



Groen  
Agenda

# 2023-2026 Green Agenda

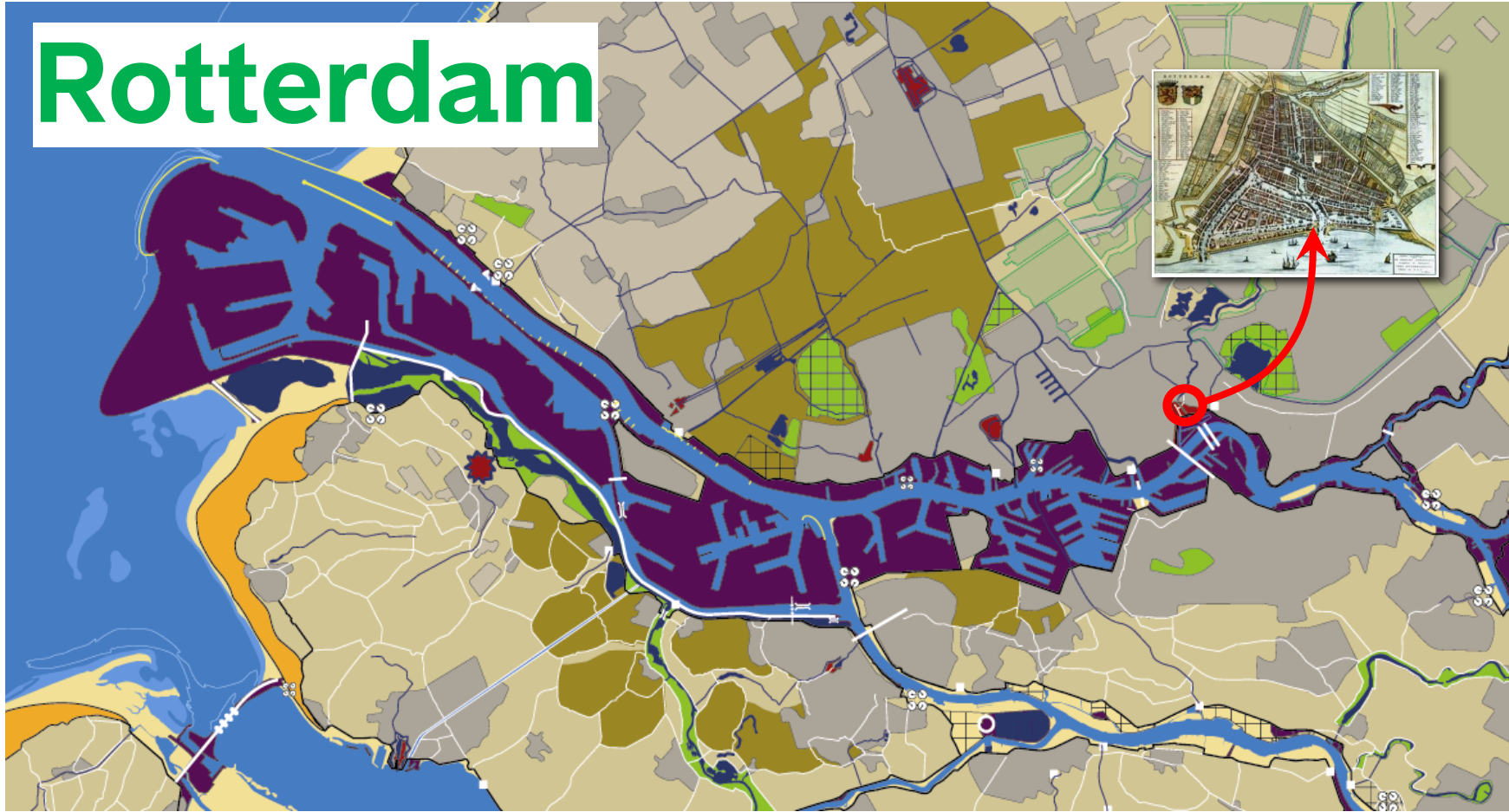
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Gemeente  
Rotterdam



# Rotterdam



## City

Area : 320 km<sup>2</sup>  
 Municipal Budget: 4,2 billion Euro's

## Region

Inhabitants: 3,600,000

## Port

Area: 105 km<sup>2</sup> (50 km<sup>2</sup> commercial sites)  
 Length of port area: 40 km.  
 Direct employment: over 70,000 jobs  
 Goods throughput: over 400 million tonnes of goods per annum



# Rotterdam

## Characteristics:

- 663.000 inhabitants
- Multicultural (170 nationalities)
- 28% households with children
- 20% younger than 19 years old
- 44% social rental houses (housing corporations)
- 20% of children live in poverty' (max 110% of social minimum)





Precipitation



Sea



River



Groundwater





Wednesday September 6, 2023, 4:29 PM

**Shocking graph with temperature increase in Rotterdam, new heat records daily**

## Heat wave in Hoek van Holland exceptionally early in the year

Flooding in Rotterdam: “Provide more greenery in public spaces”

Tuesday, October 10, 7:34 PM

**In the Bloemhof district of Rotterdam, thousands of homes are sinking into the ground**

Wednesday, November 15, 4:01 PM

**Rotterdam Airport measures above-average rainfall; possibly highest rainfall since measurements started**

Storm season in Rotterdam: more chance of flooding

LIVING

**Livable Rotterdam starts reporting center for mold homes: 'Black mold is disastrous for your lungs'**



# Cause and urgency

## A need for more and more varied greenery

- Districts with few parks and public gardens
- More Rotterdam residents > opportunities for walking, cycling and recreational activities
- Changing climate: heat, flooding
- Decrease in quantity and species of animals and plants
- Collaboration between climate adaptation, biodiversity and greenery programme teams





# Why add more greenery?

## Green is good!

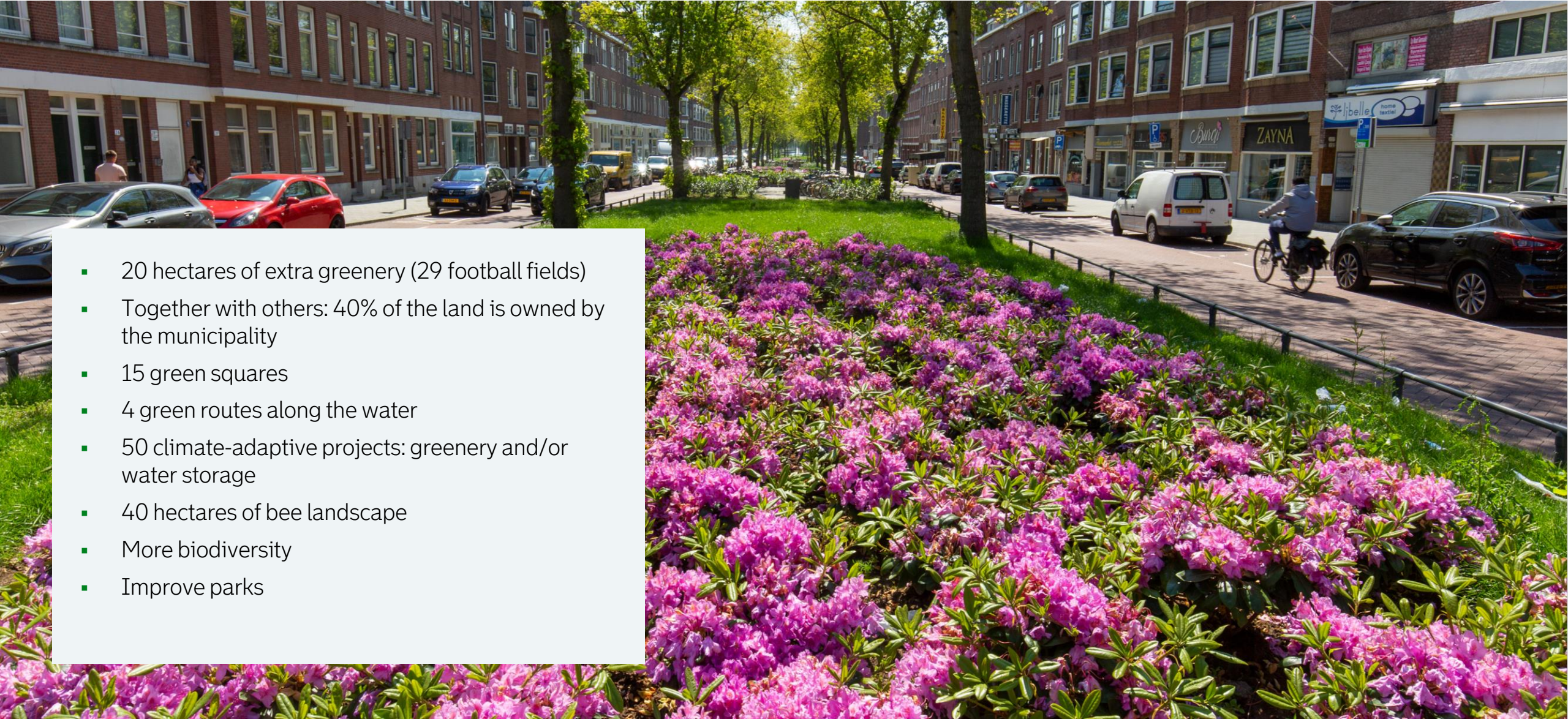
- It will make the city more attractive to live and work in
- Less stress, more recreational activities, exercise, contact
- Heat stress and flooding
- Biodiversity
- Property value





# Objectives

- 20 hectares of extra greenery (29 football fields)
- Together with others: 40% of the land is owned by the municipality
- 15 green squares
- 4 green routes along the water
- 50 climate-adaptive projects: greenery and/or water storage
- 40 hectares of bee landscape
- More biodiversity
- Improve parks





# Six tracks: adding green on all scales

1. Green close to home
2. Green in districts
3. Tackling the squares
4. Green routes along the water
5. Park improvements
6. Biodiversity and nurturing the greenery







# 1. Green close to home

## Stimulate by:

- contribution to resident initiatives
- Nature based schoolyards
- climate subsidy



# 2. Green in districts

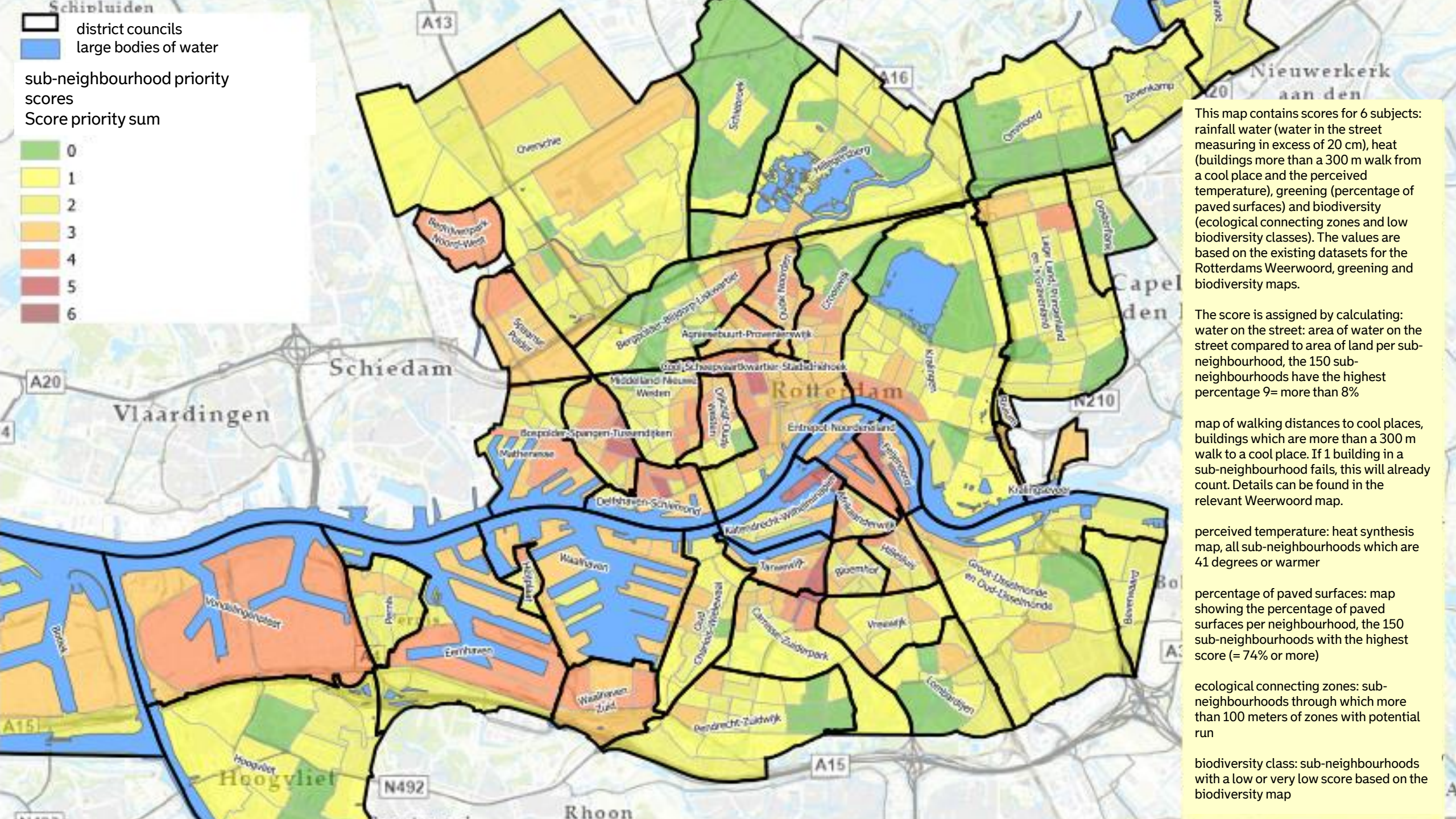


## Priority given to places which have scored badly on:

- distance to a cool place
- heat stress
- water problems
- Biodiversity
- In combination with planned maintenance

Tackling 50 climate-adaptive projects





district councils  
 large bodies of water  
 sub-neighbourhood priority scores  
 Score priority sum

- 0
- 1
- 2
- 3
- 4
- 5
- 6

This map contains scores for 6 subjects: rainfall water (water in the street measuring in excess of 20 cm), heat (buildings more than a 300 m walk from a cool place and the perceived temperature), greening (percentage of paved surfaces) and biodiversity (ecological connecting zones and low biodiversity classes). The values are based on the existing datasets for the Rotterdams Weerwoord, greening and biodiversity maps.

The score is assigned by calculating: water on the street: area of water on the street compared to area of land per sub-neighbourhood, the 150 sub-neighbourhoods with the highest percentage 9= more than 8%

map of walking distances to cool places, buildings which are more than a 300 m walk to a cool place. If 1 building in a sub-neighbourhood fails, this will already count. Details can be found in the relevant Weerwoord map.

perceived temperature: heat synthesis map, all sub-neighbourhoods which are 41 degrees or warmer

percentage of paved surfaces: map showing the percentage of paved surfaces per neighbourhood, the 150 sub-neighbourhoods with the highest score (= 74% or more)

ecological connecting zones: sub-neighbourhoods through which more than 100 meters of zones with potential run

biodiversity class: sub-neighbourhoods with a low or very low score based on the biodiversity map



# 3. Tackling the squares



- In densely built-up districts with a great deal of stone
- 15 squares, of which 5 with water collection
- Connected to planned maintenance
- For example: Persoonsdam, Slotboomplein, Rijnhoutplein





## 4. Green routes along the water

### A multitude of opportunities

- walking
- cycling
- recreational activities
- connecting neighbourhoods, the outskirts of the city and the region



# 5. Park improvements



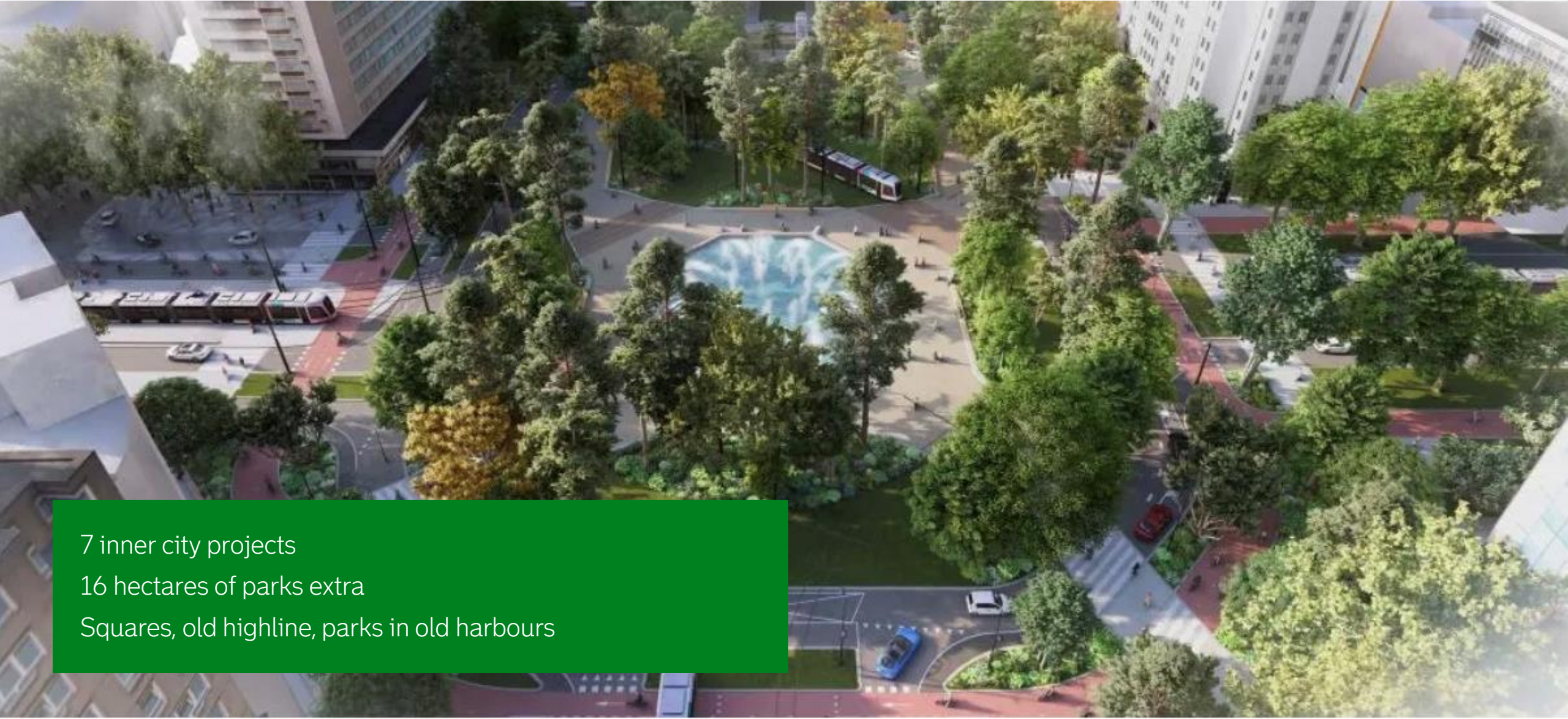
More resistant to busy periods

Attention devoted to biodiversity when replacing greenery

For example: Argonautenpark, Molenpark, Blauwe Reiger



# New parks: city projects



7 inner city projects

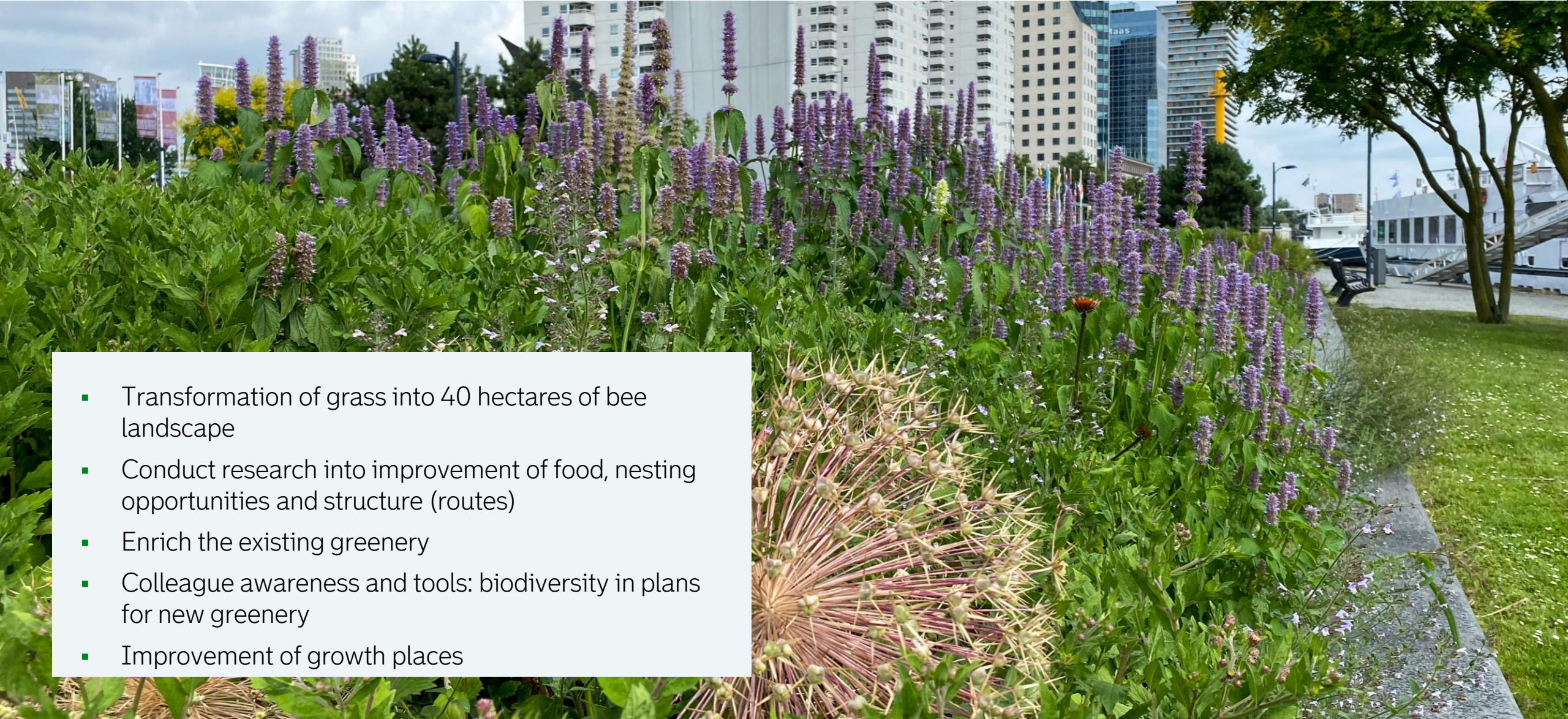
16 hectares of parks extra

Squares, old highline, parks in old harbours



# 6. Biodiversity and nurturing the greenery

- Transformation of grass into 40 hectares of bee landscape
- Conduct research into improvement of food, nesting opportunities and structure (routes)
- Enrich the existing greenery
- Colleague awareness and tools: biodiversity in plans for new greenery
- Improvement of growth places





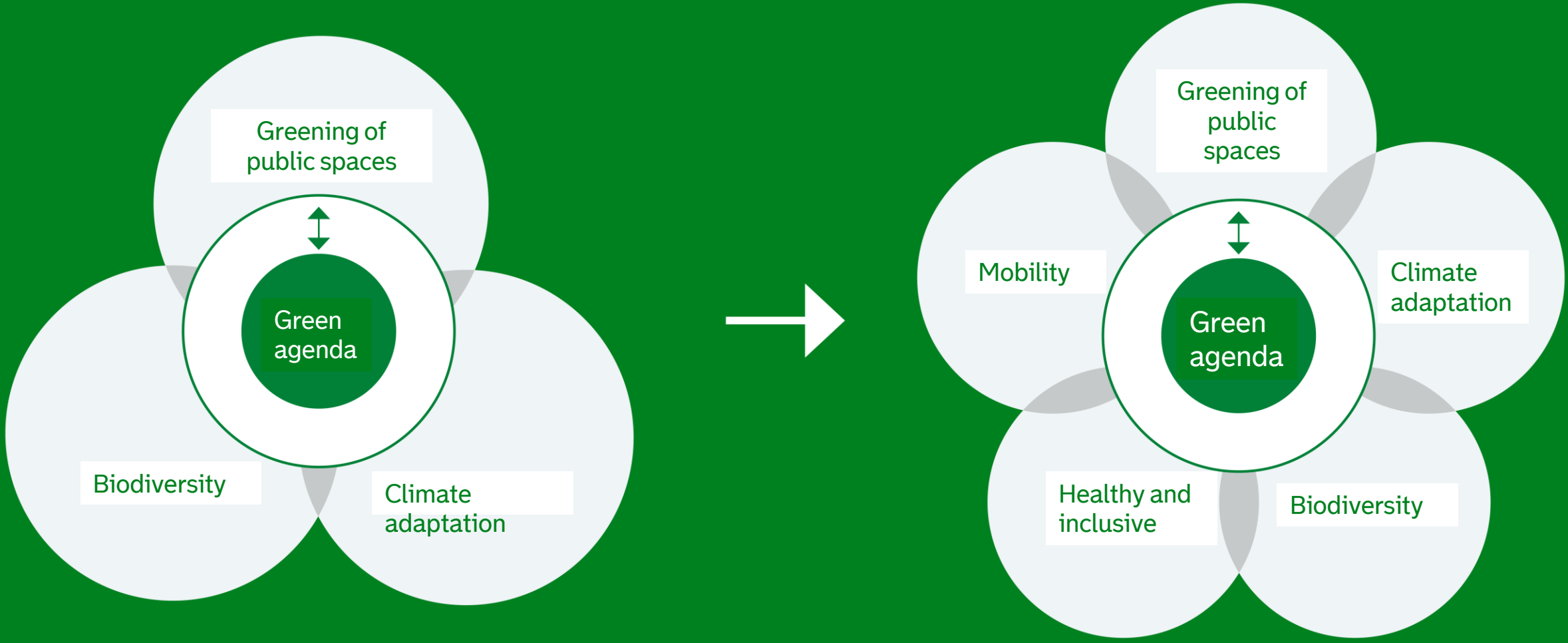
# Finance: extra money for green agenda

- 57 million euro's in total (4 years)
- 2 million per year for green close to home
- City projects have separate funding





# Coherence with other programmes







# Green-blue school school yards:

- Why?
- What is a green blue (nature based) school yard?
- The approach of Rotterdam
- Results and examples



# Why nature based school yards?

- Only 13% of children play outside every day
- 44% of children is not physically active enough
- 13% of children are overweight
- 25% of 13 year olds are nearsighted, screentime of children has increased





# What is a nature based schoolyard?



**Freedom, fantasy, adventure  
and development of movement  
skills**





# What is a nature based schoolyard?

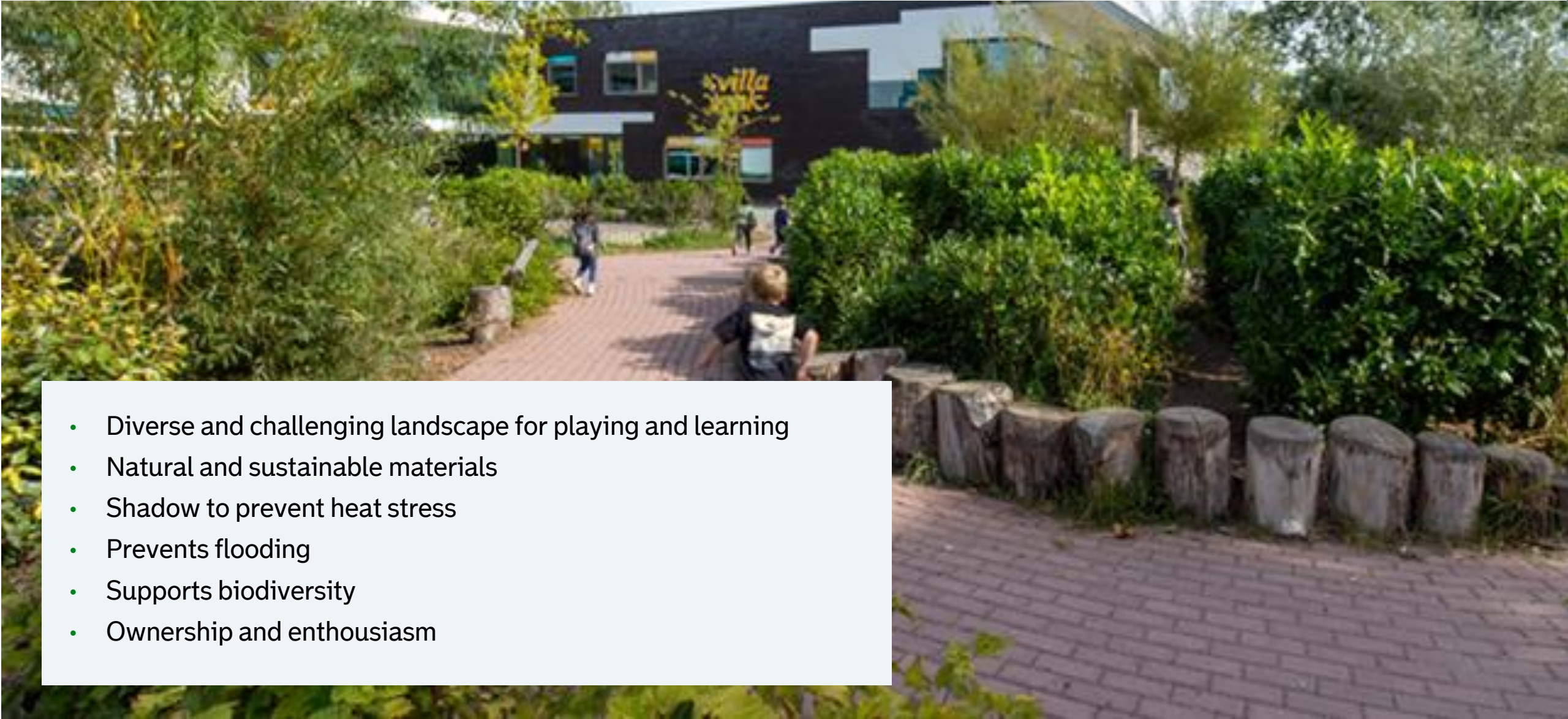


**Creativity, playing together,  
making constructions**





# What is a nature based schoolyard?



- Diverse and challenging landscape for playing and learning
- Natural and sustainable materials
- Shadow to prevent heat stress
- Prevents flooding
- Supports biodiversity
- Ownership and enthusiasm



# Rotterdam's green blue schoolyards



- € 400.000 subsidy for 5 schools per year
- Designing process together with schools
- Condition: accessible for neighbourhood
  
- 2 or 3 public squares per year
- Encouraging nature based schoolyards at new-build schools



# Example: KC de Vlinder





# Example: Oranjeschool



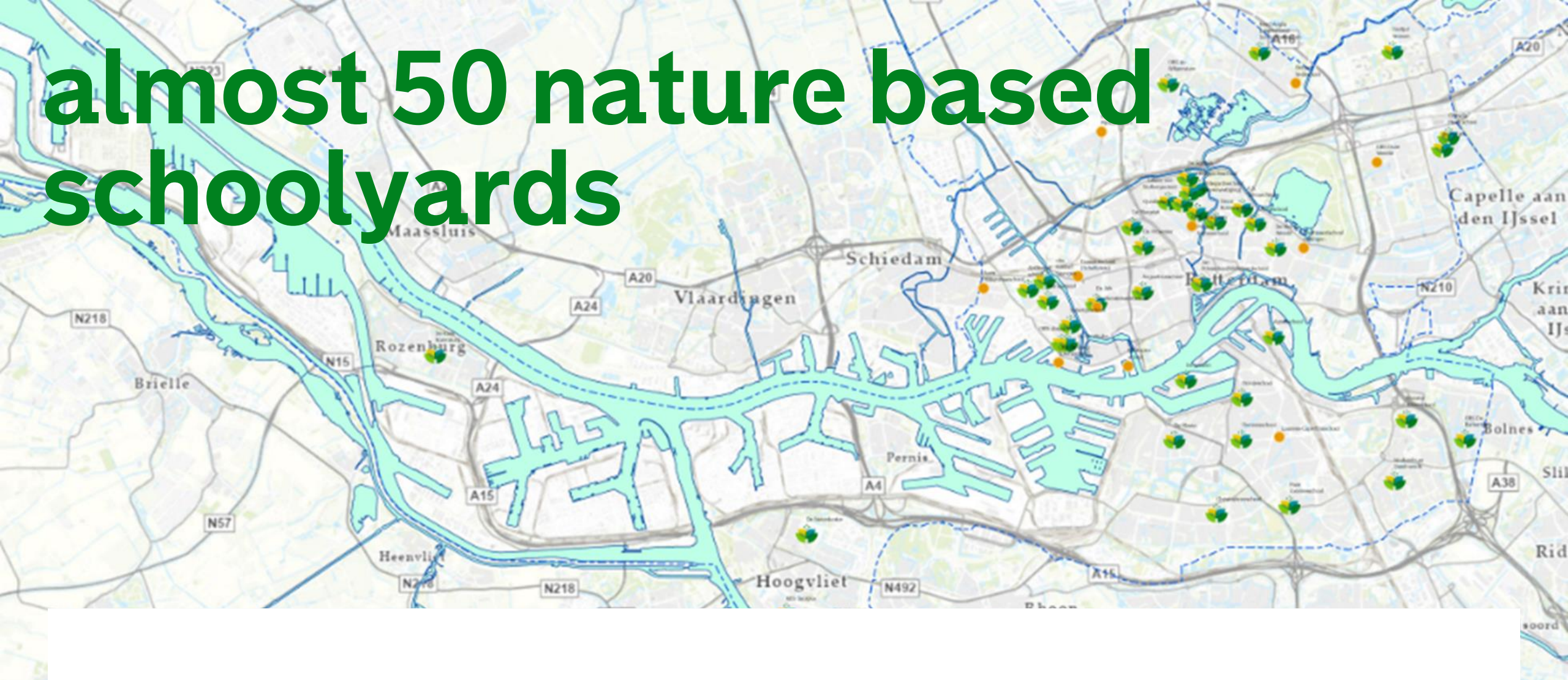


# Example: de Margriet





almost 50 nature based  
schoolyards



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**Thank you, Rotterdam is going green!**



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