

# **APPENDICES**

**UNLOCKING SOCIAL ENERGY**

Victoria Toellner

## **APPENDICES**

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**A. GRADUATION BRIEF**

**B. FIELD EXPLORATIONS**

**C. PARTICIPATORY/ RESEARCH THROUGH DESIGN ACTIVITIES**

**D. ANALYSIS/ SYNTHESIS**

**E. IDEATION**

**F. EVALUATION**

# IDE Master Graduation

## Project team, Procedural checks and personal Project brief

This document contains the agreements made between student and supervisory team about the student's IDE Master Graduation Project. This document can also include the involvement of an external organisation, however, it does not cover any legal employment relationship that the student and the client (might) agree upon. Next to that, this document facilitates the required procedural checks. In this document:

- The student defines the team, what he/she is going to do/deliver and how that will come about.
- SSC E&SA (Shared Service Center, Education & Student Affairs) reports on the student's registration and study progress.
- IDE's Board of Examiners confirms if the student is allowed to start the Graduation Project.

**USE ADOBE ACROBAT READER TO OPEN, EDIT AND SAVE THIS DOCUMENT**

Download again and reopen in case you tried other software, such as Preview (Mac) or a webbrowser.

### STUDENT DATA & MASTER PROGRAMME

Save this form according the format "IDE Master Graduation Project Brief\_familyname\_firstname\_studentnumber\_dd-mm-yyyy". Complete all blue parts of the form and include the approved Project Brief in your Graduation Report as Appendix 1 !

family name Toellner  
 initials V.N.E. given name Victoria  
 student number 4937775  
 street & no. \_\_\_\_\_  
 zipcode & city \_\_\_\_\_  
 country \_\_\_\_\_  
 phone \_\_\_\_\_  
 email \_\_\_\_\_

Your master programme (only select the options that apply to you):

IDE master(s):  IPD  Dfl  SPD  
 2<sup>nd</sup> non-IDE master: \_\_\_\_\_  
 individual programme: \_\_\_\_\_ (give date of approval)  
 honours programme:  Honours Programme Master  
 specialisation / annotation:  Medisign  
 Tech. in Sustainable Design  
 Entrepreneurship

### SUPERVISORY TEAM \*\*

Fill in the required data for the supervisory team members. Please check the instructions on the right !

\*\* chair Dr. Dave Murray - Rust dept. / section: HCD/ HICD  
 \*\* mentor Dr. Abhigyan Singh dept. / section: HCD/ DA  
 2<sup>nd</sup> mentor Hans Roeland Poolman  
 organisation: Amsterdam Metropolitan Solutions  
 city: Amsterdam country: Netherlands

comments (optional) Abhigyan has his own research project within the LIFE Project and so is a key connector between myself and involved stakeholders. Dave brings expertise in making complex (technical)systems tangible.

Chair should request the IDE Board of Examiners for approval of a non-IDE mentor, including a motivation letter and c.v..

Second mentor only applies in case the assignment is hosted by an external organisation.

Ensure a heterogeneous team. In case you wish to include two team members from the same section, please explain why.

### Procedural Checks - IDE Master Graduation

#### APPROVAL PROJECT BRIEF

To be filled in by the chair of the supervisory team.

chair Dr. Dave Murray - Rust date \_\_\_\_\_ signature Dave Murray-Rust

Digitally signed by Dave Murray-Rust Date: 2022.10.17 20:25:22 +02'00'

#### CHECK STUDY PROGRESS

To be filled in by the SSC E&SA (Shared Service Center, Education & Student Affairs), after approval of the project brief by the Chair. The study progress will be checked for a 2nd time just before the green light meeting.

Master electives no. of EC accumulated in total: 39 EC  
 Of which, taking the conditional requirements into account, can be part of the exam programme 39 EC

List of electives obtained before the third semester without approval of the BoE

\_\_\_\_\_

YES all 1<sup>st</sup> year master courses passed

NO missing 1<sup>st</sup> year master courses are:

\_\_\_\_\_

name K. Veldman date 21 - 10 - 2022 signature [Signature]

#### FORMAL APPROVAL GRADUATION PROJECT

To be filled in by the Board of Examiners of IDE TU Delft. Please check the supervisory team and study the parts of the brief marked \*\*. Next, please assess, (dis)approve and sign this Project Brief, by using the criteria below.

- Does the project fit within the (MSc)-programme of the student (taking into account, if described, the activities done next to the obligatory MSc specific courses)?
- Is the level of the project challenging enough for a MSc IDE graduating student?
- Is the project expected to be doable within 100 working days/20 weeks ?
- Does the composition of the supervisory team comply with the regulations and fit the assignment ?

Content:  APPROVED  NOT APPROVED

Procedure:  APPROVED  NOT APPROVED

\_\_\_\_\_ comments

name Monique von Morgen date 1/11/2022 signature MvM

Initials & Name V.N.E. Toellner Student number 4937775

Title of Project Co - creating novel, inclusive energy exchanges in Amsterdam Zuidoost

Co - creating novel, inclusive energy exchanges in Amsterdam Zuidoost project title

Please state the title of your graduation project (above) and the start date and end date (below). Keep the title compact and simple. Do not use abbreviations. The remainder of this document allows you to define and clarify your graduation project.

start date 29 - 09 - 2022 end date 28 - 04 - 2023

**INTRODUCTION \*\***

Please describe, the context of your project, and address the main stakeholders (interests) within this context in a concise yet complete manner. Who are involved, what do they value and how do they currently operate within the given context? What are the main opportunities and limitations you are currently aware of (cultural- and social norms, resources (time, money,...), technology, ...).

**CONTEXT OF CASE**

**LIFE Project**

The Local Inclusive Future Energy Project (LIFE) aims to accelerate the Dutch Energy Transition by utilising local sustainable energy (heat and electricity) via smart and equal distribution to the surrounding neighbourhood. This means that residents and communities can benefit from the renewable energy generated in their own area, helping them to move away from natural gas to climate-friendly alternatives.

**Scalable Inclusive Energy Platform**

Different innovations are ongoing within the LIFE Project, including the 'Scalable Inclusive Energy Platform'. The goal of the platform is to resolve grid problems whilst providing a flexible system which actively includes local citizens and businesses in local energy assets and enables energy governance. The platform must strive for "maximum social acceptability" and include especially those who are most vulnerable in society.

**Amsterdam Zuidoost**

LIFE Project is currently working to implement the energy platform in the urban district of Amsterdam Zuidoost. This district consists of large entertainment venues and financial headquarters (e.g. the Johan Crujff Arena, Ziggo Dome & ING Bank) but also many social housing residencies. Located in the Venserpolder area are 5000 social houses which are home to lower-income residents from over 109 different nations. Many of these residents are living in (energy) poverty. Amsterdamse Poort also lies in the district and is the location of both larger and smaller business owners.

**STAKEHOLDERS**

**Amsterdam Metropolitan Solutions**

AMS is one of the twelve project partners of the LIFE project. Their focus is on coordinating research activities, activating local stakeholders and aiming for long-term impact to reach systemic change.

**Potential end users**

Both flex energy asset owners (such as the Johan Crujff Arena) and the surrounding neighbourhood (household clusters and small local businesses) are possible end users of the LIFE Platform.

**CHALLENGES**

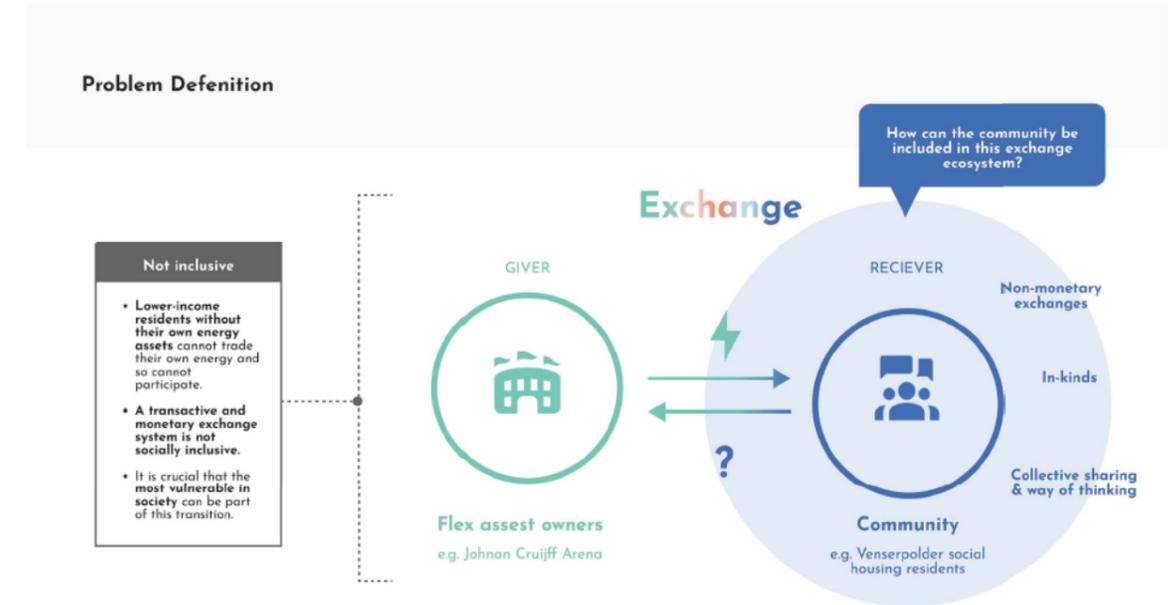
**Social Context**

The diverse social, cultural, and economic composition of the target district presents multiple challenges for designing for inclusion, achieving social impact and facilitating the transition towards a greener city.

**A socio-technical transition**

Plans and processes for the technical innovations of the transition are explicit and in place. But creating a 'plan of action' for the social side of innovations is much more ambiguous and entangled. More focus needs to be placed here to ensure a new system is designed with potential end users.

introduction (continued): space for images



**OPPORTUNITIES**

Community groups, social initiatives and close neighbourhood networks are already present here and can be a leverage for citizen participation in the LIFE Social Project and co-design of new solutions.

image / figure 1: Inclusion of the local community in energy exchange ecosystems

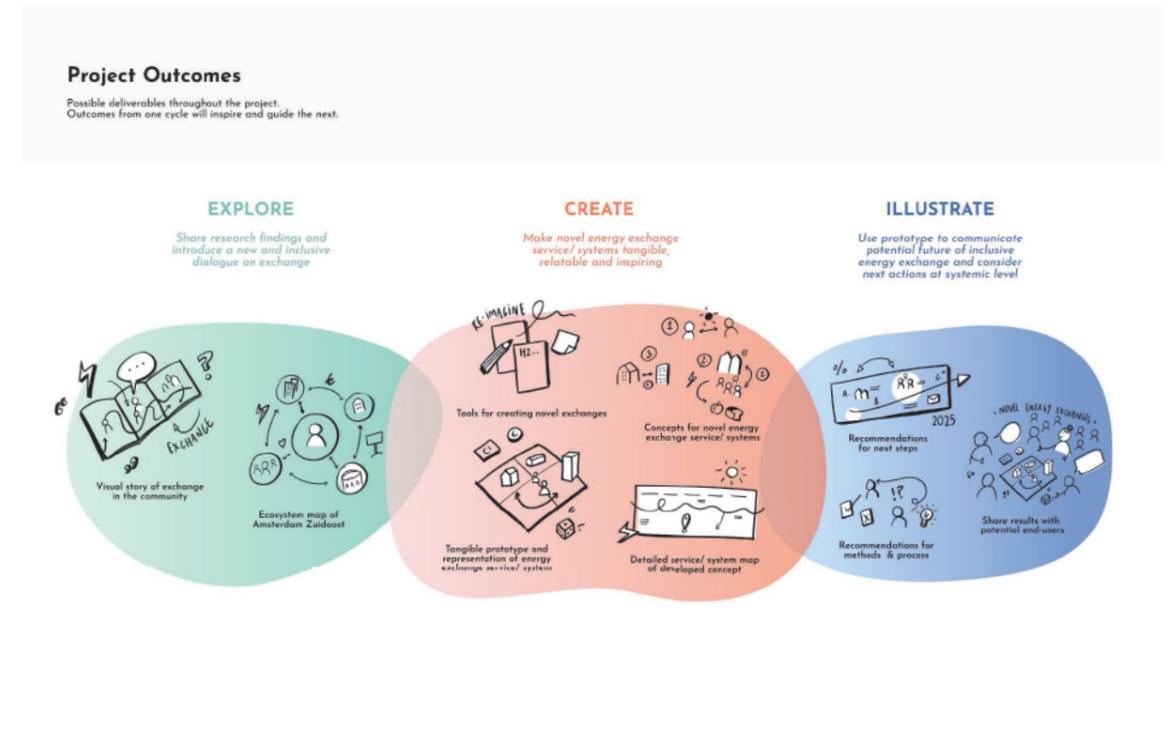


image / figure 2: Project outcomes across three cycles

**PROBLEM DEFINITION \*\***

Limit and define the scope and solution space of your project to one that is manageable within one Master Graduation Project of 30 EC (= 20 full time weeks or 100 working days) and clearly indicate what issue(s) should be addressed in this project.

As it stands the energy transition, and LIFE Platform, is not inclusive. The truth is, not everyone can afford to invest in a sustainable future.

Whilst those with energy assets (solar panels, batteries) can 'trade' on the market and profit, those without, cannot participate. For lower - income residents living in social housing this means exclusion from the transition towards cleaner, greener energy.

Whilst the energy transition carries potential for greater economic prosperity in the long run, in the short term it creates risks for escalating energy poverty and social inequality. Therefore, the inclusion of the most vulnerable in society is crucial. However, current energy exchange systems are purely monetary and transactive affairs which, in their nature, are only favourable for profitable asset owners.

In the case of the LIFE Project, these asset owners include the Johan Cruijff Arena, Ziggo Dome and ING Bank (amongst others). Solutions are needed for including the surrounding neighbourhood in this energy exchange ecosystem. New novel approaches to exchange (such as non - monetary, in-kinds, donation and bartering) need to be explored and co-created with all involved parties.

**In this project I will focus on collective groups and dive into 'exchanges' in the greater sense of the word: both the current exchanges which are present in the area and imagining energy exchange service/ systems in future scenarios.**

**ASSIGNMENT \*\***

State in 2 or 3 sentences what you are going to research, design, create and / or generate, that will solve (part of) the issue(s) pointed out in "problem definition". Then illustrate this assignment by indicating what kind of solution you expect and / or aim to deliver, for instance: a product, a product-service combination, a strategy illustrated through product or product-service combination ideas, ... . In case of a Specialisation and/or Annotation, make sure the assignment reflects this/these.

**I am going to design a novel and inclusive energy exchange service/ system with potential end-users. I will communicate and test this proposed service/ system through a tangible prototype(s) (e.g. a serious game or storyboarding tool) and detailed journey map.**

Outcomes of this project will not only focus on the content but also the process, to ensure learnings, methods and tools created and discovered can be utilized by researchers and designers in next phases of LIFE and other socio-technical projects. An over-view of outcomes throughout the project is shown above. Outcomes from one cycle will inspire and guide the next.

**Research**

In this project I will research and design novel and communal energy exchanges with potential end users (local 'inside' groups and 'outside' asset owners). The primary research questions addressed will be:

**1) What forms of 'exchange' can currently be seen in Amsterdam Zuidoost?**

- What are the different types of exchange evident and what are their characteristics?
- Which values, mindsets and social relations are linked to these exchange types? - In what contexts are these exchanges used or not used?

**2) How can we design inclusive green energy exchanges with the community?**

- How can we use co-creation methods and materials to empower residents to imagine future exchange service/ systems?
- What could these novel exchanges look like and what are the tangible (and intangible) touchpoints?
- What effect does the proposed exchange service/ system have on potential end - users?

**MOTIVATION AND PERSONAL AMBITIONS**

Explain why you set up this project, what competences you want to prove and learn. For example: acquired competences from your MSc programme, the elective semester, extra-curricular activities (etc.) and point out the competences you have yet developed. Optionally, describe which personal learning ambitions you explicitly want to address in this project, on top of the learning objectives of the Graduation Project, such as: in depth knowledge a on specific subject, broadening your competences or experimenting with a specific tool and/or methodology, ... . Stick to no more than five ambitions.

**MOTIVATION**

I chose this graduation project as I am passionate about designing meaningful and socially - valuable interventions for the future. The energy transition presents a lot of change, and not just in alternative energy sources. This necessary shift calls for fundamental development in our society: changes to our environments, interactions and behaviour. Designers have an important role to play here in participating, empowering people and re-imagining the services and systems in our cities. Several of the courses and electives which I have completed throughout my 'Design for Interaction' Masters have inspired me to design for society and have given me new skills and competences which will guide me in my graduation.

**Strategic Design for Social Innovation**

In this elective I wrote a paper about the LIFE Project, titled "Education to Empowerment: A design strategy for diffusing inclusive citizen participation and achieving social impact, in socio-technical transitions." Through doing so I gained much more insight into the barriers faced by citizens and the challenges LIFE is trying to address. My perspective and understanding as a designer has also widened, to give more consideration to the systemic level . Going forward into my graduation I aim to address the potential social impact of a novel energy exchange service/ system and I how it could be implemented within the wider ecosystem.

**Creative Facilitation**

Through this elective and a start up (which I co-founded during another course) I have facilitated many creative problem solving sessions. I have become experienced in experimenting with and developing my own methods for co-creation which I can use and adapt in my graduation.

**Exploring Interactions**

The approach which I want to take in this project is inspired, in part, by the course 'Exploring Interactions'. I really enjoyed the experimental nature of this course where I learnt how to really focus in on and design for a specific context and interaction. The iterative process of making and testing low-fi interventions will help me to explore different options and gain richer and deeper insights into both the problem and solution spaces.

**PERSONAL AMBITIONS****1. Imaginative approach**

Throughout my studies at IDE I have learnt much more about research and design methods. I hope to implement this knowledge into my graduation project and feel confident to make this process my own and one which can inspire future students.

**2. Dive into a new context**

The target location of the LIFE project, Amsterdam Zuidoost, is a very culturally and socially diverse district and one which I not familiar with. This makes conducting research and co-creation sessions there both exciting and challenging. I hope to gain valuable experience in navigating a new context and communicating effectively in a multi-stakeholder project. After my studies I would like to start working in the Netherlands within the social design domain. I see this final university project as a great learning opportunity to prepare me for designing in a foreign country (and language!) Even though my spoken Dutch is pretty good by now, I know that I will also need to be creative with the research methods which I use (e.g. generative and visual tools) in order to connect with the community.

**3. Role of design in socio-technical transitions**

Designing in a creative environment is very different to doing so in a typically 'non-designer' one. Through this project I am keen to develop a greater understanding and more experience working with professionals from other backgrounds (technical, policy, government etc.) and hope to reflect on the role that design can play in these 'less-chartered territories'.

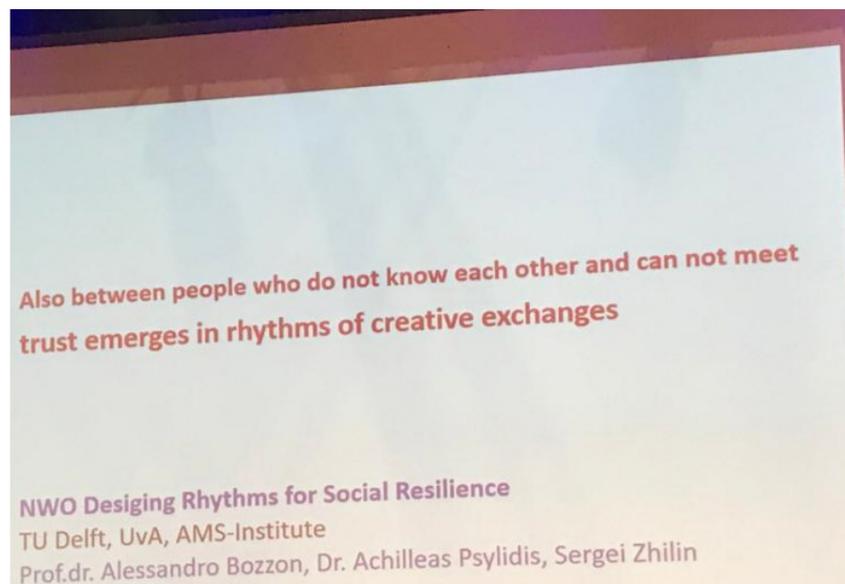
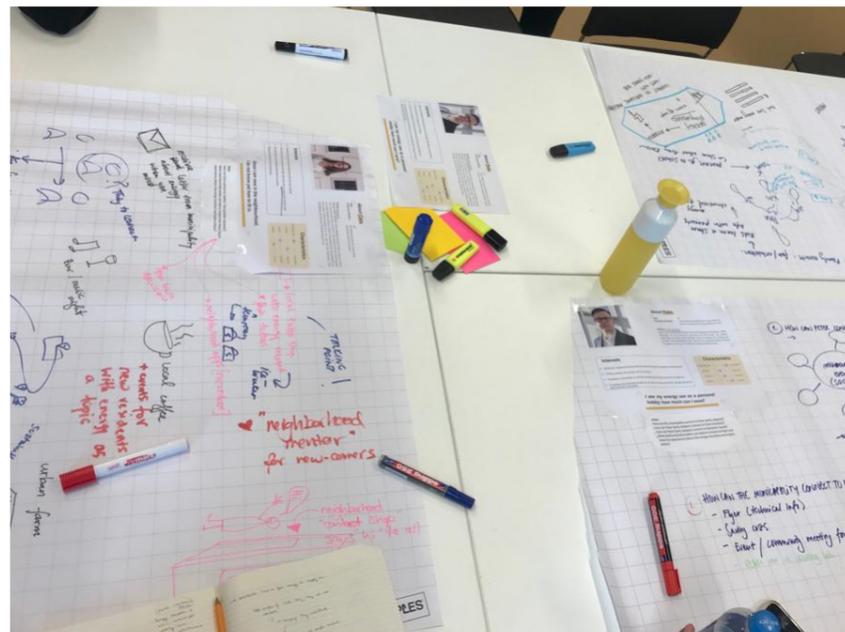
**FINAL COMMENTS**

In case your project brief needs final comments, please add any information you think is relevant.

## B. FIELD EXPLORATIONS

	FIELD EXPLORATION	WHAT	WHEN	WHERE	WHO	MATERIALS	DATA COLLECTED
B1.	Conference: When Social meets Technical: The Energy Transition for our Future	The annual TUDelft PowerWeb Institute conference. Included several workshops, keynote presentations, parallel sessions and an interactive panel discussion with the LIFE consortium team.	28.06.2022	X, TU Delft	Hosted by TU Delft PowerWeb Institute, LIFE Consortium members, researchers, experts, academics, students. Keynotes from David Shipworth and Caroline Nevejan	-	Jottings, photos
B2.	Field trip to Venserpolder	Walked around the neighbourhood, talked to residents on the streets and in the shared garden spaces/ allotments,	21.09.2022	Venserpolder, Amsterdam Zuidoost	Together with Lena De Rouw	-	Jottings, field notes
B3.	The Energy Show Exhibition	Attended the exhibition to get inspired and see what solutions are already being developed	12.10.2022	Het Nieuwe Institute, Rotterdam	Together with Lena De Rouw	-	Photos, video
B4.	Green Transition or Eco - Colonialism Event	A workshop on climate justice in the Dutch context. A presentation and interactive workshop with other students and participants	13.10.2022	TU Delft Library	Hosted by Students for Sustainability and Studium Generale, workshop led by Raki Ap	-	Jottings, photos
B5.	Amsterdam Doughnut Day	Participated in number workshops and events throughout the day.	18.10.2022	De Groene Hub, Holendrecht, Zuidoost Amsterdam University of Applied Sciences Pakhuis de Zwijger	Together with Lena De Rouw and other researchers	-	Jottings, notes, photos
B6.	Doughnut Inspiration session	Part of the Doughnut Coalition Day. A presentation followed by a brainstorm session.	18.10.2022	De Groene Hub, Holendrecht, Amsterdam Zuidoost	Maartje Bos, Anne van Stijkel, local residents, researchers, academics	-	Jottings, photos
B7.	Lokaal Geld workshop	Part of the Doughnut Coalition Day. A presentation followed by a brainstorm session.	18.10.2022	De Groene Hub, Holendrecht, Amsterdam Zuidoost	Maartje Bos, Doede Simons, Thomas Siderius, Elisabeth Werter, researchers, local residents	-	Jottings, photos
B8.	Doughnut Deal Event	Presentation and official event for closing new Doughnut Deals in the city.	18.10.2022	Pakhuis de Zwijger	Kate Raworth, LIFE project team, Lokaal Geld team, researchers, academics	-	Jottings, photos
B9.	Expert Interview	Semi-structured interview with Carien van der Have - DRIFT (Dutch Research Institute for Transitions)	20.10.2022	Teams (online)	Carien van der Have, together with Lena De Rouw	-	Recording, notes
B10.	Expert Interview	Semi-structured interview with Maria Fraaije - DRIFT (Dutch Research Institute for Transitions)		Teams (online)	Maria Fraaije, together with Lena De Rouw	-	Recording, notes
B11.	LIFE Partner Event	Full afternoon of workshops (2-3 hours) facilitated by myself and other TU Delft/ LIFE researchers.	25.10.2022	AMS Institute, Amsterdam	~15 LIFE consortium members and project partners, TU Delft researchers	Session plan, canvases and templates, co-creation materials	Completed canvases, recordings, photos, notes
B12.	'Energy Swap Shop'	Experiment set up during the LIFE Partner Event, where participants were asked to 'swap' money, a skill, an object, or something else, in return for a cookie (representing 1 day of energy)	25.10.2022	AMS Instiute, Amsterdam	De Groene Hub, Holendrecht, Amsterdam Zuidoost	Posters, tokens to 'swap' with, C-Box grid, cookies	Photos, jottings, completed canvases
B13.	Transform. Hackathon	Hackathon event spanning across three full days, working together in teams on various challenges in the energy transition.	31.10.2022 - 02.11.2023	Fort Voordorp, Utrecht	Together with Lena De Rouw, over 200 experts in the transition took part	-	Photos, notes
B14.	Field trip to De Bijlmer	Walked around De Bijlmer, visited the weekly market and interacted with local people there.	15.11.2022	De Bijlmer, Amsterdam Zuidoost	Together with Lena De Rouw	-	Photos, jottings
B15.	Welzijn Dashboard Presentation	Attended the presentation of research into a well-being monitor in Venserpolder	24.10.2022	Community Centre Venserpolder	Together with Lena De Rouw, Gijs van Leeuwen, Hans Roeland Poolman. Presentation by Nicky Pouw, Jennifer van Beek	-	Jottings
B16.	Generative interview - Lokaal Geld	Interviewed Doede Simons from Lokaal Geld, focused on how they are addressing social inclusion	24.11.2022	Community Centre Grubbehoeve, De Bijlmer	Doede Simons	Canvases	Completed canvases, recordings, photos, notes
B17.	Experiment on the streets of ArenApoort	Stood on the street with a boundary object (board with questions and visuals) and asked passers by to participate and answer the question: 'What would you give for 1 month of energy in your home?'	29.11.2022	Shopping streets in ArenApoort, Amsterdam Zuidoost	Together with Lena De Rouw, 20 residents participated over the course of the afternoon	Wooden board with questions, stickers for voting, chocolate as compensation, foldable table	Voice notes (taken after the interactions), photos, jottings
B18.	Generative interview - Community currencies	Interviewed Thomas Siderius who is working on community wealth building in Amsterdam Nieuw West	02.12.2022	Teams (online)	Thomas Siderius	Canvases (digital version)	Recordings, canvases, notes

## B1. CONFERENCE: WHEN SOCIAL MEETS TECHNICAL



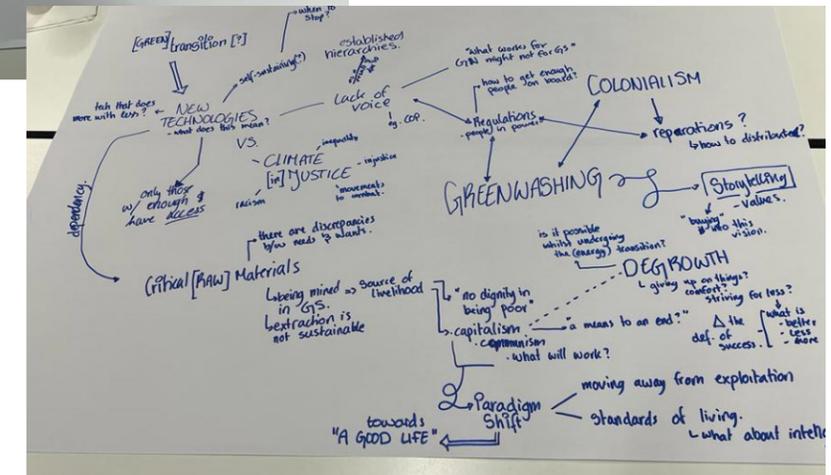
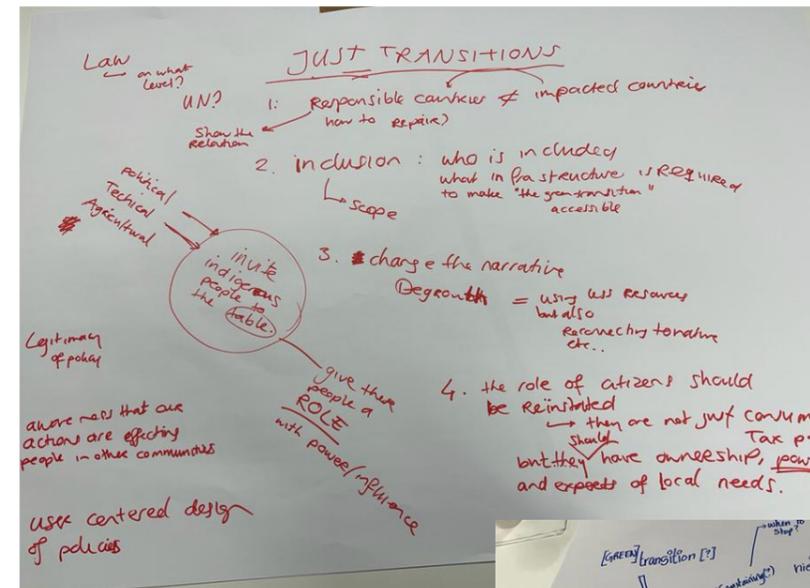
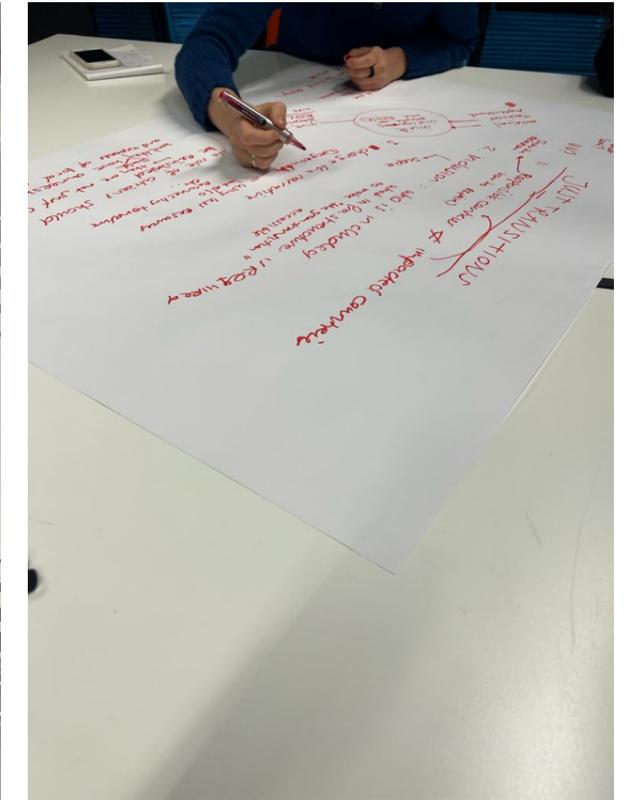
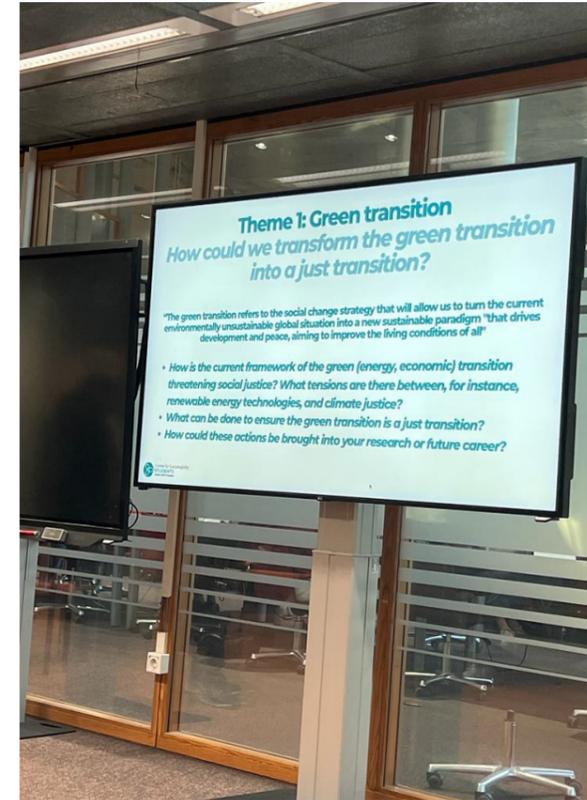
## B2. FIELD TRIP TO VENSERPOLDER



### B3. THE ENERGY SHOW EXHIBITION



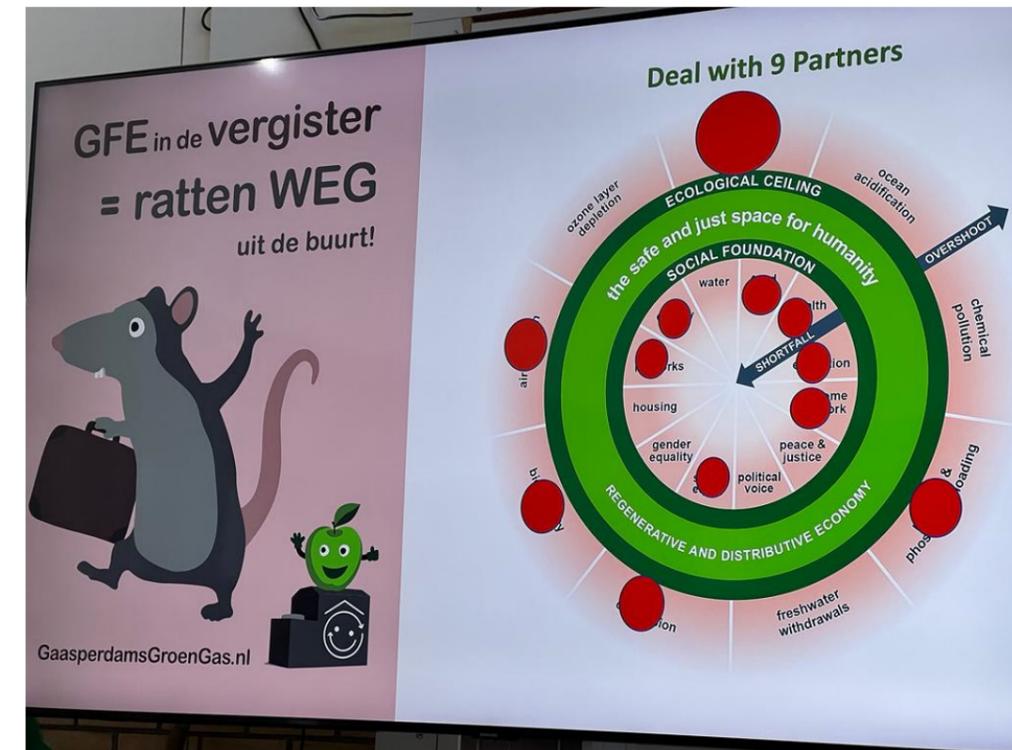
### B4. GREEN TRANSITION OR ECO-COLONIALISM EVENT



## B5. AMSTERDAM DOUGHNUT DAY



## B6. DOUGHNUT INSPIRATION SESSION

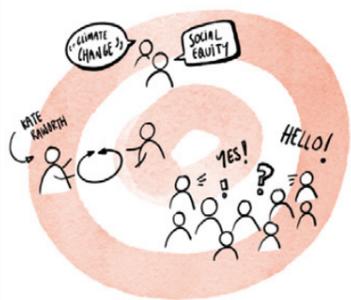
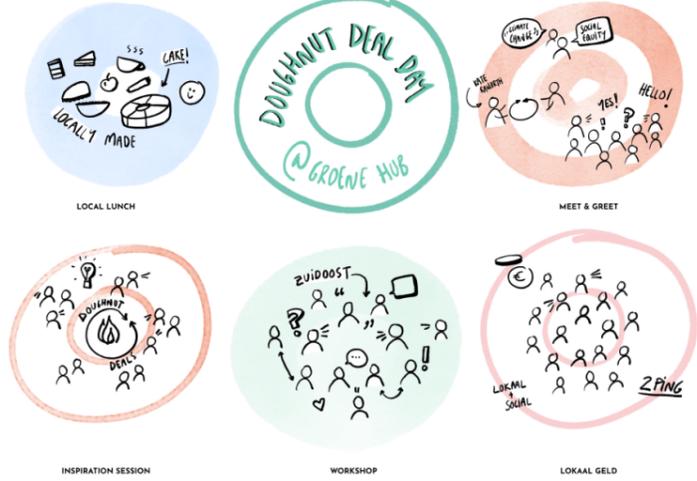


SUMMARY



NOTES, TAKEAWAYS & REFLECTIONS  
18.10.2022, Amsterdam Zuidoost  
Vicky Toelner

DOUGHNUT DEAL DAY '22  
GROENE HUB 18.10.2022



MEET & GREET  
GROENE HUB 18.10.2022

WHAT HAPPENED

- Getting to know each other over coffee and green doughnut shaped cake!
- Stepping inside the doughnut for the first time.
- Moving around the doughnut in two concentric rings to immerse ourselves in both the social foundations and the nine ecological ceilings of Kate Raworth's model. We stood back-to-back to each other and read out the words lying inside the circle or hanging around the room.
- Kate joined us! Herself and Anne Srijker officially opened the Doughnut Deal Day by connecting the inner and outer ring of the doughnut with a large arrow. This represented the joining of three issues from inside the doughnut with one or more from the outside through partnership.

ICE BREAKER QUESTIONS

- Which issue in or outside the doughnut resonates with you most?
- Where would you position yourself?
- Why are you here today at the Doughnut Deal Day?
- How can you connect your area of interest with another issue(s) in/outside the doughnut?

KEY TAKEAWAYS/ REFLECTIONS

- Meeting new people back-to-back is a new and rewarding experience!
- Physically standing inside the doughnut already triggers personal reflection about our position here and where we can make a change and social impact.
- We can quickly start to see and make connections when consciously reading out the different issues.
- Unlike the usual 'cutting off the ribbon' at the opening of an event, instead tying a rope together and creating connection is a very fitting metaphor for the doughnut model.



LOKAAL GELD  
GROENE HUB 18.10.2022

WHAT HAPPENED

- Ice-breaker conversations with others in the room to find out our motivations and goals for being here today.
- An introduction presentation to 'Lokaal Geld' covering the following topics: our current money, local currencies and the upcoming co-creation workshop.
- Explanation about the new local currency '2Ping' and how it can work in Amsterdam Zuidoost.

QUESTIONS RAISED

Value

- What is valuable and how do we create local value?
- How can we have a system with exchange of value and not just exchange of money?
- Is a local currency useful in Zuidoost and what part of this concept resonates with the community?
- How can we connect the community with the companies on the other side of the railway e.g. ING?
- Are other stakeholders willing to exchange and play with other values?

Undocumented people

- There are many undocumented people living in Zuidoost who are out of the 'dough' of the doughnut. How can we lift them out of the hole and then prevent them from falling back in?

Money

- It might be possible to get 50 2Ping instead of 30 Euros, but where does this (extra) money come from? How is it organised?
- Some people in the area do not have a choice and need to live from 150 Euros a month, why would they want 'Bijmer Euros' if they cannot pay their taxes. Can local taxes be a solution for this?

POINTS MADE

Community is a great asset & more valuable than money

- It is very important to value the potential of the neighbourhood and make that potential visible. Zuidoost is a proud and resilient community!

We should think global, but act local.

- There is great value in connecting local action to global action. Thinking about global impact gives us a greater sense of responsibility for what we do at home and in our neighbourhoods.

Local currencies are inclusive for vulnerable people

- Vouchers or credits as rewards mean that social housing residents can still earn without getting cut on social security, ensuring those who are tight on money will not be left worse off with the introduction of a local currency.

Local money needs to be connected to Euro

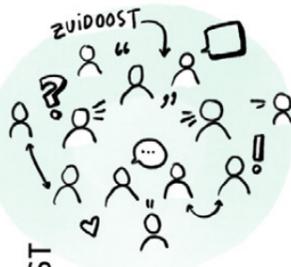
- In order for a local currency, like 2Ping, to have value and for it to be trusted it needs to be connected to the Euro (like with VVV bonnen.)

Money is for spending right now in the community

- Spending 2Ping does not feel like spending money. Instead it is an action of giving, supporting and investing in the local community and people.

KEY TAKEAWAYS/ REFLECTIONS

- There is a great feeling of passion and pride from the community in Amsterdam Zuidoost. This is not a 'vulnerable' and 'developing' district (as labelled by the Gemeente) but rather a community of people who are resourceful, proactive and care about each other. They are not 'a problem to solve' but rather a community to lift up!
- 2Ping is 'sociala lokaal betalen' and so should be accessible also for undocumented people and enable them to 'earn' under Amsterdam city rights. Use of language is important here: is not a local currency for citizens, but for all residents.



WORKSHOP - ZUIDOOST  
GROENE HUB 18.10.2022

WHAT HAPPENED

- The room split into two groups: one focusing on 'Nieuwe West' and the other on 'Zuidoost'.
- Maartje Bos introduced the workshop and started the discussion about Zuidoost with a short presentation and the following quote from Kate Raworth: 'We don't need an economy to grow, we need an economy to thrive.' A visual from Kate's doughnut model was also shared which highlights the perhaps less seen characteristics of a thriving local economy, including: participation, belonging, culture, freedom, leisure, creativity and purpose.
- Sitting all together in a doughnut formation we shared our own projects, thoughts, ideas and concerns for Zuidoost.

QUESTIONS RAISED

How can we build a healthy and resilient economy with strong networks?

- How do we already contribute to community wealth?
- What do we need to create even more value?
- What potential would you like to make more visible?
- With whom would you like to cooperate?

KEY TAKEAWAYS/ REFLECTIONS

Local currency needs to offer flexibility to community

- There was a lot of interest and enthusiasm about the introduction of a local currency in Amsterdam Zuidoost. But concerns were raised about where and when such a currency could be used. Many residents have a fixed budget for spending on necessities per month and need the flexibility to shop at various stores, to get exactly what they need.

Need to identify skills & what local people have to offer

- Methods are needed for investigating the worth a community has: what wealth and resources does Amsterdam Zuidoost have? What are the intangible resources and of what value could they be to others? Everyone in the room agreed that there is a need to reach out to existing initiatives and create a network between identification and transformation.

A local currency needs to be normalised

- Residents and businesses in Zuidoost do not want to be seen as 'needing help'. Therefore, a new local currency should be attractive to use and be a part of for everyone in the area. Introducing a local currency is only effective if it is seen as 'the norm' and is convenient and reliable.

DISCUSSION POINTS

Keeping local money in the local area

- 'We need to strengthen the local community and economy.'
- Community wealth building, communal ownership and engaging with communities is important for strengthening Amsterdam Zuidoost.

Including, educating & empowering the younger generation

- 'We have to take the new generation with - the ones that don't have expenses yet.'
- '(Volunteer) work is not just about earning money, it is also about expanding your network and experience. A job empowers and enables you.'

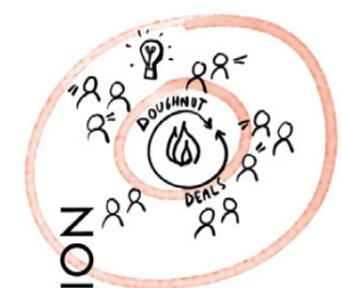
- If younger people are paid in a local currency they couldn't spend it on for example 'Gucci', but for example at the psychologist, hairdresser, in local stores and on paying their debts.
- Younger people do not associate volunteering work with the benefit of a stronger community or the possibility to learn new skills. They need something concrete, tangible and reliable which speaks to them and helps them to see the value in things other than earning 'hard cash'.

Creating new value with local initiatives

- 'The Biogester turns vegetable waste into biogas for the community.'
- 'There are so many ways in which we can create value.'
- We need to use existing local initiatives, such as the Biogester, and connect these to a local currency system to support and tackle other issues (like the energy transition).

Cooperatives are needed but cannot find people

- 'How does someone from Zuidoost not know the community themselves? We can't find them, but they also can't find us.'
- We need to identify and inform local people and let them know that they have the power to engage in cooperatives and make their opinions heard.



INSPIRATION SESSION  
GROENE HUB 18.10.2022

WHAT HAPPENED

- Presentation from Anne Srijker and Maartje Bos about current Doughnut Deals in Zuidoost and their connection to the Groene Hub and Kate Raworth.
- Information and insight into what makes an initiative a doughnut deal, or not a doughnut deal.
- Again physically sitting inside a very large doughnut (laid out onto the ground using rope) and using it as a means to start and spark conversations with new people. We sat back-to-back with one another and explained our motivations for being here.
- We were challenged to think about how we might connect our different expertise or areas of interest with each other e.g. how could energy and education connect? And How might this look in a doughnut deal?
- We did an exercise together where we stood inside the 'dough' of the doughnut and held onto a rope, whilst trying to prevent anyone from falling into the hole!
- Divided into sub-groups and discussed ideas, motivations and inspiration for new doughnut deals in Zuidoost.
- Shared our ideas and the discussions had in a plenary session.
- Anne lit the fire inside the doughnut and we each reflected on our learnings and next steps.

DISCUSSION POINTS

Creating awareness about doughnut deals and models

- Some people have been or are operating in a shared economy, but are just not aware of it!
- There is a need to identify these initiatives and people who are creating and making doughnut deals (untowers) and support them.

How to share the message of doughnut deals?

- We need to communicate the message of the doughnut deal and it's potential impact to residents and the public.
- There is a conflict in how to manage this communication. Messaging from the municipality is not always welcomed (and feels pushed from above) whilst a bottom-up approach may not reach the right people (just the early adopters).
- Perhaps a combination of a 'top-down' and 'bottom-up' approach is needed.

People in the community have a lot to give, they just need support in discovering this for themselves

- The discussions held in smaller sub-groups (of three or four people) raised interesting topics and ideas for potential future doughnut deals in the area. It is clear that there are many local people with skills and services which are of value to others. These people need guidance in putting themselves out there, making connections, testing their ideas and making their dreams a reality!
- There are also many residents who need to take the extra step of discovering what their strengths are in the first place. What are they good at and what can they contribute?
- Groene Hub is a place of learning and exploration and connector of people.

KEY TAKEAWAYS/ REFLECTIONS

Challenges and possibilities

- As physically holding a rope together showed, it is hard to keep everyone inside the 'dough' of the doughnut and prevent people from falling into the 'hole'. It is a challenge for sure to decide what gives and what takes and compromises have to be made along the way.
- But despite it's difficulties, the doughnut model shows great potential for creating social and local impact, and addressing the biggest issues facing our planet today and in the future.

Roles and responsibilities

- We need to look at where we stand in the doughnut and what our role can be. Then we need to turn to the people on either side of us and start to make connections!

More questions than answers

- This doughnut deal inspiration session brought up more questions than answers. But if we keep asking the right questions to the right people (involving stakeholders on all levels) we can begin to move in the right direction.

Proactive people and practical solutions

- It is inspiring how many proactive people in Zuidoost are actively working on and seeking out practical solutions to create new value in the community.

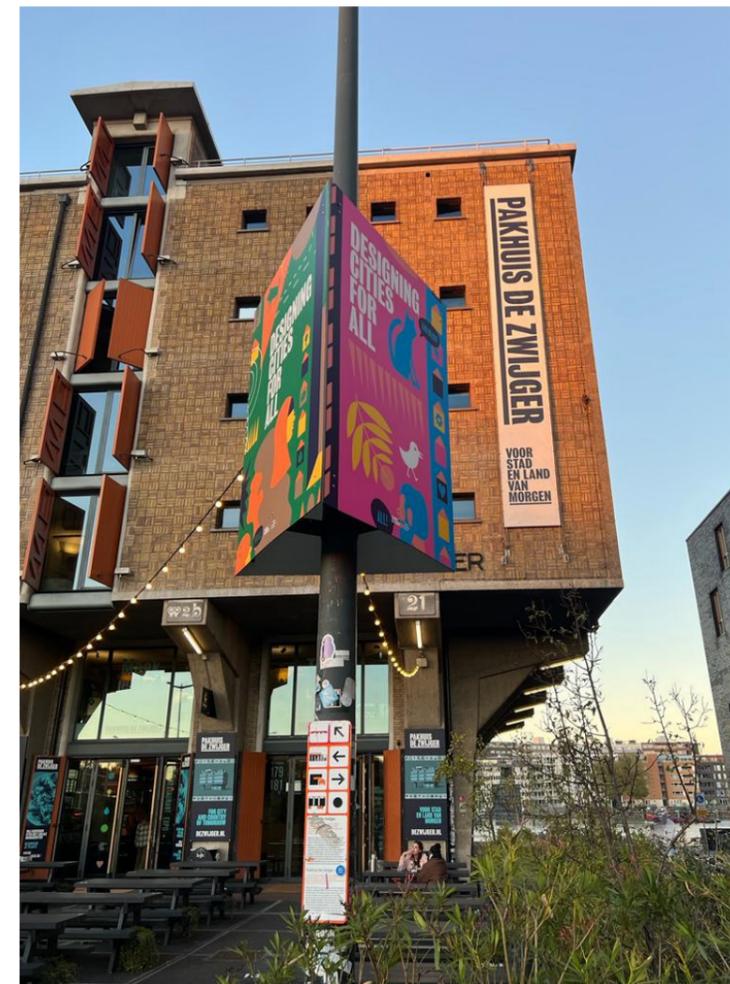
Make it tangible!

- The best way to learn about the doughnut is to step inside one yourself!

## B7. LOKAAL GELD WORKSHOP



## B8. DOUGHNUT DEAL EVENT



# B11. LIFE PARTNER EVENT

## PLANNING, STRUCTURE & MATERIALS

Session plan 25th October - Variation 3.0

**General session information**

General aims: Create alignment among partners, and to co-develop a shared vision and plan.

Time: 4 hours

Participants: ~ 15 LIFE consortium members

Materials: post-its, writing materials, slides, whiteboard, recording devices

Make consent forms (G)

**General Comments**

Remember to have a good working relationship between the two parts of the event!

Remember to have a good working relationship between the two parts of the event!

Remember to have a good working relationship between the two parts of the event!

**Session flow**

Time	Method	Activity in detail	Aim	Questions/ Notes	Materials	To-do	Trigger Questions
15 mins	Introduction	Introduction 1st part	Provide broad vision of what the LSP could be		Slides		
10 mins	Energizer	Word association game	Break the ice & energize the group!		Ball		
10 mins	Purge	Brain dump	Brain dump current assumptions and make space for new ideas!		Flip-over sheets, markers, post-it notes		What comes to mind when you think of LSP?
30 mins	Diverge	Idea generation	Generate many different examples of roles and values exchanges in the LIFE project.		Canvases, markers, post-it notes		Who is involved in LSP? Who should be included? What do stakeholders give and get?
15 mins	Break!						
30 mins	Converge	Hits and dots and idea selection	Choose the most inspiring/innovative/important value exchange		Flip-over sheets, markers, post-it notes		Which value exchange is most inspiring for you?
10 mins	Break!						
10 mins	Energizer	Rock, paper, scissors XXL	Re-energize the group and get participants back into a creative mindset!		Rock, paper, scissors XXL		
10 mins	Purge	Brain dump	Brain dump current assumptions and make space for new ideas!		Flip-over sheets, markers, post-it notes		What form(s) can LSP take?
5 mins	Introduction 2	Introduction 2nd part	Introduce the second half of the event		Slides		
30 mins	Diverge	How might we...?	Focus on realising the selected value exchange and give it a form		Canvases, markers		How can we realise the selected value exchange in LSP?
10 mins	Break!						
15 mins	Converge	Make a poster	Synthesize all ideas and come to one proposition to pitch		Canvases, markers		How can you explain this concept simply and clearly?
15 mins	Final pitches!	Elevator pitch	Present and share concepts with the rest of the room		Final completed canvas		What is your concept for LSP?

## SESSION FLOW

LIFE Partner Event

Time	Phase	Aim	Activity	Materials	Prompts
10 mins	Introduction 1	Provide broad vision of what the LSP could be	Plenary presentation	Slides	-
10 mins	Energizer	Break the ice & energize the group!	Word association game	Ball	-
10 mins	Purge	Brain dump current assumptions and make space for new ideas!	Brain dump	Flip-over sheets, markers, post-it notes	What comes to mind when you think of LSP?
30 mins	Diverge	Generate many different examples of roles and values exchanges in the LIFE project.	Idea generation	Canvases, markers, post-it notes	Who is involved in LSP? Who should be included? What do stakeholders give and get?
15 mins Break!					
30 mins	Converge	Choose the most inspiring/innovative/important value exchange	Hits and dots and idea selection	Flip-over sheets, markers, post-it notes	Which value exchange is most inspiring for you?
10 mins Break!					
10 mins	Energizer	Re-energize the group and get participants back into a creative mindset!	Rock, paper, scissors XXL		
10 mins	Purge	Brain dump current assumptions and make space for new ideas!	Brain dump	Flip-over sheets, markers, post-it notes	What form(s) can LSP take?
5 mins	Introduction 2	Introduce the second half of the event	Plenary presentation	Slides	-
30 mins	Diverge	Focus on realising the selected value exchange and give it a form	How might we...?	Canvases, markers	How can we realise the selected value exchange in LSP?
10 mins Break!					
15 mins	Converge	Synthesize all ideas and come to one proposition to pitch	Make a poster	Canvases, markers	How can you explain this concept simply and clearly?
15 mins	Final pitches!	Present and share concepts with the rest of the room	Elevator pitch	Final completed canvas	What is your concept for LSP?

## Facilitator guide

Press 'space' for AI, '/' for commands...

### 1. 13:30 - 13:30: Introduction of the day

Time: 10 mins

People involved:

- Gijis gives the presentation in main room.

Materials needed:

- Presentation slides

Aim of the activity:

- Provide our broad vision of what the LSP could be.

Activity description:

- In the different brainstorm sessions, the goal is to unpack the different concepts from this broad frame one by one, analyse them and reframe them.
- We will go through two sequential parts of diverging and converging our ideas.
- In the diverging sessions, we will broaden out, generate many ideas and consider different perspectives on the concepts at hand.
- In the converging sessions, we will draw from all the generated ideas to create alignment and come to a coherent understanding of the concepts at hand.

### 2. 13:30 - 13:40: Energizer

Time: 10 mins

People involved:

- Every group together with their facilitator

Materials needed:

- Ball/ safe object to throw and catch!

Aim of activity:

- To energize the group, break the ice and help get everyone into the topic of the day.

Activity step-by-step:

- Explain the aim/purpose of the activity.
- Together with your group stand in a circle.
- You, the facilitator, start by saying "It is 2030 and Life Social Platform has been a huge success. In LSP there is... (e.g. only green energy)."
- You then throw the ball to another person in the group who repeats the sentence "In LSP there is..." and then throws the ball to another group member.
- Continue with the game until the 10 minutes are over.

Role of facilitator:

- To explain and start the game. Please participate and join in with the energizer!

Tips for facilitator:

- The main purpose of this energizer is of course to energize the group! So keep it active and fast paced!
- There are no 'right or wrong' answers in this round and encourage the group to start thinking broader and 'outside the box'. You can do this by giving more novel or less obvious answers yourself.

### 3. 13:40 - 13:50: Purge

Time: 10 mins

People involved:

- Every group

Materials needed:

- Large flip-over sheet placed on table
- Markers
- Post-It-Notes of various colours

Aim of activity:

- To 'empty your head' or 'brain dump' all the current ideas, thoughts and assumptions which you have onto paper.
- This way you make space for new and more novel ideas further on in the creative process.
- The goal is to fill the flip-over with many Post-Its.

Activity step-by-step:

- Explain aim/purpose of activity.
- Give a brief explanation of the current state of the Life Social Platform and its mission.

**Who is involved?**

Who is involved in the LIFE ecosystem? Who is involved in the LIFE ecosystem who you consider the most important?

Group number: \_\_\_\_\_

1. WHO is included in the LIFE ecosystem?

2. WHO is NOT included in the LIFE ecosystem?

3. WHO is included in the LIFE ecosystem?

4. WHO is NOT included in the LIFE ecosystem?

**What value is exchanged?**

What value is exchanged between the different actors in the LIFE ecosystem? Who is the most important? Who is the least important? Who is the most important? Who is the least important?

Group number: \_\_\_\_\_

**How might we...?**

How might we...? How might we...? How might we...? How might we...?

Group number: \_\_\_\_\_

**POSTER PART 4**

How might we realize this? How does it relate to the challenges of the project of net congestion & inclusion?

Group number: \_\_\_\_\_



## B12. ENERGY SWAP SHOP

### MATERIALS

# The Energy Swap Shop

What is energy worth to you?

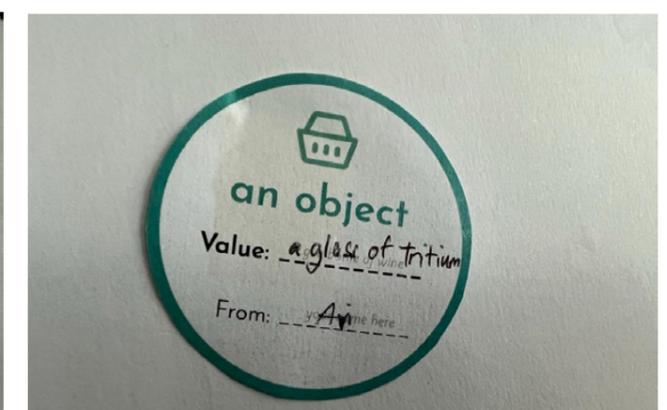
I will give...

... for (1 day) of energy  
(represented by 1 cookie!)

 money Value: _____ From: _____	 my skill Value: _____ From: _____	 an object Value: _____ From: _____	 other Value: _____ From: _____	 money Value: _____ From: _____	 my skill Value: _____ From: _____	 an object Value: _____ From: _____
 money Value: _____ From: _____	 my skill Value: _____ From: _____	 an object Value: _____ From: _____	 other Value: _____ From: _____	 money Value: _____ From: _____	 my skill Value: _____ From: _____	 an object Value: _____ From: _____
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 money Value: _____ From: _____	 my skill Value: _____ From: _____	 an object Value: _____ From: _____	 other Value: _____ From: _____	 money Value: _____ From: _____	 my skill Value: _____ From: _____	 an object Value: _____ From: _____

<b>money</b>	<b>my skill</b>
<b>object</b>	<b>other</b>

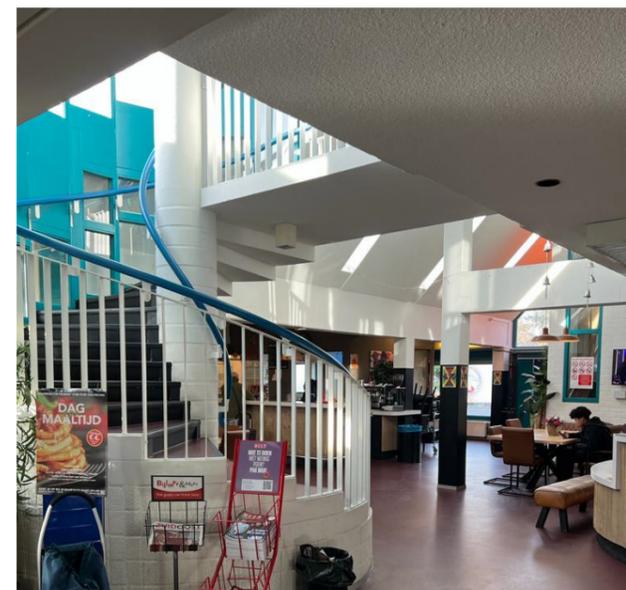
### SET UP & EXPERIMENT



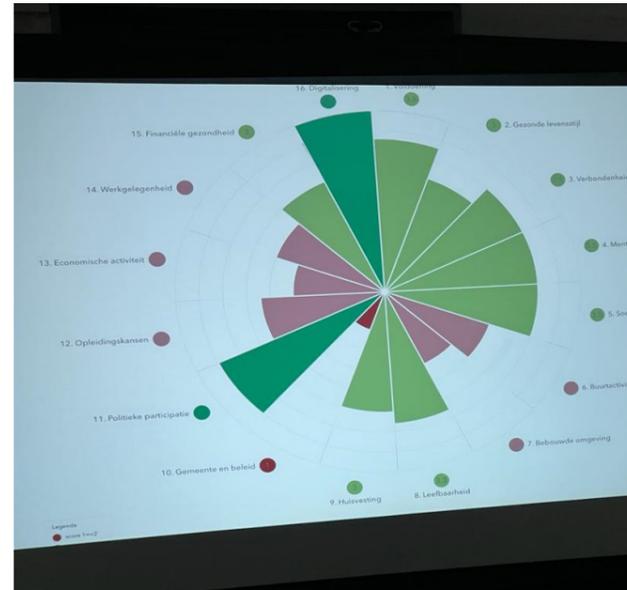
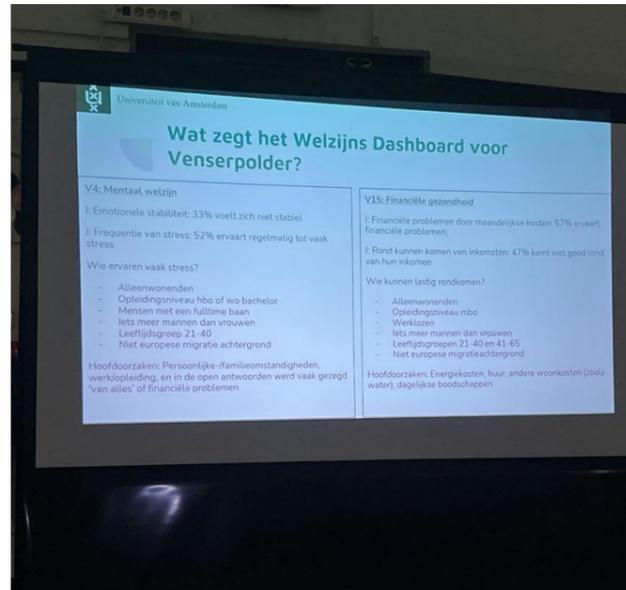
## B13. TRANSFORM.HACKATHON



## B14. FIELD TRIP TO DE BIJLMER



## B15. WELZIJS DASHBOARD / WELL-BEING MONITOR



## B16. GENERATIVE INTERVIEW - LOKAAL GELD

### MATERIALS

**1. How is Lokaal Geld aiming to tackle inclusion?** RECORD!

1a. What does inclusion mean in the Lokaal Geld project?  
 1b. How is Lokaal Geld aiming to tackle social, financial and economic inclusion?  
 1c. What are your assumptions about how inclusion will be addressed with what you are proposing with Lokaal Geld?

**2. Who do you see participating in the Lokaal Geld Ecosystem?**

2a. Who should be included, and why?  
 2b. Who are the most important people to include, and why?

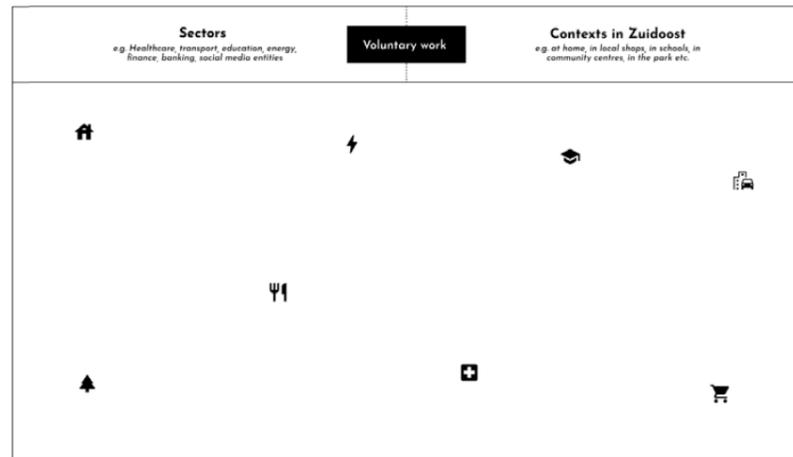
Person Diverse/incentives Social group(s)	Person Diverse/incentives Social group(s)	Person Diverse/incentives Social group(s)
Person Diverse/incentives Social group(s)	Person Diverse/incentives Social group(s)	Person Diverse/incentives Social group(s)
Person Diverse/incentives Social group(s)	Person Diverse/incentives Social group(s)	Person Diverse/incentives Social group(s)

**3. Which social groups/collectives are evident in Zuidoost?**

3a. Which aggregations/collectives are already formed and evident in Zuidoost?  
 3b. What are the biggest/most prominent groups?  
 3c. Which of these groups have partnered with/are already interested in being part of Lokaal Geld?  
 3d. Which potential groups do you see participating in the future as users of Lokaal Geld?  
 3e. Who are the decision-makers/leaders/trusted people in these groups?

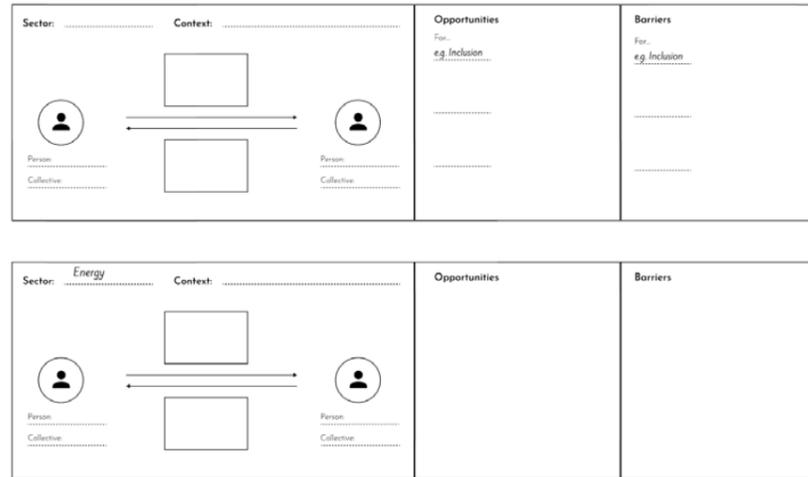
**4. What are the use cases for Lokaal Geld exchanges (regarding voluntary work)?**

- 4a. In which sectors could Lokaal Geld be used and connected to voluntary work? What are the other kinds of voluntary work?  
 4b. In which contexts and environments in Zuidooost could people and collectives use Lokaal Geld?  
 4c. Which of these contexts are more prominent/suitable for local currency exchange (and voluntary work)? Where do you see potential?  
 4d. What are the possible future contexts (may not exist yet)?



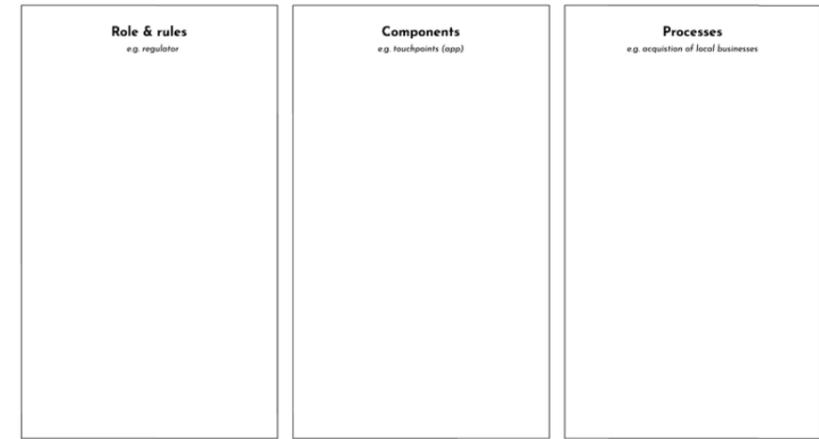
**7. Future scenarios of use for Lokaal Geld exchange:**

- 7a. What future scenarios can we imagine for Lokaal Geld exchange in Zuidooost?  
 7b. What are the opportunities & barriers in these exchanges for inclusion etc? (from characteristics outlined previously)



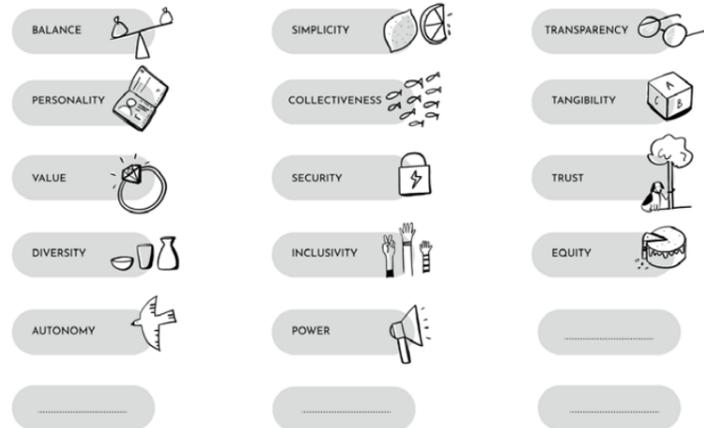
**9. Ingredients of a Lokaal Geld ecosystem**

- 9a. What is needed in order for a Lokaal Geld exchange to take place?  
 9b. What roles & rules, components and processes are needed?



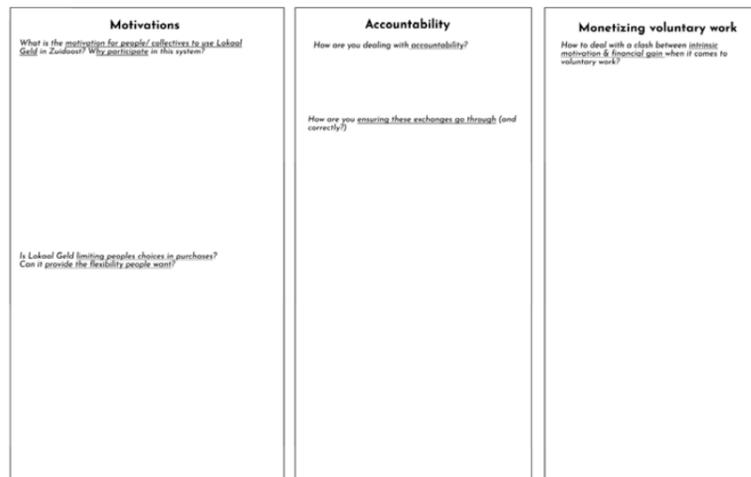
**5. Characteristics of Lokaal Geld exchanges:**

- 5a. Which characteristics (of energy exchange) are you also applicable Lokaal Geld exchanges? Where are the parallels? Please select them.  
 5b. Which are the most important characteristics to keep in mind, for Lokaal Geld? Please select them.  
 5c. Which characteristics are missing? (If any) Please write them in.



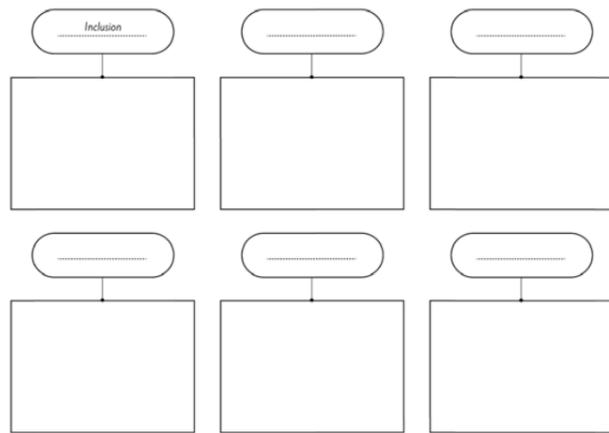
**8. Challenges and discussion points**

- 8a. How are you addressing/ dealing with the following challenges/ discussion points?



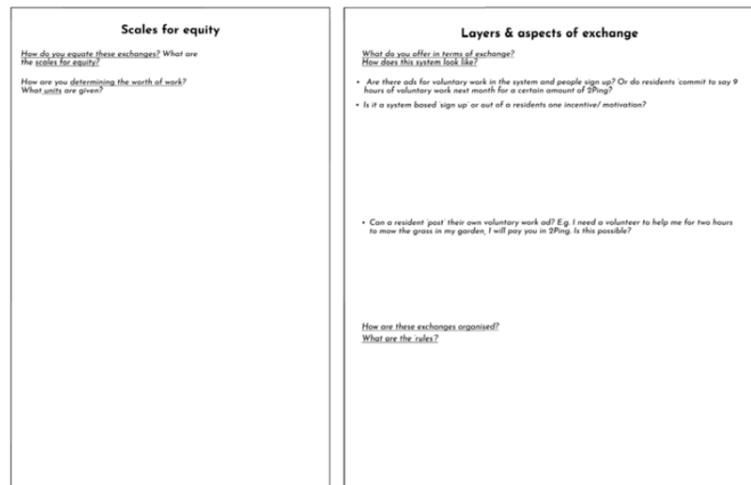
**6. Characteristics of Lokaal Geld exchanges (cont):**

- 6a. How are you dealing with the selected characteristics? How are you addressing these characteristics in Lokaal Geld?

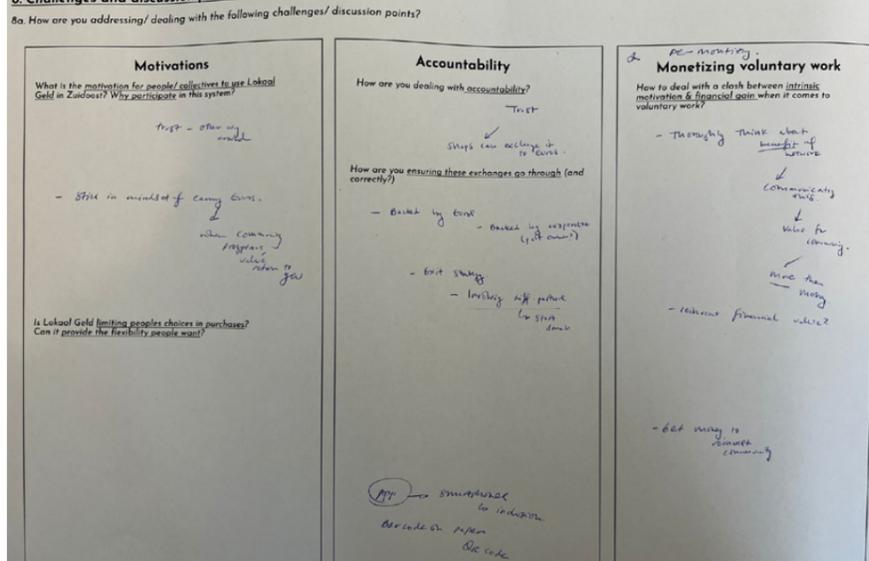
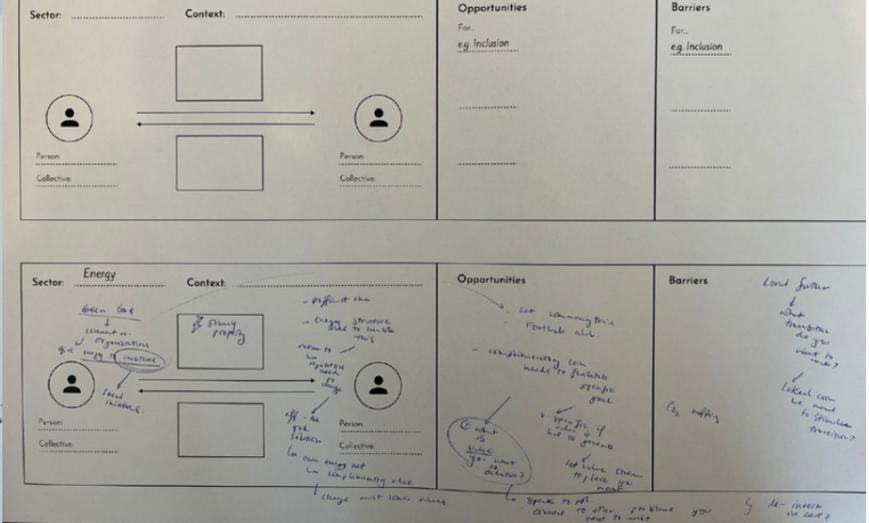
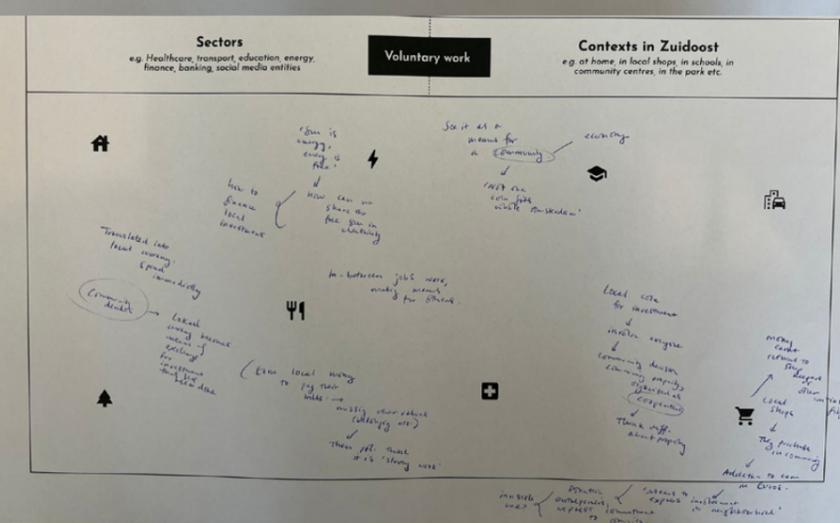
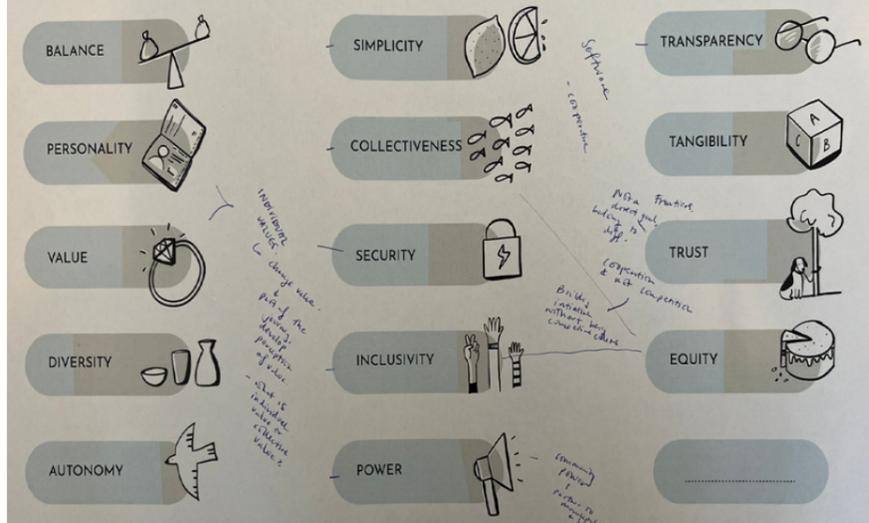
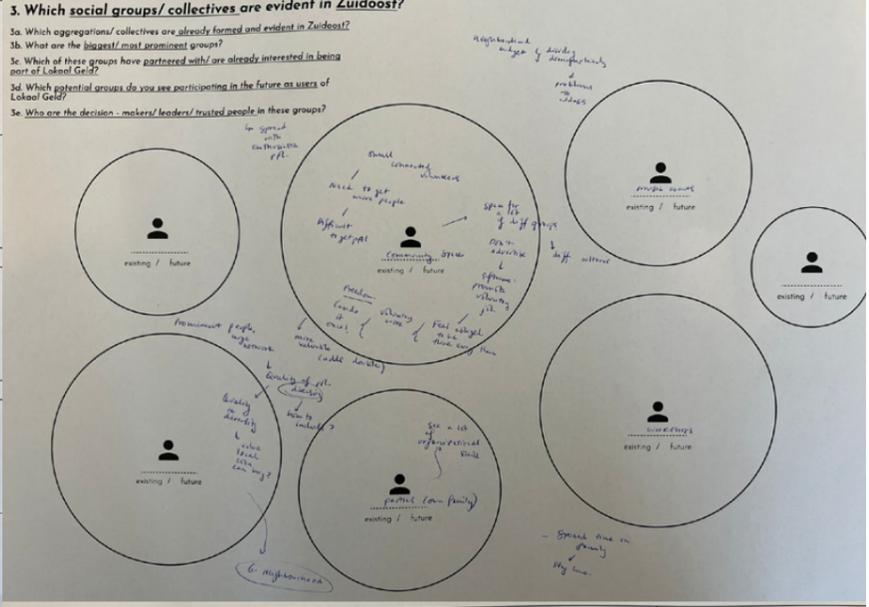
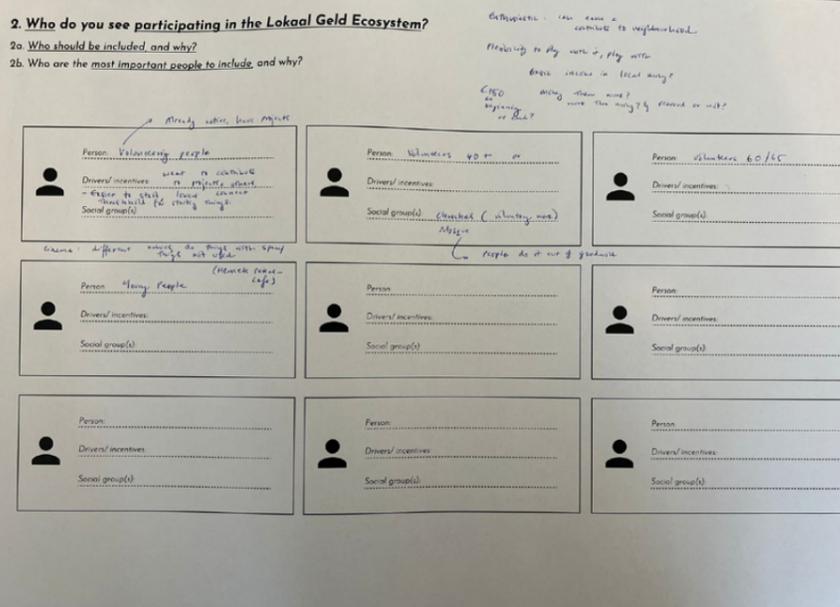
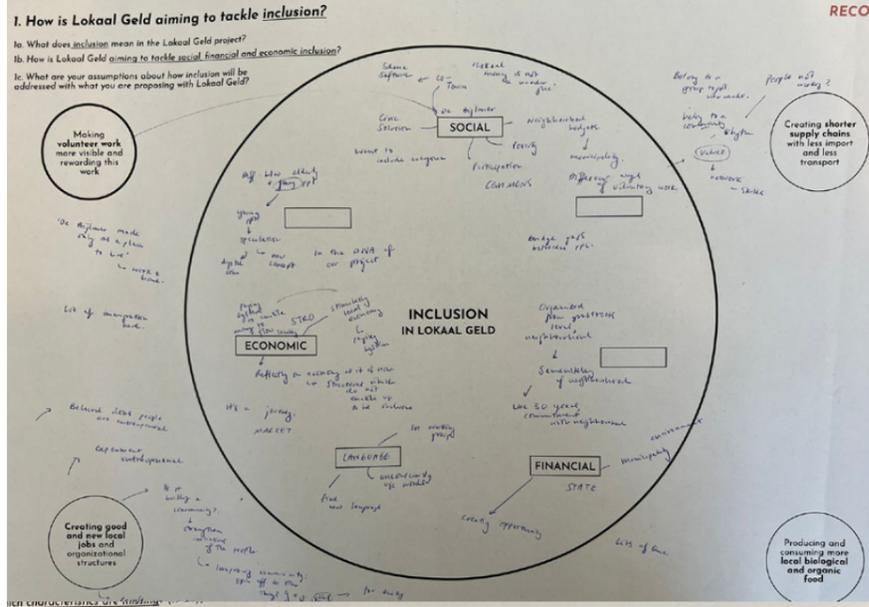


**8. Challenges and discussion points (cont.)**

- 8a. How are you addressing/ dealing with the following challenges/ discussion points?



COMPLETED CANVASES



# B17. ARENAPOORT EXPERIMENT

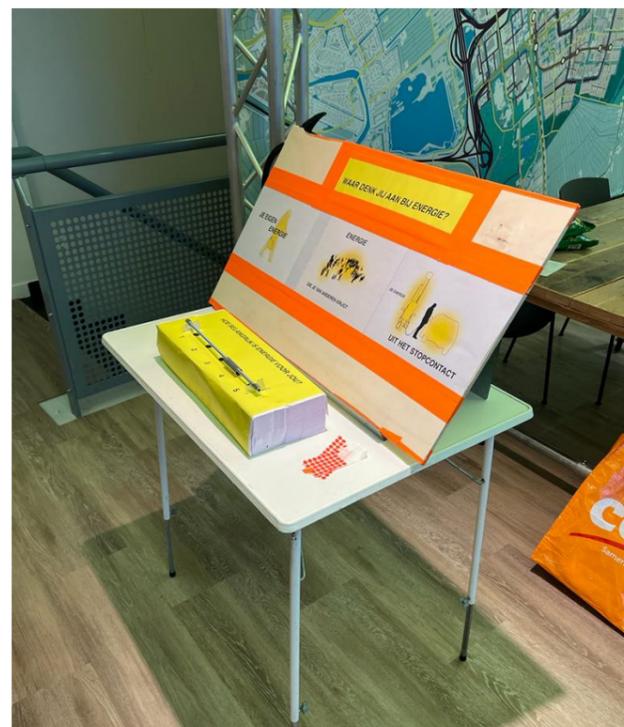
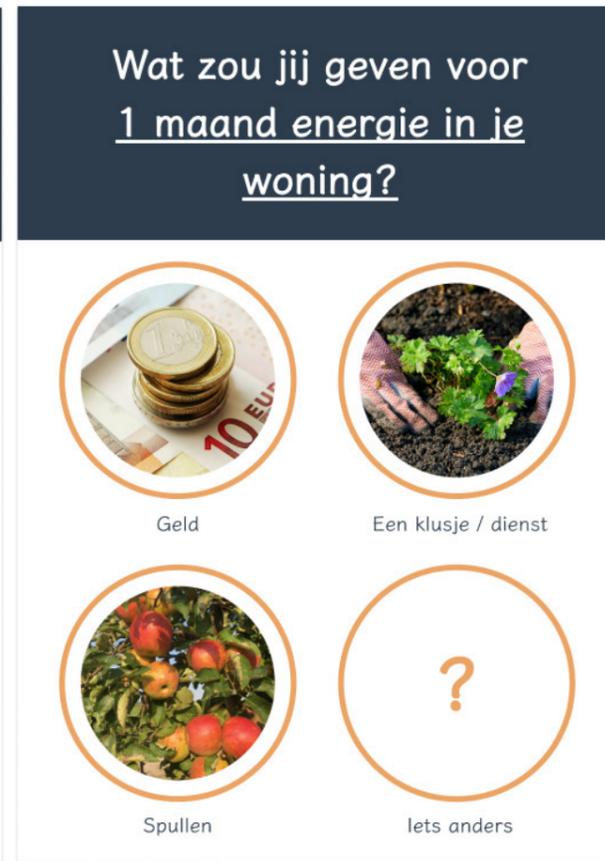
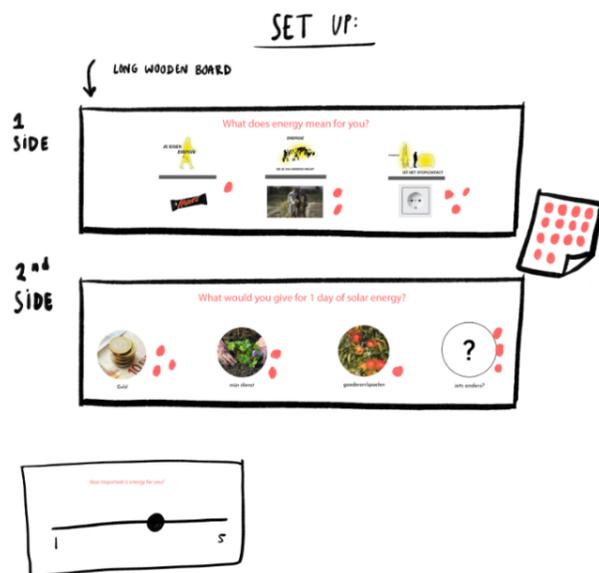
## MATERIALS & PREPARATION

### Research Plan

Date: 29.11.22  
 Location: ArenaApoort (shopping area)  
 Time: Lunchtime (1 - 2 hours depending on footfall)  
 Researchers: Lena & Vicky

### Set Up:

- Foldable table with long wooden board (posters and questions stuck on here) and slider
- Mars bars (what people get in return for participating)

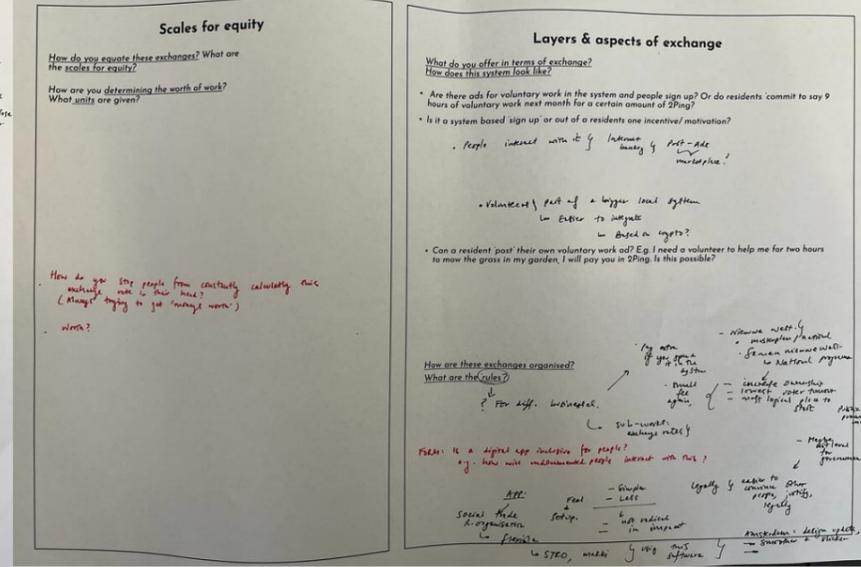
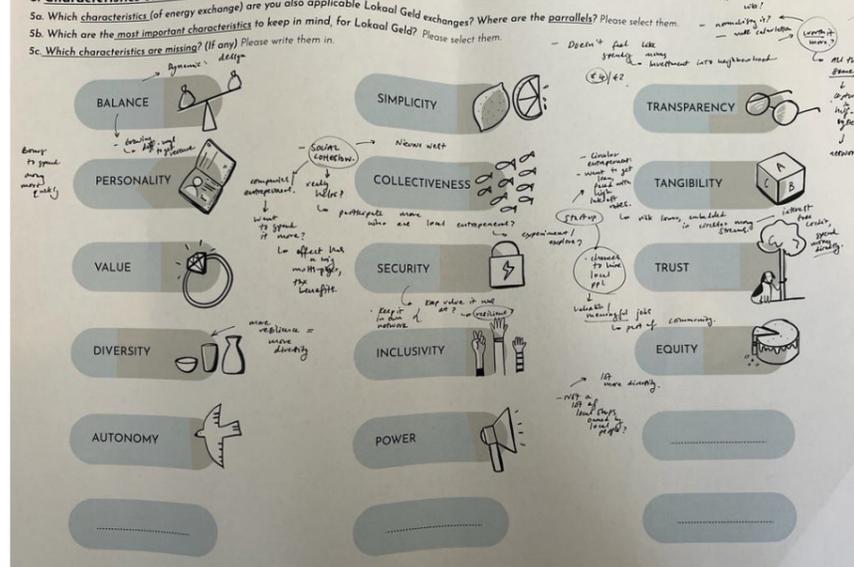
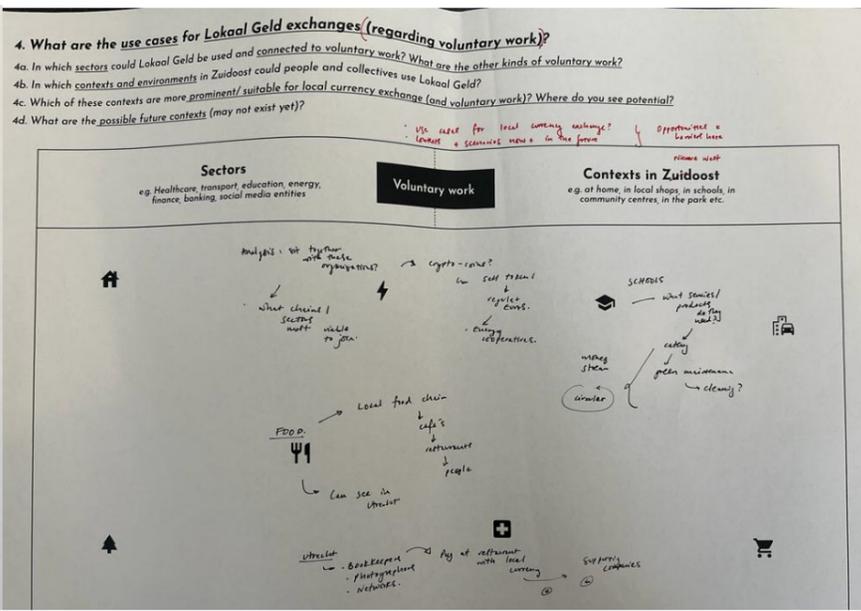
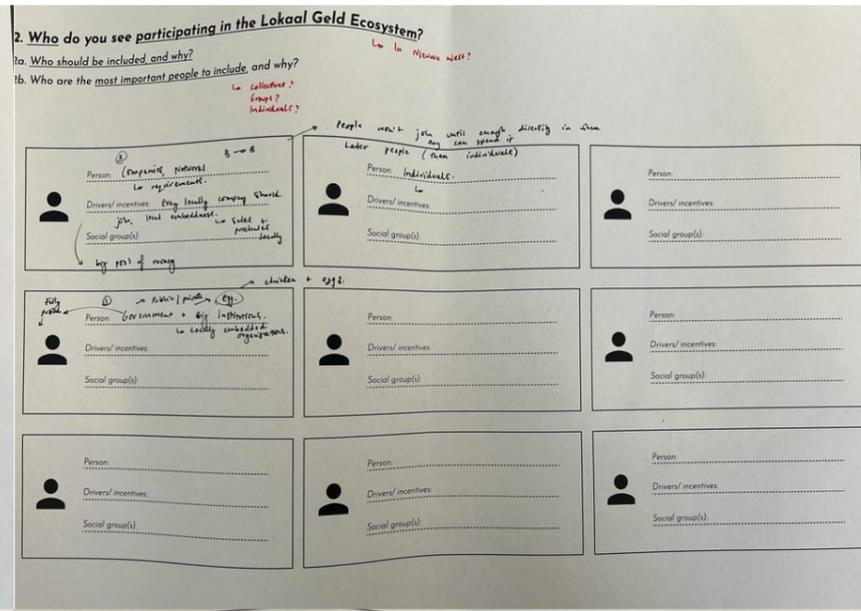
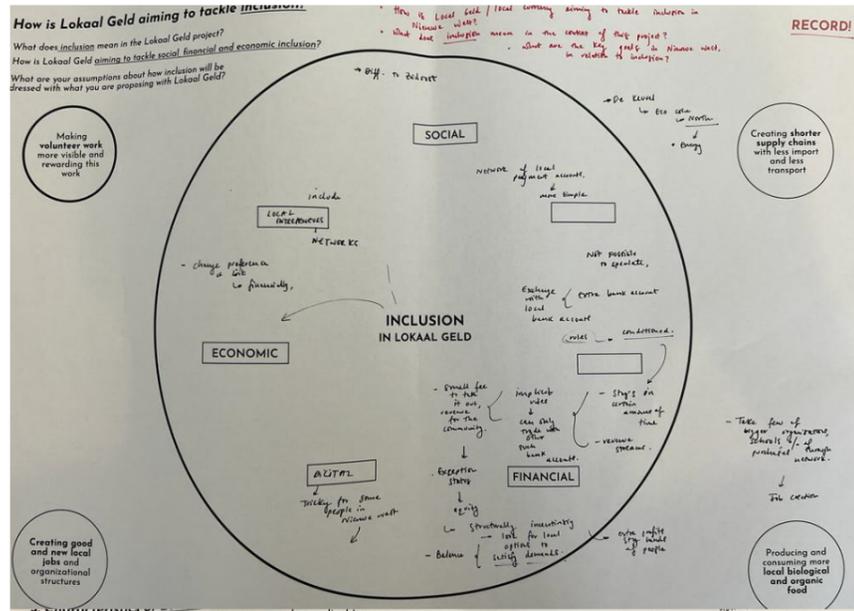


ON THE STREETS!



# B18. GENERATIVE INTERVIEW - NIEUW WEST

## COMPLETED CANVASES



## C. RESEARCH THROUGH DESIGN / PARTICIPATORY ACTIVITIES

	FIELD EXPLORATION	WHAT	WHEN	WHERE	WHO	MATERIALS	DATA COLLECTED
C1.	Creative facilitation session	During the IDE elective 'Creative Facilitation' students facilitate sessions for problem owners. I submitted my graduation project and topic and two students facilitated sessions for me, with around 8 students taking part in the sessions and using methods to explore the problem and idea spaces.	28.06.2022	During Creative Facilitation 'Hike' even in the Veluwe	Around 10 TU Delft IDE students taking part in the course 'Creative Facilitation'	The session materials were prepared by the students facilitating them. A brief was provided.	Jottings, photos
C2.	Energy exchange game	Experiment and game session held with four IDE design students to play with different types and dimensions of energy exchanges.	09.12.2022	IDE Faculty, TU Delft	Lena De Rouw and three other design students (Neva, Melissa and Danique)	Game cards, game guide, canvases	Jottings, recording, photos, completed canvases
C3.	Expert interview	Semi-structure/ generative interview focusing on the work of the EnergyCoin Foundation and the EnergyLibrary project	09.01.2023	IDE Faculty, TU Delft	Hugo Schonbeck	Canvases	Photos, recordings, jottings, completed canvases
C4.	Inspiration session 1 - city perspective	Inspiration session with LIFE consortium members/ project partners to share initial ideas and discuss their novelty and feasibility	10.01.2023	Huis van de Toekomst, De Entree 300, Zuidoost	Esther Jansen, Annoesjka Nienhuis (Gemeente Amsterdam)	Idea cards (4)C-Box, triggers questions, characteristic cards (9)	Recording, photos, Post-It Notes, jottings
C5.	Inspiration session 2 - social perspective	Inspiration session with LIFE consortium members/ project partners to share initial ideas and discuss their novelty and feasibility	17.01.2023	Huis van de Toekomst, De Entree 300, Zuidoost	Wouter Meethorst (Co - Force)	Idea cards (4)C-Box, triggers questions, characteristic cards (9)	Recording, photos, Post-It Notes, jottings
C6.	Inspiration session 3 - socio-technical perspective	Inspiration session with LIFE consortium members/ project partners to share initial ideas and discuss their novelty and feasibility	17.01.2023	AMS Institute, Amsterdam	Pablo Decelis, Gayathri Angou (AMS/ LIFE)	Idea cards (4)C-Box, triggers questions, characteristic cards (9)	Recording, photos, Post-It Notes, jottings
C7.	Inspiration session 4 - technical perspective	Inspiration session with LIFE consortium members/ project partners to share initial ideas and discuss their novelty and feasibility	18.10.2022	Teams (online)	Digvijay Gusain (TU Delft Digital Twin), Reiner (Alliander)	Idea cards (4)C-Box, triggers questions, characteristic cards (9)	Recording, photos, Post-It Notes, jottings
C8.	Inspiration session 5 - economic/ business perspective	Inspiration session with LIFE consortium members/ project partners to share initial ideas and discuss their novelty and feasibility	19.10.2022	IDE Faculty, TU Delft	Hans Roeland Poolman (AMS, LIFE PM team and stakeholder engagement), Abhigyan Singh (TU Delft, LIFE Social Platform)	Idea cards (4)C-Box, triggers questions, characteristic cards (9)	Recording, photos, Post-It Notes, jottings
C9.	Inspiration session 6 - large asset owner perspective	Inspiration session with LIFE consortium member/ project partners to share initial ideas and discuss their novelty and feasibility	24.10.2022	Huis van de Toekomst, De Entree 300, Zuidoost	Tim Oosterop (JCA Partner)	Idea cards (4)C-Box, triggers questions, characteristic cards (9)	Recording, photos, Post - It Notes, jottings
C10.	Scenario session	Scenario session with LIFE project members and Lokaal Geld team to discuss opportunities for bringing local tokens into the context of energy	02.02.2022	Grubbehoeve, Community space De Bijlmer, Amsterdam Zuidoost	Maartje Bos and Doede Simons (Lokaal Geld), Hans Roeland Poolman and Abhigyan Singh (LIFE)	Scenario sheets (5), trigger and reflective questions & canvases	Recording, photos, Post-It Notes, jottings
C11.	Evaluation session	Evaluation session with LIFE Project members. Showed the video of the vision, played the energy actions game and reflected on the three scenarios.	25.04.2023	Huis van de Toekomst	Hans Roeland Poolman, Gijs van Leeuwen, Wouter Methorst, Tim Oosterop, Esther Jansen, Avi Gansen, Marilou van de Vlugt	Video of the vision, presentation slides, energy actions game cards and personas, three scenarios, reflection canvases	Jottings, recordings, notes, photos, Post-It Notes
C12.	Evaluation session	Evaluation session from Lokaal Geld perspective.	25.04.2023	Huis van de Toekomst	Doede Simons (Lokaal Geld), Thomas Siderius, Madelon Timmers	Video of the vision, presentation slides, energy actions game cards and personas, three scenarios, reflection canvases	Jottings, recordings, notes, photos, Post-it Notes
C13.	Evaluation meeting, expert perspective	Evaluation meeting to discuss the concept of Energy Actions and local tokens.	03.05.2023	Teams (online)	Hugo Schonbeck	Video, presentation slides	Recording, notes
C14.	Evaluation meeting, expert perspective	Short meeting to discuss the role of the city in the concept of Energy Actions, and reflect on the possible options.	03.05.2023	Online call	Annoesjka Nienhuis and Esther Jansen (Gemeente)	Questions	Jottings and notes
C15.	Evaluation meeting, expert perspective	Evaluation meeting to discuss and reflect on the concept of Energy Actions from the residents perspective.	08.05.23	Teams (online)	Ria Braaf-Frankel	Video, presentation slides	Jottings and notes, recording

# C1. CREATIVE FACILITATION SESSION

## BRIEF

### THE SOCIAL ENERGY TRANSITION

Creative Facilitation Sept 2022

#### Context of the Case

##### LIFE Project

The Local Inclusive Future Energy Project (LIFE) aims to accelerate the Dutch Energy Transition by utilising local sustainable energy (heat and electricity) via smart and equal distribution to the surrounding neighbourhood. This means that residents and communities can benefit from the renewable energy generated in their own area, helping them to move away from natural gas to climate-friendly alternatives.

##### Scalable Inclusive Energy Platform

Different innovations are ongoing within the LIFE Project, including the 'Scalable Inclusive Energy Platform'. The goal of the platform is to resolve grid problems whilst providing a flexible system which actively includes local citizens and businesses in local energy assets. The platform must strive for "maximum social acceptability" and include those most vulnerable in society.

##### Social Context

LIFE Project is currently working to implement the energy platform in the urban district of Amsterdam Zuidoost. This district consists of large entertainment venues and financial headquarters (e.g. Ziggo Dome & ING Bank) but also many social housing residencies. Located in the Venserpolder area are 5000 social houses which are home to lower-income residents from over 109 different nations. Many of these residents are living in energy poverty. The diverse social, cultural, and economic composition of the target district presents multiple challenges for achieving social impact and facilitating the transition towards a greener city.

#### Challenge

##### Citizen Participation in the Social Energy Transition

The focus of this case is on including the citizens of the Venserpolder area in the energy transition and ultimately activating them to participate in the LIFE energy platform. Currently there are many barriers to participation, including:

- Relevance:
  - The energy transition does not seem relevant for many of these residents. They do not see how a novel and new system can be of benefit to them and even the potential of future financial gain is not enticing enough.
  - Their focus is on short-term goals (like putting enough food on the table tonight) and not on long-term changes like the energy transition.
- Understanding:
  - Energy is a given. It is something we use and expect every day, but it is not a concept we can easily grasp or visualise.
  - Both the technical know-how of the energy system and the social role residents can play in the transition is unclear to many.
- Communication:
  - The often-technical narrative used to explain the transition does not resonate with residents and leads to false assumptions and misinformation being spread.
  - Information is often 'pushed from above' from external parties (e.g. Banks and municipalities) creating mistrust and disinterest.

#### Possible Starting Points

Some of the barriers to participation are mentioned above and these could be used as starting points for your creative problem-solving session. *How might we include and engage residents in this social housing district to actively participate in the energy transition?* We can also start to think of possible solutions e.g. *How might we re-imagine energy exchange mechanisms for these residents?* (Think: trading energy for skills, sharing energy in community groups, donating energy through a novel system).

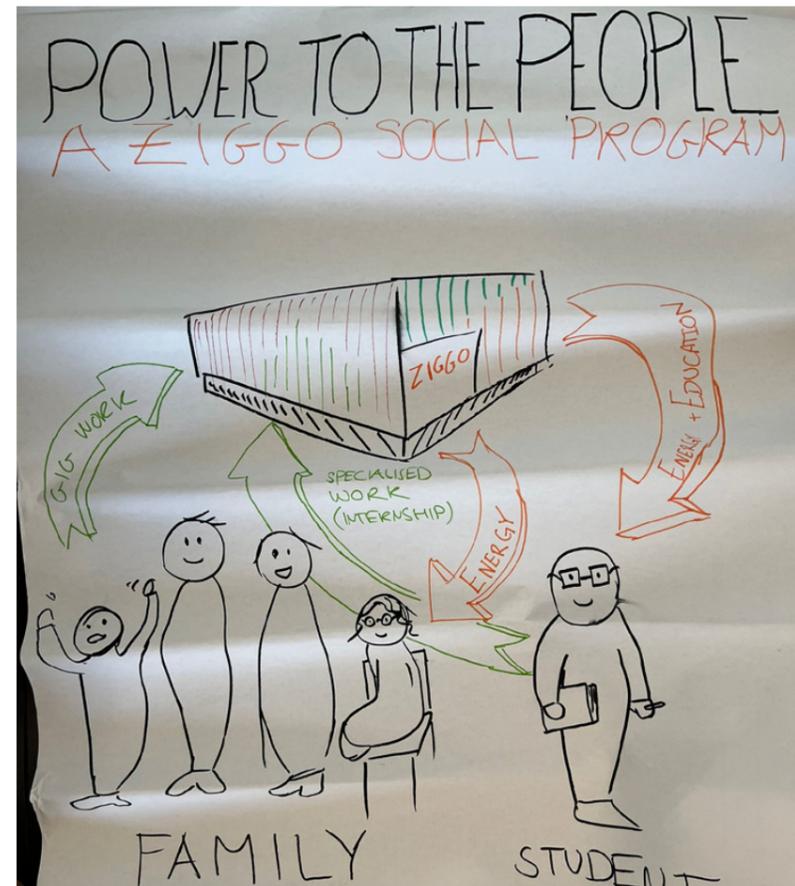
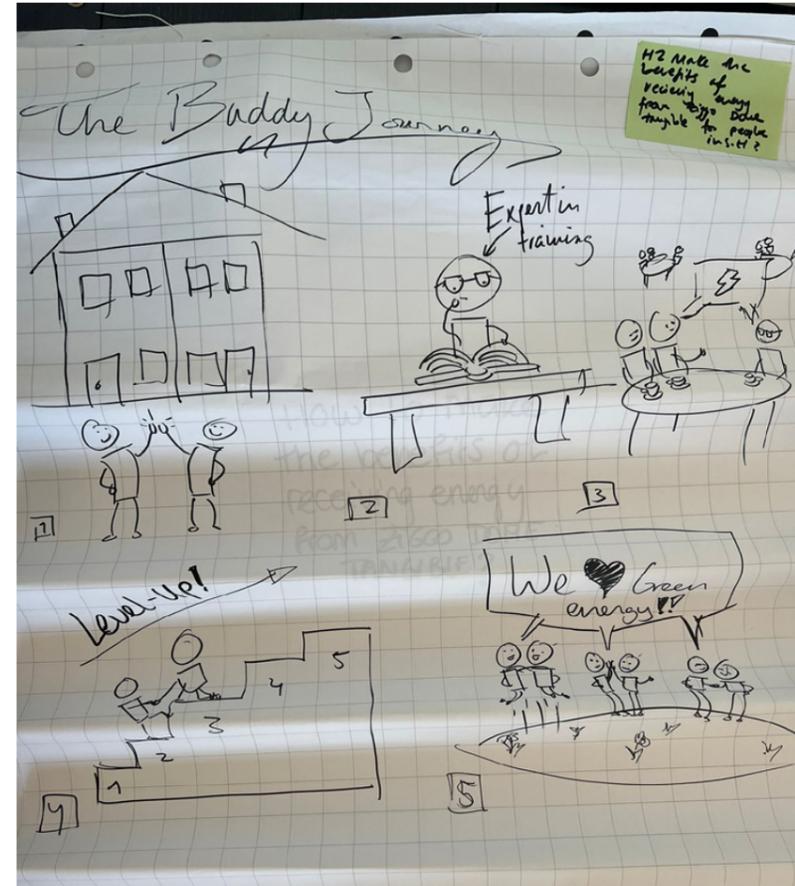
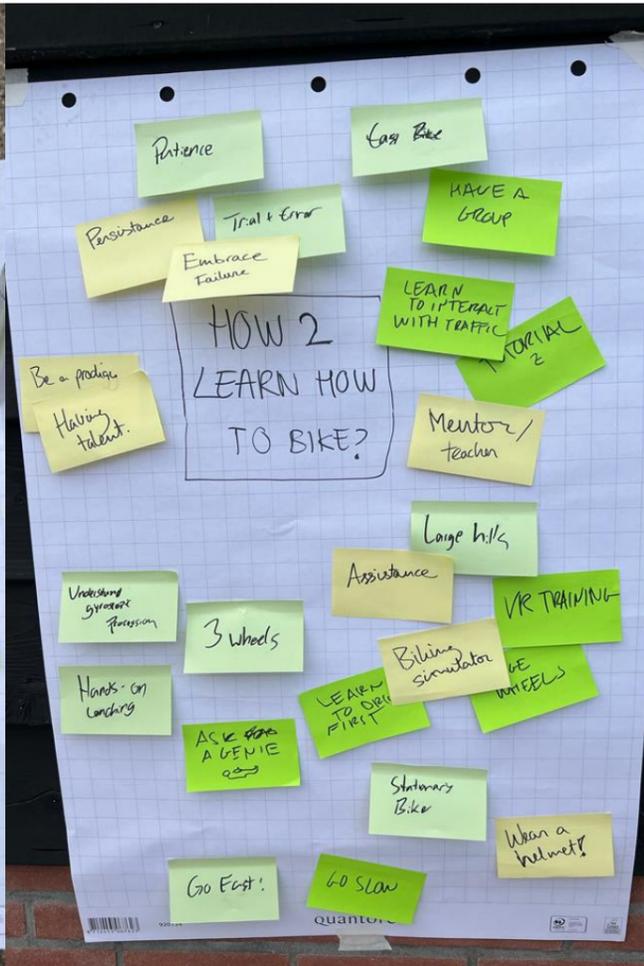
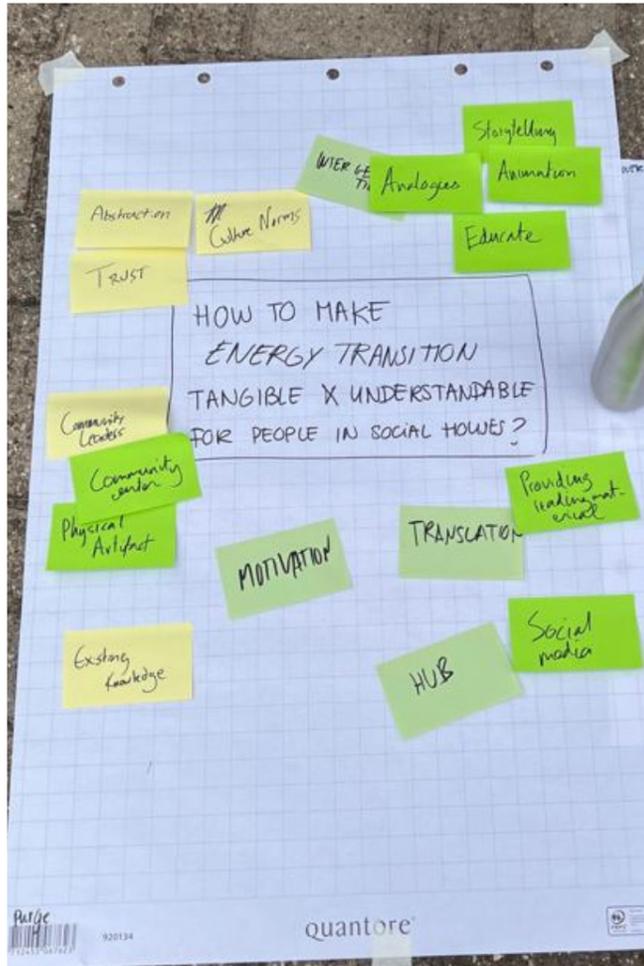
#### Contact

I am working within the LIFE project in collaboration with AMS and the Municipality of Amsterdam for my graduation. Please feel free to reach out for more information and questions!

Vicky Toellner

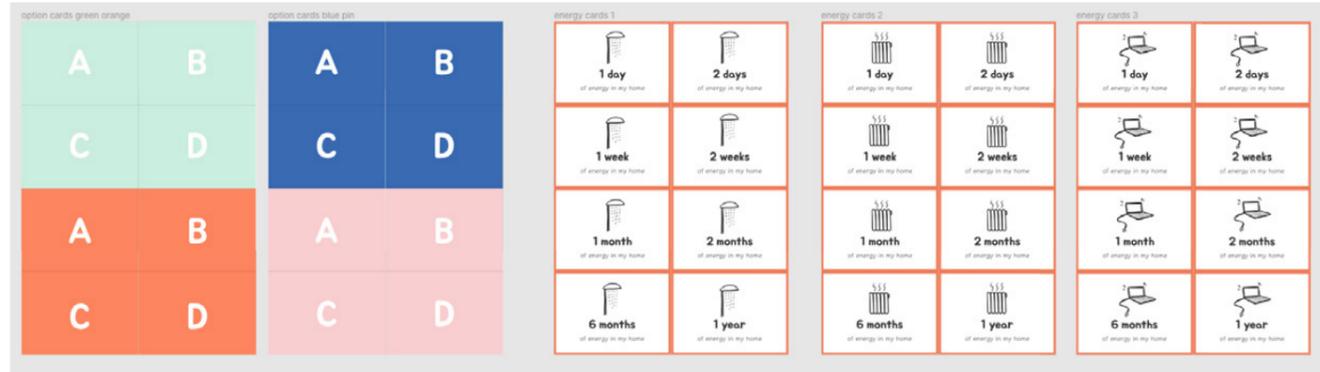


SESSION POSTERS



## C2. ENERGY EXCHANGE GAME

### MATERIALS



## The Energy Exchange Game

### Aim of the game:

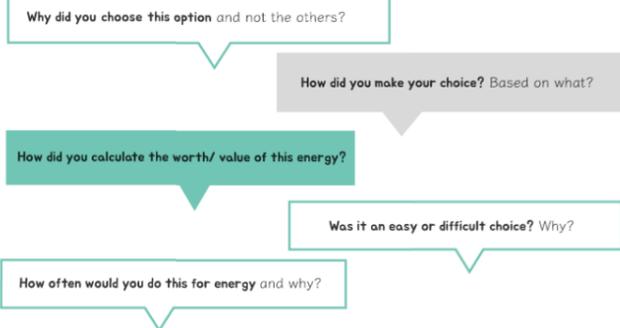
- Prompt discussion and reflection around energy exchange.
- Experiment and play with different dimensions of exchange.
- Help uncover conflicts, tensions and values in choosing exchange options.
- Challenge the group to think about what 'fair' or 'equal' exchanges are.
- Start to imagine how non-monetary exchange could work in energy systems.

### How to play?

- Each player has their own set of option cards (A, B, C and D). The energy cards and exchange cards are placed face down in the centre of the table.
- Going around in a circle each player takes it in turns to turn over an energy card and an exchange card.
- Everyone takes some time to choose an option for themselves on the exchange card (either A,B,C or D) and places this card face down on the table in front of them (without showing the other players).
- Once everyone has placed their option card face-down on the table, the player who turned over the energy and exchange cards shares what they chose and why. All of the other players also share which option they picked. Players are encouraged to discuss the choices made and question each other using the prompt sheet as guidance.
- After every player has shared and discussed why they picked an option the group decides who gets have that energy card. This decision is up to the group, but they do need to explain their choice (again using the prompt questions as a guide).
- If all or some of the players pick the same option, the groups still needs to decide which person gets the energy card. Together you need to explain your choice (come up with their own rationale for this).
- Continue the game until the time is up.
- Afterwards, reflect together using the provided canvases.

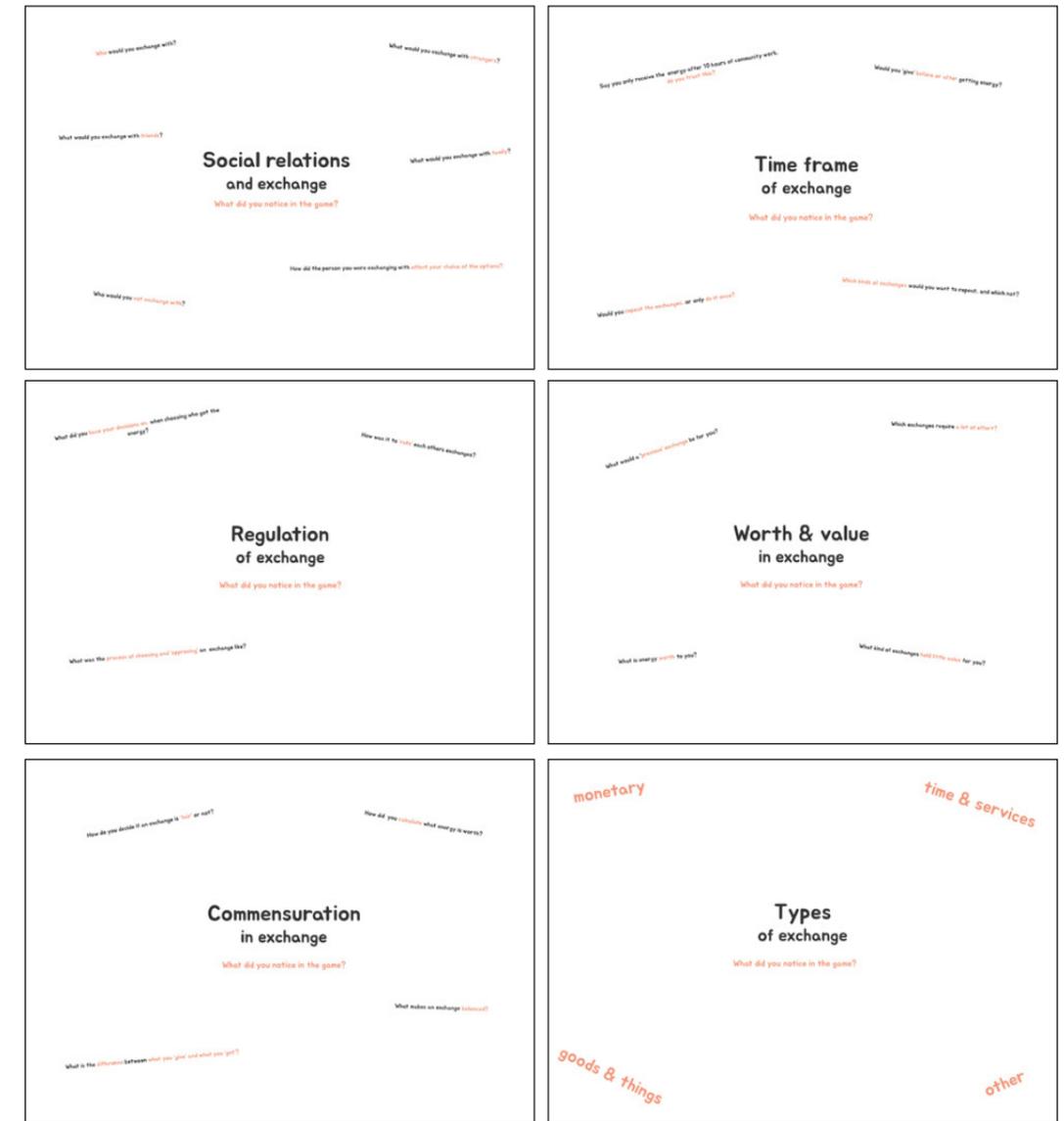
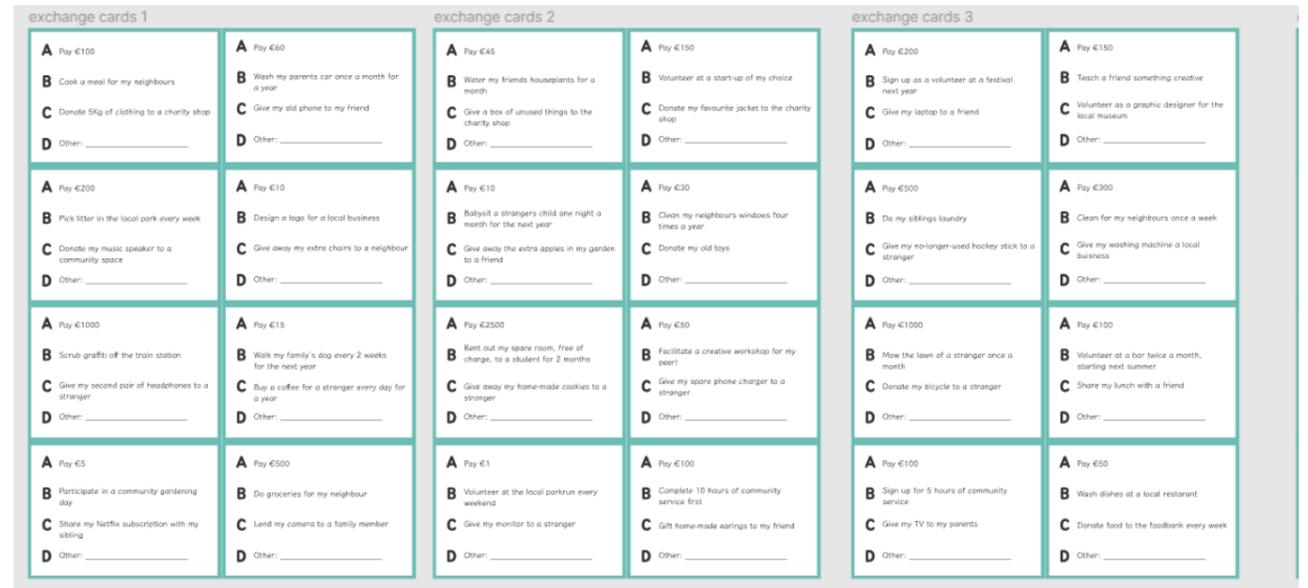
### Why did you choose this exchange option?

Use these prompts to help explain your choice to the group:

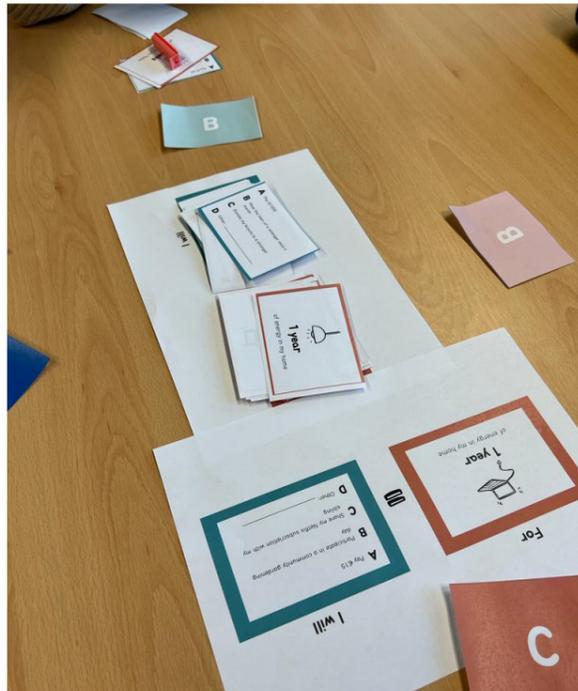


### Who should get the energy?

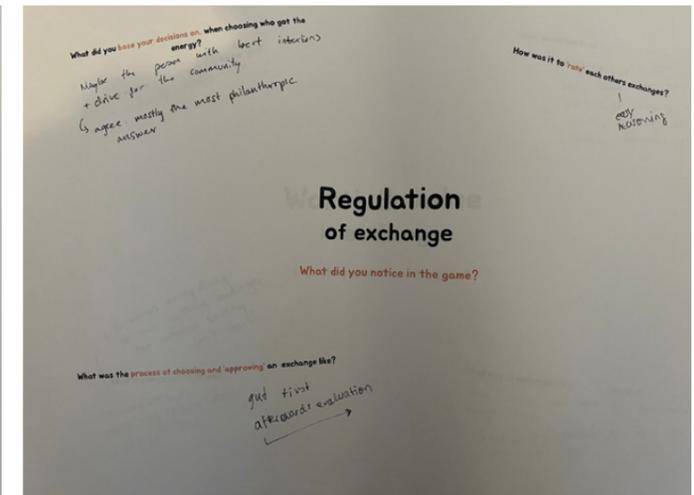
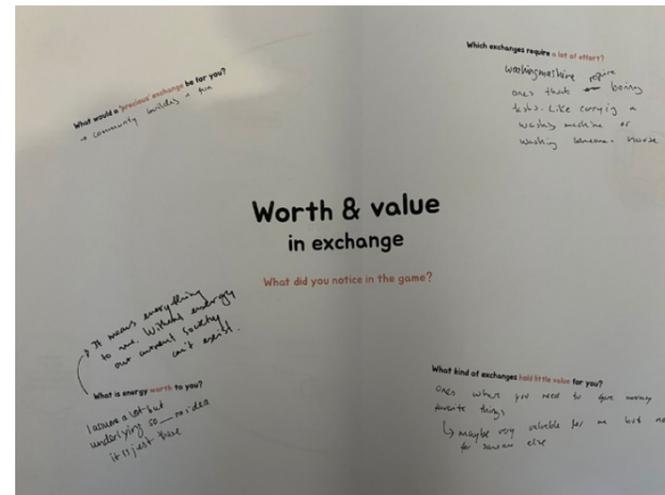
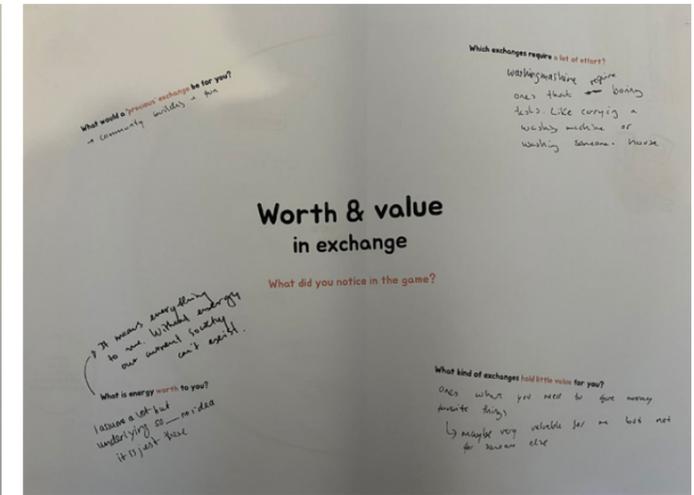
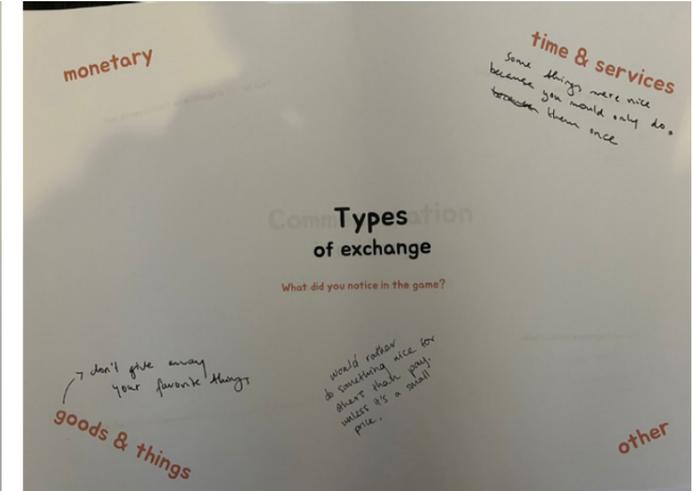
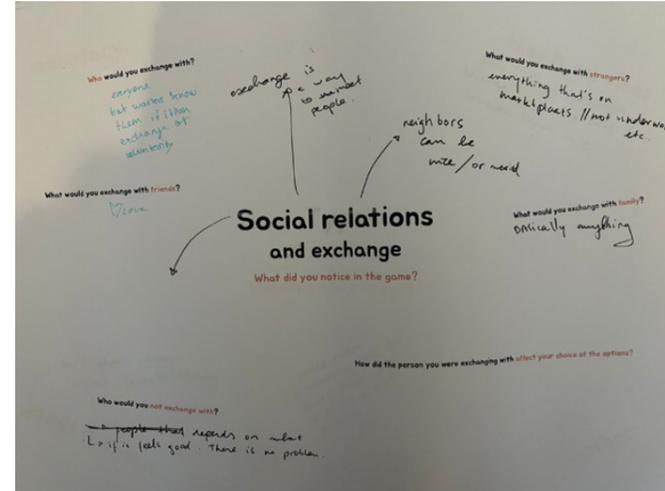
Use these questions to discuss and help you to make a decision:



GAME PLAY



CANVASES



# C3. EXPERT INTERVIEW

## CANVASES CREATED

### 1. How EnergyCoin creating and exchanging new value?

*To: What does inclusion mean in EnergyCoin  
1b. How is EcoCoin aiming to tackle social, financial and economic inclusion?  
1c. What is the potential for EcoCoin to address inclusion?*

"The EnergyCoin Foundation uses the blockchain technology for recording and exchanging the value of measurable daily climate actions."

"A new value system, towards an economy that fits within planetary boundaries of our living planet."

### 2. How is Energycoin foundation aiming to tackle inclusion?

*To: What does inclusion mean in EnergyCoin  
1b. How is EcoCoin aiming to tackle social, financial and economic inclusion?  
1c. What is the potential for EcoCoin to address inclusion?*

**INCLUSION IN THE ENERGYCOIN FOUNDATION**

SOCIAL      SUSTAINABLE

ECONOMIC      FINANCIAL

The circular economy      The shared economy

Reducing green house emissions (climate mitigation)      Protecting biodiversity and nature

Making the surroundings climate resistant

### 3. Which values are applicable to the EnergyCoin system?

*3a. Which values are applicable to EnergyCoin exchanges? Where are the parallels? Please select them.  
3b. Which are the most important values to keep in mind, for EnergyCoin? Please select them.  
3c. Which values are missing? (If any) Please write them in.*

BALANCE

SIMPLICITY

TRANSPARENCY

PERSONALITY

COLLECTIVENESS

TANGIBILITY

VALUE

SECURITY

TRUST

DIVERSITY

INCLUSIVITY

EQUITY

AUTONOMY

POWER

LOCALITY

### 5. Who are the actors in the EnergyCoin system?

*5a. Which people, groups and collectives are using the EnergyCoin now (or aim to be in the future)?  
5b. What are the incentives/ drivers for people and collectives to use EnergyCoin?  
5c. Are there social relations/ connections within and between the different groups of users?  
5d. Who are current partners of the EnergyCoin? (e.g. municipalities etc.) and what role do they play?  
5e. In which districts/ municipalities is EnergyCoin currently being used?*

INDIVIDUALS	GROUPS/ COLLECTIVES	PARTNERS/ INSTITUTIONS
 Rules:  Incentives/ drivers:	 Rules:  Incentives/ drivers:	 Rules:  Incentives/ drivers:

### 2. Who is participating the EcoCoin system?

*To: What does inclusion mean in EnergyCoin  
1b. How is EcoCoin aiming to tackle social, financial and economic inclusion?  
1c. What is the potential for EcoCoin to address inclusion?*

Social group: Incentive/ drivers: \_\_\_\_\_

Individual: Incentive/ drivers: \_\_\_\_\_

### 6. How does EnergyCoin work on different levels?

*6a. How does EnergyCoin work on a personal, community and local/ district level?*

**Regional level:**

**Local/ district level:**

**Community level:**

EnergyCoin dashboard  
'Virtual powerplant' for energy cooperatives

**Personal level:**

Energy tokens

### 7. What are the current and future use cases of EnergyCoin?

*7a. What are the current use cases for the EnergyCoin? What are possible contexts?  
7b. What future use cases do you see for the EnergyCoin?  
7c. What is the exchange value of the EnergyCoin?*

Context: \_\_\_\_\_

Calculation? \_\_\_\_\_

ACTION: → →

GET: \_\_\_\_\_

Context: \_\_\_\_\_

Calculation? \_\_\_\_\_

ACTION: → →

GET: \_\_\_\_\_

### 8. What are the opportunities and barriers for using EnergyCoin in inclusive energy exchange systems/ services?

*8a. What are the foreseen opportunities?  
8b. What are the foreseen barriers?*

Imagine a digital energy bartering service/ system where...

A sort of 'energy coin' or alternative currency could be used to exchange sustainable and socially valuable behaviour for local and more affordable and renewable energies.

E.g. In return for volunteering in the local community garden I earn 10 'energy coins' which can be exchanged for 2 weeks of renewable and affordable energy for my home, supplied by a local asset owner.

EnergyCoin:  
"A token for fresh, local, green power"

What are possible foreseen barriers?

What are possible foreseen opportunities?

### 9. How does EcoCoin deal with these different dimensions of exchange?

*9a. As an alternative currency, how does EcoCoin deal with these different dimensions of exchange?*

<p><b>Regulation</b></p> <p><i>How and who is regulating the exchanges made? Is an overview of exchanges created?</i></p>	<p><b>Form</b></p> <p><i>What are the physical and digital touchpoints of these exchanges? Is the digital dashboard inclusive for all citizens? How is blockchain integrated?</i></p>	<p><b>Commensuration</b></p> <p><i>How do you equate these exchanges? What units are given?</i></p>
<p><b>Worth &amp; Value</b></p> <p><i>How are you determining in the worth of a climate friendly action? How are you calculating the value of an EnergyCoin token?</i></p>	<p><b>Credit</b></p> <p><i>Is there a possibility of credit?</i></p>	<p><b>Motivation</b></p> <p><i>What is the motivation for people/ collectives to use EnergyCoin? Why participate in this system?</i></p>

**EnergyCoin Blockchain**

6-DBR of blocks on a distributed ledger for peer-to-peer energy exchange.

**Rules:**

- Energy coming from renewable sources.
- Blockchain allows the creation of tokens, programmable money in effect.
- Reduce energy consumption of energy provider system.
- Value creation through energy exchange.

**Characteristics:**

- Decentralized
- Transparent
- Immutable
- Secure
- Efficient
- Scalable
- Interoperable

**Value creation:**

- Energy providers can sell surplus energy.
- Consumers can buy energy at lower prices.
- Energy providers can reduce costs.
- Consumers can reduce energy bills.

**EnergyCoin Foundation uses the blockchain technology for recording and exchanging the value of measurable daily climate actions.**

**A new value system, towards an economy that fits within planetary boundaries of our living planet.**

**Value creation:**

- Energy providers can sell surplus energy.
- Consumers can buy energy at lower prices.
- Energy providers can reduce costs.
- Consumers can reduce energy bills.

**Blockchain & Value:**

- Blockchain is a distributed ledger.
- It records transactions in a secure and transparent way.
- It allows for peer-to-peer energy exchange.

**How does an EnergyCoin Token exchange take place?**

1a. How does the EnergyCoin system work?  
 1b. How does an EnergyCoin exchange take place in order to exchange the value of measurable daily climate actions?  
 1c. You do a climate friendly action, and then what happens next? What are the different steps involved?

**Regulation:**

- Climate friendly action
- Blockchain & Value
- EnergyCoin

**Value creation:**

- Energy providers can sell surplus energy.
- Consumers can buy energy at lower prices.
- Energy providers can reduce costs.
- Consumers can reduce energy bills.

**8. What are the opportunities and barriers for using EnergyCoin in inclusive energy exchange systems/ services?**

8a. What are the foreseen opportunities?  
 8b. What are the foreseen barriers?

**Imagine a digital energy bartering service/ system where...**

A sort of 'energy coin' or alternative currency could be used to exchange sustainable and socially valuable behaviour for local and more affordable and renewable energies.

E.g. In return for volunteering in the local community garden I earn 10 'energy coins' which can be exchanged for 2 weeks of renewable and affordable energy for my home, supplied by a local asset owner.

**EnergyCoin:**  
 "A token for fresh, local, green power"

**What are possible foreseen barriers?**

- Don't do this for a reward.

**What are possible foreseen opportunities?**

- Energy providers being needed to get donation.

**4. Is EnergyCoin aiming to tackle inclusion? How?**

4a. One key value I am focusing on is inclusion. What does inclusion mean in the EnergyCoin system?  
 4b. How is EnergyCoin aiming to tackle social, financial and economic inclusion?  
 4c. What is the potential for EnergyCoin to address inclusion?

**Local climate economy**

**INCLUSION IN ENERGYCOIN**

- SOCIAL:** Inclusive energy exchange.
- ECONOMIC:** A new value system, towards an economy that fits within planetary boundaries of our living planet.
- FINANCIAL:** Reducing green house emissions (climate mitigation).
- SUSTAINABLE:** Inclusive energy exchange.

**Who are the actors in the EnergyCoin system?**

5a. Which people, groups and collectives are using the EnergyCoin now (or aim to be in the future)?  
 5b. What are the incentives/ drivers for people and collectives to use EnergyCoin?  
 5c. Are there social relations/ connections within and between the different groups of users?  
 5d. Who are current partners of the EnergyCoin? (e.g. municipalities etc) and what role do they play?  
 5e. In which districts/ municipalities is EnergyCoin currently being used?

**INDIVIDUALS**

Roles: USER, INFLUENCER, ADVOCATE, 'KEYFIGURES'

Incentives/ drivers: ...

**GROUPS/ COLLECTIVES**

Roles: UPTAKE F.I., GLOBAL ACTION PLAN, PLATZLANDSVERBUND (W.I.)

**PARTNERS/ INSTITUTION**

Roles: ...

**What are possible contexts of EnergyCoin?**

Energy library by station. Token by tool.

**Personal level:**

**Context:**

**Tool:**

**ACTION:** GIVE: EnergyCoin Token

**GET:**

Calculation?

**values are applicable to the EnergyCoin system?**

values are applicable to EnergyCoin exchanges? Where are the parallels? Please select them.  
 are the most important values to keep in mind, for EnergyCoin? Please select them.  
 values are missing? (if any) Please write them in.

**BALANCE** 9

**PERSONALITY** 7

**VALUE** 7

**DIVERSITY** 4

**AUTONOMY** 3

**SIMPLICITY** 10

**COLLECTIVENESS** 9

**SECURITY** 9

**INCLUSIVITY** 7

**POWER** 6

**TRANSPARENCY** 9

**TANGIBILITY** 9

**TRUST** 9

**EQUITY** 9

**LOCALITY** 9

**How does EcoCoin deal with these different dimensions of exchange?**

9a. As an alternative currency, how does EcoCoin deal with these different dimensions of exchange?

**Regulation:** How and who is regulating the exchanges made? Is an overview of exchanges created?

**Form:** What are the physical and digital components of these exchanges? Is the digital dashboard inclusive for all citizens? How is blockchain integrated?

**Commensuration:** How do you create these exchanges? What units are given?

**Worth & Value:** How are you determining the worth of a climate friendly action? How are you calculating the value of an EnergyCoin token?

**Motivation:** What is the motivation for people/collectives to use EnergyCoin? Why participate in this system?

**Credit:** Is there a possibility of credit?

# C4. INSPIRATION SESSION 1

## MATERIALS & SESSION PLAN

**Idea cards 2**

**11. Exchanging local services for energy**

Residents provide local services (such as labour and voluntary work) and promotional activities to assist events, in return for energy.

Example: Residents do maintenance work of energy assets, e.g. solar panels on Johan Cruyff Arena, in exchange for energy.

**12. Exchanging sustainable local behaviour for energy**

Residents are rewarded for their local and sustainable behaviour with tokens, for energy, from institutions (municipalities, government and large asset owners).

Example: In return for participating in a local sustainable service (such as Freerby or bike sharing) residents are rewarded with tokens which can be redeemed for energy.

**13. Exchanging control over local infrastructure for energy and local energy assets**

Residents allow control over their local individual/ collective infrastructure (e.g. appliances, roof space for solar installation) to a distribution grid for flexibility and/or congestion management.

Example: In return for green energy assets (e.g. a heat pump) residents collectively allow the grid to control their energy consuming appliances.

**14. Exchanging energy data and in-kinds for energy**

Residents share their energy data with institutions that can monetize the data in return for energy.

Example: Residents disclose information about their energy usage in their homes in return for greener and more affordable energy.

**Idea cards blank**

UNDERSTANDABILITY	PERSONALISATION	INCLUSIVITY	TRUST	TRANSPARENCY	SOCIAL RELATIONS	BENEFICIAL FOR LOCAL ECONOMY	BALANCED RECIPROCALITY	CHOICE & CONTROL
<ul style="list-style-type: none"> <li>An energy exchange system which is easily accessible via an app and is available to all.</li> <li>The idea of energy exchange is made tangible and concrete with a simple and understandable graphic and language.</li> </ul>	<ul style="list-style-type: none"> <li>Energy exchange which allows participants to fit the exchange to their needs and needs.</li> </ul>	<ul style="list-style-type: none"> <li>Energy exchange which enables, especially vulnerable and socially excluded people to participate.</li> </ul>	<ul style="list-style-type: none"> <li>Energy exchange where participants have trust that they will receive a return for their effort/ labour/ goods.</li> <li>Energy exchange that builds trust between assets, who are not already socially connected with each other.</li> </ul>	<ul style="list-style-type: none"> <li>Energy exchange where there is transparency about the motivations and beneficiaries of the exchange.</li> <li>Energy exchange which is transparent about the data flows involved in the exchange.</li> </ul>	<ul style="list-style-type: none"> <li>Energy exchange which highlights existing social relationships of people.</li> <li>Energy exchange that enables people to face social relations, link values.</li> </ul>	<ul style="list-style-type: none"> <li>Energy exchange that supports the local economy of goods and services.</li> </ul>	<ul style="list-style-type: none"> <li>Energy exchange where people receive a fair and just return for the goods and services which they offer.</li> </ul>	<ul style="list-style-type: none"> <li>Energy exchange which gives participants choices in the exchange (free participants in and in the grid, in which the available).</li> </ul>
<p>Check: What are the challenges in applying this characteristic to the selected idea?</p> <div style="border: 1px solid gray; height: 40px; width: 100%;"></div>	<p>Check: What are the challenges in applying this characteristic to the selected idea?</p> <div style="border: 1px solid gray; height: 40px; width: 100%;"></div>	<p>Check: What are the challenges in applying this characteristic to the selected idea?</p> <div style="border: 1px solid gray; height: 40px; width: 100%;"></div>	<p>Check: What are the challenges in applying this characteristic to the selected idea?</p> <div style="border: 1px solid gray; height: 40px; width: 100%;"></div>	<p>Check: What are the challenges in applying this characteristic to the selected idea?</p> <div style="border: 1px solid gray; height: 40px; width: 100%;"></div>	<p>Check: What are the challenges in applying this characteristic to the selected idea?</p> <div style="border: 1px solid gray; height: 40px; width: 100%;"></div>	<p>Check: What are the challenges in applying this characteristic to the selected idea?</p> <div style="border: 1px solid gray; height: 40px; width: 100%;"></div>	<p>Check: What are the challenges in applying this characteristic to the selected idea?</p> <div style="border: 1px solid gray; height: 40px; width: 100%;"></div>	<p>Check: What are the challenges in applying this characteristic to the selected idea?</p> <div style="border: 1px solid gray; height: 40px; width: 100%;"></div>
<p>Responsible: <input type="checkbox"/></p> <p>Feasible: <input type="checkbox"/></p> <p>Desirable: <input type="checkbox"/></p> <p>Date: _____</p> <p>Site: _____</p>	<p>Responsible: <input type="checkbox"/></p> <p>Feasible: <input type="checkbox"/></p> <p>Desirable: <input type="checkbox"/></p> <p>Date: _____</p> <p>Site: _____</p>	<p>Responsible: <input type="checkbox"/></p> <p>Feasible: <input type="checkbox"/></p> <p>Desirable: <input type="checkbox"/></p> <p>Date: _____</p> <p>Site: _____</p>	<p>Responsible: <input type="checkbox"/></p> <p>Feasible: <input type="checkbox"/></p> <p>Desirable: <input type="checkbox"/></p> <p>Date: _____</p> <p>Site: _____</p>	<p>Responsible: <input type="checkbox"/></p> <p>Feasible: <input type="checkbox"/></p> <p>Desirable: <input type="checkbox"/></p> <p>Date: _____</p> <p>Site: _____</p>	<p>Responsible: <input type="checkbox"/></p> <p>Feasible: <input type="checkbox"/></p> <p>Desirable: <input type="checkbox"/></p> <p>Date: _____</p> <p>Site: _____</p>	<p>Responsible: <input type="checkbox"/></p> <p>Feasible: <input type="checkbox"/></p> <p>Desirable: <input type="checkbox"/></p> <p>Date: _____</p> <p>Site: _____</p>	<p>Responsible: <input type="checkbox"/></p> <p>Feasible: <input type="checkbox"/></p> <p>Desirable: <input type="checkbox"/></p> <p>Date: _____</p> <p>Site: _____</p>	<p>Responsible: <input type="checkbox"/></p> <p>Feasible: <input type="checkbox"/></p> <p>Desirable: <input type="checkbox"/></p> <p>Date: _____</p> <p>Site: _____</p>

<p><b>A. When considering the ideas,</b> think out loud and discuss...</p> <p>A1. • What is <b>exciting</b> about the idea?</p> <p>A2. • Is the idea <b>relevant</b> from your perspective? Why or why not?</p> <p>A3. • What aspect(s) of the idea are <b>important</b>?</p> <p>A4. • What are the <b>challenges</b> of the idea?</p> <p>A5. • What is <b>clear</b> or <b>unclear</b> about the idea?</p>	<p><b>C. When selecting two ideas,</b> think out loud and discuss...</p> <p>From <b>your perspective</b>:</p> <p>C1. • Which idea is most <b>inspiring</b>?</p> <p>C2. • Which idea is most <b>important</b>?</p>
<p><b>B. After placing the cards in the C-Box,</b> think out loud, discuss and write on the blank cards...</p> <p>From <b>your perspective</b>:</p> <p>B1. • What is <b>needed</b> to move X idea closer towards <b>easy to realise</b>?</p> <p>B2. • What is <b>needed</b> to move X idea closer towards <b>original</b>?</p>	<p><b>D. Take a characteristic card from the stack,</b> think out loud, discuss and write on post-its...</p> <p>From <b>your perspective</b>:</p> <p>D1. • What are the <b>challenges</b> in applying this characteristic to the selected idea(s)?</p>

Inspiration - plan

## Planning

### Inspiration session

1.5 hours, with max. 2 stakeholders/ partners at a time

**Aim:**  
Share ideas with project stakeholders and see which are feasible and inspiring from their perspective.  
Fill some knowledge gaps and identify opportunities and barriers for ideas going forward.

**Structure:**

1.
**Introduce project & inspiration session**  
 Inclusive energy exchange 5 - 10 mins
2.
**Engazer!**  
 Quick energizer to get into the creative mindset 5 mins
3.
**Consider and discuss idea cards**  
 Go through all idea cards together. Read them, think out loud and discuss the trigger questions (sheet A).  
 Already give participants the option to write down new ideas if they have them. 15 mins
4.
**Place idea cards in C-Box**  
 Place all the cards in the C-Box and discuss together whilst doing so. After placing the cards, consider the trigger questions on sheet B. 10 mins
5.
**Come up with more ideas!**  
 Use the blank idea cards and come up with new ideas, sparked by the discussions had. Use the questions on sheet C. Place the new ideas also into the C-Box. 10 mins
6.
**Select two ideas**  
 Select two of the ideas and choose them based on the trigger questions in sheet D. 5 mins
7.
**Consider and discuss characteristic cards**  
 Take characteristic cards from the stack and consider the trigger questions on sheet E for each selected idea. Make sure to go through all characteristic cards. 20 - 25 mins
8.
**Reflection and closing**  
 Group reflection on the session. Final thoughts and questions which come to mind. What are they things still to be found out? 5 - 10 mins

85 - 90 mins total

A3 31
A3 34

difficult to realise

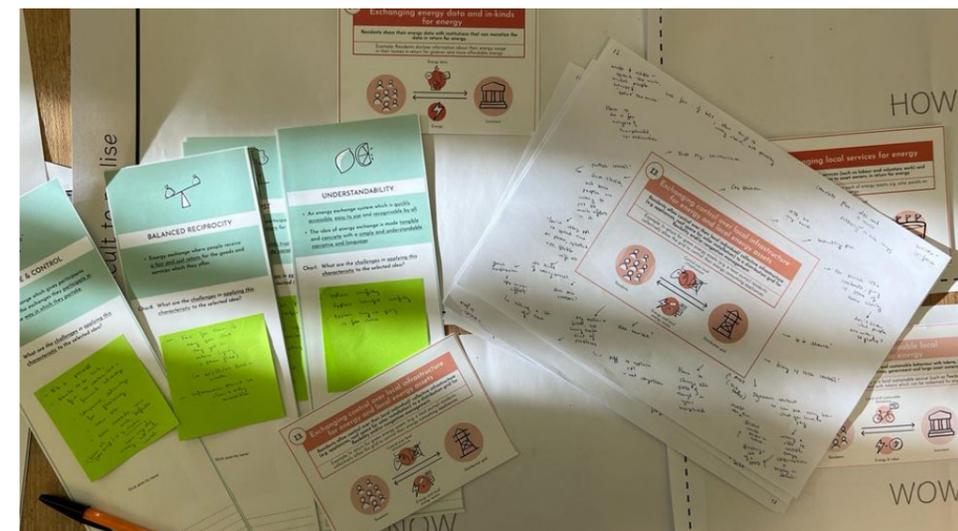
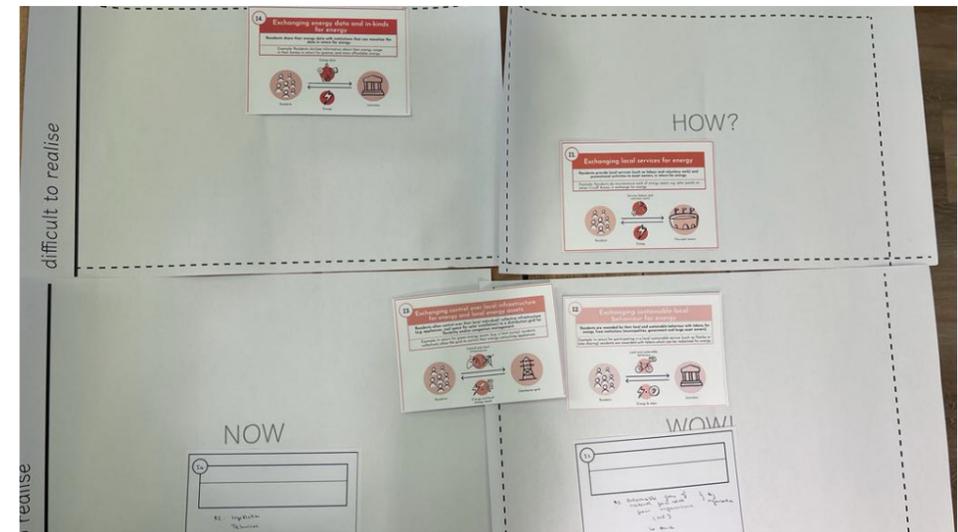
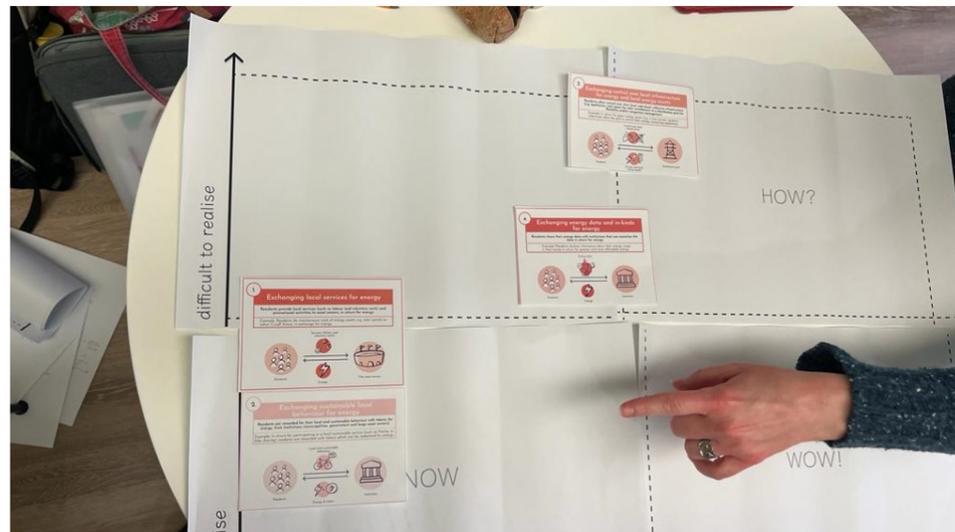
easy to realise

common

original

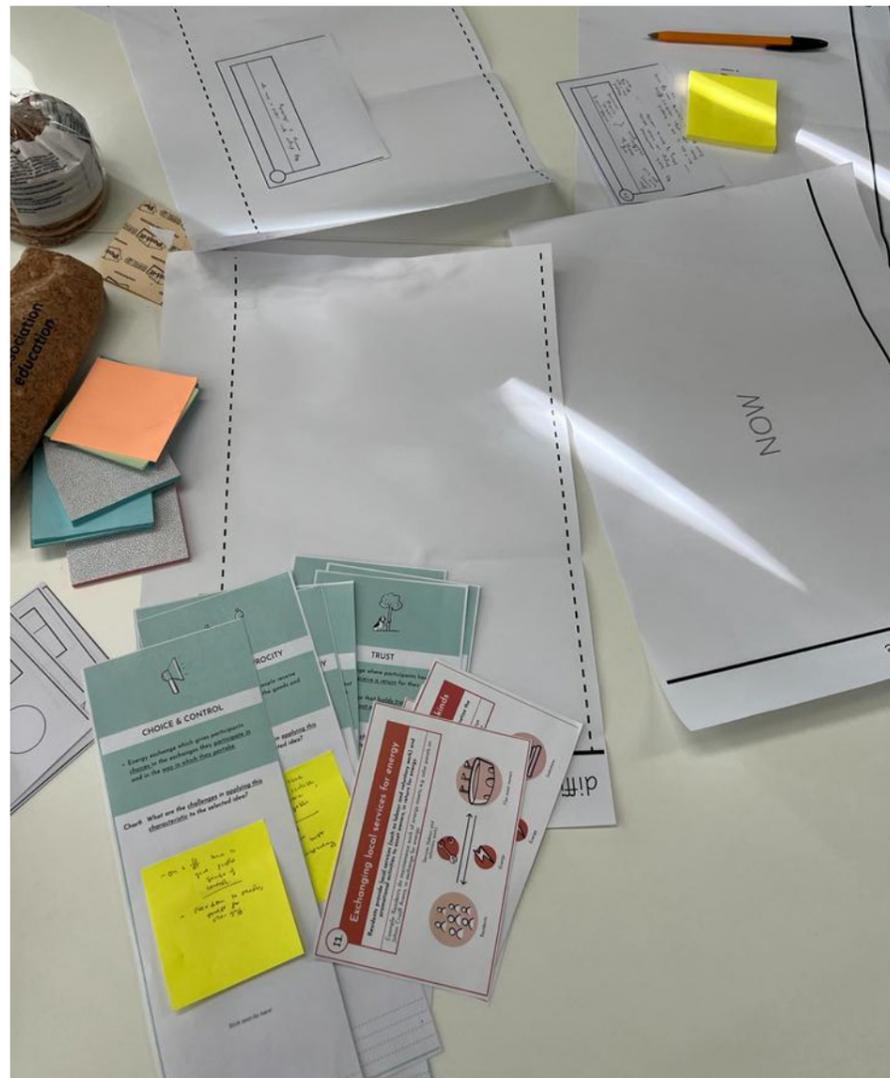
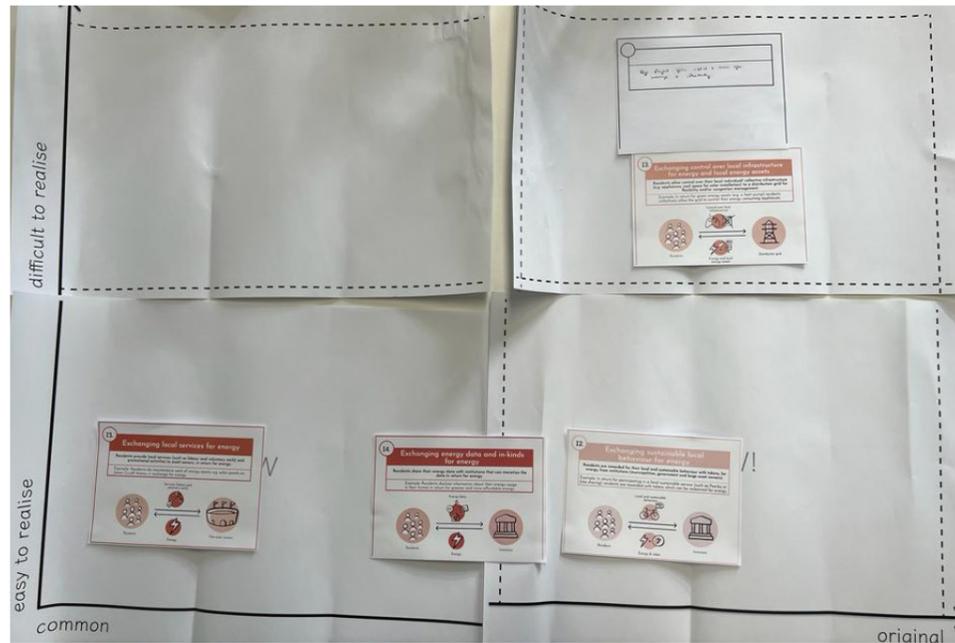
HOW?

WOW!



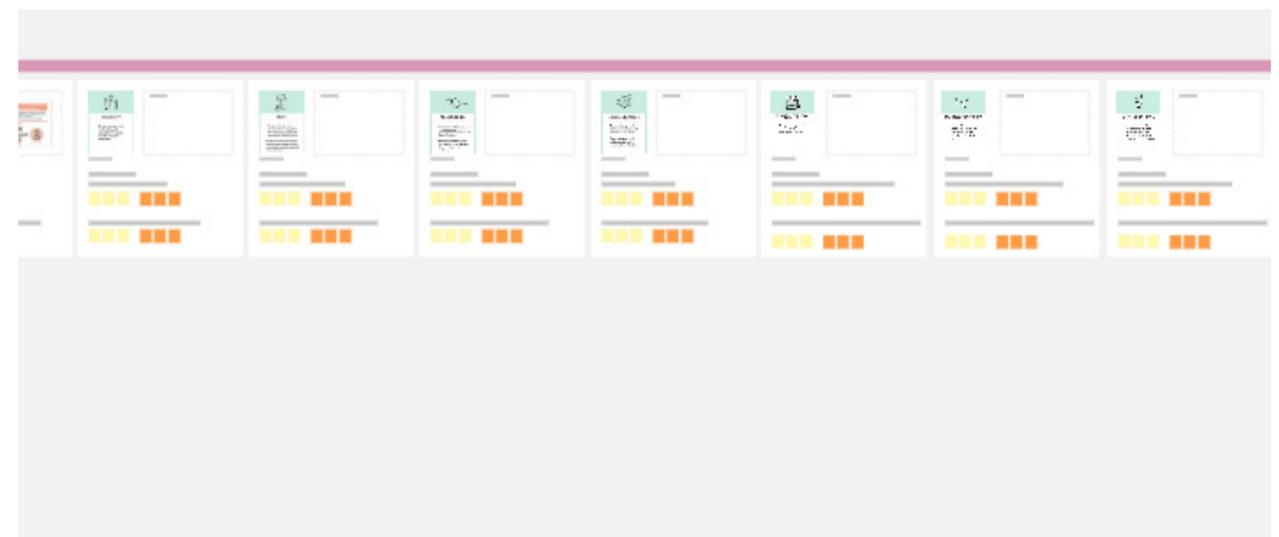
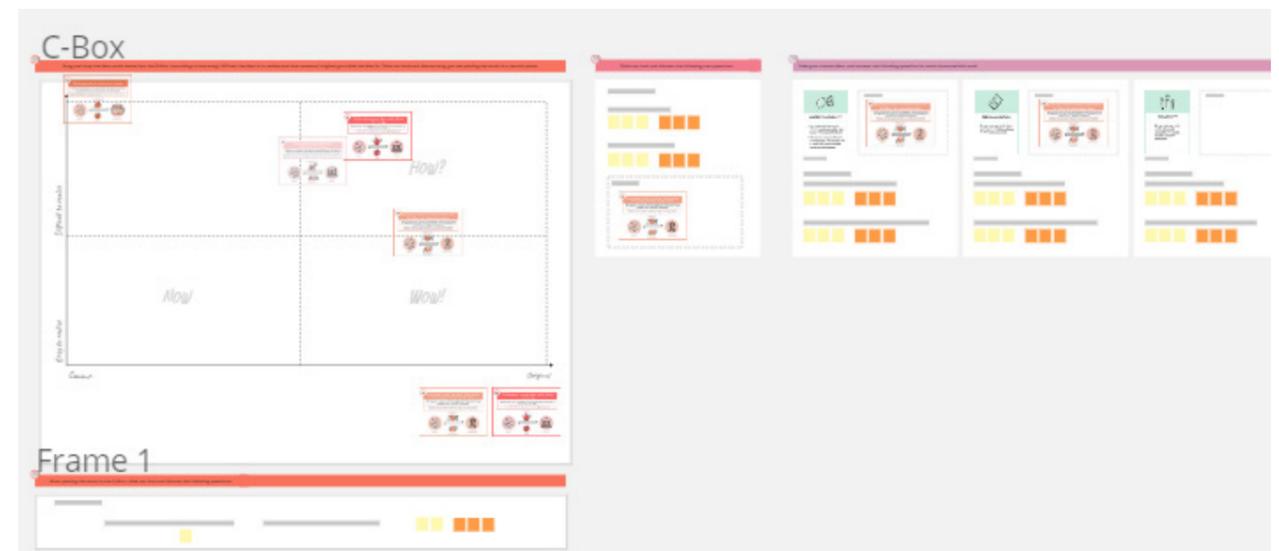
## C6. INSPIRATION SESSION 3

### SOCIO - TECHNICAL PERSPECTIVE



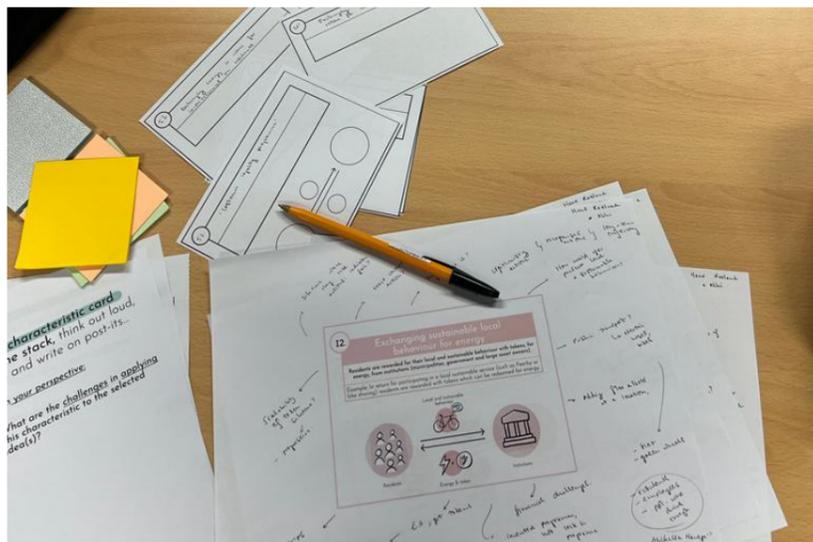
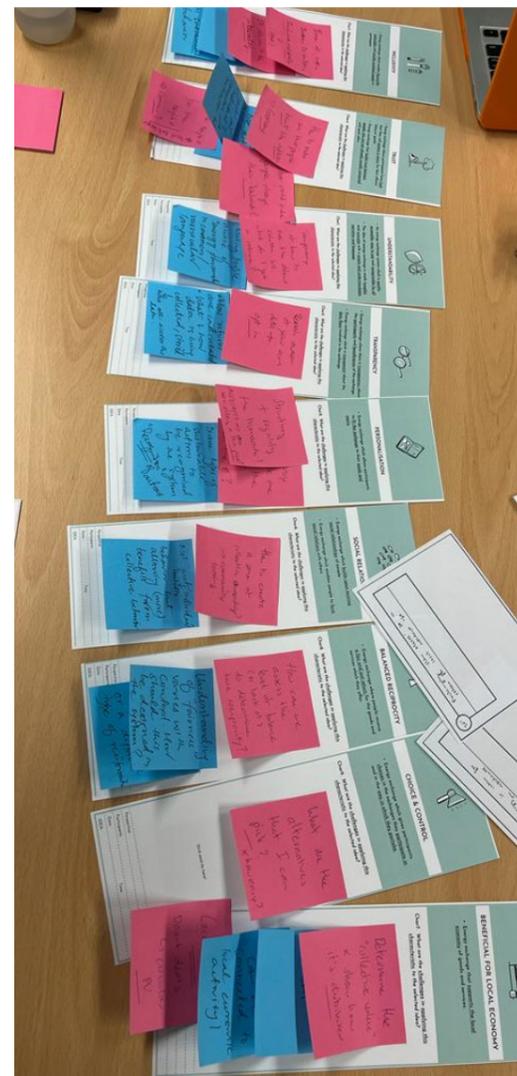
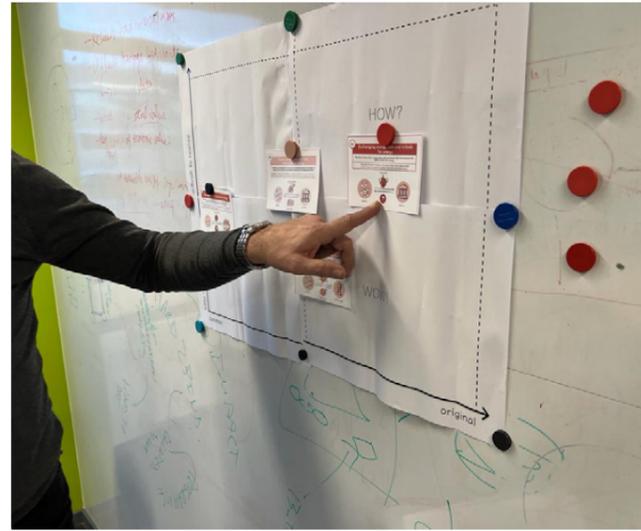
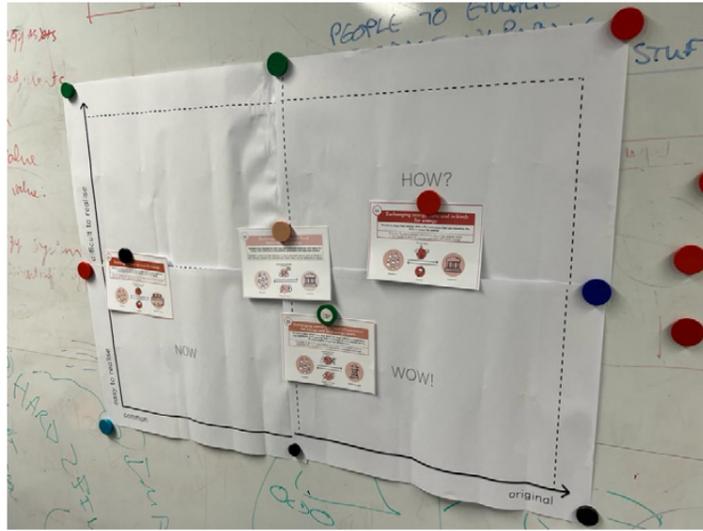
## C7. INSPIRATION SESSION 4

### TECHNICAL PERSPECTIVE



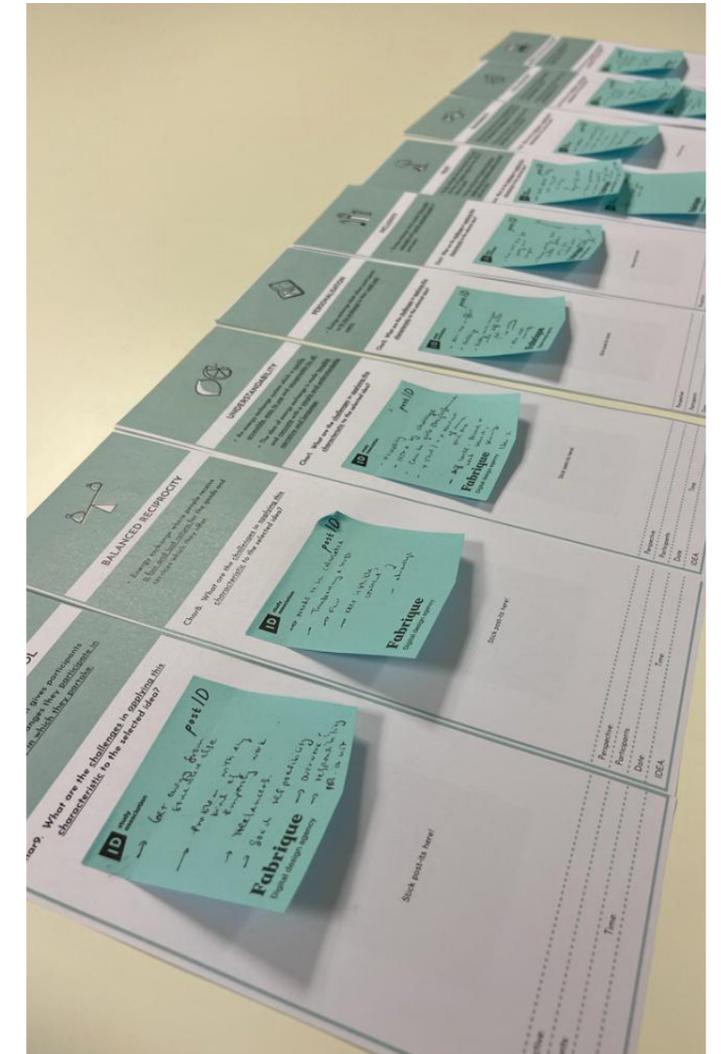
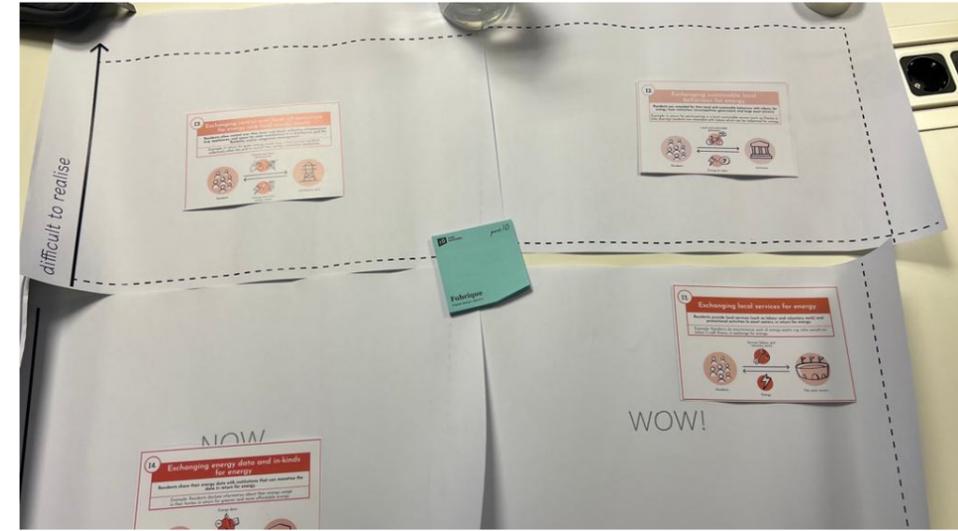
## C8. INSPIRATION SESSION 5

### ECONOMIC / BUSINESS PERSPECTIVE



## C9. INSPIRATION SESSION 6

### LARGE ASSET OWNER PERSPECTIVE (JCA)



# C10. SCENARIO SESSION

## MATERIALS/ SESSION STRUCTURE

Problem as Given

### How can local tokens be a means for socially & financially inclusive energy exchange in Amsterdam Zuidoost?

planning

### Planning

Inspiration session - Lokaal Geld RECORD!

1.5 hours, with a group of ~5 participants

**Aim:**  
Share ideas about using a local token/ currency (like Lokaal Geld) in the context of energy exchange and brainstorm further about the scenarios and contexts where this could be relevant and valuable in Zuidoost.  
Think about more 'outside the box' and encourage 'future thinking' to introduce more novelty into the ideas.

**Structure:**

- 1. Introduce project, inspiration session & problem statement** 5 - 10 mins  
Read the problem statement out loud and explain what we are going to do in the session (rough agenda). Share what I will do with outcomes of this session. Ask if there are any questions. Hand out consent forms.  
Short intro round/ energizer/ association game?
- 2. Purge** 5 mins  
Together as a group do a quick 'purge' on the key words in the problem statement to get into the topic and get any ideas out there.
- 3. Read and discuss scenario cards.** 40 mins (incl. break)  
Read the scenario out loud (me) and then and discuss each of the scenario cards one-by one, discuss them, give initial impressions and thoughts. Answer questions 1 and 2. Write thoughts on post-its. (Can also split the group into 2 pairs and each discuss three. Record both breakouts!)  
*Place spare sheets on table for filling in new or combining ideas. Can also ask, what are specific challenges/ opportunities in this scenario?*
- 4. Combine and select ideas** 10 mins  
Discuss together which are the most relevant ideas and write it down on one larger sheet.  
This can also be a combination of ideas or a new idea.
- 5. Final discussion** 15 mins  
Ask the final four questions (combining from previous sessions) and discuss together as a group (can use selected idea(s) as a reference for this. If time, can also ask additional questions)

**Wrap up of session and further discussion**  
Time to talk more about what's next and aligning Lokaal Geld's project phases with LIFE.

75 mins total (excluding break)

structure

### Structure

Inspiration session - Lokaal Geld

- 1. Session introduction**
- 2. Purge & 'brain dump!'**
- 3. Read, discuss and brainstorm on scenario cards** (Small break in between)
- 4. Combine and select ideas**
- 5. Final questions, discussion & wrap up**

qns

**Q1. How relevant is this scenario for**  
a) social and financial inclusion?  
b) implementation of local tokens?

---

**Q2. What is the value(s) in using a local token in this scenario, instead of money?**

---

qns

**Q1. How relevant is this scenario for**  
a) social and financial inclusion?  
b) implementation of local tokens?

---

**Q2. What is the value(s) in using a local token in this scenario, instead of money?**

Discussion to wrap up

**Some final questions which I would like your input on**

Q3. • What form(s) should the digital tokens take, in order to include people of different abilities? (physical, digital or both?)

Q4. • How to quantify a 'fair' return for behaviours/ actions?

Q5. • Which organisations and institutions should be involved?

Q6. • How is the action or behaviour logged/ recorded?

Discussion to wrap up

**Additional questions**

Q7. • How can tokens be connected to local economic activity?

Q8. • How can we assess the balance (or lack of balance) to determine reciprocity?

Q9. • How can local tokens not only make lasting and future impact, but also help residents in their day-to-day? Is it possible to see short term impact/ effects?

Q10. • How to manage the 'power im(bal)ance' between exchanging parties?

Q11. • How 'match' the return of energy with current prices? Does the return stay constant or fluctuate too?

Q12. • What is the benchmark for recognising the action/ behaviour?

Q13. • How to create a sense of 'collectiveness'?

Q14. • Which activities/ actions should be recognised?

Final discussion

Q3. What form(s) should the local tokens take, in order to include people of different abilities? (physical, digital or both?)

Q4. How to quantify a 'fair' return for behaviours/ actions?

Q5. Which organisations and institutions should be involved?

Q6. How is the action or behaviour logged/ recorded?



### S1 Exchanging local tokens as compensation for local event disturbances

**Example:** A local resident living nearby the Johan Cruyff Arena is compensated for the noise and parking inconvenience during a football match with local tokens which can be used on energy saving materials.

**Diagram:** Local residents exchange Local tokens with Large local asset owners. Connection to energy: Residents can get energy saving material/devices for their home using the local tokens received.

**Possible impact:** lower energy bill, build connection between large...

**Handwritten notes:**

- Can not just energy saving materials but transport option like OV chipkaart, subscription
- Additional value of digital token saves additional cost on administrative costs
- Target/Beneficiary local residents (owners), visitors & visitors (?)
- Key & Mobility
- These tokens can be used for
- Additional value of digital token saves additional cost on administrative costs
- Payment in digital token would be beneficial as in form of token stays in the system
- Lot of parking disturbance - people park their cars
- Give incentives - see what you want in the cars
- Clear house - needs energy saving devices
- more incentive to more people & related to it
- Group - more - more group
- to be relevant largest audience
- Payment in digital token would be beneficial as in form of token stays in the system

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- Group - more - more group
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### S2 Exchanging local tokens as a reward for purchasing local goods

**Example:** A resident purchases locally produced products at the store and is rewarded for their support of small businesses with local tokens, which give them a discount on their monthly energy bill.

**Diagram:** Local residents exchange Local tokens with Local SME. Connection to energy: Residents can get a discount on their energy bill at the end of the month, equal to the number of local tokens collected.

**Possible impact:** recognition for and incentive to support of local businesses, helping the local economy to thrive, more spending money available.

**Handwritten notes:**

- Local tokens with solar cell
- How to connect to off-takes (microeconomic)
- some scenario requires local energy cooperative or locally produced
- Local tokens with solar cell
- How to connect to off-takes (microeconomic)
- some scenario requires local energy cooperative or locally produced

### S3 Exchanging local tokens as a return for services and work

**Example:** A local resident works as a steward or caterer during a concert at Johan Cruyff Arena and in return for their service and time, receives local tokens which can be invested in a collective energy asset.

**Diagram:** Local residents exchange Local tokens with Large local asset owners. Connection to energy: Residents can invest in a collective energy asset, e.g. solar panels for the community centre, using their local tokens.

**Possible impact:** work experience for unemployed and/or undocumented people, strengthen and...

**Handwritten notes:**

- Tokens invest in flex all batteries at within neighborhood
- It's better as people can be motivated to invest in solar panels for their neighborhood
- People can collaborate with solar panels and use it for something
- How to connect to off-takes (microeconomic)
- some scenario requires local energy cooperative or locally produced

### S5 Exchanging local tokens for commitment to personal and community development

**Example:** A local novice entrepreneur starting up a new small business or initiative, is supported and encouraged in the first months with local tokens, which can contribute to the payment of their energy bill.

**Diagram:** Local residents exchange Local tokens with The municipality. Connection to energy: A local novice entrepreneur can pay for part of their energy bill with the local tokens they receive.

**Possible impact:** encourages entrepreneurs behind doors to share their ideas, more spending money for enterprises, skill / personal development, lower energy costs, financial guidance.

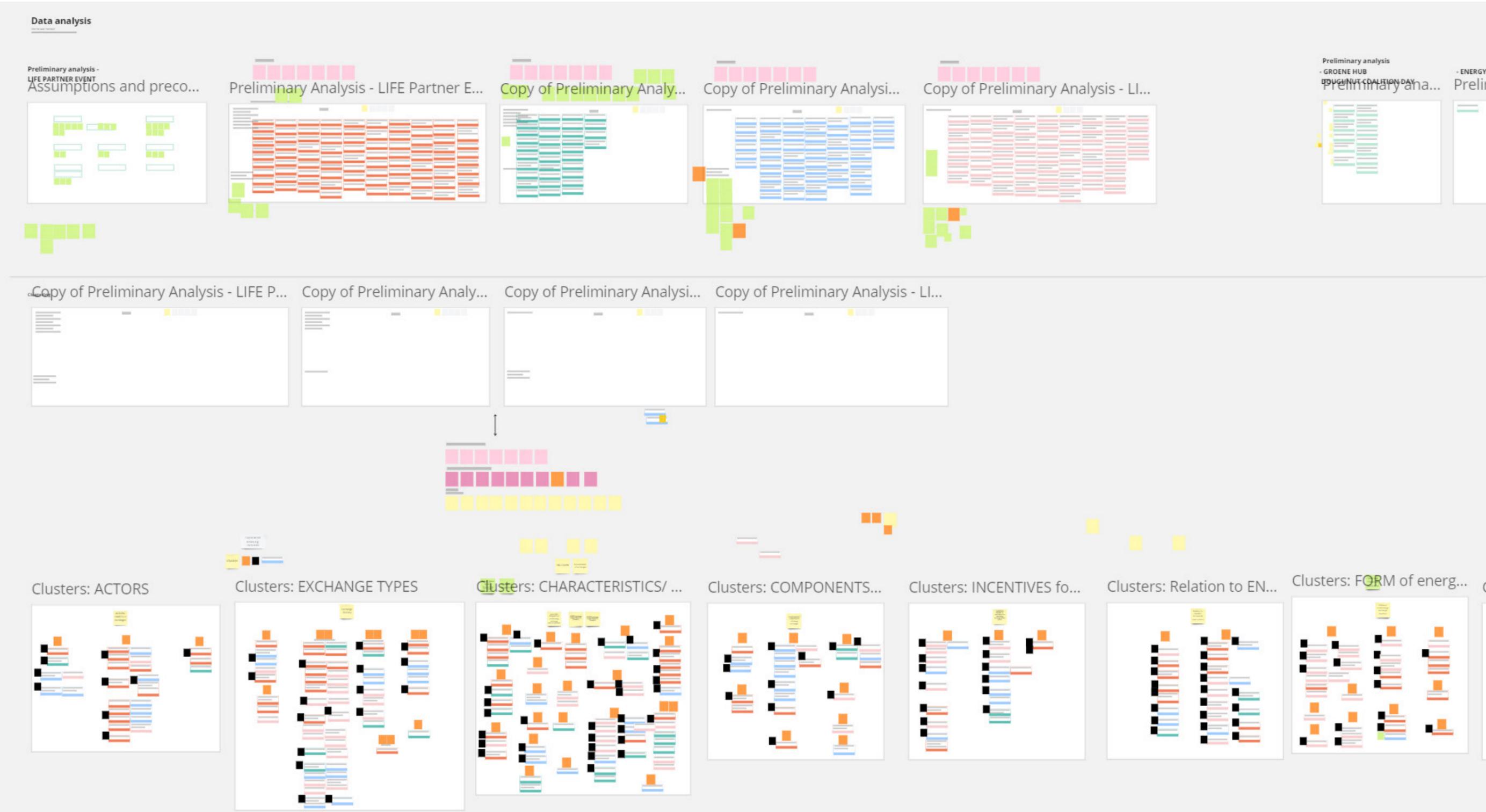
**Handwritten notes:**

- Biodegradable people educate food waste to be used in their home and food production
- Community food (restaurant) with children
- By the direction of the food in the house
- the home and support people collection for bio digestor
- How to connect to off-takes (microeconomic)
- some scenario requires local energy cooperative or locally produced

# D. ANALYSIS/ SYNTHESIS

## D1. ANALYSIS OF LIFE PARTNER EVENT

### THEMATIC ANALYSIS OVERVIEW



GROUP 1

Grid of sticky notes for Group 1 containing various ideas and discussions about energy exchange systems, such as 'LIFE Social Platform is a trade', 'Collective ownership', and 'Local market place for the...'

GROUP 2

Grid of sticky notes for Group 2 containing various ideas and discussions about energy exchange systems, such as 'Something that just struck me over the last year...', 'Energy is a basic human', and 'Local Energy Cooperatives can give advice and information'.

GROUP 3

Grid of sticky notes for Group 3 containing various ideas and discussions about energy exchange systems, such as 'Big consumers (such as ING) can give small consumers', 'I think there's also a group [of residents] who doesn't want to', and 'They [residents] just want us'.

GROUP 2

<p>"Residents can maybe get like more control of their energy"</p> <p><i>In a new exchange system where residents receive assets, they can get more ownership over their energy and a better understanding of their usage.</i></p>	<p>"[Asset owners] would like to"</p> <p><i>Large asset owners want to be seen as socially aware. (But are they?)</i></p>	<p>"When you're not in energy poverty, but your neighbour gets solar panels and you're"</p> <p><i>Residents could be influenced to participate in an energy exchange system by seeing their neighbours doing so.</i></p>	<p>"The informational part. Maybe they [residents] become aware of energy"</p> <p><i>In return for energy, residents could 'get' practical information about energy systems (e.g. saving energy) and be able to apply this to their workplaces.</i></p>	<p>"You could donate your"</p> <p><i>You could have physical energy donation banks.</i></p>	<p>"Local targeted advertising of"</p> <p><i>New energy exchange services/system should also speak to younger generation.</i></p>	<p>"Almost like you buy stamps, but then you have a few of them and at some point, you"</p> <p><i>A physical 'energy shop' would push people to visit a local store, and interact with the people there (social benefits).</i></p>	<p>"Almost like you buy stamps, but then you have a few of them and at some point, you"</p> <p><i>A physical 'energy shop' would push people to visit a local store, and interact with the people there (social benefits).</i></p>	<p>[LSP could take the form of] 'a'</p> <p><i>A new energy exchange system could be based on donation.</i></p>
<p>"Residents can get relief from"</p> <p><i>Large asset owners can help relieve local vulnerable residents of energy poverty.</i></p>	<p>"[The JCA] in their mission statement, they also have the"</p> <p><i>Many larger businesses are obliged to create value in the community they are located in (outside of their main business?)</i></p>	<p>"Do you think energy security would also be something which drives them? For"</p> <p><i>A feeling of energy security could drive residents to participate in a new system.</i></p>	<p>"The informational part. Maybe they [residents] become aware of energy"</p> <p><i>In return for energy, residents could 'get' practical information about energy systems (e.g. saving energy) and be able to apply this to their workplaces.</i></p>	<p>"Residents need assets to"</p> <p><i>Residents need assets to participate in energy exchange.</i></p>	<p>"It's almost like you also have these things like renting your washing machine. It's a service that you can use. Maybe you"</p> <p><i>Residents could rent out their roof for energy assets (e.g. solar panels) in order to access local and more affordable energy.</i></p>	<p>"Like a local hub thing. And then maybe it's also building trust. People feel like they can"</p> <p><i>Could convert energy exchange in a physical place with existing local gathering/collective places and make it more tangible.</i></p>	<p>"[Life Social Platform] means"</p> <p><i>A new energy exchange system should be as quick, easy and accessible as sending a 'like' (transferring money) to each other.</i></p>	<p>[LSP could take the form of] 'a'</p> <p><i>A new energy exchange system could be attached to existing local stores.</i></p>
<p>"I would also say security because it's going to be there for a very long time. So if that"</p> <p><i>Receiving energy from local big businesses gives residents a feeling of energy security.</i></p>	<p>"That's why they (JCA) get financial support from the"</p> <p><i>Large businesses receive governmental funding to support the local neighbourhood.</i></p>	<p>"It's not always possible to"</p> <p><i>JCA wants to get rid of the surplus energy which they can't store or sell.</i></p>	<p>"Could JCA provide maybe a subsidy or like reduction for people who want to change"</p> <p><i>Big asset owners could help residents to transition to greener energy in their homes (getting assets) in return for partial control of their assets.</i></p>	<p>"Second hand solar panels which they can easily purchase"</p> <p><i>Residents could exchange labour in return for energy assets (if they have the means to participate in energy exchange).</i></p>	<p>"[Talking about residents renting out their roofs] 'It"</p> <p><i>Conflicts could arise when public/shared spaces are used for financial gain of a few.</i></p>	<p>"[Speaking about a local hub/physical energy exchange store] 'That could be"</p> <p><i>Residents could receive personalised energy information from local large asset owners.</i></p>	<p>"[Life Social Platform] is fair"</p> <p><i>Fair sharing of energy is key to a new energy exchange services/system.</i></p>	<p>[LSP] 'should provide access'</p> <p><i>A new energy exchange system should be inclusive for international residents etc.</i></p>
<p>"Maybe the energy is cheaper if you take it from the JCA, than"</p> <p><i>Locally produced/stored energy could be cheaper for local residents (than energy from the grid).</i></p>	<p>"Decision maker implies that they [residents] have some"</p> <p><i>The only influence residents have over their energy, is their consumption (?)</i></p>	<p>"The gift itself is the reduction"</p> <p><i>What residents can 'get' from an energy exchange with asset owners, is more affordable energy prices.</i></p>	<p>"So JCA give an incentive for"</p> <p><i>Big asset owners could help residents to transition to greener energy in their homes (getting assets) in return for partial control of their assets.</i></p>	<p>"JCA offers incentives to invest in flex potential, both"</p> <p><i>Incentives offered to residents to get assets could be monetary or in-kind.</i></p>	<p>"Maybe they [JCA] are like"</p> <p><i>There is a risk of inequality due to power imbalance between large asset owners and residents.</i></p>	<p>"Like at the Albert Heijn, energy hamstere (?)"</p> <p><i>A new energy exchange system could take the form of like a discount/coupon store.</i></p>	<p>"[Life Social Platform] is about"</p> <p><i>A new energy exchange system can be compared to saving money in a central bank and earning interest.</i></p>	<p>[LSP could take the form of] 'a'</p> <p><i>A new energy exchange system should attach to existing local initiatives.</i></p>
<p>"Also what residents could"</p> <p><i>In return for receiving energy, residents can help to improve the public image of the 'giver' - the big asset owner.</i></p>	<p>"From a social view. I'm really curious about how things are"</p> <p><i>Addressing inclusion in a new services/system is an unanswered question.</i></p>	<p>"This directly leads to security"</p> <p><i>Residents can 'get' a feeling of security about their energy supply by exchanging with large local asset owners.</i></p>	<p>"So, for example, they ask residents to turn off the"</p> <p><i>In return for their own green energy assets, residents could give over (partial) control of them to flex asset owners.</i></p>	<p>"Wouldn't it be cool if JCA has some sort of app in which you"</p> <p><i>Residents could engage in energy exchange through an app.</i></p>	<p>"We talked about that residents need assets to increase their flex, but maybe they don't need assets. Maybe"</p> <p><i>Residents could loan or lease assets (from big flex asset owners) in order to participate in an energy exchange system.</i></p>	<p>"I think from a social point of view, they are aware that it's a really complex matter and it is not about blaming anybody. For instance, now energy it too"</p> <p><i>A physical place where these energy exchanges take place creates the opportunity for more education and awareness about the system.</i></p>	<p>"[Life Social Platform] means"</p> <p><i>Key to a social and local system is that energy is more affordable (for all?)</i></p>	<p>[LSP could take the form of] 'a'</p> <p><i>A new energy exchange system could form like a coupon service.</i></p>
<p>"Local engagement. I think that"</p> <p><i>Large asset owners need and want to be seen as engaging with the local neighbourhood.</i></p>	<p>"If we can prove that an asset owner in the area, like JCA, can"</p> <p><i>A ripple/snowball effect can be created if one large asset owner already participates in energy exchange with the local neighbourhood.</i></p>	<p>"They get some energy and"</p> <p><i>Residents could give their time and/or services in exchange for energy from large asset owners.</i></p>	<p>"There's actually a lot to get"</p> <p><i>Residents have perhaps more to 'give' in a new energy exchange, that might be initially assumed.</i></p>	<p>"How would they [residents]"</p> <p><i>Communication of new energy/exchange system is important.</i></p>	<p>"Providing local deals that if you buy local, they you get"</p> <p><i>Buying local energy can give locals other local deals in exchange.</i></p>	<p>"[Life Social Platform] is a free"</p> <p><i>Gaining new knowledge and learning is part of a new local and social energy system.</i></p>	<p>[LSP could take the form of] 'a'</p> <p><i>A new energy exchange system could form not just within but across communities.</i></p>	
<p>"If you have insight in the community, the that gives you"</p> <p><i>Information about usage in the community is valuable for businesses who want to know where to put their investments.</i></p>	<p>"If we can prove that an asset owner in the area, like JCA, can"</p> <p><i>A ripple/snowball effect can be created if one large asset owner already participates in energy exchange with the local neighbourhood.</i></p>	<p>"For example a group of residents sign up for some"</p> <p><i>Residents could form collectives and carry out tasks in order to receive energy.</i></p>	<p>"[A new energy exchange system] could be like these"</p> <p><i>Energy exchange could be attached to the physical places residents already visit in the neighbourhood.</i></p>	<p>"Make deals with local shops"</p> <p><i>Local stores could partner/work together with large asset owners to promote a new energy exchange system.</i></p>	<p>"Building a community. If you"</p> <p><i>Visiting the events from local businesses could be a way for residents to receive energy coupons.</i></p>	<p>"[Life Social Platform] where"</p> <p><i>Inclusion should be central to a local energy system.</i></p>	<p>[LSP could take the form of] 'a'</p> <p><i>A new energy exchange system could form not just within but across communities.</i></p>	
<p>"I would say like information about the local community, what's going on? What is"</p> <p><i>The gemeente/municipality values getting more insight into the community and the problems and possibilities there. An new system could be opportunity to create and 'have way in' for municipality research and programmes.</i></p>	<p>"There is so much potential there [exchange between local asset owners and residents]. If"</p> <p><i>The ingredients/ components for setting up exchanges between large asset owners and residents are already largely there.</i></p>	<p>"Maybe if JCA can become some part of this little"</p> <p><i>Residents can become advocates for local big businesses and help them to grow their loyalty base (in exchange for energy?)</i></p>	<p>"You could keep buying tickets with some incentives for surplus energy or something."</p> <p><i>Receiving affordable energy could take the form of a coupon or lottery ticket.</i></p>	<p>"Buy a local dishwasher and"</p> <p><i>Residents could be stimulated to 'buy local' in return for (re)affordable energy.</i></p>	<p>"LSP could be a social service"</p> <p><i>The connection between the social and technical sides could take the form of a 'social service company'.</i></p>	<p>"[Life Social Platform] means"</p> <p><i>Power and energy should be balanced and equal in a new local system.</i></p>	<p>[LSP could take the form of] 'a'</p> <p><i>A new energy exchange system could form not just within but across communities.</i></p>	
<p>"[Giving community members tickets to JCA events] Helps to diversify the audience in a way. And that helps with inclusivity goals, maybe."</p> <p><i>Involving the local community can help big flex asset owners to meet their exclusivity and diversity goals.</i></p>		<p>"You can gift energy to people."</p> <p><i>Energy could be exchanged through a physical form (like a gift box).</i></p>	<p>"Or if your [dishwasher] is broken down and you order"</p> <p><i>Hiring local workshops/craftsmanship could be traded in return for (re)affordable energy.</i></p>	<p>"Like when you hire a contractor... Maybe it could be something like that, but they"</p> <p><i>Residents themselves do not to organise the exchanges, there could be a middleman/ service which facilitates this for them.</i></p>	<p>"LSP could be a social service"</p> <p><i>The connection between the social and technical sides could take the form of a 'social service company'.</i></p>	<p>"[Life Social Platform] should"</p> <p><i>A new system should be simple and straightforward.</i></p>	<p>[LSP could take the form of] 'a'</p> <p><i>A new energy exchange system could form not just within but across communities.</i></p>	
				<p>"We also talked about this gift shop thing. In which you have this physical place, people can"</p> <p><i>Residents could 'get' energy in a physical space with a coupon system.</i></p>			<p>[LSP could take the form of] 'a'</p> <p><i>A new energy exchange system could form not just within but across communities.</i></p>	

KEY CLUSTERS AND THEMES- ACTORS/PARTIES IN EXCHANGE

ACTORS/  
PARTIES in  
exchanges  
cluster 7.0

Exchanging parties

**Different actors involved on the local level**

"How might we exchange local [redacted]"  
*Exchanges on a local level involve different actors and different values.*

**Not always clear who local residents can exchange with**

"I am going to go for the social side. I'm going to go for local community champions. Like a [redacted]"  
*It is not so obvious with whom (which stakeholders) energy champions can exchange.*

**Exchange between large asset owners and local residents**

"It's like spreading success or development. Doesn't make sense for a company to be [redacted]"  
*By exchanging between big businesses and vulnerable residents we are 'levelling out the playing field' and closing the gap between those who have and those who do not.*

**Crucial to include vulnerable residents in the exchange system**

"The majority who will participate as fast as possible are the people who are in [redacted]"  
*It is key to include the 'hard to reach people'/ the vulnerable citizens.*

"Residents can get relief from [redacted]"  
*Large asset owners can help relieve local vulnerable residents of energy poverty.*

"For me, the most interesting thing would be, how can you reach the people who are in [redacted]"  
*For a new system to be successful the majority of people need to participate. The challenge is to include those who are not 'early adopters' and are not currently interested.*

Roles

**Vulnerable residents are just beneficiaries**

"The role of energy vulnerable [redacted]"  
*Energy vulnerable residents do not have (anything?) to give for energy. They are simply seen as 'receivers'.*

"Vulnerable residents of [redacted]"  
*Vulnerable residents are just beneficiaries of a new system, not necessarily contributing themselves (not 'giving back' in the exchange?)*

"Their own role is just to reach the end of the month. Because [redacted]"  
*Vulnerable residents do not have an active role in a new energy exchange system. They are just trying to get by.*

**Residents can be consumers (and producers) of energy**

"Residents have the role of [redacted]"  
*The only role of residents in an energy exchange system is either to consume energy or produce it.*

"On the one hand I agree [that residents are beneficiaries] but on the other hand, we could [redacted]"  
*Vulnerable residents can offer more than just 'getting' in an energy exchange system. They can 'give' back too.*

"What can the stakeholder/ owner of the asset give to the user? It can be affordable energy and in return there is usually some monetary things, but here we choose to go for a certain service, can either be [redacted]"  
*Residents should 'actually do something' and actively 'give back' to the local energy cooperative/ asset owners.*

**Resident's influence**

"I think for me what really stands out, of course, is that [redacted]"  
*Residents do not have anything to 'give' in a new energy exchange system.*

"Decision maker implies that they [residents] have some [redacted]"  
*The only influence residents have over their energy, is their consumption (?)*

"So what do you give? Internal [redacted]"  
*There is uncertainty about what residents can 'give back', more than appreciation.*

Rules

**New rules and regulations are determinants of who can participate in the exchange system**

"Based on the terms and conditions of the platform you [redacted]"  
*Rules and regulations of the system will determine who participates.*

"At the end of the day we start [redacted]"  
*New rules and regulations need to be created for a new local inclusive energy exchange service system.*

"I think we just need more like [redacted]"  
*New boundaries and policies are needed for a new local energy exchange system.*

**A governor or regulator is needed for approving and regulating exchanges**

"Somebody should govern. You should have a committee [redacted]"  
*Someone needs to be responsible for checking the system, but the system itself can be technological.*

"Whoever is in charge, [redacted]"  
*There needs to be neutral and objective/ impartial co-coordinator and facilitator 'at the helm' of these exchanges.*

"We might need a custodian [redacted]"  
*Someone needs to be given the role of approving exchanges and keeping an overview of what is being exchanged.*

"Organizational stuff like the [redacted]"  
*Someone needs to organize this new system (and arrange the exchanges).*

"The regulator is a very [redacted]"  
*The person or system regulating the exchanges is crucial to their success.*

"We will probably still need like [redacted]"  
*There is someone needed to balance supply and demand (and regulate energy exchanges in a system).*

"What we need is a registra to [redacted]"  
*Someone needs to be responsible for organizing and keeping an overview of exchanges.*

"Like when you hire a contractor... Maybe it could be something like that, but they [redacted]"  
*Residents themselves do not to organise the exchanges, there could be a middleman/ service which facilitates this for them.*

**Exchanges are decided and approved between the two parties**

"Otherwise you leave it to two [redacted]"  
*Organizing and approving the exchange can be left up to the two partaking parties (?)*

EXCHANGE TYPES - USED TO CREATE INITIAL IDEA CARDS FOR INSPIRATION SESSIONS

Exchange TYPE(S)

**Donation**

**Life Social Platform could take**  
Life Social Platform could take

**"Is it just if they [residents] from their position, should then again do something for"**  
Life Social Platform could take

**"Would it not be the just thing to do? For those who already"**  
Life Social Platform could take

**"The gift itself is the reduction"**  
Life Social Platform could take

**"So what would the Johan Crujff Arena give to the VVE's, it's basically also assets for the"**  
Life Social Platform could take

**Local tokens/ currencies**

**"There could for example be like a local coin..." - Hans Roeland**  
Local tokens/ currencies

**"Local token or coin that's a registrar of the transactions."**  
Local tokens/ currencies

**"Life Social Platform] is about**  
Local tokens/ currencies

**Bartering/ non-monetary Social**

Between large asset owners & residents

**"Life Social Platform is a trade"**  
Bartering/ non-monetary Social

**"Benefit does not equal profit."**  
Bartering/ non-monetary Social

**"Is more like a barter trade"**  
Bartering/ non-monetary Social

**"What is unique here is that there's no monetary thing in"**  
Bartering/ non-monetary Social

**Local services and goods in**  
Bartering/ non-monetary Social

**Local energy cooperations give affordable energy to Mr B**  
Bartering/ non-monetary Social

**"Residents in need of energy give 'helping out with"**  
Bartering/ non-monetary Social

**"For example a group of residents sign up for some"**  
Bartering/ non-monetary Social

**"A couple of oranges and a"**  
Bartering/ non-monetary Social

**"Second hand solar panels which they can easily purchase"**  
Bartering/ non-monetary Social

**"I [an asset owner] could provide the need he [the resident] has for energy. [And"**  
Bartering/ non-monetary Social

**"They get some energy and"**  
Bartering/ non-monetary Social

**Or if your [dishwasher] is broken down and you order**  
Bartering/ non-monetary Social

**"Buy a local dishwasher and"**  
Bartering/ non-monetary Social

**talked about that residents need assets to increase their flex, but maybe they don't need assets. Maybe**  
Bartering/ non-monetary Social

**"So what would the Johan Crujff Arena give to the VVE's, it's basically also assets for the"**  
Bartering/ non-monetary Social

**"So, for example, they ask residents to turn off the"**  
Bartering/ non-monetary Social

**"So JCA give an incentive for"**  
Bartering/ non-monetary Social

**"Could JCA provide maybe a subsidy or like reduction for people who want to change"**  
Bartering/ non-monetary Social

**"Providing local deals that if you buy local, they get"**  
Bartering/ non-monetary Social

**"A participant [resident] can"**  
Bartering/ non-monetary Social

**"It's almost like you also have these things like renting your washing machine. It's a service that you can use. Maybe you"**  
Bartering/ non-monetary Social

**These CSR goals of ING. They are like 'look' we are providing energy for 1000 households. It**  
Bartering/ non-monetary Social

**"Big consumers (such as ING) can give small consumers"**  
Bartering/ non-monetary Social

**"Local neighbourhood can"**  
Bartering/ non-monetary Social

**"Big companies give loans,"**  
Bartering/ non-monetary Social

**"Local neighbourhood can"**  
Bartering/ non-monetary Social

**"Also what residents could"**  
Bartering/ non-monetary Social

**"[Giving community members tickets to JCA events] Helps to diversify the audience in a way. And that helps with inclusivity goals, maybe."**  
Bartering/ non-monetary Social

**"Maybe if JCA can become some part of this little"**  
Bartering/ non-monetary Social

**[LSP] is offering them a very concrete way to put the money where the mouth is because every company has the most beautiful vision and goals for**  
Bartering/ non-monetary Social

**It's also about social responsibility. That is part of**  
Bartering/ non-monetary Social

**Bartering/ non-monetary Informational**

Between large asset owners & residents

**Information exchange is needed**  
Bartering/ non-monetary Informational

**"Information goes from here"**  
Bartering/ non-monetary Informational

**"There's a theme about data"**  
Bartering/ non-monetary Informational

**Exchanging data for (affordable) energy**  
Bartering/ non-monetary Informational

**"Residents can give Life Ecosystem information,"**  
Bartering/ non-monetary Informational

**"Residents give information to the LIFE ecosystem. [In return]"**  
Bartering/ non-monetary Informational

**Informational exchange is necessary for a community, business and the environment**  
Bartering/ non-monetary Informational

**"If you have insight in the community, the that gives you"**  
Bartering/ non-monetary Informational

**"I would say like information about the local community, what's going on? What is"**  
Bartering/ non-monetary Informational

**Residents can become more aware of energy**  
Bartering/ non-monetary Informational

**"Local Energy Cooperatives can give advice and information"**  
Bartering/ non-monetary Informational

**Marketplace/ transactive Economic**

**Energy exchange marketplace**  
Marketplace/ transactive Economic

**"Local market place for the"**  
Marketplace/ transactive Economic

**"A market place could be one way to realize this energy"**  
Marketplace/ transactive Economic

**Residents want to receive money for an exchange**  
Marketplace/ transactive Economic

**"The financial stream. I'm all for that. I think that's"**  
Marketplace/ transactive Economic

**"They [residents] just want us"**  
Marketplace/ transactive Economic

**"But like energy gives money, right? Because there's no way"**  
Marketplace/ transactive Economic

**Surplus energy will still be sold on the market**  
Marketplace/ transactive Economic

**"If all of these transactions have taken place and still we"**  
Marketplace/ transactive Economic

**Other**

**"Community champions provide feedback from the"**  
Other

**Bartering/ non-monetary Social b/w residents**

Between residents

**"We could do it like a peerby"**  
Bartering/ non-monetary Social b/w residents

QUALITIES/ DYNAMICS OF EXCHANGE - USED TO CREATE 9 CHARACTERISTIC CARDS

QUALITIES/ DYNAMICS of novel energy exchange service/ systems

(ENERGY) exchange CHARACTERISTICS/ DYNAMICS

(ENERGY) exchange CHARACTERISTICS/ DYNAMICS

Trust

"I am going to get the energy from your supply by"

Value/ worth

"Maybe you value your time"

"These values can be different"

"What these valuable"

"Appreciation doesn't buy me"

"In five years, people might have surplus energy. But at that point, probably so many"

Equality/ fairness

Equity or equality?

"The value is based on what"

"Maybe they [JCA] are like"

"Some things are wrong at the moment. Like utility"

"How to ensure that the"

"It is hard to come up with an example [of a fair exchange?]"

"[Life Social Platform] means"

"[Life Social Platform] is fair"

"Think it is very important for"

Ownership/ control

"There are tenants and there"

"I don't know how it is envisioned for the future, but I think it would be cool to give a"

Ease of use

Simple

Quick

"[Life Social Platform] should"

"[Life Social Platform] means"

Inclusivity

"[Life Social Platform] where"

"[Life Social Platform] should"

"[LSP] 'should provide access"

"From a social view. I'm really curious about how things are"

"I actually think that the [LSP] platform can have a really huge impact on enabling that"

"Maybe ownership is a better word [than control] because"

"At least a feeling of"

Reliability

"I would like to know that to get X amount of energy, I"

"Because people need to know, Oh, tomorrow, yes, I can"

"At this marketplace we have to suppose the hypothetical"

Energy security

"I would also say security because it's going to be there for a very long time. So if that"

"This directly leads to security"

Transparency

"Everybody gets what they need. Okay, so you need to"

Time scales

"In what phase are we"

Multi-form

"I think the term 'platform' already implies there can be"

Affordability

"[Life Social Platform] means"

Tangible/ concrete

"I'm not sure I do agree with you [the view that the neighbourhood does not need more projects], because a lot of times there are all kinds of"

Balance

"An optimal local energy system will be completely"

Local

"It's becoming a trend right?"

"You could say to your neighbours I get my energy from the Johan Cruiff Arena,"

Relevance

"For a lot of people energy is not the first thing they think"

"Something that just struck me over the last year is it became much more relevant, now with"

Collectives/ Aggregations

'Collective ownership'

"I would rather use a term like cooperation or something [to"

"Have aggregated systems for"

"I think it depends on which time frame you look at. Right"

Rules and procedures

"Insure that transactions are"

"Everybody has a basic human right for energy and maybe"

"I kind of want to get rid of the"

"Small consumer households"

Personal and specific

"Allow individual valuation at"

"Local targeted advertising of"

"I guess we can make a distinction [between 'vulnerable' and 'normal'"]

"Different needs & wants"

Residents need to form collectives in order to exchange with asset owners

LIFE social platform is about collaboration in aggregations

Aggregators/collectors need to be formed to bring people together for local energy exchanges

Collected systems for local energy communities are needed

Single households cannot get flexibility to open services which makes it difficult to create an 'equivalent' exchange between them

Collective decision making

Decision-making based on other values

Homeowners are protected & have rights

Energy exchanges should be personal

A new system should speak to the younger generation

Different needs & wants

Forming clusters will emerge and offer enough flex for energy exchange

There is uncertainty about how much flexibility/autonomy can provide to the system, even in a collective

Residents households do not have flexibility to offer in an exchange with other parties

A new system should incorporate different forms & levels of flexibility

There is not one single form for a new local energy system, it should incorporate different forms and mechanisms

Your energy supply needs to be reliable and so what you give in return also needs to be fixed and reliable

Residents need to be made about green energy, quality in relation to their local people can be aware and depend on this system

A vibrant energy exchange system is dependent on predictions and forecasts

Full autonomy - complete dependence

Both parties in the exchange need and want to feel a level of control/ownership, (other level of control/autonomy in this)

In a new exchange system where residents receive assets, they can get more ownership over their energy and a better understanding of their usage

Homeowners and tenants have a different level of influence/control

Tenants and homeowners have a different level of influence and control over their energy use (and production)

Enabling the community to be decision makers in a local energy exchange system should allow them to benefit from distributed assets

Integrating exchanges are often delayed (happen at different time scales)

Integrating exchanges are offered at different time scales to the need for energy which can allow for abuse of the system

People value other people's time differently

It is difficult to assess and make a judgement about how much energy is worth how much of someone's time

Difficult to determine value of exchange

Exchange of social values affects between contexts and areas

Conflict between monetary & social values

Conflict between social and monetary values

Surplus energy could boost its value in the future

Surplus energy may lose its monetary value in the future

Accessibility

"You know what would be"

Energy exchange needs to be easy, quick and accessible through a simple finger tap

Simple

Quick

"[Life Social Platform] should"

"[Life Social Platform] means"

Inclusivity

"[Life Social Platform] where"

"[Life Social Platform] should"

"[LSP] 'should provide access"

"From a social view. I'm really curious about how things are"

"I actually think that the [LSP] platform can have a really huge impact on enabling that"

"Maybe ownership is a better word [than control] because"

"At least a feeling of"

Should social cohesion be tackled through an energy system (or something else?)

Should a new energy exchange system be the thing to provide social cohesion?

Should social cohesion be tackled through an energy system (or something else?)

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Should social cohesion be tackled through an energy system (or something else?)

Mutual interest (between exchange [parties])

COMPONENTS/INGREDIENTS OF EXCHANGE - USED TO CREATE 9 CHARACTERISTIC CARDS

COMPONENTS/  
INGREDIENTS  
of energy  
exchanges

Overview  
of  
exchange

"You need to have a checkbook with this. I took so  
[redacted]"  
*There needs to be a system in place for keeping track of what is given in return for getting energy.*

Knowing where the energy comes from

"You could say to your neighbours I get my energy from the Johan Cruyff Arena,  
[redacted]"  
*Residents do not really care where their energy comes from, as long as they get it. (Saying it is local or JFC energy is an added bonus or fun feature)*

Residents don't really care where their energy comes from (?)

"It's becoming a trend right?  
[redacted]"  
*Knowing where your goods and products come from is becoming increasingly important to people. Does the same apply to energy?*

Information

Information is needed from both exchange parties

"You need the information because you need to provide something in return. You need  
[redacted]"  
*Certain information exchange needs to happen in order to facilitate the energy exchange. (Other ones I need to happen)*

"And it wants to give something in return here, but you need to know how much  
[redacted]"  
*Both 'giver' and 'receiver' in the exchange need information from each other to organise an 'asset' exchange.*

Energy  
assets

Residents need energy assets to participate?

"Maybe in five years they  
[redacted]"  
*It is likely that in the (near?) future many households will have their own energy assets.*

"Residents need assets to  
[redacted]"  
*Residents need assets to participate in energy exchange.*

"There is a lot of potential in  
[redacted]"  
*If residents have their own assets e.g. solar panels, they can be more involved in a new energy exchange system.*

Residents themselves do not need assets, they need the OUTPUT of those assets

"It's not the asset which they need. It is the output of the assets. So if somewhere  
[redacted]"  
*Residents do not NEED assets themselves, they NEED the output of the assets (energy)*

"What needs to happen to give them [residents] value is give  
[redacted]"  
*Residents need(?) assets to be part of a new energy exchange system.*

"It is quite complicated. But if you would give to the neighbourhood some kind of  
[redacted]"  
*Enabling residents by providing them with energy assets can reduce energy poverty.*

Energy assets create local value through new jobs and opportunities

"We also have economic value for them [the residents/ neighbourhood] because I think when you start with all  
[redacted]"  
*Providing the neighbourhood with energy assets creates local value through new jobs and opportunities for the residents living there.*

"Employment for the local neighbourhood [for instance] testing the second hand solar  
[redacted]"  
*A new local energy exchange system can create new jobs for local people.*

Energy storage possibilities are also needed e.g. batteries

"I have solar panels on my roof. Could be that I also have  
[redacted]"  
*Energy exchange is not just about producing more green energy, but also about storing it to use when later.*

Differences  
in  
participation  
levels

Different levels of participation

"It [a new energy exchange  
[redacted]"  
*Residents should be able to opt in and out of a new system.*

Not all residents (consumers) yet also becomes producers of energy (prosumers)

"I think, especially in this area, I don't think people are, will  
[redacted]"  
*Residents in inner-city are perhaps less likely to want to become asset owners/ this is not a priority for them (?)*

"What if it's just not in my bandwidth, in my day to day  
[redacted]"  
*Residents should be able to opt in and out of a new system because not everyone has the time to engage in this.*

"I think there's also a group [of residents] who doesn't want to  
[redacted]"  
*Some people in the neighbourhood are not interested or do not care about being part of a new system (they just want cheaper energy?)*

"The user... doesn't care about  
[redacted]"  
*Residents don't care about understanding the new energy exchange system they just care about the energy they get. (?)*

Communication

Considered communication about this new system is needed

"How would they [residents]  
[redacted]"  
*Communication of new energy exchange system is important*

Ingredients  
are  
already  
there

"There is so much potential there [exchange between local asset owners and residents]. If  
[redacted]"  
*The ingredients components for setting up exchanges between large asset owners and residents are already largely there.*

Make  
(possible)  
impact  
visible

"Out of the municipality you always have a lot of programs, plans, task force, whatever, study groups. They're all busy  
[redacted]"  
*The impact and effect of programmes, initiated by the gemeente (top down approach) is not seen or felt by the residents they are meant to support. (They seem busy or surface level)*

Multi-  
exchange

Different exchange types are needed and should be possible

"Create a mechanism that  
[redacted]"  
*There is not one mechanism and exchange type which fits everyone, there needs to be several.*

KEY THEMES/ CLUSTERS - DRIVERS/INCENTIVES FOR PARTICIPATION IN EXCHANGE

COMPONENTS/ INGREDIENTS of energy exchanges

Overview of exchange

"You need to have a checkbook with this. I took so  
There needs to be a system in place for keeping track of what is given in return for getting energy.

Knowing where the energy comes from

"You could say to your neighbours I get my energy from the Johan Cruijff Arena,  
Residents do not really care where their energy comes from, as long as they get it. (Saying it is local or JFC energy is an added bonus or fun feature)

Residents don't really care where their energy comes from (?)

"It's becoming a trend right?  
Knowing where your goods and products come from is becoming increasingly important to people. Does the same apply to energy?

Information

Information is needed from both exchange parties

"You need the information because you need to provide something in return. You need  
Certain information exchange needs to happen in order to facilitate the energy exchange. (Other ones I need to happen)

"And it wants to give something in return here, but you need to know how much  
Both 'giver' and 'receiver' in the exchange need information from each other to organise an 'asset' exchange.

Energy assets

Residents need energy assets to participate?

"Maybe in five years they  
It is likely that in the (near?) future many households will have their own energy assets.

"Residents need assets to  
Residents need assets to participate in energy exchange.

"There is a lot of potential in  
If residents have their own assets e.g. solar panels, they can be more involved in a new energy exchange system.

Residents themselves do not need assets, they need the OUTPUT of those assets

"It's not the asset which they need. It is the output of the assets. So if somewhere  
Residents do not NEED assets themselves, they NEED the output of the assets (energy)

"What needs to happen to give them [residents] value is give  
Residents need(?) assets to be part of a new energy exchange system.

"It is quite complicated. But if you would give to the neighbourhood some kind of  
Enabling residents by providing them with energy assets can reduce energy poverty.

Energy assets create local value through new jobs and opportunities

"We also have economic value for them [the residents/ neighbourhood] because I think when you start with all  
Providing the neighbourhood with energy assets creates local value through new jobs and opportunities for the residents living there.

"Employment for the local neighbourhood [for instance] testing the second hand solar  
A new local energy exchange system can create new jobs for local people.

Energy storage possibilities are also needed e.g. batteries

"I have solar panels on my roof. Could be that I also have  
Energy exchange is not just about producing more green energy, but also about using it to achieve better.

Differences in participation levels

Different levels of participation

"It [a new energy exchange  
Residents should be able to opt in and out of a new system.

Not all residents (consumers) yet also becomes producers of energy (prosumers)

"I think, especially in this area, I don't think people are, will  
Residents in inner-quarter are perhaps less likely to want to become asset owners/ this is not a priority for them (?)

"What if it's just not in my bandwidth, in my day to day  
Residents should be able to opt in and out of a new system because not everyone has the time to engage in this.

"I think there's also a group [of residents] who doesn't want to  
Some people in the neighbourhood are not interested or do not care about being part of a new system (they just want cheaper energy?)

"The user... doesn't care about  
Residents don't care about understanding the new energy exchange system they just care about the energy they get. (?)

Communication

Considered communication about this new system is needed

"How would they [residents]  
Communication of new energy exchange system is important

Ingredients are already there

"There is so much potential there [exchange between local asset owners and residents]. If  
The ingredients components for setting up exchanges between large asset owners and residents are already largely there.

Make (possible) impact visible

"Out of the municipality you always have a lot of programs, plans, task force, whatever, study groups. They're all busy  
The impact and effect of programmes, initiated by the gemeente stop down approach(?) is not seen or felt by the residents they are meant to support. (They seem busy or surface level)

Multi-exchange

Different exchange types are needed and should be possible

"Create a mechanism that  
There is not one mechanism and exchange type which fits everyone, there needs to be several.

KEY THEMES/ CLUSTERS - RELATION TO ENERGY EXCHANGE

Relation to ENERGY EXCHANGE (new system)

Barriers

**Shared and common spaces used for assets can create conflict**  
 "[Talking about residents renting out their roofs]" It  
Conflicts could arise when public/shared spaces are used for financial gain of a few.

**Intangible exchanges create possibilities for abuse/misuse of the system**  
 "How might we exchange and  
A barrier to intangible/exchange is the potential for misuse and abuse of the system.

**Local residents do not have the structural means to participate**  
 "So let's say Johan Crujff Aren keep posting that they have surplus energy. But  
Local residents may not have the structural means to receive energy from asset owners.

**More affordable energy does not always = greener energy**  
 "But we also need to think about how we are going to get  
New local energy exchange systems may provide people with more affordable energy but it does not necessarily mean they are switching to greener energy.

**A new system might not progress the transition**  
 "How does it incentivise or decentivise certain stakeholders in the area? Because you as the Johan  
New local energy exchange systems may provide people with more affordable energy but it does not necessarily mean they are switching to greener energy.

**Even in collective residents may not have enough flex to exchange (with asset owners)**  
 "In terms of, so like offering flexibility, I don't know how  
There is uncertainty about how much flexibility Zuidooost can provide to the system, even in a collective.

**Residents are not interested in participating in ANOTHER new neighbourhood project**  
 "Like financial benefits, sure.  
There are already many existing and ongoing social projects in Zuidooost, residents are not interested in participating in a new one.

**The energy transition is not a priority for many**  
 "For a lot of people energy is not the first thing they think  
Residents are only beginning to see energy as a priority because of recent increases in their bills.

Opportunities/ (potential impact?)

**Peer-to-peer system can reduce congestion**  
 "[A peer-to-peer system] creates demand and it helps congestion because if there's  
A peer-to-peer system can reduce congestion because there is always demand for your surplus energy.

**Peer-to-peer system creates incentives for local energy assets, production & storage**  
 "A peer-to-peer system creates  
A peer-to-peer system creates incentives for local energy assets, production and storage.

**An exchange system can create renewed interest in investing in sustainable energy assets**  
 "I think if there's a surplus of energy in your local grid. What are you going to do with it? I  
Surplus energy could be sold and the profits used to invest in green energy assets.

**Locally produced/stored energy could be cheaper for local residents**  
 "Maybe the energy is cheaper if you take it from the JCA, than  
Locally produced/stored energy could be cheaper for local residents than energy from the grid.

**Involving one large asset owner can inspire others to get involved.**  
 "If we can prove that an asset owner in the area, like JCA, can  
A ripple effect can be created if one large asset owner already participates in energy exchange with the local neighborhood.

**The ingredients for exchange between asset owners & residents are already there**  
 "There is so much potential there [exchange between local asset owners and residents]. If  
The ingredients/components for setting up exchanges between large asset owners and residents are already largely there.

**Personalised/franchised energy?**  
 "[Speaking about a local hub/ physical energy exchange store]" That could be  
Residents could receive personalised energy information from local large asset owners.

**Make possible impact visible**  
 "Out of the municipality you always have a lot of programs, plans, task force, whatever, study groups. They're all busy  
The impact and effect of programmes, initiated by the gemeente (top down approach) is not seen or felt by the residents they are meant to support. (They seem like a surface level).

**Learning & new knowledge about energy systems/ the transition**  
 "[Life Social Platform] is a free  
Gaining new knowledge and learning is part of a new local and social energy system.

Live local, stimulate local economy

"You could say 'I am getting it [energy] from the arena.' Putting this local sense to the  
Using local energy can be tied to the more general and bigger campaign of getting people to buy local (they local legislators, visit local stores, support local arts etc.).

"This energy, because it is created close to them, it is  
Locally produced energy is more affordable for local residents than energy coming from the grid.

**Relevance of energy (transition) in society**  
 "Something that just struck me over the last year is it became much more relevant, now with  
A new way of doing it to include vulnerable people is needed now more than ever.

**Choose an energy provider based on accompanying collective assets**  
 "[By choosing a certain energy  
Residents could choose their energy provider based on the collective purchases (with/without) which come with it.

**Community centers are vital for connecting local residents to the local community**  
 "Community centers play the role of supporting vulnerable  
Community centers are integral to fostering social cohesion in a neighbourhood.

**Temporary visitors in Zuidooost can be asset owners**  
 "Temporary visitors to the area  
Employees and visitors in Zuidooost can become temporary asset owners.

KEY THEMES/ CLUSTERS - FORM OF ENERGY EXCHANGE

FORM of novel energy exchange (system)

**Physical - stores**  
**Discount/ coupons store**  
 Like at the Albert Heijn, energy hamstere (?)  
An energy exchange system could be based on coupons.

**Energy lottery**  
 "You could keep buying tickets with some incentives for surplus energy or something.  
Buying affordable energy could be done through a lottery system.

**Attach to existing (everyday stores)**  
 "[LSP could take the form of] a  
A new energy exchange system could be attached to existing local stores.

**Physical - donation banks**  
 "You could donate your  
You could donate your surplus energy to a physical donation bank.

**Physical - coupons**  
 "[LSP could take the form of] a  
An energy exchange system could be based on coupons.

**Physical - events**  
 "Building a community. If you  
Building an energy exchange system could be done through a community event.

**Physical - benefits**  
 "I think from a social point of view, they are aware that it's a really complex matter and it is not about blaming anybody. For instance, now energy it too  
Physical energy exchange systems could be based on social benefits.

**Physical - events**  
 "Almost like you buy stamps, but then you have a few of them and at some point, you  
Physical energy exchange systems could be based on social benefits.

**Multi-form**  
 "Life Social Platform is a  
A new system should be both physical and virtual.

**Service**  
 "We could do it like a peerby  
Energy exchange on top of the community platform using other

**Digital - app**  
 "Wouldn't it be cool if JCA has some sort of app in which you  
Residents could manage energy exchange through an app.

**Digital - wallet**  
 "So you ask a visitor of the event to give input to a certain doing for good project or  
Residents could manage energy exchange through an app.

**Attach to local initiatives**  
 "[LSP could take the form of]  
An energy exchange system should also be attached to existing local initiatives.

**Local hub/ community centres**  
 "Life Social Platform could be a  
An energy exchange system should also be attached to existing local initiatives.

**Local for Local**  
 "Local 4 Local"  
Local 4 Local is a platform for local businesses to support each other.

**Information & awareness of new system of energy**  
 "When they enter, they receive some sort of coupon or some sort of thing, which gives them  
Residents could get energy in a physical store with a coupon system.

**Gift shop**  
 "[LSP could take the form of] a  
An energy exchange system could be based on gifts.

**Social service company**  
 "LSP could be a social service  
LSP could be a social service company that provides energy to those in need.

**Information & awareness of new system of energy**  
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 "LSP could be a social service  
LSP could be a social service company that provides energy to those in need.

## Suggestions for addressing characteristics of local energy exchange

The nine cards outlining characteristics of local energy exchange were used as prompts for discussion and reflection in the final activity of the inspiration sessions. Although the cards were addressed in relation to one of the four idea cards, the responses given could be collated into universal suggestions to take forward into the ideation phase



### UNDERSTANDABILITY

- Present all of the options clearly.
- Model the service/ system around platforms which are already familiar and known.



### PERSONALISATION

- Recognise a variety of actions in the service/ system.
- Facilitate flexibility in regards to participation and time commitment.
- Make the effects of the service/ system visible to residents.



### INCLUSIVITY

- Consider that everyone has limitations, but everyone also has strengths. Design a service/ system which accommodates for diversity in abilities.
- Use language which is empowering and not patronising.



### TRUST

- Utilise local organisations as connectors between institutions and residents to help build trust.
- Create formal roles and rules for the service/ system.



### TRANSPARENCY

- Provide clarity about the structure and workings of the service/ system in a simple and relatable manner.
- Create a platform which visualises the exchanges taking place.



### SOCIAL RELATIONS

- Allow benefits not just for individual actions, but also common and collective behaviour
- Use local trusted people as 'gatekeepers' for the service/ system and to bring residents together.



### BENEFICIAL FOR LOCAL ECONOMY

- Utilise and boost local initiatives.
- Enable residents to spend more money locally by covering or contributing towards their energy costs.
- Enable visitors and other people in the area to support the local service/ system.



### BALANCED RECIPROCITY

- The 'return' in the exchange should remain stable and constant.
- Provide benefit to the district as a whole.



### CHOICE & CONTROL

- Outline the alternatives.
- Give choice and control over incremental changes and/or elements of the system.

# D2. LOKAAL GELD - GENERATIVE INTERVIEW ANALYSIS

## Context

"You see a difference between elderly people and young people?"

"We have a lot of immigrants here. And their pension is not the same."

"There's a lot of poverty... you see?"

"De Bijlmer was made as a residential area."

"De Bijlmer was built on the idea of division between work and home, and recreation."

"You see shopping centers, but not in the center?"

"It's also in the movement of making and recreating the center."

"Events that people come here [community centre] for are..."

"When we have a party, you see a lot of organizational skill."

"They [residents] have large families. So there are often birthdays and other events."

"There are people [who are part of] large ethnic groups."

"The budget comes from the municipality and it's divided democratically between the groups."

"That's why De Bijlmer is a very interesting place because we have so many cultures and languages."

## Inclusion

"Energy justice is one of the things we want to do."

"It's a challenge. Local money is a challenge."

"We want to involve everyone."

"My personal motivation is because it is a way of reflecting on the world."

"Half of the building is owned by private ownership. The other half is owned by the municipality."

"Inclusion. Yes interesting."

"Inclusion is also in how we are organized from the start."

"We aim to reflect the diversity of the neighborhood."

"Inclusion is something that we want to do."

"Unconsciously you use words like 'we' and 'us'."

"In Lokaal Geld other things are more important, than the financial aspect."

"The municipality gives money to the neighborhood and they can organize their own events."

"The space is empty now [the community centre]. And you can use it for other things."

"You can do something with the space."

"So financial inclusion is just creating that opportunity."

Local belonging

## Motivation to participate

"Because you can earn money. But with the money you earn, you can do other things."

"What shopkeepers get out of the exchange. The money that has been earned in local money will not leave the neighbourhood. So it returns to the neighbourhood."

"The local currency is in addition to what they earn in regular money."

## Exchange

"Experiment within the community."

"We live in an area with people who are very diverse."

"There are some things you can do with local money."

"Need to look at different ways of doing things."

"By building a community, you can do something with that."

"With local money, you are more connected to the neighborhood."

"You can play with the value of the money."

"[A local currency] allows us to do things that we couldn't do before."

"Focusing on paying voluntary work."

"What happens when people get them at the first of the month?"

"The software enables us to promote voluntary jobs or projects."

"When they volunteer people, it's organized festivals and an opening here and I always have a lot of people."

"It's nice to give people something."

"So that's something we have to think about, because then it's not just about the money."

## WHO to include?

"Enable at first the groups who are already active in the neighborhood."

"There's a lot of voluntary work in churches. The 'K zone' [apartments] works together."

"People who are already active in volunteering, have projects, and also want to do something for the neighborhood."

"People in churches volunteer a lot."

"If you have a token that can connect everybody, then it will also enable voluntary groups to do things together."

"Most of the people actively volunteering are 40 or older."

"We have a restaurant here [in community centre] on Wednesdays and we have a lot of people there."

"We are also aware of the diversity of the neighborhood."

"About groups of people/collectives: We have the 'K zone' and the 'K zone'."

"But we also need volunteers sometimes to help with the meals or other things, and it's important to have a network of people who can help each other."

"With the neighbourhood budgets we have a very good network of people who can help each other."

"We are in the 'G' neighbourhood, but we also have connections and network with other neighborhoods."

"We have contact with these people [decision makers in the community]. The network is important for us to do things together."

"Quality [of the people included] means diversity of the groups and also the quality of the people who are involved."

"We also want to involve social projects so people can donate their time and skills."

"[By donating local coins] entrepreneurs can express their commitment to the community. What is usual in the neighborhood is that people who have a business also donate their time and skills to the community."

Exchange network, connections, network

## (Energy) systems

### IDEAS with local money?

"Maybe you can give a basic idea of how it works?"

"There are also ideas to enable people to earn local money, to pay their bills. But that's a bit more complicated."

"So that's something we have to think about, because then it's not just about the money, but also about the energy structure."

"With energy we also had conversations with Johan Cruijff Arena. They had a nice idea of using local money to pay for the energy they use there."

"We harvest the sun with solar panels and use that energy to power the community centre."

"Then you have the aspect of how to finance the investment of solar panels. And I'm thinking on using a local currency within a community to do something with that."

"Then the local currency can be earned by shop who can use it to pay for their energy bills."

"[The local currency] can also be earned by shop who can use it to pay for their energy bills."

"Thinking about that concept: how to use a local coin for energy?"

"[Investment of local money] - it's a community decision and it's about how to use the money to invest in energy projects."

"The idea of a cooperative helps to think differently about energy production and distribution."

"People could spend local money on energy services."

### Contexts for local (inclusive) exchange

### Local money in energy context?

"The example of shared energy production is a good one."

"It's a difficult one [to imagine] because it's not just about the money, but also about the energy structure and how it's organized."

"The energy structure also has to be able to enable that [using local currencies in energy]. It's not just about the money, but also about the energy structure and how it's organized."

"With and off the grid solution, you should be able to do that. You have to build solar panels, a battery and own electricity network here in the flats."

"I think Arena [JCA] should not connect with the individual people, but connect with the community as a whole."

"Connecting large asset owners to local initiatives has a lot of potential."

"A complimentary coin has to facilitate a specific goal. If you want to do something with the energy, you need a coin that is specifically designed for that purpose."

"First you have to formulate what is the value you want to create with the energy. The important thing is to have a clear goal and to have a community that is willing to invest in that goal."

"It's important to address the values that also speak to the people here. The important thing is to have a clear goal and to have a community that is willing to invest in that goal."

"Idea: give the energy for energy production and distribution."

"It's a level further than only delivering the energy. What we want to do is to create a community that is willing to invest in energy production and distribution."

### AMBITIONS with local money?

"I see it [Lokaal Geld] as a way to create a community that is willing to invest in energy production and distribution."

"It's not one coin fits whole because it's not just about the money, but also about the energy structure and how it's organized."

### Values/ characteristics important to Lokaal Geld (local, inclusive exchange)

"Simplicity of course, but it's a bit more complicated than that."

"Collectiveness" - Doede

"Simplicity and transparency"

"Power in the sense of community power. To be a part of the community."

"Inclusivity" - Doede

"We want to change value. It's about how we value things and how we use money to express that value."

"Develop the perception of value. It's about how we perceive value and how we use money to express that value."

"A lot of the values/ characteristics are about how we value things and how we use money to express that value."

### Using values from inclusive energy exchange as an example

"Over time is related to the community. The community is what we want to build and what we want to sustain."

"If you are a frontier you need to express trust to the organization. The community is what we want to build and what we want to sustain."

"Cooperation instead of competition. It's about how we cooperate and how we compete."

"How do you reinvent the idea of building an initiative without money? It's about how we build an initiative and how we sustain it without money."

## Dynamics of the exchange

### Accountability

"[About dealing with accountability in Lokaal Geld]. It's about how we deal with accountability and how we use money to express that accountability."

### Accountability

"[About dealing with accountability in Lokaal Geld]. It's not a currency like Bitcoin, but it's a currency that is designed for the community."

### Time frame & trust

"If you have a basic voluntary income you get trust that you can use the local currency to pay for your energy bills."

"You're paid first and then you do the work. And we trust that you do that. That we can call it a level further than only delivering the energy. What we want to do is to create a community that is willing to invest in energy production and distribution."

"How do you tell that story? It's about how we tell the story and how we use money to express that story."

"I do a lot of voluntary work here in the community space. But I also had a voluntary job in the community space. It's about how we do voluntary work and how we use money to express that work."

"Money can feel differently. I'm freelancer and sometimes I get paid a lot per hour, but I also work on a cargo bike. It's about how we feel about money and how we use money to express that feeling."

"You give more value to the community. It's about how we give value to the community and how we use money to express that value."

### Exchange set up

"At the moment it is connected to voluntary organizations e.g. we're organizing an event and we use the local currency to pay for the energy we use for that event."

"Sometimes you also see volunteers who have a big pension. They don't need the local currency to pay for their energy bills. It's about how we see volunteers and how we use money to express that seeing."

"Can use the local money to pay for their energy bills. It's about how we use local money to pay for energy bills and how we use money to express that use."

"When I do something for my neighbour, and old woman, I buy groceries for her - she can use the local currency to pay for her energy bills. It's about how we do something for our neighbours and how we use money to express that doing."

"Because you have to spend it in the community, and when you use the local currency to pay for your energy bills, you are spending it in the community. It's about how we spend money in the community and how we use money to express that spending."

## Form of exchange

"We chose to do it [make an exchange] because it's a way to create a community that is willing to invest in energy production and distribution."

"On the other hand you can also work with QR codes and use the local currency to pay for your energy bills. It's about how we work with QR codes and how we use money to express that work."

# D3. ARENAPOORT ANALYSIS



# D4. CONTEXT FACTOR THEMES - PHASE 1 EXPLORATIONS

## Context factors

Findings from field and literature explorations

Residents cannot afford to invest time into community building	'Market - like' energy systems foster competition, not collaboration	A new system needs to be flexible and adaptable for diverse users
The value of energy is ambiguous	Local residents have little or no disposable income	Value 'caring and sharing' mentality
Energy (and it's source and destination) is invisible	Familiarity in new systems helps engagement	A new energy system should become the 'norm'
Residents stay within their own tight-knit family circles	Local residents are not just beneficiaries, they have more to offer	Need to expand social networks to build communities
Income of local residents does not stay or circulate locally	Financial and monetary support is really needed	Inclusion by utilising and connecting existing initiatives, services and businesses
Local asset owners have surplus energy to give to the local neighbourhood	Desire for personal and skill development amongst residents (especially the youth)	A new system needs to be simple to understand and use
Residents want agency and ownership of their energy	Entrepreneurial behaviour is evident, but ideas are not developed or grown	

## Context factors

Findings from field and literature explorations

Financially vulnerable	Financial and monetary support is really needed in Zuidooost	Development area	New projects are constantly starting, but they fail to utilise existing systems and practices	Lack of community & social cohesion	Community and social cohesion is lacking in Zuidooost	Energy specific	Energy (and it's source and destination) is invisible
	Local residents have little or no disposable income		New projects label neighbourhoods as being in need of fixing		Residents stay within their own tight-knit family circles		The value of energy is ambiguous
	Income of local residents does not stay or circulate locally (they work elsewhere)		There are many existing services, initiatives and projects in Zuidooost		Residents cannot afford to invest time into community building		Energy systems are difficult to understand and relate to
Skills and ideas to offer	Local residents are not just beneficiaries, they have more to offer				Residents have a 'caring and sharing' mentality	Market system	'Market - like' energy systems foster competition, not collaboration
	Desire for personal and skill development amongst residents (especially the youth)				Zuidooost is a diverse district there are long and short term residents, visitors and business people		Residents do not have agency and ownership over their energy
	Entrepreneurial behaviour is evident, but most ideas do not develop or grow to fulfil potential						Local asset owners have surplus energy and potential to give this local neighbourhoods

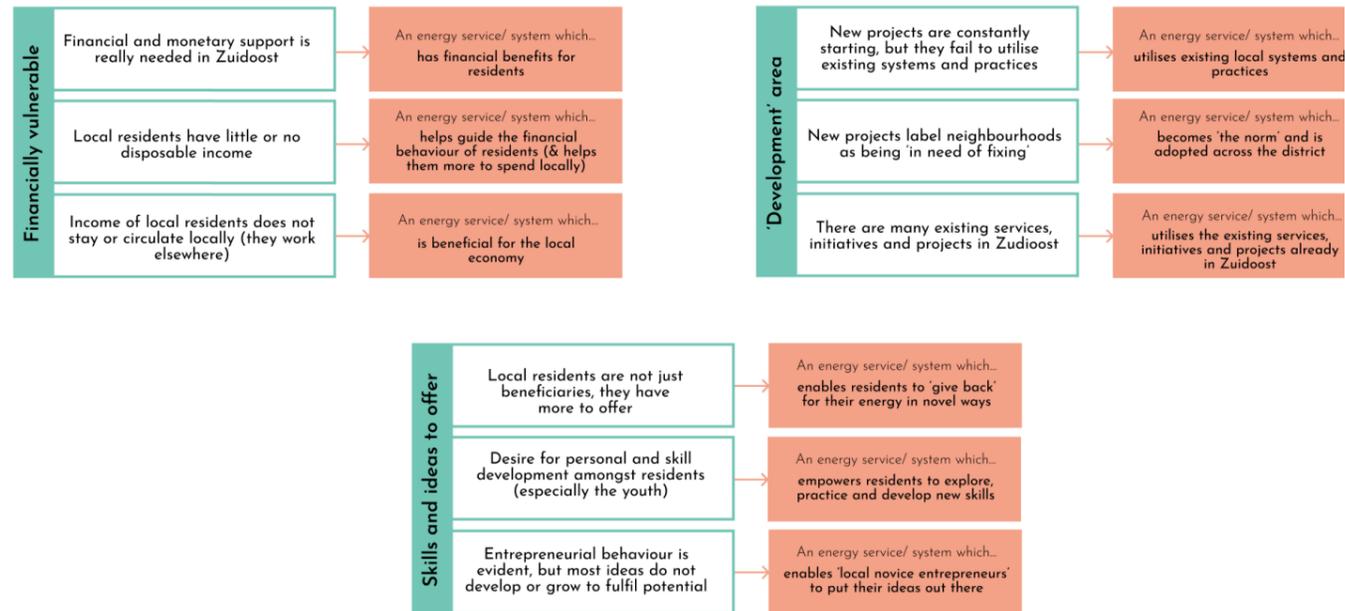




## D5. SYNTHESIS INTO DESIGN REQUIREMENTS/ RATIONALE

### Context factors -> Design requirements

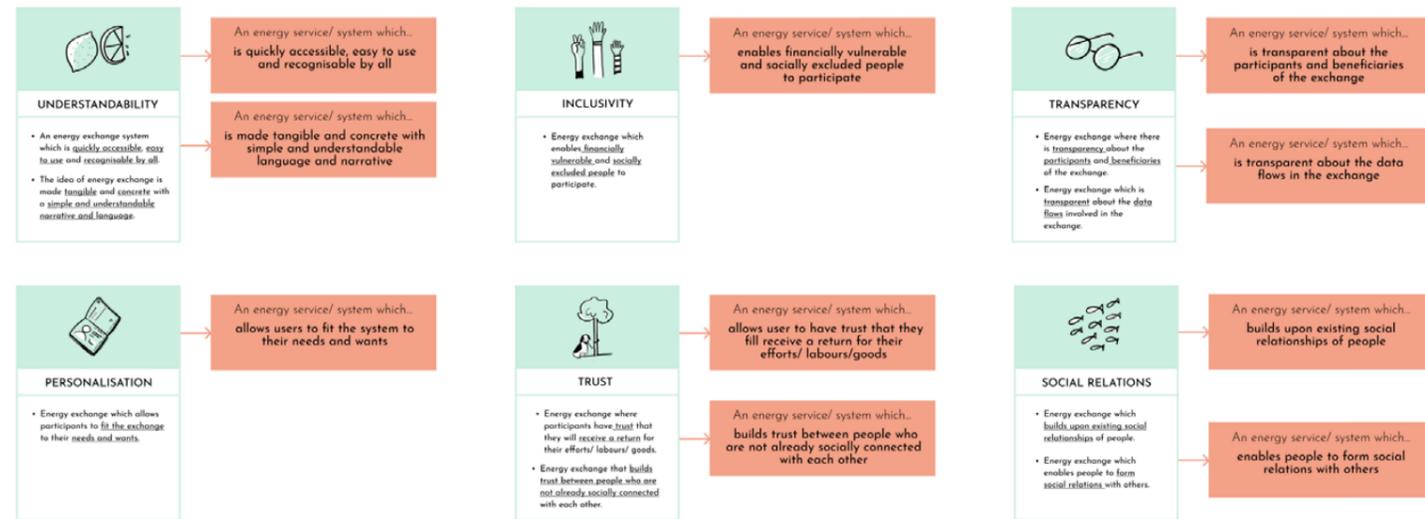
Findings from field and literature explorations



### Conceptual framework for local energy exchange -> Design rationale

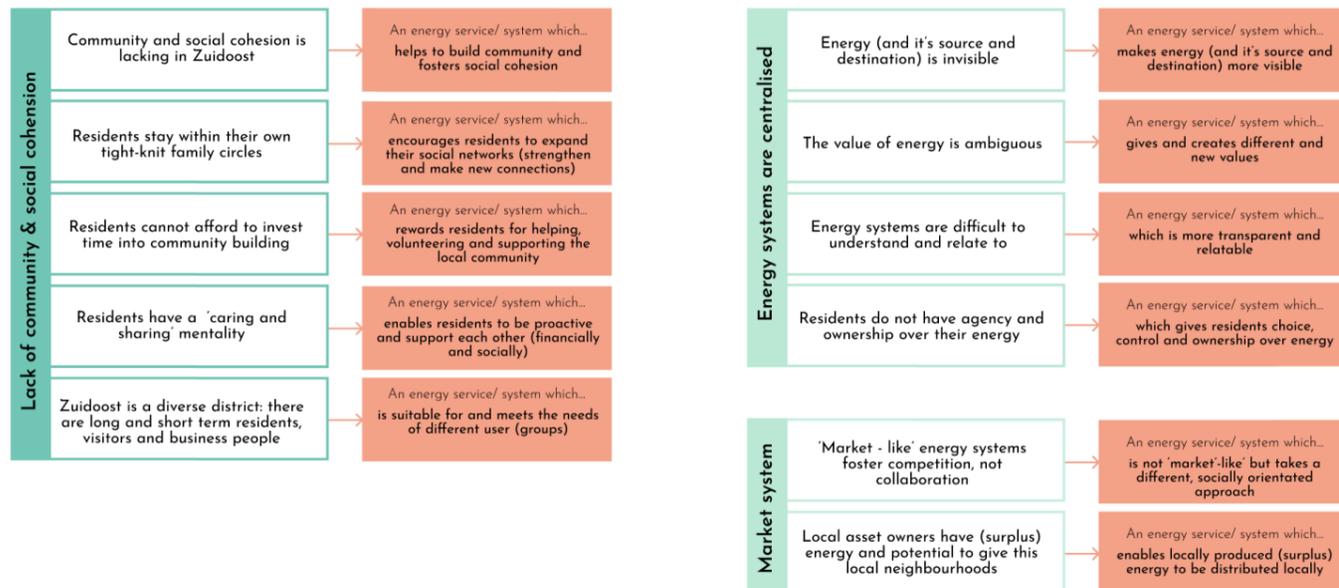
Findings from field and literature explorations

#### Characteristics of local energy exchange



### Context factors -> Design requirements

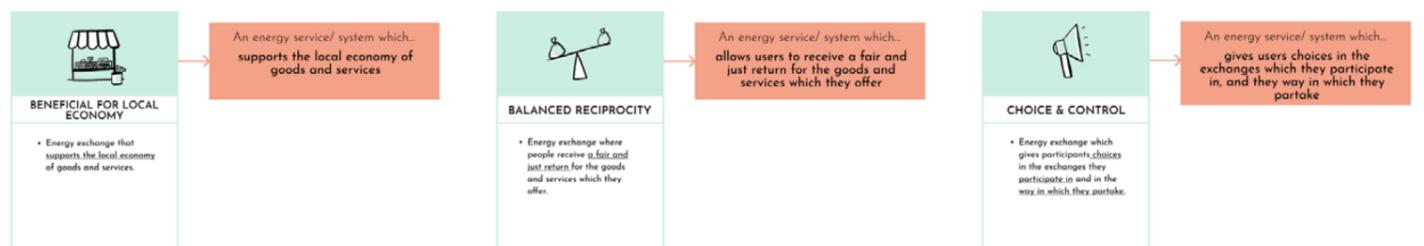
Findings from field and literature explorations

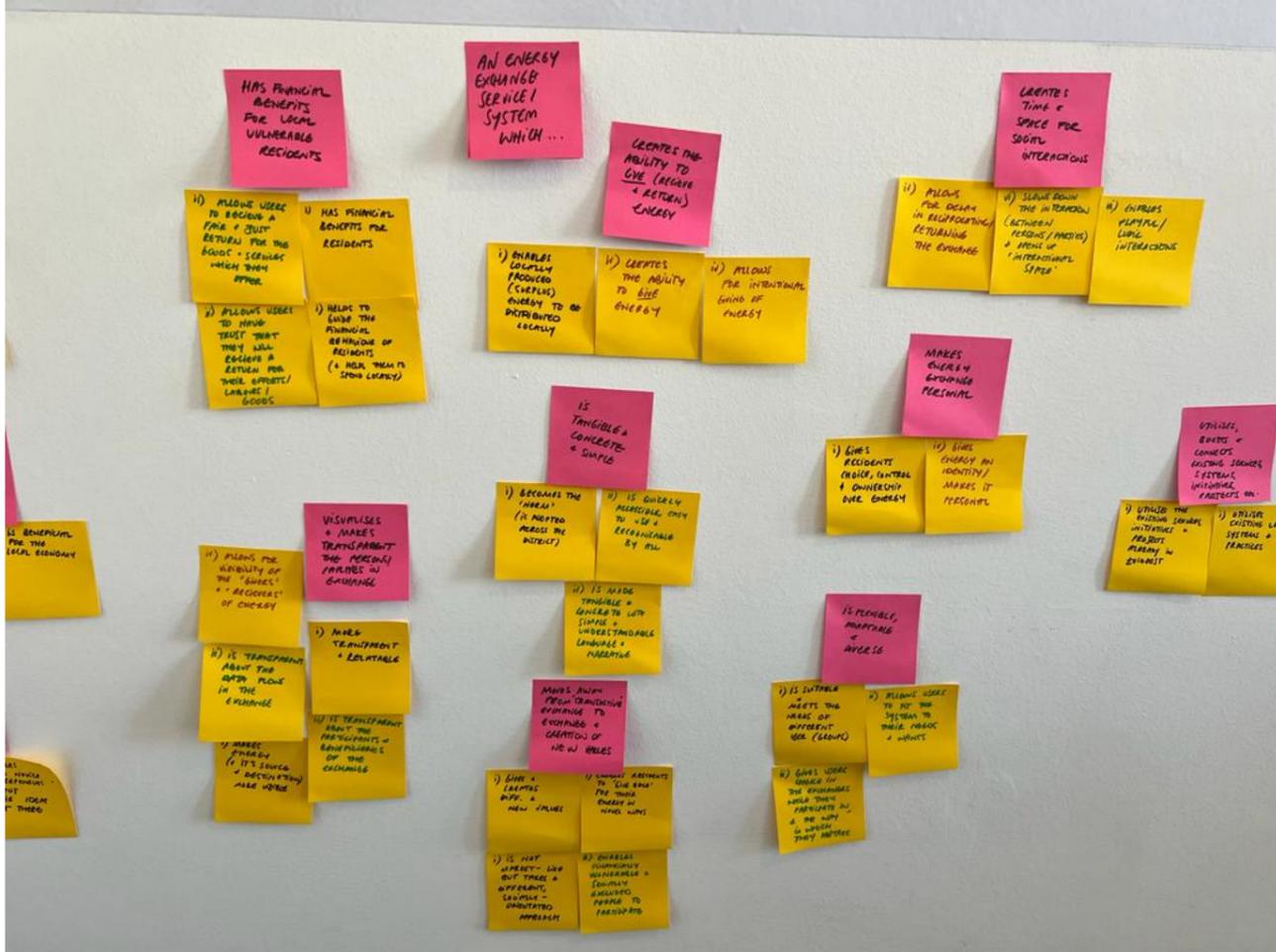


### Conceptual framework for local energy exchange -> Design rationale

Findings from field and literature explorations

#### Characteristics of local energy exchange





# D6. ANALYSIS OF INSPIRATION SESSIONS

## OVERVIEW OF FRAMEWORK

**INSPIRATION SESSIONS**

INSPIRATION SESSIONS - Synthesis of data

Step 4: Placin... Step 6: Select... Step 7: characteristic cards

Step 3: Idea...

Copy of Step ... Copy of Step ... Copy of Step 7: characteri...

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Step 3: Idea c...

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Step 3: Idea...

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Step 3: Idea...

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STAKEHOLDER/ PARTNER/ CONSORTIUM MEMBER	P1. Gemeente: Esther & Annoesjka	P2. Co-force: Wouter	P3. AMS: Pablo & Gaya	P4. Digital Twin & Alllander: Digvijay & Reinier	P5. LIFE: Hans Roeland & Abhigyan	P6. JCA: Tim Oosterop
PERSPECTIVE	Governmental/Policy	Social	Technical/social	Technical	Economic/ business model	Large asset owner
1.General comments, reaction and interpretations						
2.Implementation/ feasibility/ realisation						
3.Roles						
4.Opportunities						
5.Challenges						
6.Design directions/examples/ metaphors						
7.Raises further questions/ more clarity needed						
8.Characteristics which are mentioned						







## F. EVALUATION

### QUANTITATIVE DATA - GOOGLE FORM (FOLLOW UP QUESTIONS FOR SESSION 2, LIFE PROJECT TEAM)

Q8. Which of the three scenarios presented above is most relevant, from your perspective?

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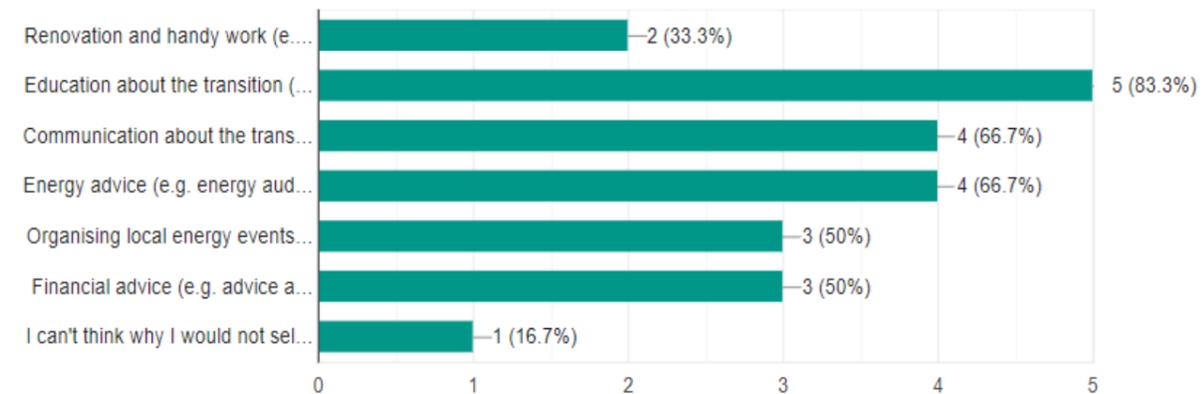
6 responses



Q6. Are there specific energy actions which are of value to you (and your perspective) in LIFE? Please select all that apply.

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6 responses



Q10. Which scenario(s) do you think could be realised within the next phase of the LIFE project (1-2 years)?

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6 responses



