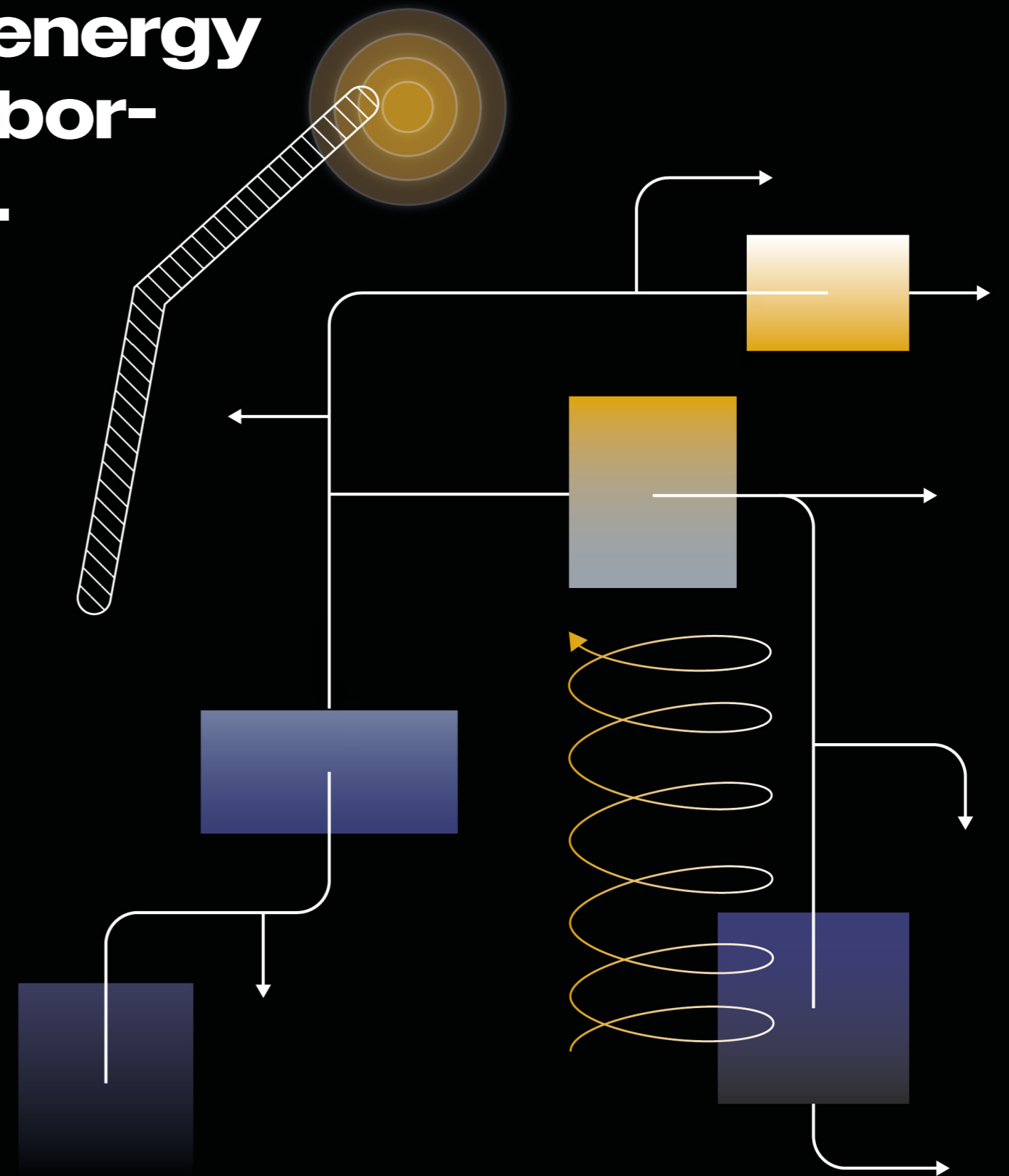


# emPOWERed

transitioning towards just energy futures in vulnerable neighborhoods in Rotterdam South.



Sophie van Hal  
MSc Urbanism P5 presentation

TU Delft  
21-06-2024

ENERGY TRANSITION

**POWER**



ENERGY TRANSITION

**em*****POWERED*****ed**

COMMUNITY PARTICIPATION





Source: Ina Fassbender/AFP/Getty Images

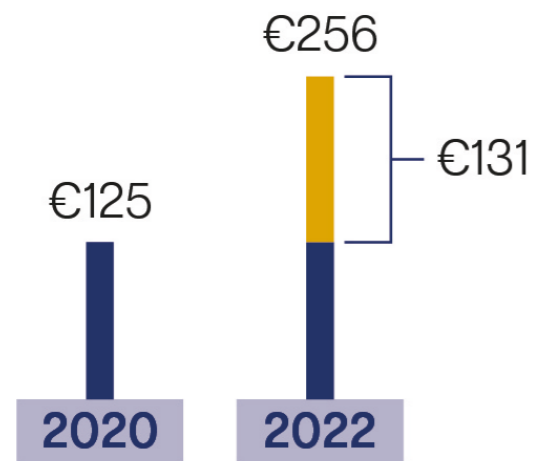


# The energy transition

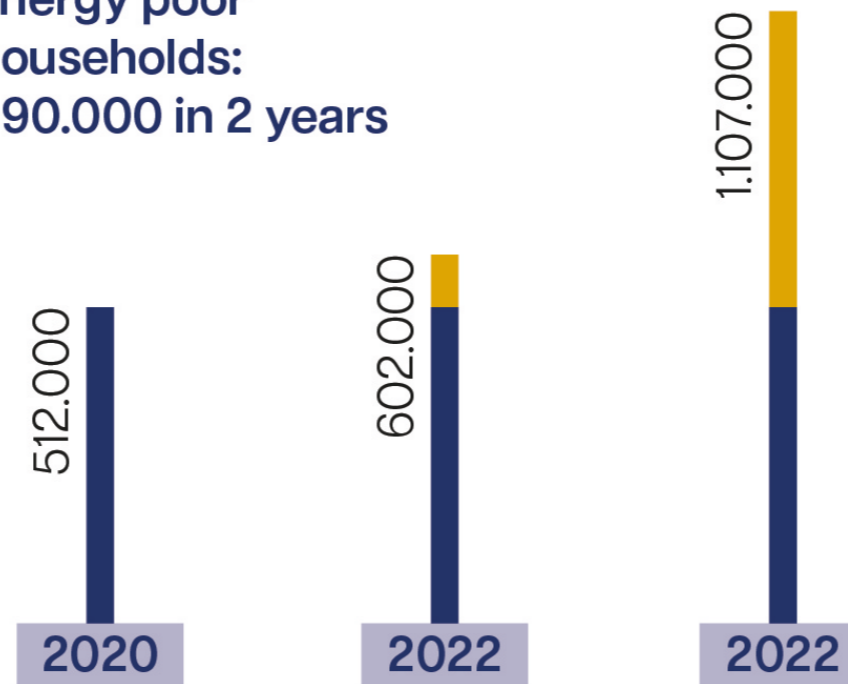


# Energy poverty

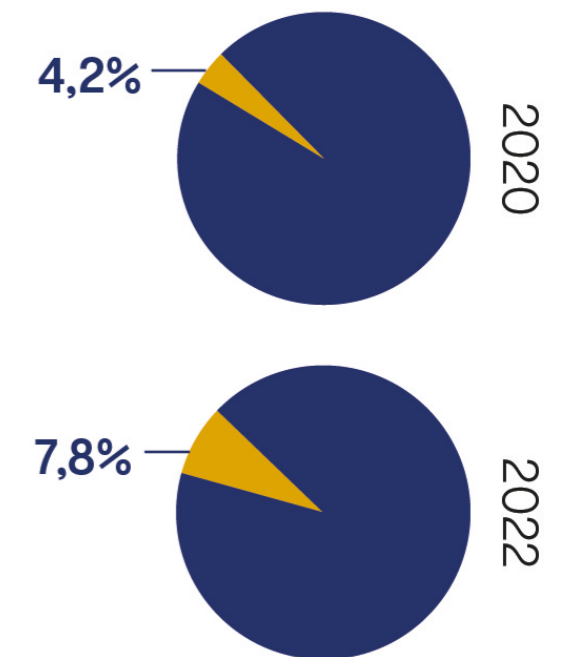
Average energy bill  
(all households)



Energy poor households:  
+90.000 in 2 years



Share of total  
income towards  
energy bills



# Recent developments





# Recent developments



29-09-2023

## **De energietoeslag en het prijsplafond verdwijnen in 2024: wat betekent dat voor jou?**

🕒 2 min. leestijd

➔ Delen

# Recent developments



29-09-2023

## De energietoeslag en het prijsplafond verdwijnen in 2024: wat betekent dat voor jou?

🕒 2 min. leestijd

➔ Delen

## Maak jij je ook zorgen om de energiekosten in 2024?

[Doe mee aan ons onderzoek](#)



Door Redactie  
20 november 2023



# The energy transition... but for who?

**Ministerie van Economische Zaken en Klimaat**  
61.985 volgers  
Gepromoot

Bespaar thuis op energie. Neem een hybride warmtepomp. Zo bespaar je op je gasverbruik voor verwarming. Zet ook de knop om.

**Met een hybride warmtepomp bespaar je op je gasverbruik voor verwarming.**



0:07 / 0:10


Bekijk alle bespaartips. [Meer informatie](#)

13 reacties 6 commentaren

Interessant Commentaar Reposten Versturen

**CHARGED**  
1.129 volgers  
Gepromoot

In deze video laten we je kennismaken met de Sessy thuisbatterij. Met al meer dan 2000 installaties in Nederland, is Sessy nu al een gamechanger in duurzame energieopslag.



Sessy - Nr. 1 Slimme thuisbatterij [Meer informatie](#)

56 reacties 1 commentaar

Interessant Commentaar Reposten Versturen

Sessy is een écht N

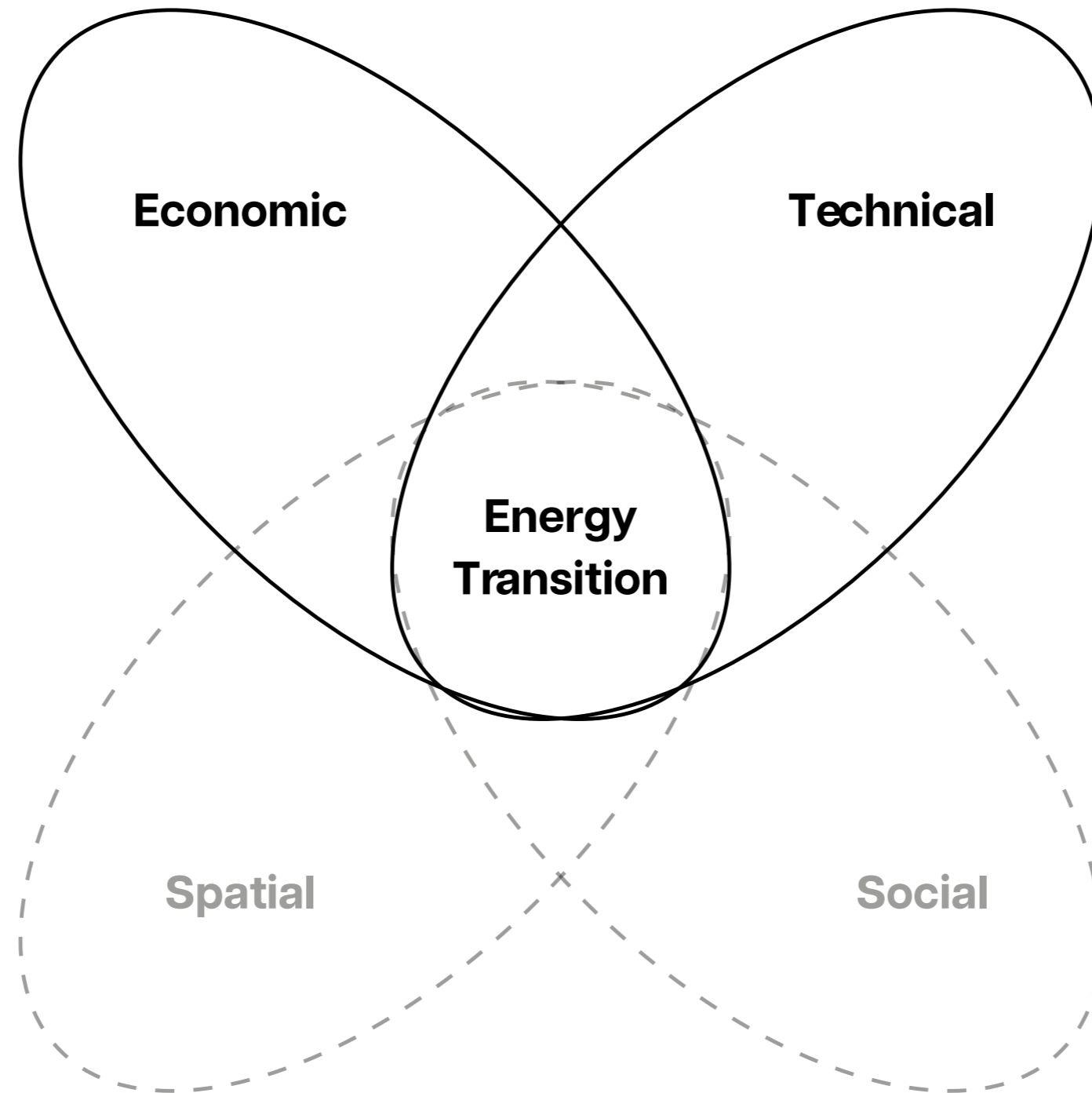
**Sessy is de enige thuisbatterij die zichzelf terugverdient**

Sessy is de **best verkopende slimme thuisbatterij van Nederland** voor particulieren met zonnepanelen. Verlaag je energiekosten door je zelf opgewekte groene stroom op te slaan zodat je - ook in de piek- en avonduren - geen grijze stroom verbruikt.

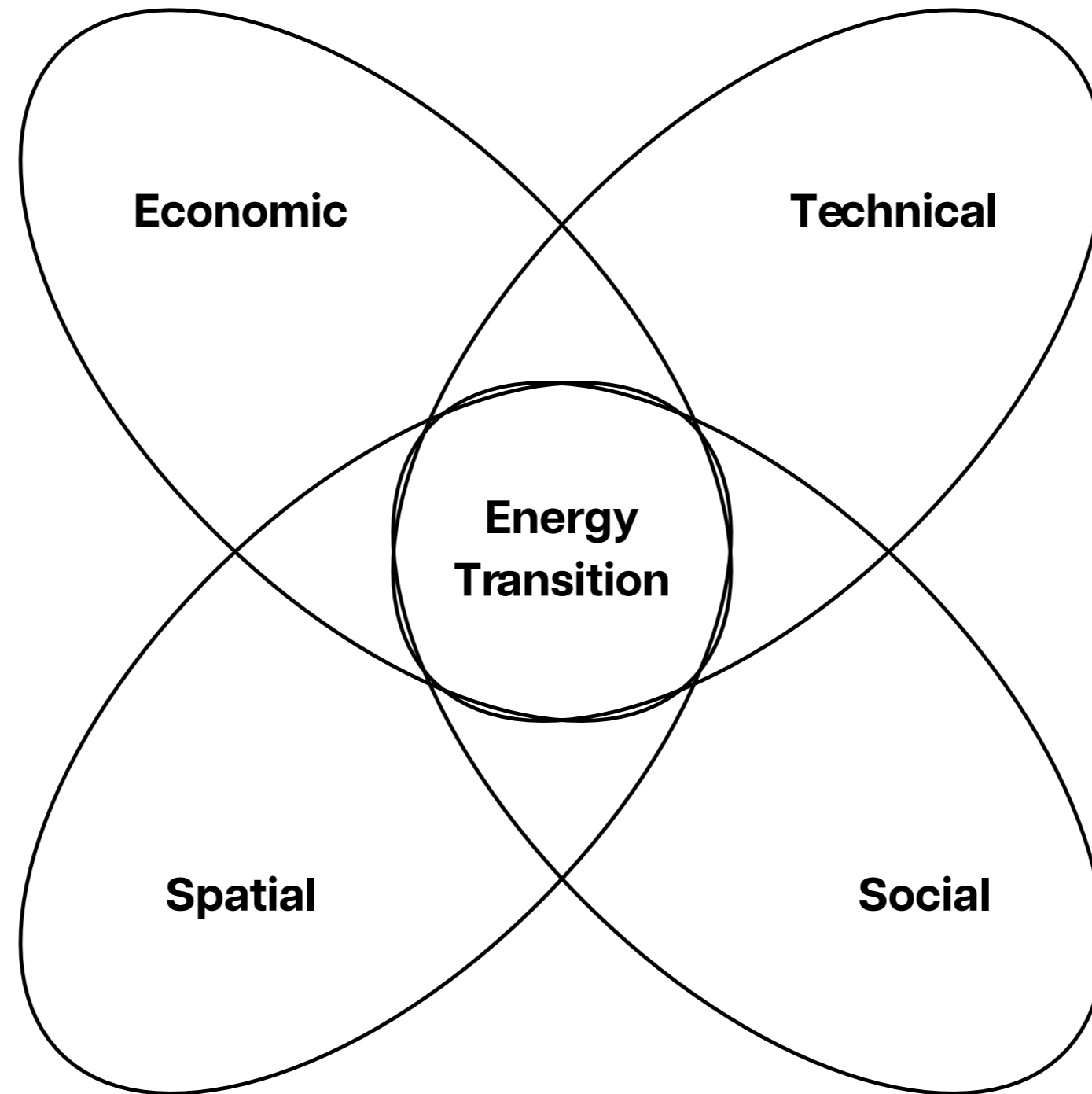
**Bestel nu vanaf 3.250,-**



# The energy transition



# The energy transition



To strive towards...



To strive towards...



...with everyone involved





# Spatial justice



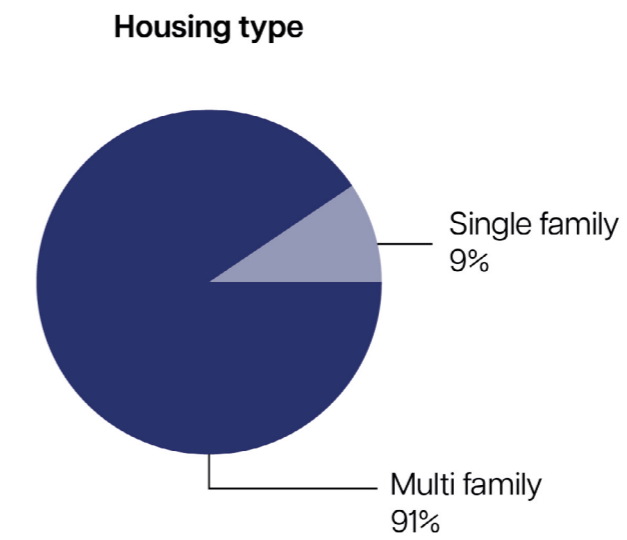
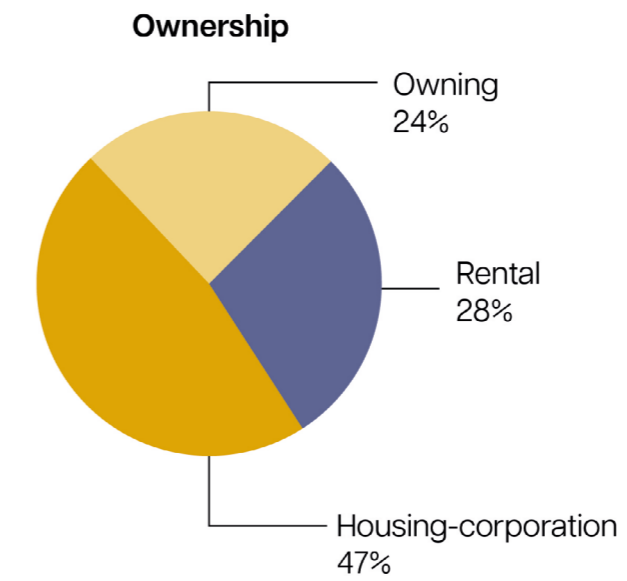
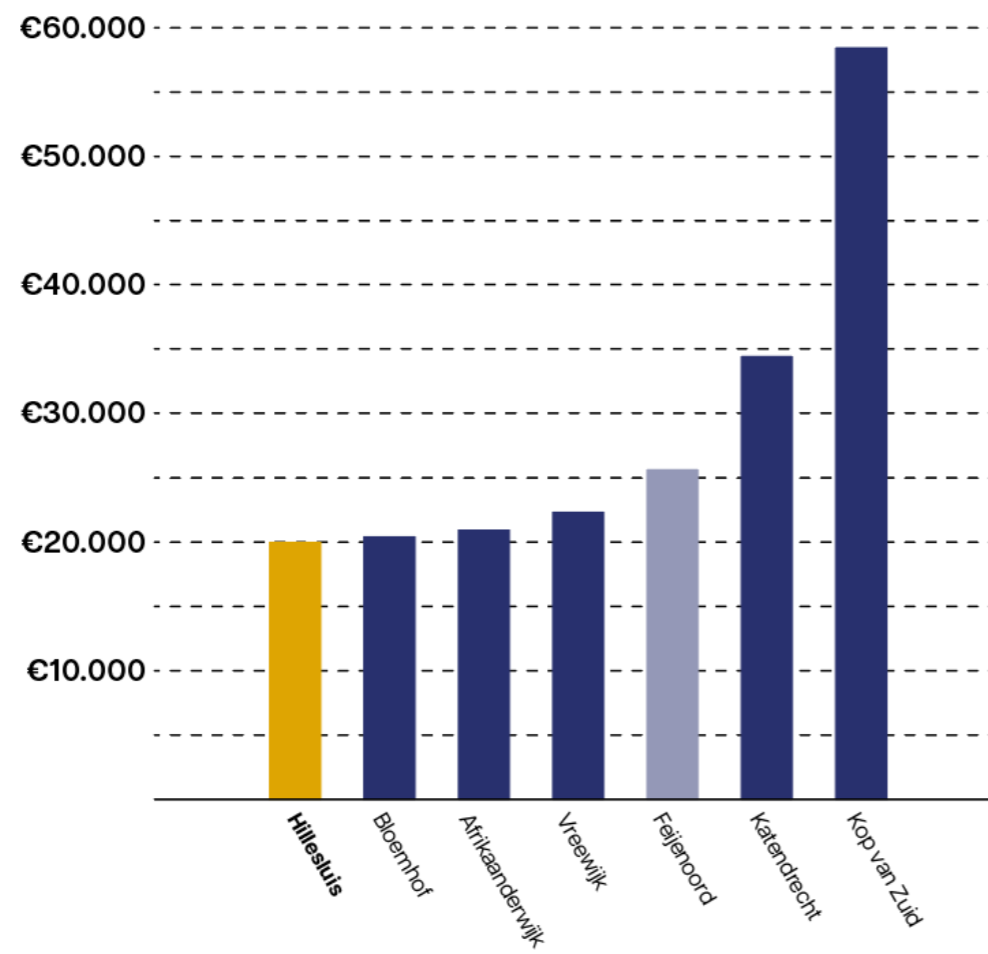


# Case area: Hillesluis





# Energy vulnerabilities in Hillesluis







Wilhelminaplein

Kop van Zuid

Rijnhaven

Katendrecht

Rijnhaven

Afrikaanderwijk

Maashaven

Tarwewijk

Bloemhof

Zuidplein

Hart van Zuid

Rotterdam Zuid station

Various residential developments

Feyenoord City

Rotterdam Stadion station

Vreewijk

**LEGEND**

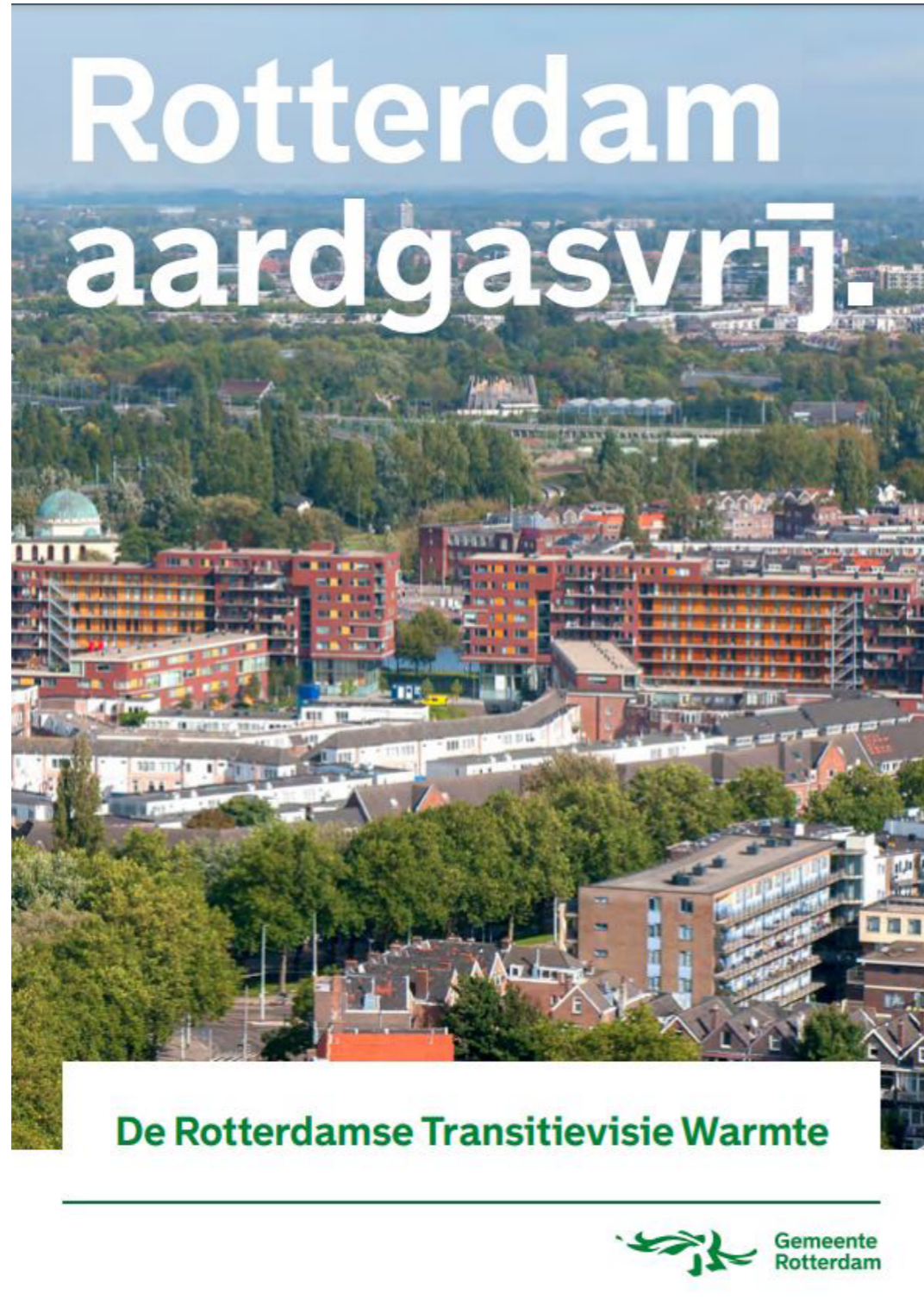
- Development
- Train station
- Metro station
- Train tracks
- Metro line
- Neighborhood border
- Building
- Shopping streets

0 250 500 750 1000 m





# Transition policy





# Transition policy



# Transition policy



Decrease emissions by 50%



# Transition policy



**Decrease emissions by 50%**

**Clean and affordable energy system for all**





# Transition policy



**Decrease emissions by 50%**

**Clean and affordable energy system for all**



**Strengthen the global position**

# Transition policy



**Decrease emissions by 50%**

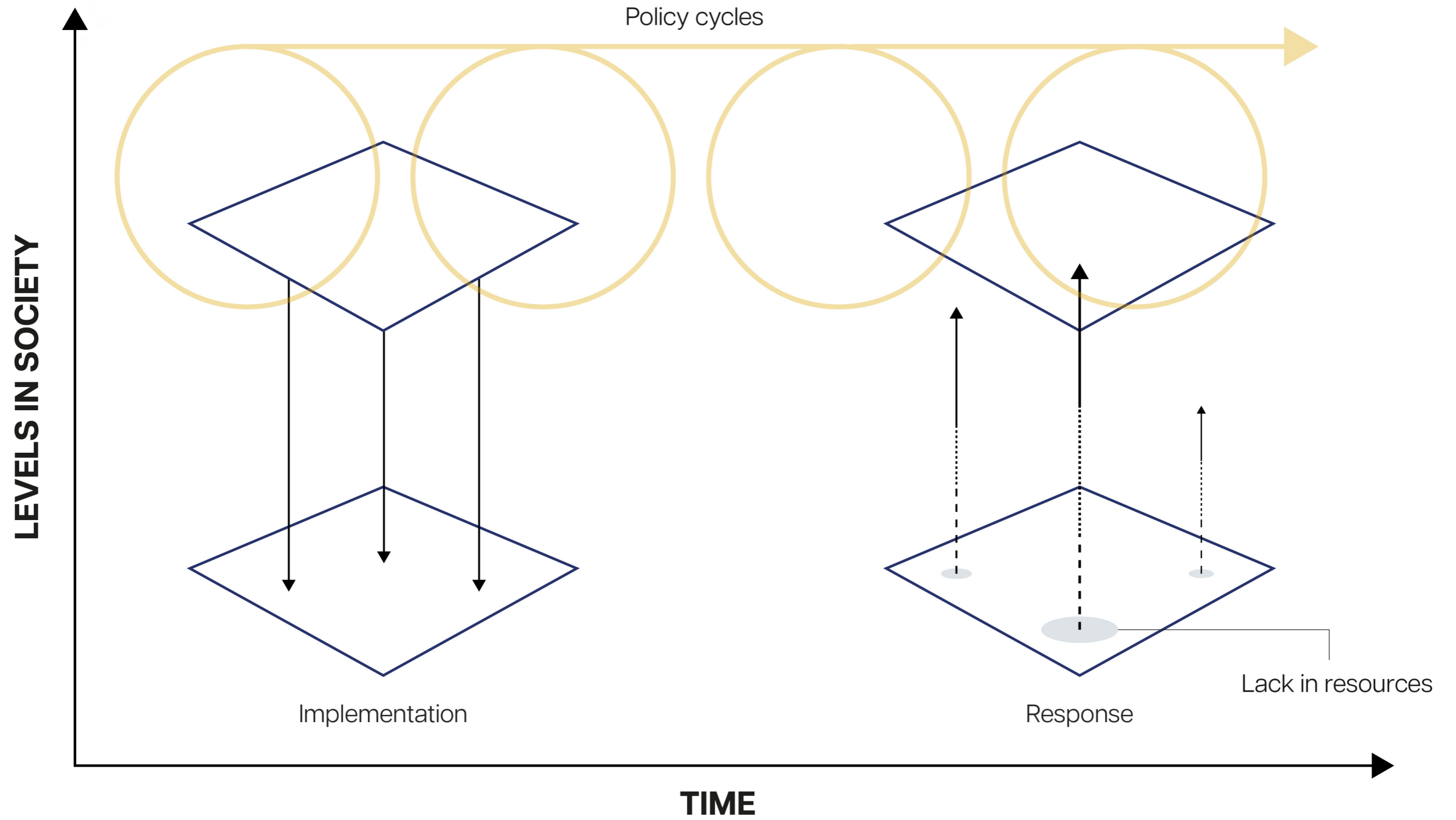
**Clean and affordable energy system for all**



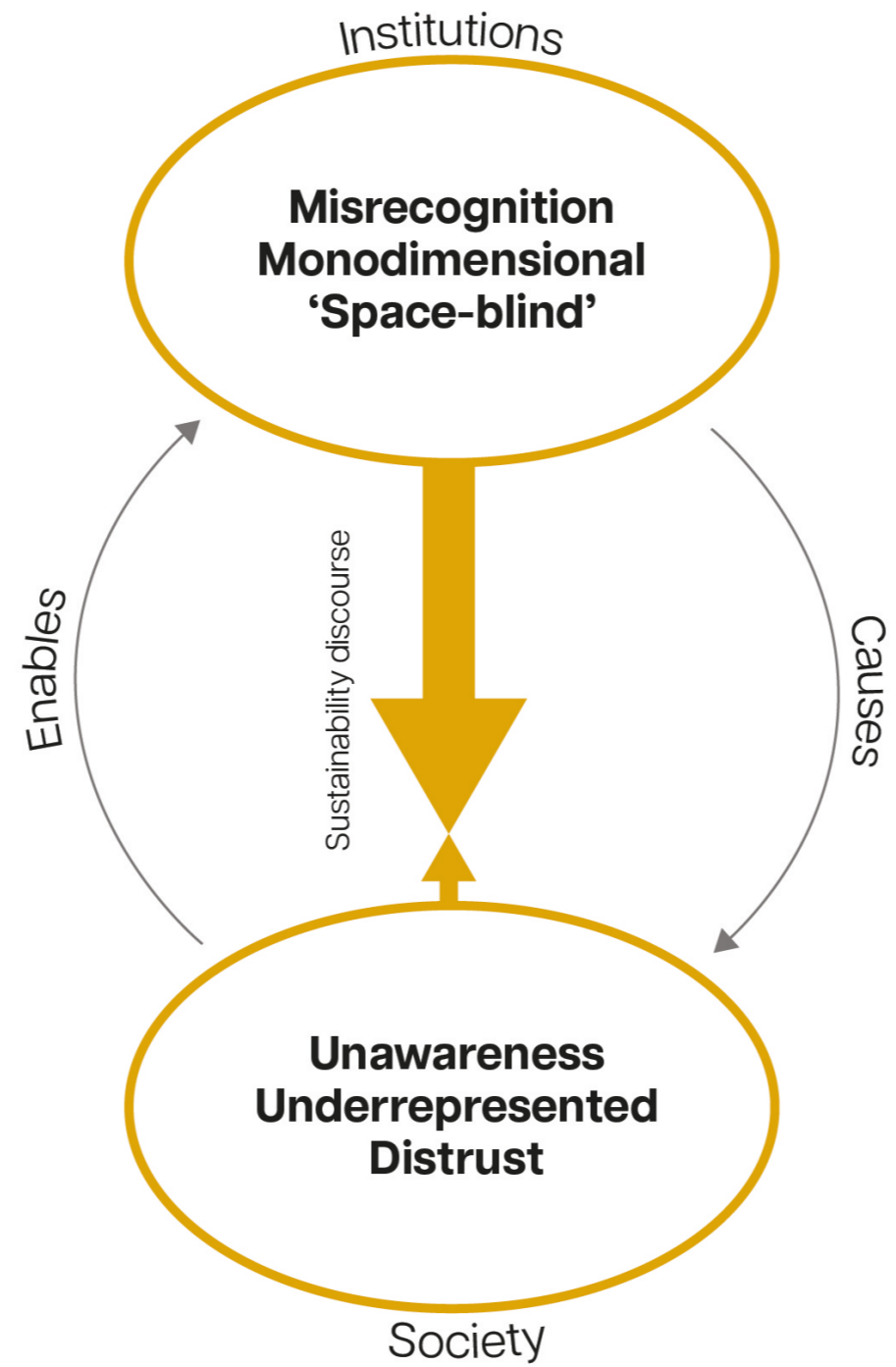
**Strengthen the global position**

**Collaborate with, engage and inform citizens**

# Cycles of unjust



# Cycles of unjust





# How to move forward?

Participation

# How to move forward?



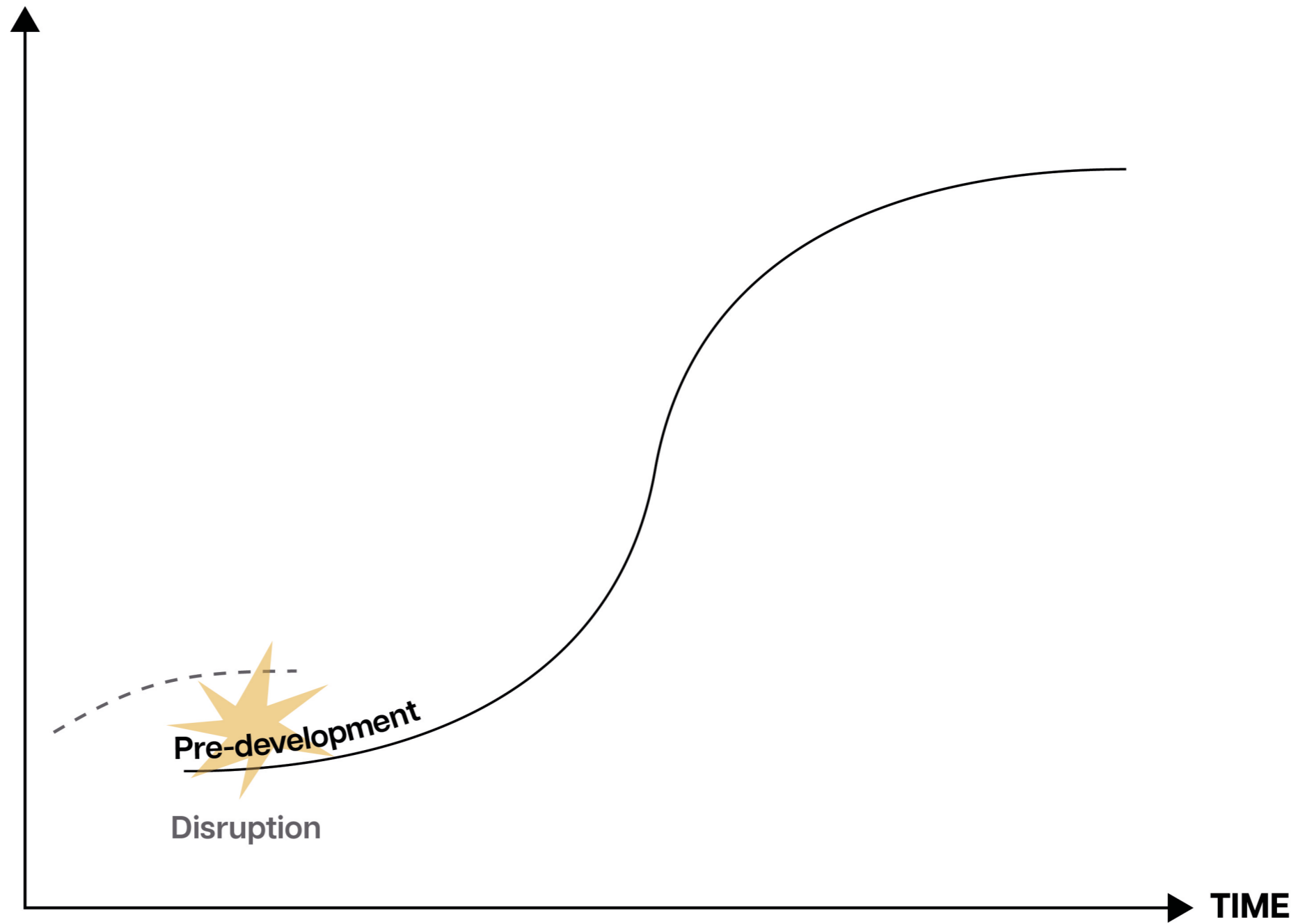
# How to move forward?



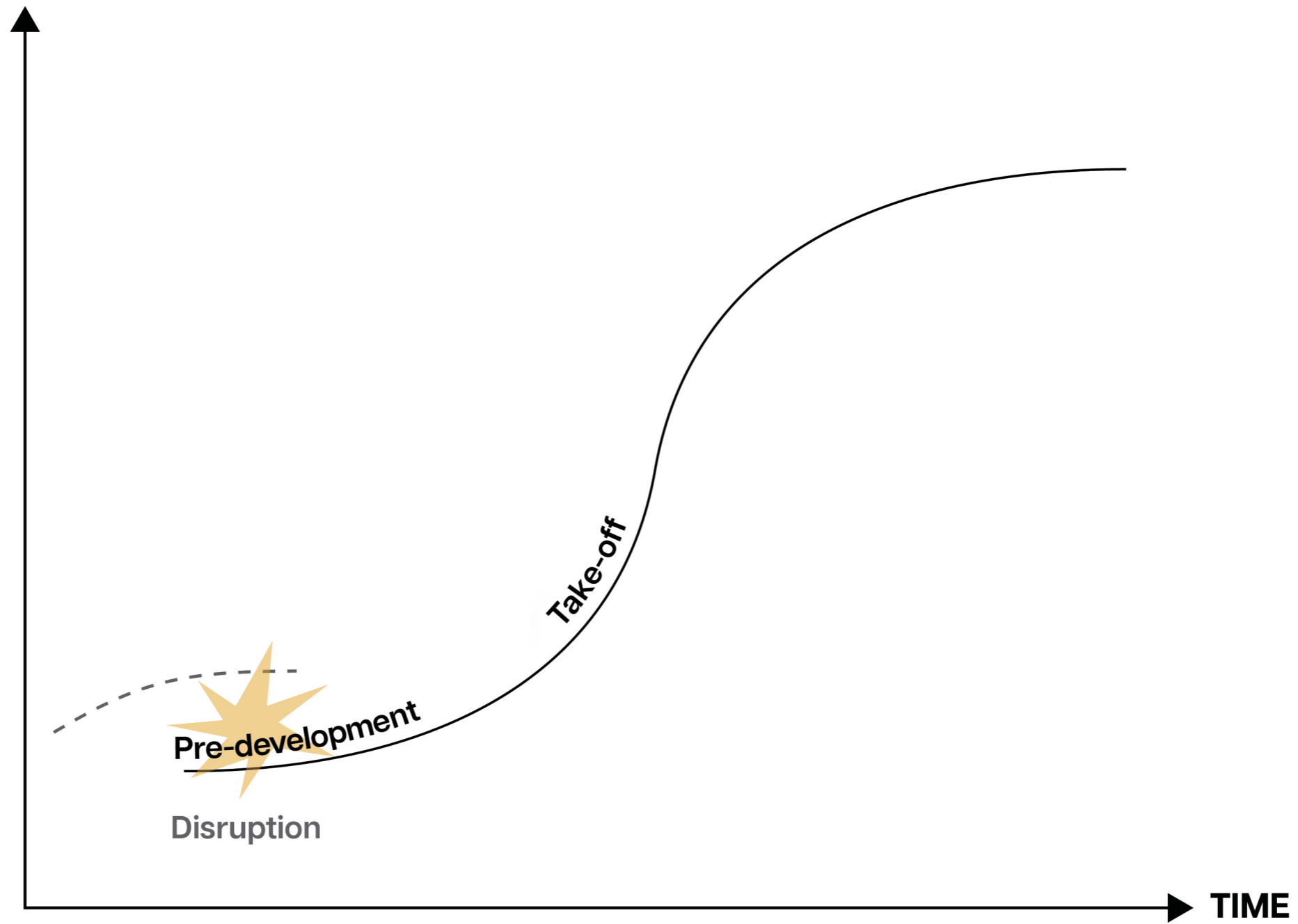
# **Main research question**

**How can participatory planning practices facilitate multi-actor collaborations between people, policy and innovation towards a spatially just energy transition in Hillesluis?**

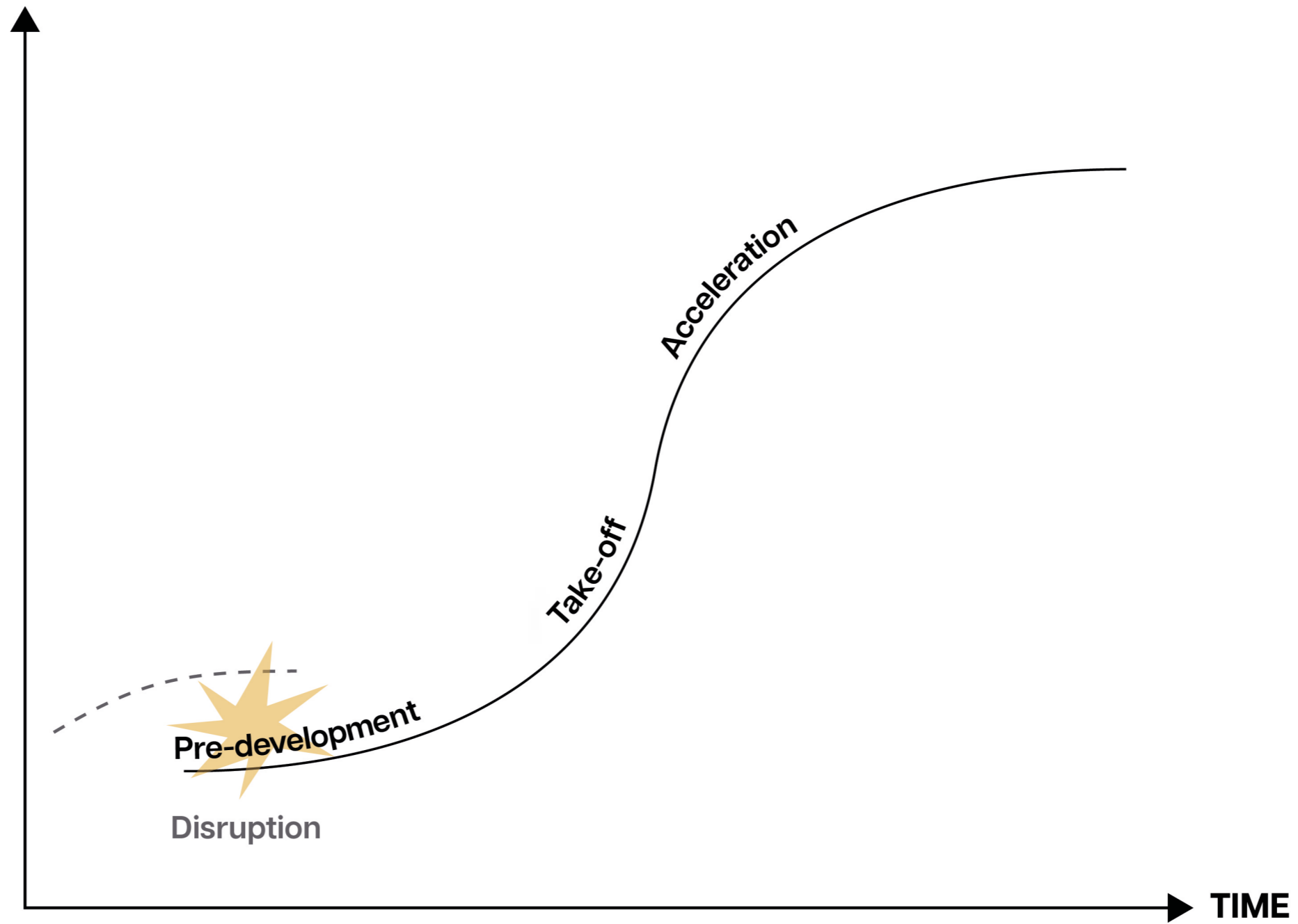
# S-curve



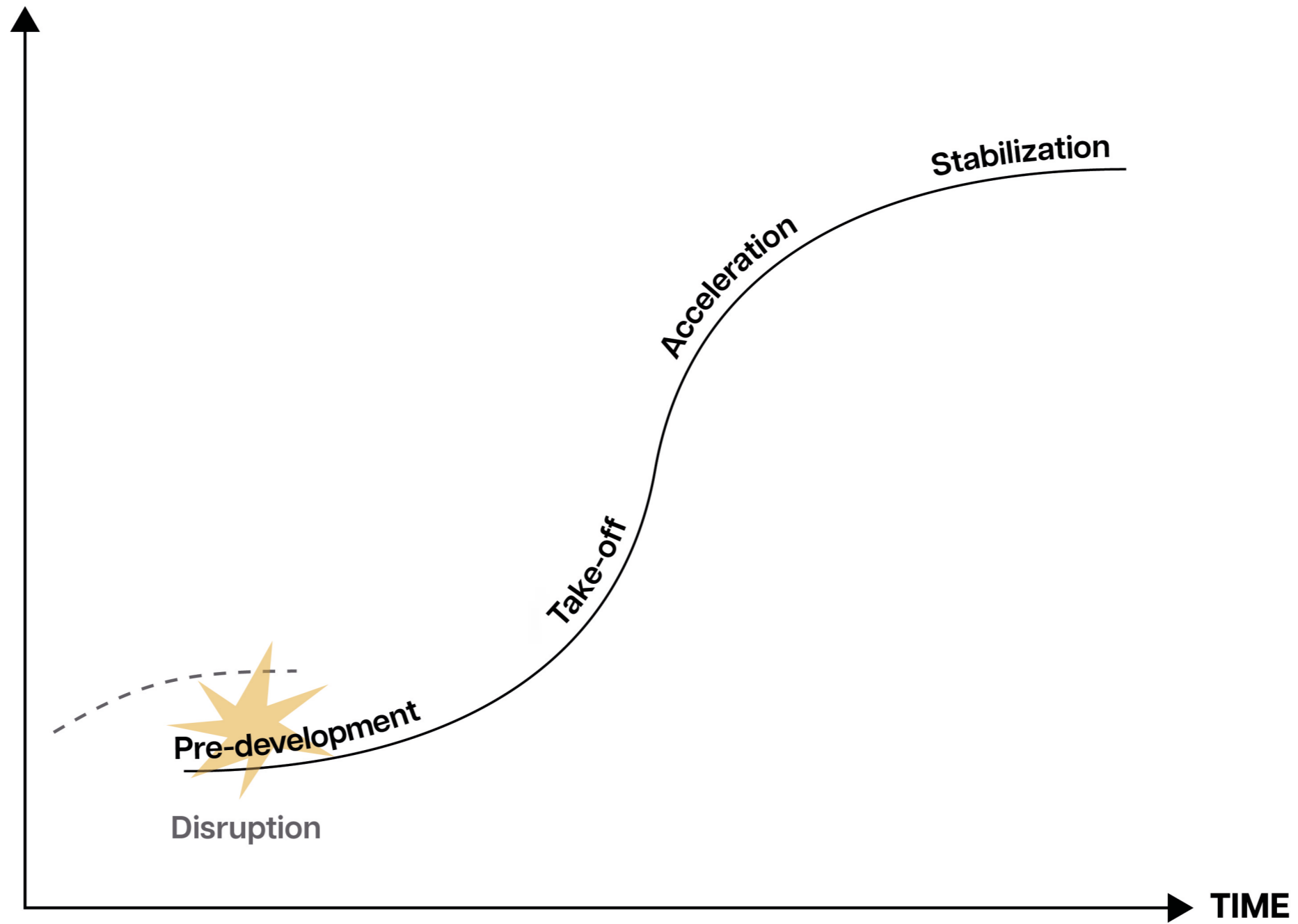
# S-curve



# S-curve

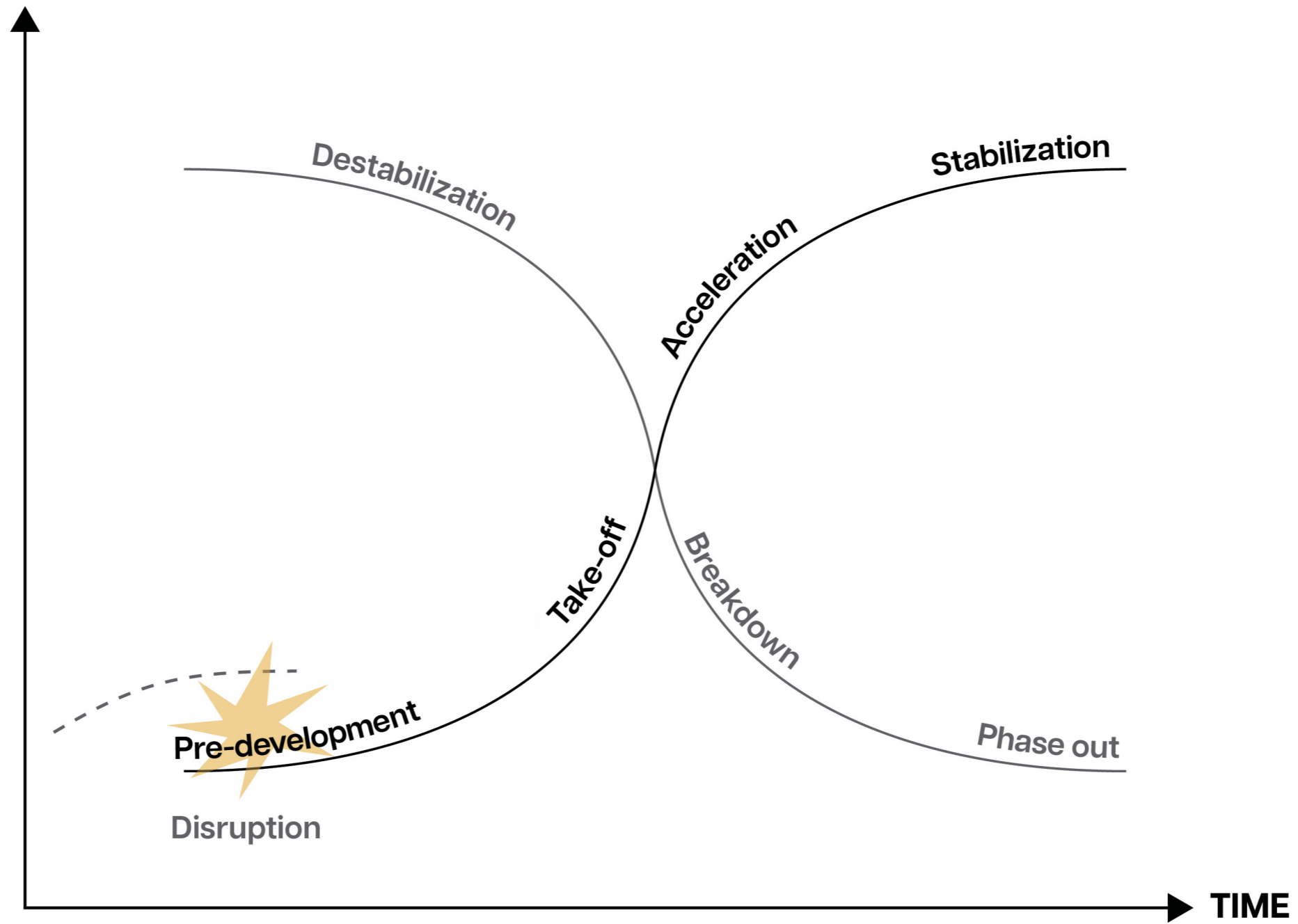


# S-curve





# X-curve



# How to manage transition phases?

**Governance**

# How to manage transition phases?

## Governance

Stakeholders

Policies

Decisions

# How to manage transition phases?

**Transition governance**

**=**

**Transition management**

# How to manage transition phases?





# How to manage transition phases?



# How to manage transition phases?



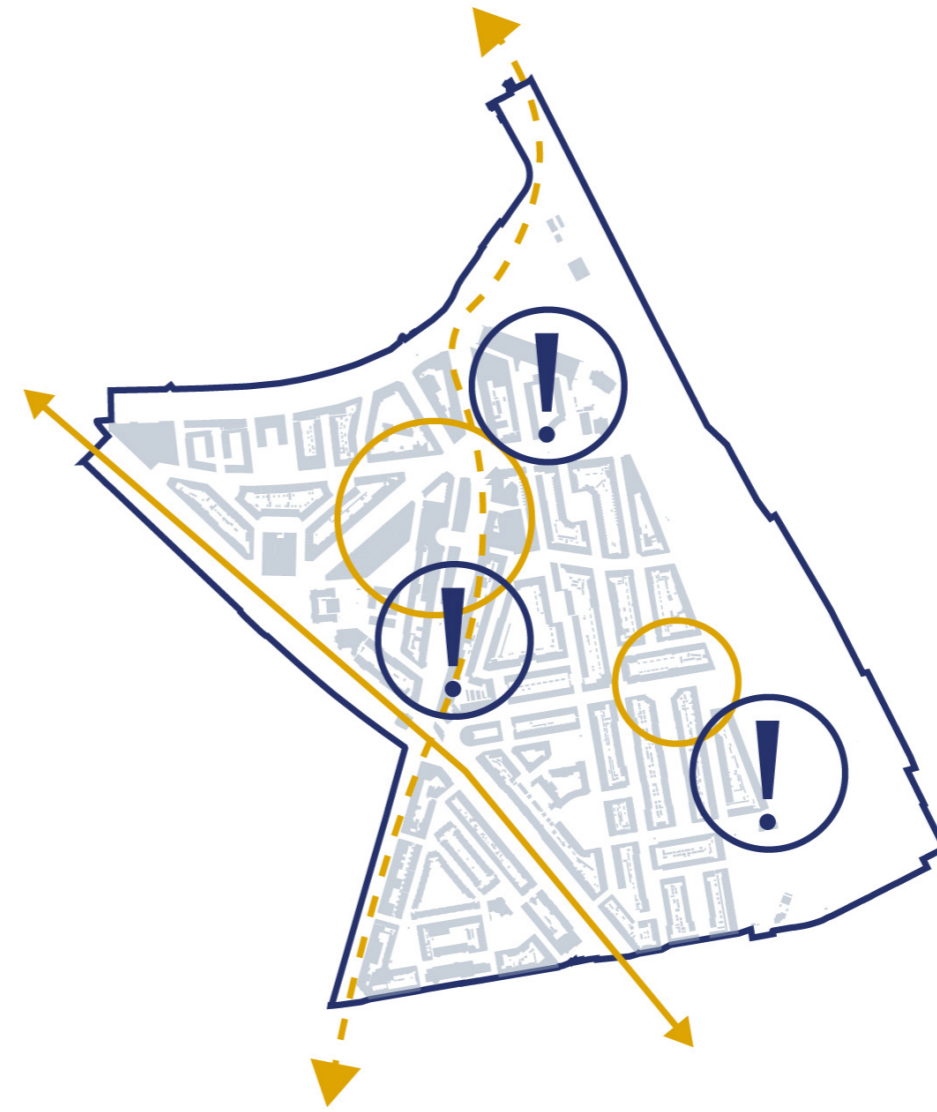
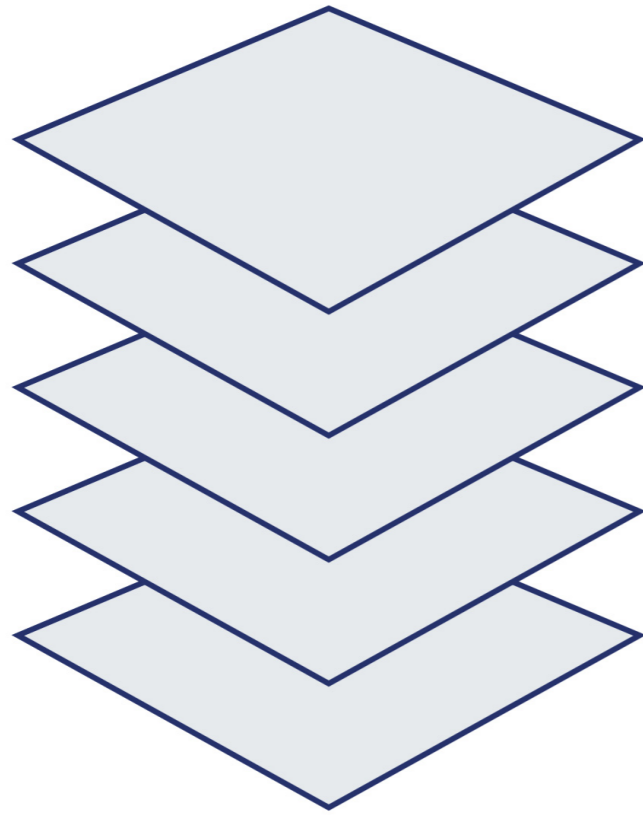
# How to manage transition phases?





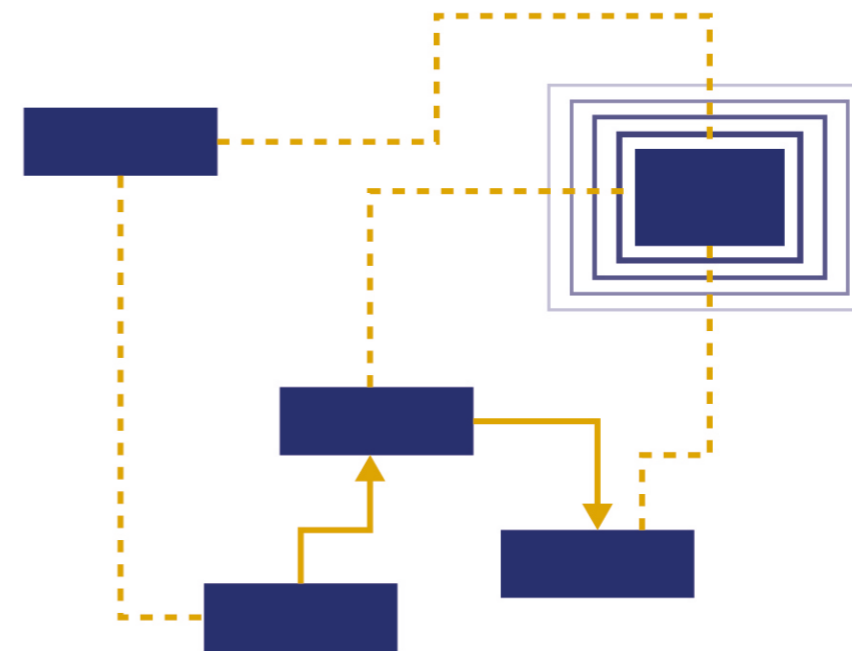
# Methods

## CONTEXT ANALYSIS



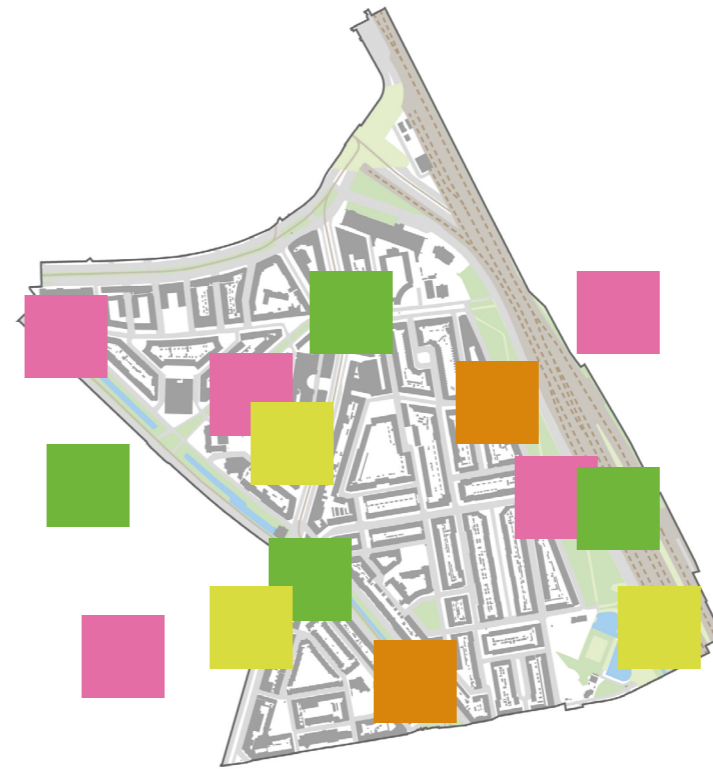
# Methods

## DISCOURSE ANALYSIS



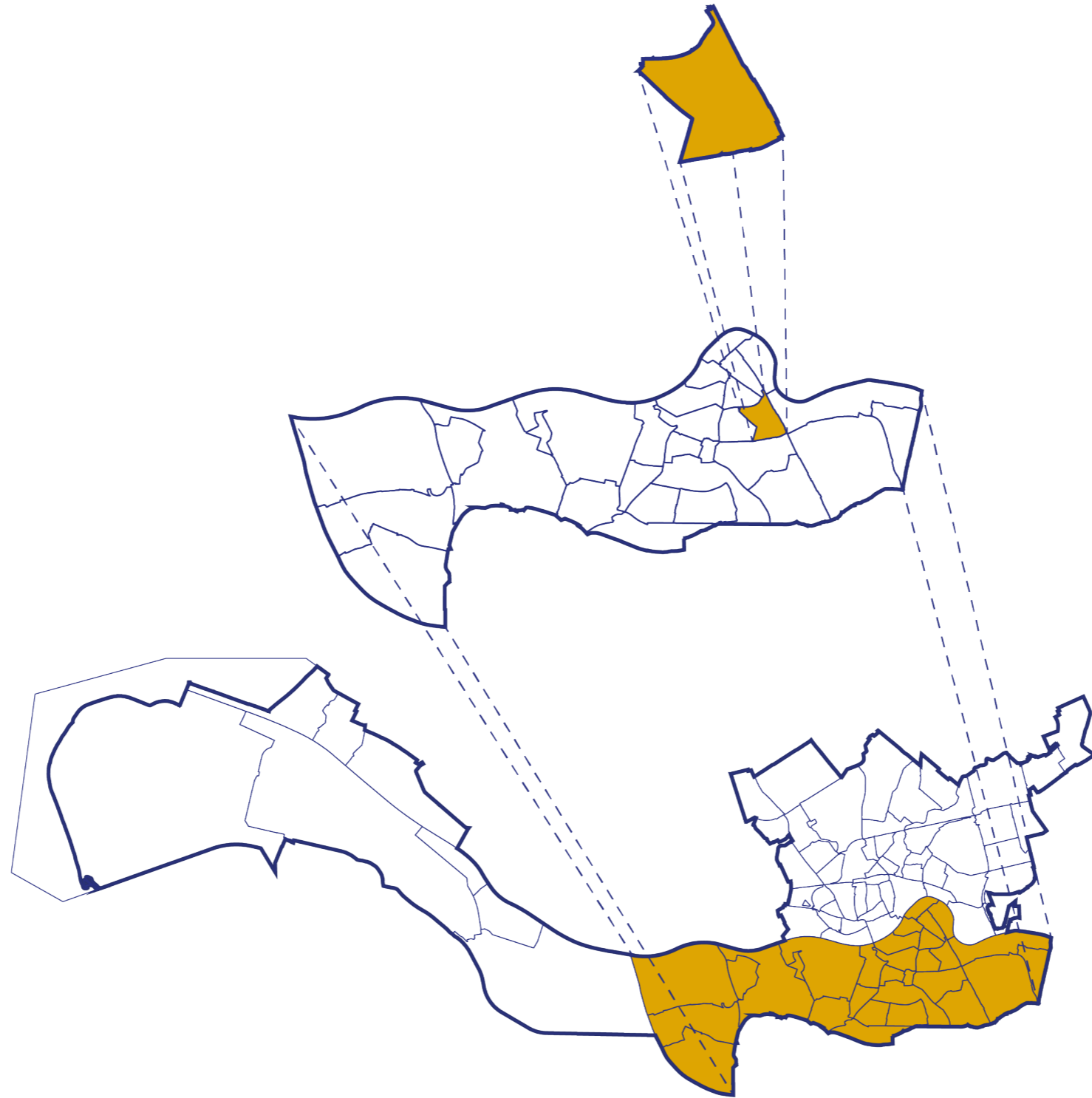
# Methods

## CO-CREATION



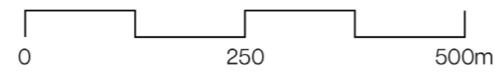


# Hillesluis

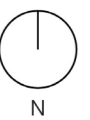


# Energy vulnerabilities in Hillesluis

## Building ages

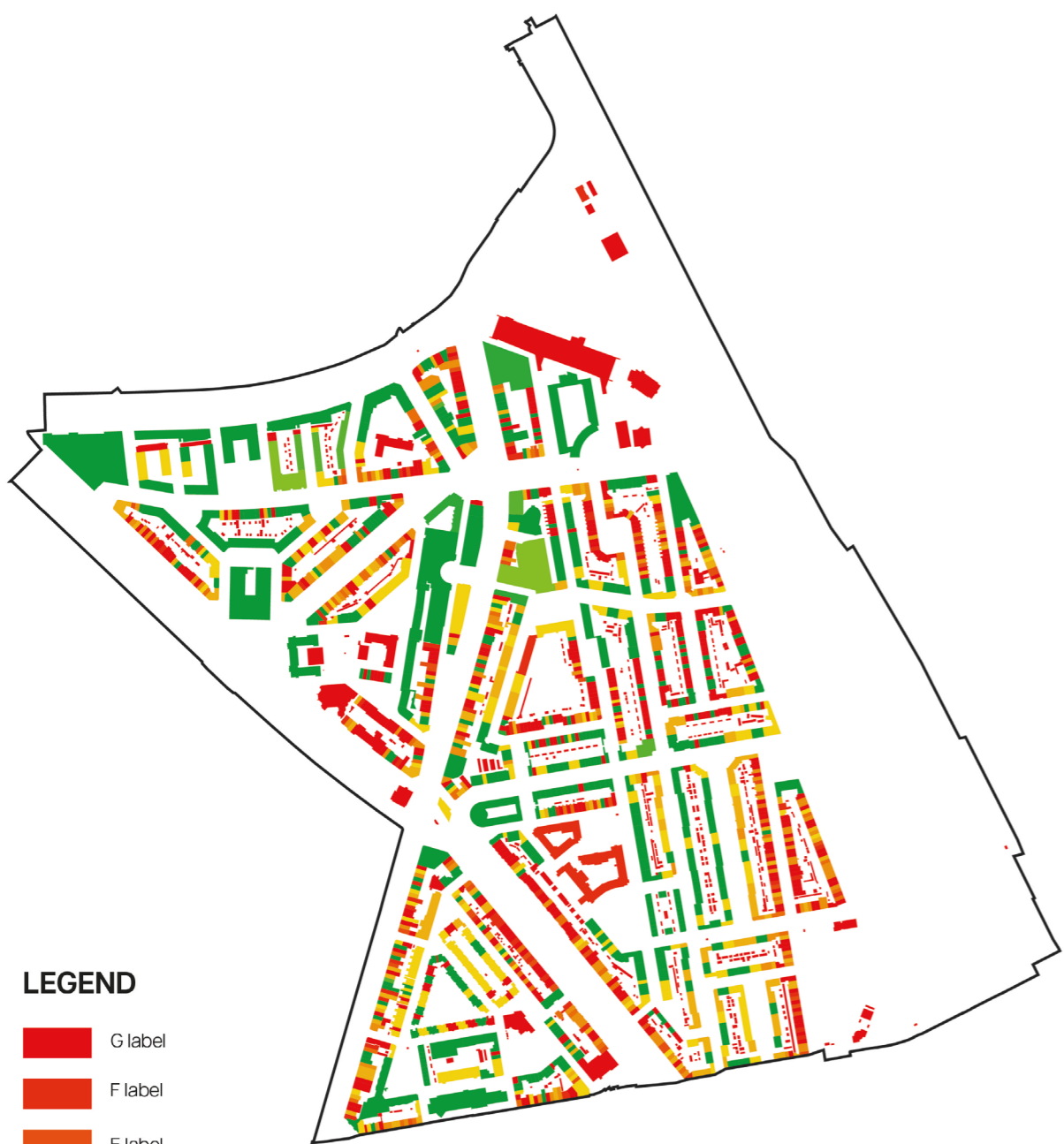


## Buildings from 1921-1930



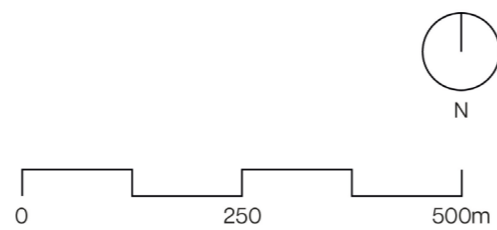
# Energy vulnerabilities in Hillesluis

## Energy labels

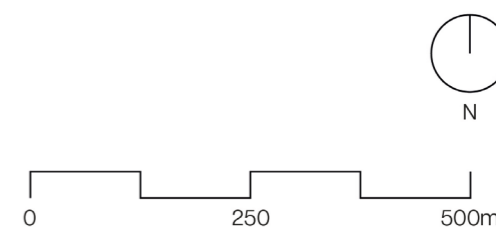


### LEGEND

- G label
- F label
- E label
- D label
- C label
- B label
- A label
- A+ label



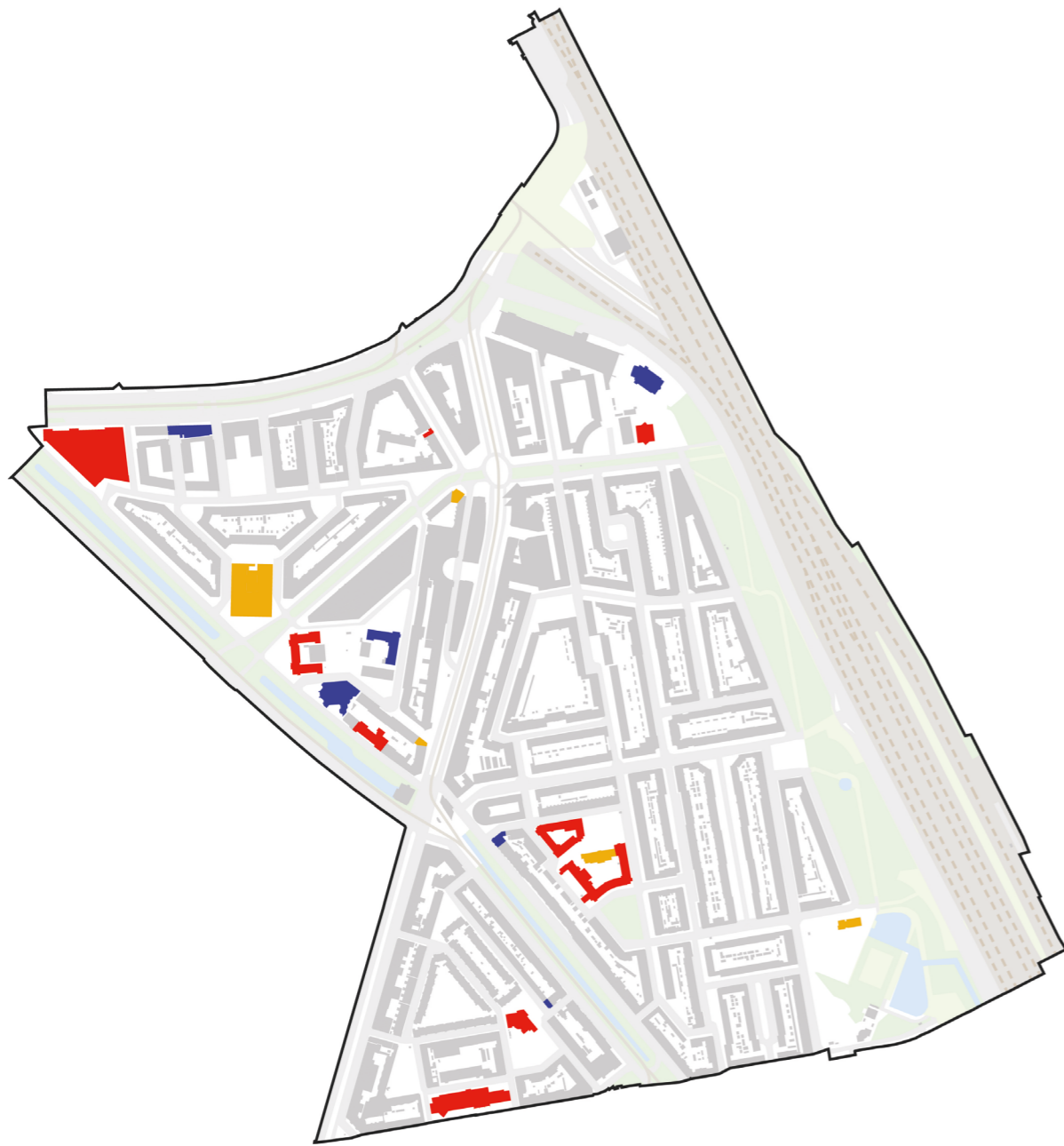
## Energy labels in 1921-1930 buildings





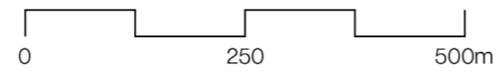
# Energy vulnerabilities in Hillesluis

## Indoor meeting places



### LEGEND

- Religious spaces
- Community spaces
- Schools

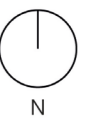


## Outdoor meeting places



### LEGEND

- Inner-courtyards
- Playgrounds or sportsfields
- Casual meeting places
- Low potential
- Medium potential
- High potential





# Co-creating a future vision for Hillesluis

## DENK MEE AAN DUURZAAM HILLESLUIS!

De energietransitie staat voor de deur. Wij als wijk zullen ons ook aan moeten passen. Dit gaat niet altijd op een gelijke manier voor iedereen. Daarom is het belangrijk dat iedereen mee kan praten en denken over hoe wij de wijk voor ons zien in de toekomst.

### WAT GAAN WE DOEN?

2 workshops om een duurzame toekomstvisie te maken voor en door Hillesluis. We brengen belangrijke plekken in kaart en zullen ideeën uitwisselen over verschillende onderwerpen zoals onze woningen, buitenruimtes en de buurtnetwerken.

Hoe ziet een duurzaam Hillesluis er in de toekomst uit?

### WIE ZOEK IK?

6-8 bewoners uit Hillesluis voor een werkgroep.



### Workshop 1 Kansen en risico's

3 April 2024  
10:00-12:00  
De Hillevliet



### Workshop 2 Toekomstvisie Hillesluis

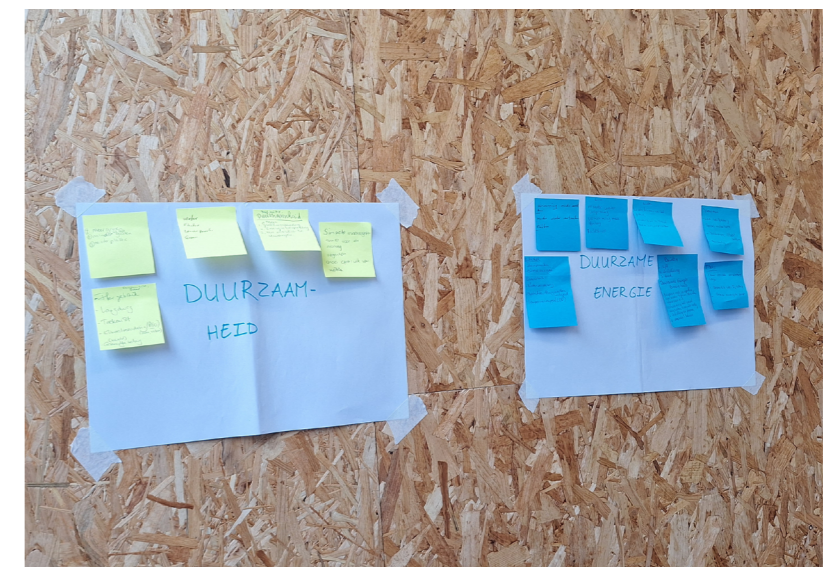
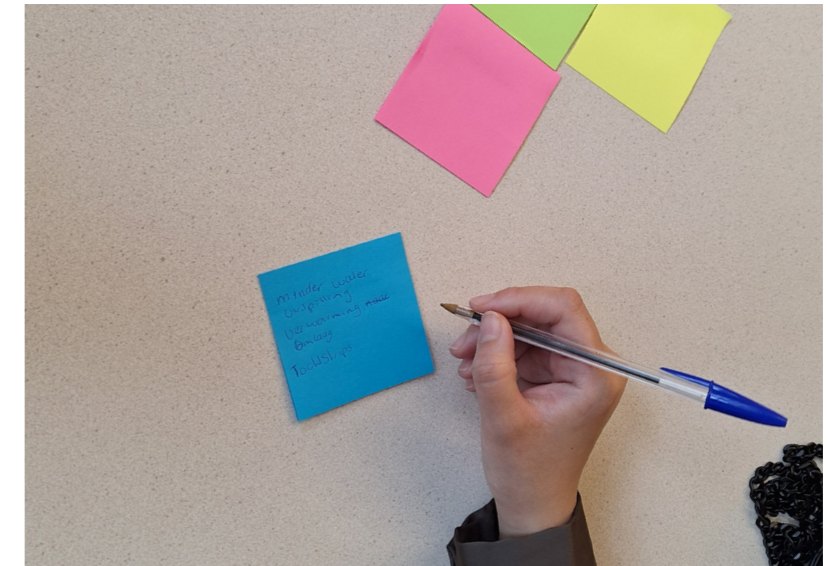
Half April 2024  
11:00-15:00



Tentoonstellen  
van resultaten

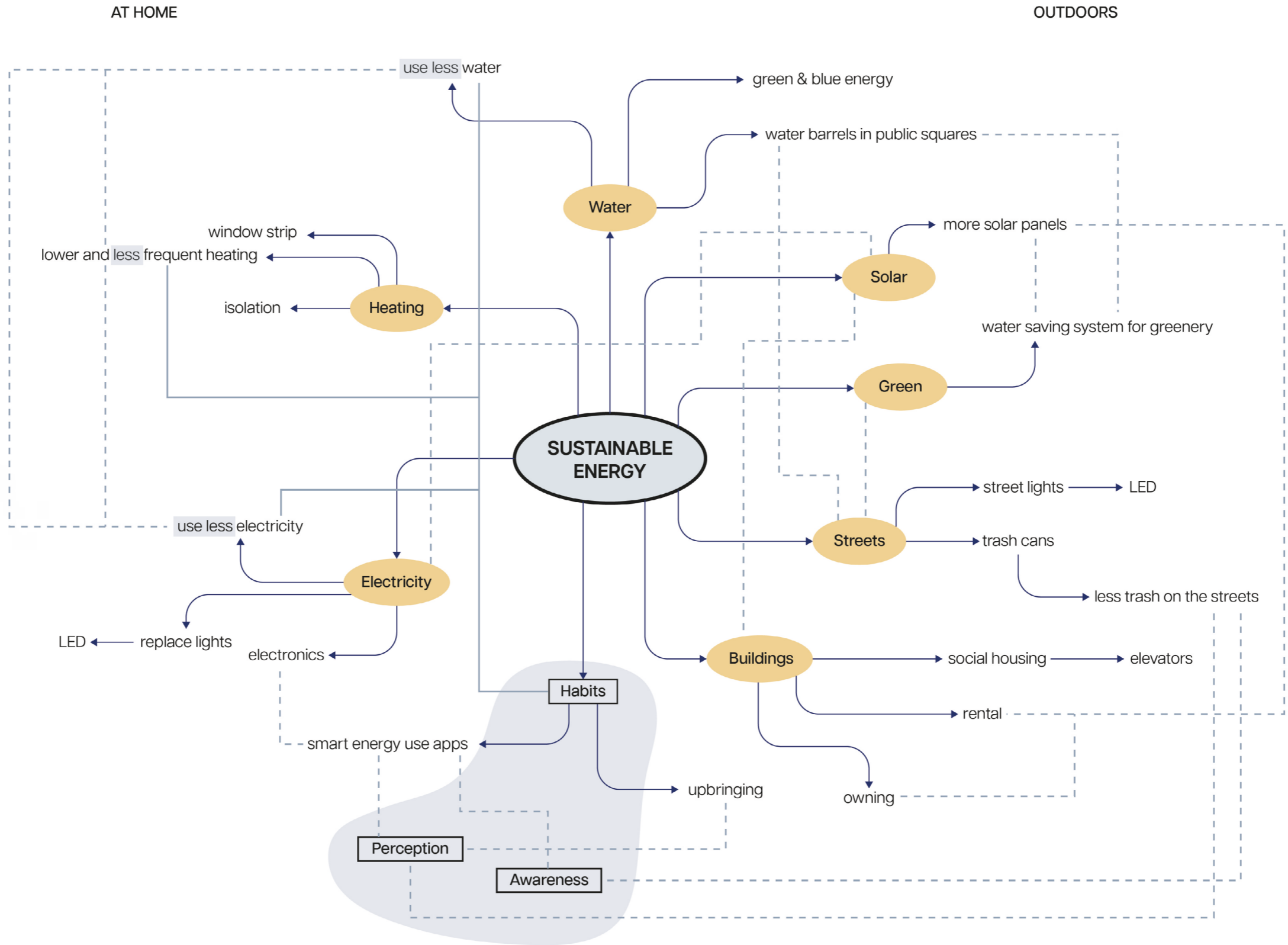


**TU Delft**  
Afstudeeronderzoek  
MSc Urbanism  
Sophie van Hal  
+31 6 11254470





# Session 1 results



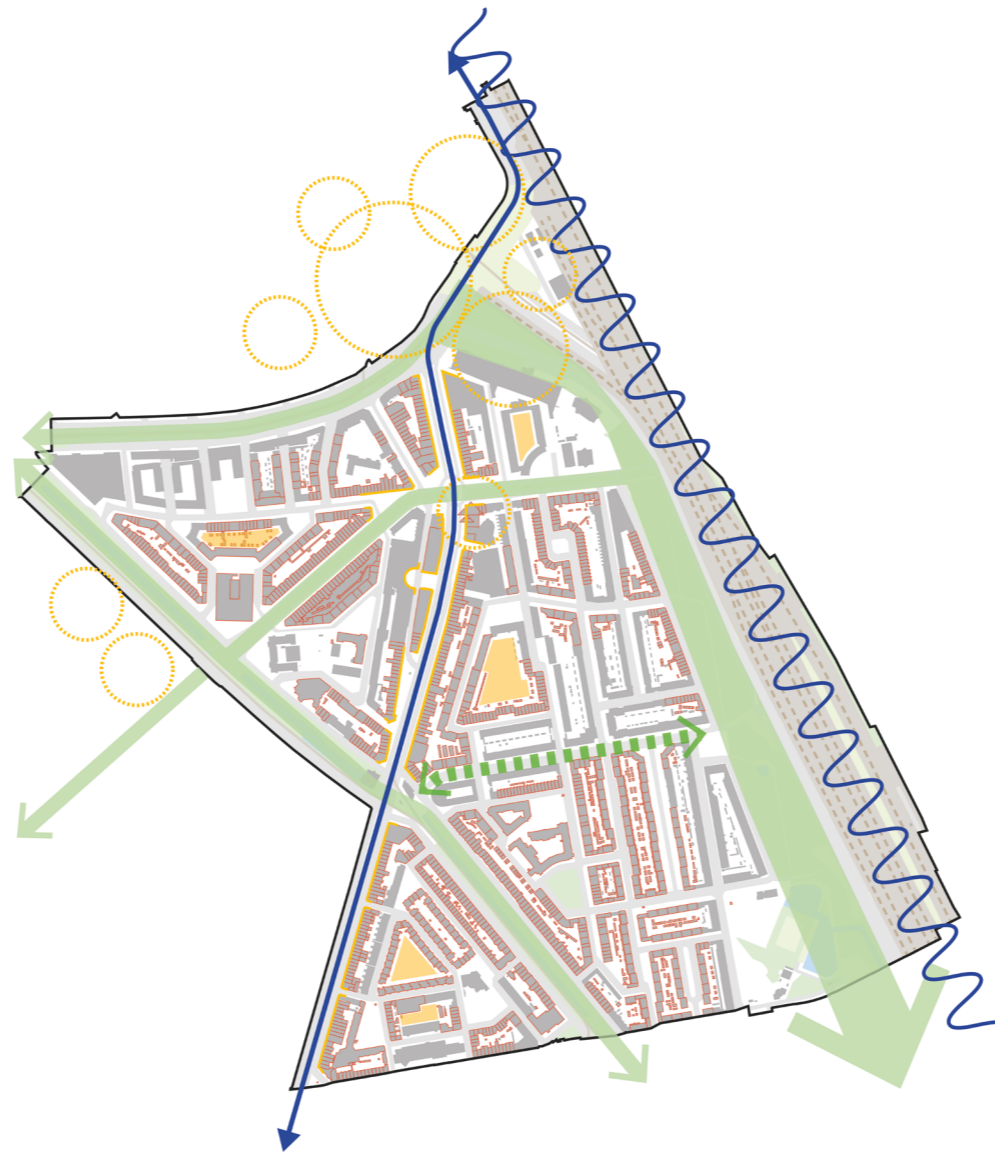


# Risk and opportunity maps

Social map



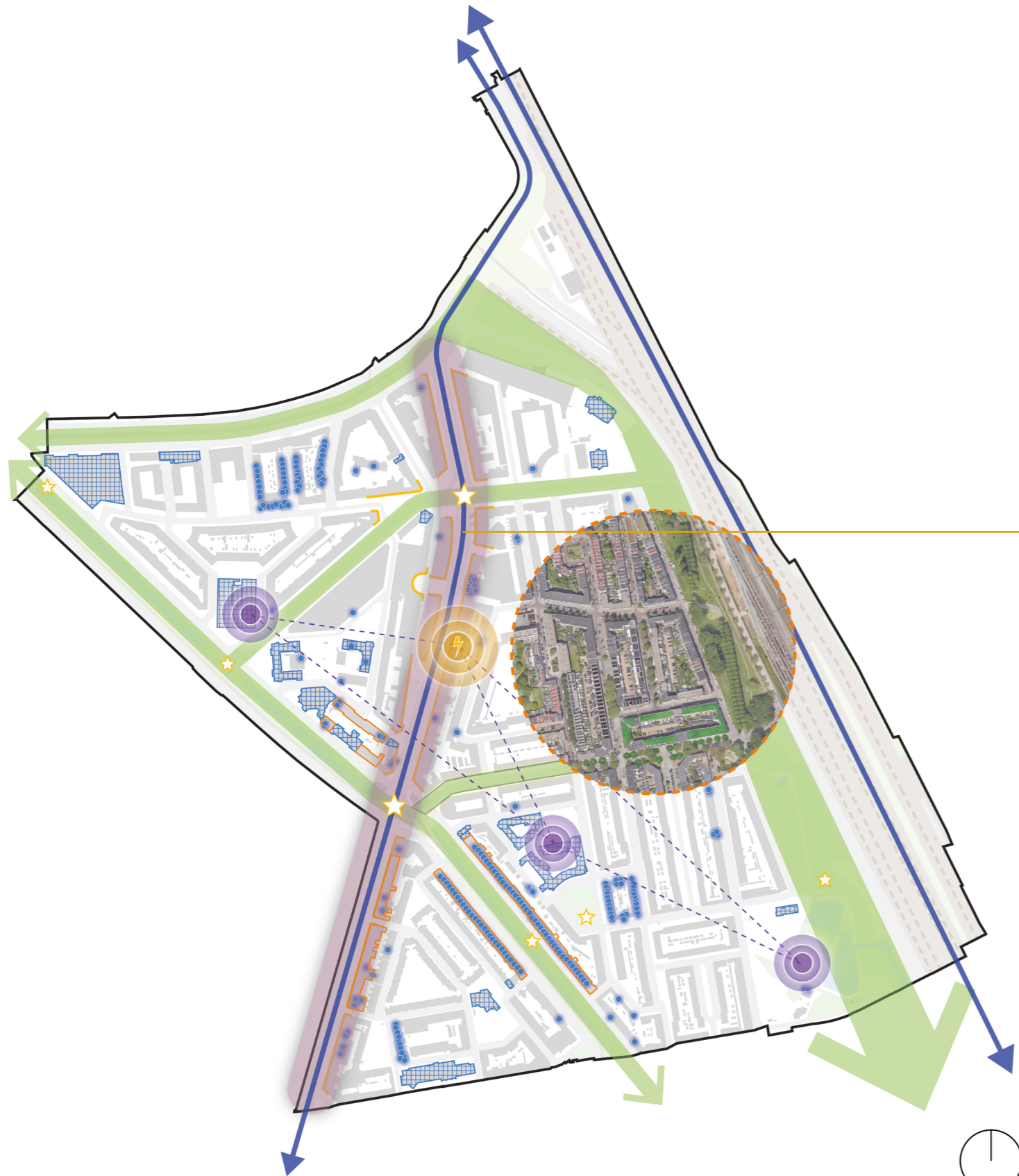
Spatial map



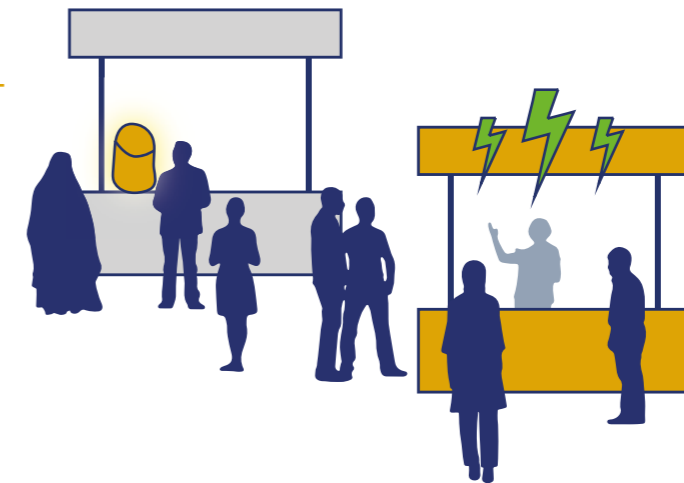
Energy map



# A future vision for Hillesluis



**Social media**

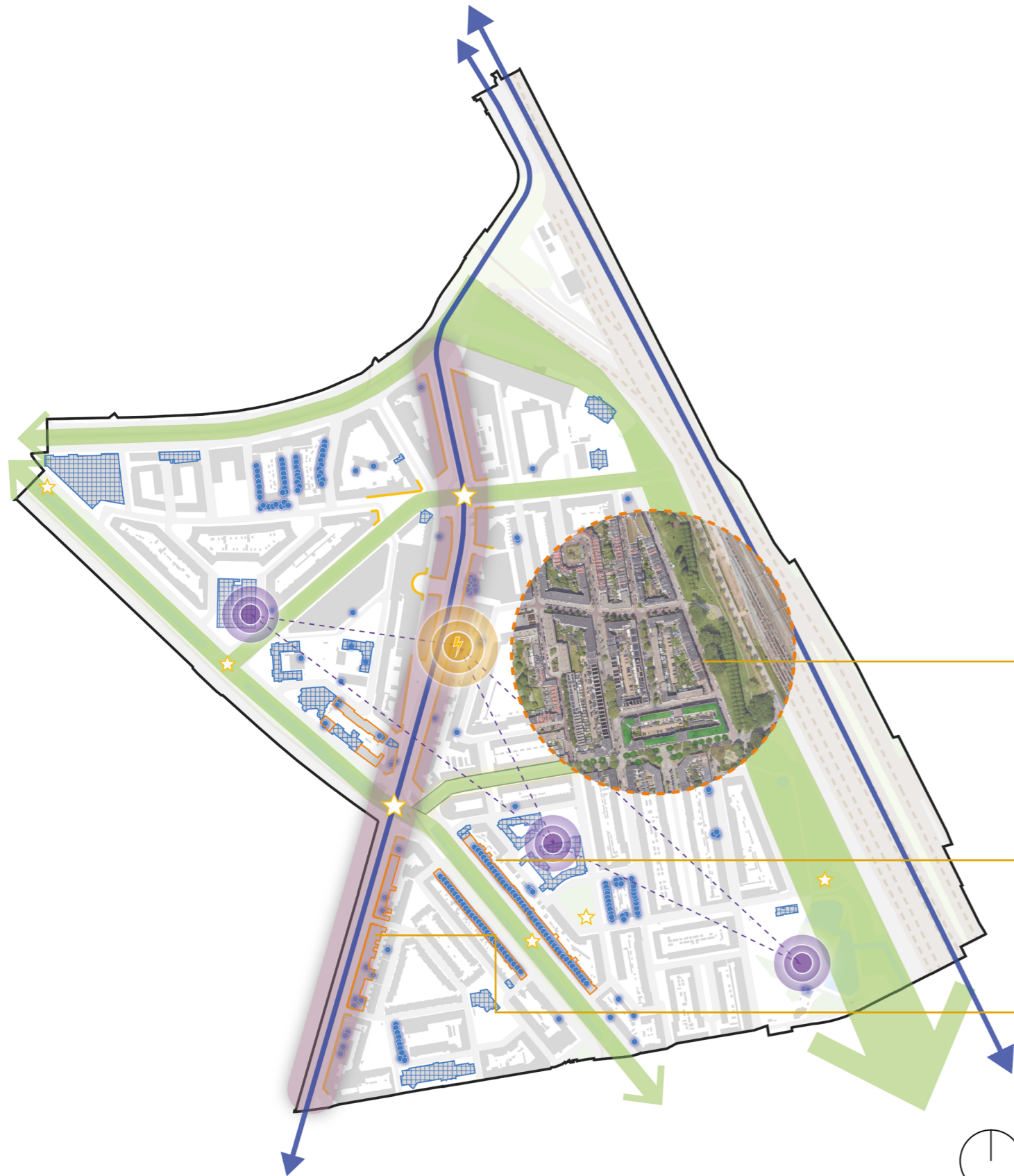


**Energy markets**

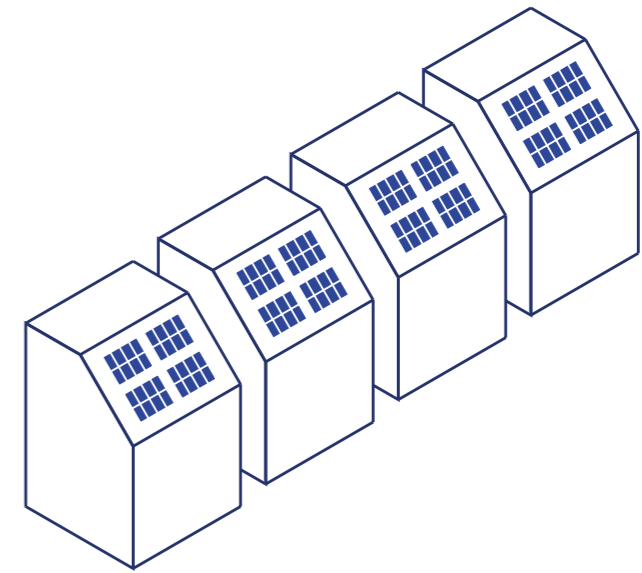




# A future vision for Hillesluis



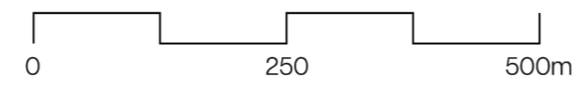
## Pilots



**Social housing**

**Private homes**

**Temporary housing**





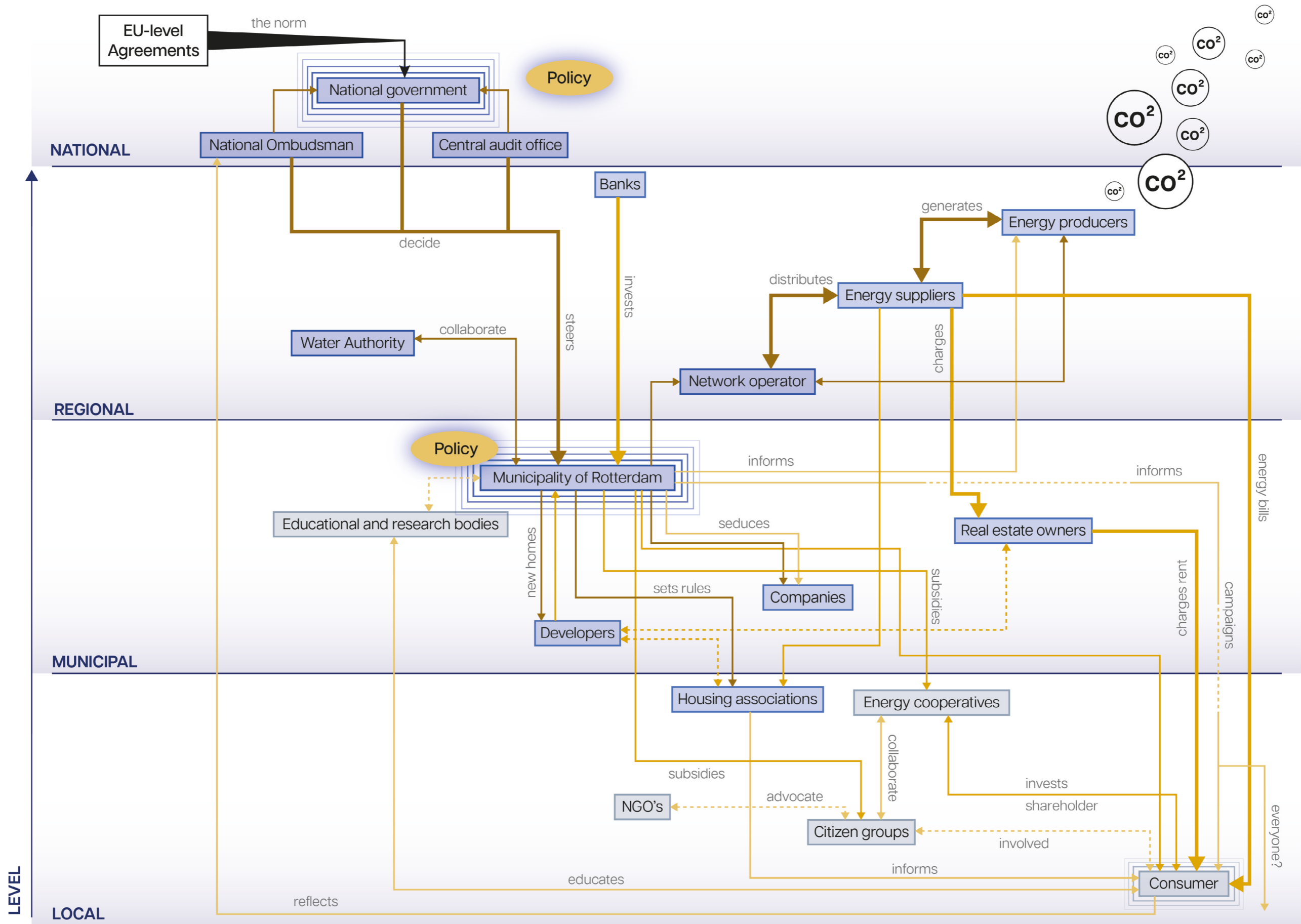
# A future vision for Hillesluis



## Energy hub

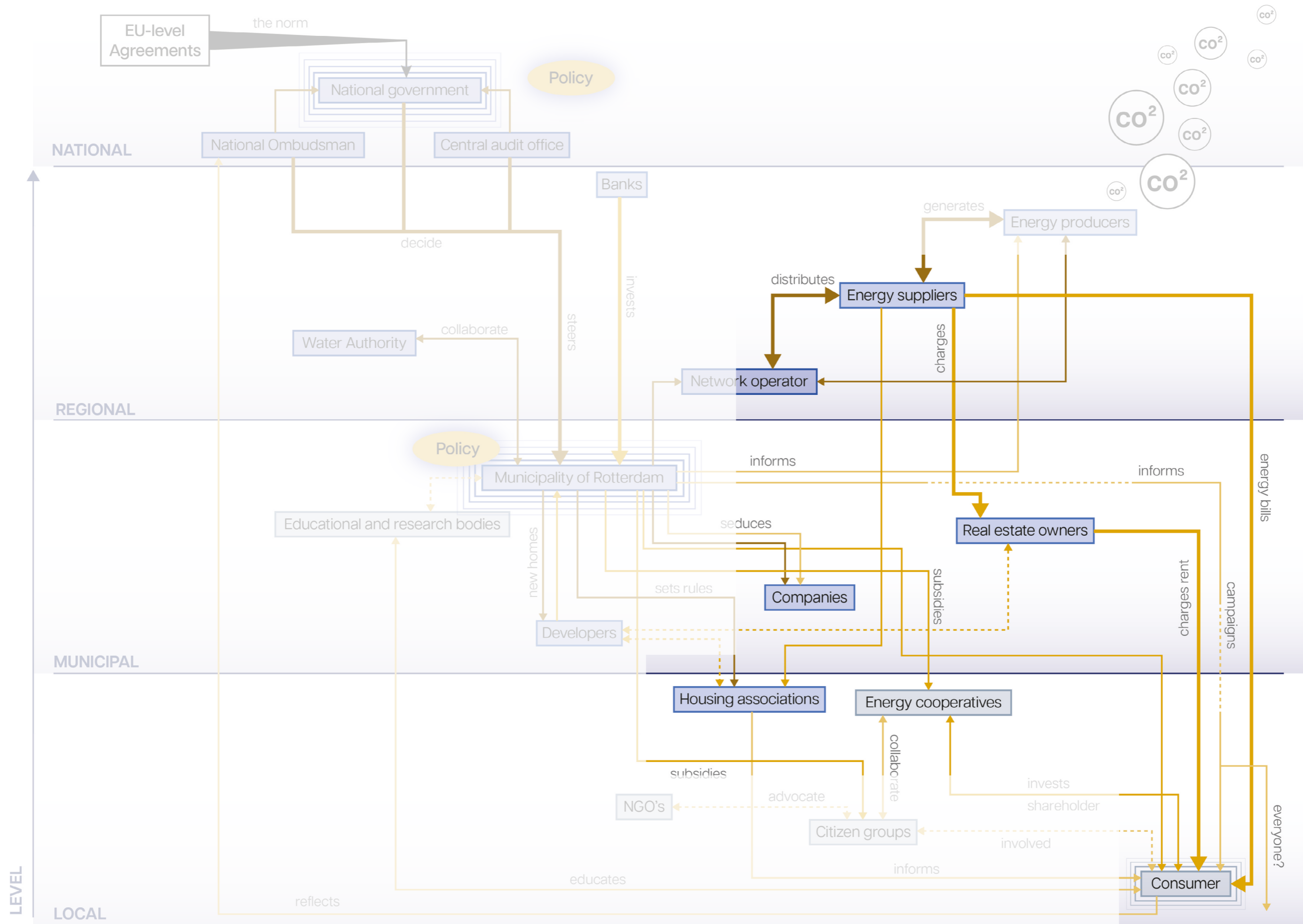


# Governance of the energy transition in Rotterdam



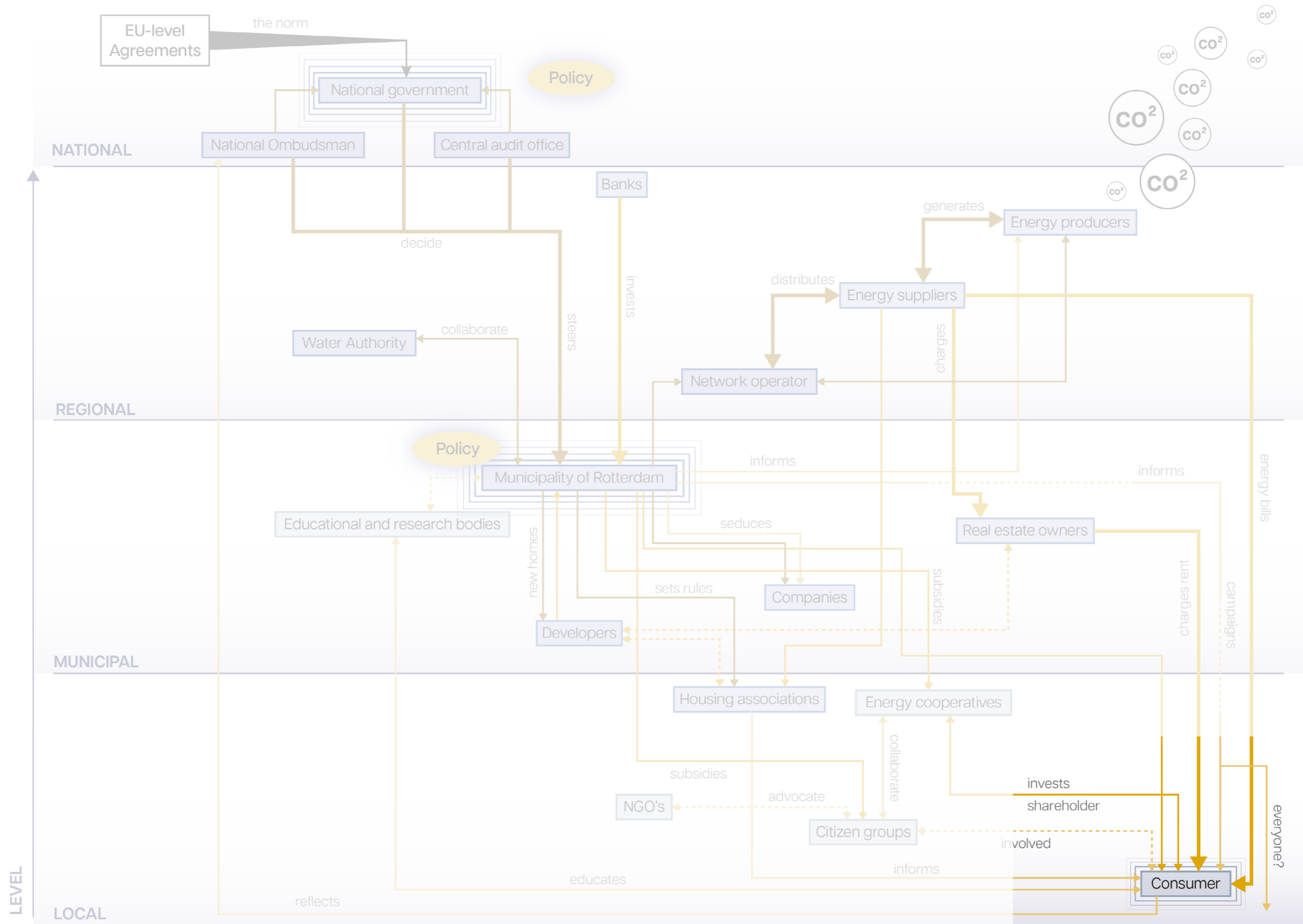


# Governance of the energy transition in Rotterdam

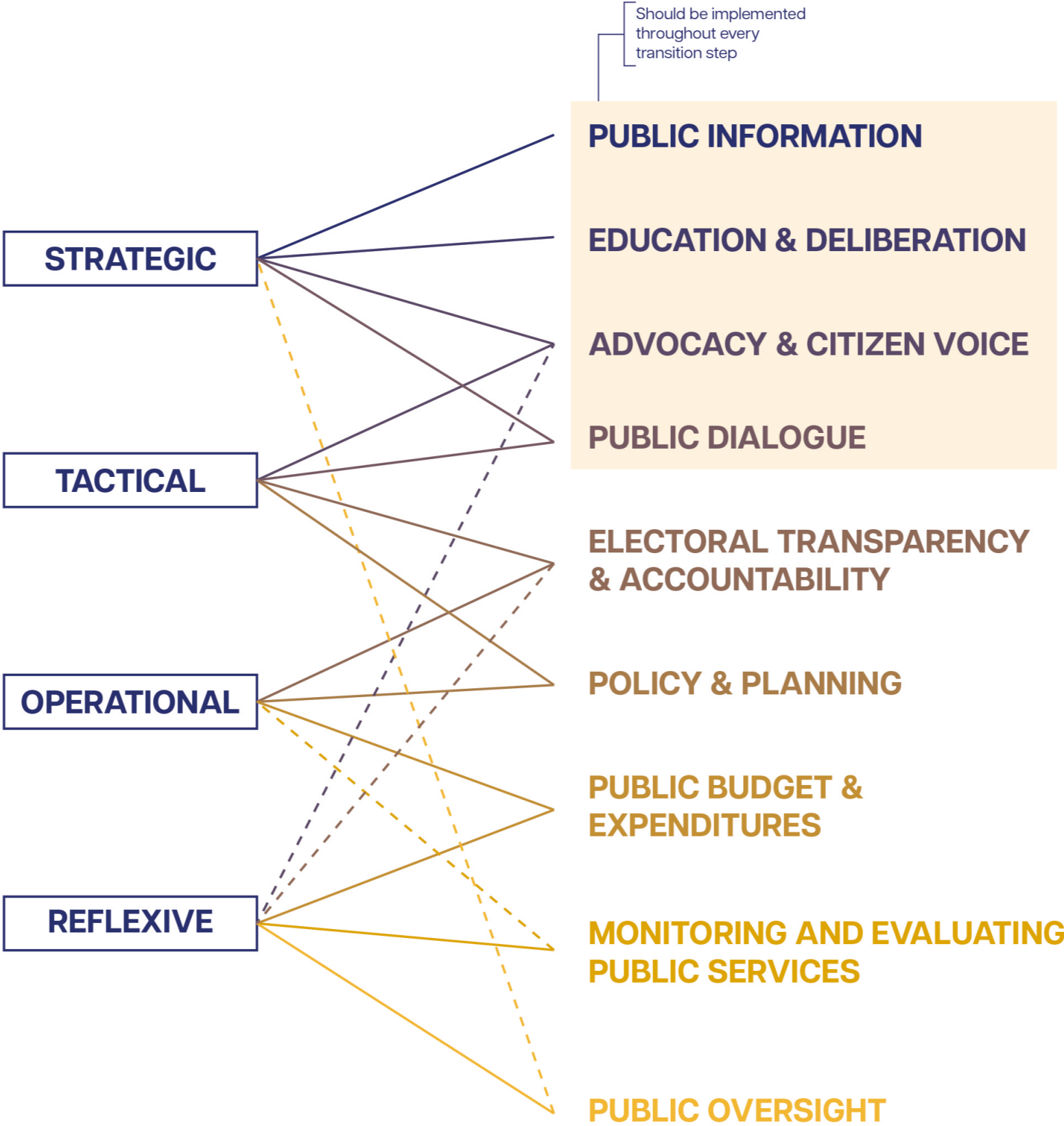




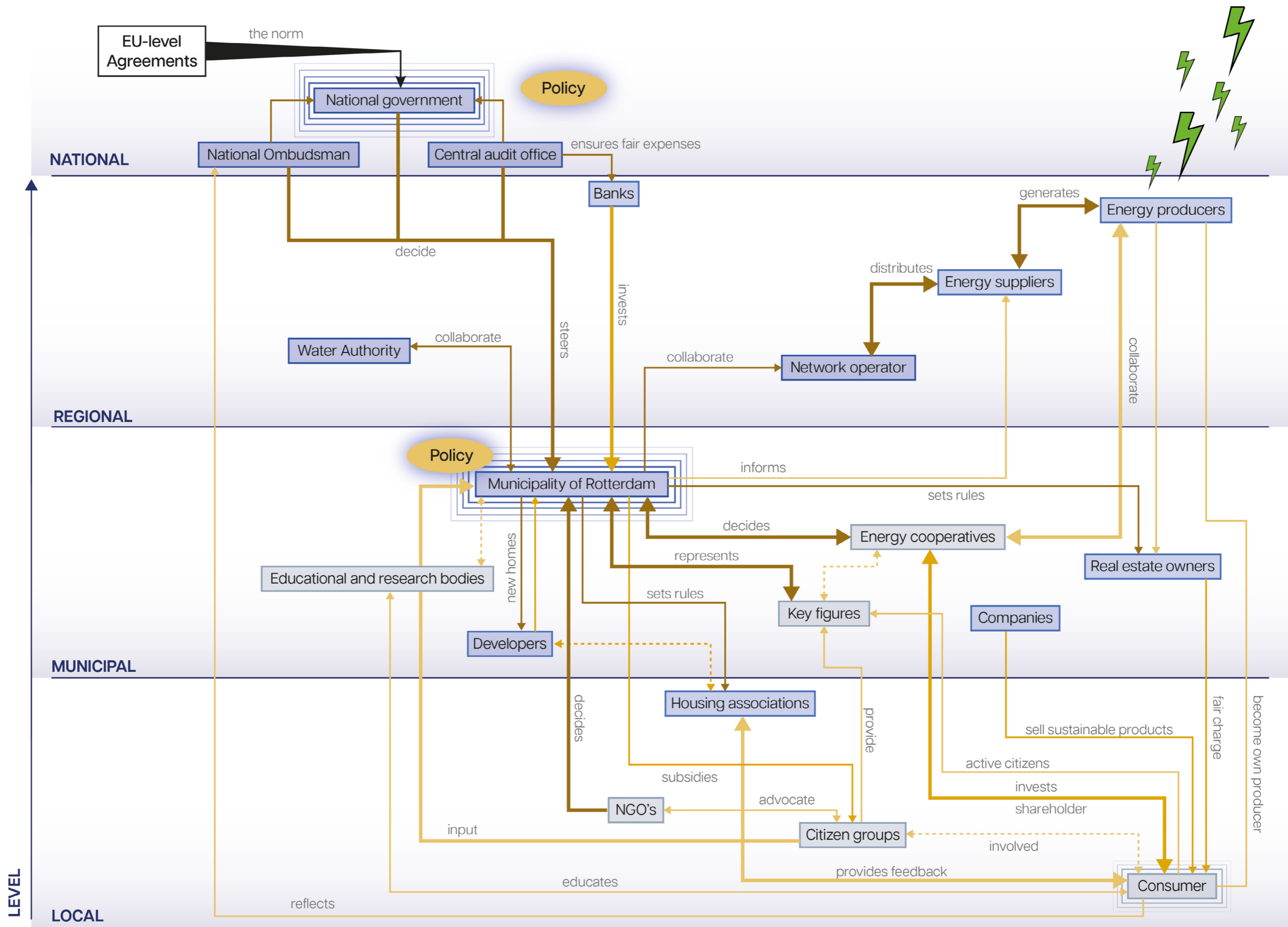
# Governance of the energy transition in Rotterdam



# A new governance structure

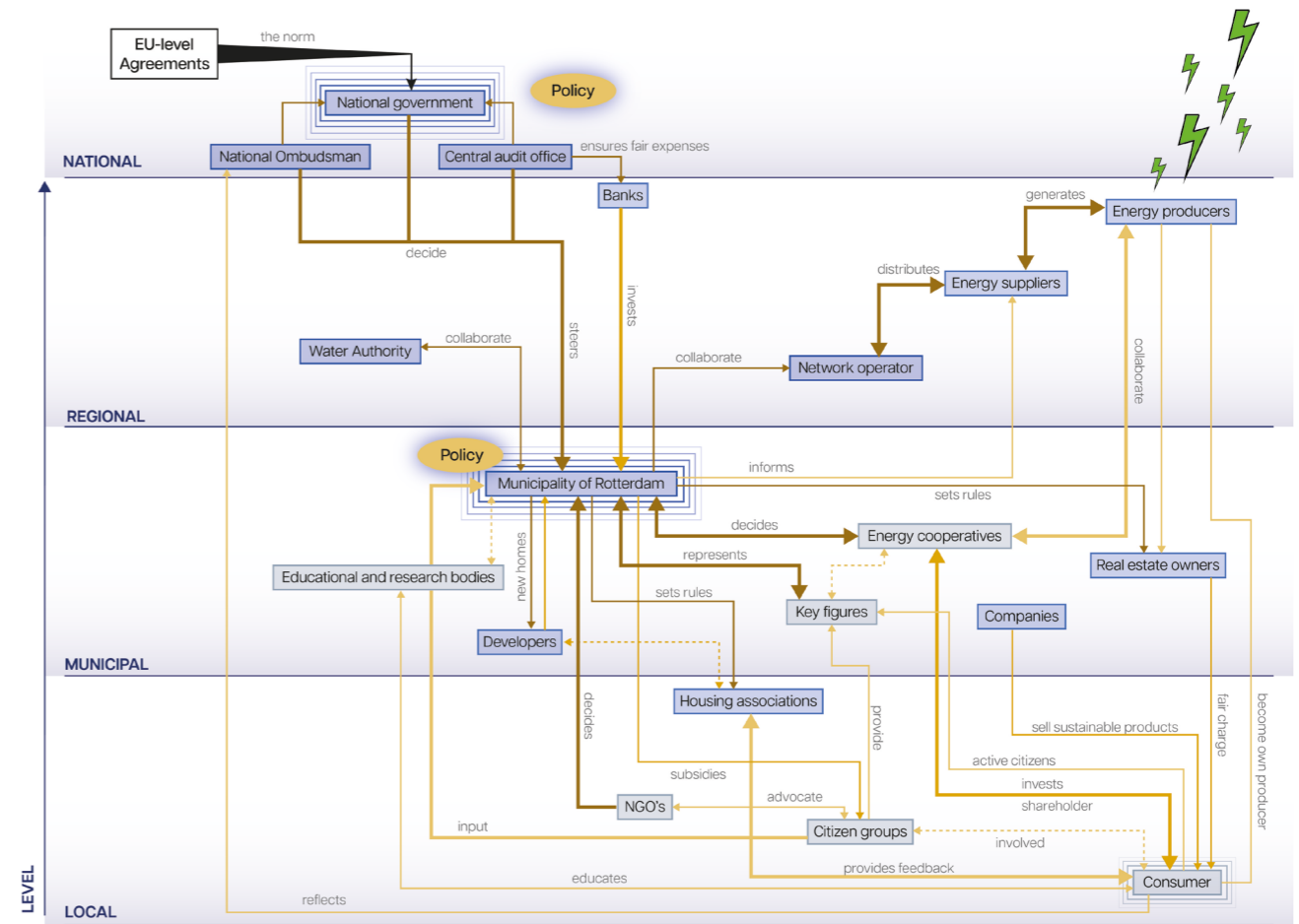


# Participatory governance of the energy transition in Rotterdam

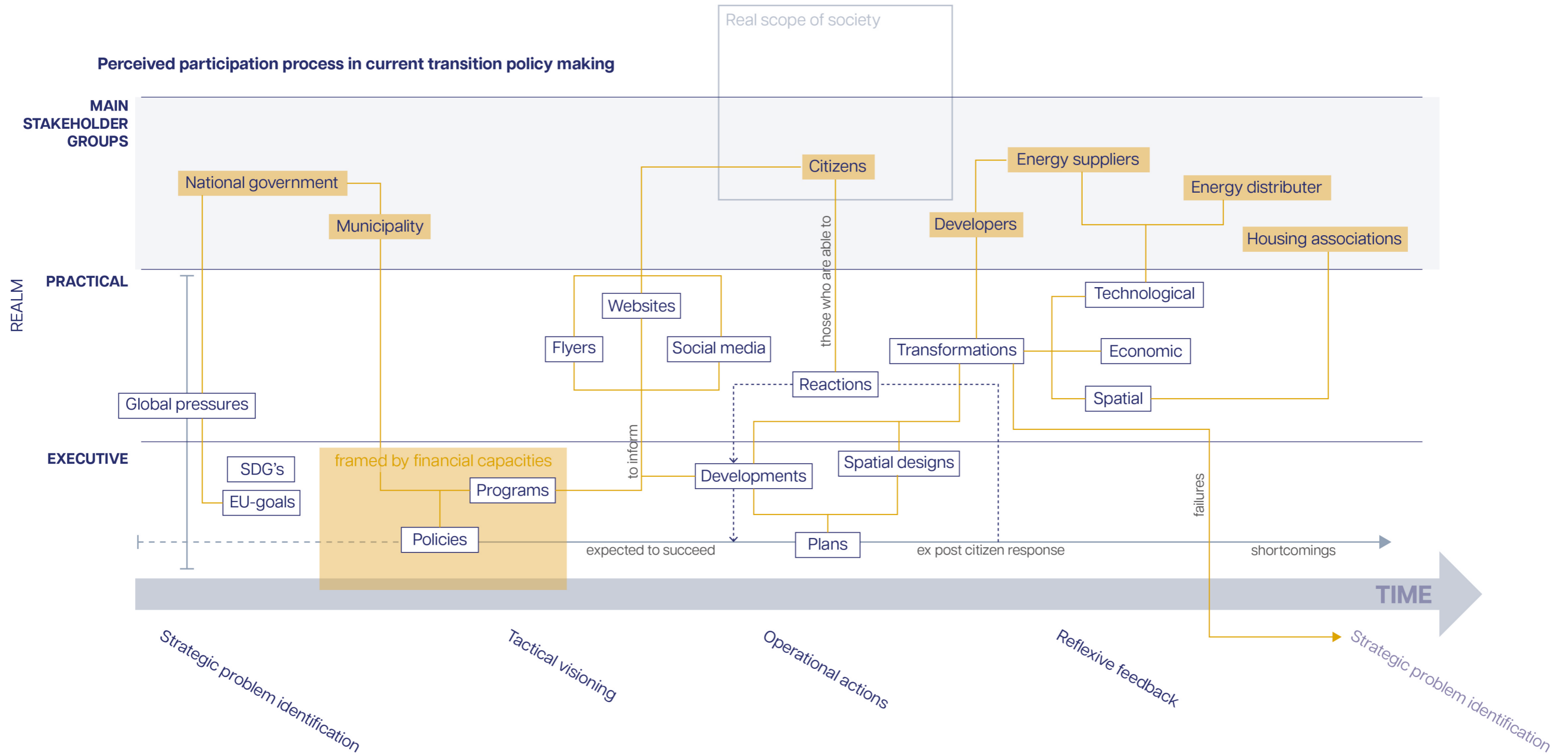




# A good direction for Hillesluis?

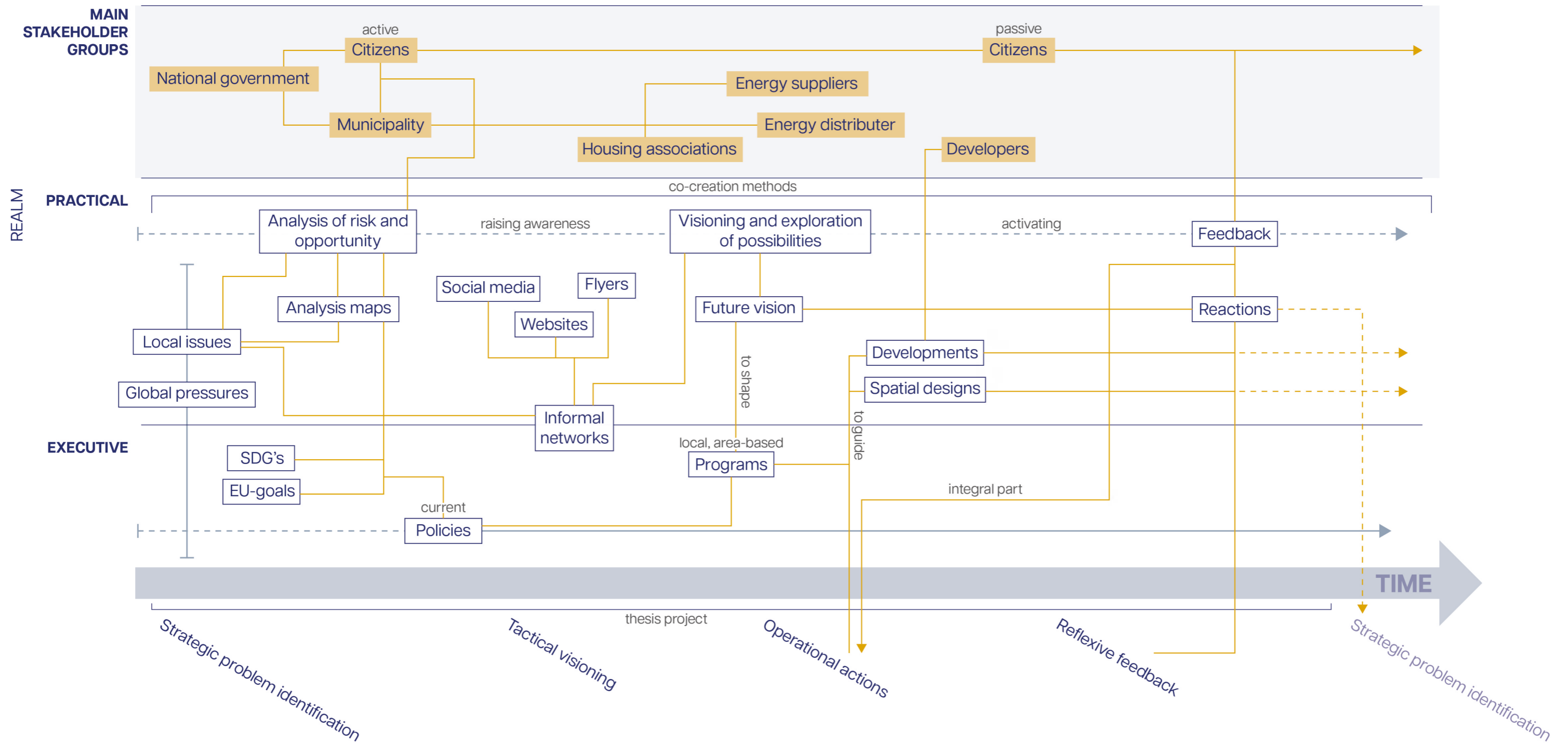


# Participation process



# Participation process

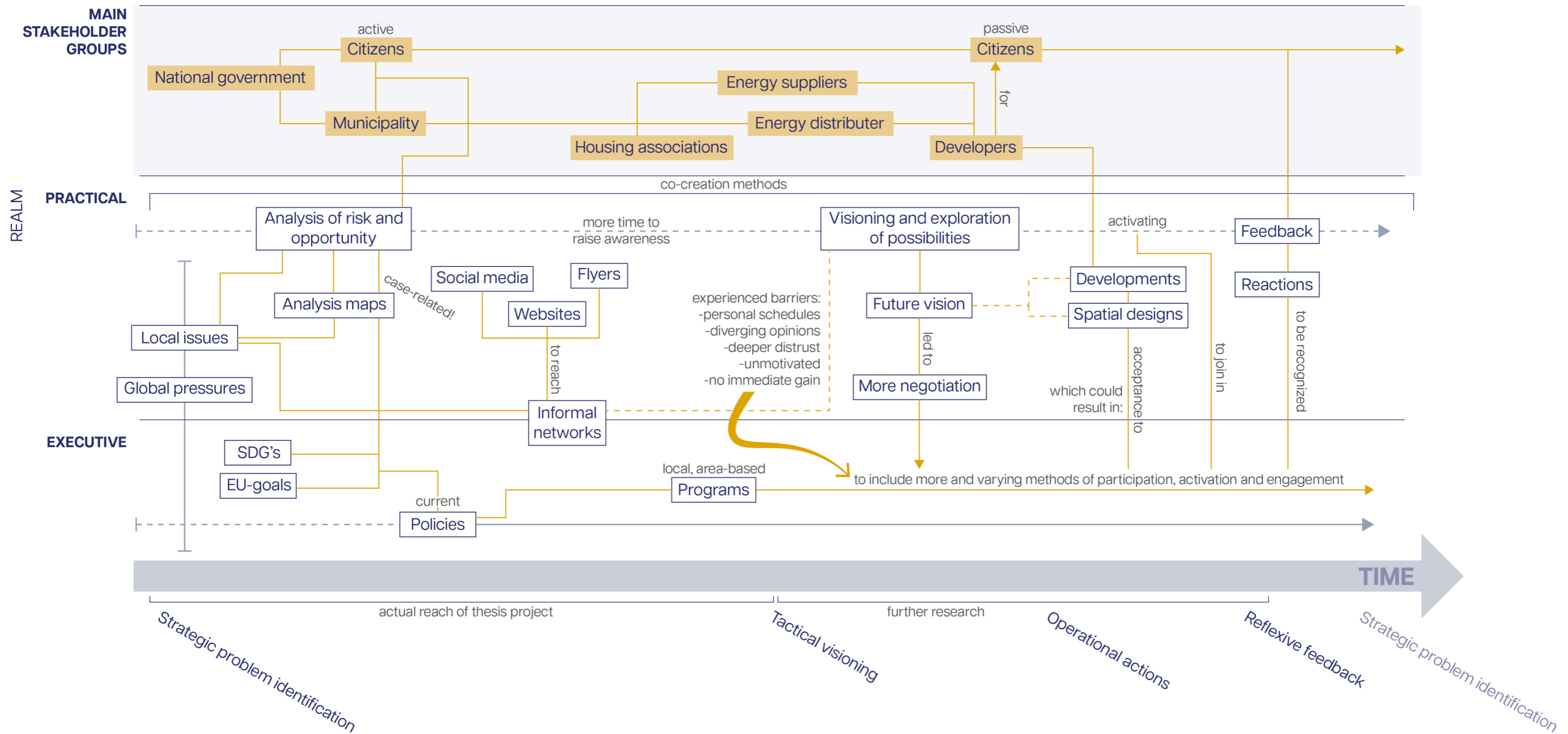
## Ideal and just participation process in transition policy making





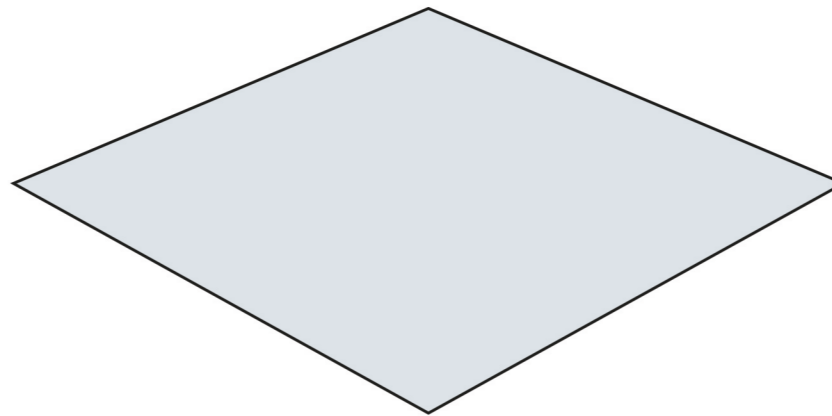
# Participation process

Actual trajectory of the participation process in the case of Hillesluis



# Recommendations

**POLICY**



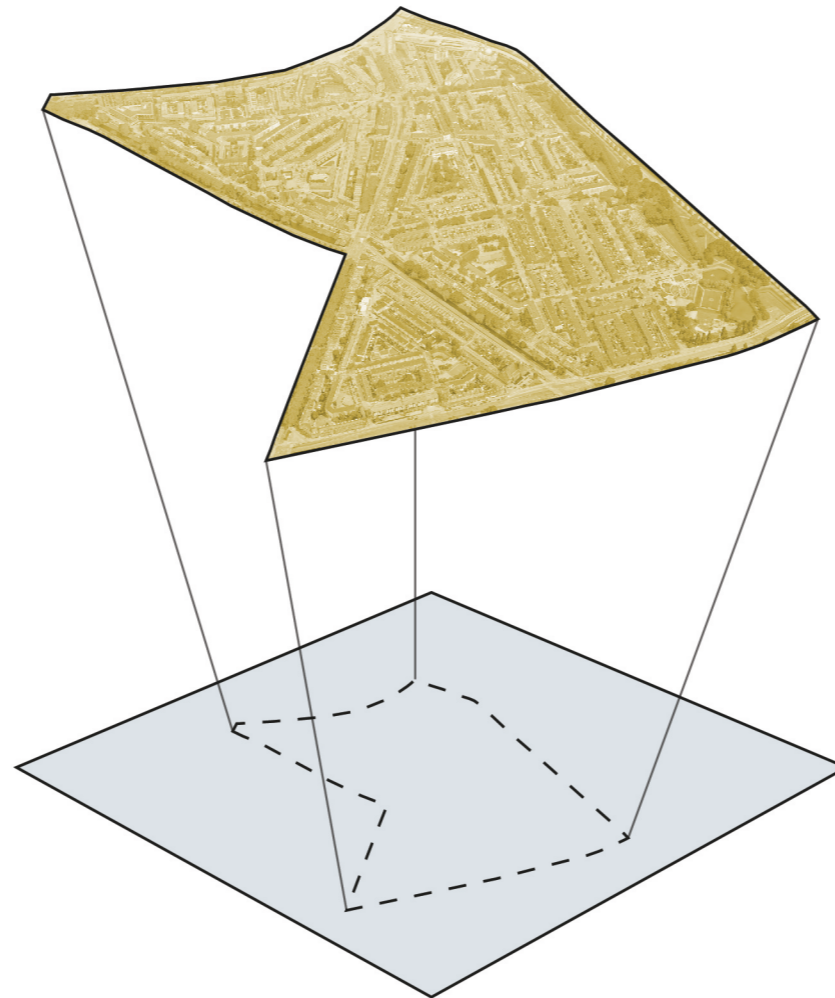
-Recognize diverse capacities

-Utilize and build upon local knowledge

# Recommendations

**ACTIONS  
FOR HILLESLUIS**

**POLICY**



-Create events and spaces to learn

-Activate to join in

-Build programs from own experiences



-Recognize diverse capacities

-Utilize and build upon local knowledge

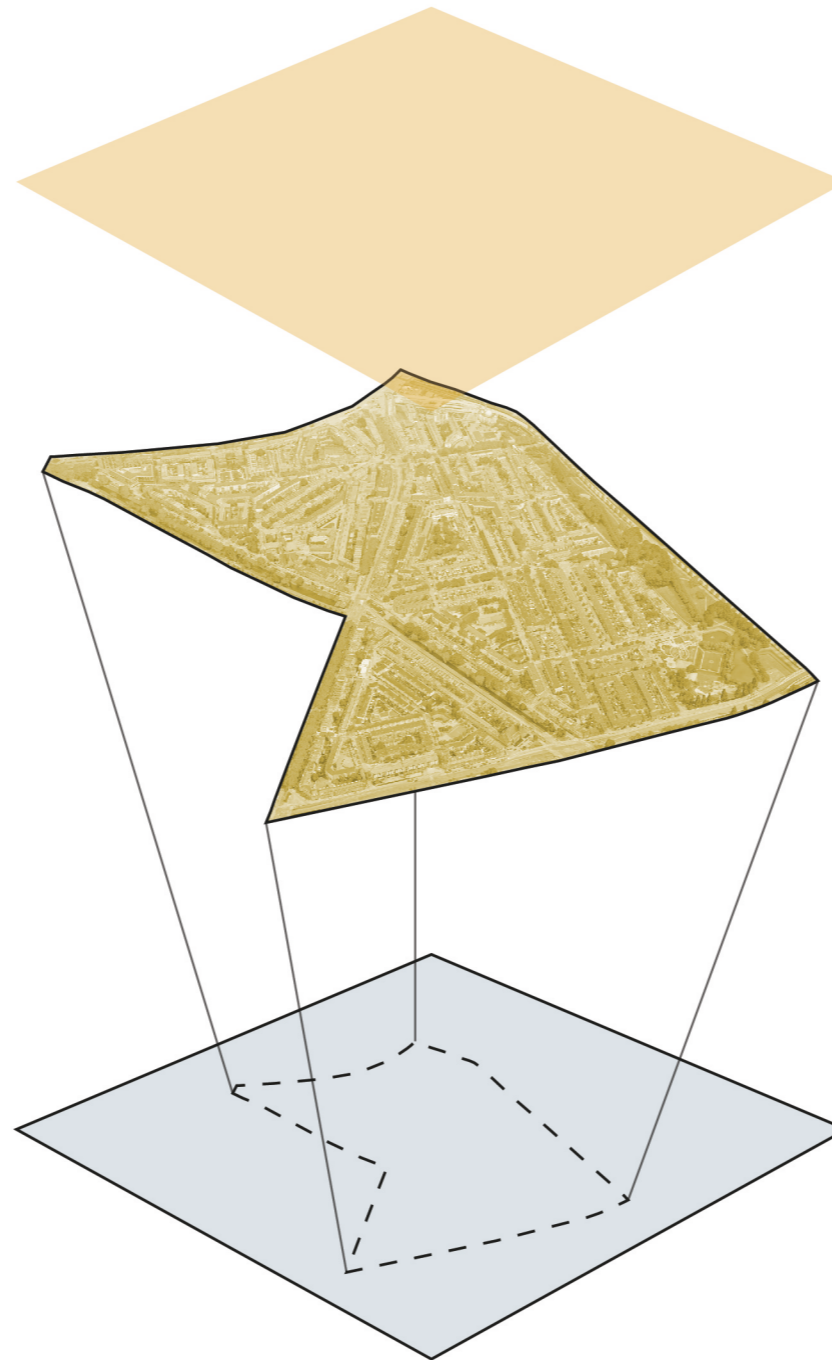


# Recommendations

**PARTICIPATION  
PROCESS**

**ACTIONS  
FOR HILLESLUIS**

**POLICY**



-Weekly, monthly, yearly moments

-Focus on raising awareness

-Lowering the threshold to participate



-Create events and spaces to learn

-Activate to join in

-Build programs from own experiences

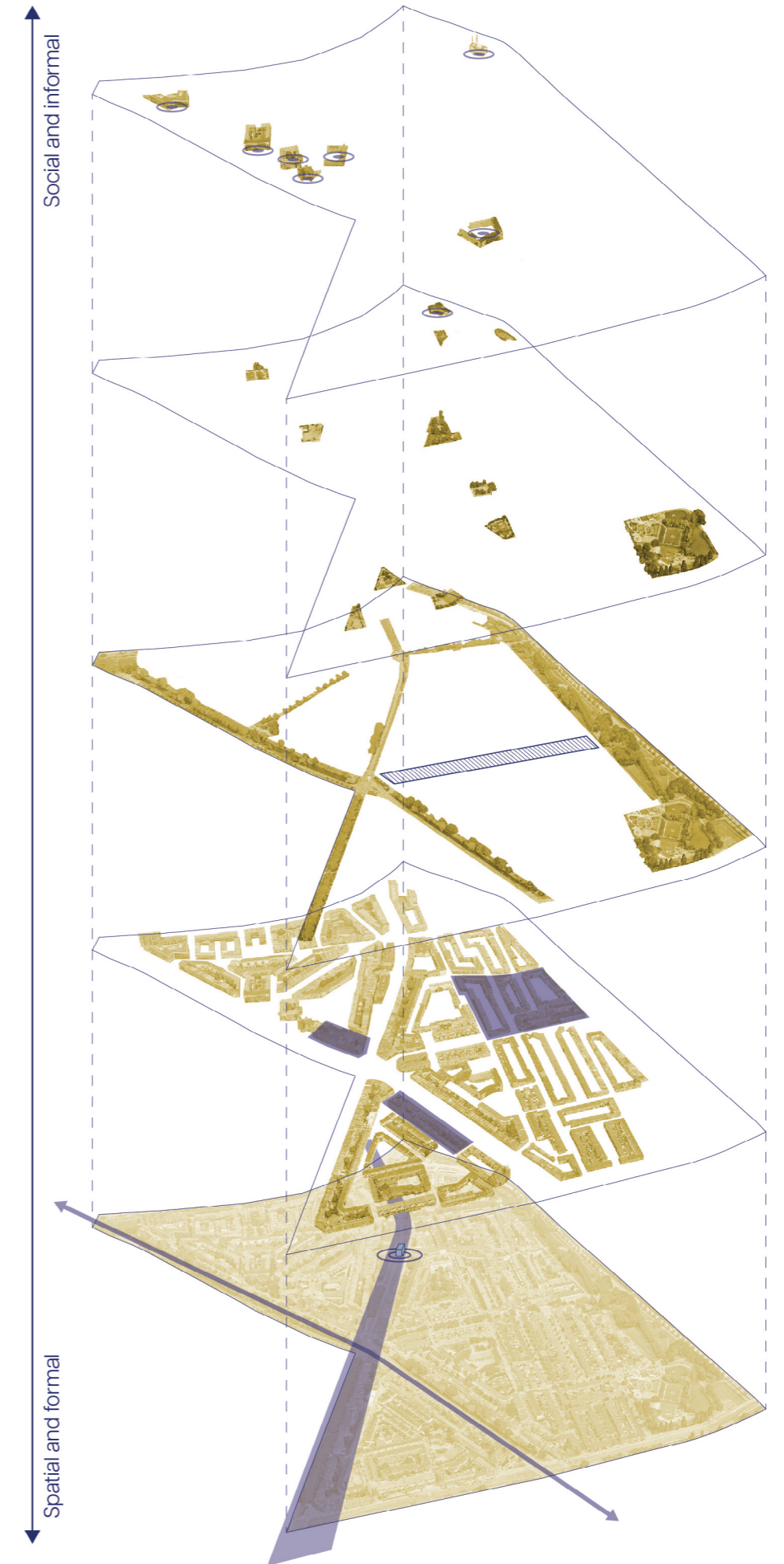


-Recognize diverse capacities

-Utilize and build upon local knowledge

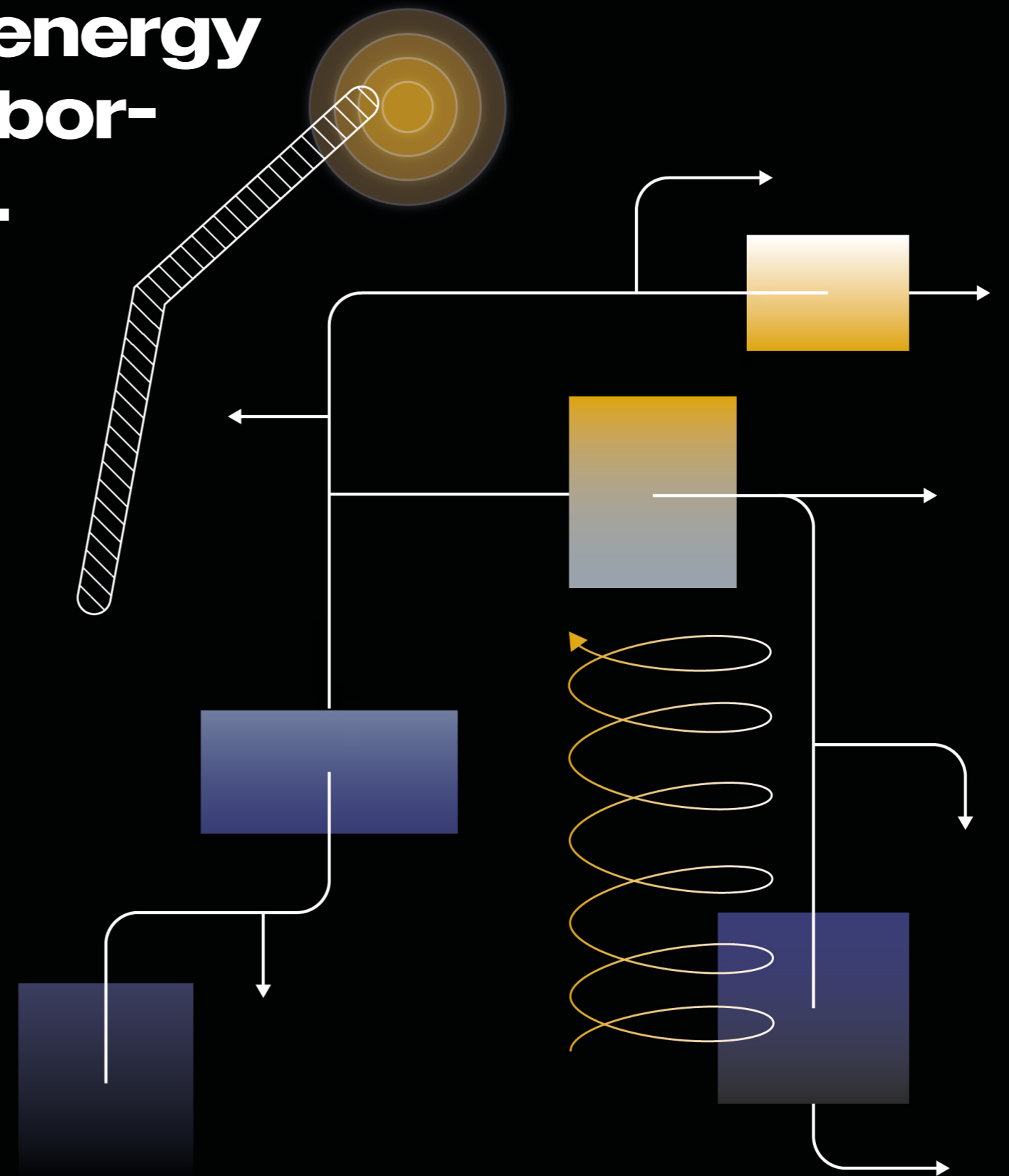
# Conclusion

**How can participatory planning practices facilitate multi-actor collaborations between people, policy and innovation towards a spatially just energy transition in Hillesluis?**



# emPOWERed

transitioning towards just energy futures in vulnerable neighborhoods in Rotterdam South.

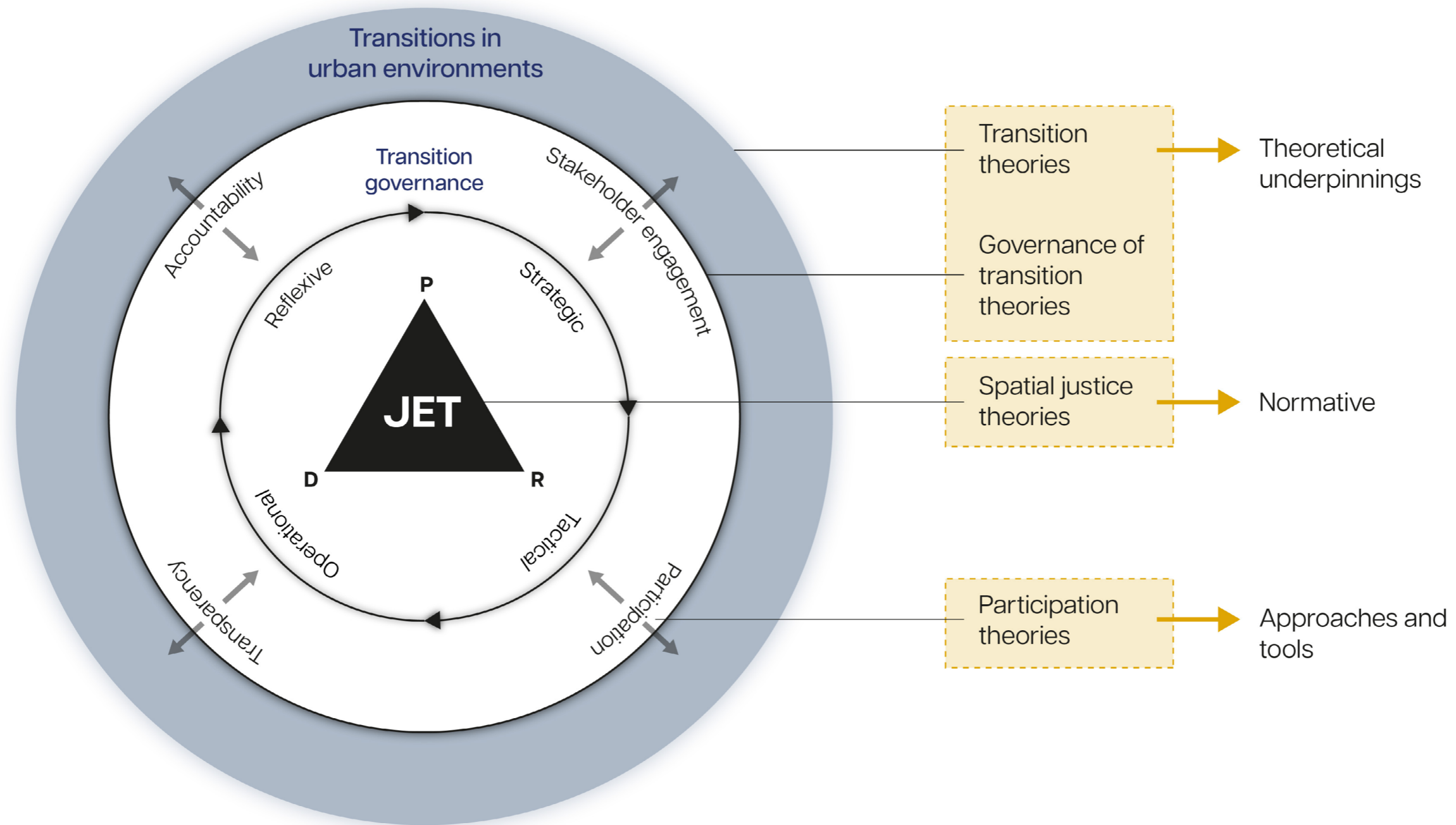


Sophie van Hal  
MSc Urbanism P5 presentation

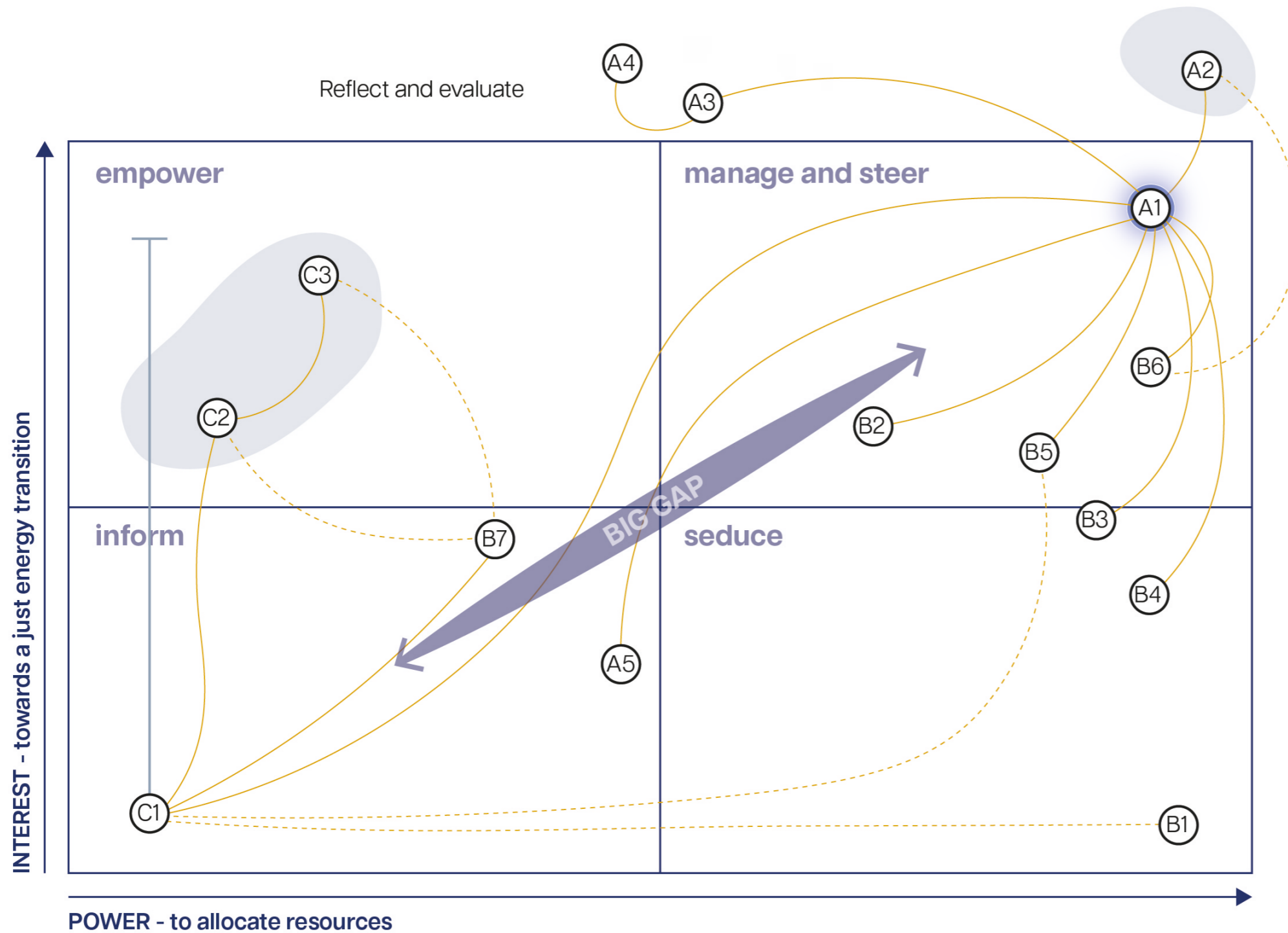
TU Delft  
21-06-2024



# Conceptual framework



# Stakeholders in the energy transition in Rotterdam



STAKEHOLDERS	
A - PUBLIC	(A1) Municipality of Rotterdam
	(A2) National government
	(A3) National Ombudsman
	(A4) Central audit office
	(A5) Network Operator (Stedin)
	(A6) Water Authority (Hoogheemraadschap van Schieland en de Krimpenerwaard)
B - PRIVATE	(B1) Real estate owners
	(B2) Developers
	(B3) Energy suppliers
	(B4) Energy producers (mostly harbor)
	(B5) Housing associations (Woonstad)
	(B6) Banks
	(B7) Companies
C - CIVIL SOCIETY	(C1) Consumer (Individual citizen)
	(C2) NGO's/Citizen groups
	(C3) Energy cooperatives
	(C4) Educational and research bodies

# Collaboration diagram

