MAKING-CITY

The Unified CItizen Engagement Approach

Cyril Tjahja (TNO)

Congres De Mens Centraal in de Energietransitie

16 juni 2022

Provincie Limburg, Maastricht

MAKING-CITY

- ▶ Horizon 2020 project
- ▶ Positive Energy Districts (PEDs)
- ▶ Social innovation: co-creation & co-design

Making City

Eight cities
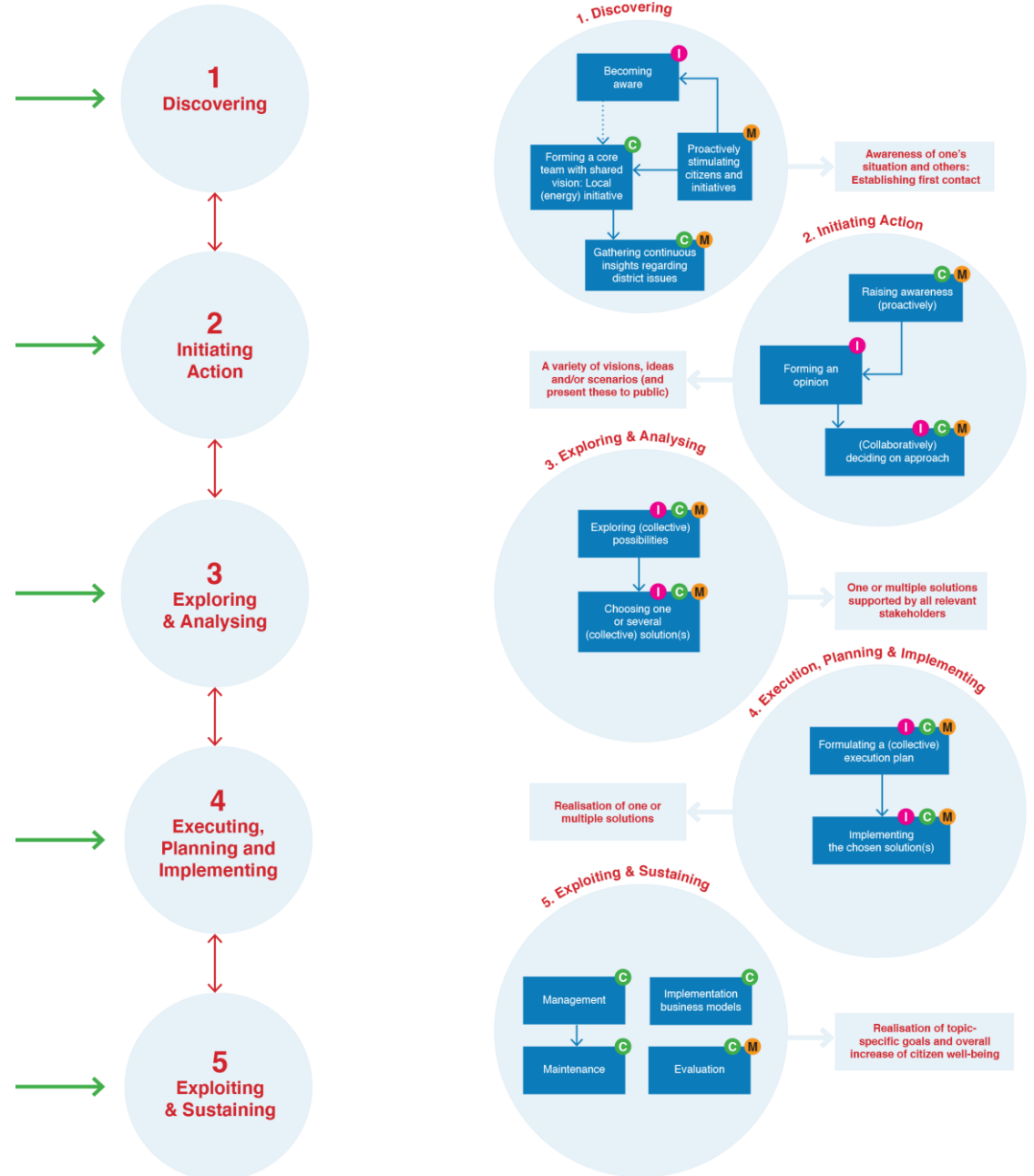
▶ 2 lighthouse cities

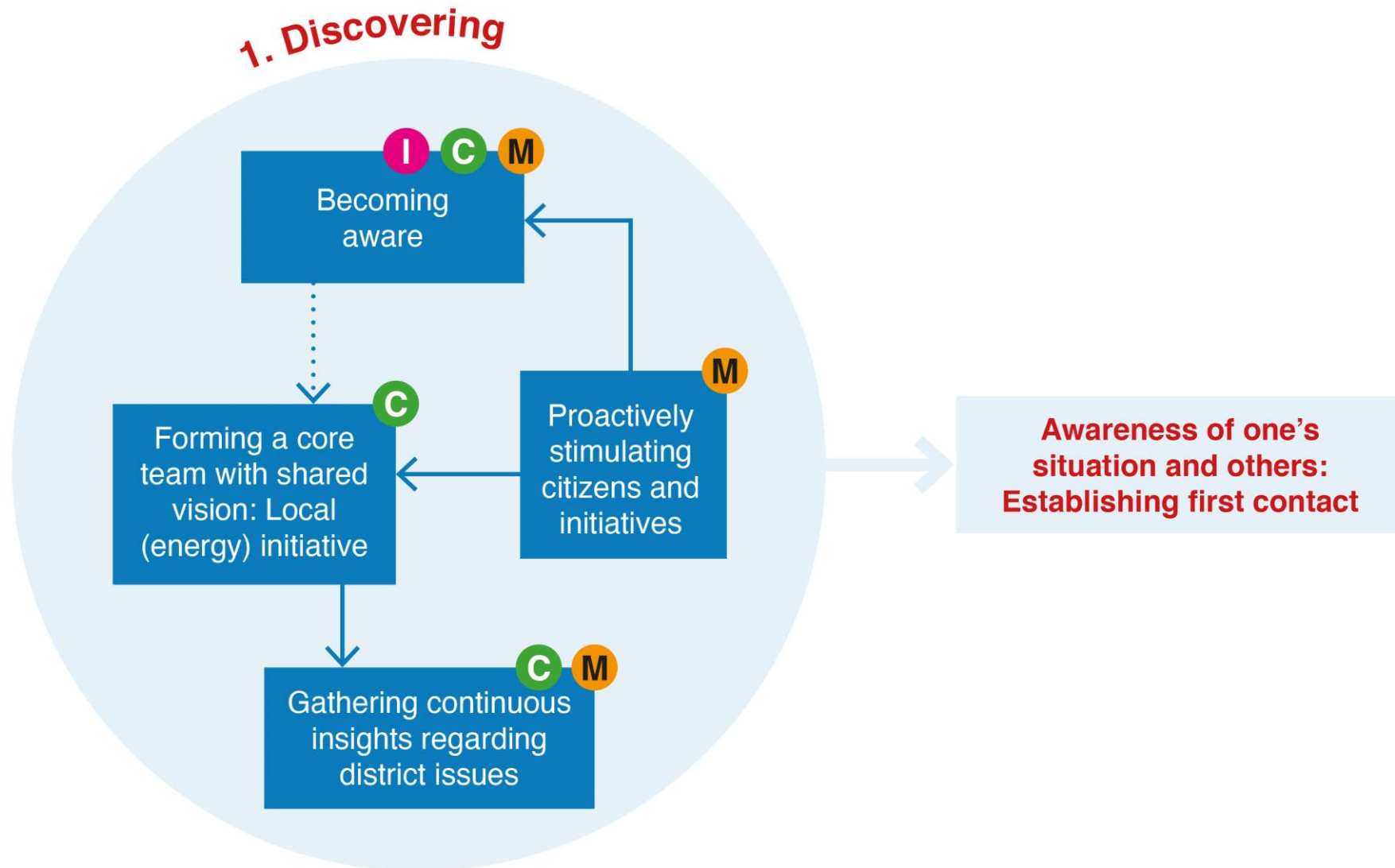▶ 6 follower cities

▶ 34 European partners

OULU

GRONINGEN

LUBLIN

TRENCIN

BASSANO
DEL GRAPPA

VIDIN

KADIKOY

LEON

Making
City

Phase 1: Discovering

Phase 2: Initiating Action
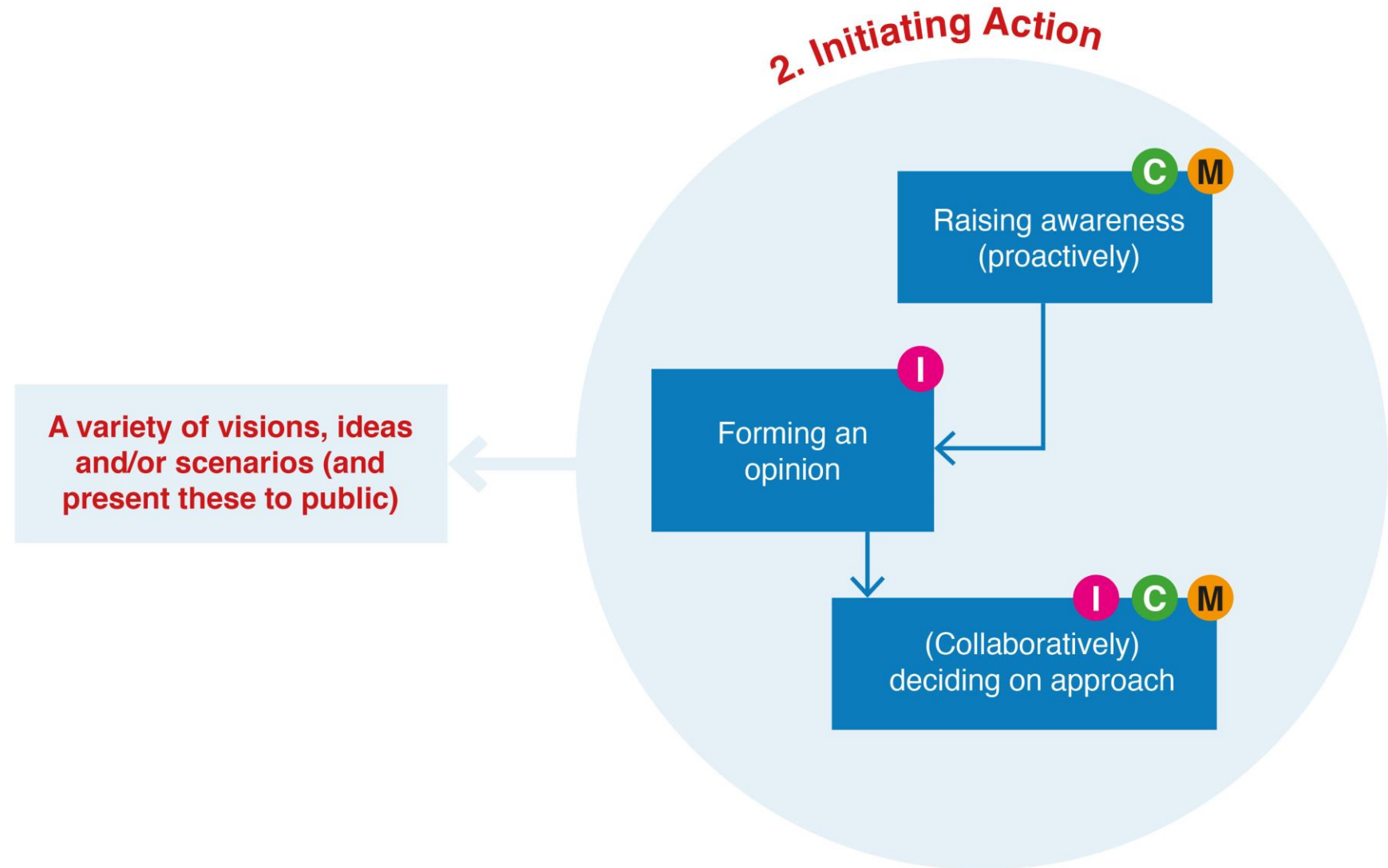
Phase 3: Exploring & Analysing
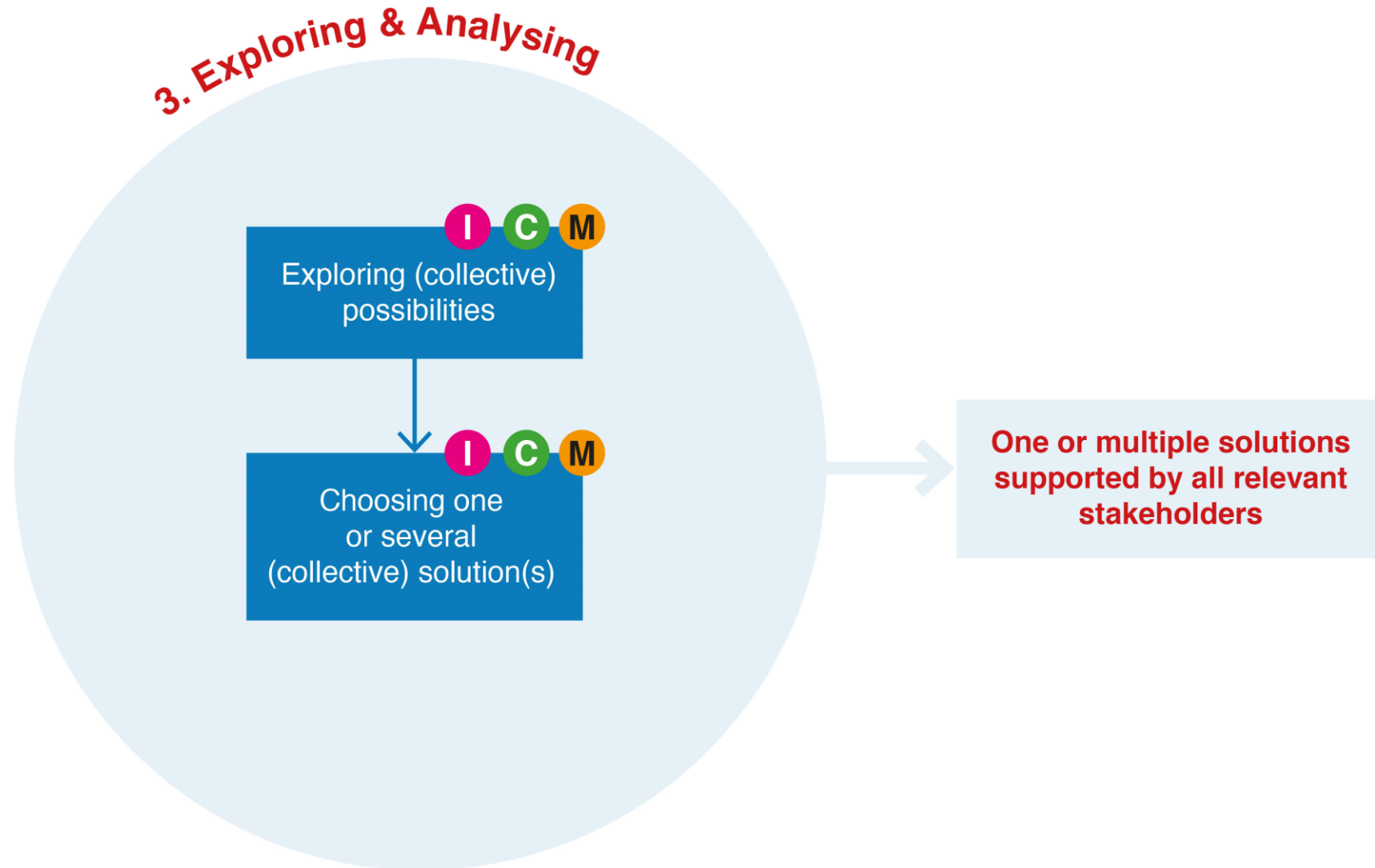
Phase 4: Execution, Planning & Implementing

4. Execution, Planning & Implementing

Formulating a (collective) execution plan

Implementing the chosen solution(s)

Realisation of one or multiple solutions

Making City
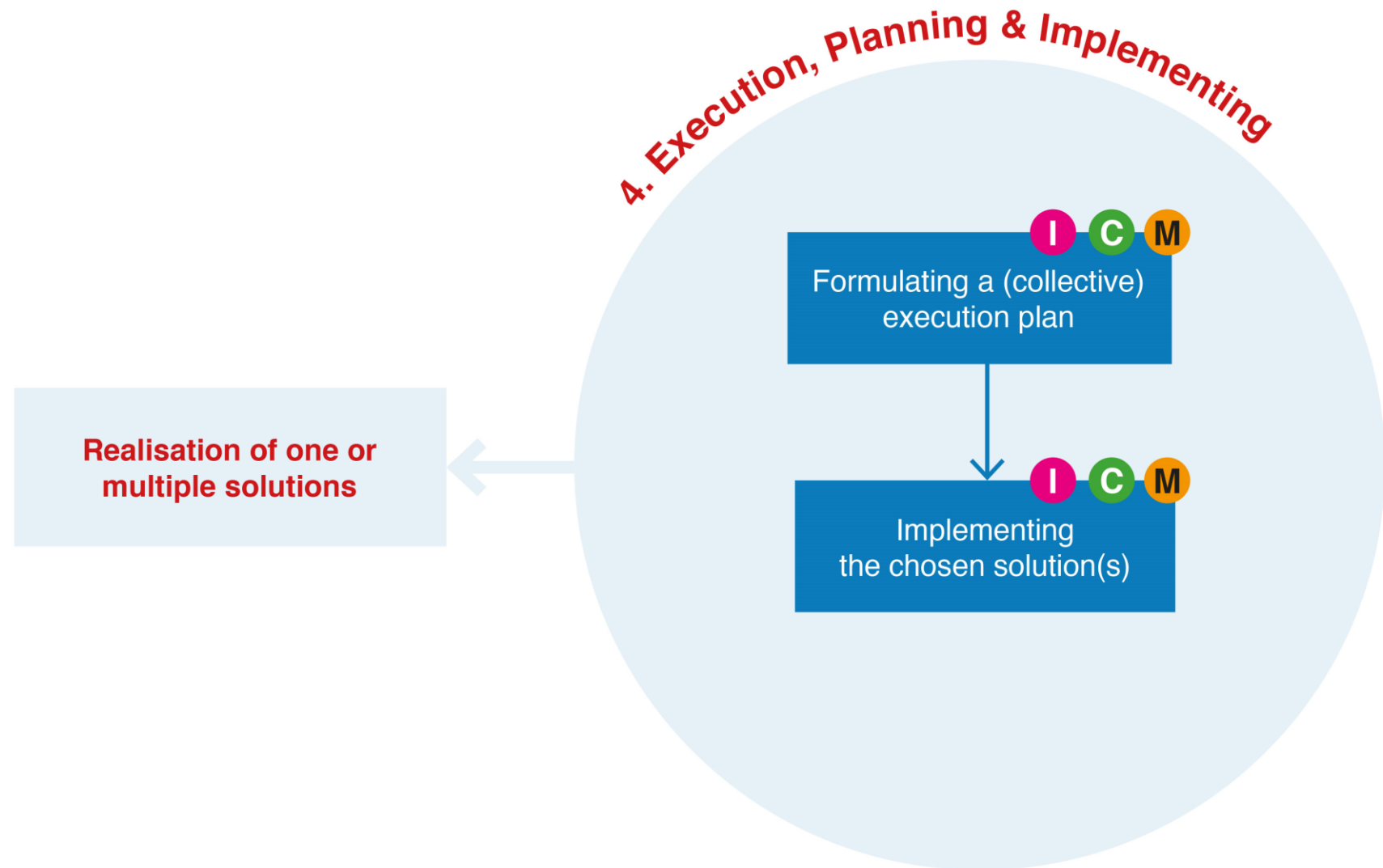
Phase 5: Exploiting & Sustaining
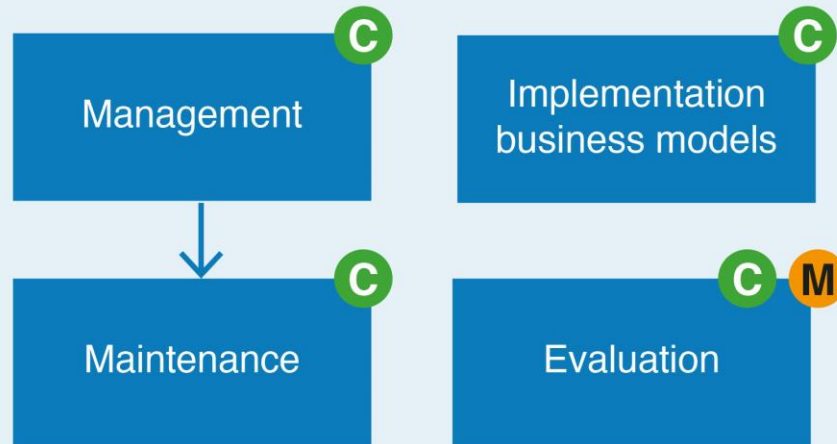
Current and future activities

▶ Finalising associated tools and methods
▶ Testing of different pathways in Hoogkerk (a.o.)
▶ Evaluation of approach

Making City

CommunityxChange

PED Citizen Engagement, TNO Congress.

16.06.2022 | helena.fitzgerald@ul.ie

+CityxChange Approach

- Localised energy transition through Positive Energy Blocks
- Link technical and community aspects
- Work with & across disciplines
- Work across strategic and operational levels
- Open Innovation and Co-creation
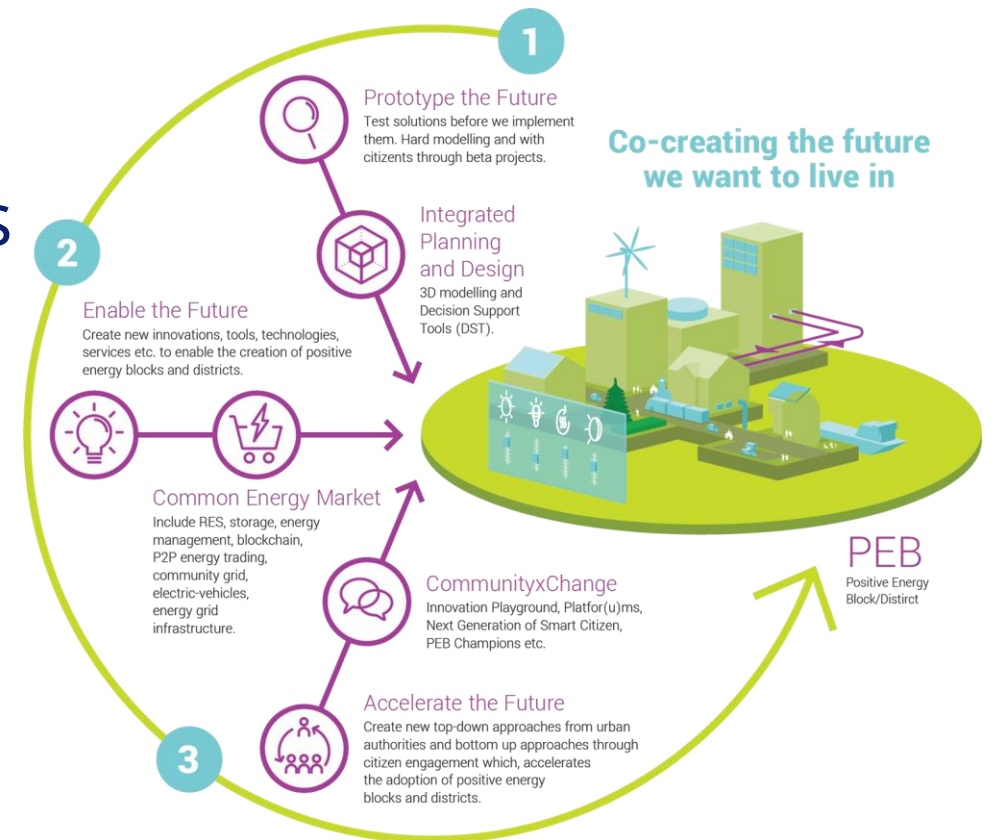
+CityxChange Impacts at Multiple Levels

- Systemic / Collective / Individual behavior change
- Broad participation on direct and indirect energy issues
- Participation in co-creation and energy communities
- Innovation ecosystem & labs
- Bold City Vision – Changes in strategic city governance and transitions
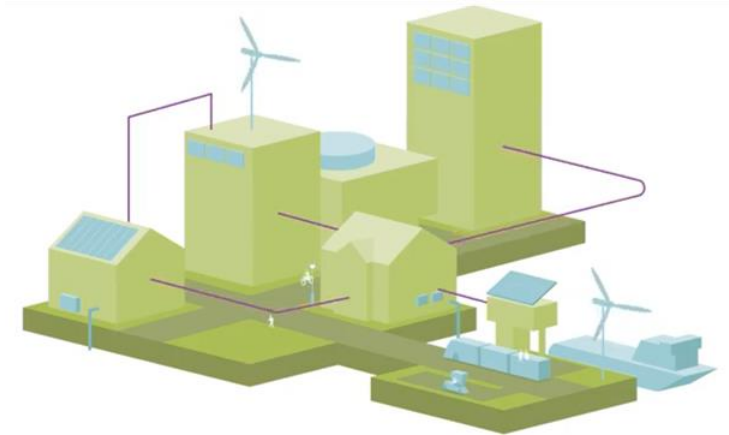
+CITYXCHANGE

CommunityxChange

Six concepts to enable top-down and bottom-up processes of engagement:

- Bold City Vision
- Citizen Participation Playbook
- Innovation Playground
- Learning Framework - Next Generation Smart Citizen
- Positive Energy Champion Network
- DPEB Innovation Lab

https://cityxchange.eu/knowledge-base/

Bold City Vision

Bold City Vision

Citizen Participation Playbook

Bold City Vision

Innovation Playground

Citizen Participation Playbook

New Knowledge

Positive Energy
Champions Network

Innovation
Lab

Innovation Playground

Citizen Participation Playbook

Digital Platform

City Energy Model / Digital Twin

Virtual

Physical

Innovation Lab

Positive Energy Champions Network

Innovation Playground

Citizen Participation Playbook

City Governance Systems and Participatory Processes

Co-Design

Prototypes

Pilots

Creativity

Innovation Lab

Innovation Playground

Citizen Participation Playbook

City Governance Systems and Participatory Processes

Positive Cycles of

Collaboration

Co-Design

Prototypes

Pilots

Creativity

Innovation Lab

Innovation Playground

Citizen Participation Playbook
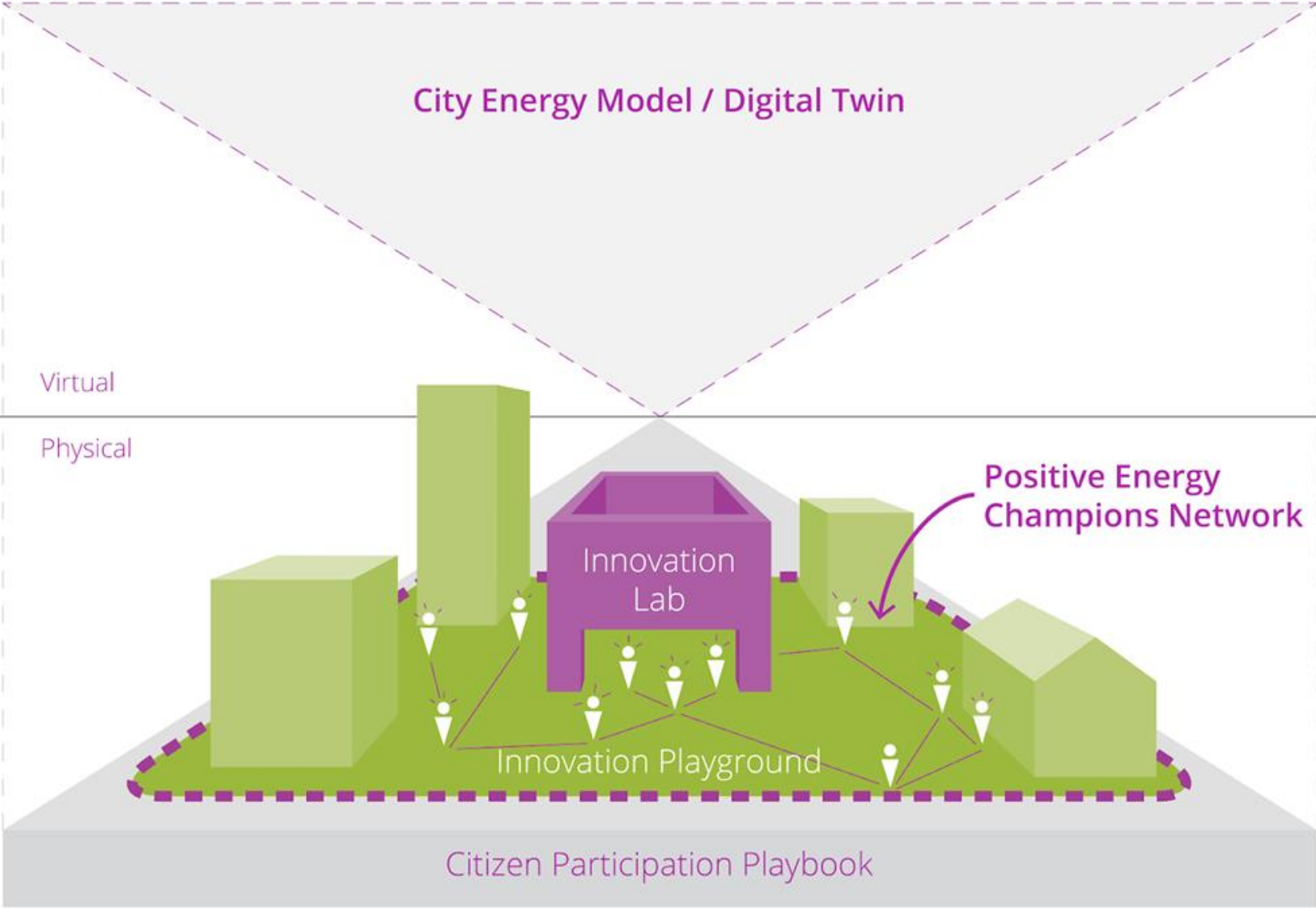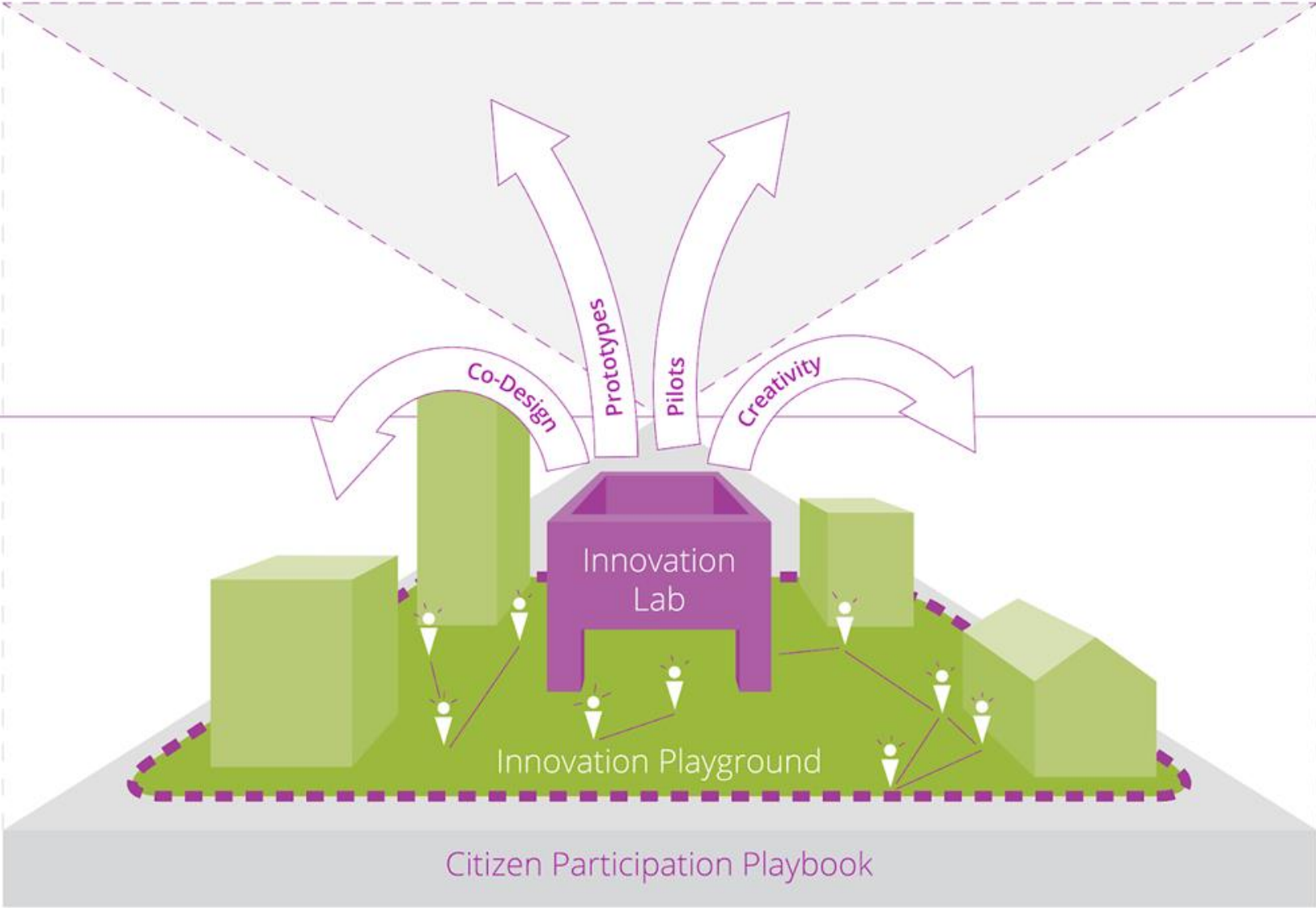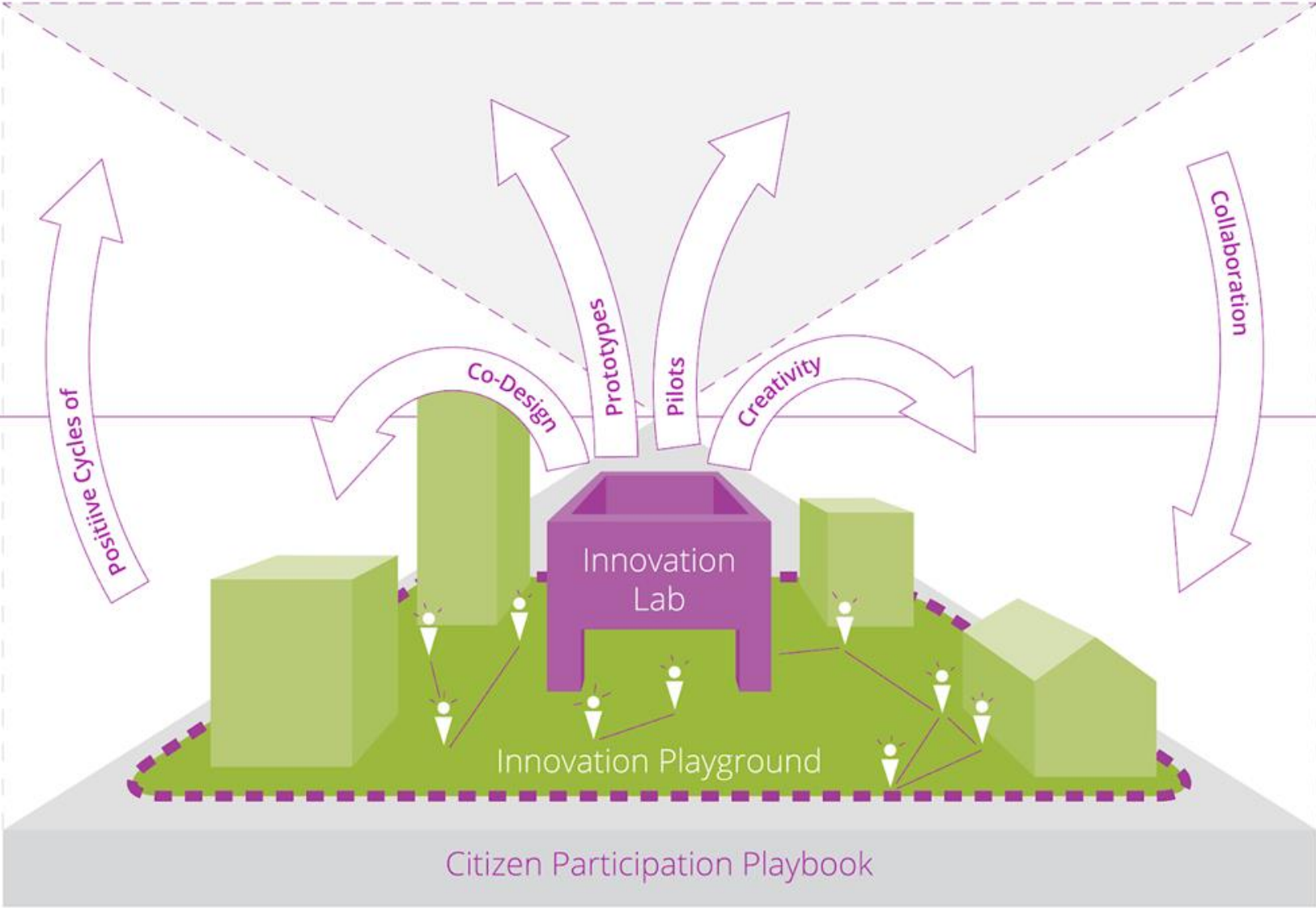
Innovation Playground | Innovation Lab
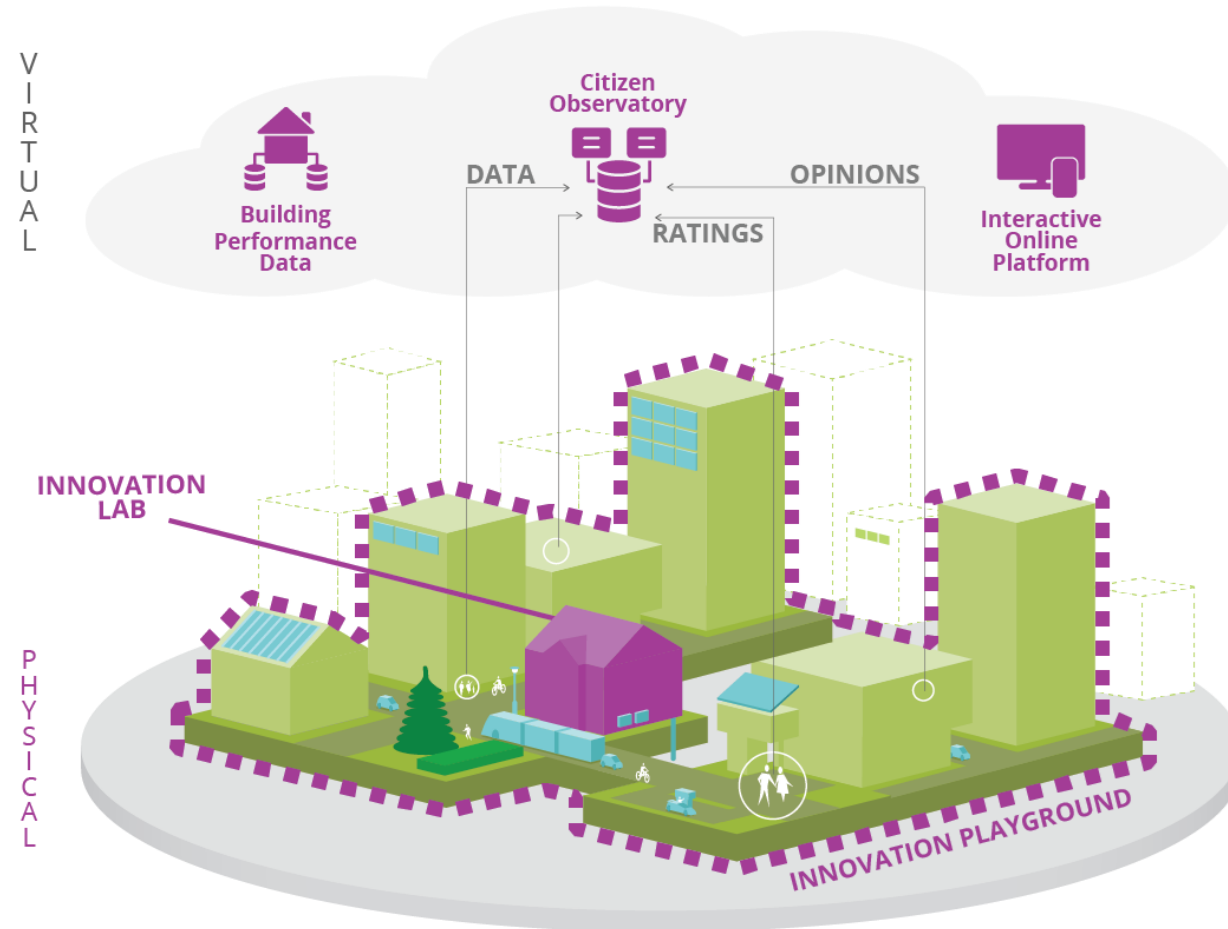
PEBs and PEDs Same Scientific Concept. Different Cities.

Powerhouse Brattørkaia – the World's Northernmost Energy-Positive Building. Image Snøhetta

Figure 2 Dereliction and Vacancy map of the Georgian Neighbourhood showing buildings at a trigger point for incorporation into the DPEB.

Image by Urban Innovation Department, Limerick City and County Council

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Engaging stakeholders through gamification – City Engage Week
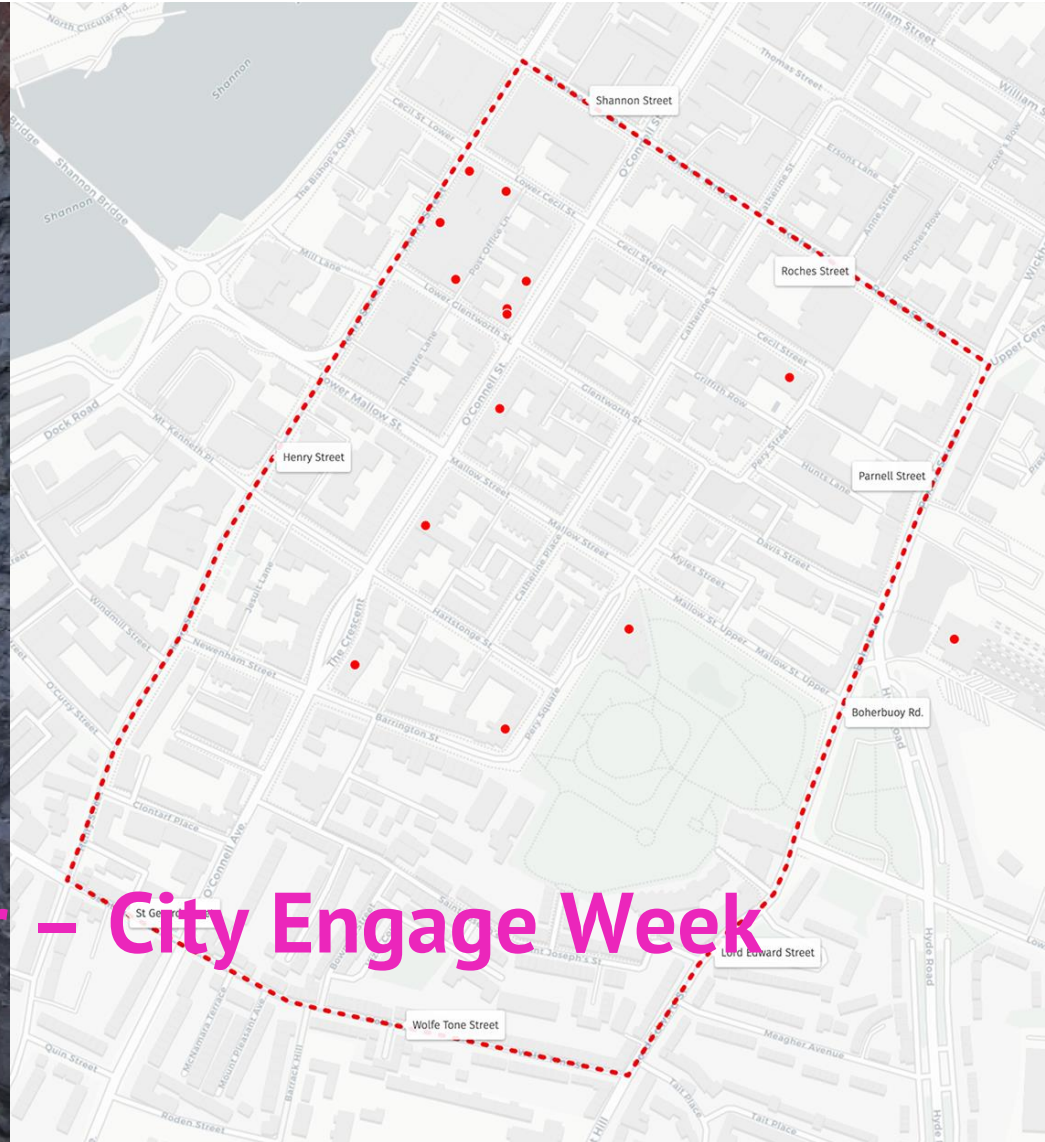
Innovation Playground Narrative Tour – City Engage Week

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Demystifying sensor technology and inter-generational learning
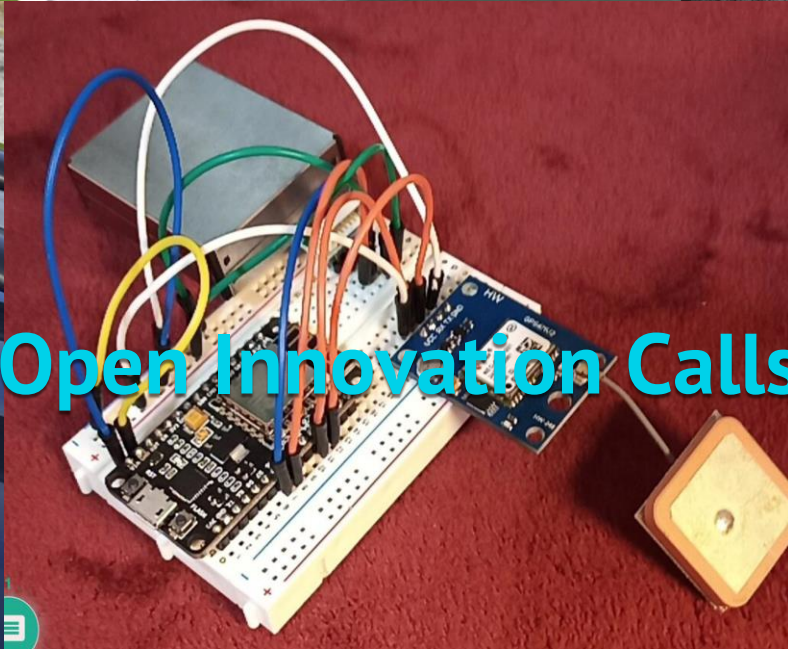
Working together on Open Innovation Calls For Citizen Solutions

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Cathie Chappell

"I drive an electric car, but feel unable at present to make longer journeys due to the lack of charging points, I would like to monitor this, and hopefully see an improvement in this infrastructure."

Aoife McKeon

"I hope to encourage impactful individual change with the aim of raising awareness about the aim to become a Smart City."

Jennifer Tierney - Cityxchange Team

"I am eager to share the journey of my transition to an electric car and all it involves and hope that by doing so I can inspire people in a similar position so that they can make the change.."

Bill Kelly - Community Power

"Our project 'Greening the Grid aims to energise the citizenry of Limerick City to become actively involved in the energy transition."

Grainne McInerney

"I aim to improve the energy usage in the Georgian quarter in a realistic way that is sustainable and economically feasible."

Anne Cronin - Limerick Cycle Bus

"We aim to highlight the need for safe segregated connected infrastructure for cyclists of all ages in Limerick."

Andrew O'Connell - St. Michael's Rowing Club

"There is huge potential for St. Michael's in harnessing the river to power our launches and the clubhouse in a clean and sustainable way."

David O'Connor - Facilities Manager Limerick City and County Council

"Over the next 20 weeks I plan to work with the +CityxChange team to incorporate their knowledge into the management of Council buildings by implementing some positive energy actions."

Siobhan O'Reilly - Limerick City Gallery of Art

"We are working with +Cityxchange partners Integrated Environmental Solutions IES, using their modelling platform to get a better understanding of how the building uses energy."

Patricia Roberts - No.1 Pery Square

"I hope to reduce business energy costs and to demonstrate the positive effect of the reduction on the environment to employees and customers."

Mark Manning - Smart Systems

"We hope to lower the energy costs associated with the building by monitoring the energy usage of the building and its constituent parts."

Una Walsh

"My plan as a Positive Energy Champion is to Empower Communities."

Nell Ward - Peter McVerry Trust

"We hope to identify and implement actions and changes that will help us to provide and manage more energy efficient homes, that in turn support cost effective living for our tenants."

Tom Spillane

"I will be examining the current transport system that exists within Limerick, and trying to mould new forms of active transport into the system."

Limerick's First Positive Energy Champions!

No 1 Pery Square
Pery Square, Limerick

The team at No 1 Pery Square have become Positive Energy Champions to promote awareness of energy efficiency and to demonstrate the positive effects of reducing CO_2 emissions. They are focused on introducing sustainable practices throughout the business. The aim of the project is to assess and improve the energy use of the hotel.

Sim auxiliary energy (kWh / m² per year)	72.59	*
Sim cooling energy (kWh / m² per year)	0	*
Sim dhw energy (kWh / m² per year)	89.42	*
Sim equipment energy (kWh / m² per year)	3.8	*
Sim heating energy (kWh / m² per year)	57.36	*
Sim lighting energy (kWh / m² per year)	13.23	*
Sim total carbon (CO₂ kg/m² per year)	59.13	*
Sim total energy (kWh / m² per year)	236.4	*

Engaging with the City Energy Model/Digital Twin

See full user story

https://www.limerick.ie/cityxchange/positive-energy-champ

www.iesve.com   IES
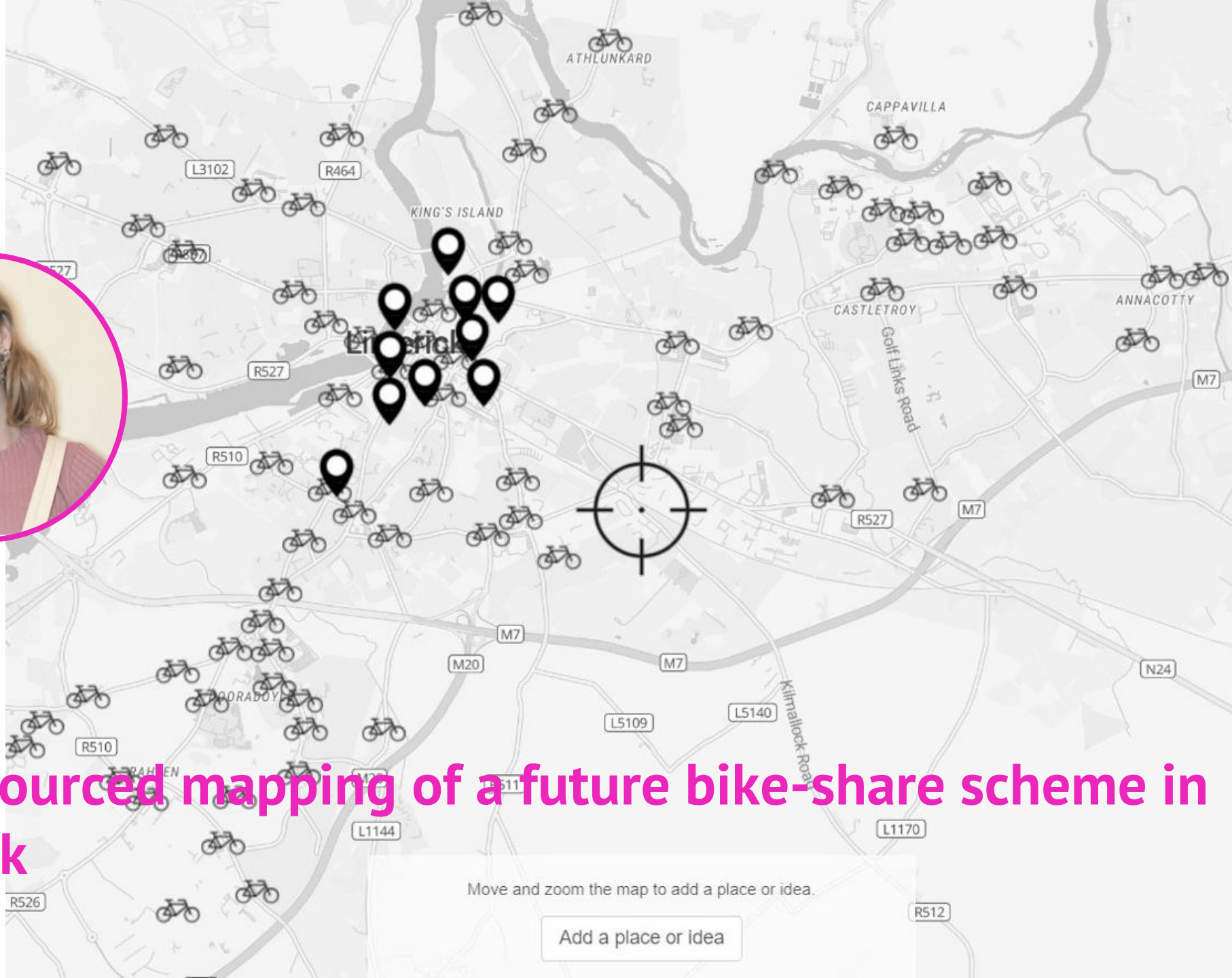
Crowdsourced mapping of a future bike-share scheme in Limerick

Citizen Roles in the Co-creation of PEDs

- Citizens empowered as co-innovators in the creation/replication of PEBs/PEDs – as explorers, ideators, designers and diffusers.
- Citizens animate the innovation playground
  - through participation in Open Calls for Citizen Solutions
  - as energy champions introducing new energy concepts to their communities
  - as participants in energy communities & as prosumers
- Broaden participation and taking ownership

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#GeorgianNeighbourhood

Small Business Innovation Research (SBIR) Challenge Award

Decarbonising Together

Setting a decarbonisation challenge in the Engagement Hub

Citizens as co-innovators

https://citizeninnovationlab.ie/

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ATELIER

DE MENS CENTRAAL IN ENERGIEPOSITIEVE WIJKEN EN IN LOKALE ENERGIETRANSITIE

VIJF VRAGEN IN ONDERZOEK, BELEID EN OPSCHALING

1. Mens centraal in energiepositieve wijken?
- Versnellers en vertragers -

SUBSIDIES

ENERGIE SYSTEMEN

OMWONENDEN

BEDRIJVEN

BEWONERS

PLANNING

REGELGEVING

MARKT

TECHNIEK

ICT

BESTUUR

POLITIEK

BELEID

KENNIS

RISICO'S

KOSTEN

2. Welke mens?

Opschaling

3. Doorwerking naar maatschappelijk doelen – wat levert het op?
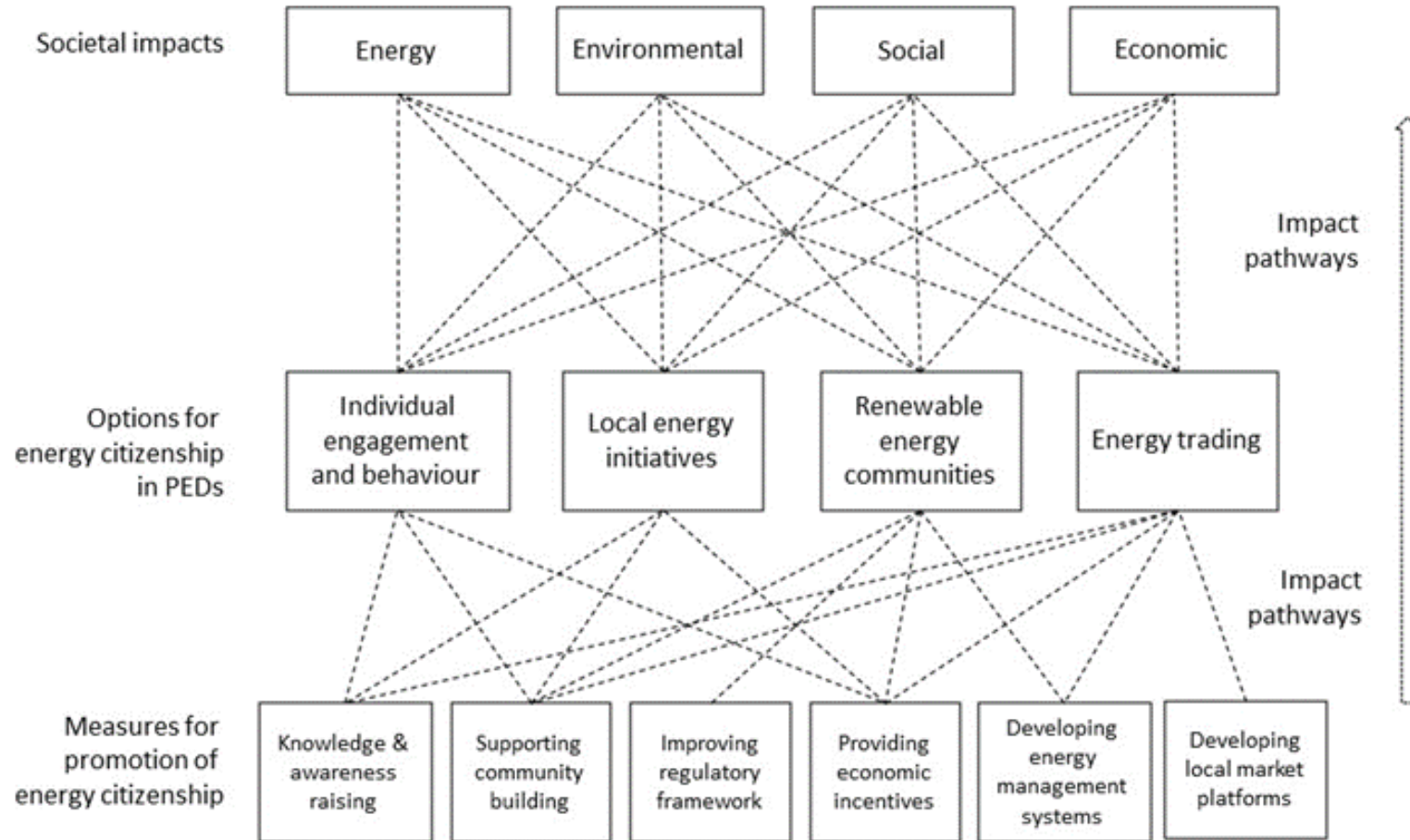
4. Hoe van multi- naar inter- en trans disciplinariteit?

Multidisciplinary	Interdisciplinary	Transdisciplinary
• Juxtaposes separate disciplinary approaches around a common interest • Where researchers from each discipline work in a self-contained manner • Little cross fertilisation ("integration") among disciplines or synergy in the research outcomes	• Involves bodies of knowledge derived from more than one discipline. • Strives for collaboration between disciplines. • Aims to integrate knowledge, at least to some extent.	• Intends to transgress boundaries between disciplinary knowledge • Intends to integrate different bodies of knowledge and create new knowledge • Develops new interdisciplinary research methods • Tends to imply active co-creation of knowledge between academic and societal partners

5. Wordt de trend naar holisme niet te complex voor onderzoekers, praktijk en beleidsmakers?
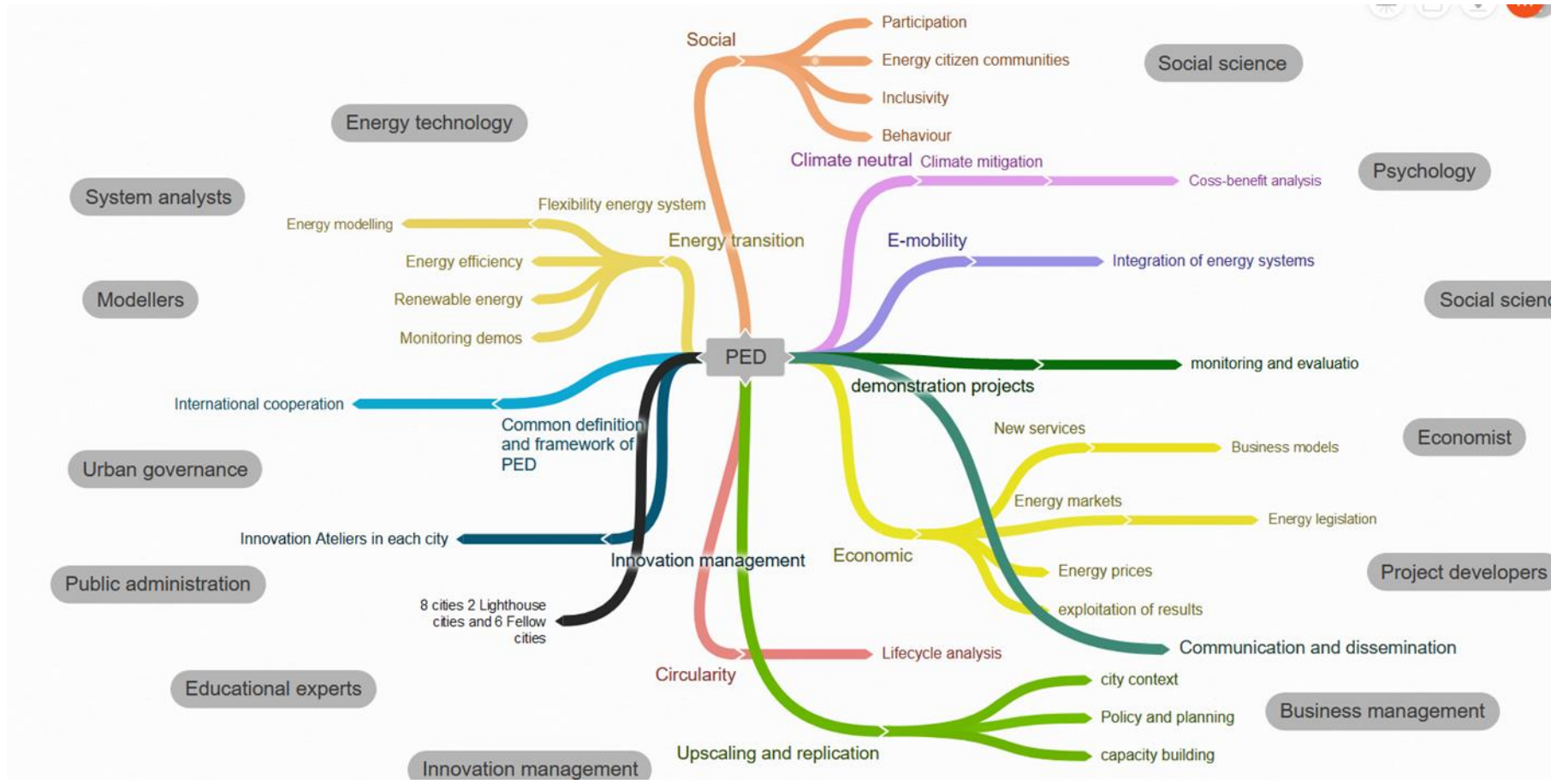
TNO energy Transition

POCITYF

TENANT ENGAGEMENT – A HANDBOOK FOR HOUSING CORPORATIONS

POCITYF - A workbook for housing corporations

- Housing corporations have an important role in the energy transition on a local level or neighbourhood.
  - They can be front-runners in the neighbourhood.
  - They are often better organized compared to all citizens within a neighbourhood.
  - They have a different organizational structure compared to local initiatives or groups
  - They are often well-connected to other public and private organisations in the neighbourhood.

POCITYF

POCITYF Handbook - **Overview of steps and tools**

Preparation

Step 1. Describe the residents and the context

1.1 Describe what you already know about the residents.
1.2 Collect additional information.
1.3 Evaluate this step

Residents' information questionnaire	Wishing Card
The Chatting Tree	**Wishing Tiles**

Step 2. Distinguish different resident groups

2.1 Define the resident groups.
2.2 *Optional*: Draw up personas.
2.3 Evaluate this step.

Step 3. Set up the participation strategy

3.1 Determine the participation level, the "what" and the "when".
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4.1 Formulate the basic communication strategy.
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Means-matrix

Implementation

Step 5. Monitor and evaluate

5.1 Monitor throughout the project's duration.
5.2 Evaluate the process and the results after the project.

POCITYF

Residents indicate what they like about their neighbourhood and immortalise it on an original tile.

De fijne buren

"I'm curious about you. Does NATURAL GAS-FREE appeal to you?"

The tiles are used as a starting point for discussions with residents about the future.

"To find out what concerned residents most, Van Alckmaer, in cooperation with the Kleinschalige Culturele Producties (KCP) agency, organized 'liftgesprekken' in the hall of each block of flats.

Th... ... is visible to ...e housing ... a board or ...n a meeting place.
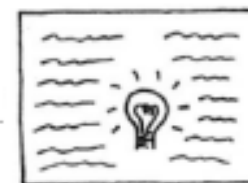
After the project is completed, the tiles will be given a nice spot in the community centre, for example.

Example - Persona

Personal background
- Erik, man, 25, single
- Housing corporation tenant
- Lives in Rivierenbuurt
- Job seeker
- Little contact in the neighbourhood

Communication style
- Difficult to reach
- Personal approach because he doesn't attend meetings
- Must 'stumble' upon the information
- Communication should look fun, visually appealing and simple

Needs
- Needs trust
- Wants clarity through a personal approach
- Must survive financially, so does not want extra costs
- Needs help to make the right decision

Challenges
- Feels excluded and is disappointed in society
- Takes time to make himself understood
- Matching interests and needs
- Preventing choice stress by offering simple choices

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	Step	Explanation
7	Ownership	Residents own the assets and have full control
6	Self-governance	Residents decide on all activities and make their own plans within predefined frameworks
5	Delegate	Housing corporations transfer parts of decision-making to residents
4	Coproduce / cooperate	Joint planning between the housing corporation and residents (as in a project group)
3	Consult	A formal dialogue between the housing corporation and residents (such as workshops, sounding board group)
2	Give input	Residents can formally give input within set frameworks (such as a questionnaire, public consultation)
1	Inform	The residents are informed about the activities and the project, but there is no formal possibility to react
0	No participation	There is no contact between the housing corporation and those concerned

Table 1. Based on the new style of participation ladder (Physical Environment Consultative Body)

Step 3. Set up the participation strategy

Target group/Personas	Initiation		Definition	
	Participation level	Input (what)	Participation level	Input (what)
Resident group 1	Consultation	Contribution of knowledge and experience on different themes (through working groups)	Consultation	Requirements and wishes according to theme (working group)
Resident group 2	Co-production, cooperation	Residents' committee secures input of knowledge/ experience of working groups (in cooperation with working groups)	Consultation/co-production, cooperation	Requirements and wishes from the residents' committee (on the basis of working groups)
Resident group 3	Co-production, cooperation	Residents' committee secures input of knowledge/ experience of working groups (in cooperation with working groups)	Consultation/co-production, cooperation	Requirements and wishes from the residents' committee (on the basis of working groups)
Resident group 4	Consultation	Contribution of knowledge and experience on different themes (through working groups)	Consultation	Requirements and wishes according to theme (working group)

Step 3. Set up the participation strategy

Back table:

Target group/Personas	Participation level	Initiation					Execution and aftercare phase				....
			Design and preparation phase				Peak-end rule	Transit residence	Experiencing new behaviour	Customisation	
			Hassle test	Model home	Customisation	Experiencing new behaviour			x		
Resident group 1		Social proof				x	x				

Front table:

Target groups	Initiation and definition phase				Design and preparation phase				Execution and aftercare phase			
	Project announcement	Linking opportunities	Motivation boost	Social proof	Hassle test	Model home	Customisation	Experiencing new behaviour	Peak-end rule	Transit residence	Experiencing new behaviour
Resident group 1	x		x		x		x		x	x	x
Resident group 2		x		x		x		x		x	
Resident group 3		x		x	Contribution of knowledge and experience on different themes (through working groups)			Consultation/co-production, cooperation		Requirements and wishes from the residents' committee (on the basis of working groups)	
Resident group 4	x		Consultation						Consultation		Requirements and wishes according to theme (working group)

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Step 4. Set up the communication strategy

Target groups	Time	Medium	Customisation	Emotions
Resident group 1	Afternoon	Written (project folder), visual, at the resident's home	Clear planning, extra explanation	
Resident group 2	Evening	Digital environment, written (project folder)	Clear planning	
Resident group 3	Afternoon	Written (project folder), digital environment, drop-in centre	Formal communication	
Resident group 4	Afternoon	Written (project folder), visual, at the resident's home		

Step 4. Set up the communication strategy

High level of participation envisaged

- Coffee cart / carrier cycle moment
- Open evening with models
- Regular drinks evening
- Drop-in centre
- Escape room (a place where you can find some peace and quiet during the work)

- Home visit
- Session with drawings for residents to sketch on with the architects present

Important message (e.g. a choice moment)

Less important message (e.g. an update)

- Newsletter
- E-mail
- First spade in the ground moment or presence at an archaelogical survey

- Letter
- Information evening
- Video to explain something
- Digital environment

Low level of participation envisaged

Based on: Replacement new build: it starts with resident communication | TNO

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POCITYF

Thank you!

- POCITYF project: https://pocityf.eu/
- Handbook:
  - https://pocityf.eu/news/becoming-sustainable-together-with-residents-participation-and-communication-manual-for-housing-corporations/
  - https://pocityf.eu/wp-content/uploads/2022/03/Becoming-sustainable-together-with-residents-Workbook-2.pdf

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