



# Just smart energy platforms

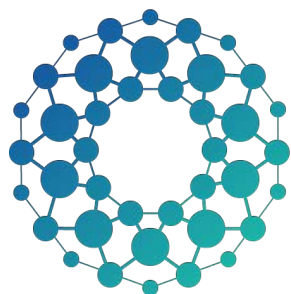
And the challenges of co-creation

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# Theses



- We're in the long transition phase of smart collective solution for the foreseeable future – break-downs *are* the system
- We're running the risk that flexibility is being over-engineered and smartness is getting too complicated
- Co-creation should be standard feature and competence in organizations developing smart energy solutions



NRG2  
PEERS

LIGHTNESS



# Break-downs

*They aren't logical, the graphs in the energy dashboard. The first few days - you have this blue colour, that's your own consumption - but you see here, where you have two hours of zero consumption but also a reduction in battery capacity - you know: something isn't right. Somewhere the meter is off. There's a reduction in capacity, so there must be consumption - there's no other way. I'm still trying to figure things out: what's really happening?*

# Insight



*How do we know if the system works?  
We basically have to assume that it works."*

*My first feeling is that of failure. I think it is my responsibility, because others can do it, yet I cannot. (...). I cannot call Eneco [DSO], but have to bother my neighbour...*

# Break-downs

# Automation





*We didn't want the heat pump to start up at night, because of the noise. So a mechanic replaced our thermostat, programmed it to go down a degree at night and go back up in the morning, and voila! See, that's the kind of thing [automated solution] we're looking for!*

*I want to have insight into the house. I simply want to understand what's happening in my own home.*

*"Twice it was over 25 degrees here, and we're unable to get it colder. Remotely they could reset it the heat pump, which is clever. No one had to come by. But on the other hand, I feel like, I want to be able to do it myself, because if they can do it remotely it should also be possible here."*

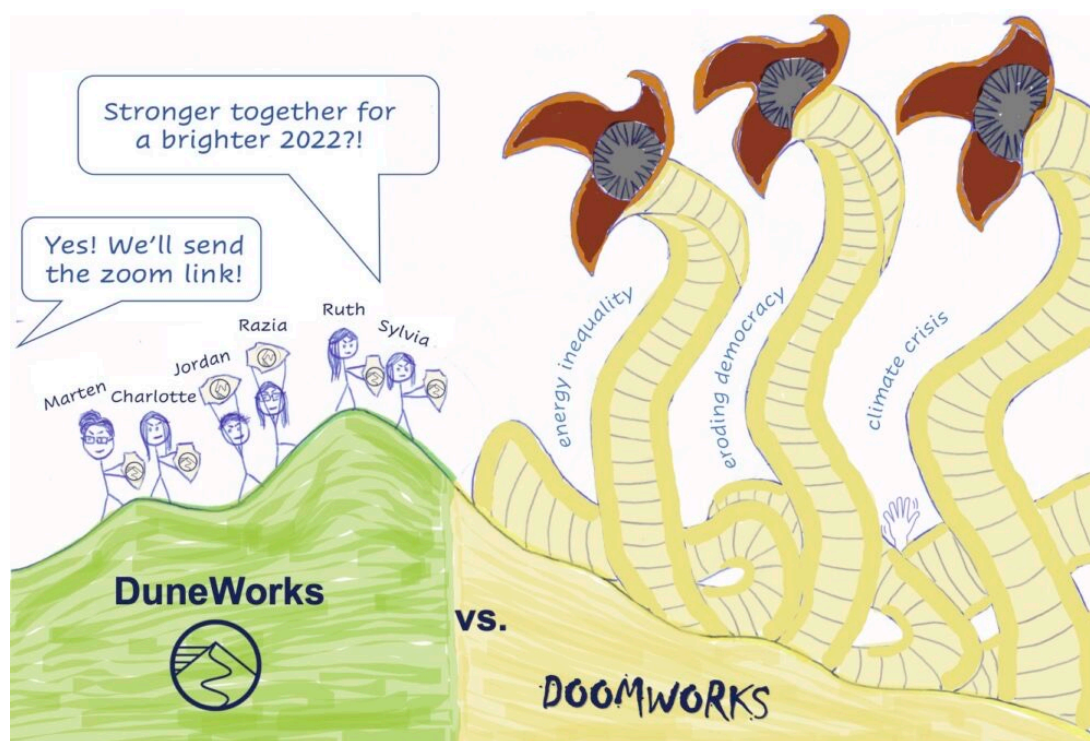
# Complexity



- Residential users are asked to manage the stability of the grid
- Solutions are grid focused solutions so far, user-focused solutions still in infancy
- Value for the grid: ; value for the user: 



# DuneWorks



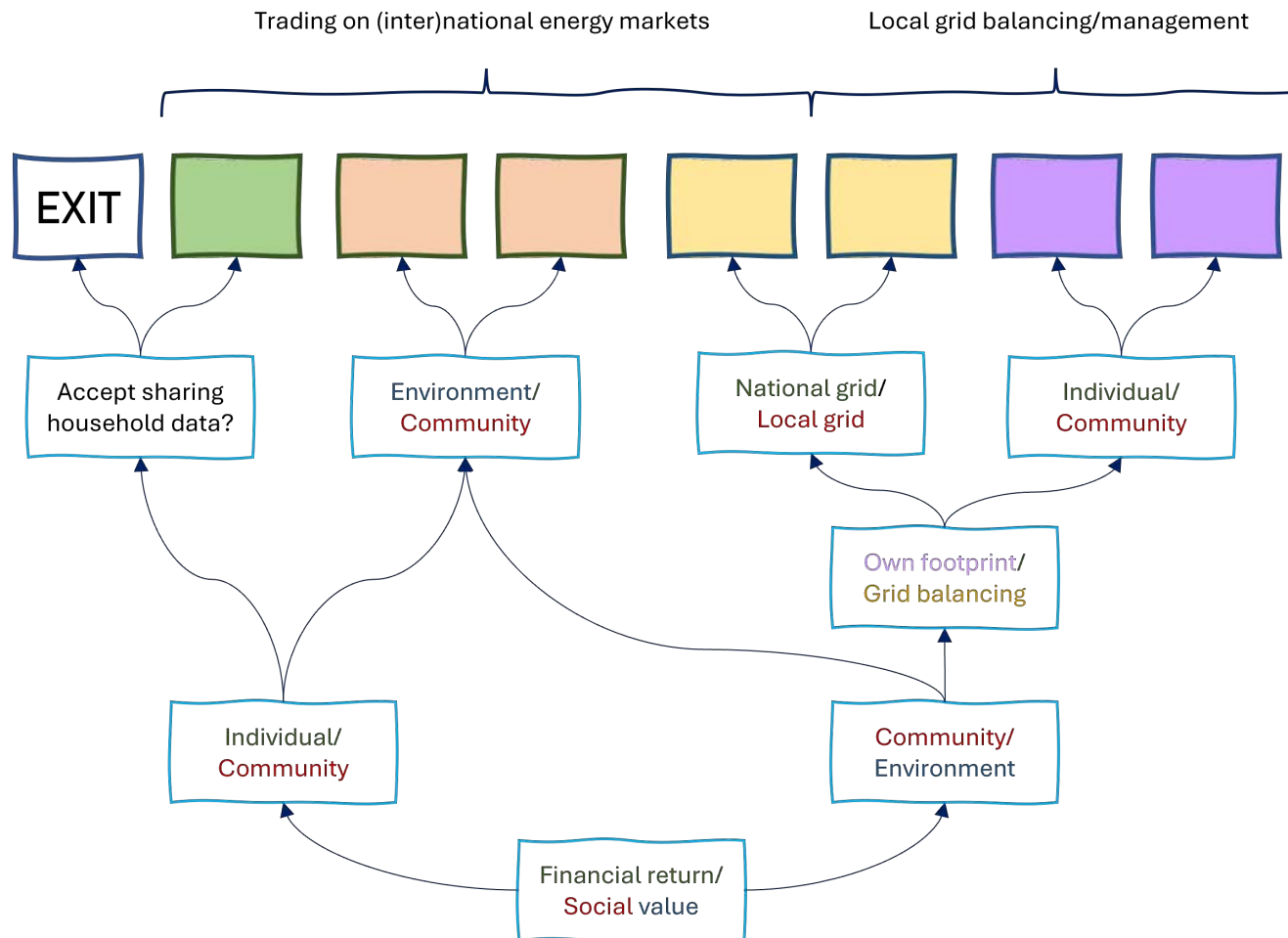
We work towards a democratic and just sustainable society.

We do research, advice, workshops, trainings and project coordination.

# Our questions for (just) co-creation

- How will communities acquire the capabilities to make collective informed decisions?
- How can we design for and with *communities*?
- Finally, access to energy is a human right and public good. How can we do justice to ethical and regulatory frameworks?





# Design for and with communities



- The energy community values game allowed residents to talk about who they were to each other and what role they wanted or felt ready to take on the world (of energy).
- Go beyond expressing their (pre-existing) opinions.
- Reassertion over the script for their neighbourhood and their homes.

# Energy as right and public good



- Next steps - business model development?
- Privatization of next-gen energy system
- Who's responsible?



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*This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 957823*





# Design for and with communities

- Does the workshop show a path forward in designing for communities? The Voorhout participants still had pretty vague ideas about what it means to be an energy community. These were their first-time reflections. The only thing that stood out clearly was the sphere of legitimate collective action was bounded by the protection of privacy and preservation of autonomy.



# Safe, affordable, and accessible energy system

- Right from the get-go, in each of the four groups, there was a vocal group that adamantly advocated financial return.
- Prioritizing community as value pushed the question of distribution to the forefront: for if you do something with each other and for each other, who is going to put something in, and who is going to get something out of it?
- This discussion excerpt and the preceding one do show two things: the importance of being well-informed – well-equipped – to make well-informed decisions as a community. To know what options are out there and what their practical implications would be. Second, trust (in the sustainability of the value proposition, in the fairness of its financial model) and therefore engagement with the system depend decisively on whether the details have been thought through (whether ex-ante, in co-design or ex-post, in operational practice).



# Co-creation

- Not just with users, but also among business and regulatory / partners in the supply chain