

Public Participation in Positive Energy Districts

SPARCS-Project in Leipzig West – Duncserviertel

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MORE INFORMATION

General Information

SPARCS Goals

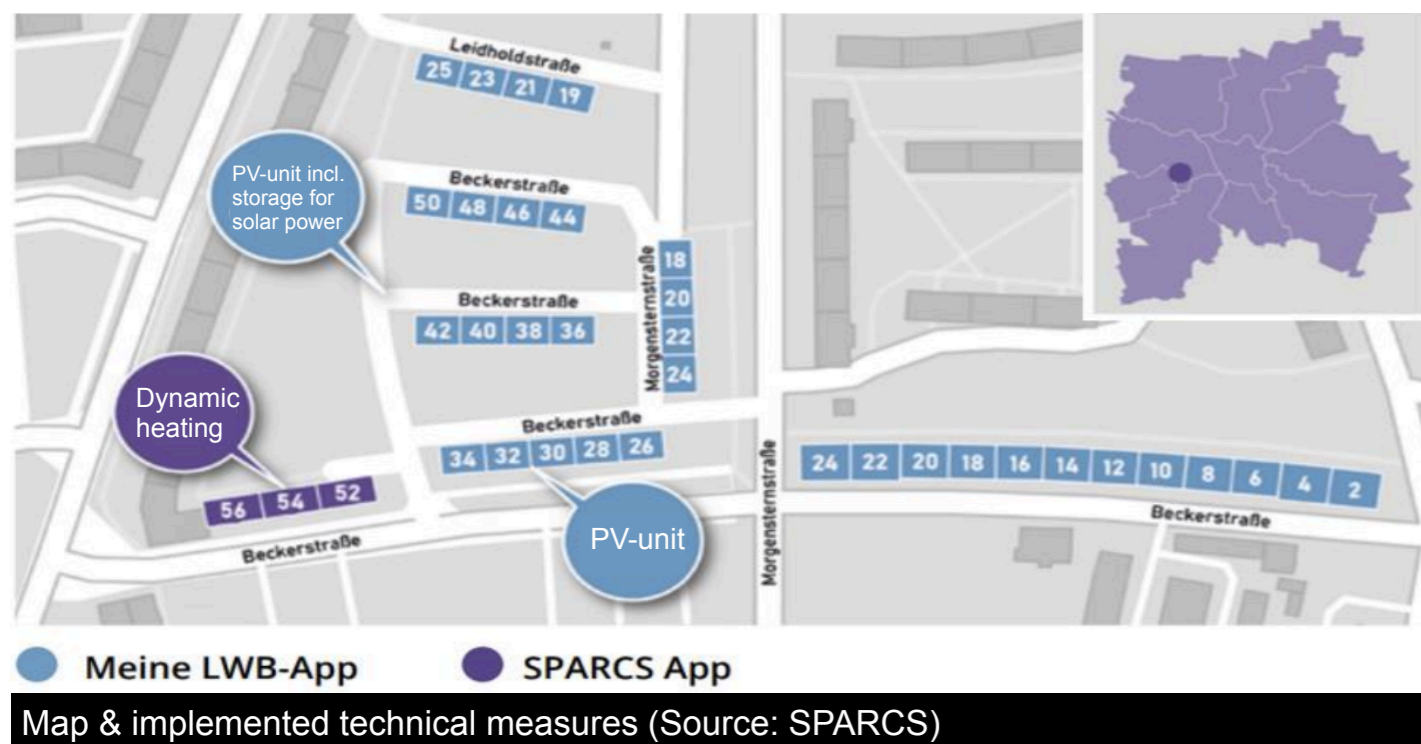
- Enable the urban transformation in cities towards PEDs.
- Integrating renewable energy sources into an existing district heating network.
- Establish a virtual power plant.
- Utilise energy storage based on old EV batteries.
- Increase awareness for the energy transition and energy sensitive consumption behaviour.

Key Data

- Seven existing social housing blocks
- 300 rental apartments
- Owned by the City of Leipzig
- Leipzig is planning to be carbon neutral by 2030
- Mostly senior residents, young low income families and families with a migration background
- Project was carried out by SPARCS, 2019-2024

SPARCS Project Partners

- Wohnen & Service Leipzig (WSL)
- Leipziger Stadtwerke
- Stadt Leipzig (LWB)
- University of Leipzig
- Fraunhofer Institute
- Centro
- Seecon
- Suite5



Selected Formats

Poster & Flyer Advertisement	
Description	Distribute information via printed media sent by postal service or public display to inform about activities, new developments, events, contactless interactions.
Target Group	Duncserviertel district citizens
Lessons Learned	<ul style="list-style-type: none"> o Early distribution o Simple yet effective to reach a wide audience o Beneficial to identify a target group based on postal code
Coffee-and-Cake	
Description	Official introduction of the project on-site in a friendly manner. Talk directly about the project goals and the tenants' vision for a sustainable neighborhood.
Target Group	WSL tenants and LWB customers
Lessons Learned	<ul style="list-style-type: none"> o First opportunity to get in direct contact with residents o Facilitated meaningful engagement o Being well visible and offering drinks and snacks increases participation
Postcard Campaign	
Description	Postcards on the topic of climate protection activities were sent out to the households. Participants were invited to colour the boxes that applied to them and send the postcards back. The boxes were sized according to their share of annual gig-emissions.
Target Group	WSL tenants and LWB customers
Lessons Learned	o Perfect solution for contactless yet interactive participation
Workshop: What does my Energy Consumption really mean?	
Description	Provide insight in the App and its features, encourage to test the app and share feedback, discuss about PV, heating cost calculations, digital solutions for energy management, energy consumption etc.
Target Group	WSL tenants and LWB customers
Lessons Learned	<ul style="list-style-type: none"> o The participants (12-15) showed great interest in the discussed topics o It is crucial for effective outreach to use eye-catchers, effective marketing, networking, identifying existing communication channels and selection of the target group o Practical energy saving tips are a great way to capture attention o Cooperation with organisations such as Caritas or Mosaik provide inclusiveness and engagement for participants at all levels of communication and knowledge o Simple language and concrete examples lead to involvement and understanding

Participation Goals

Citizen engagement and activities are key to changing urban environments. Getting local residents involved makes decision-making more democratic. It also boosts transparency and creates a feeling of involvement and shared ownership. This projects goal was to involve all important stakeholders from the start: local initiatives, businesses, and residents. It aimed to promote bottom-up participation and support to spark curiosity and acceptance for creating an energy-positive neighbourhood.

Concrete Targets

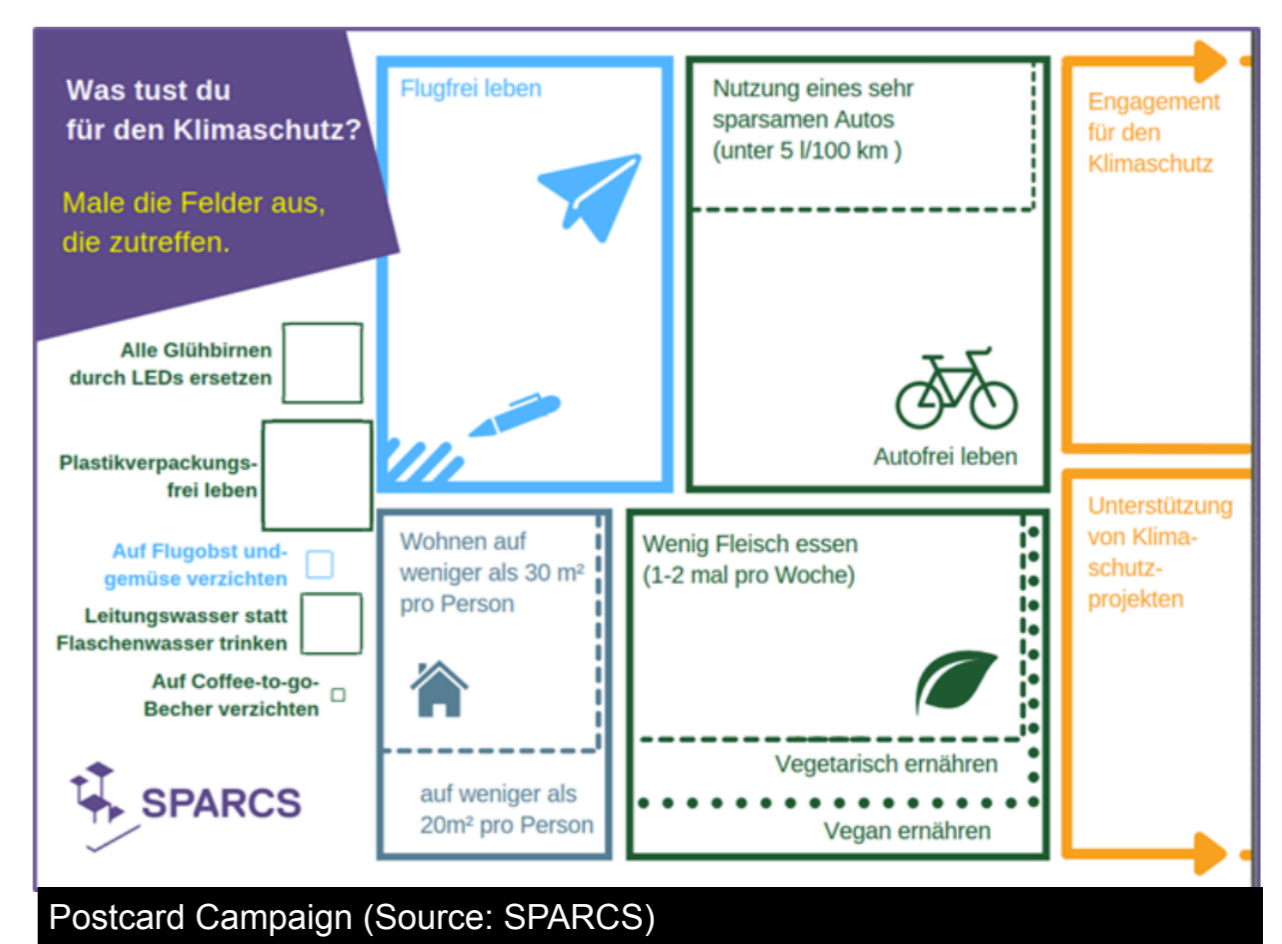
- Provide community management and energy advice to residents during the energy transition. This includes access to the virtual power plant and the smart grid.
- Identify and activate key participation groups (e.g., tenants and local companies).
- Help citizens learn about cost-effective PV installation, energy-saving habits, and joining the energy-positive community.
- Create solutions focused on users for energy-positive building blocks. For example, hold workshops and events to improve communication and discussions with citizens.
- Create and test two apps: LWB app and SPARCS app. These apps will help users save energy by showing their consumption and allowing comparisons.
- Carry out detailed research on how personal factors, like attitudes, and group factors, such as social identity, help create energy-positive districts.
- Identify effective communication strategies for collective sustainability transitions and behavioral change.



Poster workshop advertisement, provided in different languages (Source: SPARCS)



Volunteers at Coffee-and-Cake-Event (Source: SPARCS)



Postcard Campaign (Source: SPARCS)

Challenges

Communication

- Identify the target group. Consider factors like age, location, interests, socio-economics, and behavior regarding environmental and energy topics.
- Adjust communication strategies to fit the needs and interests of the target group.
- Link the project to an issue that matters to the citizens.
- E.g. Saving energy costs > saving polar bears

Participation

- Low participation levels lead to lower acceptance and thus success of the project
- Low community self-efficacy leads to low participation levels.
- To overcome this, first a sense of community has to be established e.g. by more bottom-up focus.
- Low level of willingness to use the apps
- Develop user-centric technical solutions in the dialogue.

Research

- A small sample size of 300 households and a low return rate of 10%-28% limit statistical analysis.
- Low participation in the app's use leads to a further limited database.
- More engagement in participants' advertisement is needed to increase the database.
- Engage more in successful formats (e.g. Energy Consultation Hours)