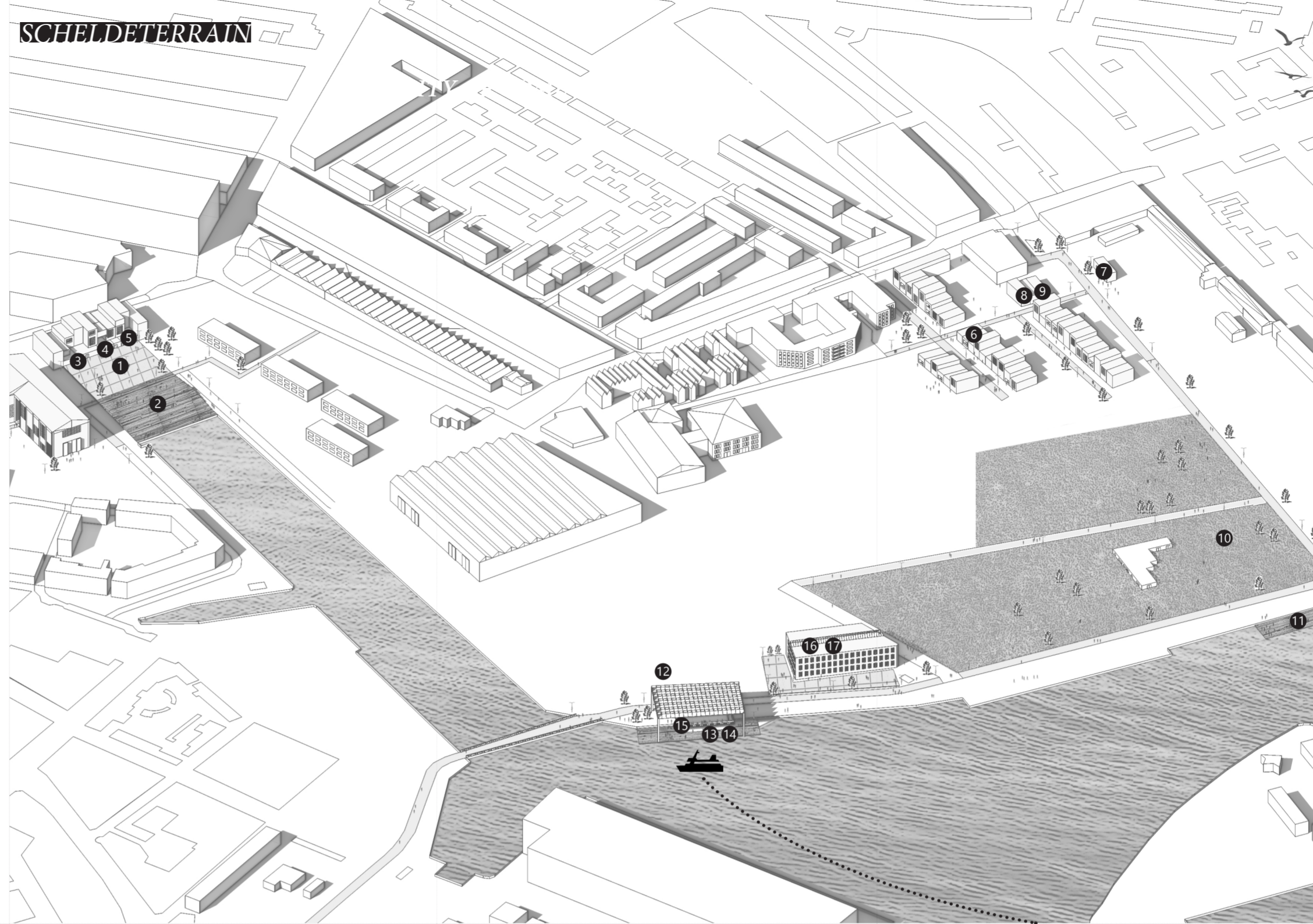


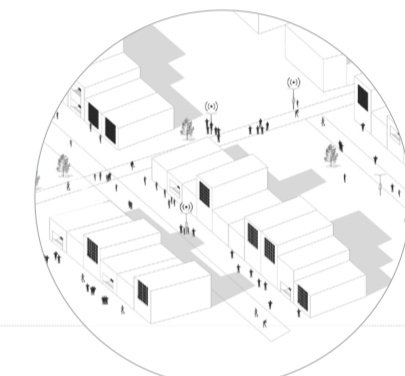
SCHELDETHERRAIN



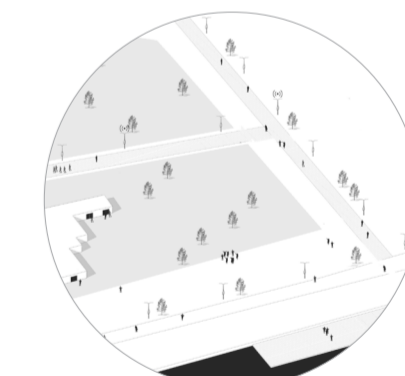
The **celebration dock** is located on the east side of the Scheldeterrain, the location near the city center. It used to be the place where new build ships were launched and celebrated, after the building process was finished. Besides this historical meaning, the building of the Plaatwerkerij is still intact on the edge of the site. For the design of this site, the aspect of celebration and the combination of the different user groups is the most important.



The location of the **waterfront** is characterized by the old timberfactory and the last shipyard in the old harbour, Damen. This offers an opportunity to activate the waterfront. The jetty for the already existing watertaxi is moved to the location. For the workers, the site will offer a way to commute to the port of Vlissingen-Oost by boat. The timberfactory is suitable to host an exhibition about the wind farm and offer office space for employment agencies in the energy industry.



This area of the Scheldeterrain is adjacent to an housing area, originally build by the Schelde company for their workers. With no contamination of the soil, the site is suitable for building most of the accommodation for the temporary citizens. This location for the **workers area** will allow the temporary citizens to live close to the city center and a recreational park. The fence, currently restricting access to the site, can grow along with the accommodation, meaning that the site is accessible or non-accessible according to the housing that is occupied.



The **central park** of the Scheldeterrain contains the largest part of contaminated soil and is not suitable for building. Closed off by a fence at the moment, the soil will be cleaned in stages by the poplar trees through phytoremediation technology. Based on the contamination, the fence is opened up in stages, allowing access to more and more space of the park for the public. The path and the waterfront of the park will reconnect the site to the larger framework of green- and waterfront space in the area.

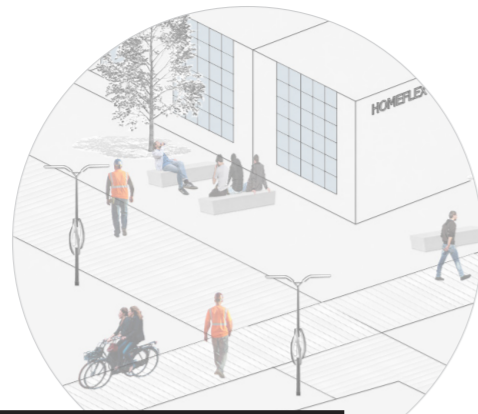


The **transformator station** is situated within the industrial area of the port of Vlissingen-Oost on the beach of the Kaloot. Here is the landing point of the cable route that connects the wind farm at sea with the electricity grid on land. The cable will link the site of extraction, the North Sea, with the site of consumption, Vlissingen. The infrastructure will protect further development of the protected dune area of the Kaloot and offers a place where citizens can experience both nature and industry.

KALOOT



**MAP OF
VLISSINGEN**



With the new scale of operating and constructing large offshore wind farms, the city of Vlissingen and the port of Vlissingen-Oost are facing a transition. A part of this transition will include an increase of work migration and temporary citizens within the area for the next five years. This project is a research into this phenomenon of comings and goings.

The design is an attempt to make the global factors of energy and migrant workers comprehensible and visible, while using this as a catalyst to local urban change. This project illustrates the idea that services for the temporary needs of migrant workers can be combined with long term improvements for the local population. The temporary citizens are seen as a window of opportunity for the transformation of the urban area, as well the industrial port area.

As final product of the project, this two-sided document in the format of a folded city map, combining research and design proposal, shows a common new future for Vlissingen. It imagines a potential migrant worker or tourist arriving in Vlissingen, learning about Vlissingen and the Borssele wind farm, and using the facilities the city and the port have to offer. On the other hand, it informs the permanent resident about the new adaptations made in their urban fabric and invites them to participate and celebrate the Borssele wind project as an upgrade to their environment.

Colophon
Anouk Klapwijk
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Map made as part of:
Design as Politics Graduation Studio, 2016/2017
‘A City of Comings and Goings’- designing for migration and mobility

Revealing a new side of Vlissingen through a design proposal based on the spatial implications of the Borssele offshore wind project.

WELCOME TO VLISSINGEN

With this map, we take you to along the new hotspots of Vlissingen during the construction of the offshore wind farm of Borssele. Vlissingen, already famous for its rich maritime history, adds another chapter to this history, the chapter of offshore wind energy. While the offshore wind farm largely remains invisible on land, this guide shows you the spatial implications it does have on the city and its port. The map will guide you around the new opportunities that are on offer. See for yourself and enjoy!

SCHELDETHERRAIN

- 1 CELEBRATION SQUARE
- 2 WATERFRONT STAIRS
- 3 CAFE
- 4 POST OFFICE
- 5 WESTERN UNION BANK
- 6 ACCOMMODATION
- 7 FITNESS CENTER
- 8 HOMEFLEX OFFICE
- 9 AIRBNB HOUSE
- 10 CENTRAL PARK
- 11 FISHING DOCK

- 12 FERRY TERMINAL
- 13 BORSSELE TOUR OFFICE
- 14 COMMUTERS STATION
- 15 OBSERVATION PLATFORM
- 16 BORSSELE WIND EXHIBITION
- 17 EMPLOYMENT AGENCIES

KALOOT

- 18 TRANSFORMATOR STATION
- 19 TRAINING CENTER
- 20 TRANSFORMATOR PARK
- 21 CABLE TRAJECTORY WALKWAY
- 22 DUNE AREA
- 23 BEACH

FERRY SHUTTLE

Explore Vlissingen, Vlissingen-Oost and Borssele by ferry! You can buy a hop-on-hop-off day trip or buy a subscription for commuting. Tickets are only available at the ferry terminal. Use the app for current departure times and a personal timetable.

..... Route
Pick up points



The vast network of energy production, consumption and distribution has left its imprint on our urban landscapes around the world. Cities were shaped by energy, such as many other cities in the UAE and across the globe, Dubai owes her development to the strategic geographic location and the access to oil fields. With the energy transition, the geographic locations will change and wind energy will shift the focus towards Northern Europe. This will result in new emerging employment patterns in e.g. the Netherlands.



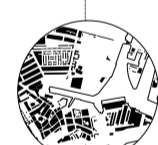
When looking at the Dutch context of the energy transition, the government announced the construction of five new wind farms off the coast of the North Sea, which are amongst the largest in the world. In the map current and planned windfarms are compared, showing the change of scale. Being aware of the influence of work migration on the urban environment, new questions are posed on how to deal with large temporary populations in the Netherlands. 'Polendorp' serves as an example of current planning.



The first of these wind farms, **Borssele**, will be build 22 kilometers of the coast of Zeeland. This will result in new job opportunities and growth of the port industry in Vlissingen-Oost and its adjacent city Vlissingen in the upcoming years. The challenge and opportunity this temporary citizens can offer is examined in this project. Therefore the amount and phasing of workers is studied. While the project and the design will focus on a particular site, the city of Vlissingen, the work could offer lessons to the broader context of migration and a temporary population.



On one hand, the challenge for the graduation project is to catalyze long term improvements for the local and permanent citizens, while at the same time improving the conditions of and servicing the global and temporary citizens. On the other hand informing the general public about the energy transition and celebrating the first large scale offshore wind farm in the Netherlands is the second challenge. Therefore, a strategy is made on the scale of **the port & the city**.



The spatial and financial conditions of the **city of Vlissingen** make this a difficult task. Small interventions in a large system need to re-enforce or re-connects the cities underlying system. Only then, the structure of the city can be transformed and a long term legacy for the city can be protected. Therefore, the theory of patchwork urbanism is adopted in order to divide the **areas** and design small operations to impose constraints on the future. 5 locations are determined within the urban area and in the port area.



On the **scale of public space & urban fabric**, each project is designed based on the presence of the temporary citizens. According to their amount, the design for each location is developed in five steps. Besides these phases, four design principles; connection with the city, activating the waterfront, public functions on the ground floor and different levels for visual interaction, are applied to all sites to ensure the designs offers not only space to the temporary citizens, but also for the permanent inhabitant.

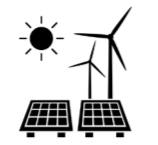


Zooming in to the **smallest urban scale** of the project, design elements used in the designs provide continuity and connect the projects together. Main elements are chosen for the lightning, landscaping and infrastructure. For lightning, an addition to traditional street lightning is made, incorporating a vertical axis wind turbine on each lantern, incorporating a vertical axis wind turbine on each lantern. For landscaping, a specific type of tree is chosen, because of its remediation potentials. Finally the infrastructure consists of two types of tiles and concrete benches.

TWO TRENDS

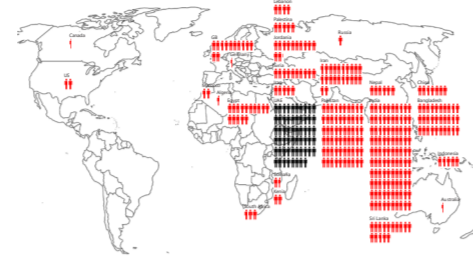


Increase of mobility of individuals & labour migration



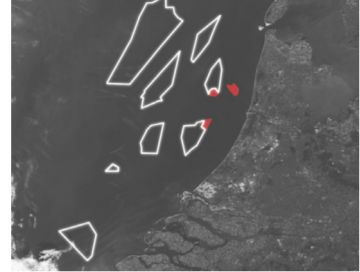
Shifting the focus to renewable energy resources

ENERGY & LABOUR MIGRATION



emirati (00.000)
expat & origin (00.000)

CURRENT & PLANNED OFFSHORE FARMS



Existing wind farm
Planned wind farm

DUTCH CONTEXT OF 'POLENDORP'



Location: in the middle of nowhere
No foundations: to make it disappear quickly
No services, shops, restaurants

BORSSELE WIND PROJECT



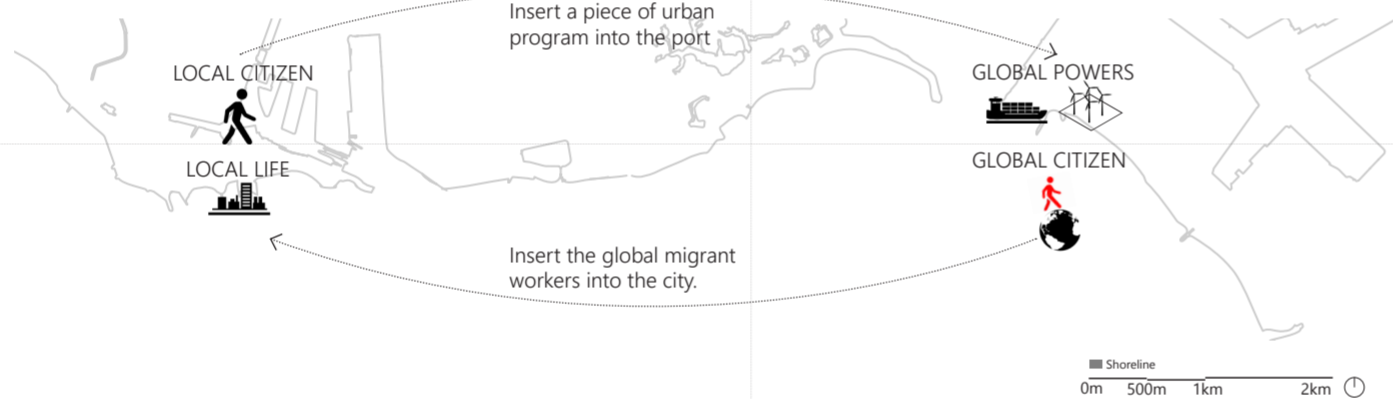
AMOUNT OF WORKERS



PHASING

- 1: preparation of Borssele off site
- 2: preparation of Borssele on site
- 3: installation of the foundations and the transformer station
- 4: preparation of the wind turbines and blades
- 5: installation of the wind turbines and blades

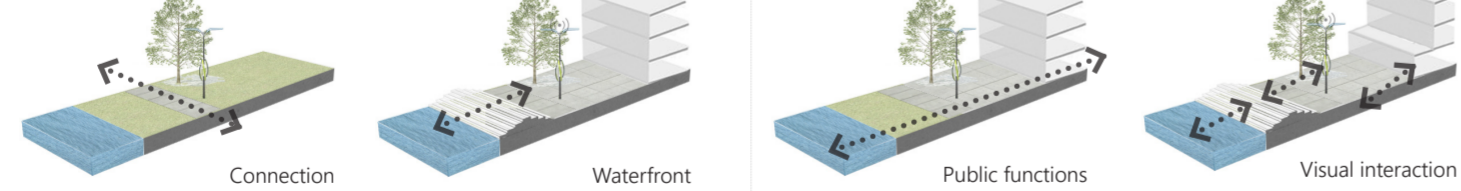
STRATEGY



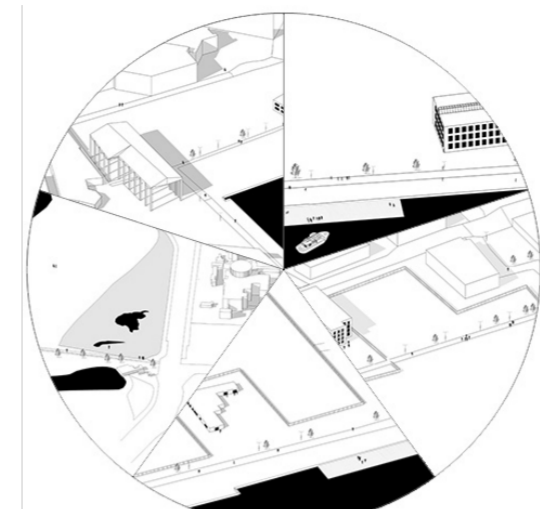
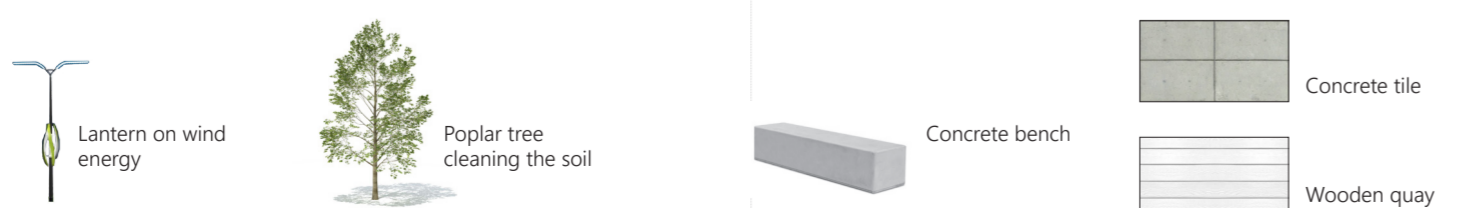
FIVE LOCATIONS IN A SYSTEM



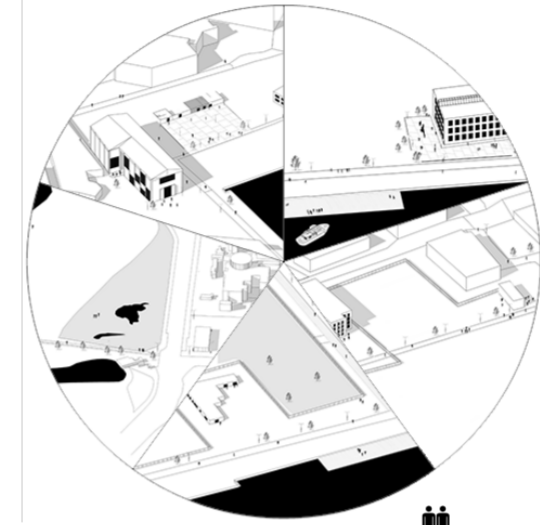
DESIGN PRINCIPLES



DESIGN ELEMENTS



1: preparation of Borssele off site



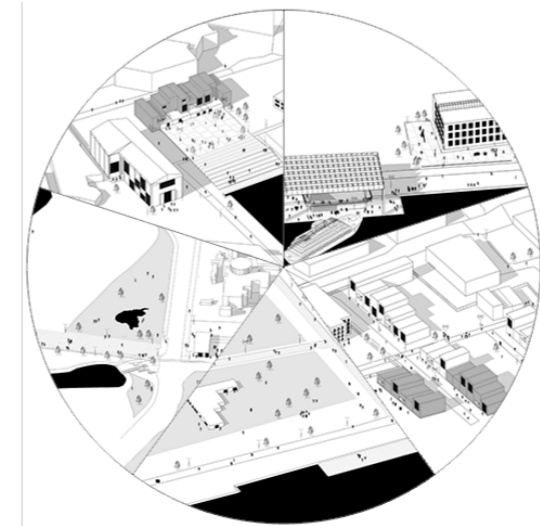
2: preparation of Borssele on site



3: installation of the foundations and the transformer station



4: preparation of the wind turbines and blades



5: installation of the wind turbines and blades

