
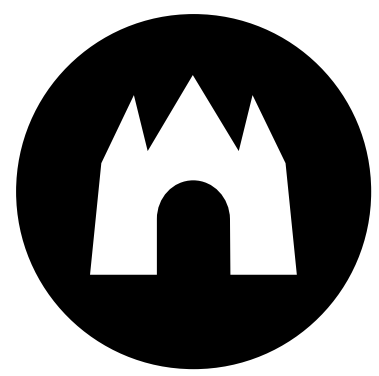

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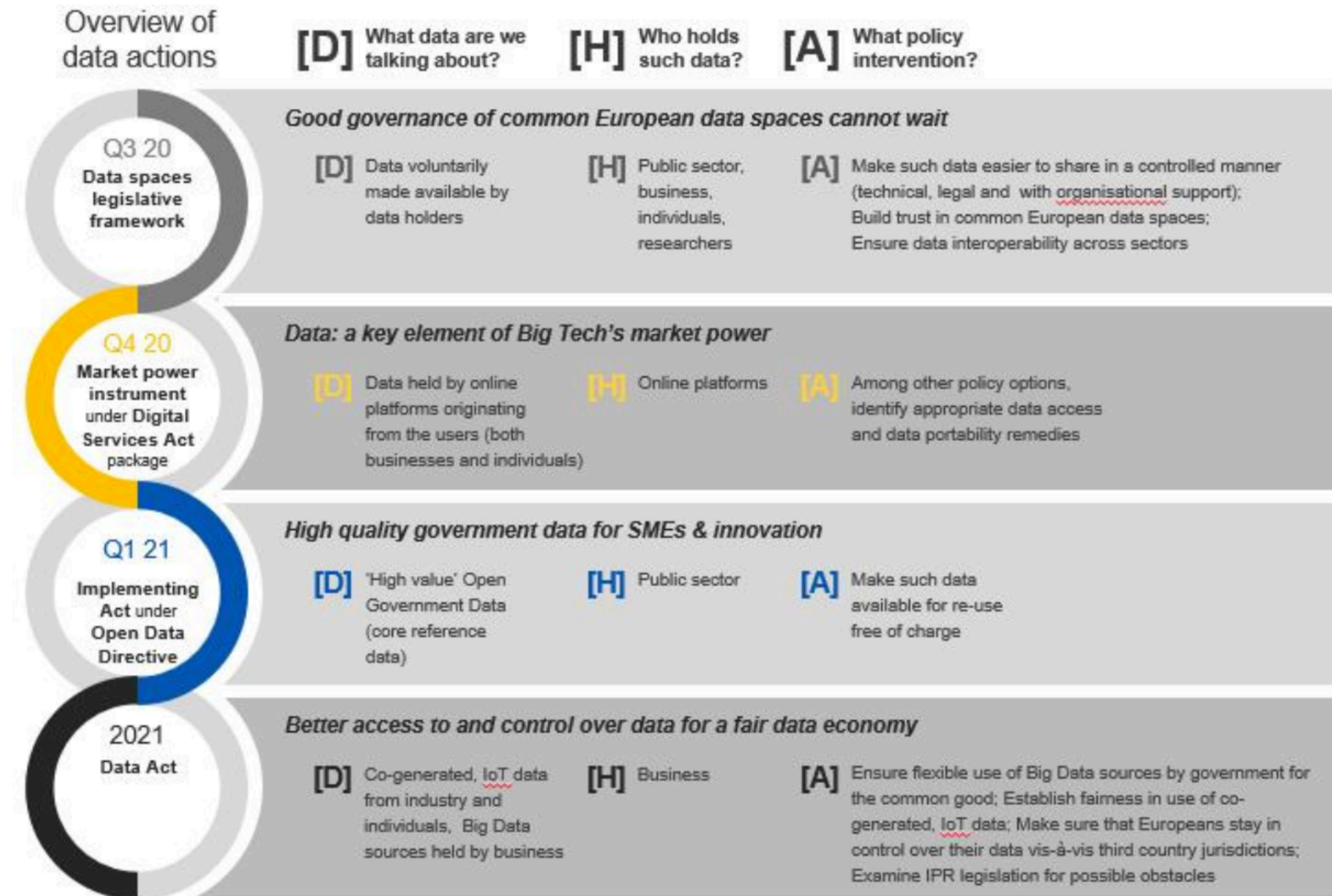
**(Data) commons for better value-
based collaborations**

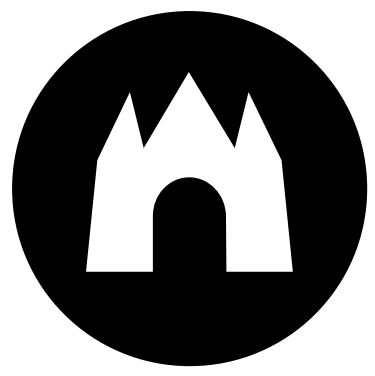
Open Donderdag lezing, 19 oktober 2023
Danny Lämmerhirt, Lab Lead Future Internet Lab



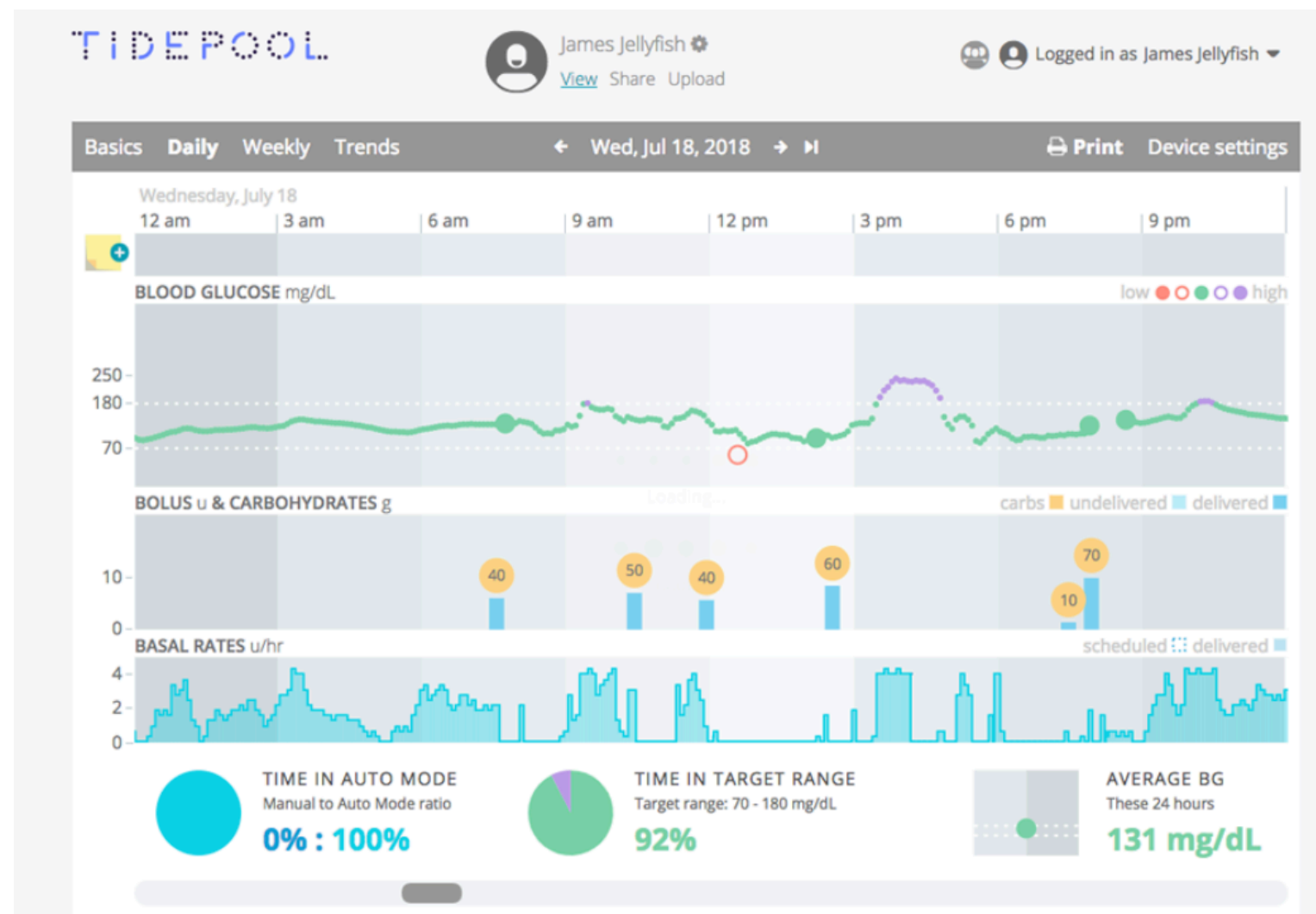
Background: EU policy on data intermediaries

- **The EU's turn to data intermediation:** Legislative proposals (e.g. Data Governance Act) support “trusted data intermediaries” and “data altruism organisations” that act in the public interest.
- **Opportunity:** Laws describe enabling conditions for collective uses of data (e.g. trust mechanisms, mandates for neutrality, interoperability, etc.).
- **Limitations:** Framing data as resource brackets the context of real-world cases; data intermediaries serve specific policy goals.





From data intermediaries to commoning of/with data

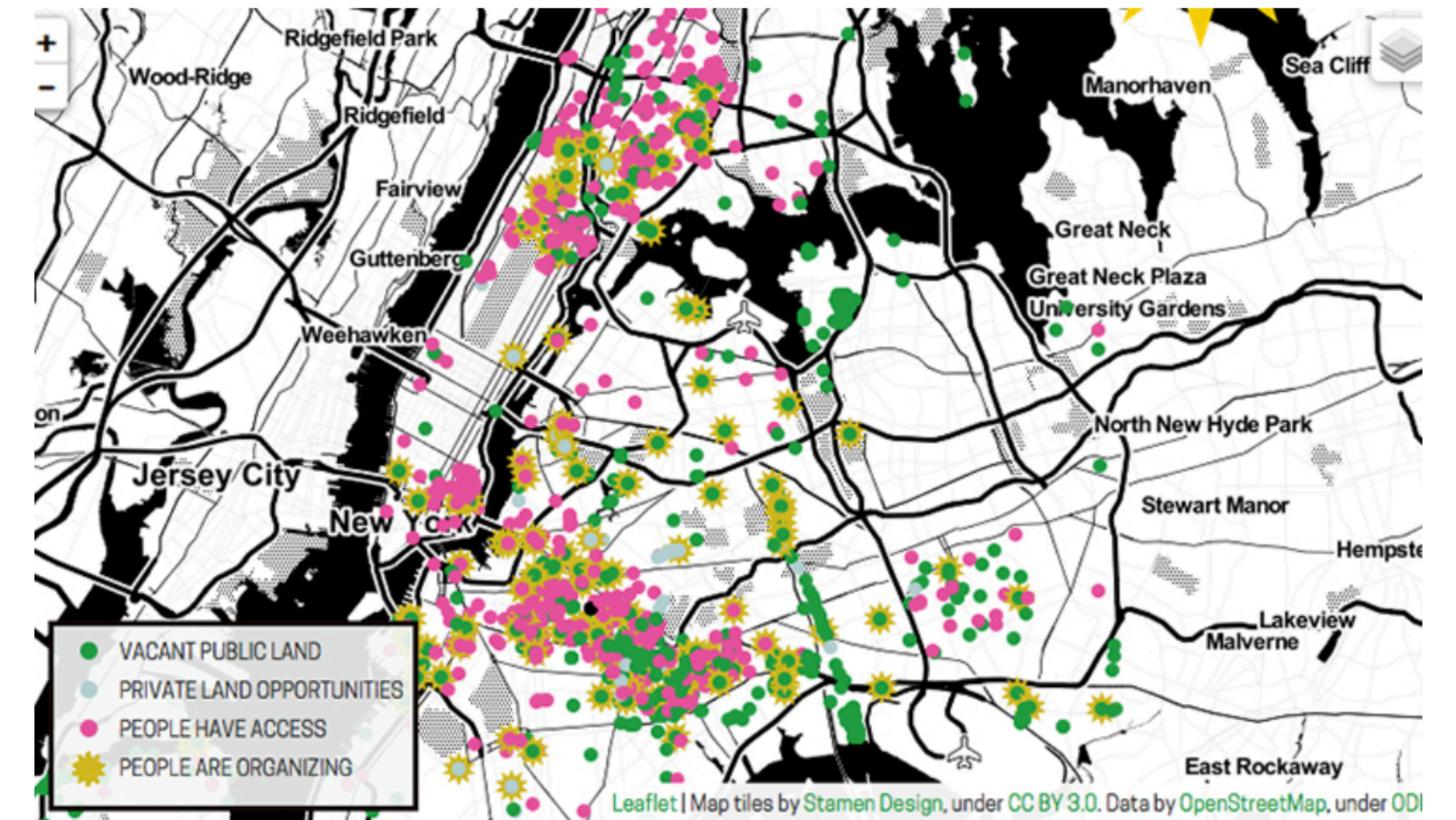


Monitor glucose data to help diabetics guide their daily insulin intake

Take control of your work.

Community Insights puts the raw data in your hands so you can decide what works best for you.

Retrieve fares from ride sharing apps to inform gig workers about prices



Analyze open land data to influence urban land use



Waag Futurelab & the Commons Lab

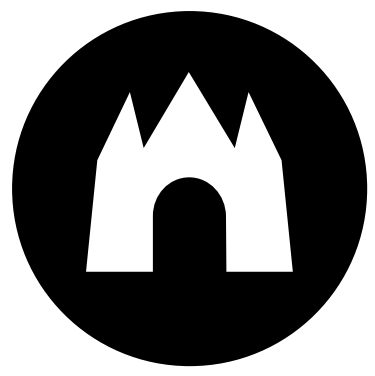
- **Waag Futurelab's Commons Lab:** develops digital media to support collaborations around issues of societal concern, as well as common resource pools. Ostrom's **commons principles** inspire our design and public research methods.
- **Argument 1:** Data is not only a resource to be governed (data as commons), but also a means to organize cooperation around common goals (shared values/resources as commons).
- **Argument 2:** What data is useful for communities depends on the social relations and behaviors we want to nurture.



The origins of the commons concept

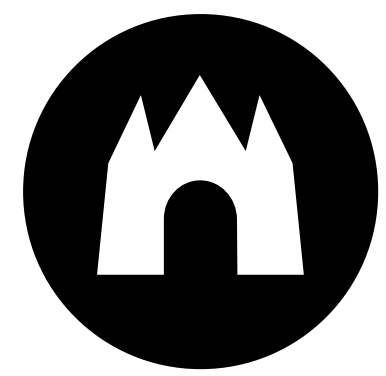


1. Define clear group boundaries
2. Match rules to local needs and conditions
3. Those affected can participate in rule-making
4. Rules are respected by outside authorities
5. Members monitor each others' behaviour
6. Use graduated sanctions for rule violators
7. Accessible means for dispute resolution
8. Nested commons for interconnected systems



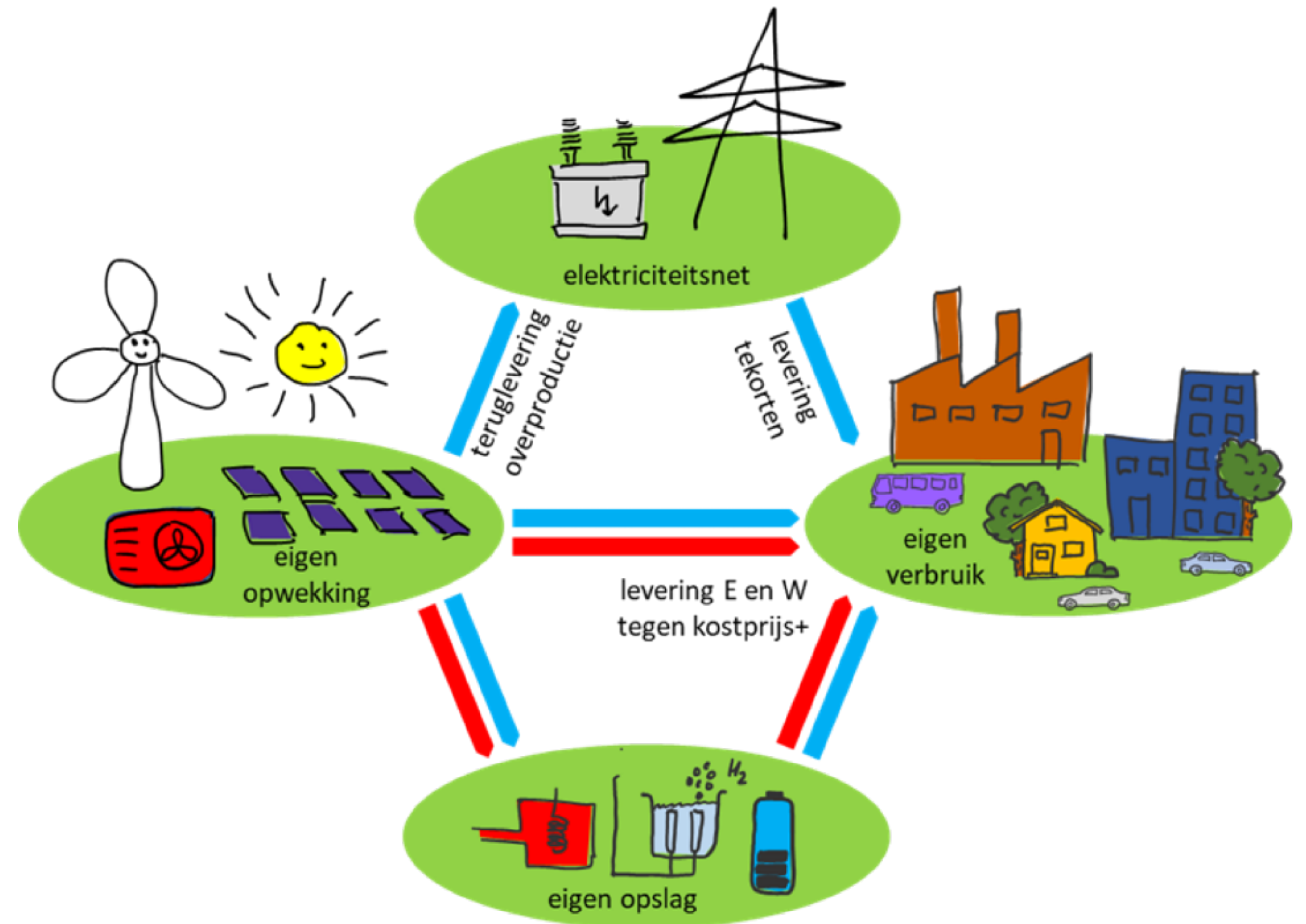
Ostrom: What principles for the commons?

Commons principles	Commoning with data	Commoning of data
Clear boundaries	<ul style="list-style-type: none">- Who is the community that shall accomplish a shared goal?- What are the shared resources that shall be governed?- What role does each actor play?	<ul style="list-style-type: none">- What data should be collected, in what form?- Who should have access to what kinds of data?- What use purposes should be allowed, by whom, to accomplish what actions?
Appropriate rules	<ul style="list-style-type: none">- What are desired social interactions and behaviors?- What rules can shape interactions and behaviors?- What are undesired social outcomes, control mechanisms, and monitoring practices?	<ul style="list-style-type: none">- How can actors apply for data access?- How are access requests documented and made visible?- What rules govern data use (e.g. ToS)?- What rules should apply to data processing?
Rule-making processes	<ul style="list-style-type: none">- How are decisions made about desired social interactions and behaviors?- How can these decisions be changed, by whom, under what circumstances?	<ul style="list-style-type: none">- Who has a right to define rules about data?- Who should decide over data sharing (e.g. with third-parties) and on what basis?
Monitoring	<ul style="list-style-type: none">- What data can represent social interactions and behaviors?- Who should be involved in monitoring (e.g. p2p)?- How will monitoring insights be used to change behavior?	<ul style="list-style-type: none">- What aspects of data should be monitored (e.g. access, uses)?- In what form is data monitored (e.g. API calls, purpose reporting, feeding back data analyses to community)



Energy commons: Waag's Atelier Project in IJburg, Amsterdam

- Shortage of affordable and clean energy. Expected net congestion through solar panels, heat pumps, electric cars, increasing energy usage per household.
- We explore how energy and data sharing could be organized to coordinate energy usage within a specific neighborhood community.

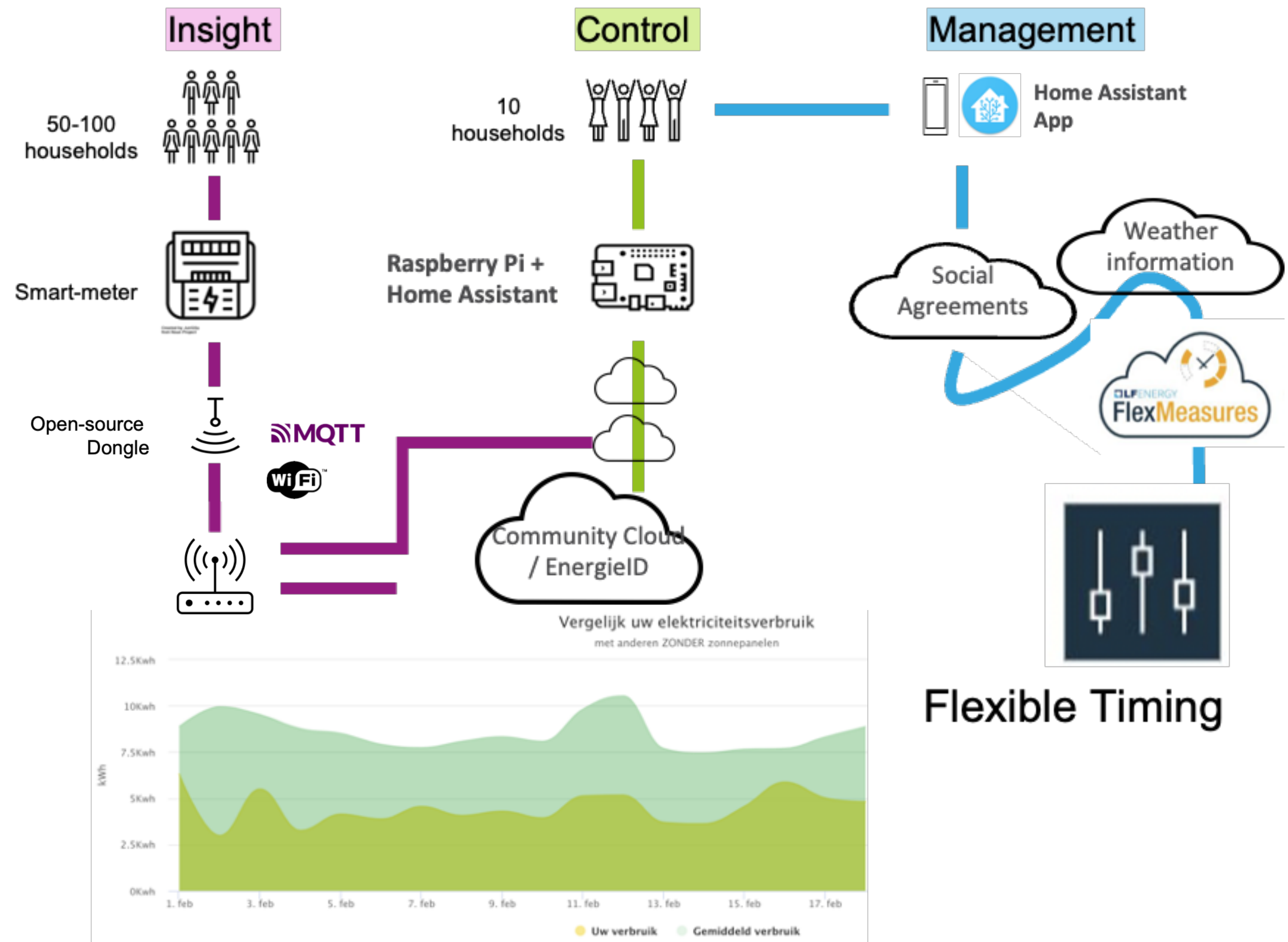




Energy commons: Waag's Atelier Project in IJburg, Amsterdam

- **Research questions:**
- What principles and values should the community take as starting point to share energy and energy data?
- Which principles can we translate into technology?
- Which principles need to be embedded in the social organization around technology?

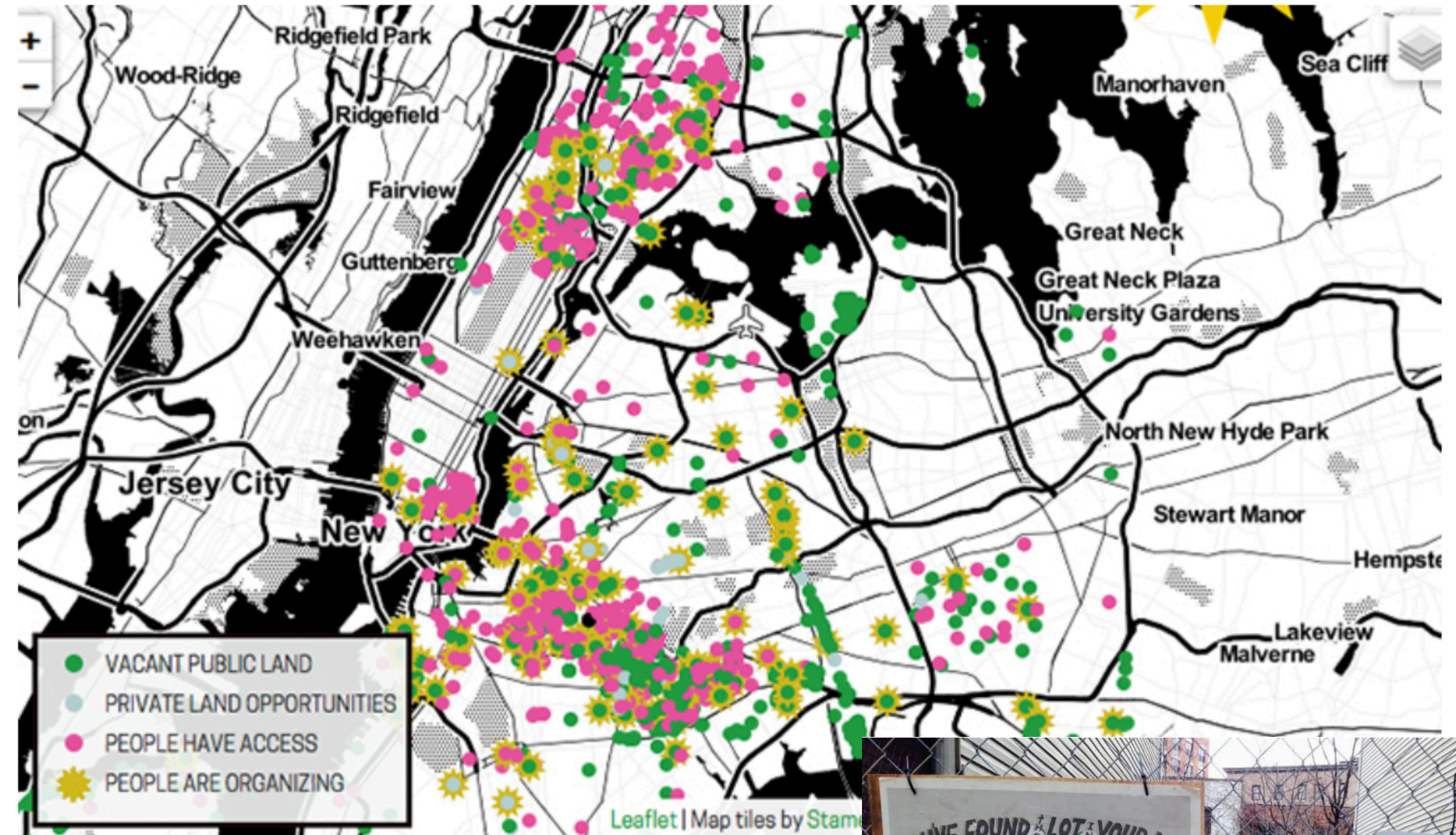
Citizen science met open tech Home and Community Energy Management





Extending commons to citizen-government interaction

- 596 Acres is a “grassroots strategy” to transform open data into open space managed by communities.
- **Common resource:** urban land & shared goal for greener urban planning.
- **Monitoring:** Verify open cadastral data to update vacant land entries.
- Capacity-building to navigate **rules:** Inform citizens about legal rights to access public land & preparing applications with the city for land reuse.





Commoning as the remaking of state-citizen relationships?

- Commoning as an activity explores shared concerns that matter for a community. It is a way of assembling technologies, rules, and practices to design and critique collective life.
- (Data) commoning may create spaces for intervention (build new ways of governing common resources), but also for scrutiny of existing institutions and infrastructures (critique/revising existing institutions).
- “Community” may go beyond citizen groups and involve governments and companies who can become partners, or subjects of scrutiny, when addressing shared problems.
- Depending on the problem to address, public institutions may play important roles to support commoning, e.g. by setting rules or laws that form the basis for collective action, by providing datasets, by offering contact points for community groups, etc.

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Thank you for your attention