Working package 3 deliverables

Smart-BEEiS Human-Centric **Energy Districts**

Socio-economic factors & Citizens' practices, enabling Positive **Energy Districts**

Coordinators: Minh Thu Nguyen¹, Luca Lamonaca¹, Han Kyul Yoo²

Collaborators: Adam Hearn³, Darja Mihailova³, Nicolas Caballero⁴

Editors: Dr. Kostas Galanakis⁵, Dr. Susana Batel¹, Prof. Dr. Robert Ackrill⁵

¹ ISCTE-IUL; ² WUR; ³Basel University; ⁴Eurac; ⁵NTU













This project has received funding from European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie Actions, Innovative Training Networks, Grant Agreement No 812730



Aims of Work Package 3

Aim: Develop a practical tool that popularises the evidence based knowledge of the relationships between socio-economic factors and citizens' practices, enabling citizens to become active promoters of PEDs. To develop strategies that can positively influence policy makers towards sustainable behaviour patterns which will be used to advise at city/town council level.

Tasks	Deliverable
Task 3.1 – Generating evidence based understanding of socio-economic, psychological and political factors creating and/or enabling the creation of PEDs	D3.2. Challenging 'silo' type thinking on promoting PEDs, a socio-psychological approach
Task 3.2 – Changing citizens' ideas and practices towards PEDs	D3.3 . 'Help me to Achieve' online self-guide manual and Video: Energy justice starts with you
Task 3.3 — Shaping stakeholders' practices	D3.4. Round Table Executive ReportD3.5 Advisory report on Accelerating PED Design

D3.2 Challenge silo thinking in designing PEDs



Silo thinking is the pursuit of one individual or group's interest or objectives without considering or recognising others' viewpoints and interests inside or outside of the organisation, discipline or community.

- **Disciplinary silos** between technical and social experts at different levels;
- Administrative silos between different government departments;
- Institutional silos between local authorities, businesses and NGOs in collaboration;
- **Silos of representation** of local authority about public responses and their participations in PEDs;
- **Silos of context** that persists in the adoption, replication and scaling-up of PED.

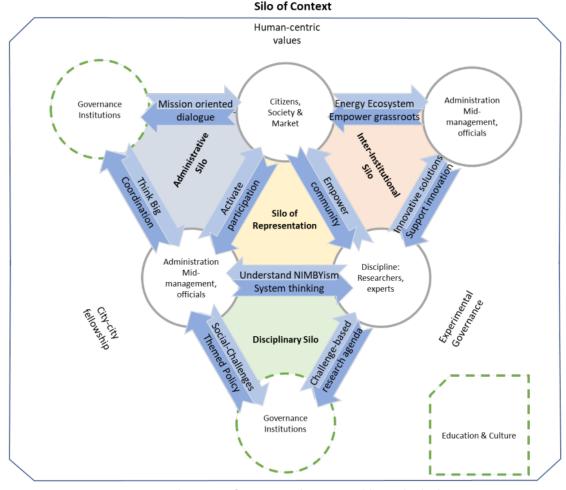


Figure 3-1. The nexus of recommendations to address silo-thinking

D3.5 Advisory report to accelerating PEDs



Silo thinking issues identified from interviews with stakeholders from Amsterdam, the Canary Islands, and Lisbon metropolitan area:

- Institutional silos between citizens who want to consume affordable renewable energy produced in the community, and large companies who are concerned with efficiency and profit (Amsterdam, Canary islands, Lisbon)
- **Silo of representation** of citizens about the reluctance of businesses to come out of their profit-driven practices (Amsterdam)
- Silo of representation about citizens' knowledge and willingness to participate in PEDs projects that make citizens feel less empowered to collaborate as an equal partner with the government or large businesses (Canary islands)
- Administrative silos that hinder the government's financial support of cross sectoral energy transition efforts such as housing retrofit projects (Lisbon)



Recommendations from D3.2 and D3.5



From D3.2	From stakeholders in D3.5
 Structural change: provide legal framework and incentives for local government and companies to engage more with citizens and small businesses 	 Local government subsidizes energy consultation (Amsterdam) Provide new resources and means of participation for citizens (Canary islands)
 Intermediary actors: facilitate communication and collaboration between government sectors and between stakeholders 	 One-stop shop for retrofit information and dedicate housing department as coordinator (Lisbon) Research institute as coordinator between stakeholders and sectors (Canary islands)
 Intergroup communication: citizens and small businesses to acquire more information and voice their demands, breaking from misrecognition and exclusion. 	 Companies get in personal contact with potential citizens (Amsterdam) Municipality as champion in engaging different sectors and stakeholders (Lisbon) Build culture of collaboration not competition and Provide transparent information and training to citizens (Canary islands)

D3.4 – Round-table discussion on local energy transition

Yoo, Han Kyul¹, Nguyen, Minh-Thu², Lamonaca, Luca^{2*} ¹Wageningen University; ²ISCTE-IUL;



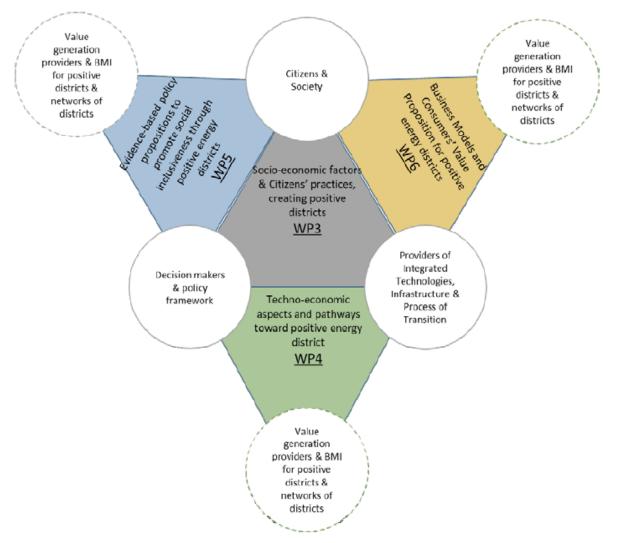




Figure 1. Smart-BEEjS Nexus of actors, challenges and goals



Background

The roundtable was based on previous Smart Beejs' deliverable (D3.2, D4.2, D6.2) interviews held across the European regions (8) participating in the project: Canary Islands, Lisbon metropolitan area, Amsterdam metropolitan area, Wien metropolitan area, Ruhr region, Switzerland, Italy, Nottingham (UK).

In each region, 3-10 interviews were conducted with diverse types of stakeholders, on the current status quo schematically covering the aims of 4 WPs.

The round-table was organised as a 2-hour online session, on March 2021.

Smart-BEEjS Human-Centric Energy Districts

Aims

The key theme of the round-table discussion was the perceptions of the stakeholders regarding the main drivers and challenges that these regions face currently in their efforts to deliver a sustainable energy transition. The four dimensions explored during the round-table were:

- (a) the level of collaboration among municipalities and citizens in the different regions;
- (b) critical infrastructure changes and needs for achieving a decentralised energy system;
- (c) types of social values that might possibly be incorporated into different business models;
- (d) insights into the phenomenon of energy poverty during the energy transition in each region

The insights were then explored in the next WP presentations.

The round-table was organised as a 2-hour online session. March 2021.

Results/WP3: Municipalities' and Citizens' Collaboration



- Public-private collaboration is key, but novel means to leverage resources are essential
- such as:
- > Creation of dedicated agency run by the municipality for mediation and to work to incentivise the private sector and NGOs
- 'crowd funding' approach that engages citizens and other institutional funders
- Citizens' participation is key, but the public is not a homogenous and passive group

Stakeholders emphasised that citizens should be involved at early stage of planning and public policy and technology developers should not take the public as a homogenous group.

Perspective-shift to holistic benefits

This discussion necessitates a shift in business and utilities' motivation, from economic growth to a holistic urban planning perspective.

Results/WP4: Infrastructure and related policy shifts



National vs local levels of preparedness

In several countries misaligned between national and local governace (e.g.: workforce capabilities, regulatory barriers).

The notion of value – a conflict of interest (Split incentives Dilemma)

Where the municipalities own utilities and/or have district heating systems there is a conflict of interest. This phenomenon occurs more frequently for private providers. The users will benefit from decreased energy consumption or self-consumption while the owners of the energy systems would lose revenue.

Results/WP6: Incorporation of social and environmental aspects in business modelS



- Values: Inclusiveness, ownership, and transition to renewables
- Enabler: Well-designed and trustworthy citizen groups, such as energy cooperatives

Citizen-group stakeholders



- Values: Well-being
- Enabler: Quantifying social benefits, such as humidity level improvements from housing retrofits.

Government stakeholders



- Values: Transition to renewables
- Enabler: Persuasively communicating costs and benefits of renewable energy systems to homeowners.

Business stakeholders



Social and environmental values and enablers by stakeholder group

Results/WP5: Energy Poverty



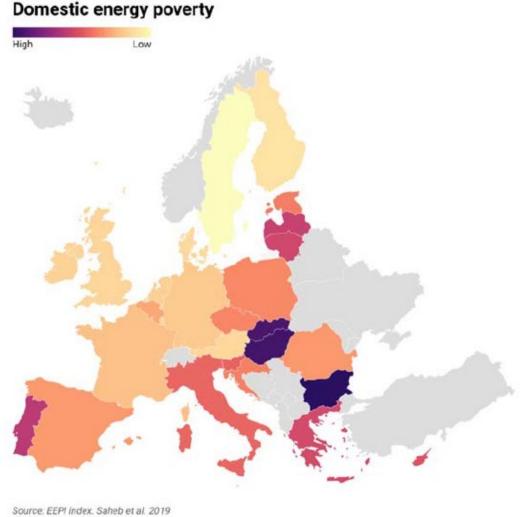
Energy poverty awareness

Mainly interpreted as a domestic energy poverty. Awareness varied wildly across participants depending on their region, depending upon by their levels of energy poverty and whether it is addressed explicitly in policies.

Public grants are needed to tackle energy poverty

Energy justice

Notably, few participants mentioned energy justice issues that apply to all regions. Energy needs of different segments of the population need to be addressed.



Created with Datawrapper

Thanks for your attention!

Smart-BEEjS Human-Centric Energy Districts

Contact us:

Minh Thu Nguyen@iscte-iul.pt

Luca Lamonaca@iscte-iul.pt

Hankyul.Yoo@wur.nl



This project has received funding from European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie Actions, Innovative Training Networks, Grant Agreement No 812730