a smart grid project, this emphasizes a sense of place and a community feeling which is usually already present in rather isolated areas.
- **Look for third party support/funding** . The process of bottom-up citizen participation can be facilitated by a third party: starting from administrational and financial consulting, IT-solutions (websites, blogs, social media, etc.) to the organization of the recruitment process and local events for future members of the cooperatives. In some countries public funding for community initiatives for deploying low-carbon technologies might be available. There are also private consulting companies specialized in setting up and supporting energy community initiatives.

- **Involve local non-energy partners with a solid reputation**. It can be advantageous to involve local, preferably non-profit organizations (e.g. a local innovation office, local mayor, community coach, etc.) in managing the project. An energy company and/or DSO (distribution system operator) can still be a main financial contributor and remain responsible for technical support, but by delegating project management tasks to local non-energy players, the project may be judged as more trustworthy. Furthermore, it is more likely to be perceived as contributing to the local common good – e.g. contributing to the environmental performance of the local community, stimulating eco-tourism, etc. This way specific energy-related issues can be connected to community issues. Hence, a smart grid project can gain more added value in the perception of consumers, than would be the case in a purely technical experimental set up. For more information, see also the S3C guideline How to identify regional stakeholders.

> **Involving local communities to secure societal support for the project (PREMIO, FR)**
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> The PREMIO project decided to develop an *in vivo* demonstration project on the neighbourhood scale and to maximize the potential of local distributed generation, demand response and local storage in order to shave peaks and in this way to contribute to grid management. The target groups included the consumers present in a real neighbourhood – i.e. both SMEs and households. Local communities in the Provence-Alpes-Côte d'Azur region of France were invited to register as volunteers for hosting the demonstration project. The community of Lambesc was chosen because local people enthusiastically showed their motivation to take part in the project (e.g. by signing a petition approving the project, by turning up very numerously at a meeting organized to present the project). Furthermore, the mayor of Lambesc was highly in favour of the project, because he was elected on a platform promising more sustainable development for the community.

When *recruiting* participants:
- **Create a local hype**. The first step is to get everyone informed by making use of local media and invite them to sign up for the project (e.g. local TV, local radio and local newspapers). It is recommended to apply insights from *social marketing*, such as setting up a social norm (helping to achieve a local goal, display that fellow residents are also joining) and creating scarcity (e.g. by limiting the number of participants that can participate in a project). When reactions slow down, more direct ways of communication, such a personalised mailing or phone calls, can be applied to invite people to join the project. Projects initiated by local partners using multiple communication channels (addressed to different types of audiences) are most likely succeed in creating a hype around the project. Knowing and understanding the local identity, being part of the local community makes the service you want to

provide to participants more valuable and of high quality. Being asked by a trusted and respected member of your community to join a project of community interest is likely to be a factor that especially facilitates initial recruitment.

- **Seek connection to local communities in several ways** to inform and recruit potential participants, for example by connecting the project communication to local festivities or cultural traditions and by involving local civil society institutions (such as sports and leisure organizations) in project recruitment. Organizing community events have also shown to be a successful way to make people familiar with the community approach envisaged.

Creating a neighbourhood hype (Rendement voor Iedereen, NL)

In October 2012 recruitment started for the smart grid pilot in Nieuwland, a neighbourhood in the city of Amersfoort. First, a leaflet about the project was distributed in the neighbourhood. This leaflet was differentiated from slick and glossy advertisements by printing it in greyscale on a green sheet of paper, and it contained a spelling mistake (to attract the reader's attention). The question "have you heard of the new residents' collective?" was printed on top. According to the project management, communication in the recruitment phase should appeal to a sense of 'civil disobedience' in order to attract attention of the potential participants. Balloons were handed out to kids in the streets and primary schools were involved to spread information about the project (aiming to reach parents by drawing their children's interest). Advertisements were published in local newspapers and an advertising trailer was placed in the neighbourhood to draw extra attention. After people had been exposed to the project a couple of times through different channels, an information event was held. Soon after, the recruitment communication stopped because there was room for only 100 households and more than that had already signed up.

More information: www.smartgridrendement.nl

In the *execution phase*:

- **Organize community events at regular project intervals**. Such events allow members from the community to meet each other face-to-face and talk about project experiences, thereby strengthening community dynamics and carrying them over from the recruitment phase to the execution phase. It also helps to have virtual interactive platforms in place. Such platforms should contain both private messages to the client supported by professionals; and community forums to exchange experiences and solve doubts.
- **Organize community co-creation**. Collect and incorporate community feedback on the design and operation of smart grid technologies and end-user interfaces used in the project and/or the new services made possible by

these technologies and interfaces. For more information see the S3C guideline Co-creation – collaborating to develop smart energy solutions.

- **Use local project ambassadors** to represent the community of consumers. By using project ambassadors, communication between the project management and the group of participants can be made multilateral instead of top down. Besides representing the consumers, project ambassadors can fulfil different roles, for example some of them can be technical experts that will be the first to try out new products while others can be responsible for the communication within the community.
- Create a **visualization of community performance**, preferably in a central location such as a town hall or central square, or in a virtual way by providing an online platform.

Dr. Energy – a virtual platform to visualize community performance (InovCity, PT)

The Dr. Energy platform was developed by EDP to fulfil the needs of consumers to have an online community to compare "me and others". The existence of a figure also established a "humanized" relationship between the supplier and the consumer. The platform joined all those elements and allowed consumers to learn from the education section with energy efficiency guide; to share their doubts, issues, tips etc. in the forum; to compare with the average community consumption; to rate others´ ideas online; and to have a personalized interaction with Dr. Energy through a chat format or email.

More information: www.drenergia.pt

Further reading

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SMART **CONSUMER**
SMART **CUSTOMER**
SMART **CITIZEN**