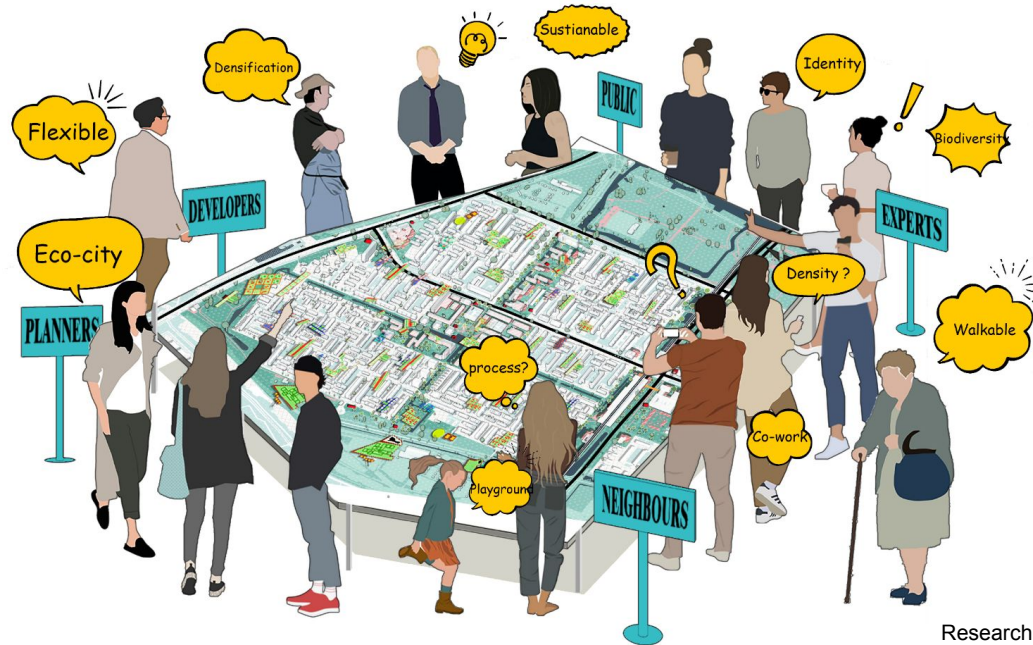



# TOWARDS 'PARTICIPATORY LANDSCAPES'

- A participatory urban model to encourage, implement & scale-up nature-based solutions in urban contexts

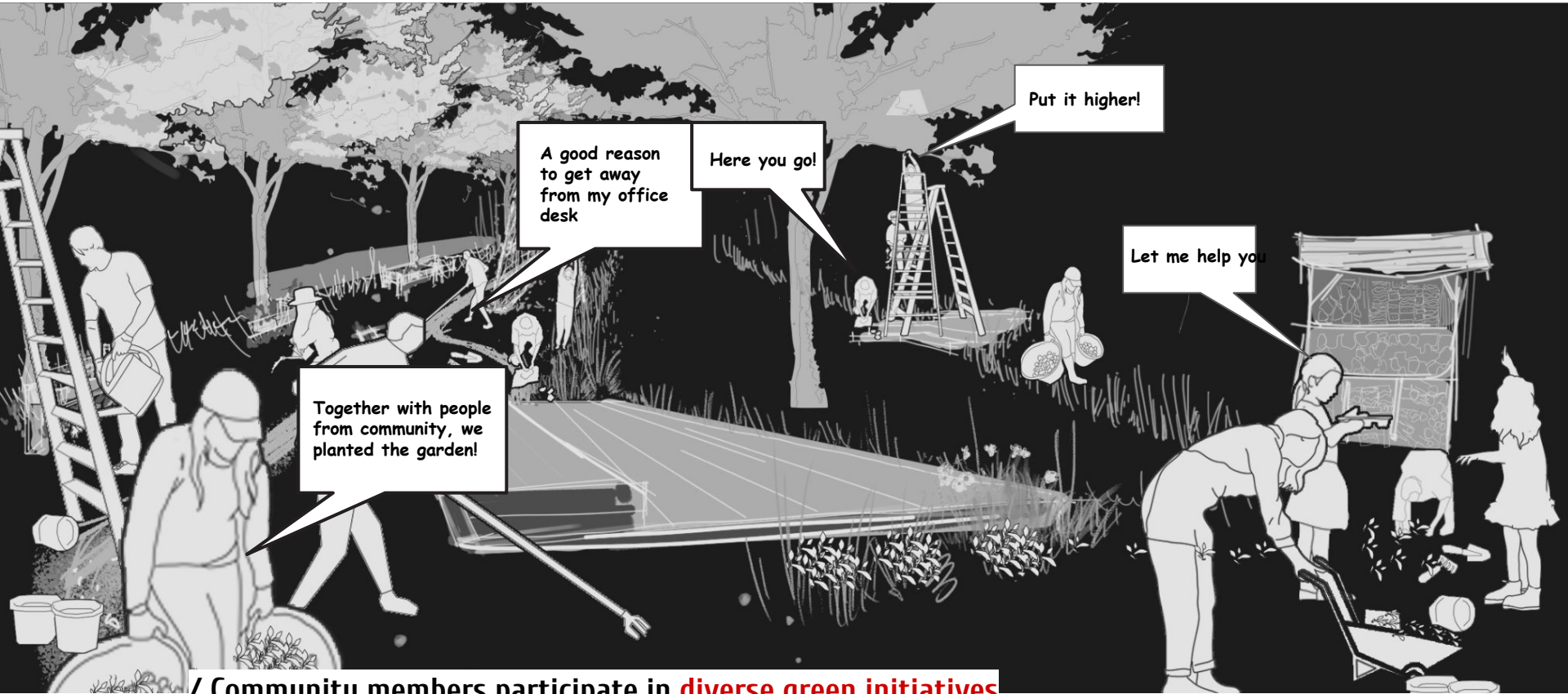


Ning Cai 5076307 Urbanism  
Research Studio : Urban ecology and eco-city  
First Mentor :Dr.Remon Rooij  
Second Mentor : Ir. Frits van Loon

An aerial photograph of a city grid, likely the Pendrecht area, showing a dense network of buildings and streets. A river flows through the left side of the image, and a multi-lane highway runs along the bottom left. The text "The future for the pendrecht .." is overlaid in white in the center of the image.

The future for the pendrecht ..

# vision statement



/ Community members participate in **diverse green initiatives**

# vision statement



/ Diverse green initiatives combine the benefits of

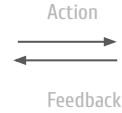
# vision statement

## strategies

strong social awareness



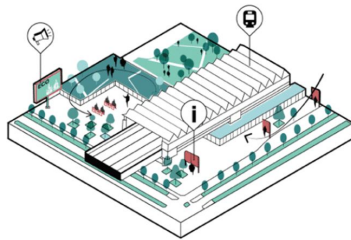
Inspire motivation



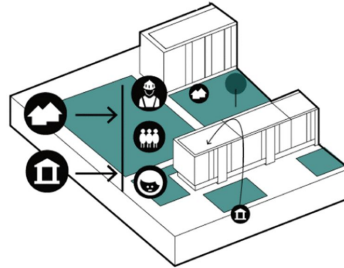
Capacity for self-renew



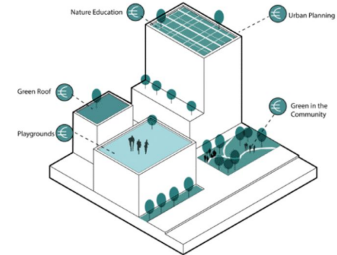
Transform iconic space



Transfer of authority and responsibility to community



Green Subsidy



/ Green initiatives get support from **Urban strategies**

## The consequence of vision



**/ Social groups become encouraged to renovate their own living environment**

## The consequence of vision



**/ The empty grassland is transformed into a productive eco-social , educational, and energetic resources.**

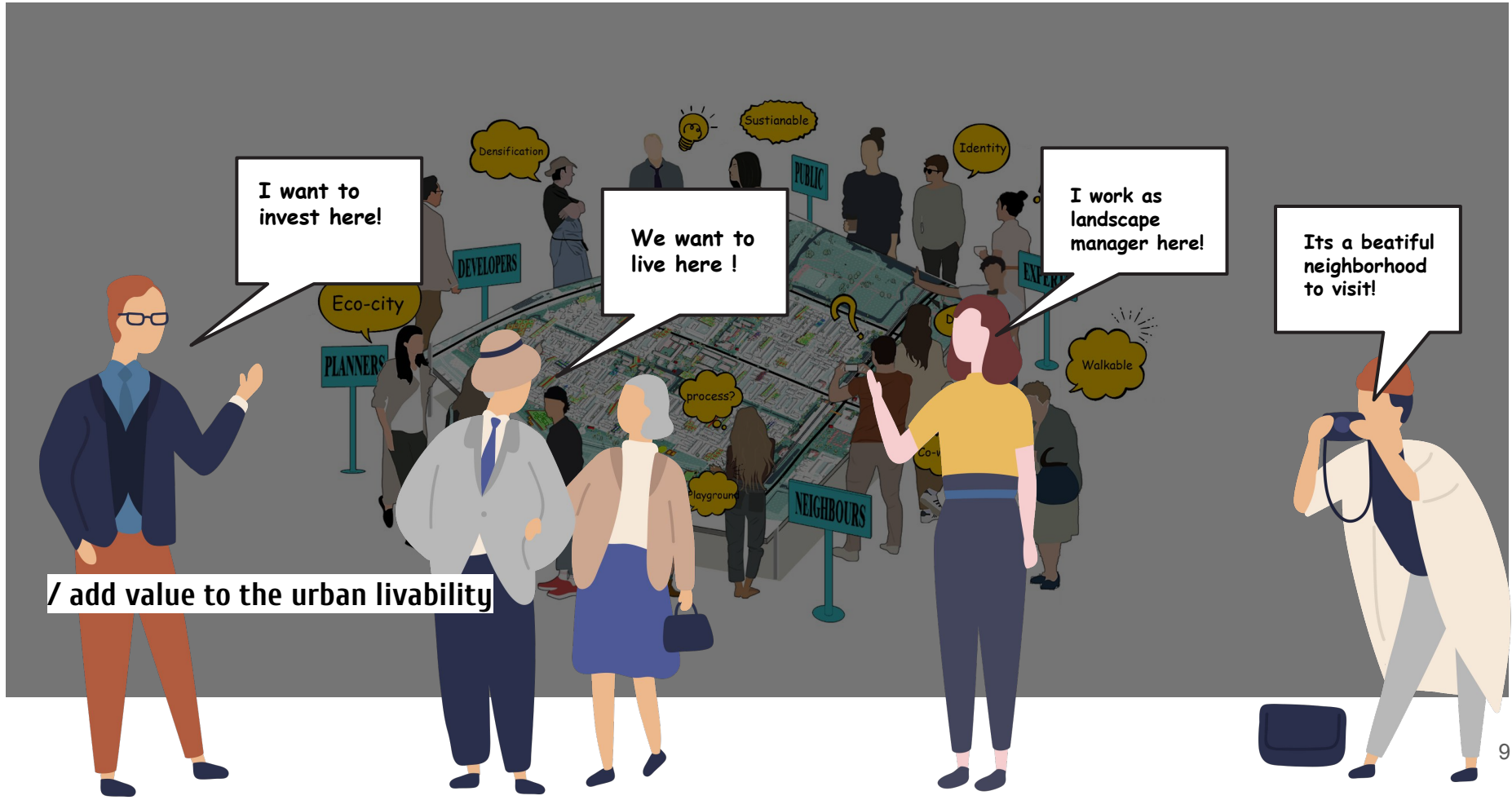
# The consequence of vision



/ Urban ecology and biodiversity be improved



# The consequence of vision



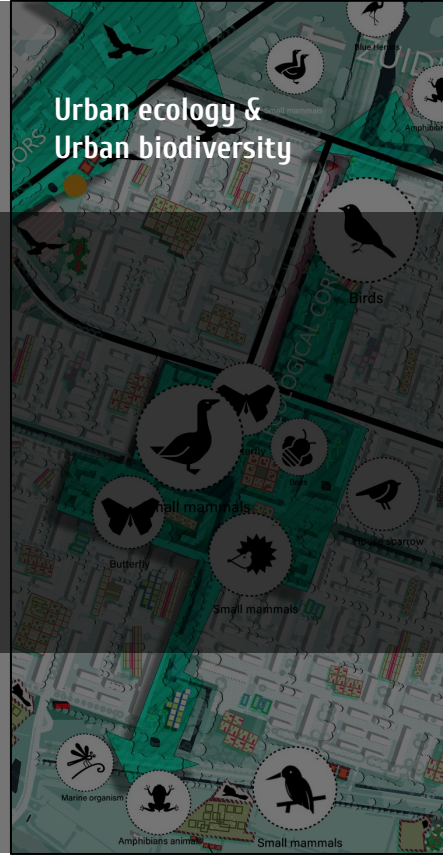
Social engagement



Green initiatives & Nature-based solutions



Urban ecology & Urban biodiversity

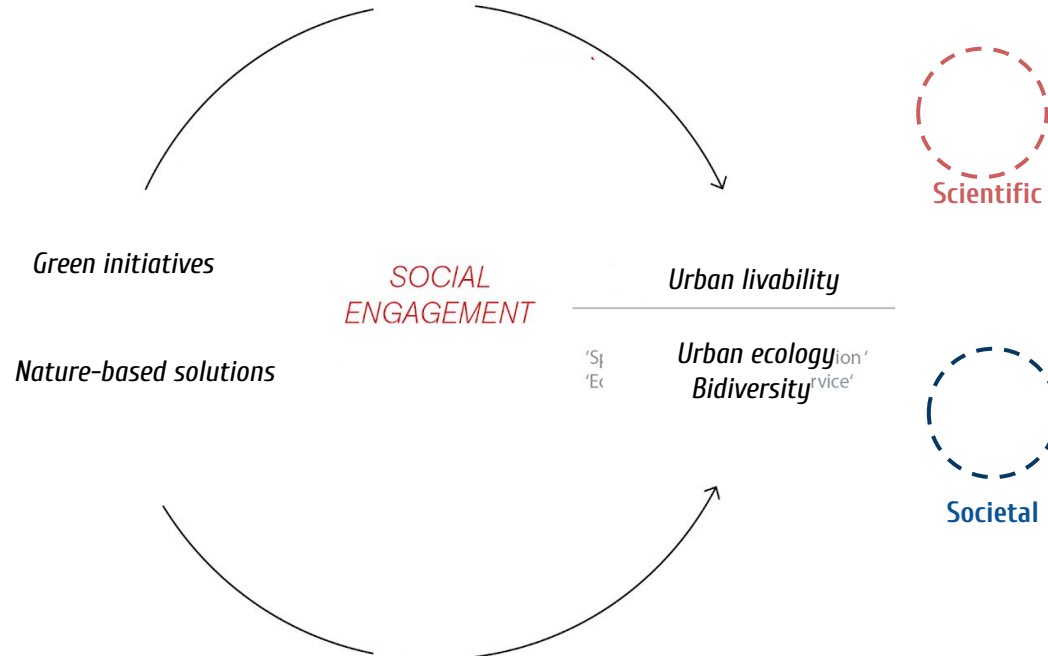


Urban livability



why is this relevant?

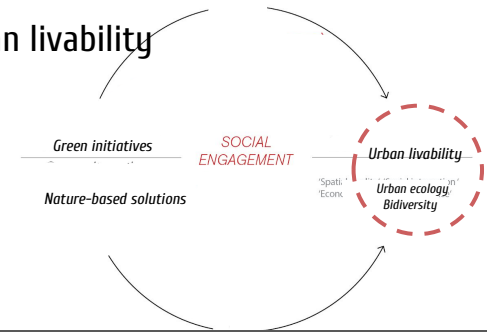
# The relationship between social engagement, green initiatives , urban ecology and urban livability



Drawn by author

# The relationship between social engagement, green initiatives , urban ecology and urban livability

Scientific : Nature in cities is essential for urban livability



Incentive for healthy behavior



- Swimming opportunities
- places to gather
- Mental health
- Social cohesion
- ....

Meidate Urban stress



- Clean air
- Flooding issue
- Noise reduction
- Urban Heat Island
- ...

Long-term livability



- Sustainable
- Maintain stable ecosystem
- Increase resilience to global challenge
- ....

# The relationship between social engagement, green initiatives, urban ecology and urban livability

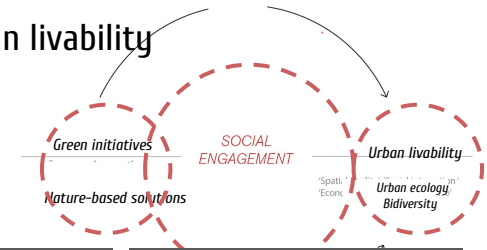
## Scientific : Nature-based solutions(NBS) & urban nature



Source: ICUN Global Standard for Nature-based solutions

# The relationship between social engagement, green initiatives, urban ecology and urban livability

## Scientific : The role of social engagement in the urban nature



### to what extend

**Political level**

trade- off  
confilicts  
...

**Pratical level**

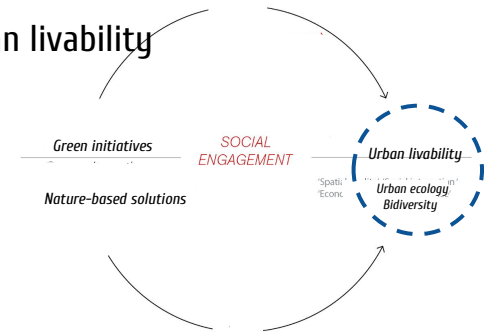
Capacity  
Maintain green condition

**Operational level**

Multi-disciplinary team  
Specific actions

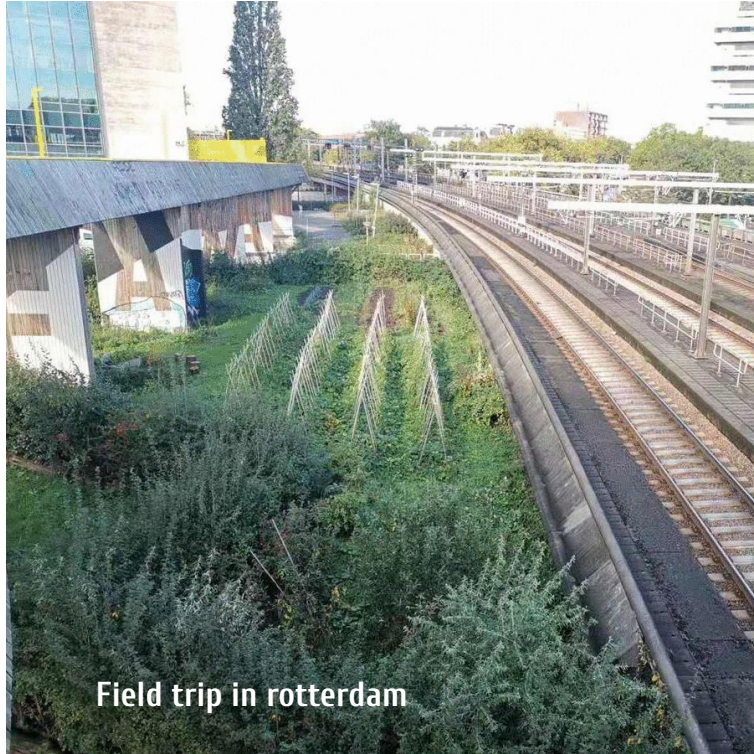
# The relationship between social engagement, green initiatives , urban ecology and urban livability

Societal: Biodiversity is an urban agenda of Rotterdam city

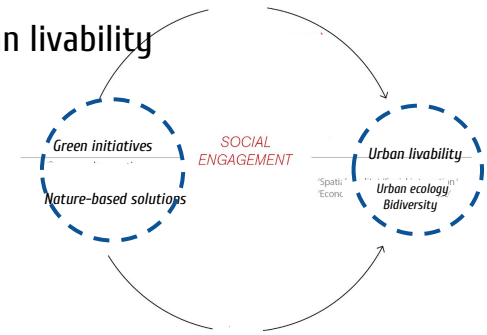


# The relationship between social engagement, green initiatives , urban ecology and urban livability

## Societal: Green initiatives in Rotterdam



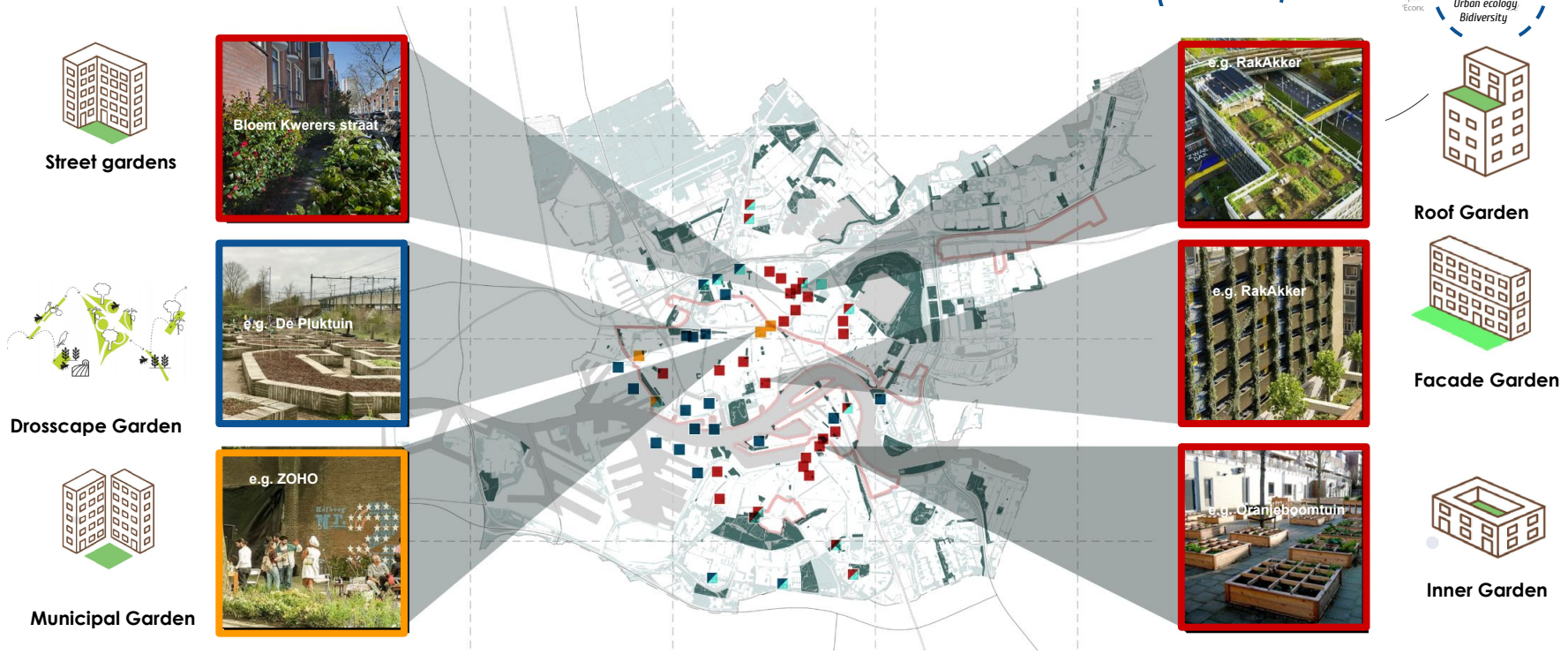
Field trip in rotterdam





# The relationship between social engagement, green initiatives, urban ecology and urban livability

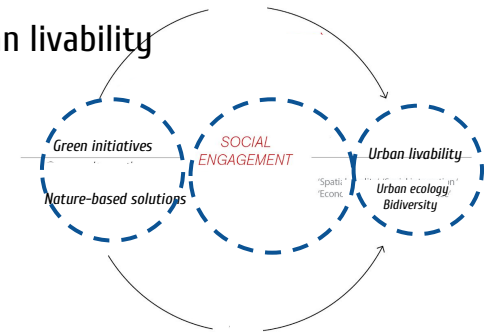
## Societal: Green initiatives in Rotterdam



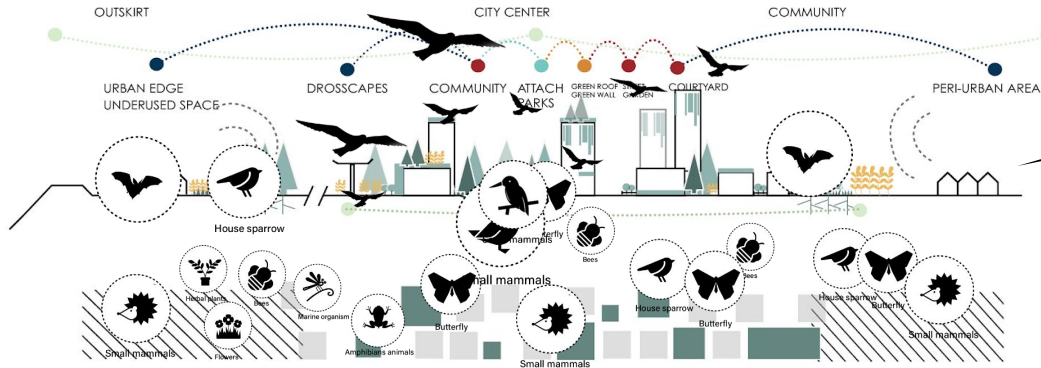
Drawn by author, data based data from Natuurkaart Rotterdam; Gemeente Rotterdam, 2020

# The relationship between social engagement, green initiatives, urban ecology and urban livability

Societal: Social engagement is essential for rich urban nature



SPACE



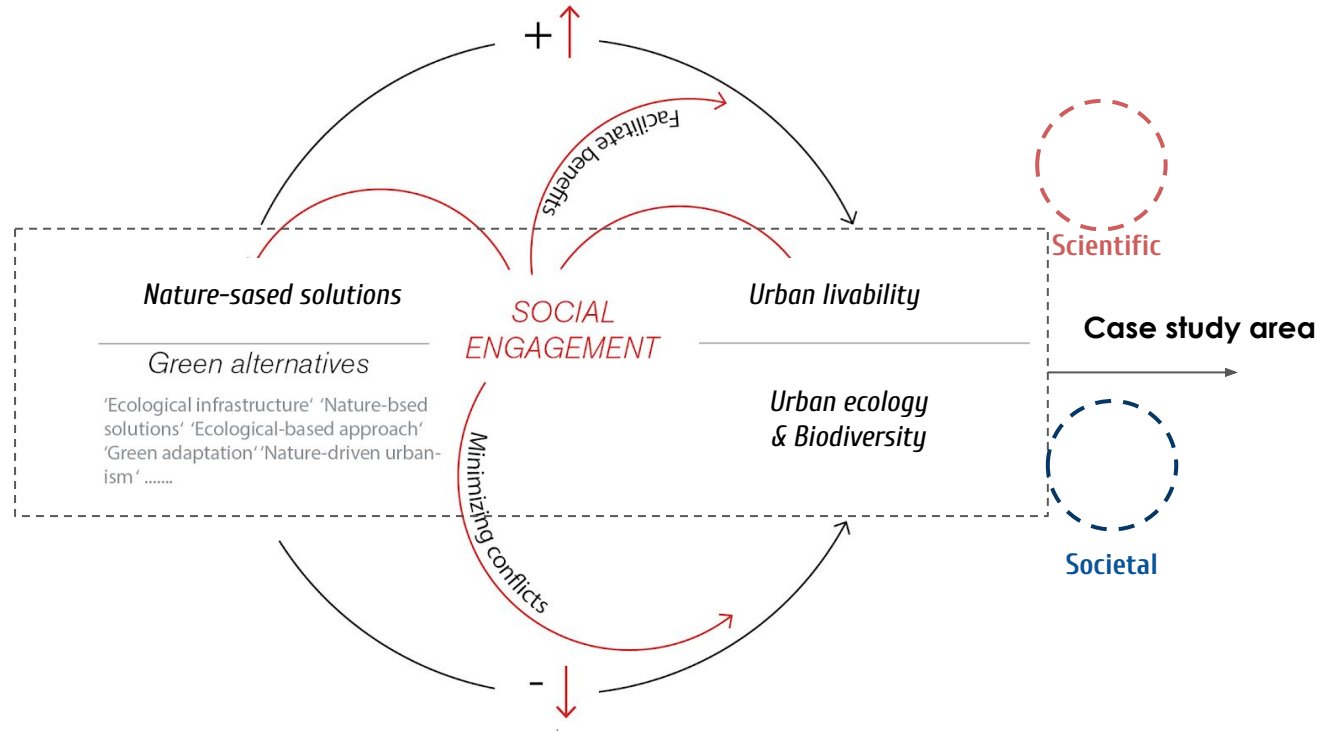
**"only 40% surface is municipal land "**

Source: Working Together on Rich Rotterdam Urban Nature, 2021b

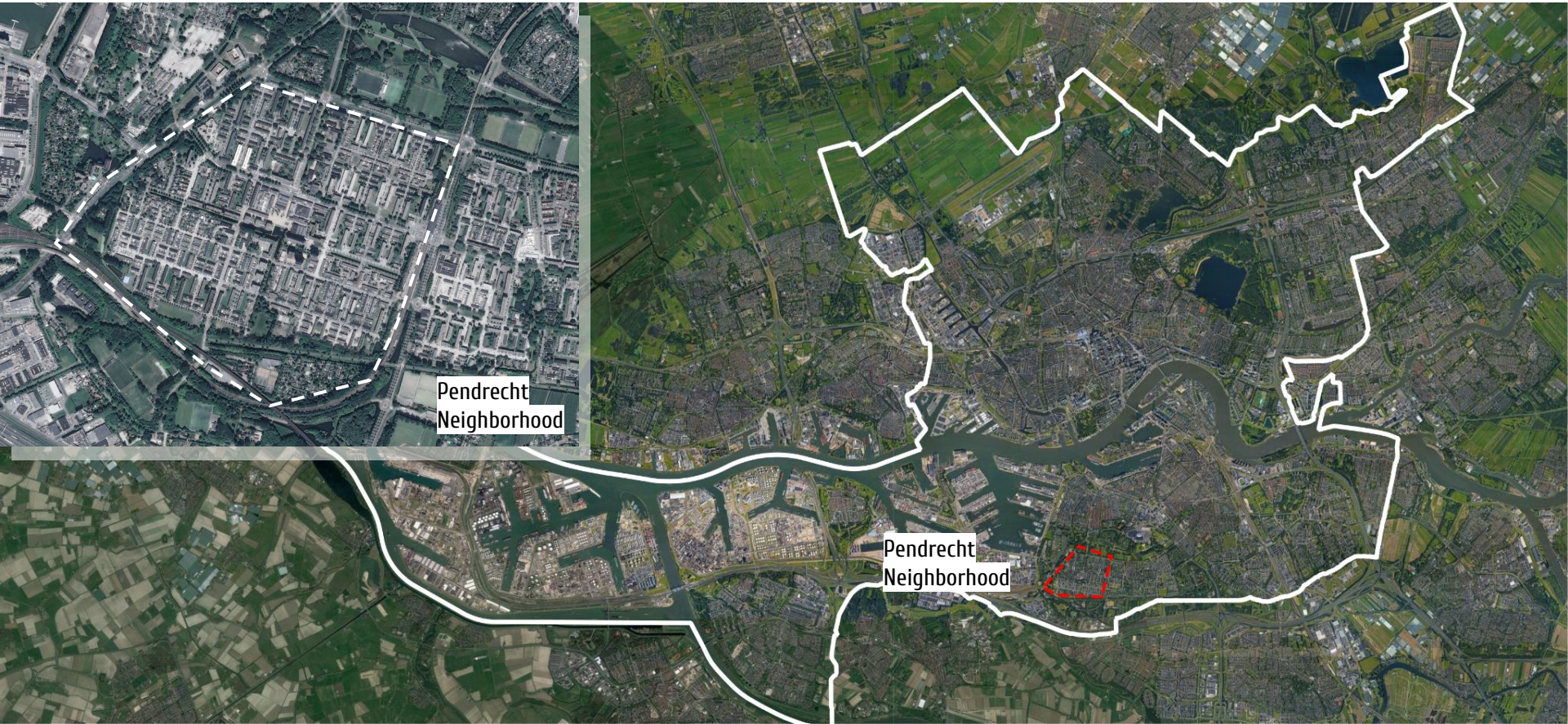
- More nature connection



# Research objective



# Introduction



# Introduction

## Post-war reconstruction area



1950-1980

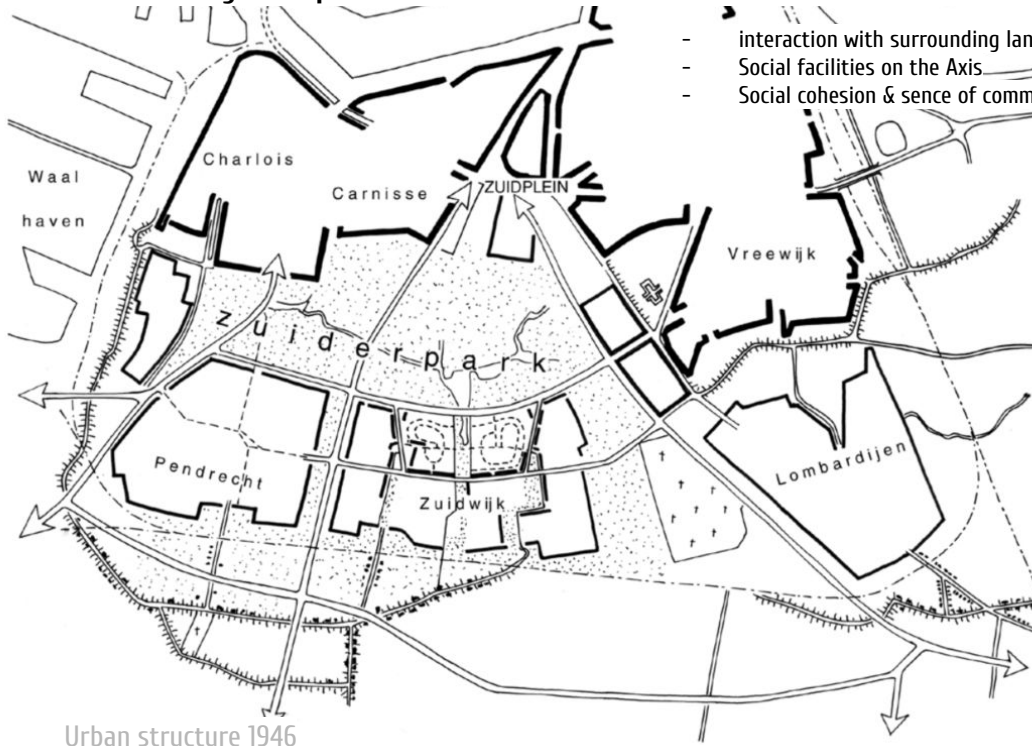
Based on open data , Drawn by author



Pic : <https://www.topolijdreis.nl/>

# Introduction

## Garden city concept

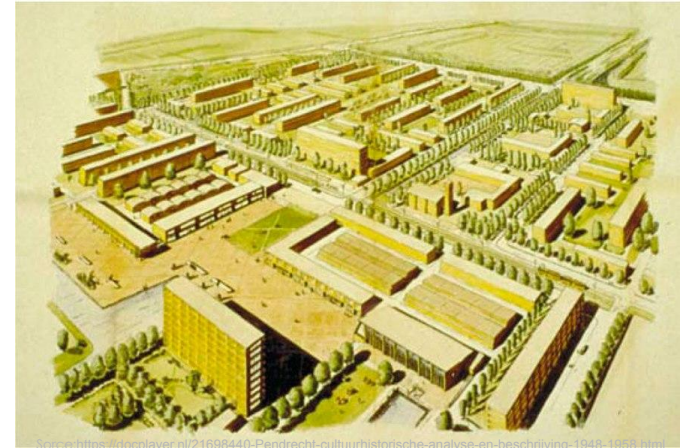


- interaction with surrounding landscapes
- Social facilities on the Axis
- Social cohesion & sense of community

Urban structure 1946

Source: <https://docplayer.nl/21698440-Pendrecht-cultuurhistorische-analyse-en-beschrijving-1948-1958.html>

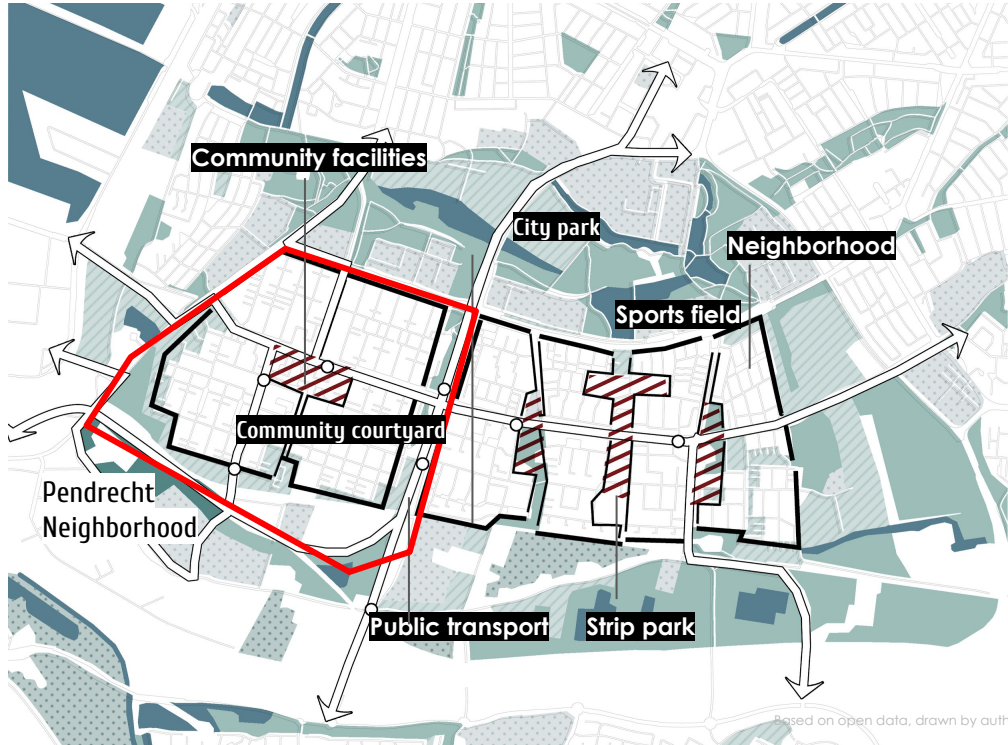
## The urban planning of Pendrecht



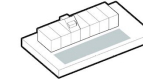
Source: <https://docplayer.nl/21698440-Pendrecht-cultuurhistorische-analyse-en-beschrijving-1948-1958.html>

# Introduction

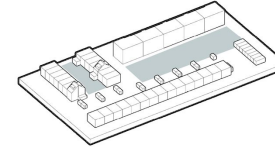
## Current urban structure



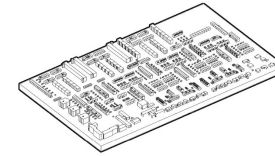
## city composition



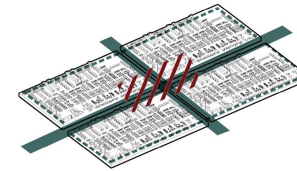
Housing units



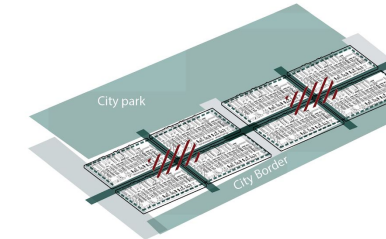
Building Blocks



Neighborhood



City districts

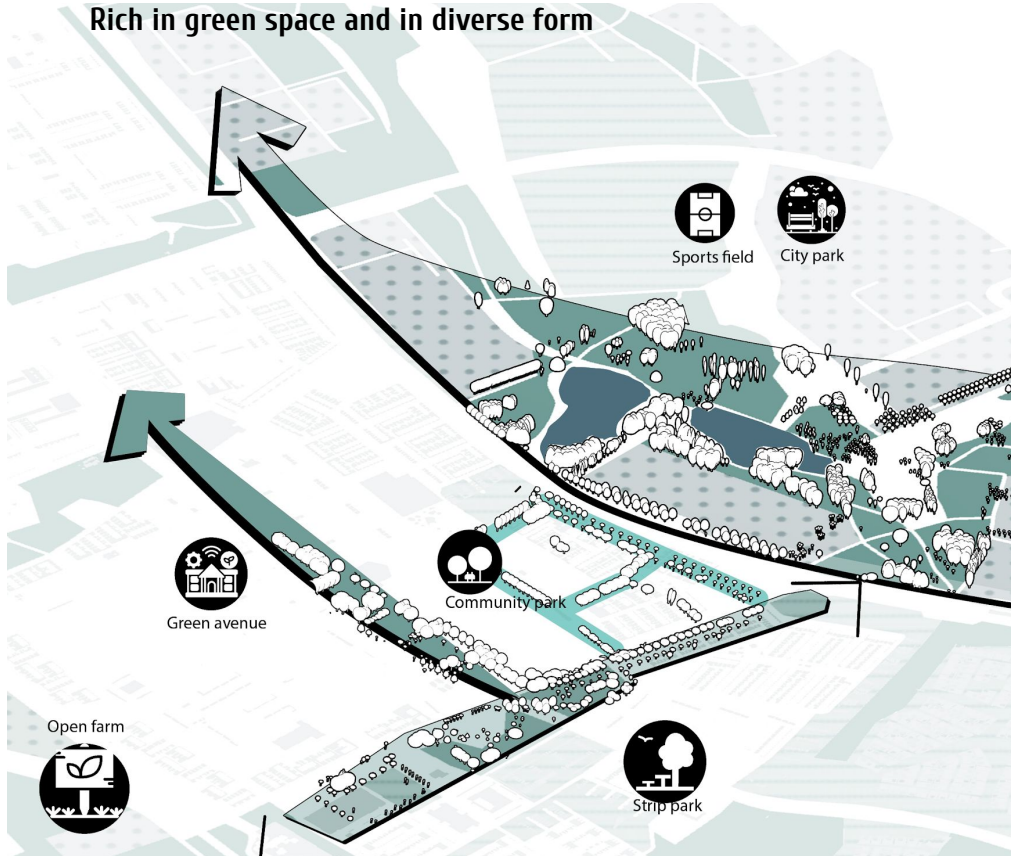


Garden city

# Introduction



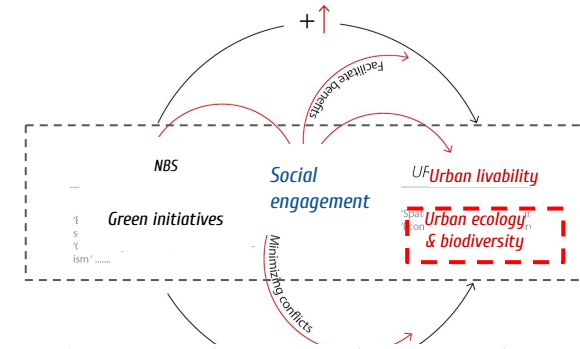
SPPORS FIELD



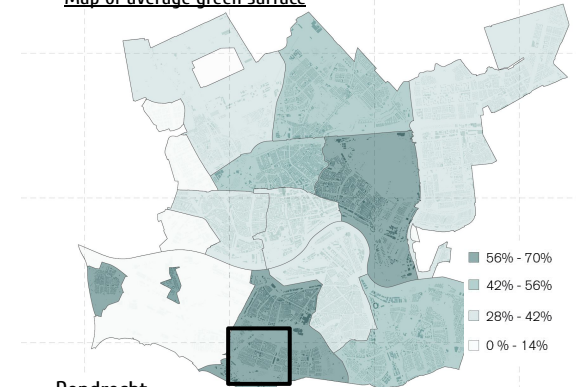


# Challenge I

## Poor quality and usability of green space in the neighborhood



Map of average green surface

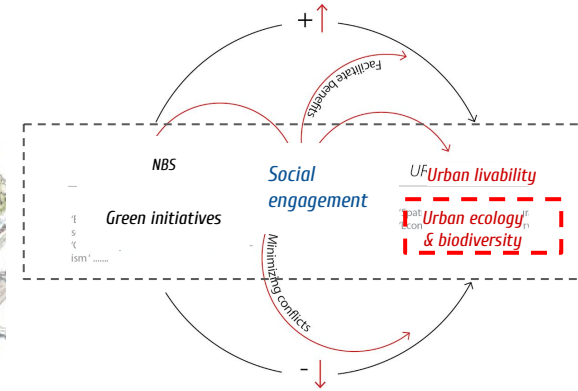
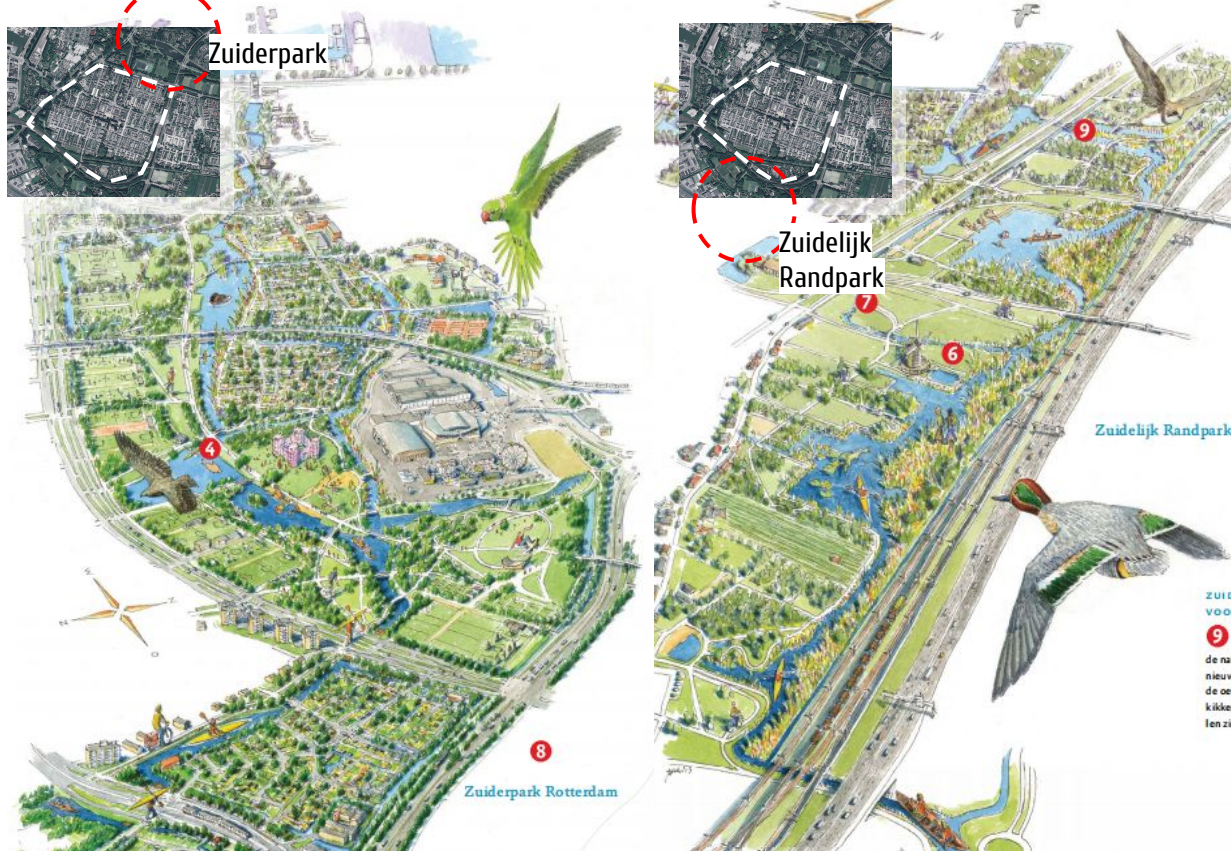


Pendrecht Neighborhood

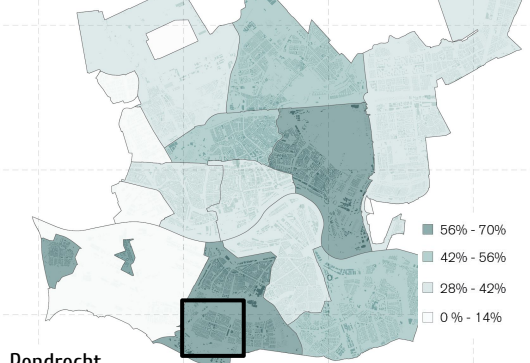
Data from GIS map of ecosystem services totals at district level which is deposited in Dryad Digital Repository ((Derksen, Van Teeffelen & Verburg 2015), Drawn by author

# Challenge I

## Poor quality and usability of green space in the neighborhood



Map of average green surface

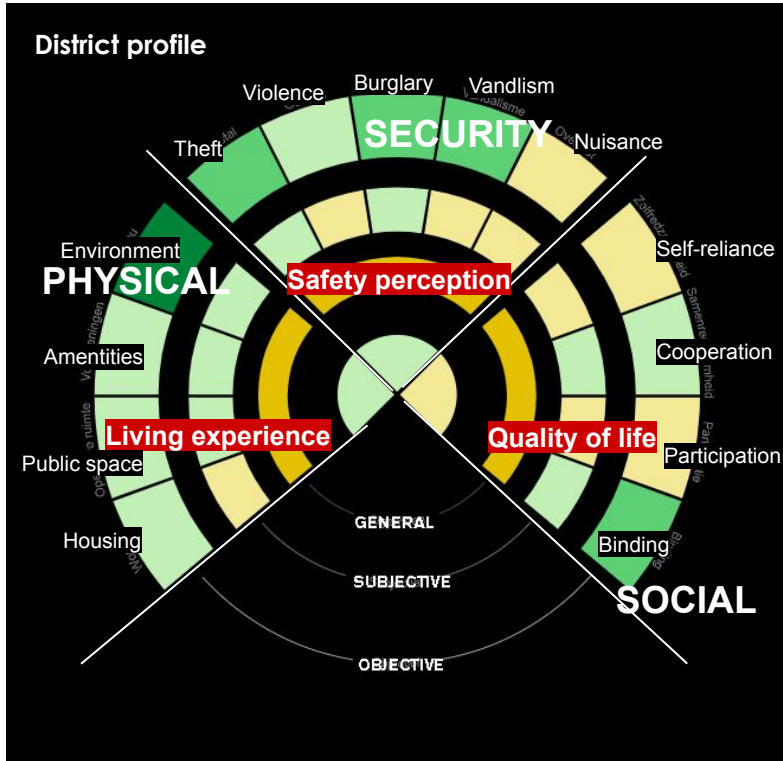


Pendrecht Neighborhood

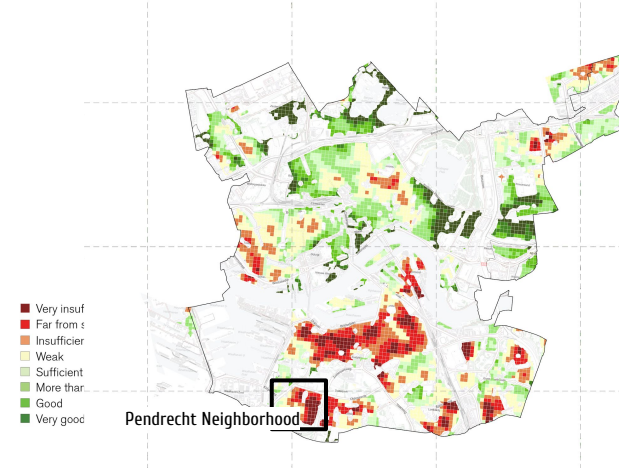
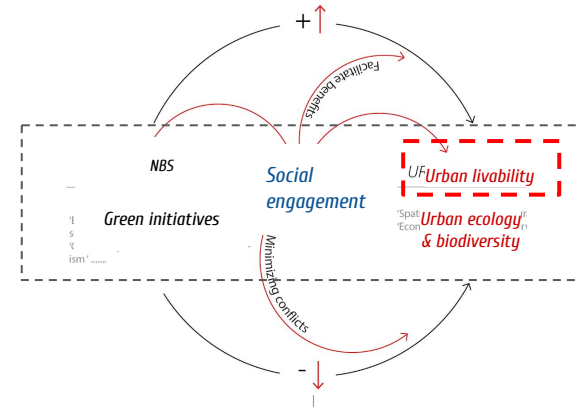
Data from GIS map of ecosystem services totals at district level which is deposited in Dryad Digital Repository ((Derksen, Van Teeffelen & Verburg 2015), Drawn by author

# Challenge II

## insecurity of public space

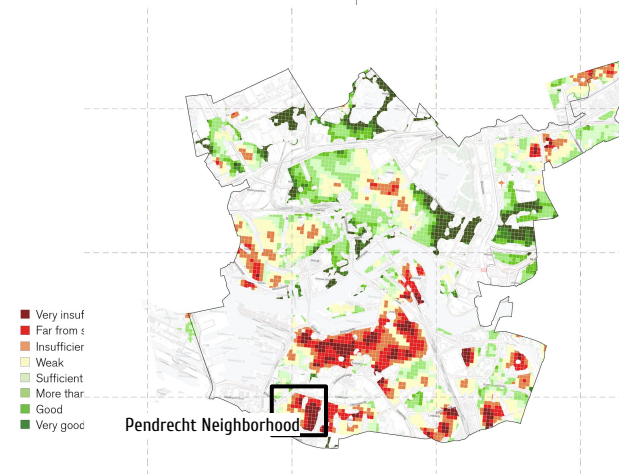
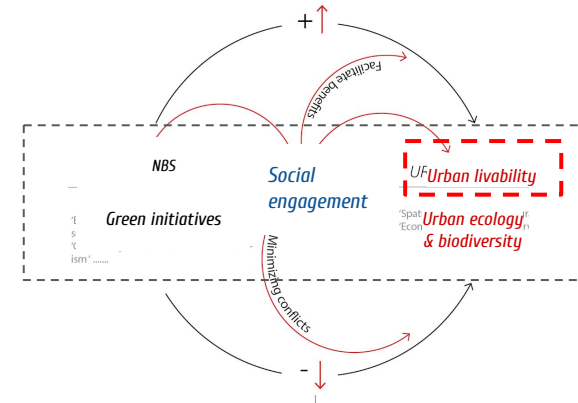


Source: <https://wijkprofiel.rotterdam.nl/nl/2018/rotterdam/charlois/zuidwijk>



# Challenge II

## insecurity of public space



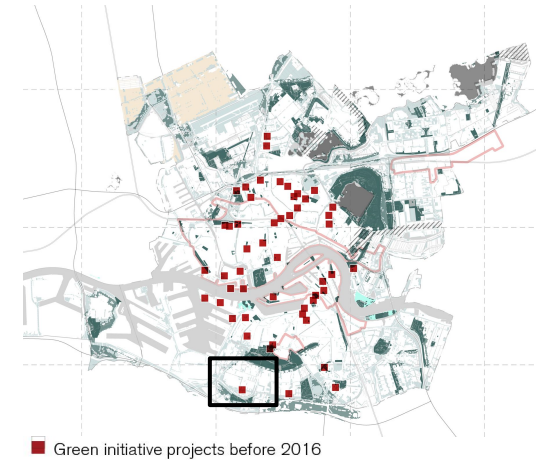
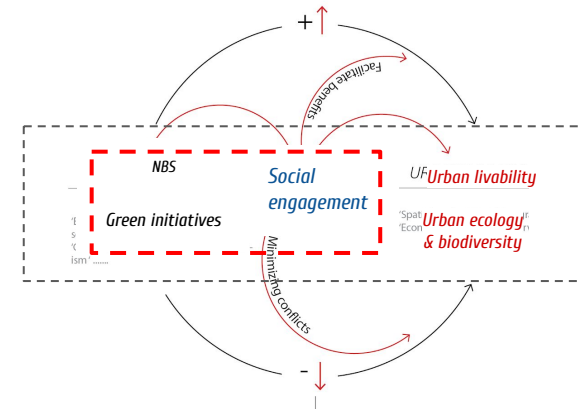
Source: Google map, illustrated by author

# Challenge III

low social cohesion - Community potential resources not being leveraged  
& Low social engagement on green initiatives



Source: foto: stichting tussentuin <http://platformbinnentuinen.nl/tuinen/panderplein/>



# Research objectives I

To activate the usability of public space through social participation in NBS and green initiatives



Community food hub

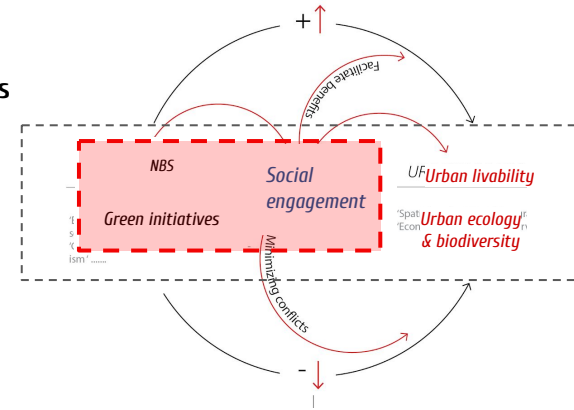
Edible garden



Street garden

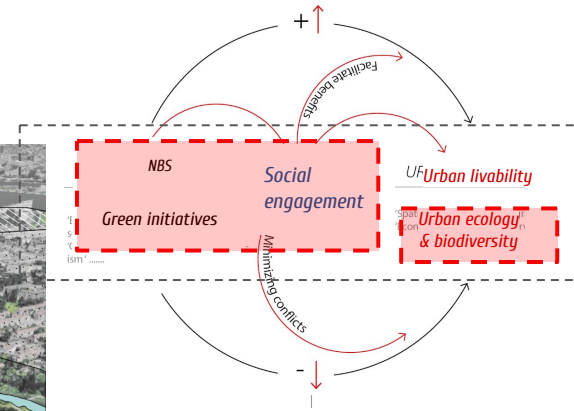
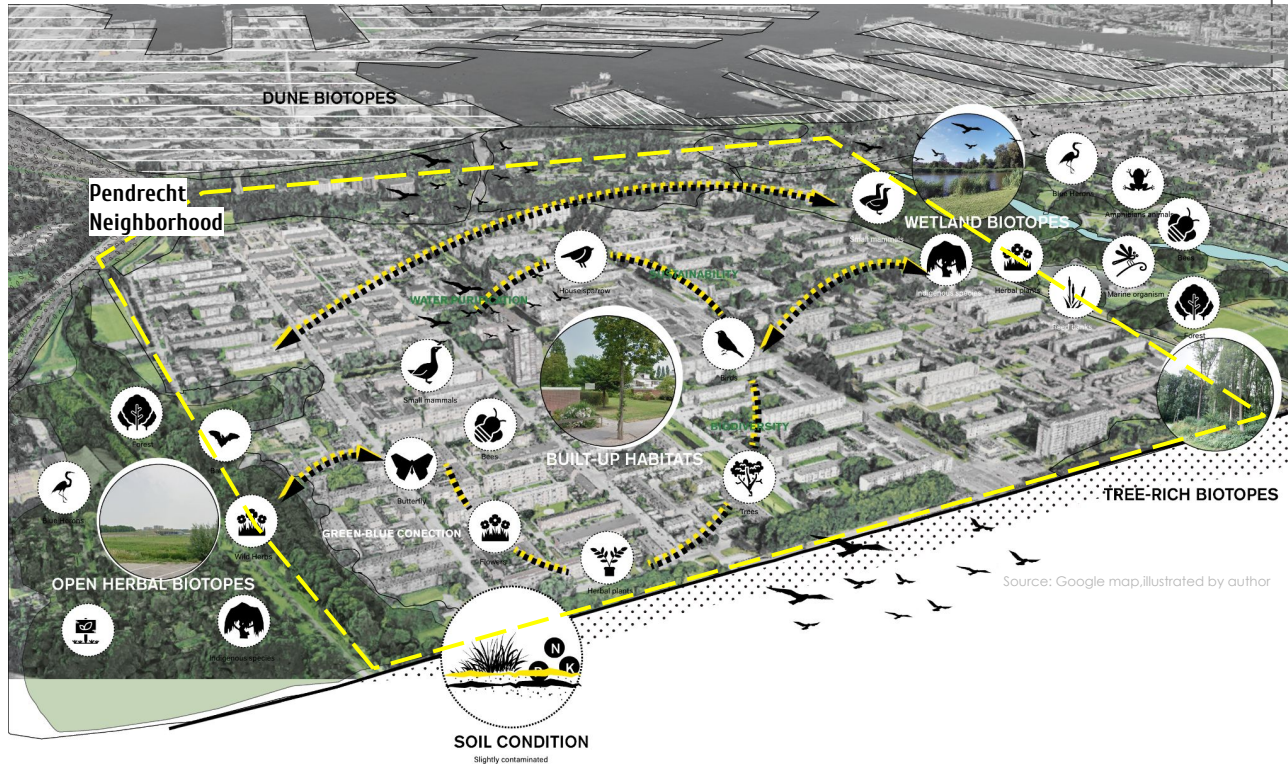
Educated garden

Sketch by author



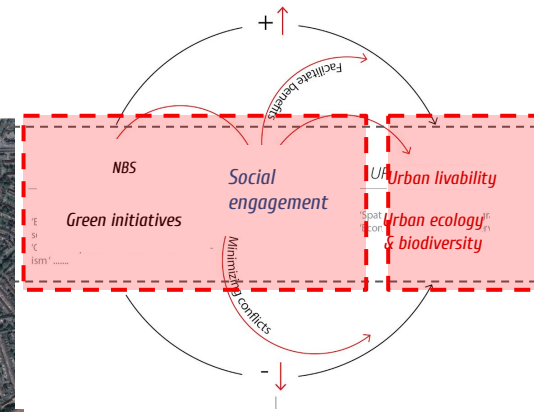
# Research objectives II

To form a better connection of urban nature with surrounding landscapes & Improve urban biodiversity

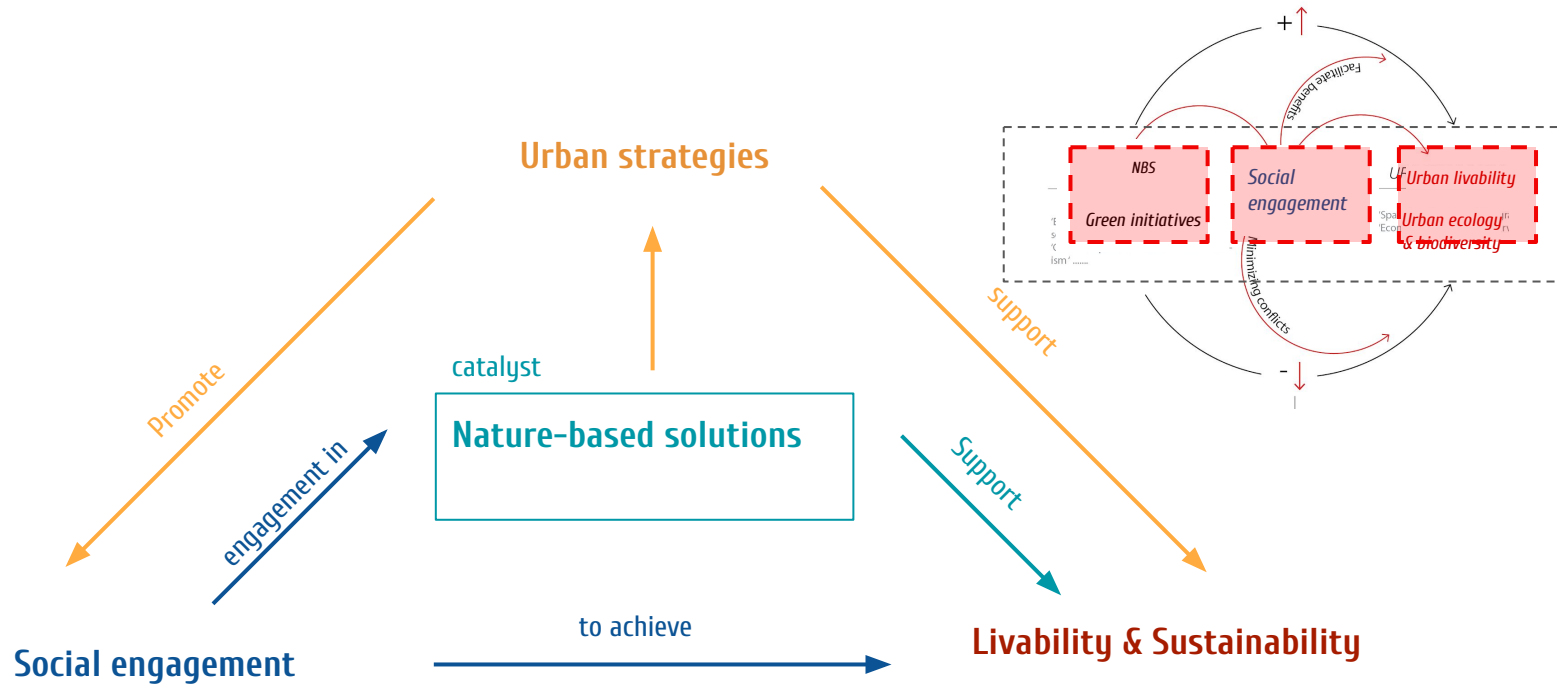


# Research objectives

To shift urban challenges & promote livable living in the city



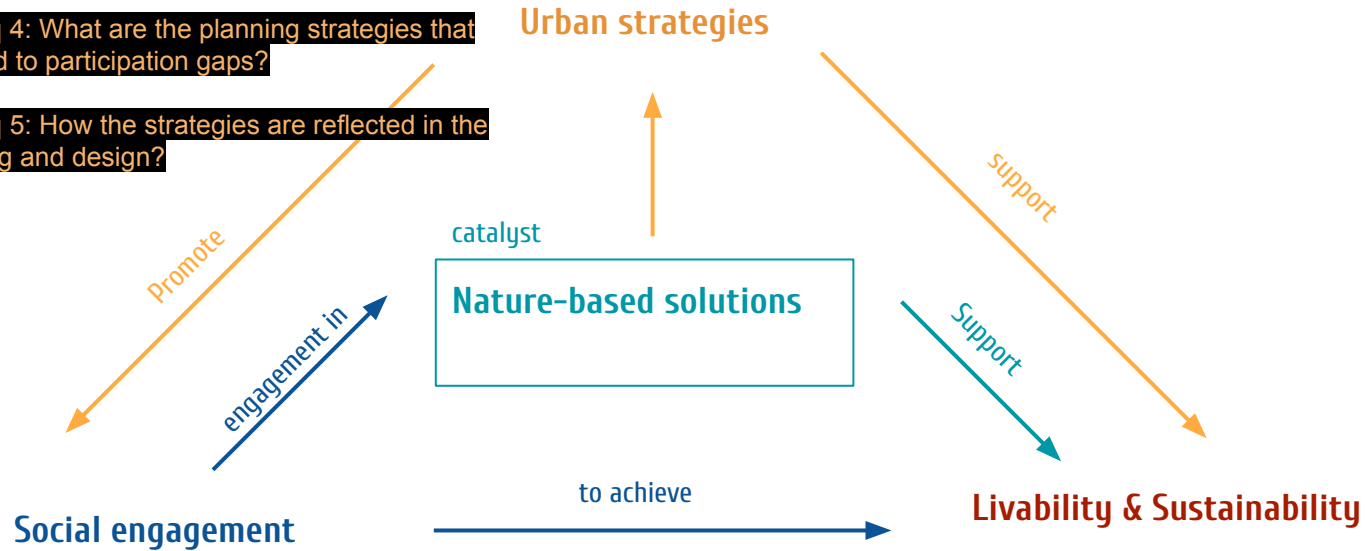




sub 1 :How do planning and design strategies integrate the building with the nature concept?

Sub-Rq 4: What are the planning strategies that respond to participation gaps?

Sub-Rq 5: How the strategies are reflected in the planning and design?



Sub-Rq 2: How to understand the complexity of social participation in NBS?

Sub-Rq 3: What kind of stakeholder groups are involved in the project and what the role of them?

Sub-Rq 6: How to ensure the long-term operation of the project?

Sub-Rq 4: What are the planning strategies that respond to participation gaps?

Sub-Rq 5: How the strategies are reflected in the planning and design?

## Urban strategies

support

Promote

engagement in

catalyst

Nature-based solutions

Support

Social engagement

to achieve

Livability & Sustainability

Sub-Rq 2: How to understand the complexity of social participation in NBS?

Sub-Rq 3: What kind of stakeholder groups are involved in the project and what the role of them?

Sub-Rq 6: How to ensure the long-term operation of the project?

# Challenges for social participation in NBS

e.g. Different interests

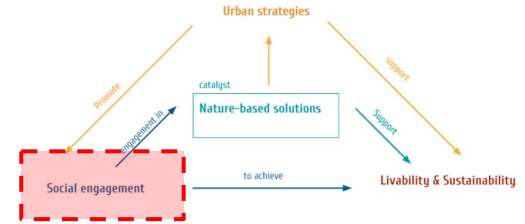


Photo by author

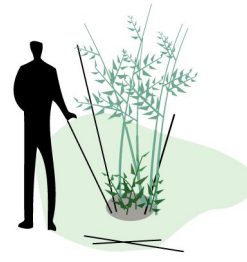
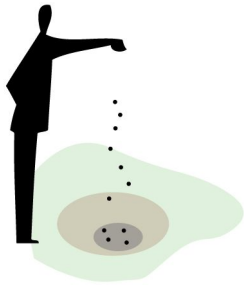
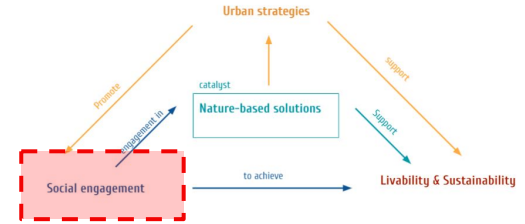


Illustrate by author



# Challenges for social participation in NBS

e.g. Horticulture knowledge & skill



Illustrate by author

## e.g. Plant

- where to plant
- Plant type
- ....

## Grow

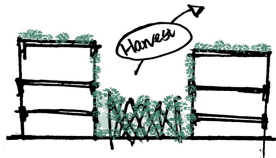
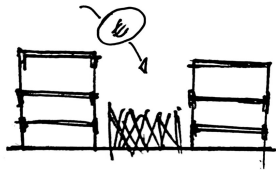
- Watering
- soil

## Maintain

- share responsibilities
-

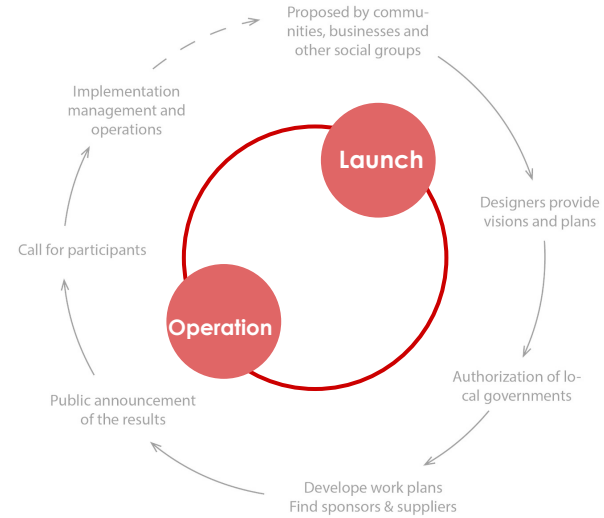
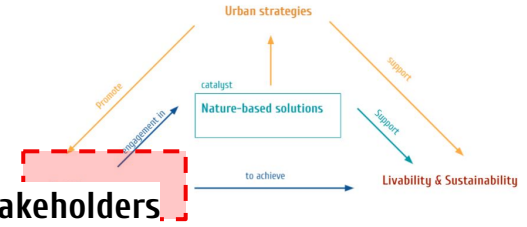
# Challenges for social participation in NBS

e.g. Money concern



Illustrate by author

e.g. Process & connect stakeholders.

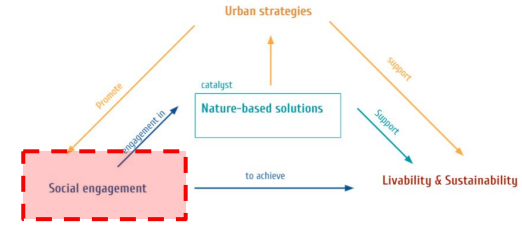
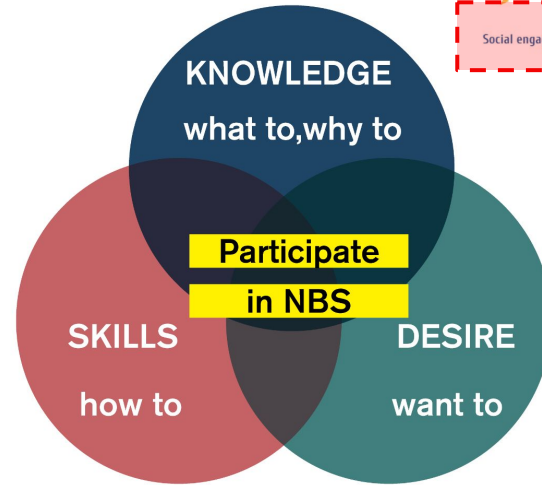


Illustrate by author

# Understand the complexity of participatory gaps from a Social psychological perspective

If we see participating in NBS as a series of **behaviors...**

Three conditions support that



**Pic 4.2.1 Patterns of participating in NBS**

Source: Illustrated by author,  
Based on the internalized principles & patterns of behavior, what is a habit? Habits patterns of behavior composed of 3 overlapping components.

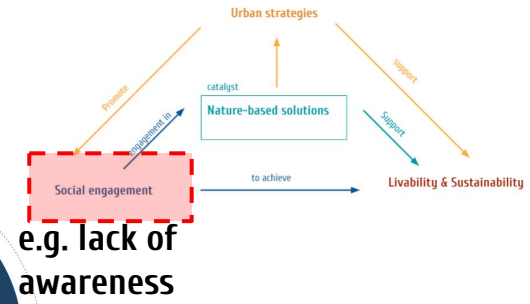
# Understand the complexity of participatory gaps from a Social psychological perspective





# Understand the complexity of participatory gaps from a Social psychological perspective

|  |  |  |  |
|--|--|--|--|
|  <p>Tenant</p>               | <p>For tenants, they may <b>lack knowledge</b> of biodiversity; <b>unfamiliar</b> with NBS; not understand <b>the process of participation</b> and how to get involved</p> | <p>They may <b>lack a strong desire</b> to transform the environment due to <b>limited lease terms</b>; they do not understand the conditions of use of the <b>various NBS and the potential benefits</b>; they do not have the <b>time or conditions</b> to maintain the items; NBS have natural uncertainties and their growth and maintenance takes a long period, so they do not have a <b>clear picture of the result</b></p> | <p>They may lack <b>gardening skills</b>; they may face a <b>lack of infrastructure</b>, e.g. plumbing, tool shed; they may <b>lack support</b>, e.g. financially, in terms of information; They <b>lack authority</b> to change the environment; They may have <b>different interests</b> for the communal land</p> |
|  <p>Landlord</p>             | <p>The same challenges with tenants.</p>   | <p>Unlike tenants, they are not restricted by lease dates</p>  | <p>Unlike tenants, they have the right to adapt the house and site</p>   |
|  <p>Housing association:</p> | <p>The same challenges with tenants.</p>   | <p>They are primarily <b>profit driven</b> and are more concerned with the potential impact and benefits of NBS and the benefits of the inputs and outputs.</p>  | <p>They will be concerned about the <b>maintenance and operation</b> of the NBS at a later stage, and the <b>distribution of responsibilities</b></p>  |
|  <p>Er...</p>                | <p>The same challenges with tenants.</p>   | <p>Again, they are profit driven and their willingness may be influenced by the <b>feedback cycle of the project</b>, as well as the <b>feasibility of the business model</b></p>  | <p>The same challenges with housing association</p>  |

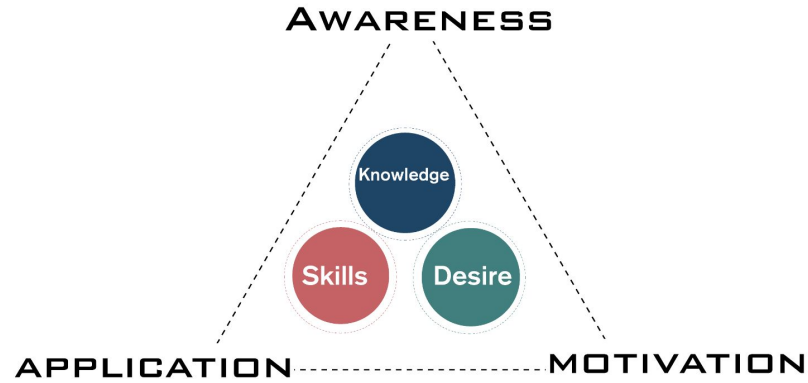
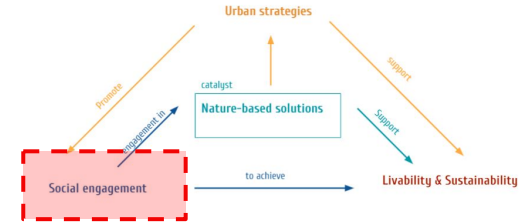


e.g. lack of awareness

e.g. Money concern

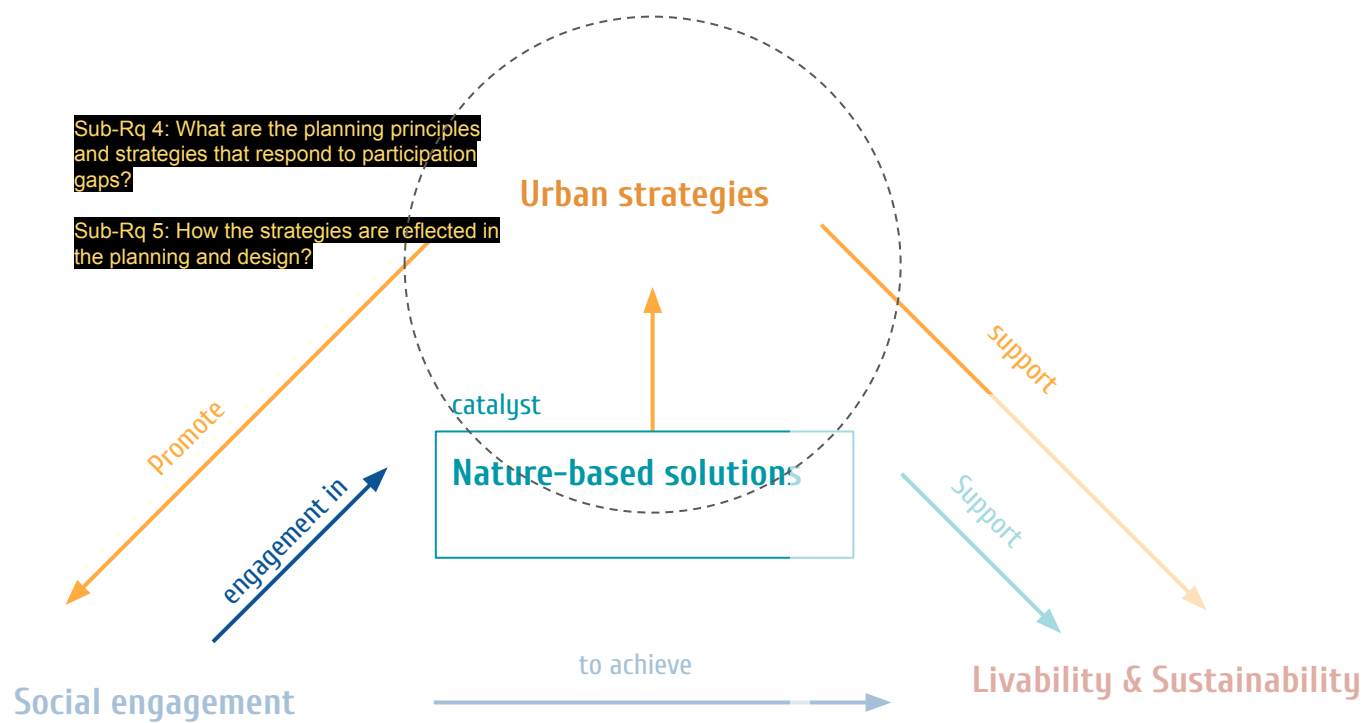
& skill

# A new perspective to narrow down the participatory gaps



Pic 4.5.1 Three aspect of focus for strategies development

Source: Illustrated by author.



Sub-Rq 4: What are the planning principles and strategies that respond to participation gaps?

Sub-Rq 5: How the strategies are reflected in the planning and design?

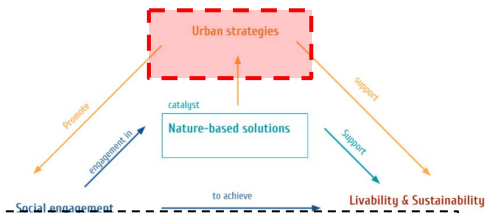
Sub-Rq 2: How to understand the complexity of social participation in NBS?

Sub-Rq 3: What kind of stakeholder groups are involved in the project ?

Sub-Rq 6: How to ensure the long-term operation of the project?

# Design principles

Explore design principles from these three perspective



## Case study



source: Pic from ZOHO Climate Proof District (2014)



source: Pic from Carrot City - Ecobox, 2007



source: Pic from (Sustainable Schiebroek-Zuid, 2010)



## Literature review

### The Role of Public Space in Urban Renewal Strategies in Rotterdam and Dublin

Rianne Van Melik & Philip Lawton

Pages 513-530 | Published online: 21 Dec 2011

Download citation | <https://doi.org.tudelft.idm.oclc.org/10.1080/02697459.2011.626681>

Full Article | Figures & data | References | Citations | Metrics | Reprints & Permissions | PDF

Policy Studies Journal, Vol. 27, No. 3, 1999 (502-529)

### Ecology and Participation in Landscape-Based Planning Within the Pacific Northwest



Agricultural Systems  
Volume 140, February 2018, Pages 110-123



Participatory systems approaches for urban and peri-urban agriculture planning: The role of system dynamics and spatial group model building

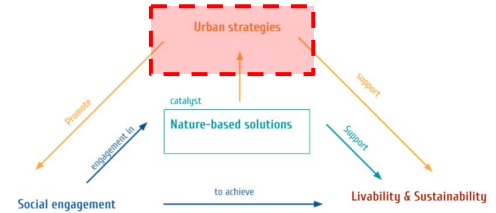
Karl M. Rich Ph.D., AIA, Shigeki Rishi M.Sc., AIA, Kanar Daywan M.Phil., G. F. O'S

Show more

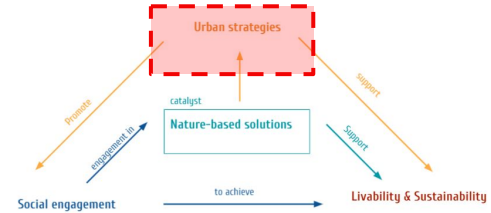
developing and developed countries has mostly been a bottom-up process, typically initiated by individuals or non-governmental organizations rather than by governments or facilitated by planners. Indeed, while attitudes towards urban agriculture have been shifting among planners over the past 15 years (Lovell, 2010; Morgan, 2013; Morgan, 2014), the mainstreaming of a policy consensus to facilitate urban agriculture remains lacking, as does knowledge at a planning level to support it (Pothukuchi and Kaufman, 2000). Given the important role that urban agriculture can play from a livelihoods and social cohesion perspective, the question is thus how to support and mainstream urban agriculture as a strategy that could be used not only as a reaction in times of crises but also as a livelihoods strategy that can enhance the resilience and sustainability of urban areas and populations. More specifically, what types of systemic planning tools are available to integrate planners and practitioners in a process of joint learning that can guide the development of urban agriculture more effectively?

# Design principles

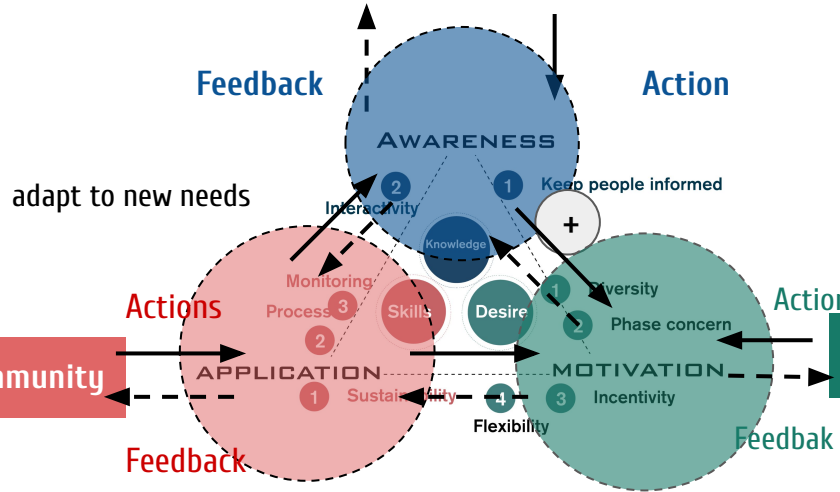
Explore design principles from these three perspective



### 3 tracks for strategies development to narrow down the participatory gaps



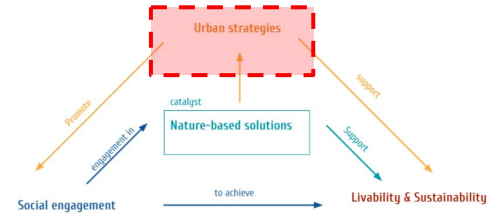
#### Track 1 : Transformative placemaking



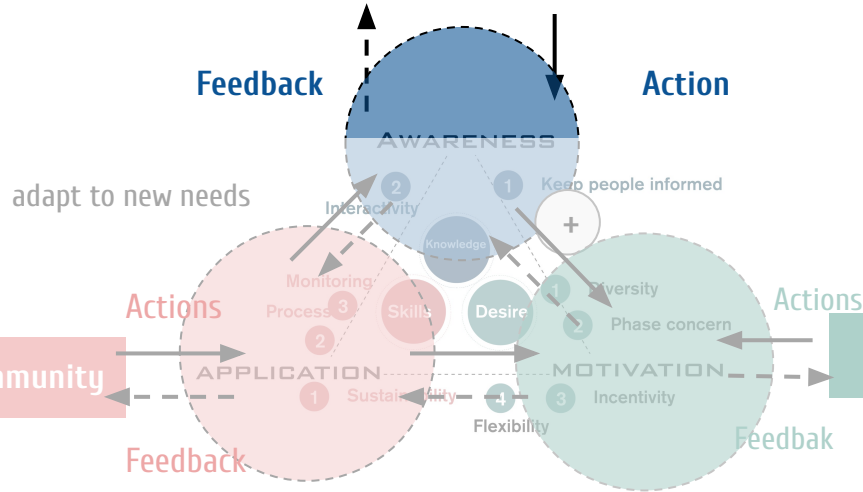
#### Track 3: Empower the community

#### Track 2 : Inspire motivation

# 3 tracks for strategy development



## Track 1 : Transformative placemaking



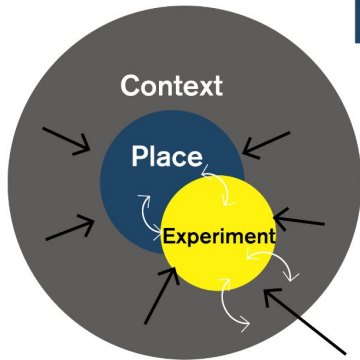
## Track 3: Empower the community

## Track 2 : Inspire motivation

# Track1 Transformative placemaking



Important driver of urban transformation



Urban context

Dominant Discourse

Place transition

Alternative Discourse

Transformation narratives

Iconic places

New relations

Pic2.5.2.1 Sence of place and experimentation in urban sustainability transition

Source: Frantzeskaki, N., Van Steenberg F., & Stedman, R. C. (2018). Sense of place and experimentation in urban sustainability transitions: the Resilience Lab in Carn Rotterdam, The Netherlands. *Sustainability*, 13(4), 1045-1059.



Source: Pic from RUDgr.com

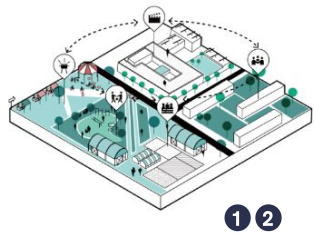


# Track1 Transformative placemaking

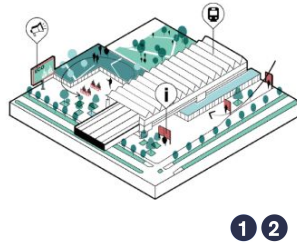
## Design characteristics



### TPM 01 Multi-functional space



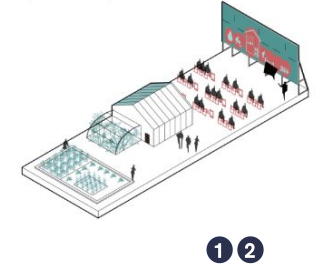
### TPM 02 Transform iconic space



### TPM 03 Develop Green initiatives pilots with urban development projects



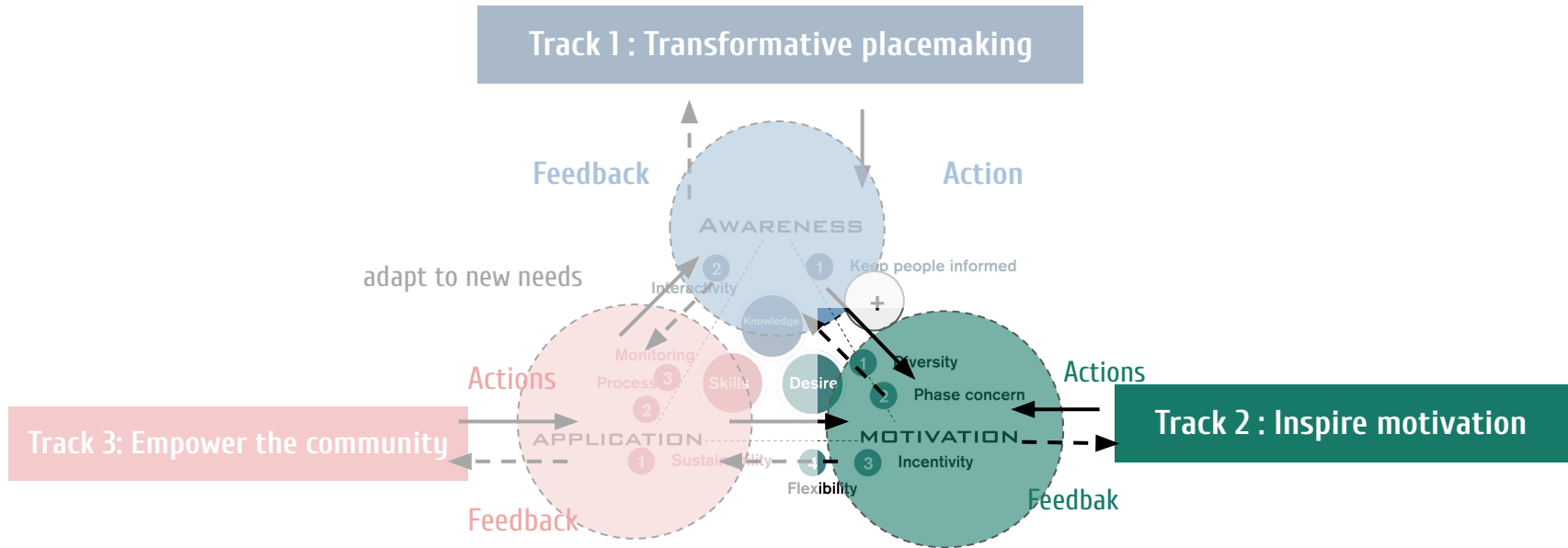
### TPM 04 Provide a place where you can learn, share and participate



Illustrate by author

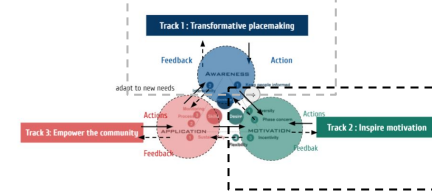
- 1 Keep people informed
- 2 Interactivity

### 3 tracks for strategy development



# Track2 Inspire motivation

Combine NBS with variety of benefits



ACTIVE & HEALTHY LIFE



CLIMATE ADAPTATION & BIODIVERSITY



ENHANCE LOCAL ECONOMIES



LOCAL FOOD PRODUCTION



SOCIAL INTERACTION & COHESION



ENERGY SAVING



AVAILABLE FOR ALL AGES

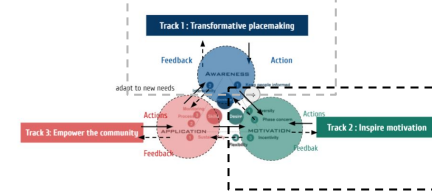


EDUCATION

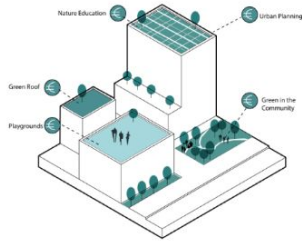
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# Track2 Inspire motivation

## Design characteristics



### M01 Green subsidies



1

money concern

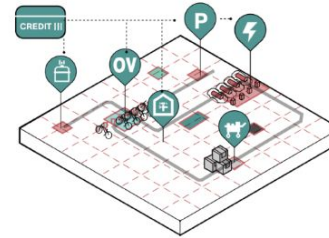
### M02 Semi- finished design



1 2 3 4

unstable participation

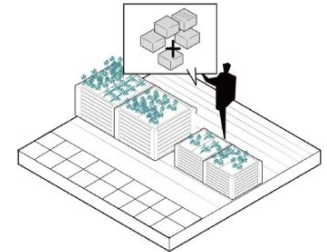
### M03 Credit & infrastructure system



1 2 3 4

Incentive & feedback

### M04 Flexible design elements

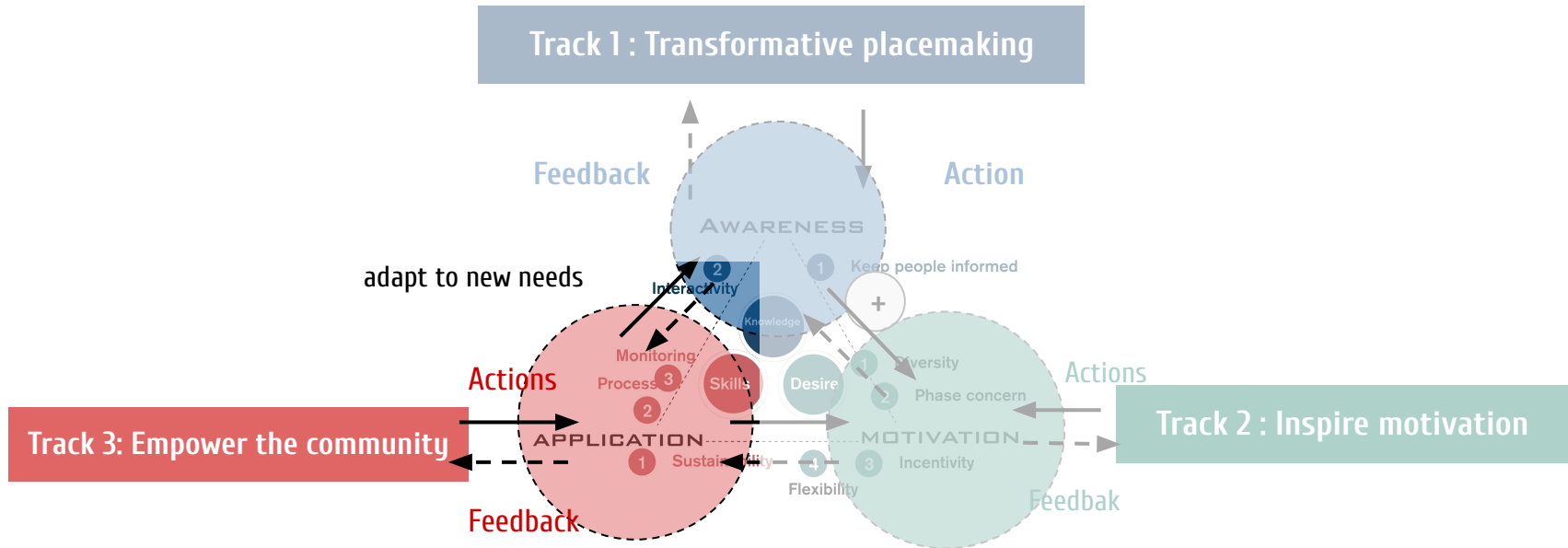


1 2 3 4

temporal nature illustrate by author

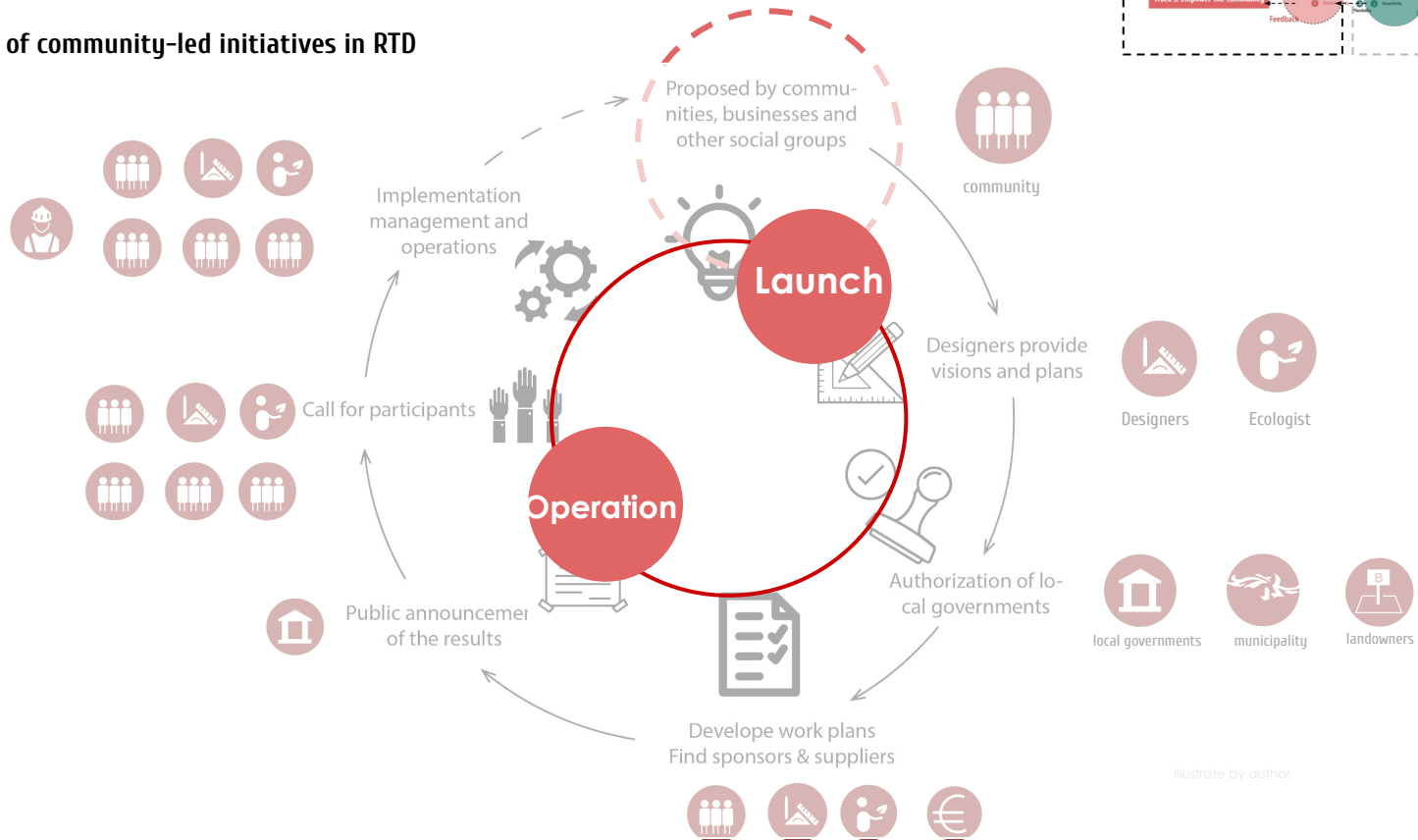
- 1 Diversity
- 2 Phase concern
- 3 Incentivity
- 4 Flexibility

### 3 tracks for strategy development



# Track3 Empower the community

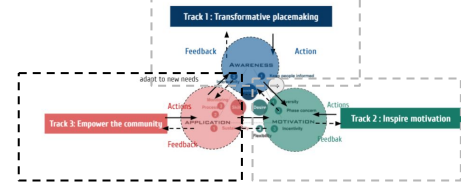
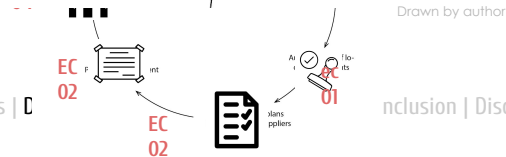
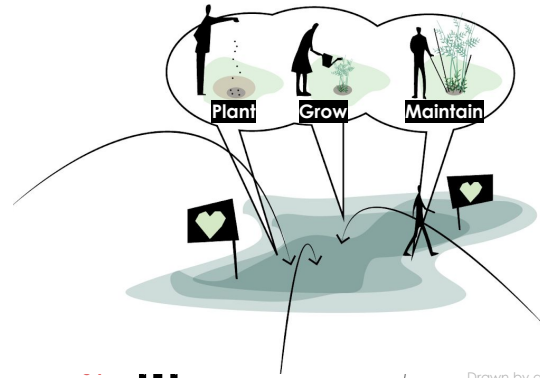
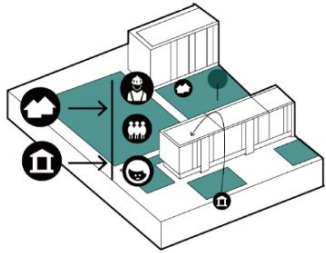
## The general process of community-led initiatives in RTD



# Track3 Empower the community

## Design characteristics

**EC 01** Transfer of authority and responsibility to community

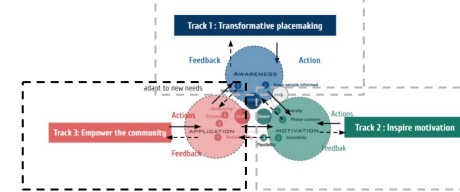


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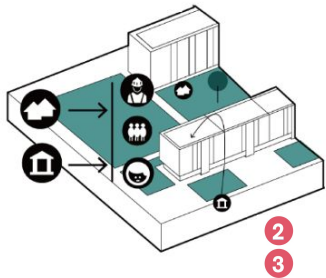
Drawn by author

# Track3 Empower the community

## Design characteristics



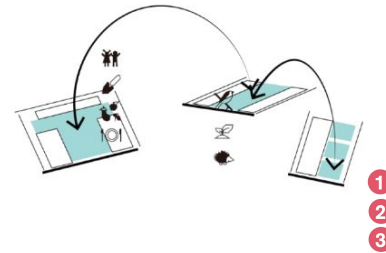
### EC 01 Transfer of authority and responsibility to community



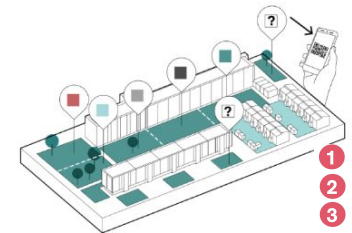
### EC 02 Strengthening and building capacity of residents to self-organize



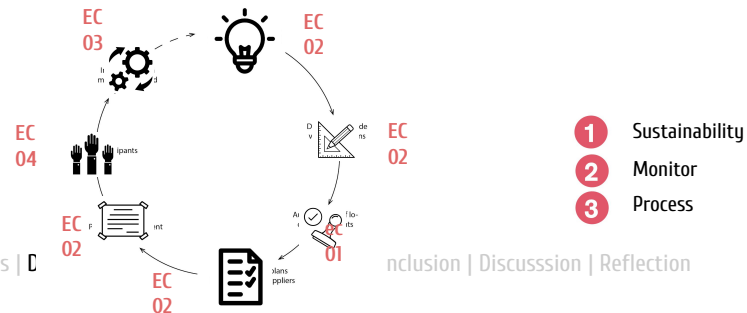
### EC 03 Phase concern



### EC 04 Segmentation of responsibility

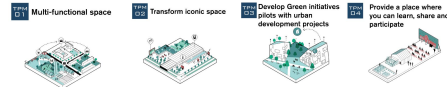


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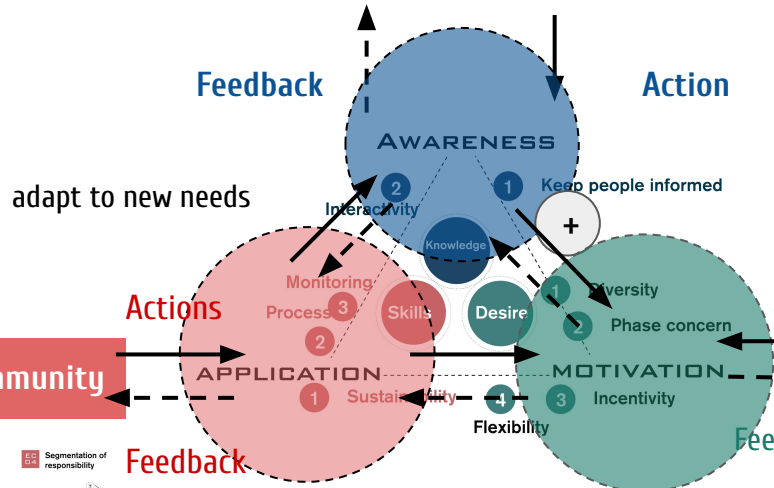




# Conclusion : **Three tracks** to encourage social participation



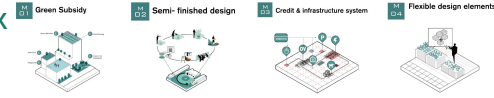
## Track 1 : Transformative placemaking

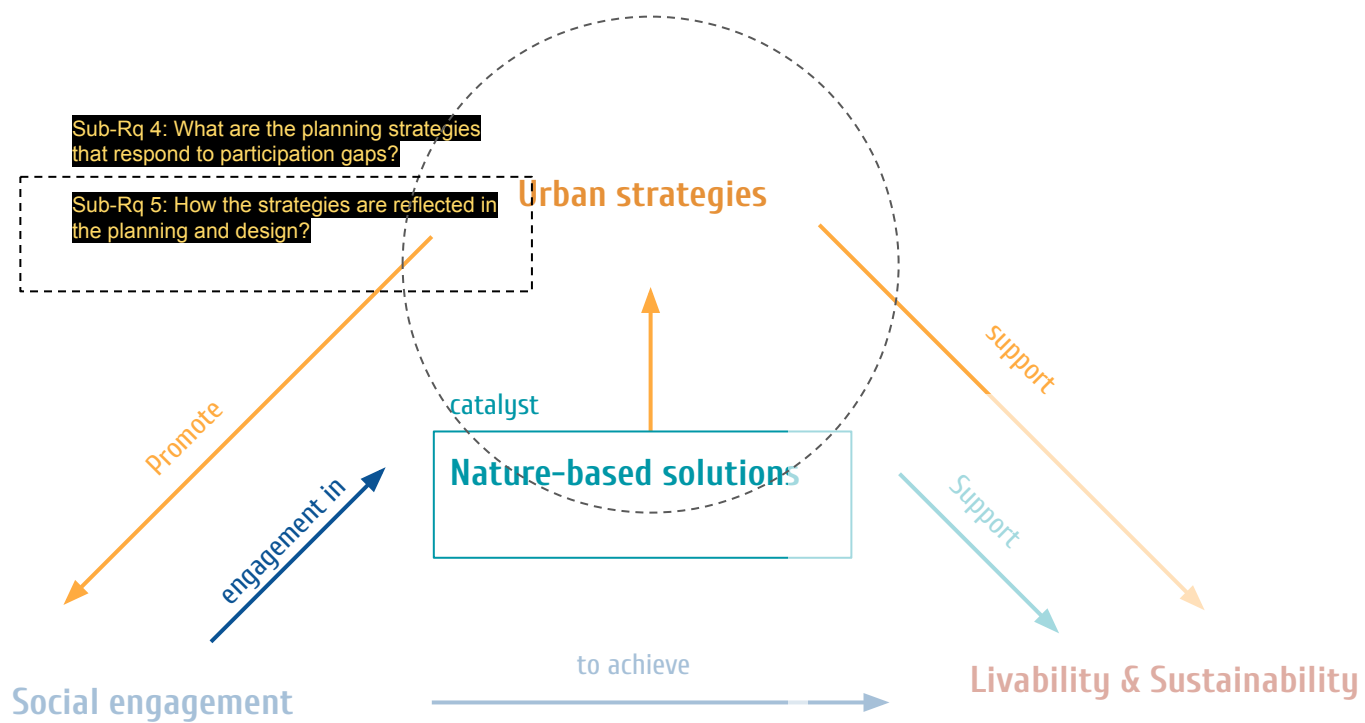


## Track 3: Empower the community



## Track 2 : Inspire motivation



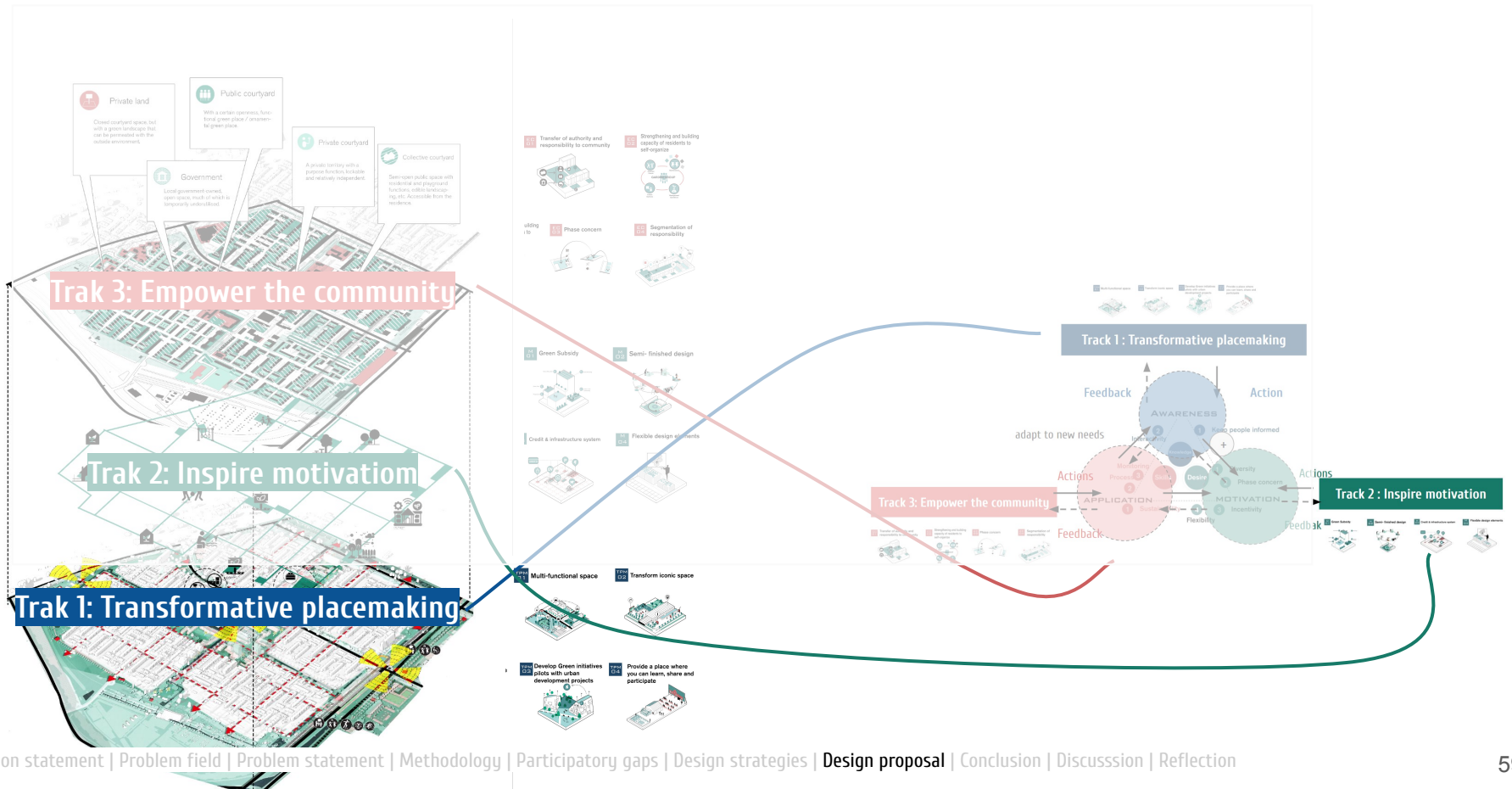


Sub-Rq 2: How to understand the complexity of social participation in NBS?

Sub-Rq 3: What kind of stakeholder groups are involved in the project ?

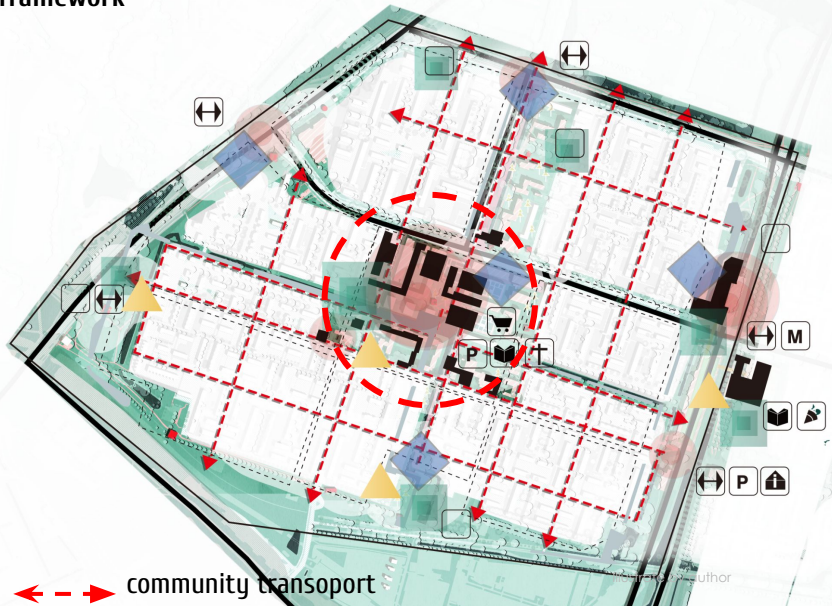
Sub-Rq 6: How to ensure the long-term operation of the project?

# Conclusion of the design proposal



# Track 1: Transformative placemaking

## Spatial framework



- TPM 01** Multi-functional space
- TPM 02** Transform iconic space
- TPM 03** Develop Green initiatives pilots with urban development projects
- TPM 04** Provide a place where you can learn, share and participate



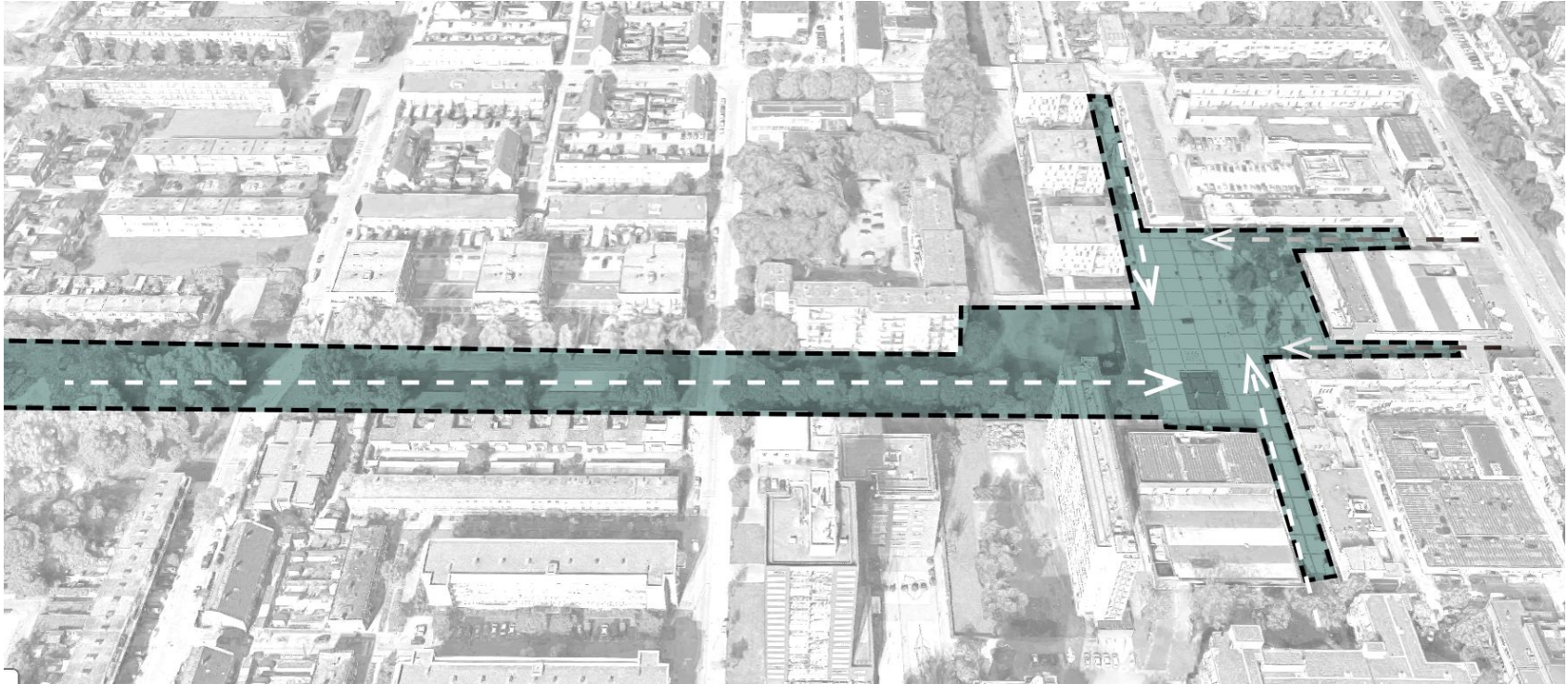
# Track 1 : Transformative placemaking

## Spatial idea



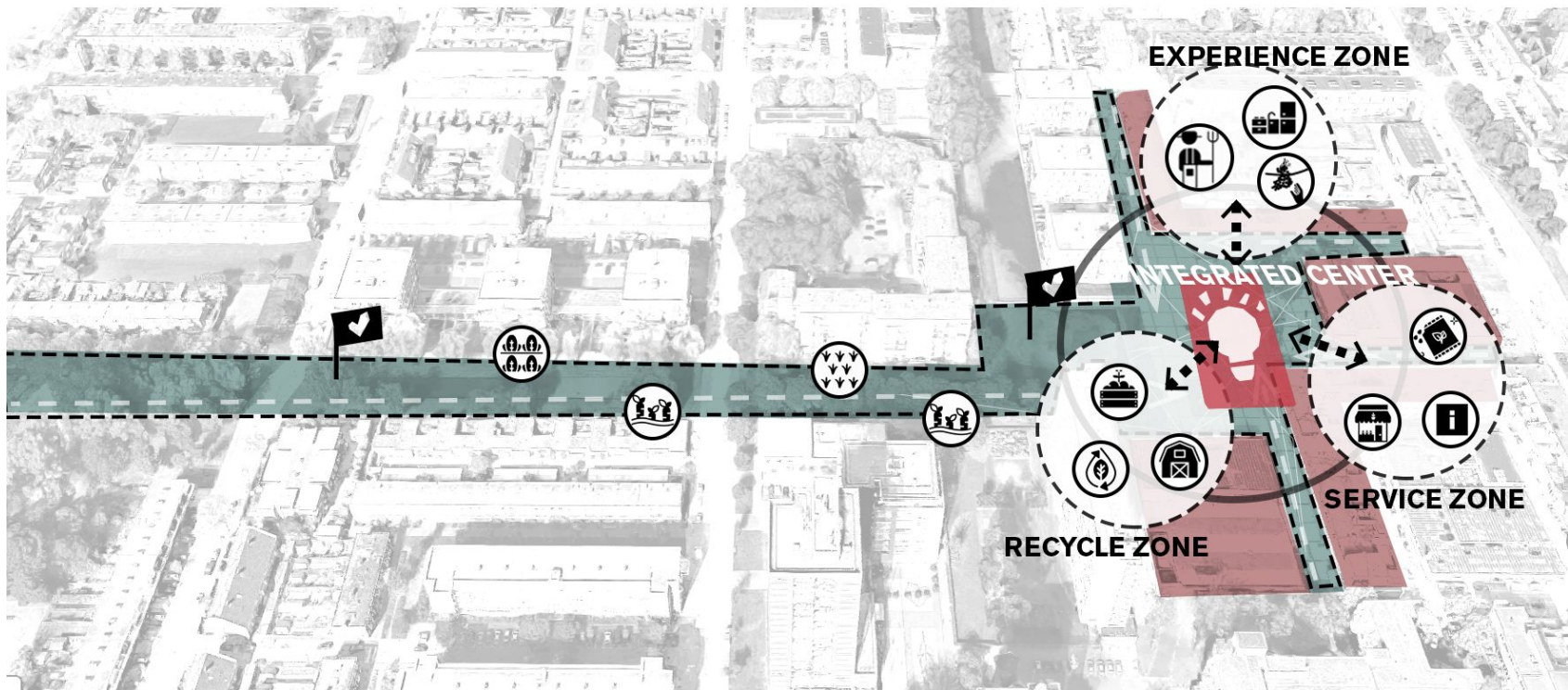
# Track 1 : Transformative placemaking

## Spatial idea



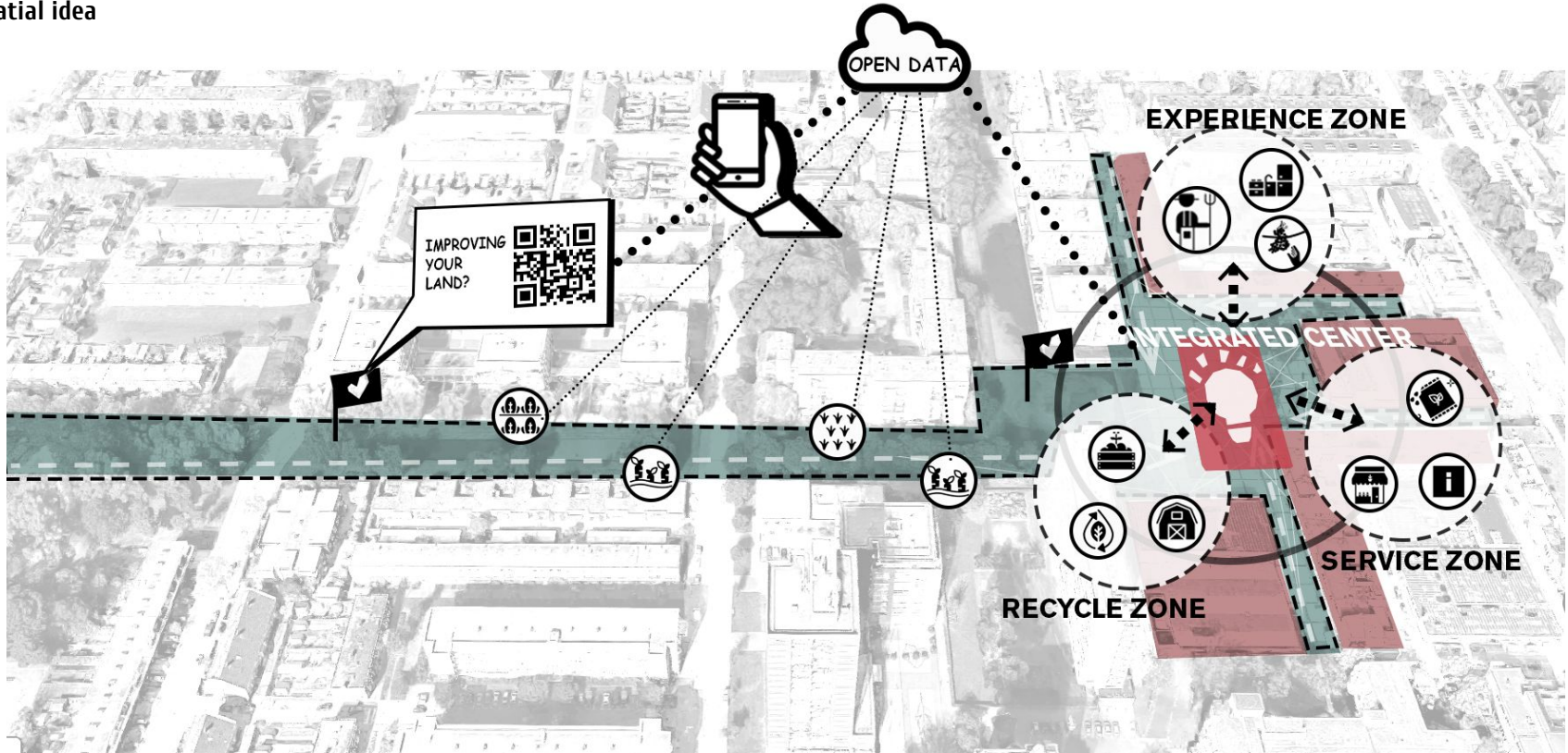
# Track 1 : Transformative placemaking

## Spatial idea



# Track 1 : Transformative placemaking

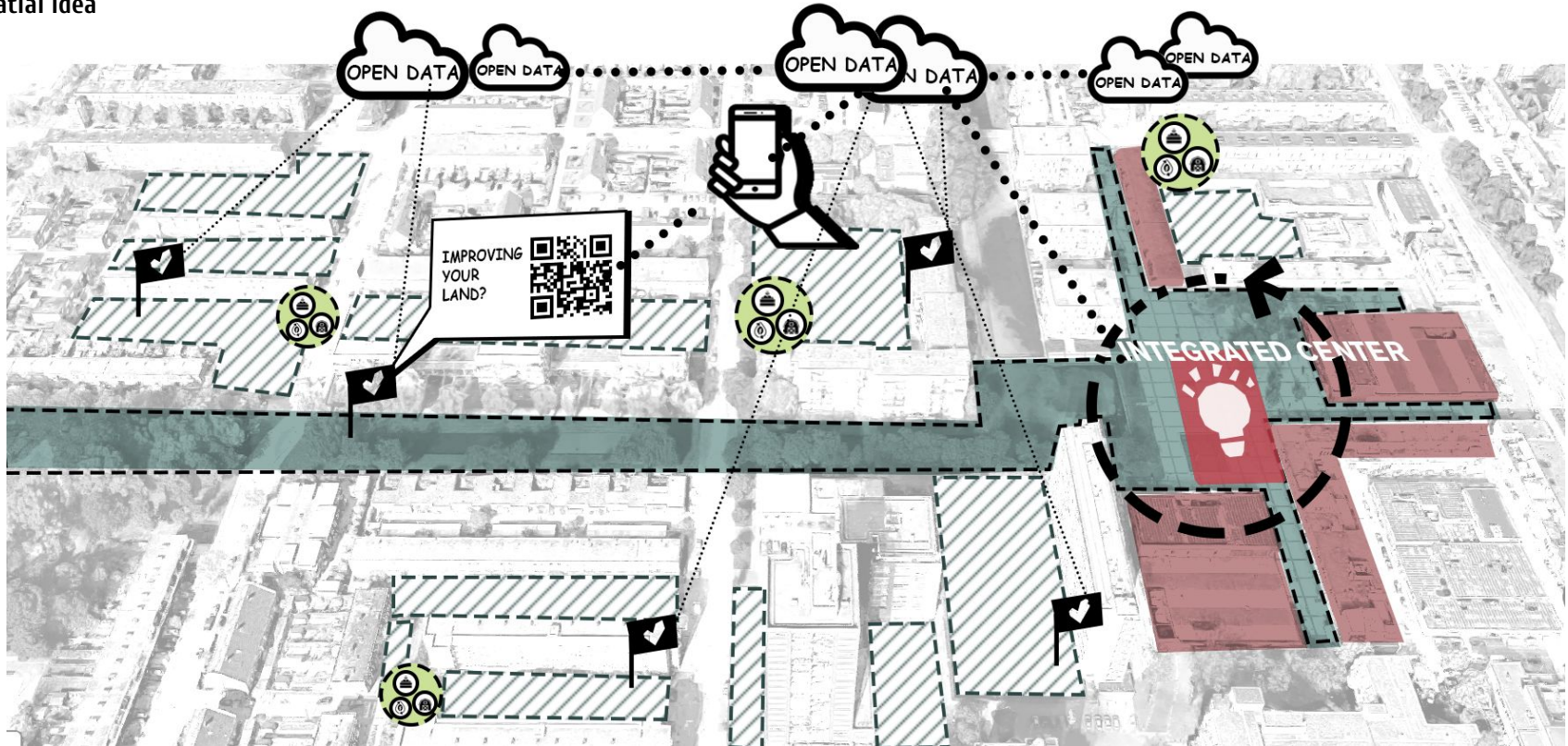
## Spatial idea





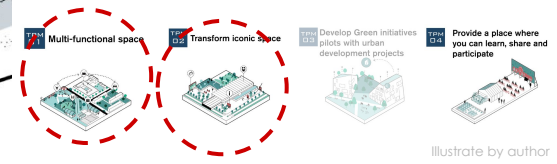
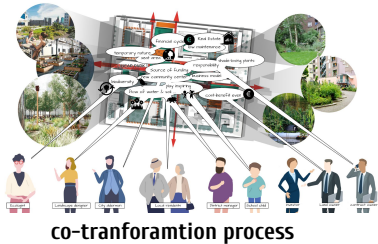
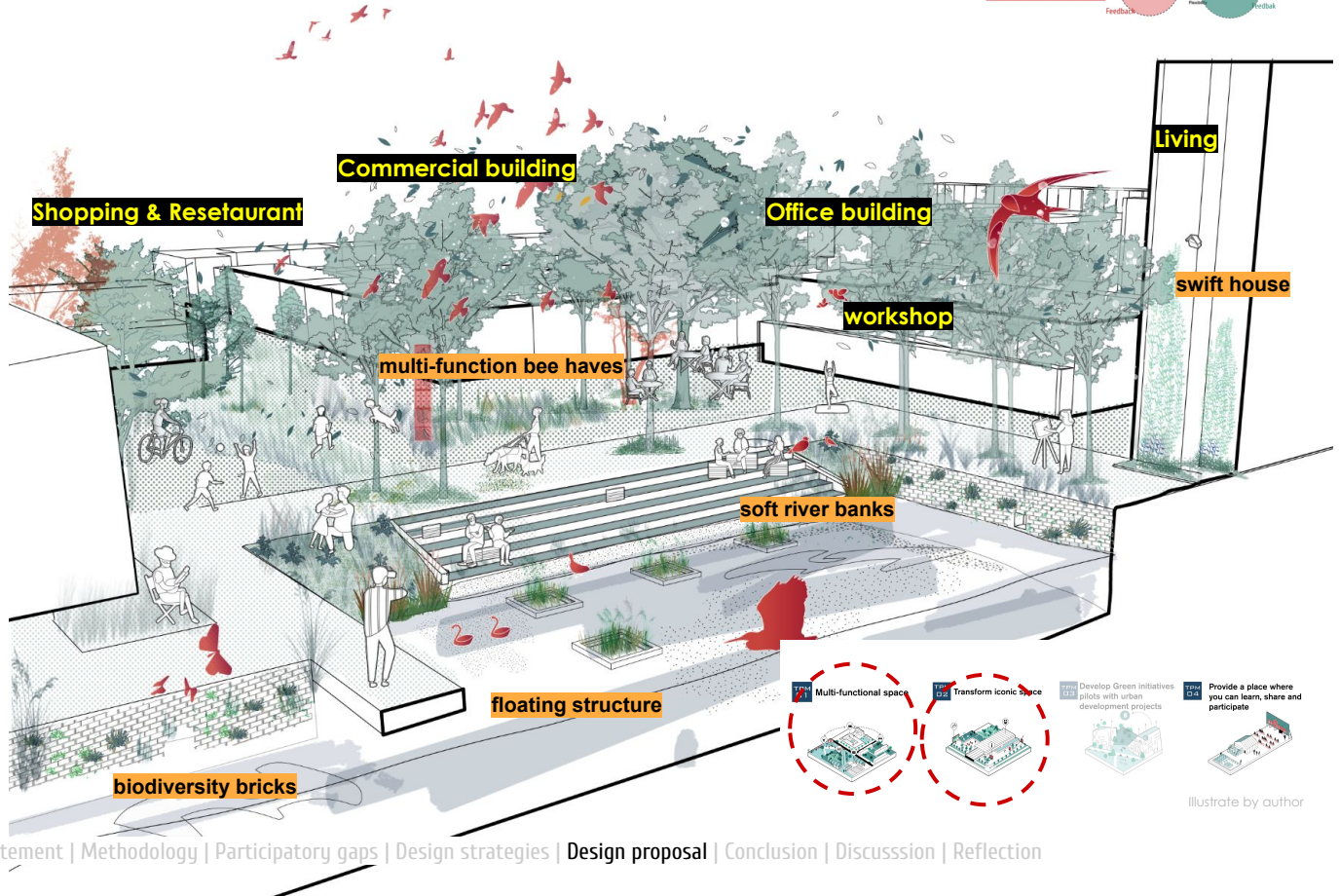
# Track 1 : Transformative placemaking

## Spatial idea

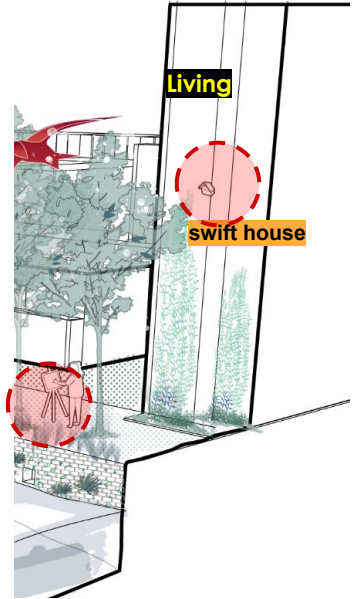
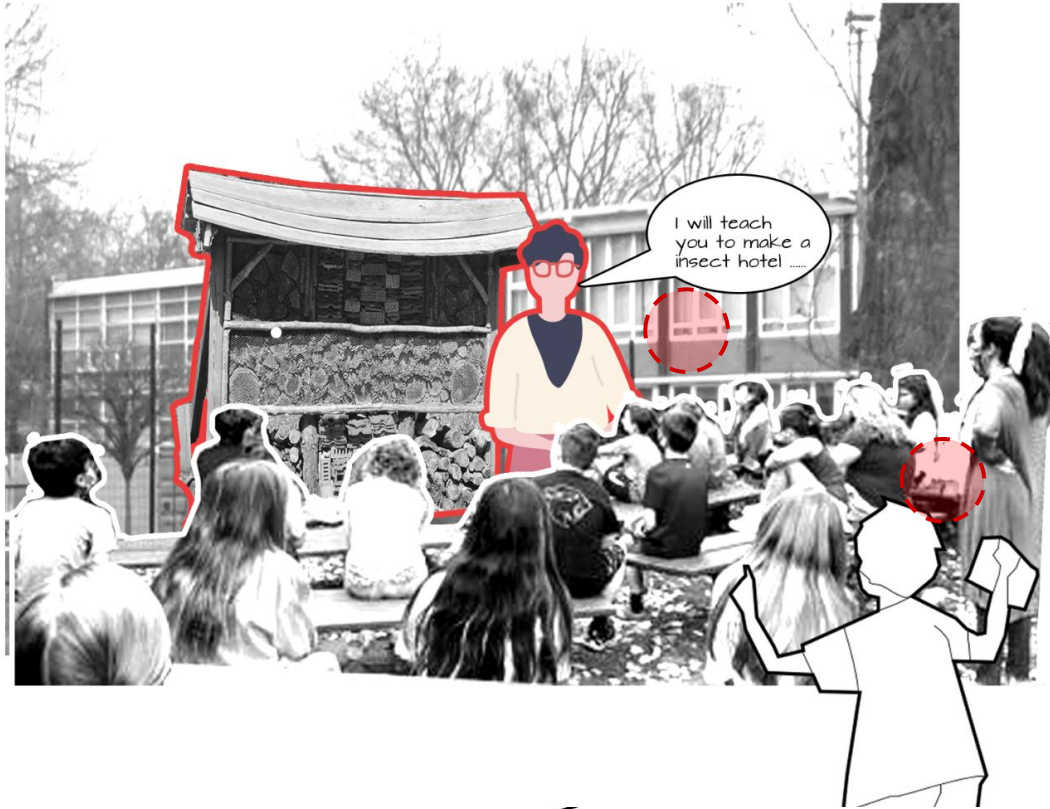


# Scenario 1 : Public -led transformation

## Biodiversity garden



# Scenario 1 : Public -led transformation



Illustrate by author

tion

# Scenario2 : private -led transformation

contribution new construction for making the square more green



**TPM 03** Develop Green initiatives pilots with urban development projects

Combining densification to reshape place vitality in conjunction with densification and the reshaping of place dynamics, the new housing needs to provide a certain percentage of green space.

**TPM 02** Transform iconic space

In combination with the eco-buildings and eco-plaza, this is a new community centre that will attract more new residents

**TPM 01** Multi-functional space

A multifunctional ecological site for a wide range of activities. For example, relaxation, sports, dining, plantation picking, etc.

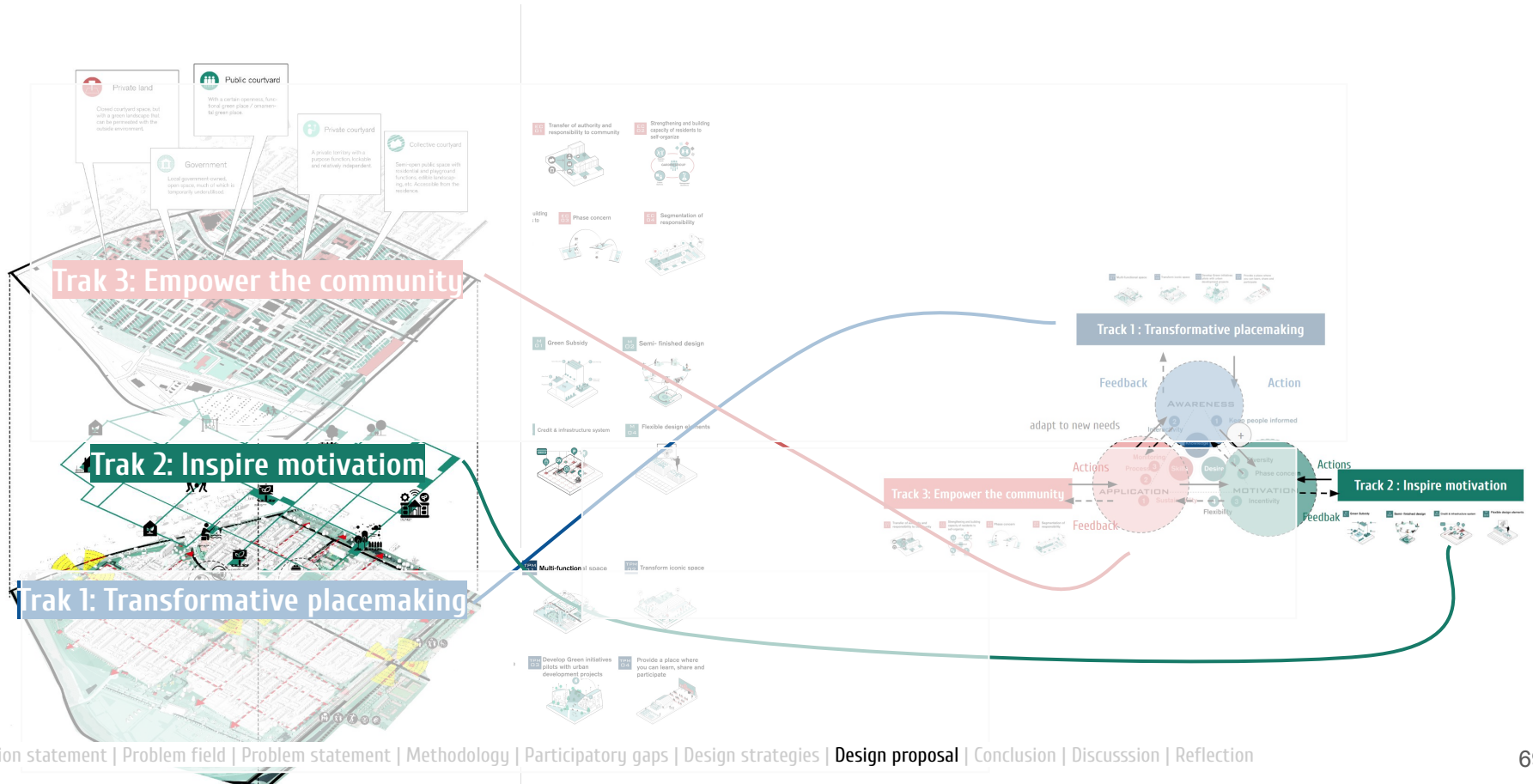
**TPM 04** Provide a place where you can learn, share and participate

With the new project in place, investment can be attracted to create a profitable eco-centre, offering appropriate education, services and products.

core motivation

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# Conclusion of the design proposal

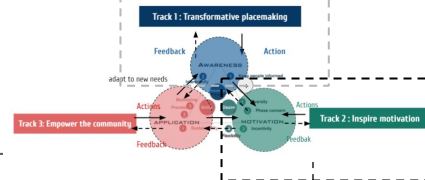
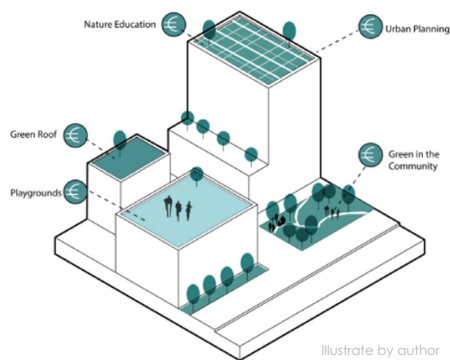


## Track 2 : Inspire motivation

Motivate people with green subsidies



### Green incentive



Lees voor

## Subsidieregeling Klimaatadaptatie 2021!

Ook in 2021 werken we samen aan een klimaatbestending Rotterdam met de subsidieregeling Klimaatadaptatie. Dit jaar is er totaal 500.000 euro beschikbaar voor bewoners, VVE's, bedrijven en organisaties in Rotterdam.

Het klimaat verandert en dat raakt ons allemaal, vooral in de steden neemt de kans op overlast en schade door extreem weer toe. Bovendien heeft extreme hitte negatieve gevolgen voor onze gezondheid. Gelukkig kunnen we daar iets aan doen! Samen maken we onze geliefde stad klimaatbestendig. De inzet van bewoners is daarbij onmisbaar, want ongeveer 60 procent van de stad is immers privaat terrein. De subsidieregeling Klimaatadaptatie is bedoeld om Rotterdammers en Rotterdamse bedrijven, verenigingen te stimuleren het eigen terrein klimaatbestendiger te maken en voor te bereiden op extreem weer.

### Klimaatadaptieve subsidie

Je kunt subsidie aanvragen voor het toevoegen van groenoppervlak door beplanting, waterberging en afgekoppeld oppervlak.

De subsidie bedraagt:

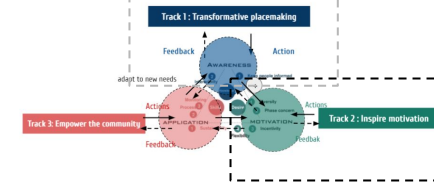
- 500 euro per toegevoegde kubieke meter waterberging.
- 10 euro per toegevoegde vierkante meter gerealiseerd groenoppervlak.
- 5 euro per toegevoegde vierkante meter afgekoppeld oppervlak.

Een combinatie is hierbij mogelijk. Er kan maximaal weer 50.000 euro worden toegekend en uitgekeerd per aanvraag.

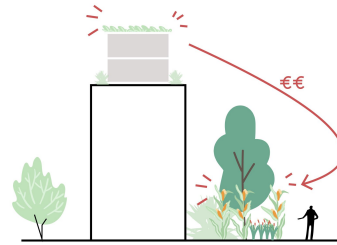
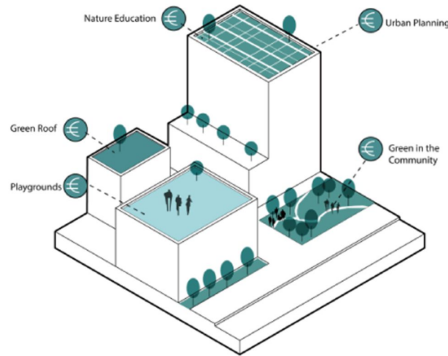
<https://rotterdamsweerwoord.nl/weerberichten/subsidieregeling-klimaatadaptatie-2021/>

# Track 2 : Inspire motivation

Motivate people with flexible incentive measures



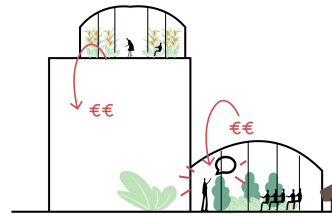
## Green incentive



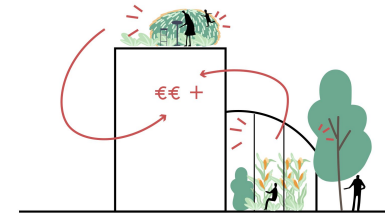
New construction needs to contribute more greenery in the community



Contribute to community amenities



Increase the value to the buildings

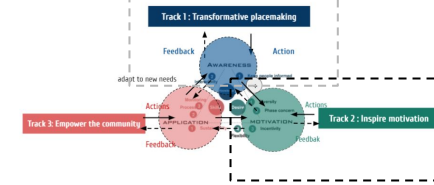


Generate income for the community

source: illustrated by author

# Track 2 : Inspire motivation

## Improve infrastructure systems for Green initiatives

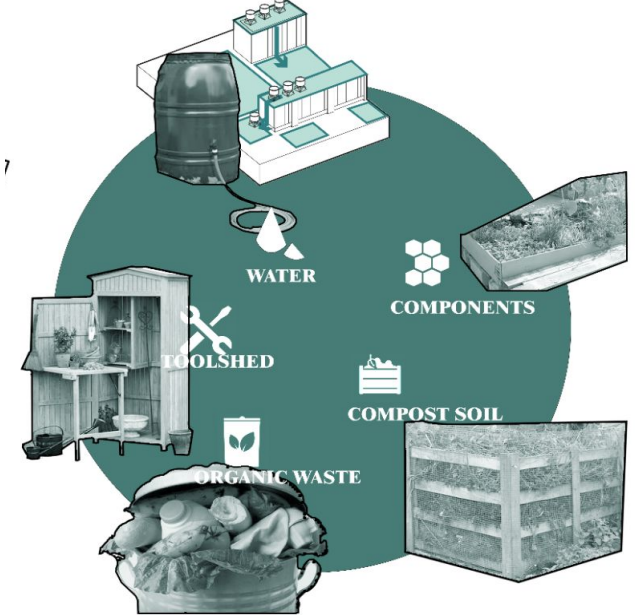


The plan for eco-infrastrue system



Illustrate by author

Five essential elements for an effective garden



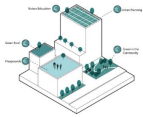
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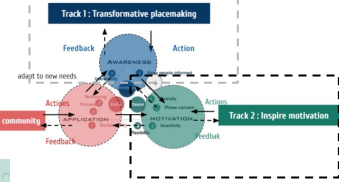
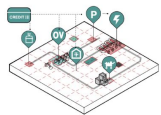
# Track 2 : Inspire motivation

## Design scenario

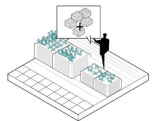
M03 Green incentive



M04 Credit & infrastructure system



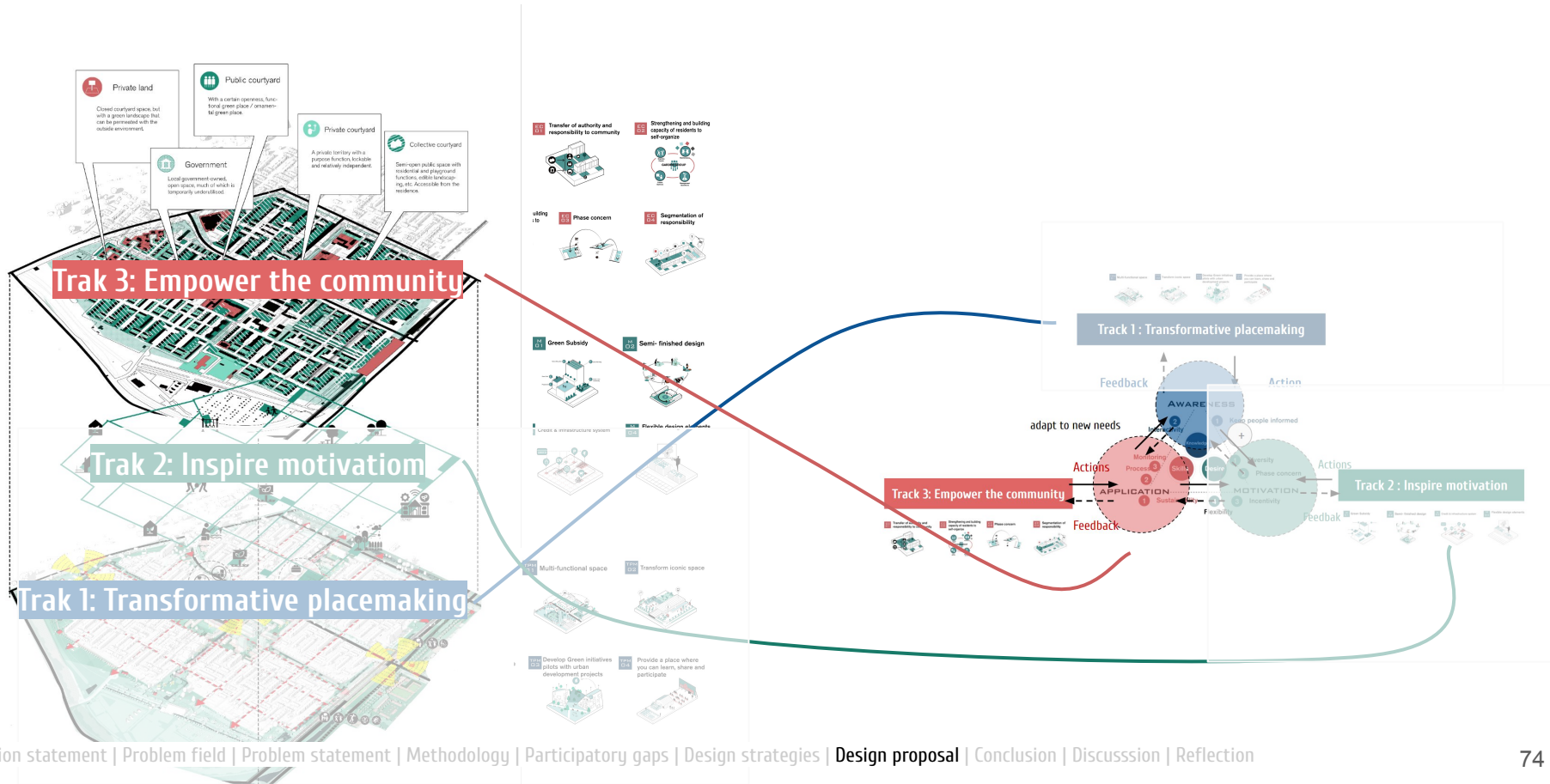
M04 Flexible design elements



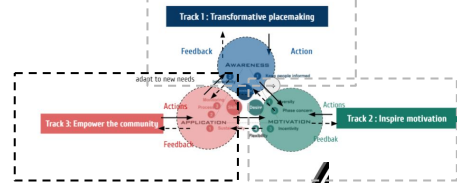
M02 Semi-finished design



# Conclusion of the design proposal



# Track 3 : Empower the community



collective land



Private / social services



Private garden



Municipality land



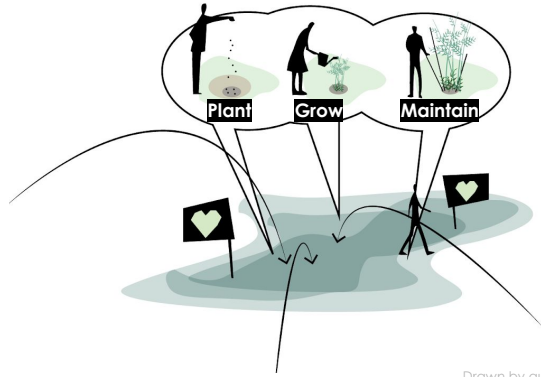
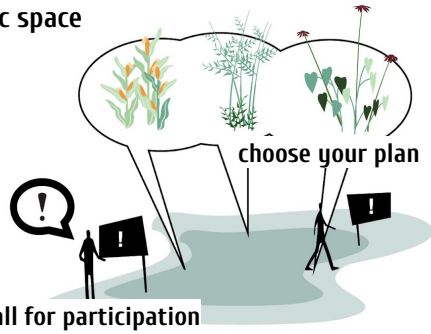
- Collective garden
- Private garden / living
- Private land / services

illustrate by author

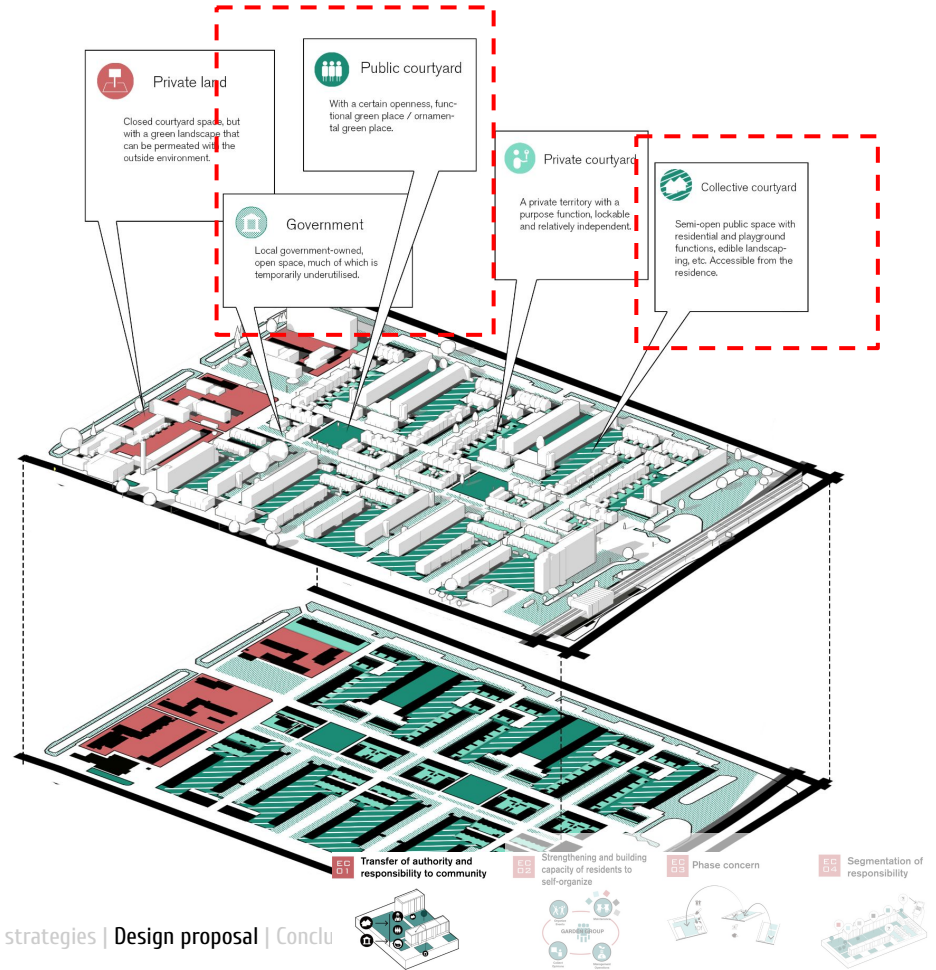
Map of land authorities

# Track 3 : Empower the community

## Redefine the public space



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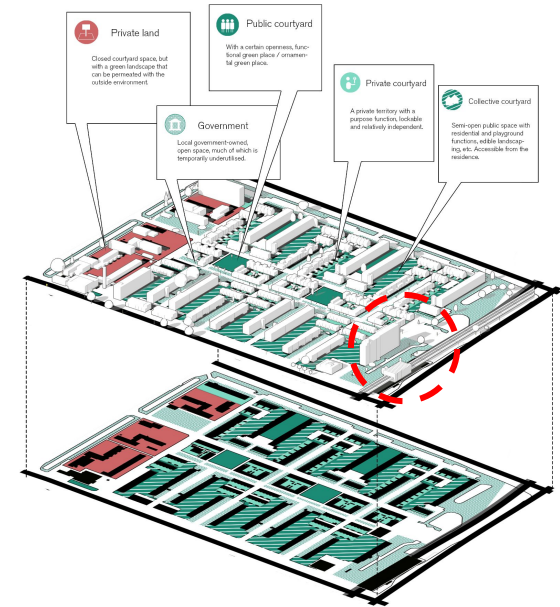
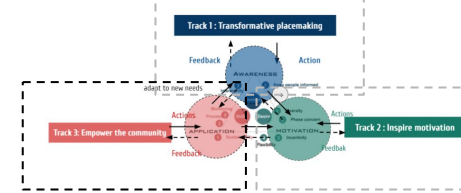


# Track 3 : Empower the community

## Design Scenario

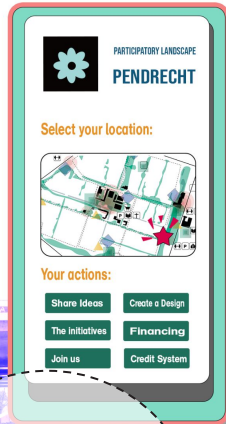
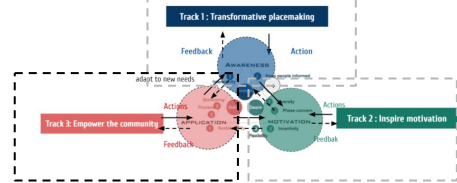


municipality



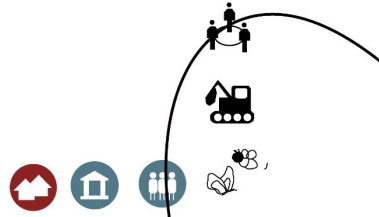
# Track 3 : Empower the community

## Spatial Scenario



Development rights are **transferred** from the public sector to the community

EC 01 Transfer of authority and responsibility to community



easility connect stakeholders

set up the plan: edible garden

EC 02 Generating the learning capacity of residents to self-organize



share responsibilities

EC 04 Segmentation of responsibility



Transformability

EC 03 Phase concern



# Track 3 : Empower the community

## Spatial Scenario: Edible garden for underused space



# Track 3 : Empower the community

## Spatial Scenario: regenerate of collective courtyard



"It's a place you can belong to because everyone gives it an individual character."

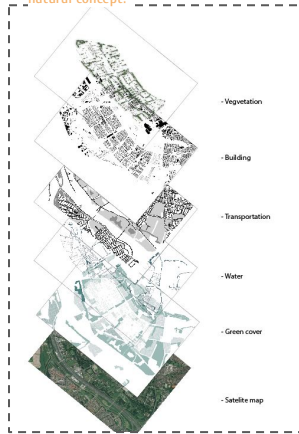


Once-empty meadow that has regained its social, ecological, productive, educational and other functions

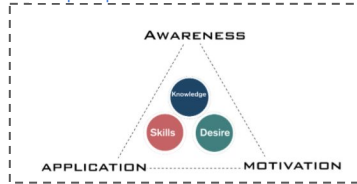


# Summary the project

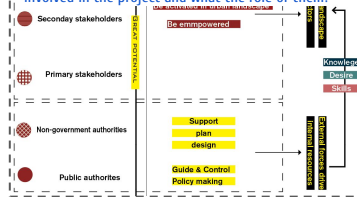
sub 1: How do planning and design strategies integrate the building with the natural concept?



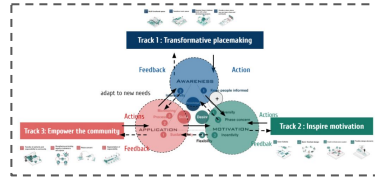
Sub-Rq 2: How to understand the complexity of social participation in NBS?



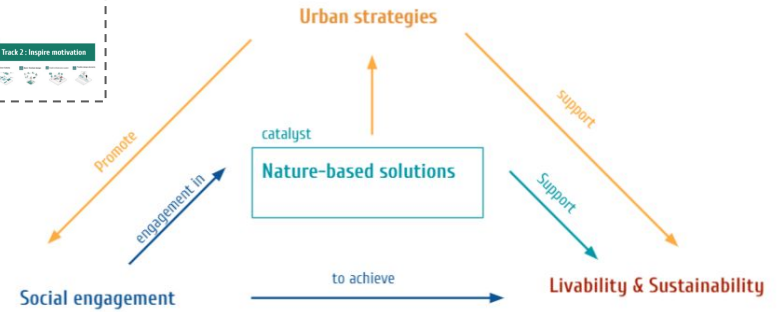
Sub-Rq 3: What kind of stakeholder groups are involved in the project and what the role of them?



Sub-Rq 4: What are the planning strategies that respond to participation gaps?

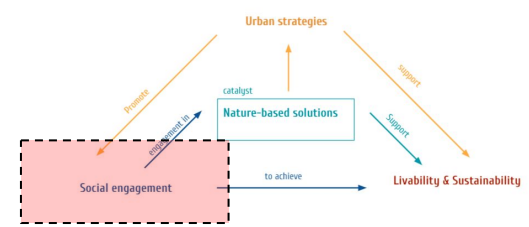


Sub-Rq 5: How the strategies are reflected in the planning and design?

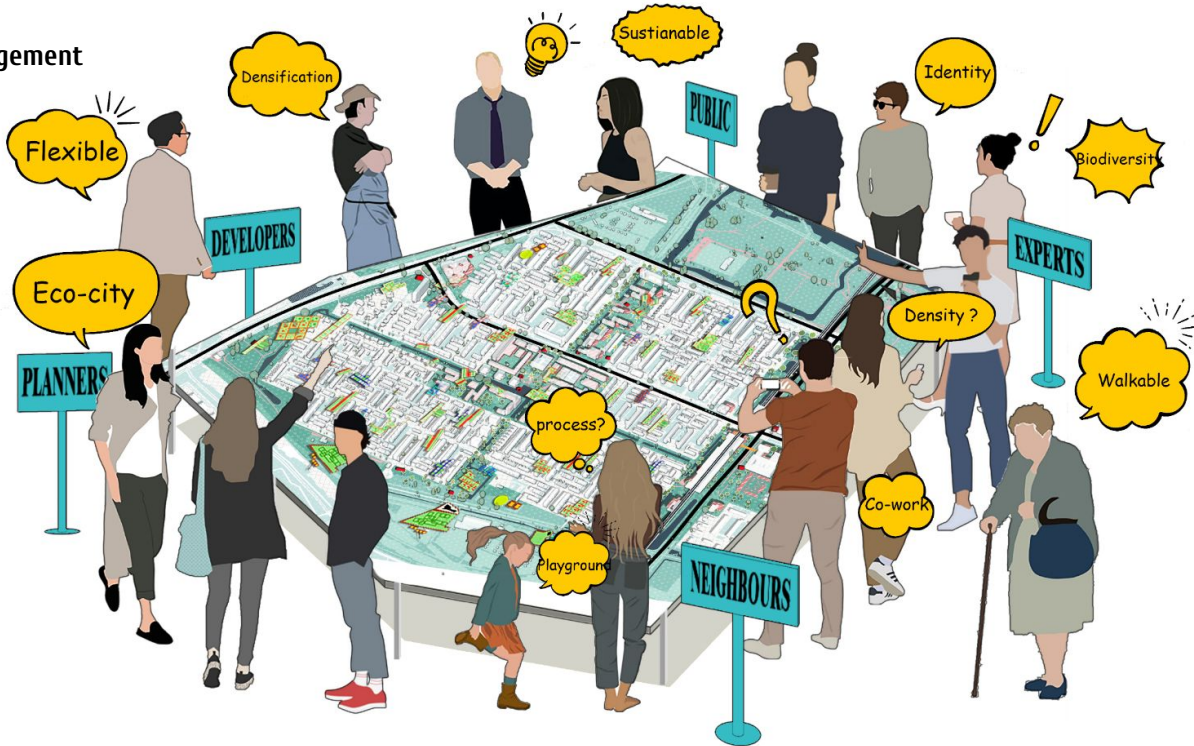


Sub-Rq 6: How to ensure the long-term operation of the project?

# Vision statement



- A broader social engagement



# Vision statement

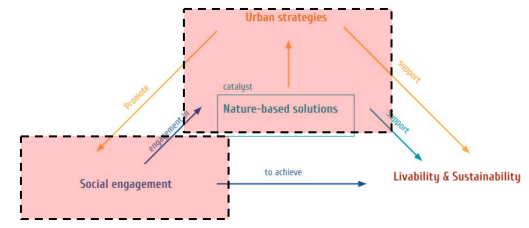
- A broader social engagement

- Social groups are involved in various green initiatives and have inspired different activities.

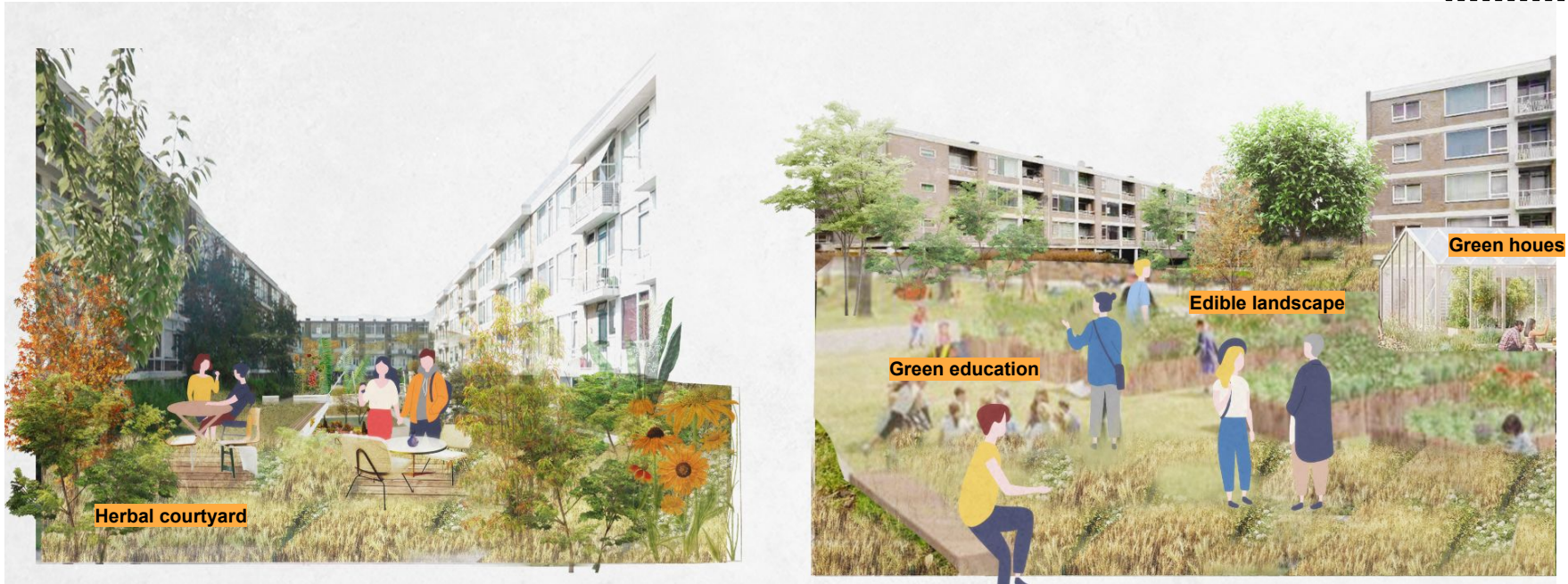
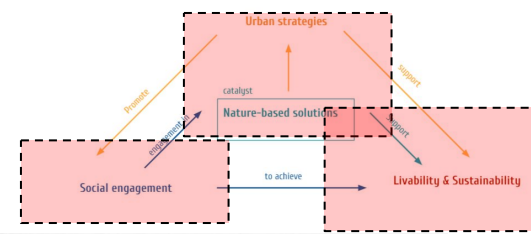


# Vision statement

- It is not a fixed plan, but a series of urban strategies that can be adapted towards the evolution of a participatory urban landscape







**/ Activated public space and a variety of social activities are strong weapon fight against social segregation and insecurity**

**/ Reinvestment**

I want to invest here!

**/ New commers social cohesion**

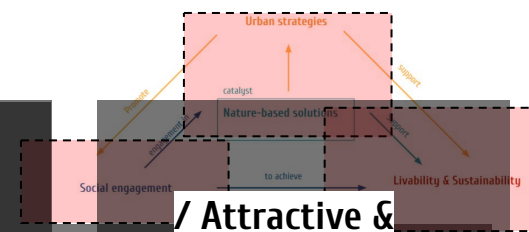
We want to live here !

**/ New job opportunities**

I work as landscape manager here!

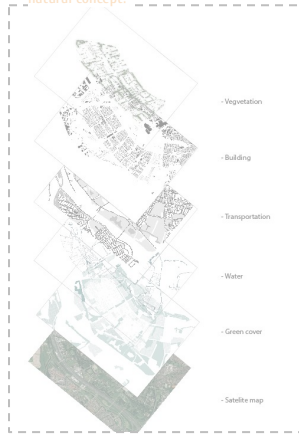
**/ Attractive & inspiring place to visit**

Its a beautiful neighborhood to visit!

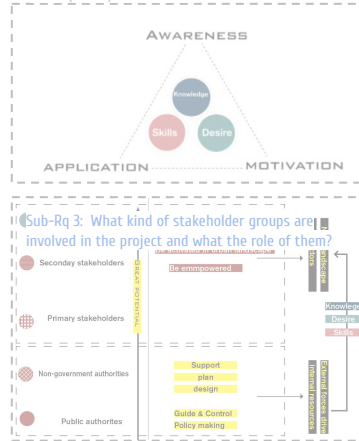


# Discussion

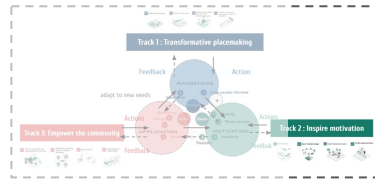
sub 1: How do planning and design strategies integrate the building with the natural concept?



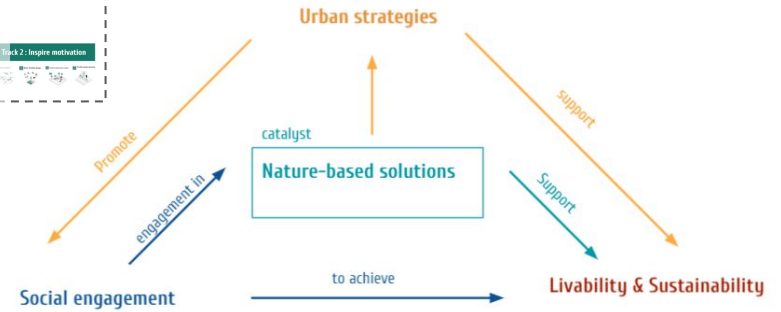
Sub-Rq 2: How to understand the complexity of social participation in NBS?



Sub-Rq 4: What are the planning strategies that respond to participation gaps?



Sub-Rq 5: How the strategies are reflected in the planning and design?



Sub-Rq 6: How to ensure the long-term operation of the project?



Sub-Rq 4: What are the planning strategies that respond to participation gaps?

Sub-Rq 5: How the strategies are reflected in the planning and design?

## Urban strategies

Promote

engagement in

catalyst

**Nature-based solutions**

support

Support

**Social engagement**

to achieve

**Livability & Sustainability**

Sub-Rq 2: How to understand the complexity of social participation in NBS?

Sub-Rq 3: What kind of stakeholder groups are involved in the project ?

Sub-Rq 6: How to ensure the long-term operation of the project?

## - Public control and governance

- Prevent excessive power in community



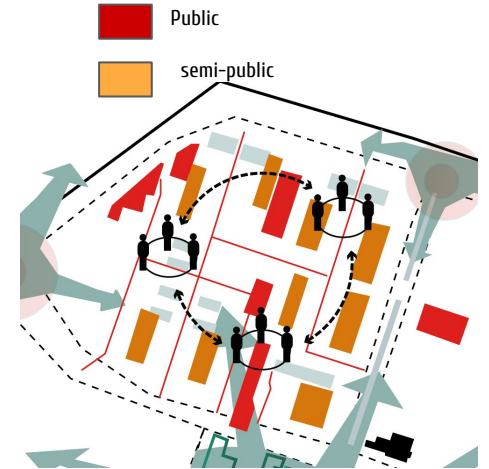
Open public spaces lose their function and character

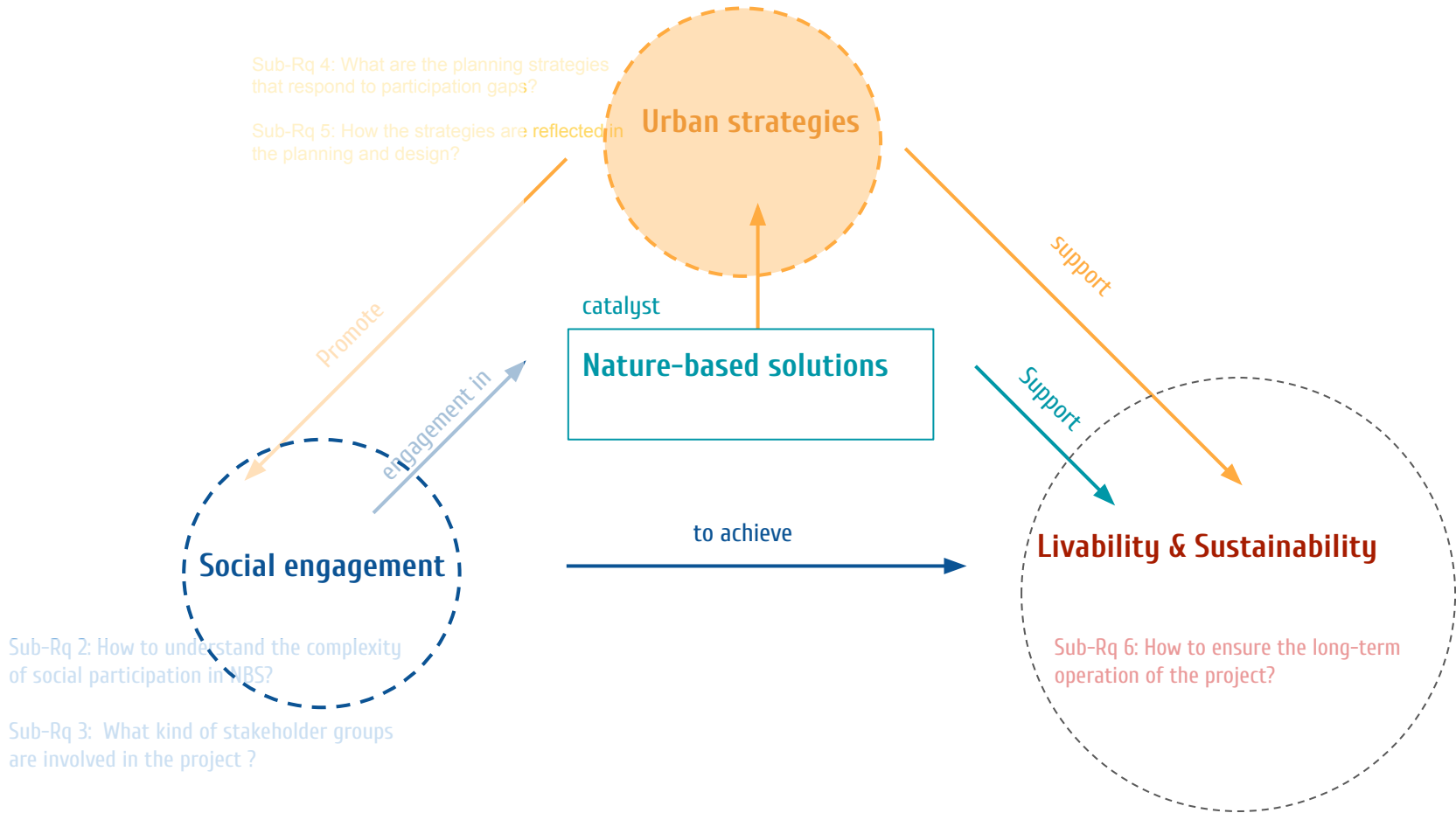


Public space with social function



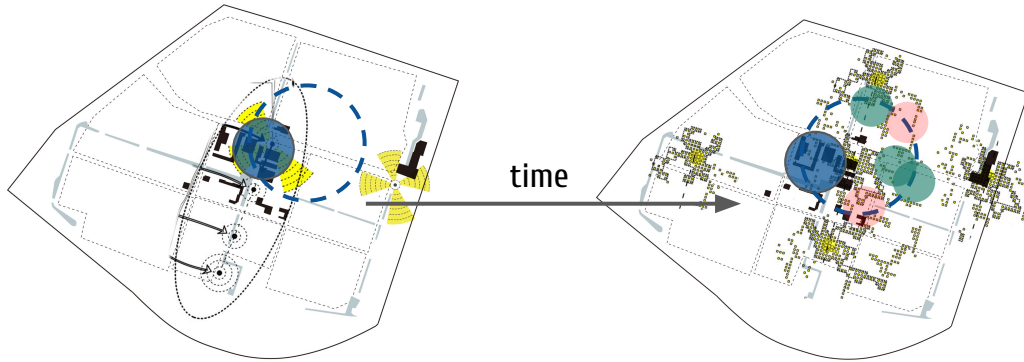
The closure of public space is the cause and result of the failure of the public sphere





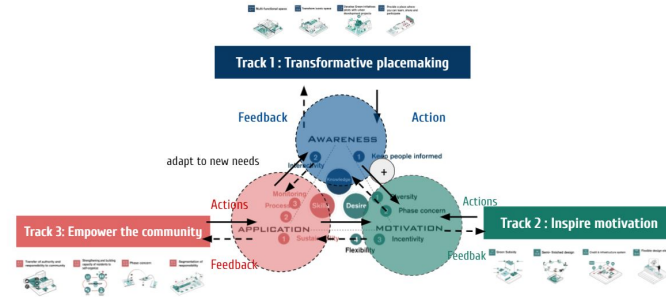
- **Incremental change**

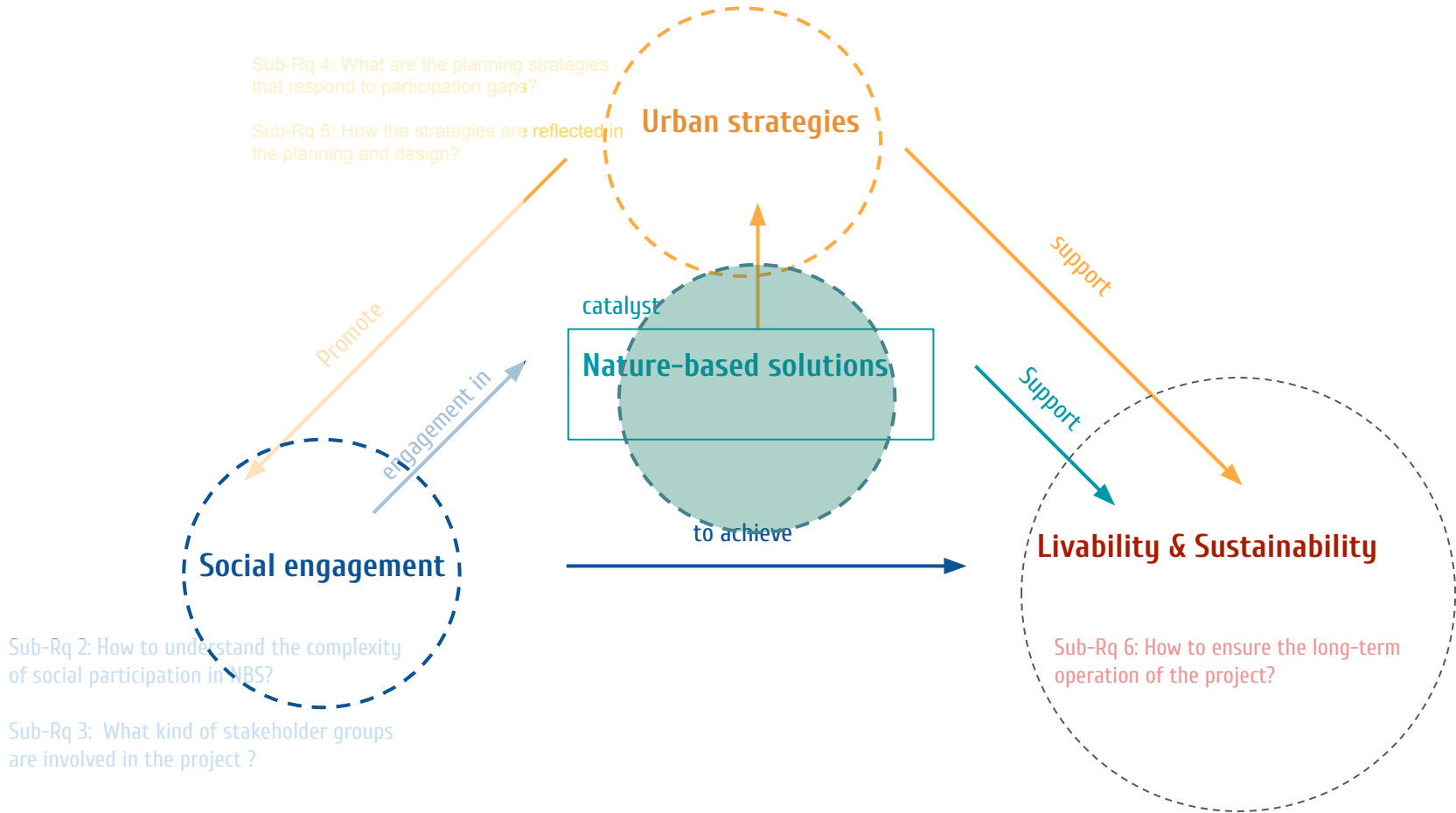
- Avoiding radical changes in the social environment and considering vulnerable groups



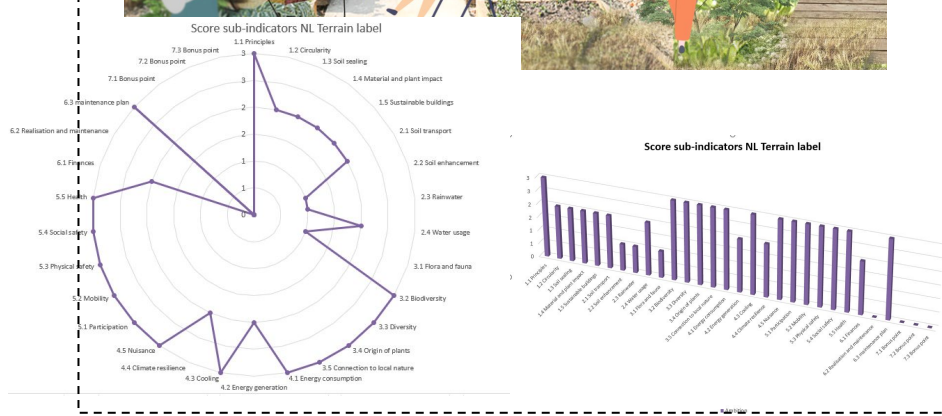
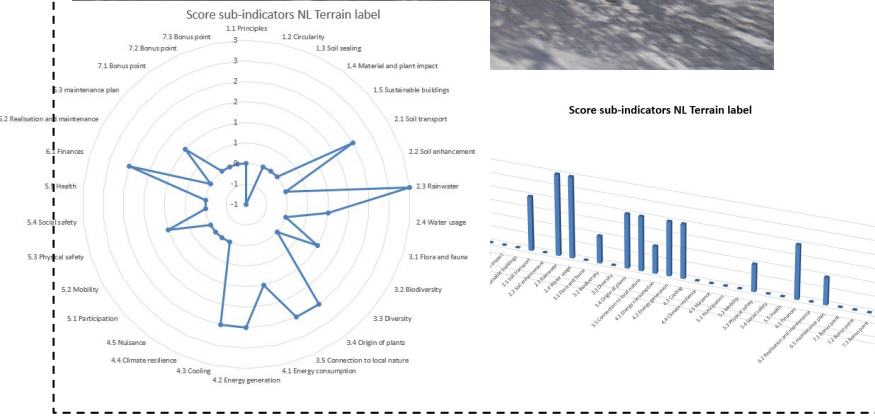
connect and activate city nodes

A series of reactions that occur over time





# - Monitor and secure



## REFLECTION

- **The transformability of the project?**
- **The role of urbanist?**

# REFLECTION

- The transformability of the project?
- The role of urbanist?

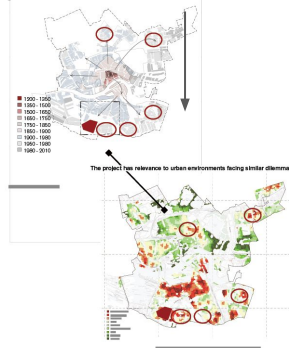
## Theme

Participatory planning & Problematic community & sustainable transition & urban ecology →

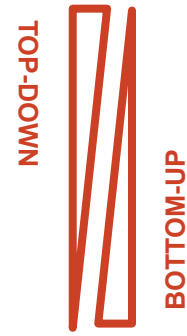
energy transition  
smart cities  
transport  
...

Experience for urban governance and community building in Chineses context.

External power leverage the great internal resources



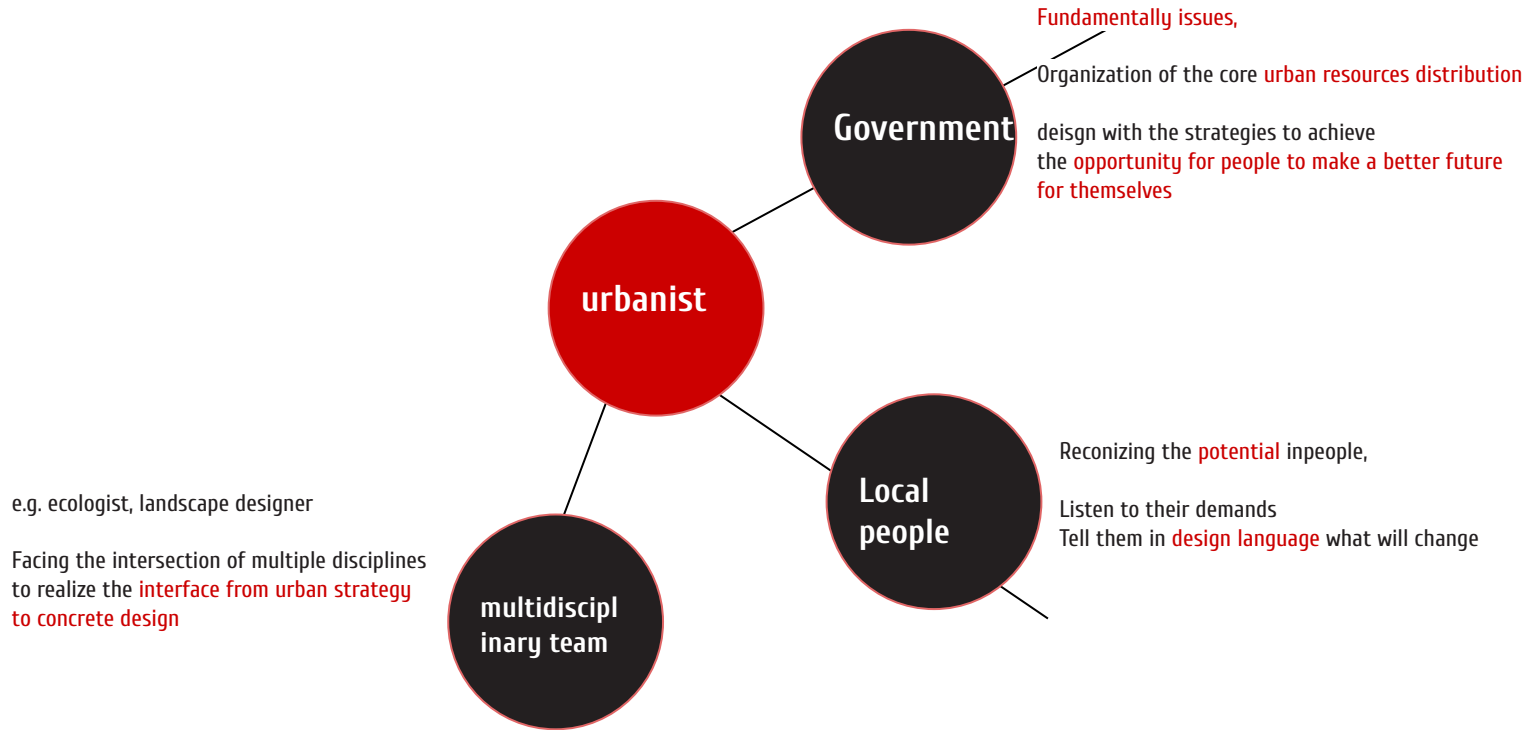
The project represents a progressive process of sustainable urban transformation thinking,





## REFLECTION

- The transformability of the project?
- **The role of urbanist?**





**THE END  
THANK YOU !**