

Transforming
an Industrial
Port Area into a
Circular Urban
Makers District

Activating Urban Commons in the Productive City

Dear European competitors,

European NL, Rotterdam Architecture Institute (AIR) and the municipality of Rotterdam are proud to propose five locations for European 15. All five have been designated 'high priority' development sites by the municipality..

This is the site brief of Vierhavensblok. In short, the challenge is to densify the site with new circular building blocks where working and living meet. These blocks are inextricably linked to the 'flows' and values present on site and embody the notion of a circular city. Also, they offer a variety of affordable work spaces that attract and maintain (starting) creative and cultural entrepreneurs.

In Search of 'Good Growth'

Rotterdam is growing. The city aims to build 50,000 new homes in the next decade and to vigorously enhance the quality and energy performance of the existing built environment. In short, Rotterdam is looking for

Colophon

European 15 Rotterdam

Initiated by Stichting European NL

In full-partnership with Rotterdam Architecture Institute

www.airrotterdam.eu

Launching partner

City of Rotterdam, department of urban development

Editor

Martine Zoeteman

Translation & copy editing

D'Laine Camp, In Other Words

Graphic design

Loes Sikkes

www.loessikkes.nl

Site and aerial photography of project sites

Frank Hanswijk

www.frankhanswijk.nl

With financial support of the City of Rotterdam
and Creative Industries Fund NL

Stichting European NL

Van Nelleweg 8065

3044BC Rotterdam

The Netherlands

Contact European 15 NL

E15@european.nl

www.e15rotterdam.nl

‘good growth’: building a compact, circular, productive, healthy and inclusive city with equal opportunities and high quality of living for everyone. It aims to be a vibrant and welcoming place for people of all walks of life, ages and beliefs. Citizens of Rotterdam should be able to live productive lives by working, learning, caring or in any other way contributing to the development of the city and its narratives. Therefore, it is important to remove barriers, to increase connectivity, to collaborate on ‘making city’ and to move forward on the rich Rotterdam tradition in architectural experiment and innovation.

Radical Renewal of Spatial Policy

For European 15, five sites have been selected within the city of Rotterdam that could catalyse opportunities on multiple levels. Places that could enhance the city’s social resiliency and contribute to ‘good growth’. These five sites will be a testing ground for the new Rotterdam vision and regulatory framework on spatial and socioeconomic developments, called the *Omgevingsvisie* (Environmental Strategy). This framework is currently being drafted by the municipality. Because of its holistic approach, it should accelerate innovative spatial solutions and sustainable socioeconomic developments. It is supported by an extensive participatory process and an action research program. The European 15 sites have been selected to implement this process, through research by design and its aim of implementing exemplary projects. The five assignments are in line with the theme of European 15 and the central themes

of the *Omgevingsvisie*: Productive, Inclusive, Circular, Healthy and Compact City.

Public Learning Programme

In addition to the European 15 competition process, there is an extensive public learning programme, including public events, workshops, masterclasses and a storytelling campaign. European 15 is initiated by European NL, Rotterdam Architecture Institute, the municipality of Rotterdam and aims to connect a strong network of committed and innovative private parties.

This period is a crucial moment in the urban development of Rotterdam. For the municipality, the possibility of acquiring diverse new ideas, testing the scope of the *Omgevingsvisie*, and at the same time providing opportunities to young talent, is the main reason for the cooperation with European 15.

Enter the European 15 competition and join the Rotterdam search for good growth and the urban work-and-live environments of the future.

Best regards,

European NL,
Rotterdam Architecture Institute
&
Municipality of Rotterdam

VIERHAVENSBLOK

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Rotterdam x European 15

The fifteenth edition of European centres on the productive city as a design and development challenge. European NL and the Architecture Institute Rotterdam have set up a partnership for European 15 and decided to work together with the municipality to focus on five Rotterdam locations that are each exemplary for the current challenges the city faces. Through the international platform of European Europe, young design teams are challenged to work on these questions. The express ambition of the competition is to award the five winning teams a follow-up contract in line with their design proposals.

To Rotterdam, its participation in European 15 also presents an opportunity to field-test the *Concept Omgevingsvisie* (Concept Environmental Strategy Rotterdam). The pursuit of a densified city (a) with resilient residential environments requires reciprocal considerations between the need for productivity (b), health (c), inclusiveness (d), and a sustainable, circular living environment (e). The recently drafted *Concept Omgevingsvisie* (also see text in box) puts these five perspectives on the city on the agenda in mutual coherence. A design competition aimed at innovation must take this ongoing thinking and development process into account and ideally also inform it. Taking productivity as a starting point, the European 15 challenges will therefore also address the other cornerstones of the *Concept Omgevingsvisie*. European 15 is partly aimed at acquiring knowledge about the biggest post-war change in the field of spatial planning in the Netherlands.

Radical Renewal Spatial Policy in the Netherlands

ENVIRONMENTAL ACT

The Omgevingswet (Environmental Act) is a Dutch act that will enter into force in 2021. The Environmental Act is about the physical living environment, in other words: about everything we need to live, work, study and recreate, such as water, air, soil, nature, roads, energy and buildings. At this time there are many separate rules and regulations that concern our physical living environment. When the new act is in force, all those different rules and regulations will have been combined into a single, coherent act. The Environmental Act not only ensures that there are fewer rules, but also that these rules are clearer and more accessible. In addition, it will be easier for residents and entrepreneurs to start initiatives together. The municipality monitors and advises what possibilities there are.

ENVIRONMENTAL STRATEGY NL

The Environmental Act requires that all municipalities and provinces draft a local environmental strategy that reflects how each municipality or province will deal with developments in

the physical living environment now and in the future. Central government also draws up an environmental strategy. An environmental strategy is a story, image or website by which the municipality shows how it wants to organize its physical living environment.

ENVIRONMENTAL STRATEGY ROTTERDAM

Rotterdam takes developments that affect the use of space, such as climate change and population ageing, as well as the growth of the city, into account. Today, the city houses about 644,000 people. This number is growing and every day, in addition, thousands of people come here to work, study, spend leisure time or because they have to go to hospital. That is a lot of space users. However, the space is limited. That is why it is important to think about which activities go where. The green and the water need space, for example, as do new homes, solar energy, waste collection as well as everyday facilities within walking and cycling distance.

Rotterdam's Environmental Strategy is not only about the city or the centre of Rotterdam, but also about the port area and about Hoogvliet, Rozenburg, Pernis, Heijplaat and Hoek van Holland. Very different areas that are all part of Greater Rotterdam. Different things are important in different areas. But whatever the area, we always look at the whole. Are there enough dwellings, is there proper public transport, outside public space, greenery, schools and care facilities within walking and cycling distance and are the air and water clean? Rotterdam has developed a *Concept Omgevingsvisie* in which it summarized the above in five perspectives:



Compact City Rotterdam develops into a densified, attractive city by the river



Healthy City Rotterdam makes healthy urban living possible



Inclusive City Rotterdam offers space for encounter and participation

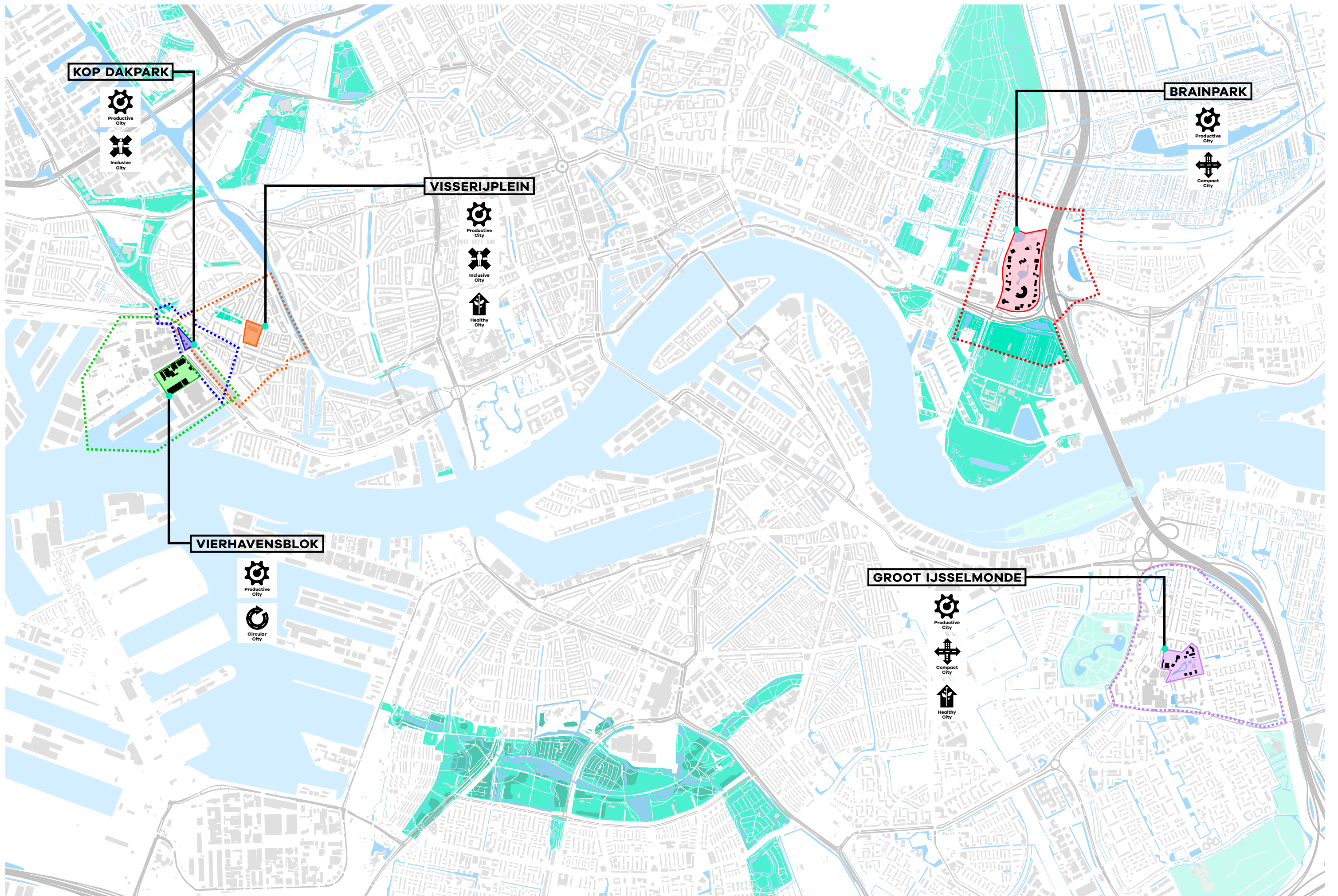


Circular City Rotterdam offers space for sustainable energy and recycling



Productive City Rotterdam makes room for The New Economy

The definitive *Omgevingsvisie Rotterdam* (Environmental Strategy Rotterdam) will be published in 2020.



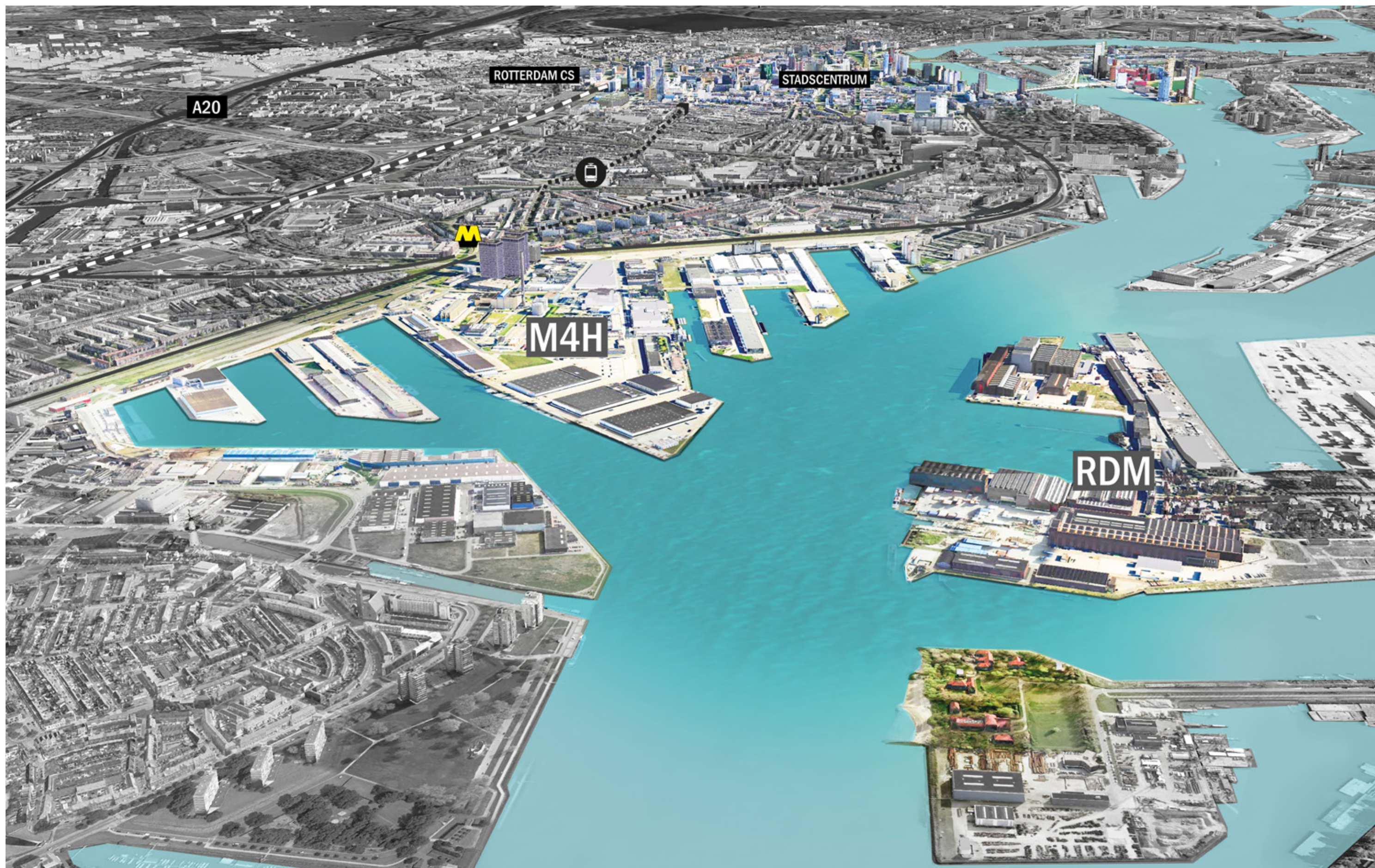
URBAN CONTEXT

Innovation at the Boundary between City and Port
 Working on Twenty-first Century Skills
 Making Room for the Manufacturing Industry
 Transition to a Sustainable, Circulair City

The City of Rotterdam seeks opportunities in the combination of accommodating its growth, shaping the transition from traditional industry to the next economy, and creating a more sustainable, and thus circular, city. Building on a long tradition of architectural experiments and engineering the urban metabolism of the city and its port, it now calls on citizens to contribute collectively to smart circular solutions for innovative work-and-live environments, while contributing to the renewal of the port area.

Innovation at the boundary between city and port

Rotterdam has always been a port city. In recent decades, however, the city and port have grown apart in the physical sense. The port moved in the direction of the sea, the city took over old port areas and shot up towards the sky. The boundary between city and port is particularly crucial to the quest for innovation and ways to further develop the port city, as it consists of outdated port areas that provide the perfect conditions for the invention of ways to renew the industrial economy: close to the city, plenty of space and including rich cultural heritage. New ideas need old buildings! as Jane Jacobs would say. Moreover, these areas allow the linking of transitions in the field of energy and raw materials to the associated socioeconomic and spatial development of the city. In Rotterdam, the port and the city face this transition together, as the two strongly connected components of a single urban system.



The Rotterdam Makers District, RDM and M4H, on both sites of the Maas

Source: 'Toekomst in de maak. Ruimtelijk raamwerk voor Merwe-Vierhavens Rotterdam' / DELVA Landscape Architecture & Urbanism

Working on Twenty-first Century Skills

Rotterdam wants to be a productive city and accommodate different types of productivity that fit the different characters of its districts and inhabitants. Employment in Rotterdam is changing. Companies are expected to computerize further in the next two decades, causing certain jobs to change and disappear. An important section of Rotterdam's population will find it hard to keep pace with this digital society, such as the often vocationally educated and sometimes vulnerable inhabitants of the neighbourhoods in the Merwe-Vierhavens District. At the same time, good marketing has ensured that craftsmanship and 'the experience' are now increasingly important. In order to keep up with the new economy, there is a growing need for twenty-first-century skills in Rotterdam.

Making Room for the Manufacturing Industry

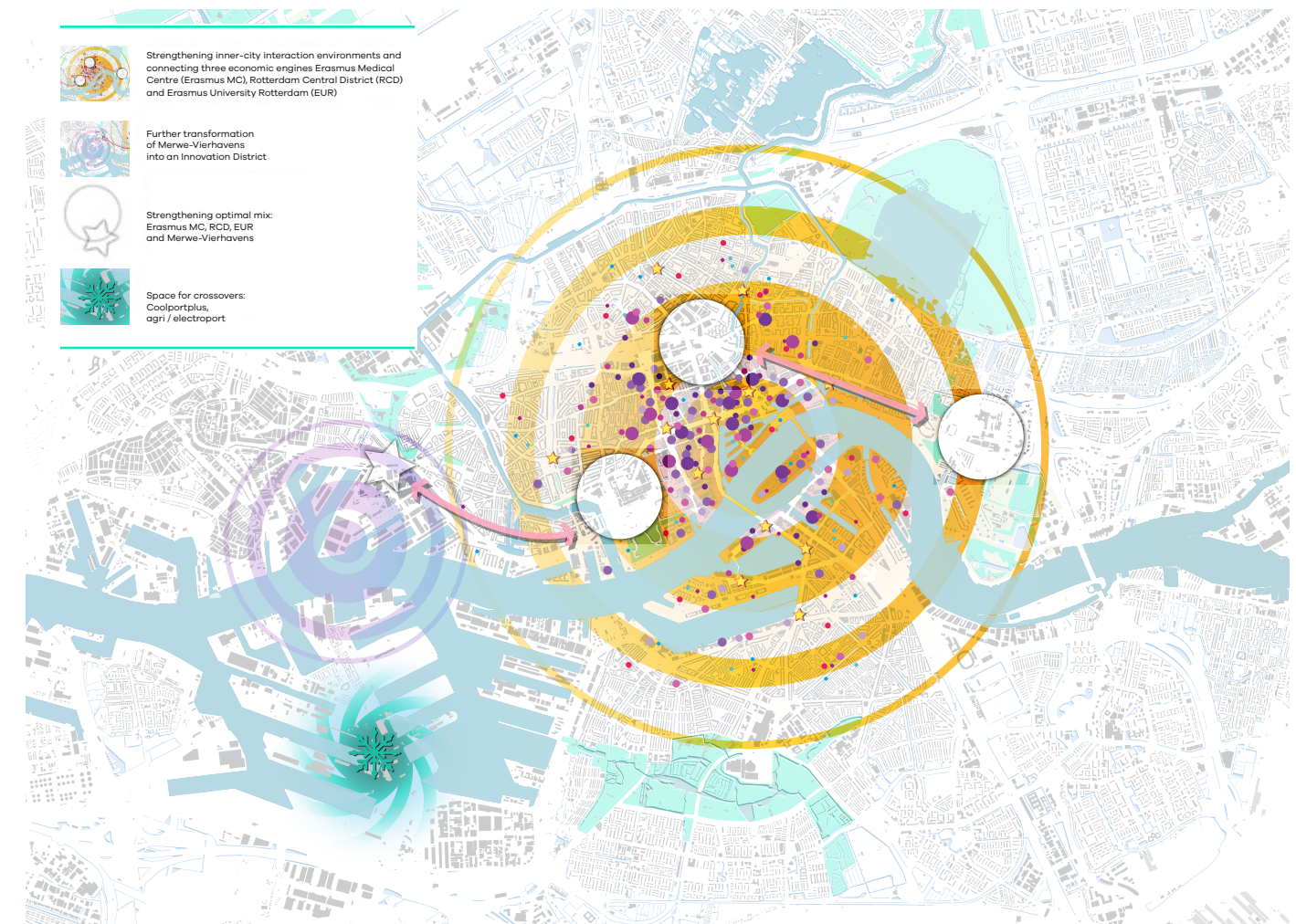
The new manufacturing industry – that is: the manufacturing industry in a new form, made possible by digitization and robotization and the use of materials that are not harmful to people and the environment – is an important success factor of an economy in transition. The key to the success of this type of manufacturing industry is its proximity to creative talent, markets and knowledge centres. In addition, this industry needs flexible and affordable work spaces. The new manufacturing industry is a driver of innovation in regional value chains and creates above-average numbers of new jobs.

Rotterdam is making room for the manufacturing industry in the Rotterdam Makers District: the RDM area and the Merwe-Vierhavens District (M4H) together will be the innovative manufacturing industry's regional hub. This is where the transition to the new economy of port and city is put into practice. This is where port development and urban development come together. Over the past ten years, the RDM area has already developed in the spirit of the Makers District into a hotspot for technological training institutes complemented by research facilities and maritime and technology companies. The Innovation Dock comprises flexible spaces for start-ups and experiments. In the year 2019, the RDM area is almost in full operation. The M4H District is still at the beginning of its further development into an innovation environment.

In the Makers District, young companies can grow into large, established companies. Young people are familiarized with technology. New technologies are not only invented, but also tested and applied. They are visible to everyone. The area will be the whole region's breeding ground, both a testing and a show ground for the future circular economy.

Transition to a Sustainable, Circulair City

Rotterdam aspires to develop into a city that is at the forefront of the transition to sustainable energy and circular processes. In the circular city, there is no waste. Inhabitants and businesses use energy, water and raw materials efficiently. To make this possible, the traditional process of producing, consuming and disposing of products is ended. Instead, circles are closed wherever possible. This reduces the use of energy, water and raw materials as well as lowers CO2 emissions. In addition, renewable sources are used to generate energy. Innovation, new business activity and employment are facilitated. Collectivity is the basis for circularity: knowledge, space and flows are shared in physical and digital networks. Collaboration and information sharing create new, interesting connections that lead to ground-breaking circular initiatives.



Strategic planning map next economy

Source: 'Kaart van de Stad'

STUDY AREA

History Vierhavens District
Port Area in Transition to Makers
District

**Historic aerial photo of M4H**

Source: 'Toekomst in de maak. Ruimtelijk raamwerk voor Merwe-Vierhavens Rotterdam'

History

Vierhavens District

Vierhavens is a port area in Nieuw-Mathenesse in Rotterdam-West. The area owes its name to four harbours for the transhipment of mixed cargo – Keilehaven, Lekhaven, IJsselhaven and Koushaven – that were built in this part of Rotterdam between 1912 and 1916. In the 1970s, the transhipment of general cargo declined drastically due to containerization. In the 1990s, the area was renewed. The eastern part of Lekhaven was filled in and its warehouses demolished to make room for the construction of refrigerated and deep-freeze warehouses for the storage and transhipment of fruit and fruit juices. The construction of Merwehaven started in 1923 and was completed in 1930. Unlike other Rotterdam harbours of that age, Merwehaven is still partially in use. However, this is finite. Merwehaven was constructed as a mixed-cargo harbour. Fruit was transhipped here as well. In 1971 a complex of fruit warehouses was opened with a storage capacity of 400,000 units. This complex was expanded in 1985. Today, it includes 43,000 m² of air-conditioned warehouses.



Lekhaven, 1965

Source: 'Toekomst in de maak. Ruimtelijk raamwerk voor Merwe-Vierhavens Rotterdam'

Port Area in Transition to Makers District

Creativity and entrepreneurship are interconnected. They have room to grow in Rotterdam, more specifically in the M4H District. Part of the Makers District, M4H is turned into a vibrant district that features a mix of new manufacturing industry, urban facilities, housing, culture and a circular economy. Including a substantial number of dwellings – about 3,500 to 5,000 by 2035 – M4H contributes significantly to Rotterdam's inner-city building challenge of 50,000 dwellings. The innovative concept that is presented here ensures that the area makes an important contribution to attracting and retaining the people needed to make the city and port of the future.

M4H will wholeheartedly focus on the substantiation of the ambition of collectivity as the basis for circularity that is central to the area. Innovative work environments, dwelling types and smart mobility allow the sustainable growth of the city and contribute to the renewal of the port, among other things by companies that grow from the start-up stage. M4H has many seedling innovation environments. An innovation environment requires a mix of functions and a rich variety of business environments: cheap and expensive, small and large-scale, mixed and separate working and living spaces. Flexible and affordable spaces and communal facilities are important to makers. Pioneers and start-up companies will find their niches; there is room for experiments and events in free spaces in old buildings and on empty lots; established innovative companies will feel completely at home there. Incubators and shared facilities will meet a growing need. In 2019, the first inhabitants will move into the area and new, appealing projects will be completed.

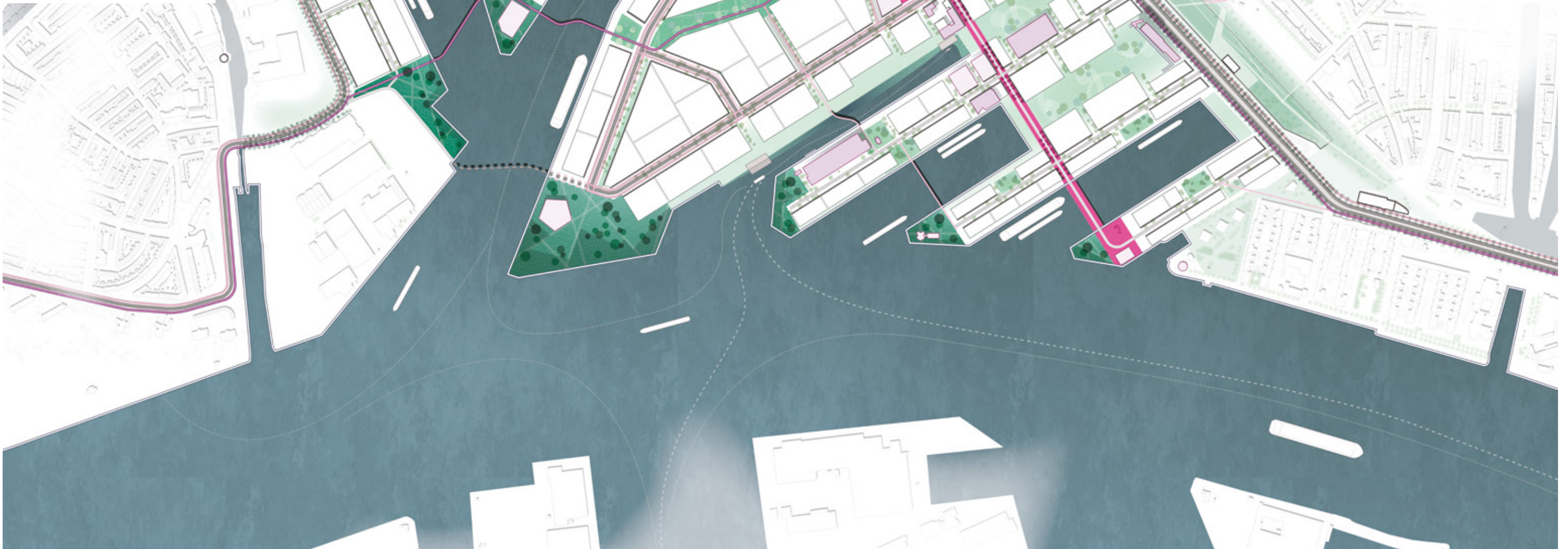
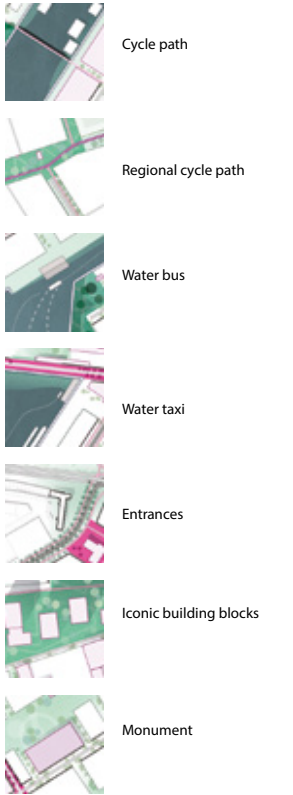
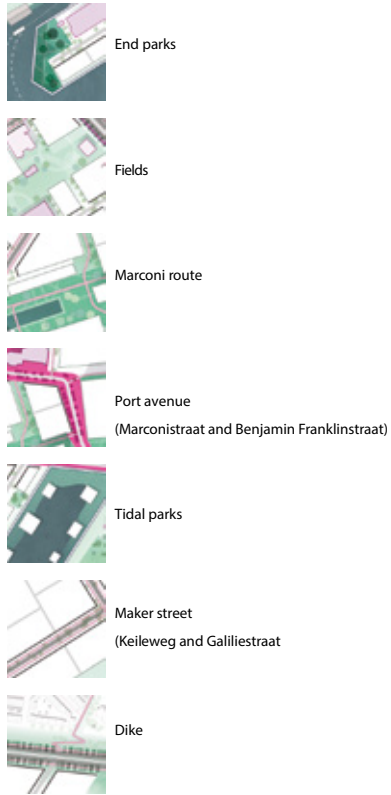
Keilekwartier

M4H is divided into a number of subareas, each with its own profile. The Galileipark at the heart of the district has room to accommodate large manufacturing companies. There is no room for dwellings here, but there is room for education, sports, culture and catering industry. The surrounding area consists of different living and working environments. The highest densities are in Marconikwartier. In the Merwehaven area the emphasis is on housing, although there is some room for small businesses and light industry, for example in work-and-live spaces and in substructures. Keilekwartier and Gustoweg form the links to the work areas. They can accommodate creative and traditional manufacturing companies, if possible in combination with housing.



The subareas of M4H

Source: 'Toekomst in de maak. Ruimtelijk raamwerk voor Merwe-Vierhavens Rotterdam' / DELVA Landscape Architecture & Urbanism



Spatial strategy for M4H (ambitions 2050)

Source: 'Toekomst in de maak. Ruimtelijk raamwerk voor Merwe-Vierhavens Rotterdam' / DELVA Landscape Architecture & Urbanism



Infrastructure inbetween the Strip (left) and the Merwe-Vierhavens (right)

Photo: Frank Hanswijk



Workshops in creative hub the Keilewerf located in the Makers District

Photo: Hester Blankestijn



Creative hub SPEK Design Dock with the Marconi Towers in the background

Photo: Iris van den Broek



View on the Vierhavensblok from Benjamin Franklinstraat

Photo: Iris van den Broek

PROJECT SITE AND ASSIGNMENT

- Facts & Themes
- Characteristics
- Competition Assignment

Facts

Site representative

Municipality of Rotterdam

Actor(s) involved

Municipality of Rotterdam, creative partners based on site

Team representative

architect and/or urban planner

Expected skills with regards to the site’s issues and characteristics

Architectural, Urban Design

Communication

Anonymous publication online after the 1st jury round
Publication in book and potential exhibition after the competition

Jury - 1st evaluation

With the participation of the site representative

Jury - prize selection

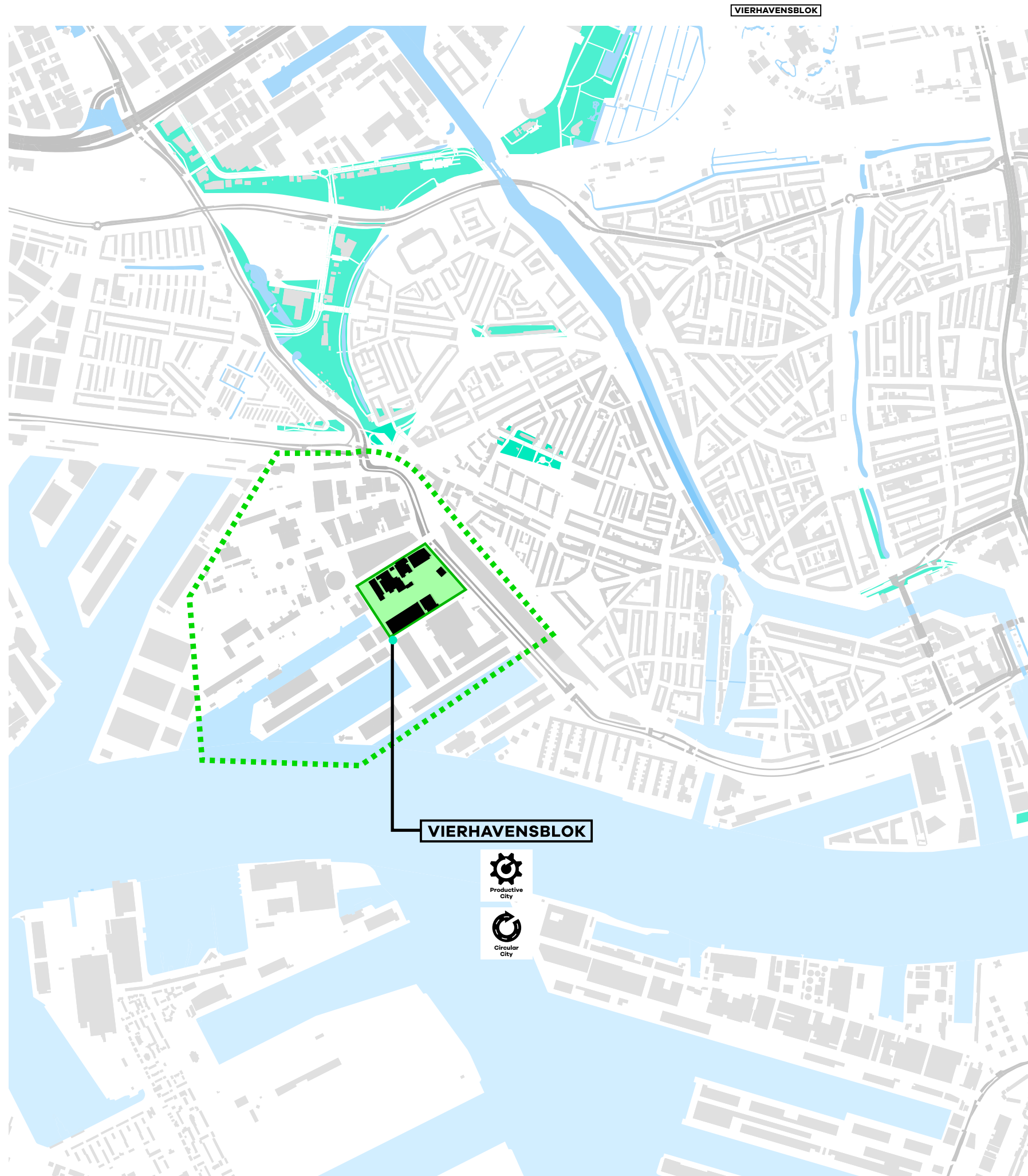
Ranked selection: with Winner (€12,000), Runner-up (€6,000) and Special Mention (no financial reward)

Post-competition intermediate procedure

Meeting to present the rewarded teams to the site representatives. Possible workshop on site with the rewarded teams – winner(s), runner(s)-up, special mention(s)

Commission given to the selected team(s) for the implementation

Follow up design (or research by design) assignment on implementation at the project site (or a site with similar characteristics) commissioned by the municipality of Rotterdam and/or private partners



Themes



VIERHAVENSBLOK x PRODUCTIVITY

Creativity and entrepreneurship are interconnected and they are, as drivers of the next economy, given space to grow in Rotterdam, in particular in the city's port area. Merwe-Vierhavens (M4H) will be transformed as part of the larger Makers District, mixing new manufacturing industry, urban facilities, housing, culture and a circular economy. This combination of functions lays the foundation for innovative interaction milieus, attracting and retaining the people needed to shape the productive city and port of the future.

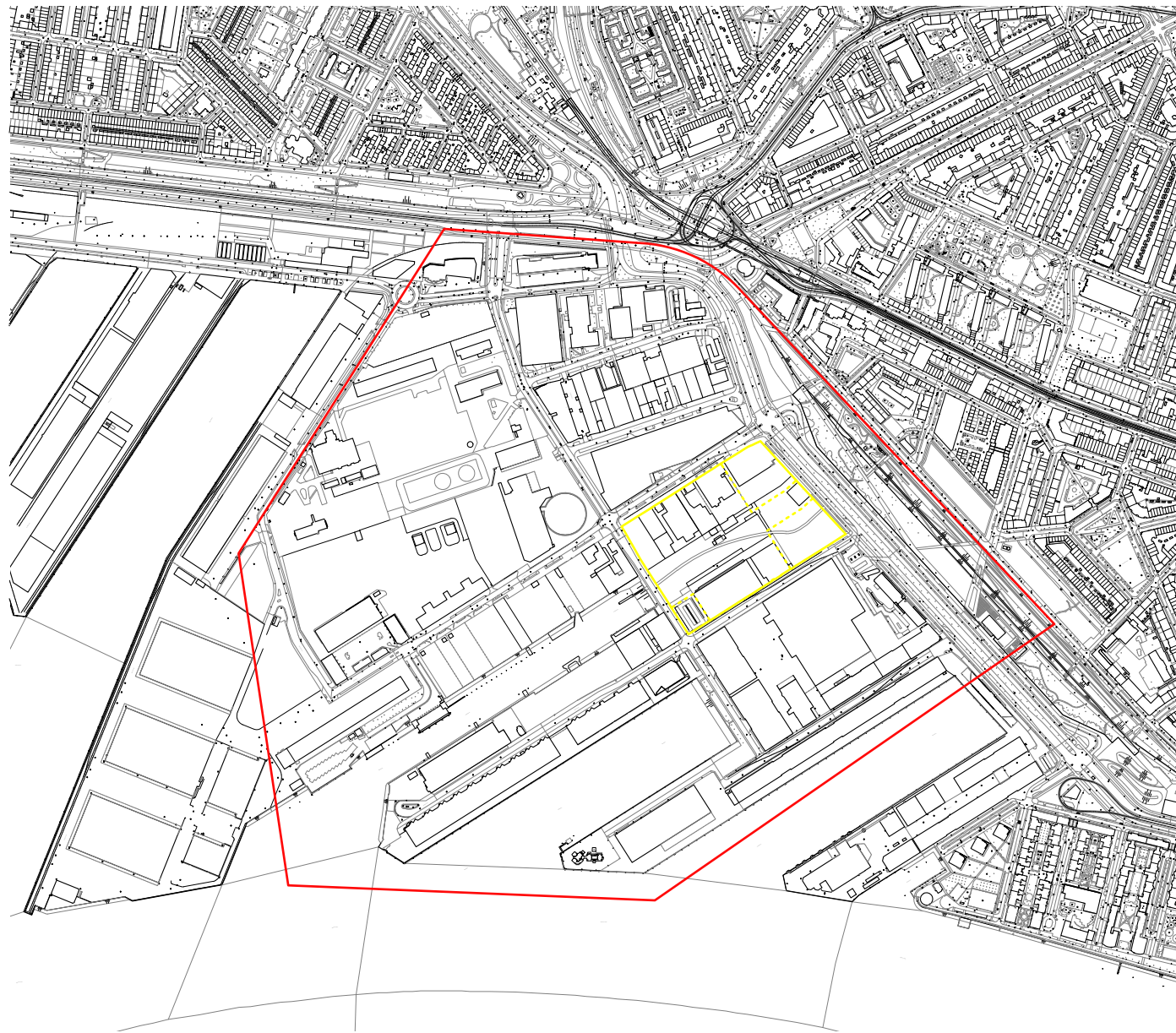


VIERHAVENSBLOK x CIRCULARITY

The Vierhavensblok is looking for a concept in which collectivity is the basis for circularity. Inhabitants of Rotterdam are encouraged to take initiatives to contribute to new circular solutions. They can shift from ownership to use by sharing cars, for example, and thus limit the use of space and facilitate other possibilities. To guide this process, the City of Rotterdam developed eight leading principles for sustainable area developments:

- I. M4H offers permanent space to different types of makers
- II. M4H prefers the sharing of facilities over individual ownership
- III. M4H offers room for experiment and learning
- IV. M4H uses and exchanges renewable energy
- V. M4H values residual flows
- VI. M4H makes it possible for companies, residents and visitors to opt for sustainable mobility.
- VII. M4H designs the outdoor space and plots so that they function as a single resilient climate adaptive system.
- VIII. M4H builds on the industrial capacity and quality of the area

A recurring question is: What is the right scale for such circular infrastructures? In the case of this project site this question is reversed, asking for a prototype showing which circular infrastructures are suitable, both technically and financially, on the scale of this site.



**European 15 assignment Vierhavensblok:
study area (red) and project site (yellow)**

Source: Gemeente Rotterdam

Site Family changing metabolism –
multiplying and connecting agencies

Location Rotterdam, Merwe-Vierhavens,
Vierhavensblok

Population 644,000 inhabitants
(Rotterdam)

Strategic Site 92.2 ha

Project Site 5.5 ha

Scale L/S

Owner(s) of the Site mix of public
and private ownership



Vierhavensblok: project site (yellow)

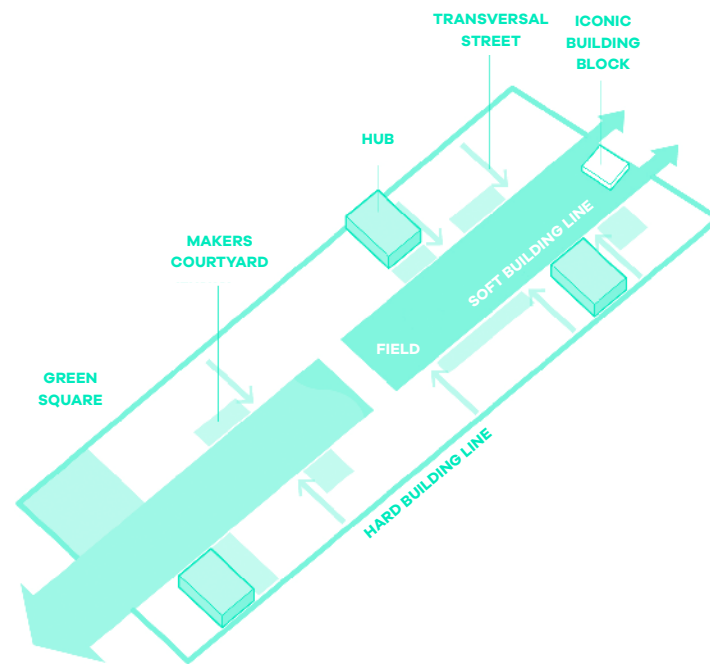
Photo: Frank Hanswijk

Characteristics

VIERHAVENSBLOK

The project site, called Vierhavensblok, is located within the M4H area. It is characterized by a mix of solitary industrial buildings and halls, situated around a large open collective space. In the near future, new work-and-live typologies will be inserted that provide space for crafts and creative manufacturing businesses as well as high quality housing will be inserted. Affordability of workspaces and collectivity as the basis for circularity are two important starting points for these new developments.

This subarea is a work-and-live environment with room for craftsmanship and creative manufacturing companies that make as well as share and show products in places in which encounters are optimally facilitated. Due to its special dynamics, the area will also attract visitors from outside the district. The municipality expects that the opportunity to live among makers will appeal to a target group that likes to experiment. This mindset is reflected by the special housing typologies and architecture of what are often collectives. Makers likely to fit in this environment include designers, industrial designers, artists, architecture firms, interior makers, textile-wood paper processors, small food producers (city brewery, bakery, urban agriculture), repairers and people running studios, printing offices and small workshops.



Spatial structure of Vierhavensblok

Source: 'Toekomst in de maak. Ruimtelijk raamwerk voor Merwe-Vierhavens Rotterdam' / DELVA Landscape Architecture & Urbanism



View on the project site from the 'Dakpark'

Photo: Frank Hanswijk



Aerial view on the Vierhavensblok

Photo: Frank Hanswijk



Typical streetview on the borders of the project site

Photo: Frank Hanswijk



Workspace of the Keilecollectief

Photo: Frank Hanswijk

ACTORS ON SITE

Various innovative, creative and cultural entrepreneurs have their work spaces on the project site; some of them are property owners already. Some of them are united in collectives.

The goal of AVL Mundo (founded in 2008) is to stimulate the growth of the world of Atelier Van Lieshout by fostering creative talent, transforming areas and people through art and making the work produced by Atelier Van Lieshout accessible to a wide audience. AVL Mundo is currently working on the conversion of 3,500 m² in Rotterdam's Merwe-Vierhavens District into a multifunctional space that centres on art.

The Keilecollectief is a group of professionals involved in architecture and urban design housed on the first floor of the Keilepand in M4H. The Keilecollectief consists of Bekkering Adams architects, GROUP A, De Urbanisten, HP architects and Nieman adviseurs. The collective regularly organizes lectures and workshops about Merwe-Vierhavens that are open to the general public.

In 2014, Keilewerf started out in M4H in a 1,000-m² abandoned warehouse. Today, it comprises a breeding ground for more than 80 (young) creative entrepreneurs divided over two buildings with a total floor area of 6,000 m². Steel workers, artists, furniture makers and musicians settled here as well. Filmmakers, surfboard shapers, food truck builders and upholsterers have also built their own studios or workshops. Yet Keilewerf is a place that offers still far more possibilities. Besides placing an order to have something made, people can come in and make things themselves. For this purpose, several flexible workstations and workbenches are for rent. In addition, the shipyard partners share a sawmill and run a construction market, 'Buurman', for second-hand materials.

Studio Roosegaarde is the social design lab of Dutch artist and innovator Daan Roosegaarde. Together with his team of designers and engineers Roosegaarde creates landscapes of the future for a better world. The studio connects people, technology and space to improve daily life in urban environments and spark imagination. Internationally acclaimed works include WATERLICHT (a virtual flood which shows the power of water), SMOG FREE PROJECT (the largest outdoor air purifier which turns smog into jewellery), SMART HIGHWAY (roads that charge throughout the day and glow at night) and the recent SPACE WASTE LAB (visualising and upcycling space waste). Studio Roosegaarde is located in a former glass factory in the harbour of Rotterdam NL, also known as the Dream Factory. Here new innovations are developed into smart prototypes for the landscapes of tomorrow.

With the help of volunteers, Voedseltuin grows organic fruit and vegetables to supplement the packages handed out to the clients of Rotterdam's food bank. In addition, Voedseltuin is also an employment project for people who have difficulties finding paid employment. Voedseltuin has been located at the heart of the Vierhavensblok since 2011. The garden is a green, park-like place in a city district that is in full development, creating countless opportunities as a connecting factor between business, non-profit organizations, local residents and nature lovers.

Soundport is a building dedicated to music and the music industry. It houses several studio spaces run by sound artists, musicians, and producers, as well as musically oriented businesses. It is one of the creative workspots developed by SKAR, the Rotterdam organization for artist studios and creative hubs.



Central area of the Vierhavensblok

Photo: Frank Hanswijk



View on the Vierhavensblok from the Keilestraat

Photo: Frank Hanswijk



Rotterdam Street Culture Weekend at the Vierhavensblok with the first European edition of street art festival POW! WOW!

Photo: Fleur Beerhuis



View on two of the new development plots (see yellow dashed lines on map and aerial photo) from the Keilestraat

Photo: Frank Hanswijk

Competition Assignment

The challenge is to densify the site with new circular building blocks where working and living meet. These blocks are inextricably linked to the 'flows' and values present on site and embody the notion of a circular city. Also, they offer a variety of affordable work spaces that attract and maintain (starting) creative and cultural entrepreneurs.

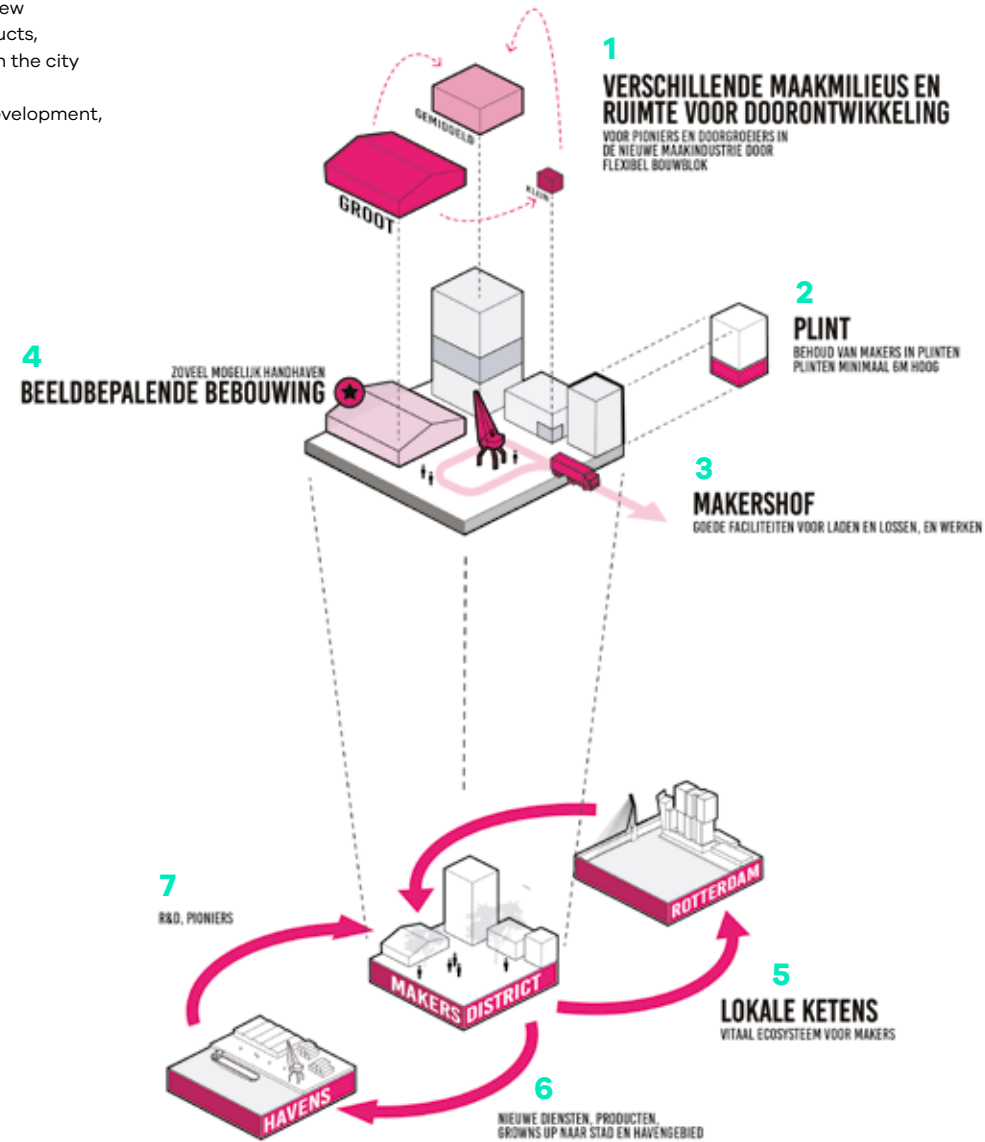
The design teams are asked to:

- Develop a vision for the Vierhavensblok that shows which of the eight leading principles for sustainable area development can be organized collectively at the scale of this project site in a spatially, technically and financially effective way.
- Apply one (or more) of the eight leading principles for sustainable area development on (one of) the marked plots (see yellow dotted lines) inside the contours of the project site. Combine the principle(s) with a design proposal for innovative live-and-work typologies at an architectural level.
- Develop a strategy for a phased densification of the Vierhavensblok in which affordability (for example in the form of operating principles) and the existing entrepreneurs and collectives and their initiatives (for example Keilewerf's 'shift operation' from its current temporary location to a new space) are explicitly included.

Basic guidelines M4H:

- Programmatic mix:
 - workspaces: 30-40%
 - offices: 10-20%
 - housing: 30-50%
 - facilities: 10%
- There is a maximum building height of 40 metres in M4H. But in case of exceptional added value for the area, higher buildings are allowed.
- To house makers in the area, the ground floors should be flexible in use and have a minimum height of 6 metres.
- Environmental category M4H: maximum of 3.1.

- 1 Flexible building blocks to create several makers environments and room to accelerate
- 2 Maintaining makers on the ground floor (for example: create a minimum height of 6 meters)
- 3 Makers courtyard with excellent facilities for (un)loading and manufacturing
- 4 Maintaining iconic building blocks
- 5 Local chains to foster a vital ecosystem for makers
- 6 Exchange of new services, products, grows up with the city and port area
- 7 Research & Development, Pioneers

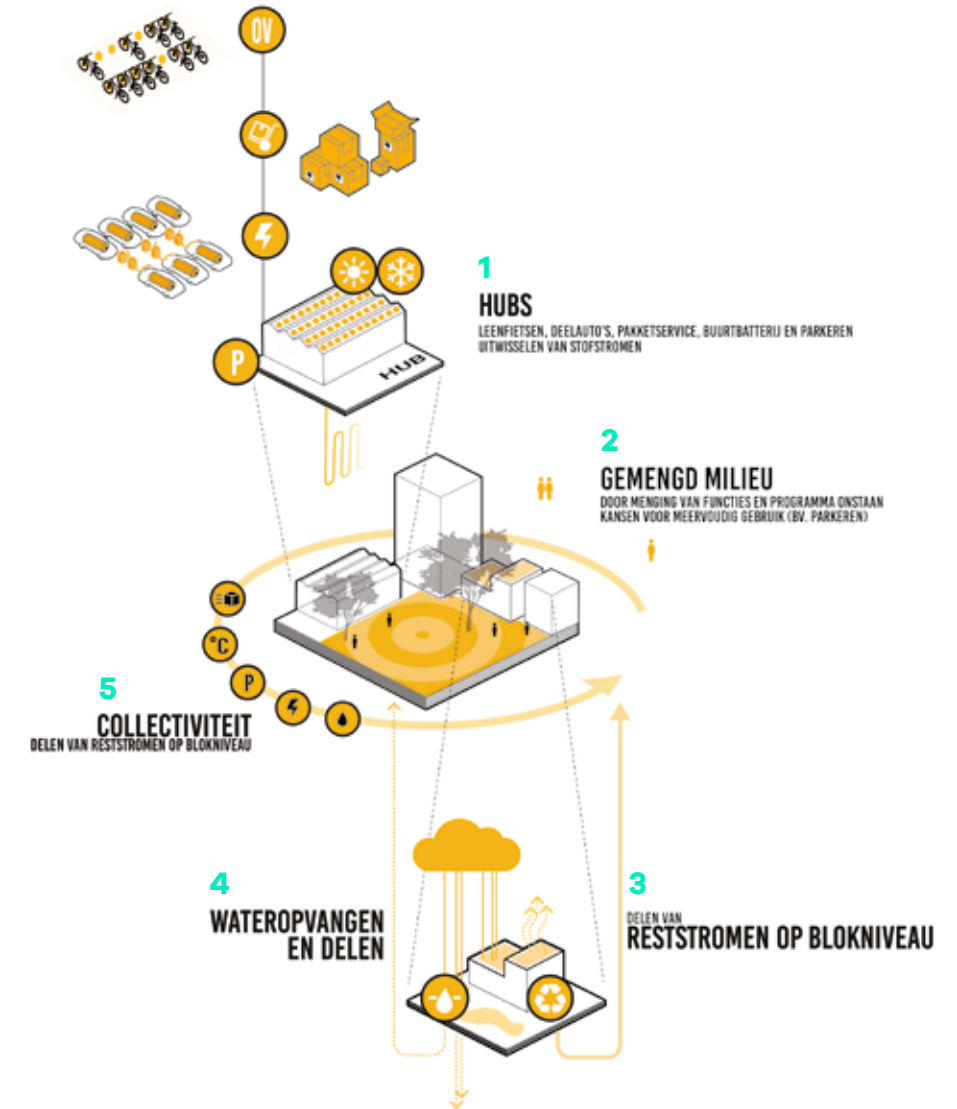


Rotterdam's leading principles for sustainable area developments:

I. M4H offers permanent space to different types of makers

Source: 'Toekomst in de maak. Ruimtelijk raamwerk voor Merwe-Vierhavens Rotterdam' / DELVA Landscape Architecture & Urbanism

- 1 Hubs with shared facilities (bicycles, cars, parcel service, community battery and parking) and exchange of resources
- 2 Programmatic mix to create opportunities for multiple uses
- 3 Sharing (waste) flows on the level of a building block
- 4 Collecting and sharing water
- 5 Collective efforts on the level of a building block

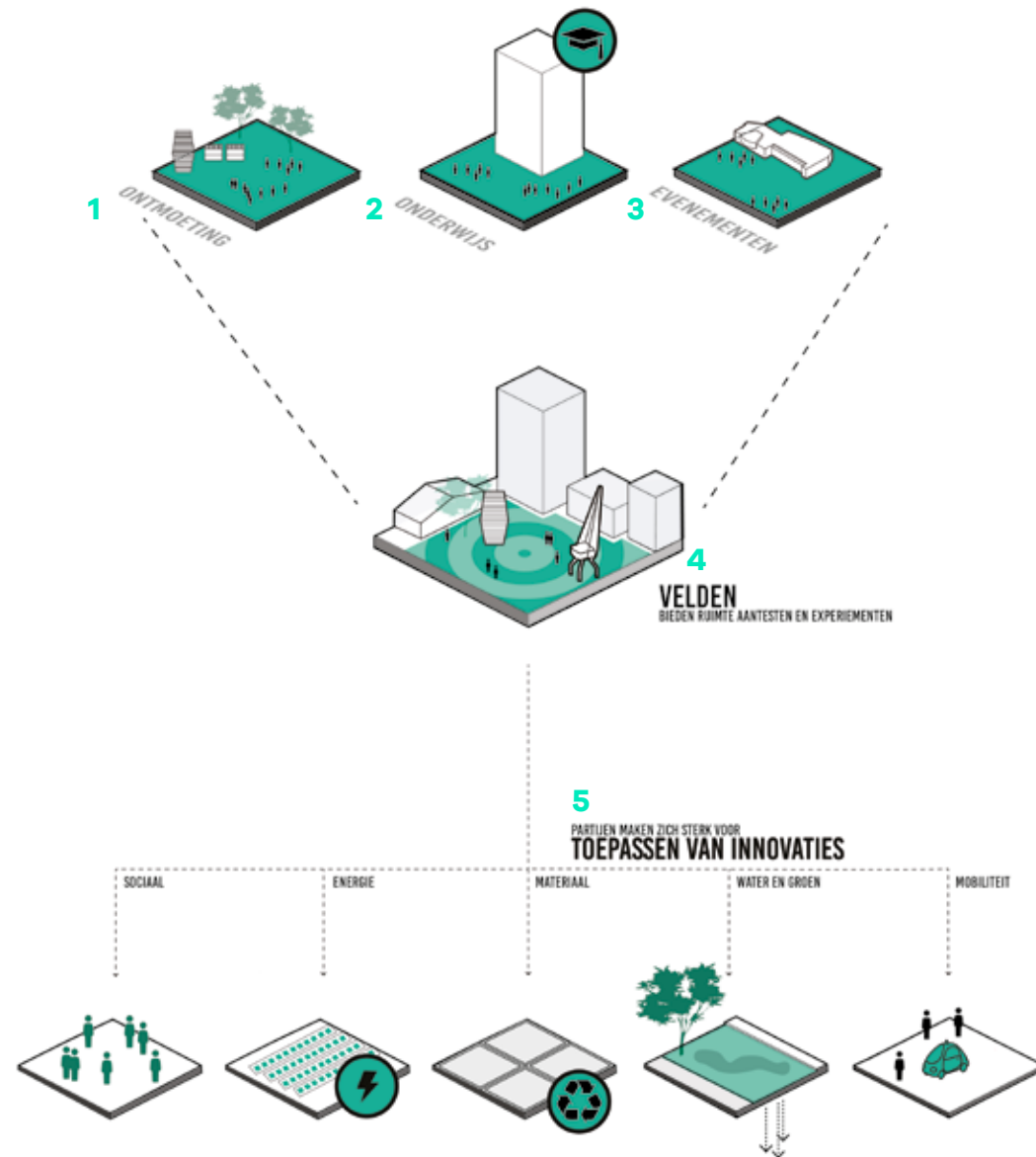


Rotterdam's leading principles for sustainable area developments:

II. M4H prefers the sharing of facilities over individual ownership

Source: 'Toekomst in de maak. Ruimtelijk raamwerk voor Merwe-Vierhavens Rotterdam' / DELVA Landscape Architecture & Urbanism

- 1 Meet ups
- 2 Education
- 3 Events
- 4 Fields for experiments
- 5 Application of innovations



Rotterdam's leading principles for sustainable area developments:

III. M4H offers room for experiment and learning

Source: 'Toekomst in de maak. Ruimtelijk raamwerk voor Merwe-Vierhavens Rotterdam' / DELVA Landscape Architecture & Urbanism

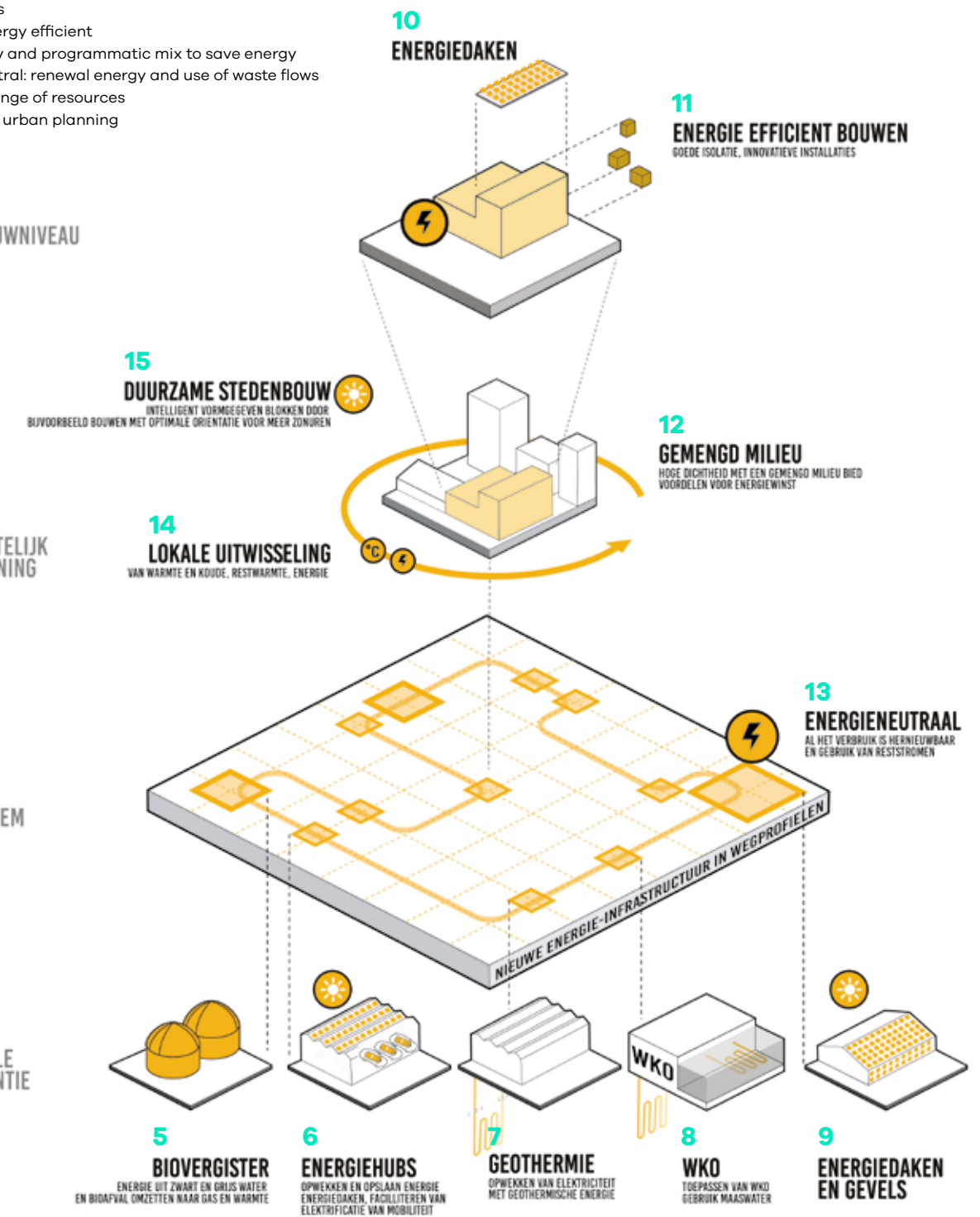
- 1 Building
- 2 Urban planning
- 3 System
- 4 Local potential
- 5 Bio-digester
- 6 Energy hubs
- 7 Geothermal energy systems
- 8 Thermal storage
- 9 Energy roofs and facades
- 10 Energy roofs
- 11 Building energy efficient
- 12 High density and programmatic mix to save energy
- 13 Energy-neutral: renewal energy and use of waste flows
- 14 Local exchange of resources
- 15 Sustainable urban planning

1 GEBOUWNIVEAU

2 RUIMTELIJK ORDERING

3 SYSTEEM

4 LOKALE POTENTIE

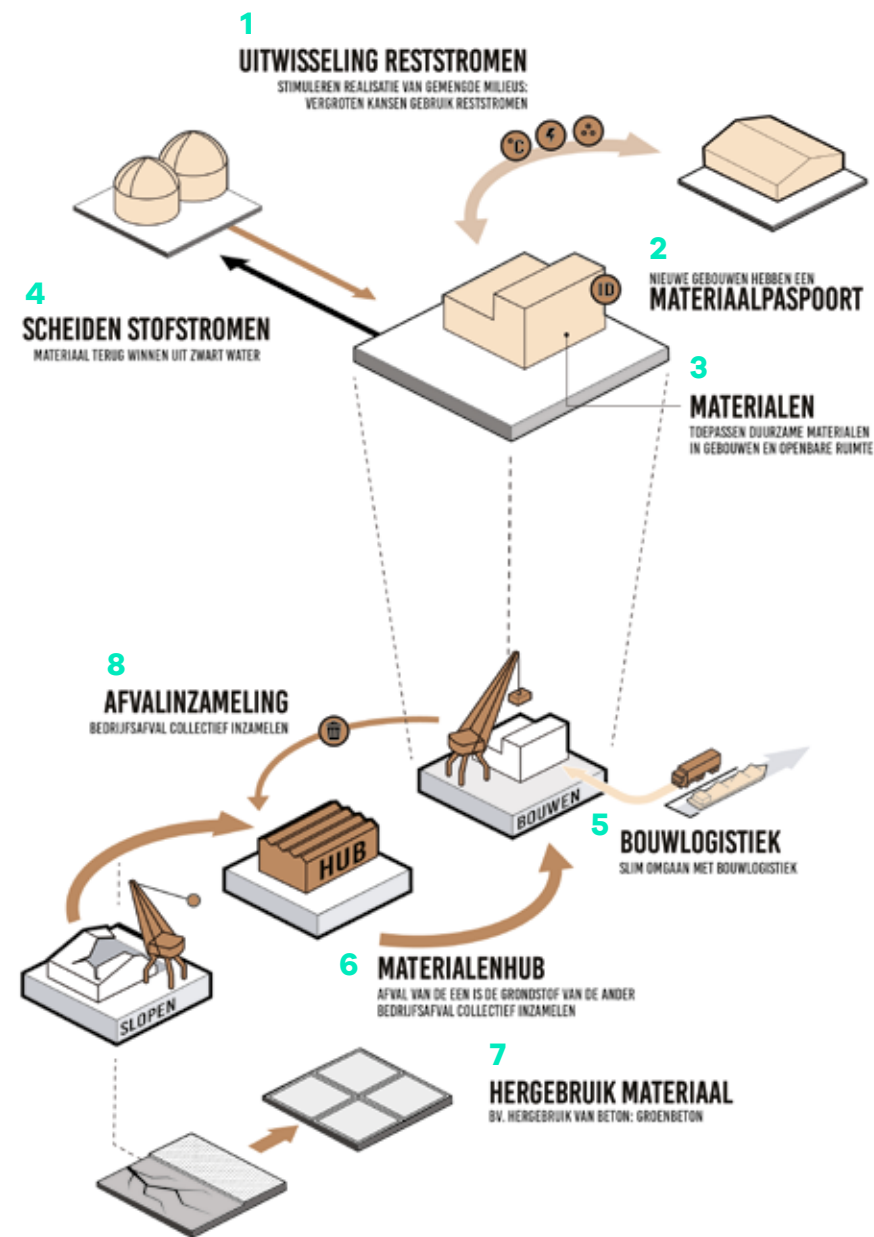


Rotterdam's leading principles for sustainable area developments:

IV. M4H uses and exchanges renewable energy

Source: 'Toekomst in de maak. Ruimtelijk raamwerk voor Merwe-Vierhavens Rotterdam' / DELVA Landscape Architecture & Urbanism

- 1 Exchange of (waste) flows
- 2 Material passport
- 3 Use of sustainable materials
- 4 Separation of flows
- 5 Smart building logistics
- 6 Collective material hub
- 7 Recycling materials
- 8 Collecting waste collectively

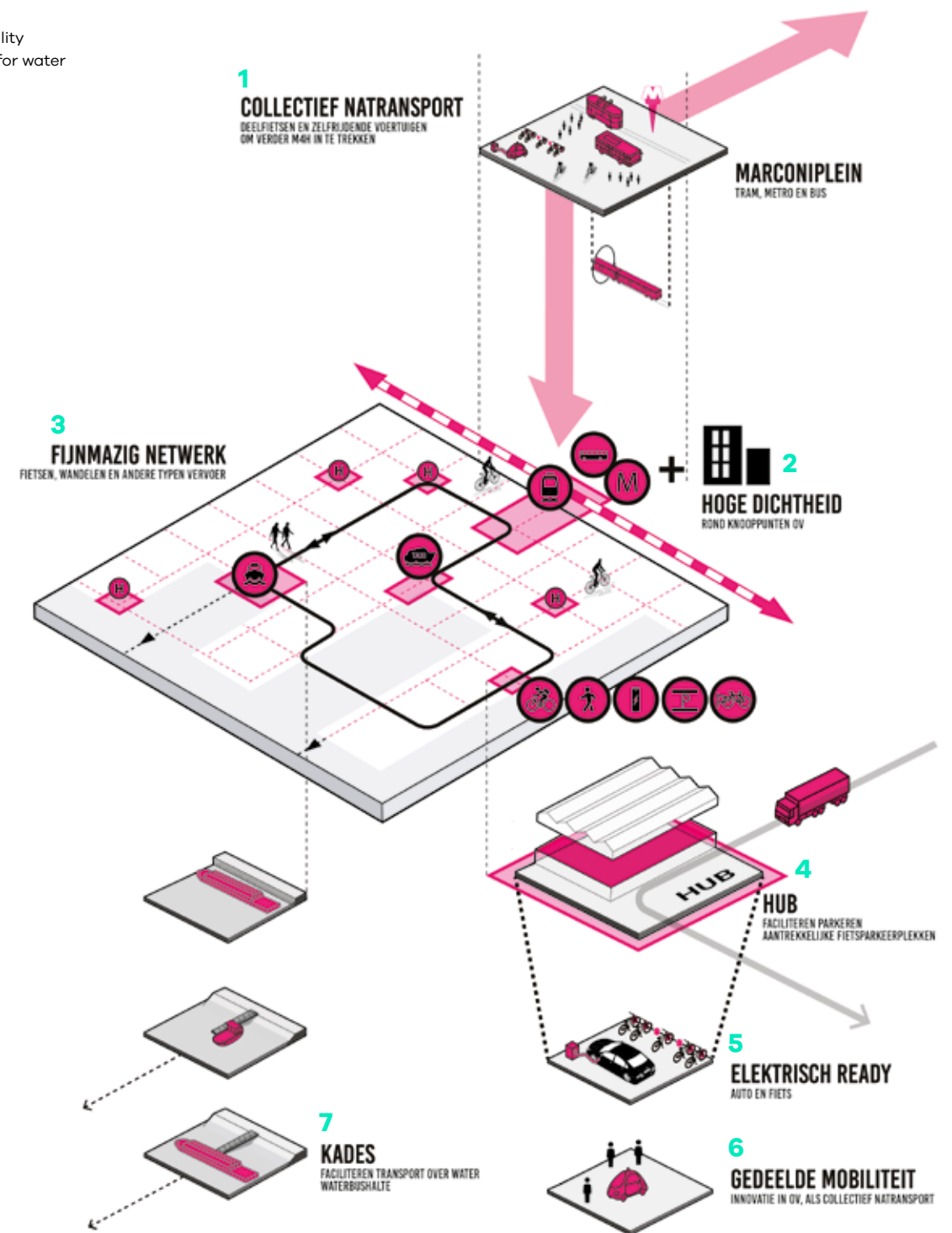


Rotterdam's leading principles for sustainable area developments:

V. M4H values residual flows

Source: 'Toekomst in de maak. Ruimtelijk raamwerk voor Merwe-Vierhavens Rotterdam' / DELVA Landscape Architecture & Urbanism

- 1 Collective transport on site
- 2 High density around public transport hubs
- 3 Dense network for cycling and walking
- 4 Mobility hub with smart and attractive parking for cars and bicycles
- 5 Charging point for electric vehicles
- 6 Shared mobility
- 7 Quays used for water transport

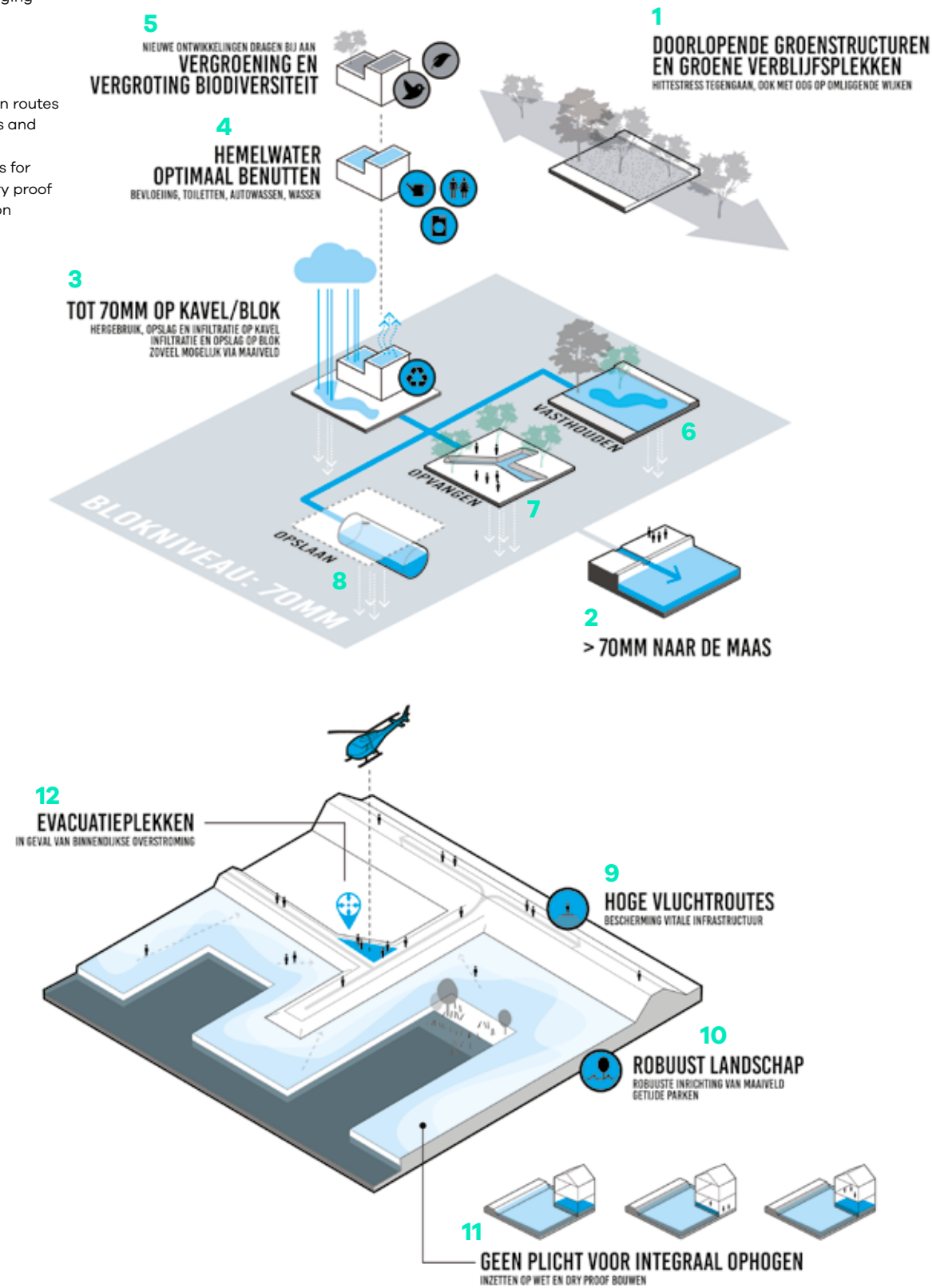


Rotterdam's leading principles for sustainable area developments:

VI. M4H makes it possible for companies, residents and visitors to opt for sustainable mobility

Source: 'Toekomst in de maak. Ruimtelijk raamwerk voor Merwe-Vierhavens Rotterdam' / DELVA Landscape Architecture & Urbanism

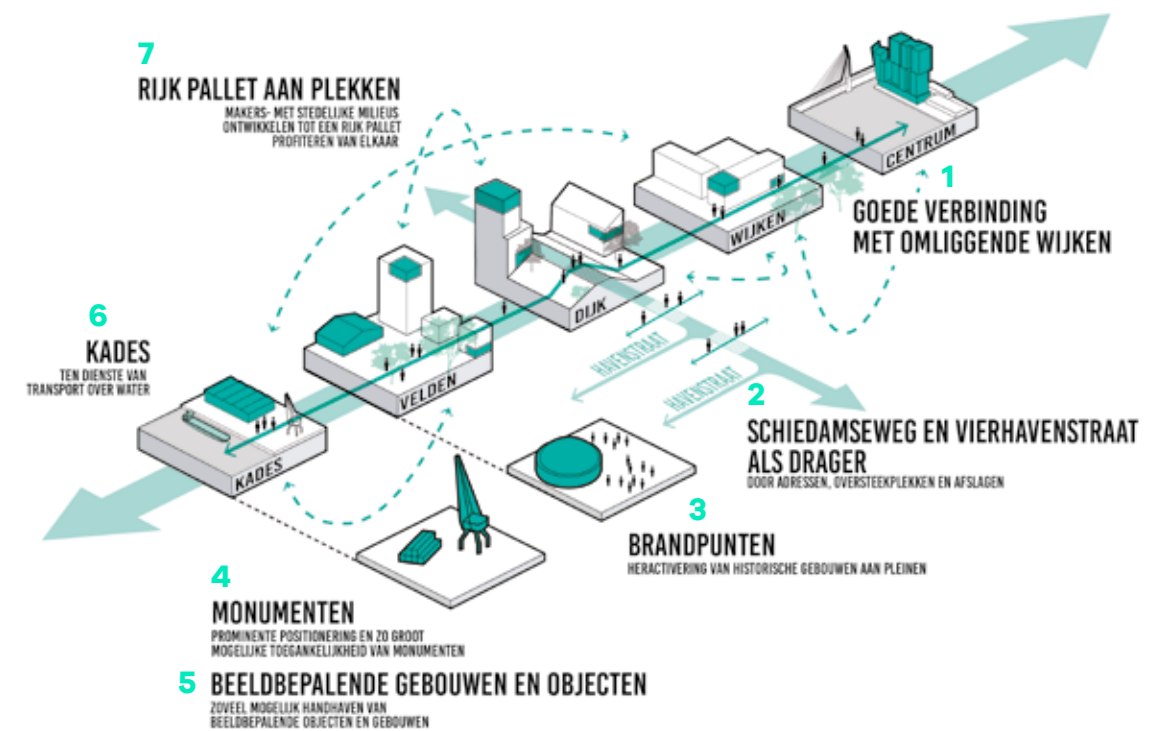
- 1 Continuous green structure and green public spaces to prevent heat stress
- 2 70mm to the Maas river
- 3 Maximum of 70 mm on plot
- 4 Optimizing use of rainwater
- 5 Greening and enlarging biodiversity
- 6 Maintain
- 7 Collect
- 8 Store
- 9 Elevated evacuation routes
- 10 Rugged landscapes and tide parks
- 11 Innovative concepts for building wet and dry proof
- 12 Places of evacuation



Rotterdam's leading principles for sustainable area developments: VII. M4H designs the outdoor space and plots so that they function as a single resilient climate adaptive system

Source: 'Toekomst in de maak. Ruimtelijk raamwerk voor Merwe-Vierhavens Rotterdam' / DELVA Landscape Architecture & Urbanism

- 1 Well connected with surrounding neighbourhoods
- 2 Schiedamseweg and Vierhavenstraat as main infrastructure
- 3 Centres of activities: reactivating historic buildings next to squares
- 4 Accessibility of monuments
- 5 Restoring iconic buildings and objects
- 6 Quays used for water transport
- 7 Rich mix of places: makers versus urban environments



Rotterdam's leading principles for sustainable area developments: VIII. M4H builds on the industrial capacity and quality of the area

Source: 'Toekomst in de maak. Ruimtelijk raamwerk voor Merwe-Vierhavens Rotterdam' / DELVA Landscape Architecture & Urbanism

THE JURY

Jury

Jacob van Rijs (chairman)

Architect, MVRDV (Rotterdam, NL)

www.mvrdv.nl

Johan Anrys

Architect, 51n4e (Brussels, BE)

www.51n4e.com

Marc Glaudemans

Director Province of Noord-Brabant (NL)

Joost Beunderman (NL)

Urban geographer and director of 00:/ (London, UK)

www.architecture00.net

Marieke Kums

Architect, Studio MAKs (Rotterdam, NL)

www.studiomaks.nl

Beatriz Ramo (ESP)

Architect, STAR (Rotterdam, NL)

www.st-ar.nl

Tina Saaby

Former Chief City Architect of Copenhagen (DK)

<https://dk.linkedin.com/in/tina-saaby-3786763>

Jury substitutes

Mariet Schoenmakers

Independent urban designer and planner (NL)

Like Bijlsma

Architect, SUBoffice (Rotterdam, NL)

www.suboffice.nl

Technical committee

Is tasked to advise the jury on the contextual sensitivity and the feasibility of the competition proposals. After judging the technical committee will select from its body an implementation committee that will advise on the successful implementation of European 15 proposals in Rotterdam.

The technical committee is composed of: two European NL board members; two launching partner representatives; a private partner representative for each committed party; one site specific stakeholder representative per site; both jury substitutes (unless tasked to act as an active jury member).

ORGANIZATION

Project coordination

Martine Zoeteman

Secretary to European NL / E15 Project leader

André Kempe

Secretary of the European NL Board

Olof van de Wal

President of the European NL Board

Barbara Luns

Director AIR, Rotterdam Architecture Institute

Bas van der Pol

Director AIR, Rotterdam Architecture Institute

Mattijs van Ruijven

Head urbanist, department of urban development, City of Rotterdam

Esther Heemskerk

Senior urbanist, department of urban development, City of Rotterdam

Pre-competition working group

Jeroen Bleijjs, Jeroen de Bok, Paulien Campagne, Agnes Galama, Martijn van der Mark, Ingrid Michielsen, Kjeld Postma, Kim Schotting, Michelle Sleenbos, Sabina van der Spek, Marleen ter Vergert, Walter de Vries (City of Rotterdam); Peter Kleintunte (ASN Bank); Robbert de Vrieze (Delfshaven Cooperation); Lisa ten Brug, Lisa Lambert (AIR).

European NL Board

André Kempe

Architect / Urban Designer

Co-founder / Director at Atelier Kempe Thill

Jonathan Woodroffe

Architect / Urban Designer

Co-founder / Director at S333 Architecture + Urbanism

Madir Shah

Architect / Urban Designer

Founder / Owner at URBANOFFICE Architects

Olof van de Wal

Director at SKAR - stichting kunstaccommodaties Rotterdam

Owner Leef de stad

RECOMMENDED READS

Rotterdam in Facts & Figures

www.rotterdam.incijfers.nl

In this database you can compile statistics related to several policy domains on the scale of the city, a district or a neighbourhood.

www.wijkprofiel.rotterdam.nl

The Wijkprofiel (Neighbourhood Profile) shows how the 14 areas and 71 districts are doing socially, physically and in terms of security. The scores are based on measurable facts and figures and the experience of the citizens of Rotterdam: their vote counts for 50 percent.

Relevant policy documents

URBAN PLANNING

Omgevingsvisie Rotterdam (Environmental Strategy)

An introduction on the radical renewal of spatial policy in the Netherlands and how the City of Rotterdam is developing its own Omgevingsvisie (Environmental Strategy) according to this new Omgevingswet (Environmental Act). Note: The first version of this Omgevingsvisie is not public yet.

Kaart van de Stad (Map of the City)

A future exploration of (new) spatial development opportunities of the City of Rotterdam. (PDF, published 2016)

Stadsvisie 2030 (Urban Vision 2030)

Spatial development strategy of the City of Rotterdam. (PDF, published 2007)

HOUSING

Woonvisie 2030 (Housing Vision)

Housing development strategy of the City of Rotterdam. (PDF, published 2016)

ECONOMY

Voortgangsrapportage 2017 Havenvisie 2030 (Progress Report 2017 Port Vision 2030)

Update of the Havenvisie 2030, published in 2011. (PDF, published 2017)

Roadmap Next Economy Metropoolregio Rotterdam-Den Haag

Shared ambition of 23 municipalities in the metropolitan region Rotterdam-The Hague to improve the next economy. (PDF, published 2016)

MOBILITY

Meerjarenprogramma Infrastructuur, Ruimte en Transport (MIRT, Long-range Programme Infrastructure, Space and Transport)

Annual update of the national mobility strategy. (PDF, Dutch only, published 2019)

Stedelijk verkeersplan Rotterdam 2030 (Urban Traffic Plan Rotterdam 2030)

Mobility strategy of the City of Rotterdam. (PDF, Dutch only, published 2017)

OTHER RELEVANT INFORMATION

Het Verhaal van de Stad (The Story of the City)

What will the future of Rotterdam and its inhabitants look like in 2037? The answers of 9,000 Rotterdammers to this question are published online and in a downloadable PDF.

Ruimte voor een Stad in Balans (Space for a City in Balance)

An exploratory report mapping knowledge about participation and encounter in the Rotterdam neighbourhoods and identifying prospects for action in the physical domain that can contribute to participating and encounter.

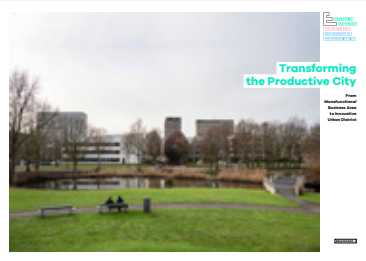
Read more about European 15

- [Online platform](#) with more information about the five sites in Rotterdam (NL) and weekly updates providing insight information
- [Competition Rules European 15](#)

European 15 Sites in Rotterdam (NL)

European NL, Rotterdam Architecture Institute (AIR) and the municipality of Rotterdam are proud to propose five locations for European 15. All five have been designated 'high priority' development sites by the municipality.

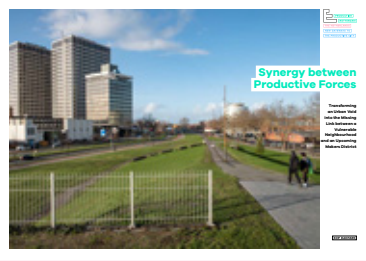
BRAINPARK I



GROOT IJSSELMONDE



KOP DAKPARK



VIERHAVENSBLOK



VISSERIJPLEIN



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March 2019

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