

Five hard questions and the need for capacity building

Author(s)

van Winden, Willem

Publication date

2022

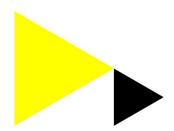
Document Version

Final published version

Link to publication

Citation for published version (APA):

van Winden, W. (2022). Five hard questions and the need for capacity building. Web publication or website https://smartcity-atelier.eu/allgemein/blog-5-hard-questions-and-the-need-for-capacity-building/



General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please contact the library: https://www.amsterdamuas.com/library/contact, or send a letter to: University Library (Library of the University of Amsterdam and Amsterdam University of Applied Sciences), Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

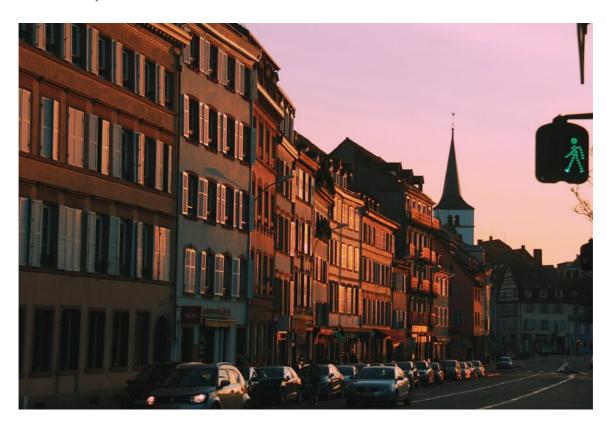






Blog: 5 hard questions and the need for capacity building

Feb 7, 2022



By Willem van Winden, professor of Urban Economic Innovation at Amsterdam University of Applied Sciences

In the Atelier project, Amsterdam and Bilbao are building Positive Energy Districts: urban districts that create more energy than they consume and do it in a CO2 neutral way. Six other European cities (Bratislava, Budapest, Copenhagen, Krakow, Matosinhos, and Riga) joined the project as fellow cities, also creating PEDs but in a somewhat later stage, building on the experiences of Bilbao and Amsterdam. Developing PEDs may sound like a great idea because climate change is an urgent crisis, and energy prices have risen dramatically in the last months. Many citizens are worried to see their bills go up along with the sea level.

To help the cities realise their PEDs, Atelier includes a capacity building programme, in which professionals in the partner cities can learn from each other and experts how to make their ambitions come true. Amsterdam University of Applied Sciences is one of the partners to design the training, learning, and coaching activities. Here are five hard questions to give an impression on what kind of knowledge and expertise is needed.

1. How does an eventual PED fit the bigger picture of the urban, regional&national energy transition and climate ambitions?

A PED is never an isolated project, it is part of a bigger system. Cities are wise to co-develop, with their citizens, an integrated vision on an effective and fair energy transition. Such a vision and strategy need not only input from the technicians and energy experts, but also from economists (costs, benefits, trade-offs and risks of various options, and how to divide them), from urban planners (what to do where), and from social scientists (behavioral change, participation). A good vision acknowledges that many high-tech and low-tech solutions are available at different prices and stages of maturity. Moreover, the diversity of urban neighborhoods and structures must be taken into account; there must be alignment with national and European energy initiatives and policy levels. A good vision builds on the future scenarios on the energy market and must be adapted regularly. A PED that is not embedded in a comprehensive vision will lead to ad-hoc experimentation with disappointing results.

2. Where should we develop a PED in the city, and what are the boundaries?

It makes a big difference if you create your PED in a run-down area with old, energy-guzzling buildings (very difficult), or in a greenfield new district where you can apply the latest building technology (much easier). Going for the difficult option could make sense because you could yield the highest efficiency gains and help the poor citizens reduce their energy bill.

3. What technologies are available, which ones do we choose, and why?

There are many options: Solar, wind, storage, trading systems, energy management systems, etc. How do we choose, and based on what? This requires a frame of reference based on which one can take such decisions.

4. How to measure and evaluate the results and outcomes?

There are many unanswered questions regarding measurement and evaluation. How exactly do we measure energy consumption, production and use, and efficiency gains? Where do we get the data from? Who owns the data? How to deal with privacy and security? How far do we go with nudging and Al solutions to induce energy saving behaviour?

5. How to engage the stakeholders?

Such as the owners of the building, the energy company, the technology suppliers, and last but not least, the citizens. This is far from easy because developing a PED has consequences for all. It is key here to co-create a PED proposition that benefits all stakeholders, including the ones with the least power: the (poor) citizens. This requires a smart "social design process" where the

stakeholders talk and negotiate what the PED should be, and who gains what.

There are many more questions, and unfortunately, we do not have all the answers. We must learn from each other, from best practices, and from experts. Our task for the coming months is to develop a great capacity building programme, together with the partners. To be continued!

(Photo credits: Unsplash)

Search

Recent Posts

Capacity building event in Budapest

E-learning course released: Shared e-hubs

ATELIER's workshop on PEDs at the Smart City Expo Barcelona

Participating at the Positive Energy Districts Conference 2022 in Amsterdam

Our presence at the Smart City Expo World Congress 2022 in Barcelona





This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 864374.