



Towards Energy Citizenship for a just and inclusive transition:
lessons learned on collaborative approach of Positive Energy
Districts from the EU Horizon2020
Smart Cities and Communities projects

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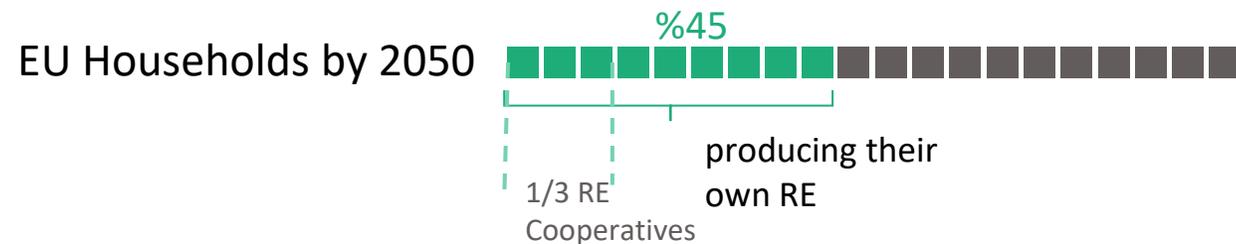
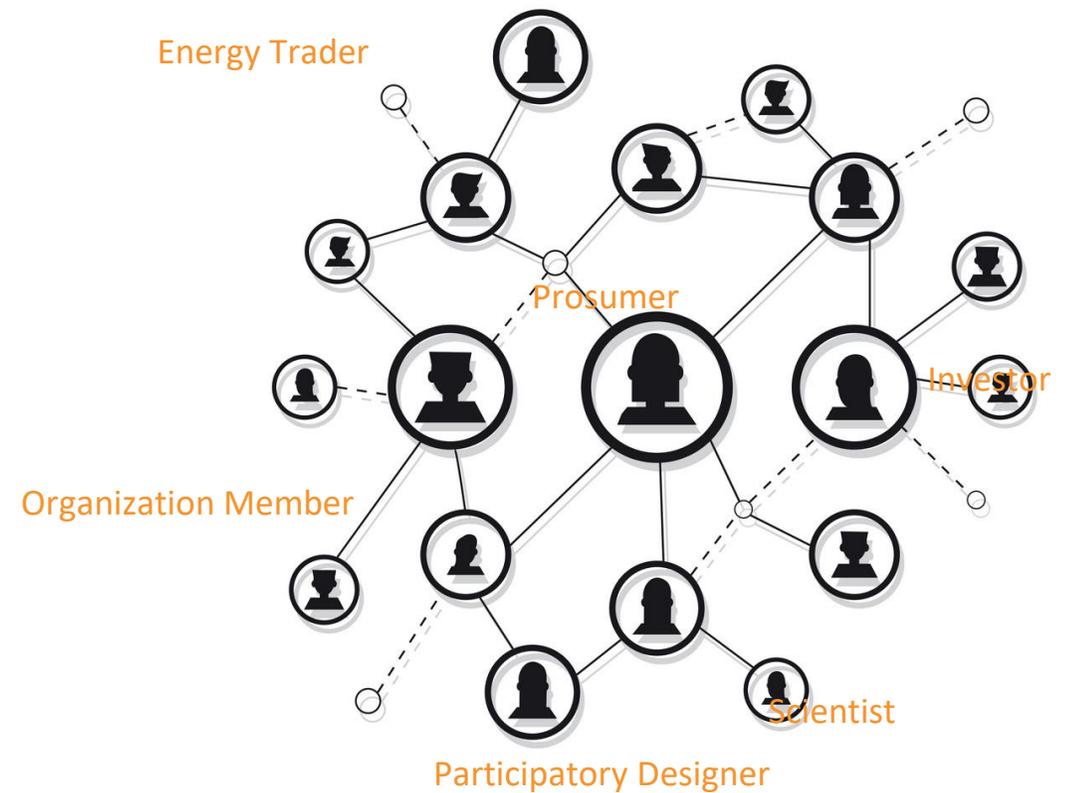
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New role of EU citizens

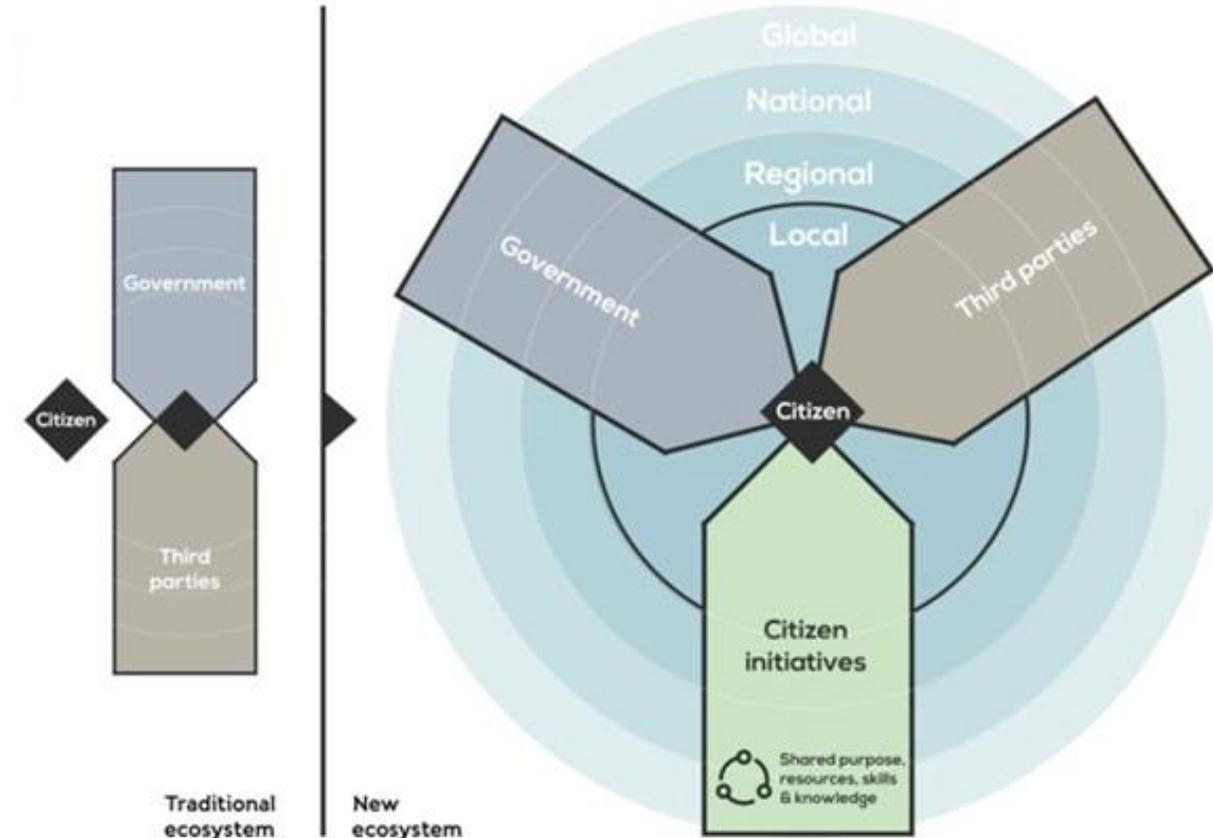
Paris Agreement
UN Sustainable Development Goals (7,8,11,13)
Clean Energy Package for all Europeans
EU Green Deal

- **Citizens at the heart** of the decarbonisation pathway
- **Fair and inclusive transition** towards carbon neutrality
- The transition will not only require substantial investments across Europe but also the **involvement of the relevant stakeholders** from public and private sectors (investors, providers, designers, policy-makers) as well as all the **EU citizens** (prosumers, energy traders, organization members and participatory designers).



Energy Citizenship (1/2)

- Traditional market approach
 - Citizens involved in energy production without investing in – for their own benefit as passive consumers
 - Individuals as homo economicus
- Multilevel integrated approach towards neutrality
 - New ecosystem where citizens become more active, co-managing with relevant stakeholders, the government and third parties
 - Shift from citizens-as-consumers to energy citizens
 - Move beyond individualistic approaches in order to include collective and inclusive spaces for participation and engagement



(Gunnerer Power, D3.23, Report, Making City, 2019)

Energy Citizenship (2/2)

- Low-carbon communities
 - Can decide and act upon their own energy production and consumption, not only within the dwelling but also including other dimensions of their lifestyle
 - place-based
 - linked to certain geographical boundaries
 - interest-based
 - Digital communities

Energy citizenship means seeing *energy as an ecological resource and as a social necessity, subject to collective decision making* NOT as commodity

Role of cities

- How to best harmonise and mainstream climate policy across sectors
- How to choose and integrate low-carbon technologies
- How to ensure citizens and businesses buy in

Positive Energy District (PED)

Energy-efficient and energy-flexible urban areas or groups of connected buildings which produce net zero greenhouse gas emissions and actively manage an annual local or regional surplus production of renewable energy. They require integration of different systems and infrastructures and interaction between buildings, the users and the regional energy, mobility, and ICT systems, while securing the energy supply and a good life for all in line with social, economic, and environmental sustainability

(JPI Urban Europe, 2020)

Use cases



*Citizen engagement strategy
for implementation of city
vision 2020 & PED designs in
FWCs*



*Local Energy Market as
trading system for local
communities*



*Peer-to-peer energy trading
platform as market-based*

Making City



*Groningen, Oulu,
The Netherlands Finland*

Atelier



Amsterdam, The Netherlands *Bilbao, Spain*

Pocityf



Alkmaar, Evora
The Netherlands Portugal

Conclusions



- Strong city visions that people recognize and value
- Bottom-up approach at district level to create and share knowledge, and to develop district energy plans and PED developments



- Development of PEB started by the local community
- Smart grid is owned by the community
- Ad hoc regulation that allows the distribution, the share and the trade of RES between private residents



- P2P energy trading platforms are developed to allow citizens to become key stakeholders within the decision-making process

Conclusions

- There is an enormous innovation potential of a combined approach towards physical energy transition investments and societal engagement
- Intensified participatory processes, including partners that are relatively new to the table of the urban energy transition, induce traditionally established partners to seek for integrated, collective solutions
- Currently, many European cities are exploring, shaping and formalising policies that will structure their views and actions towards energy citizenship.
- Next steps towards energy citizenship:
 - ✓ Participation and engagement should be considered as multi-scalar and multi-level paths
 - ✓ The public interest of energy citizenship legitimates public actions and public tool choices
 - ✓ A quantified substantiation of the added value of the integrated planning claim.



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Thank you for your attention