



VINGE NORTH




FUTURE LIVING NOW

KUBEN MANAGEMENT, GREEN ISLAND & EFFEKT

WHERE AND HOW WILL OUR CHILDREN LIVE?

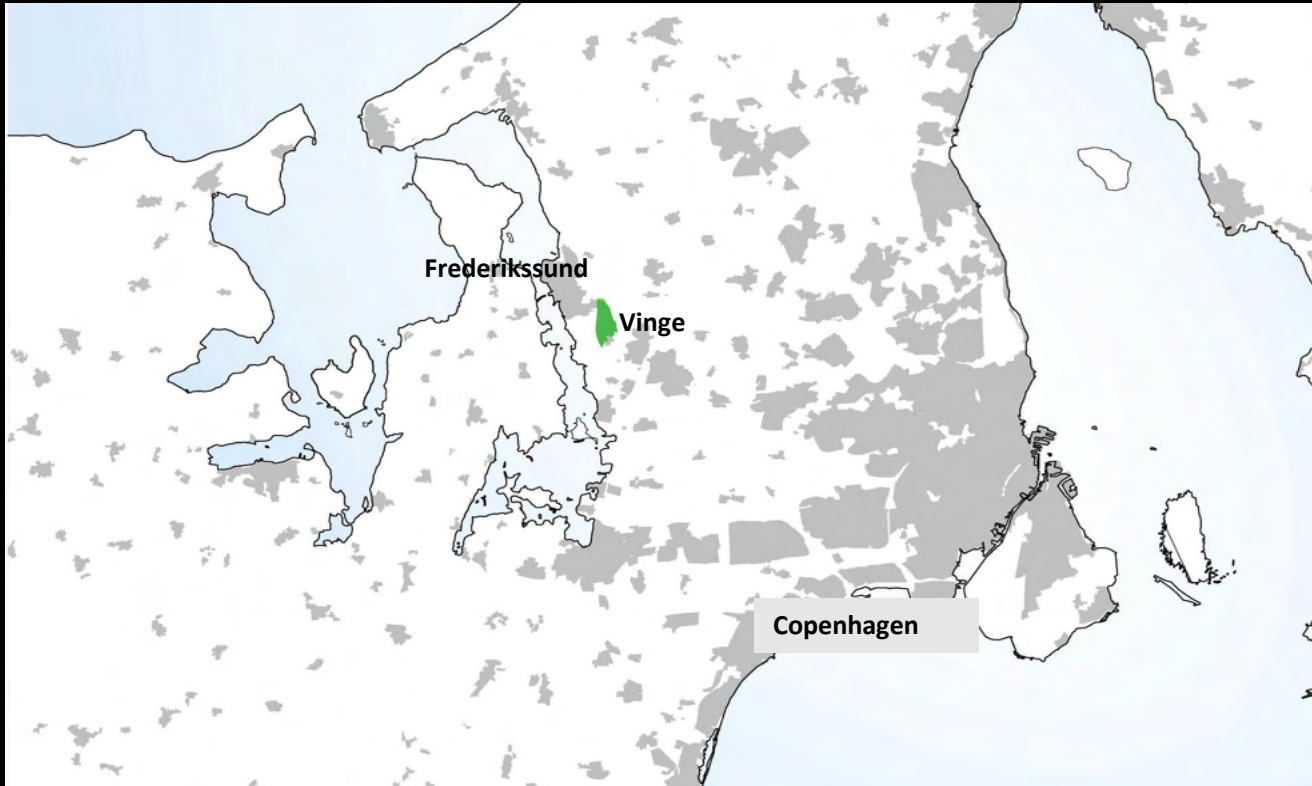
Many of us have moved away from smaller communities to overpopulated, expensive and increasingly lonely big cities. The demand for a future secure and comfortable living is growing exponentially.



-  Globally, and indeed in the Greater Copenhagen area, not enough housing is being developed to meet demand.
-  We (UN) have decided for a sustainable future, first wave of green transition was subsidized, now the need is economically viable solutions.
-  New housing developments are increasingly marketed on sustainable values. We want to deliver future secure living.

ALIGNING INTERESTS

Developing sustainable housing projects often flounder in a landscape of opposing interests.



Frederikssund County has spent MDKK 387 since 2009 creating a visionary master plan for a new city – **Vinge**



December 2017 a Danish Pension Fund withdrew from developing the central area of Vinge, because the county failed to execute on their visionary plans (Helhedsplanen).



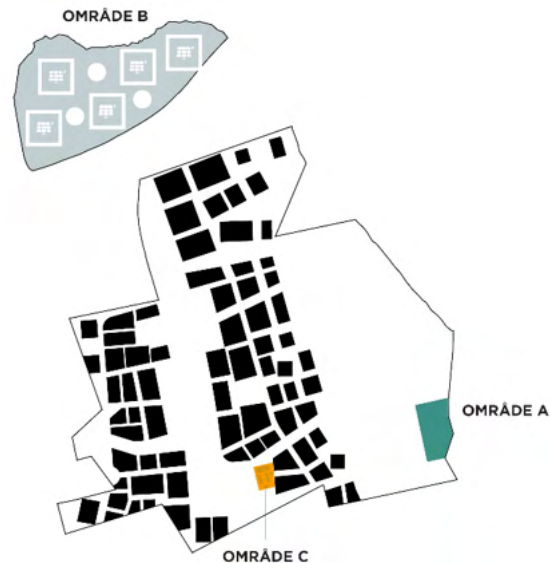
A city development vehicle like Byudviklingsselskabet Vinge Nord can align interest and succeed.



WHERE IS VINGE NORTH

VINGE NORD DEVELOPMENT DELIVERS

Building right opportunities at very competitive rates



We deliver a carbon free utility and infrastructure solution, that meets 9 out of 16 UN sustainable development goals. (6,7,8,9,11,12,13,15,16)



We build a city that will meet all future expectations for the good life. A city that is nestled in nature, living with nature and not of it.



Vinge Nord will be a community where continuous development is secured, through community ownership of commons and utilities.

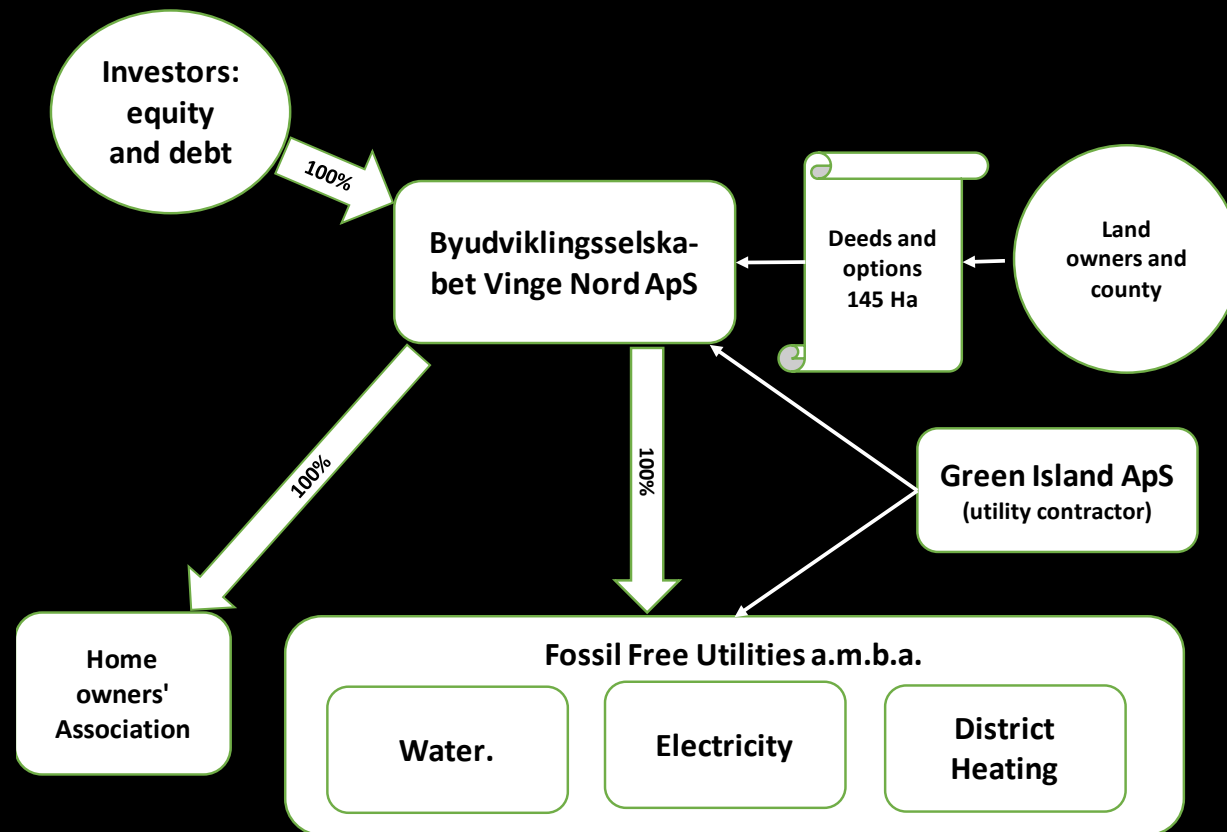


- We create value by eliminating risks for developers and end-users.
- We deliver the fabric for a modern and future secure city, that is so much in demand.
- We will steward the city planning process



BYUDVIKLINGSSKABET VINGE NORD APS

Organization in development and construction phase

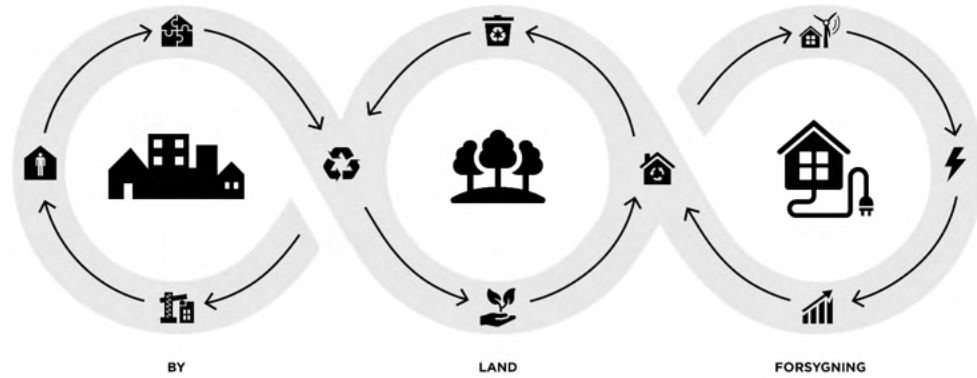


At present Byudviklingsselskabet Vinge Nord ApS has:

- Achieved a committed time plan for approvals from the county of Frederikssund.
- Signed options to buy the necessary land, the options are conditioned on the planning permission and other authorities permissions are obtained.
- Q4 2018 building rights will be brought to market.



instead of traditional seperated sector planning



**Vinge north is a new visionary model where city, landscape,
and utilities are integrated and create synergies between
each other**

VINGE

MASTER PLAN

THE MUNICIPALITY OF FREDERIKSSUND



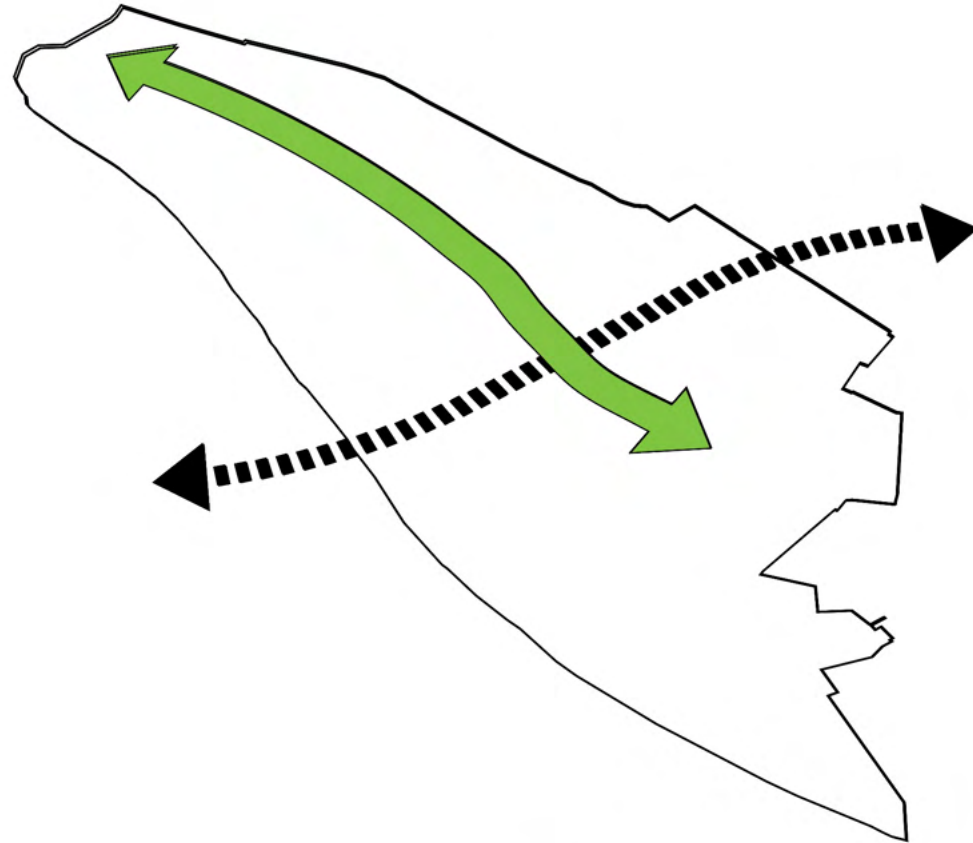
Placering

CONTEXT



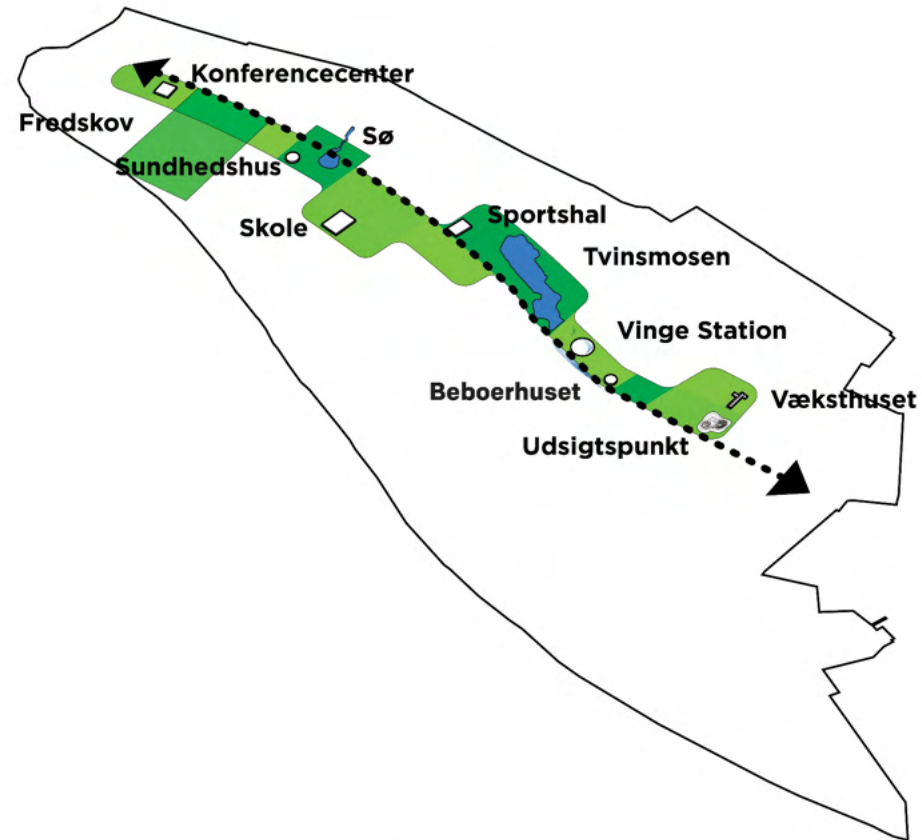
Landskab og by



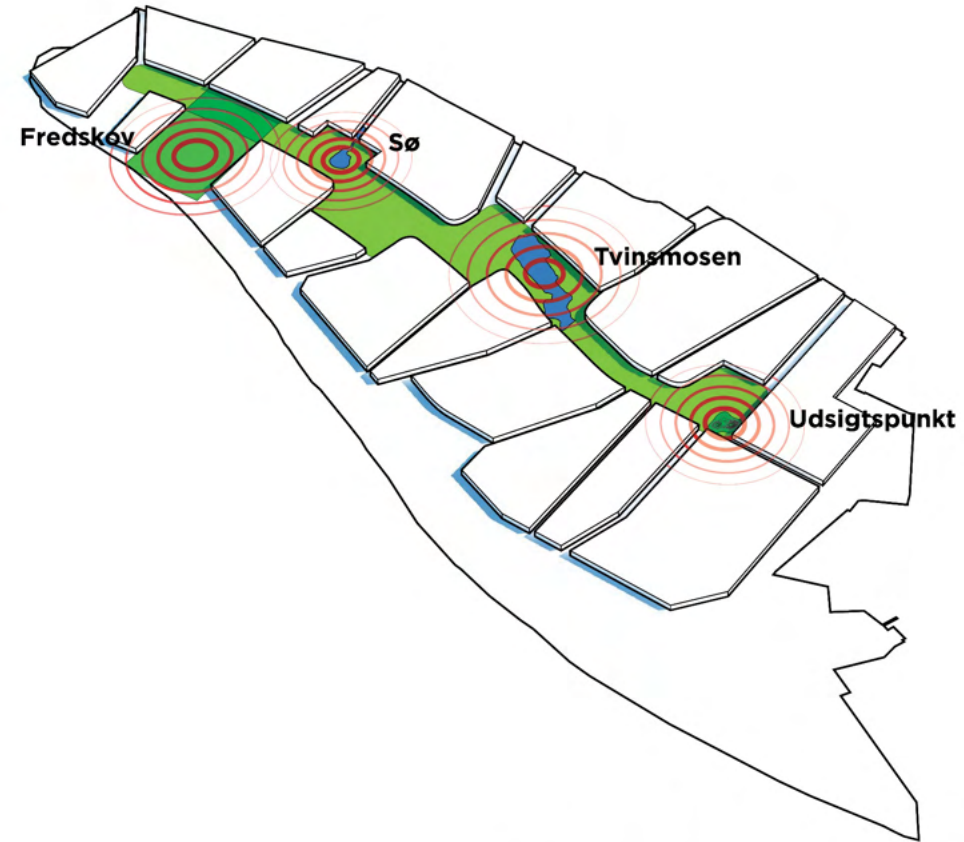


VISION

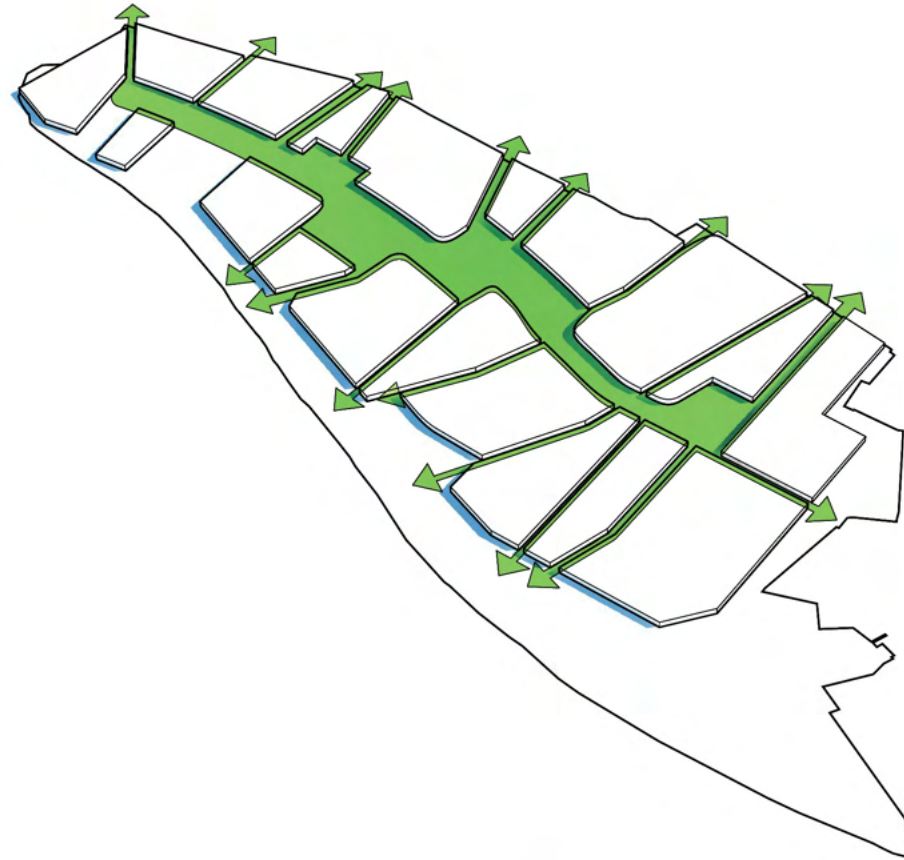
CITY AND LANDSCAPE INTEGRATION



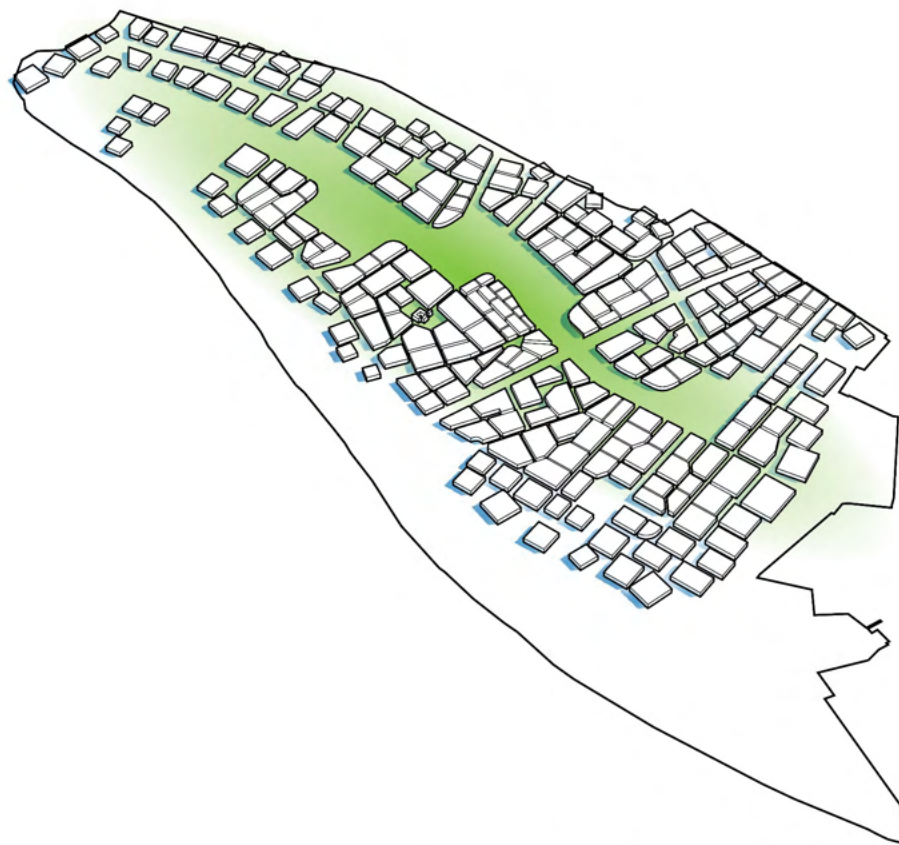
THE GREEN HEART



GREEN CITY CENTERS



GREEN CORRIDORS



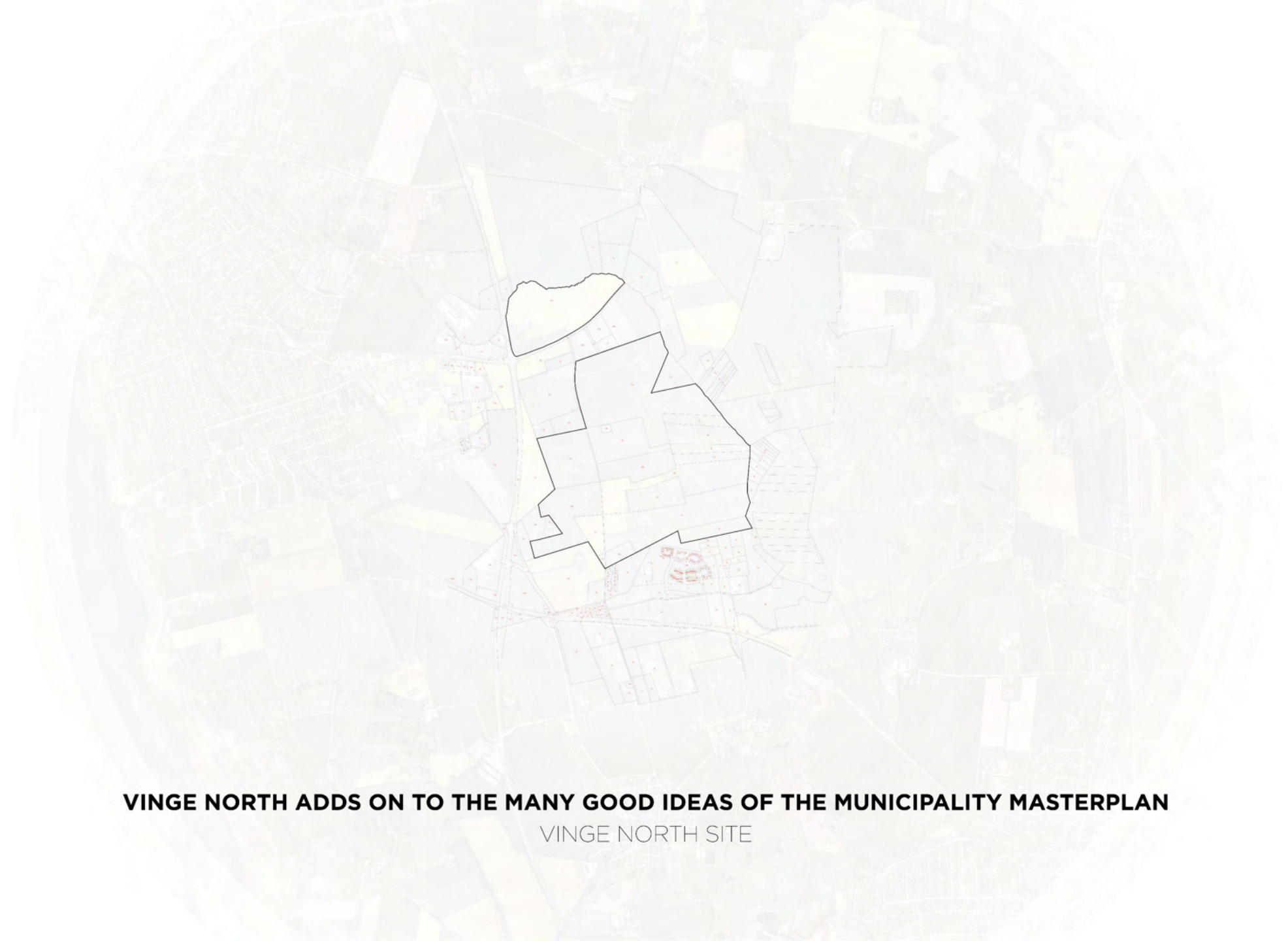
HOUSING DEVELOPMENTS



VINGE MASTER PLAN

VINGE NORD

THE FIRST CARBON FREE MODERN DEVELOPMENT



VINGE NORTH ADDS ON TO THE MANY GOOD IDEAS OF THE MUNICIPALITY MASTERPLAN

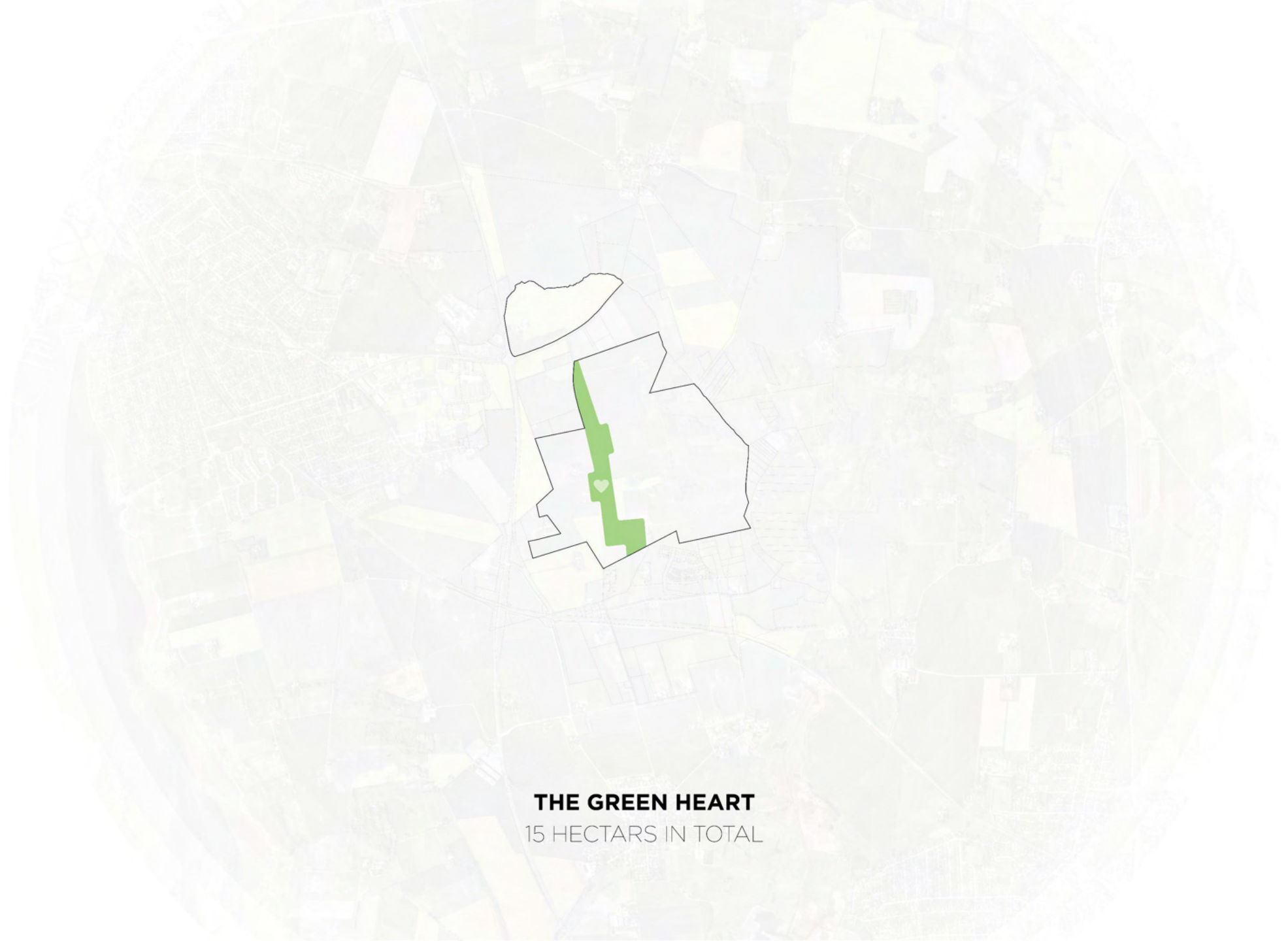
VINGE NORTH SITE



WHERE IS VINGE NORTH



VINGE NORTH



THE GREEN HEART
15 HECTARS IN TOTAL



HOUSING DEVELOPMENT

82 HECTARS IN TOTAL



LAND ZONE

50 HECTARS IN TOTAL WITHIN THE SITE

- 
- Primær
 - Sekundær
 - Tertiær
 - Busvej

INFRASTRUCTURE
STREET CATEGORIES

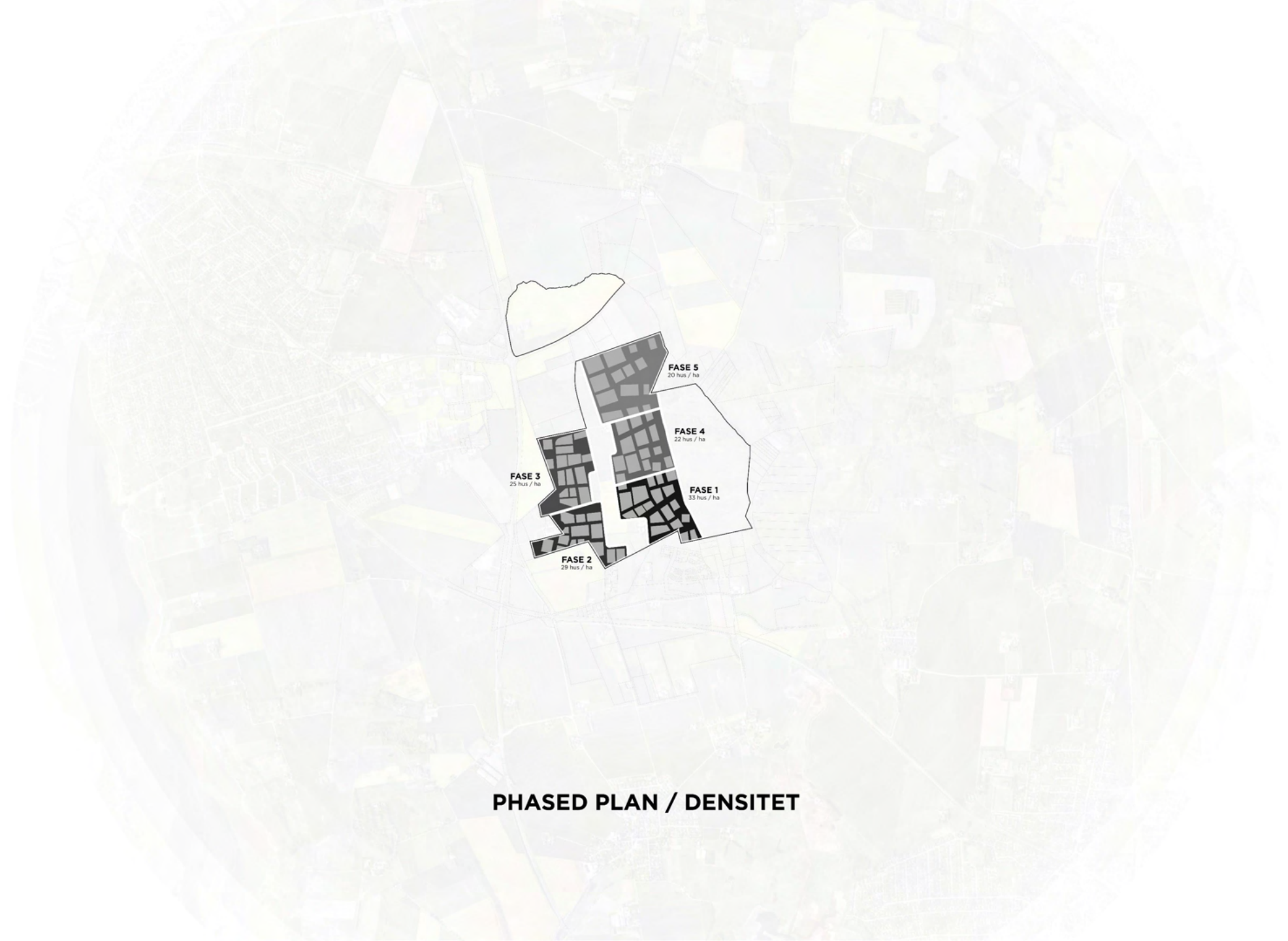
----- Primaert vandskel
— Vandveje
----- Vandskel



RAIN WATER MANAGEMENT



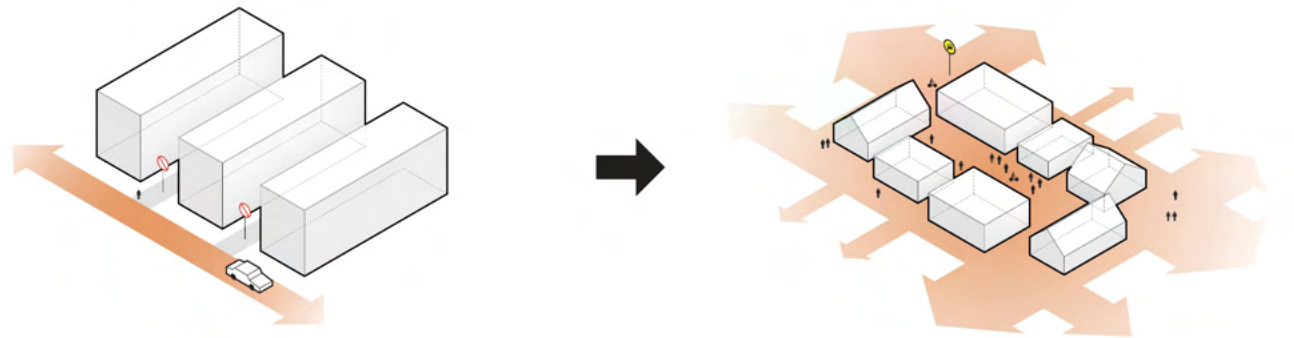
SOUND BARRIERS



PHASED PLAN / DENSITET

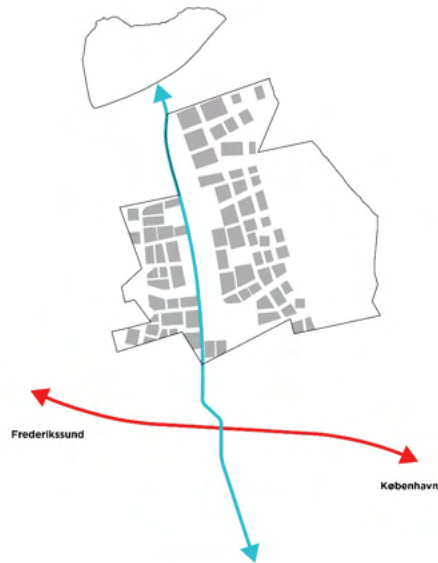
QUALITITES OF LIVING

IN A FUTURE SECURE VINGE NORD



ACCESS / CONNECTIONS

FROM SEPERATED ENCLAVES
TO WELL CONNECTED RESIDENTIAL AREAS



Easy access to public transportation



Safe and accessible infrastructure



A city plan with nature as its heart



A cityscape that encourages walking and biking



Station integrated in the landscape in Vinge



Green public transport hub in Roskilde



Green bus stop in London

Easy access to public transportation



Safe walking zones along the road



Streets with integrated hang out space



Green streets for community

Safe and accessible infrastructure



bike paths along natural sights



good separation of cars and bikes

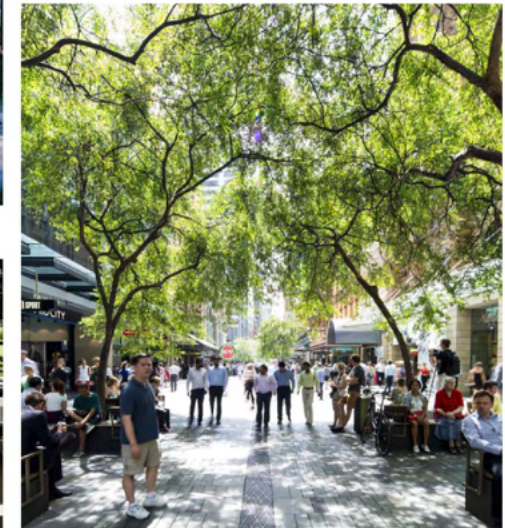


Bike sharing stations

Planning that prioritizes sustainable mobility

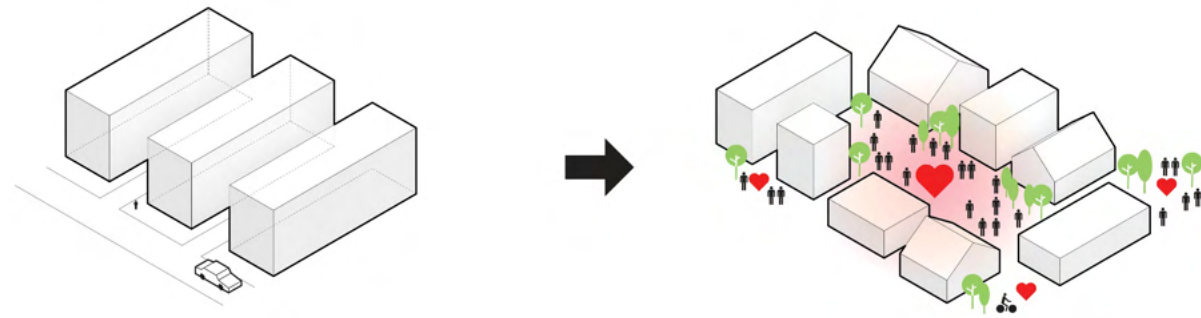


Streets that encourages walking



walking streets with character

Creation of neighbourhoods that encourage walking



Communities

FROM CLOSED PARALLEL SOCIETIES
TO OPEN DIVERSE COMMUNITIES



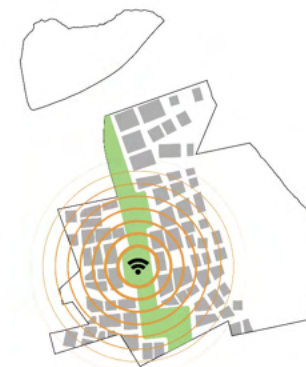
**city scapes for regional
community**



**city scape for local
community**



**Varied neighbourhood
functions for community**



**online
community**



Regional adventure activities



Facilities for sport in nature



School in Vingje North integrated in nature



Regional tourist attractions



City scapes for community gardens



Vertical community farming



Regional nature experiences



Schoolyard in Vingje North



Food court in Vingje



IoT app that serves the community



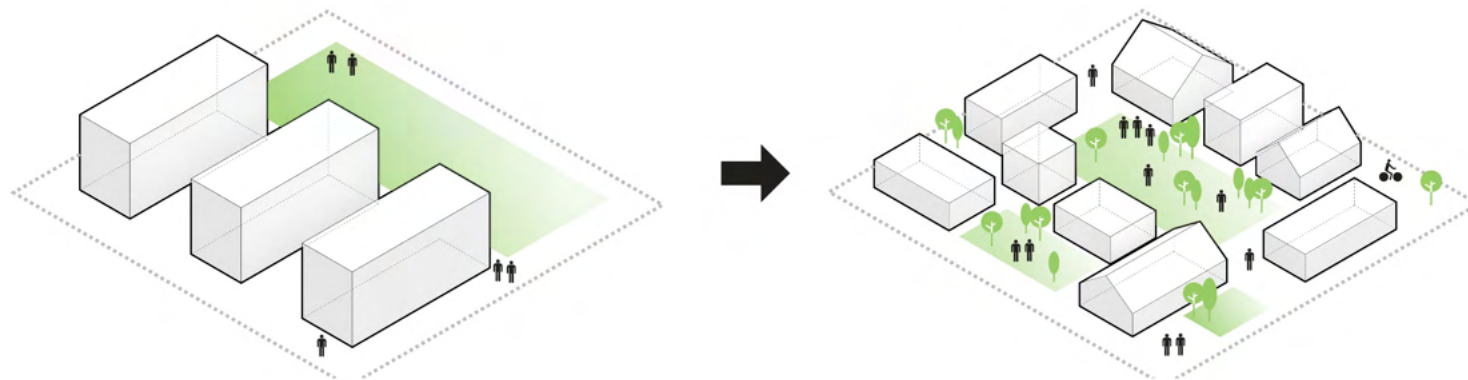
Online communities around sharing

City scapes for regional community

City scape for local community

Various neighbourhood functions for community

Online community



DENSITY / SCALE

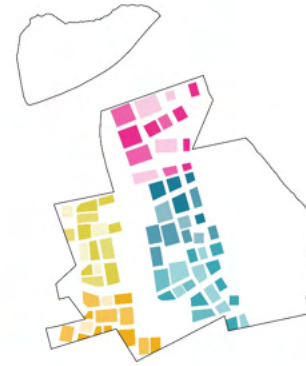
FROM SCALELESS MONOTONOUS DEVELOPMENT
TO CLOSE DWELLINGS IN A HUMAN SCALE



Districts



Neighbourhoods



Clusters



Green disticts



Neighbourhoods bursting with activity



Clusters integrated in nature



Districts with a city feel



Peaceful neighbourhoods



Clusters of green



Districts with a clear identy



Neighbourhoods for community

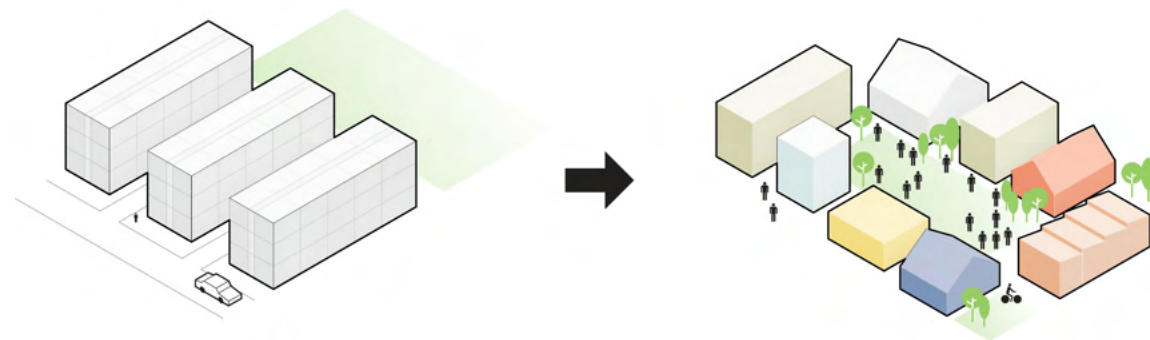


Clusters of commons

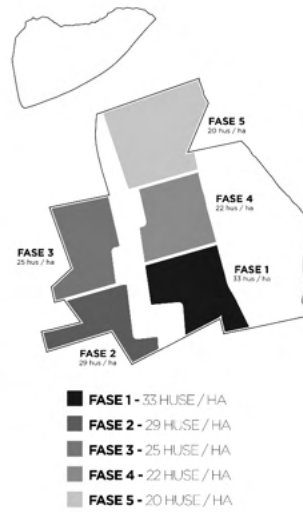
Districts

Neighbourhoods

Clusters



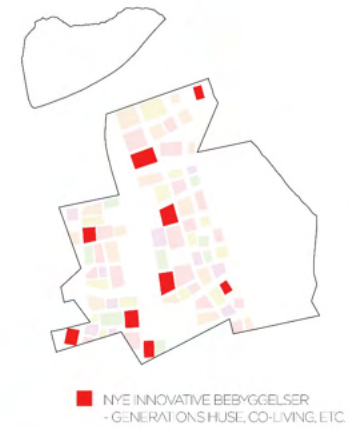
VARIATION
FROM MONOTONOUS DEVELOPMENTS
TO VARIED FLEXIBLE NEIGHBOURHOODS.



Varied density



Diverse types of dwellings



Community living



Areas with high density



Apartment buildings



Generation houses



Areas with medium density



Attached houses



Co-living



Areas with low density



Villas

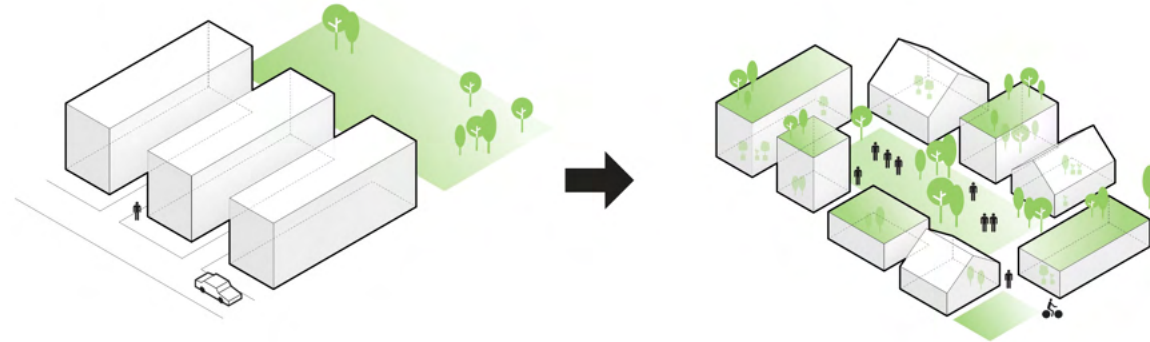


Senior communities

**Varied
density**

Diverse types of dwellings

Community living



NATURE

FROM SERPERATION FROM NATURE
TO INTEGRATION OF NATURE



Green spaces as regional attractions



Varied green outdoor spaces



Intimate green corridors



private green outdoor spaces



Forests as farms



Green spaces for play



Green corridors for nature



Intimate green spaces for community



Green areas for rainwater management



Parks



Green corridors for gardens



Semi-private green zones for recreation



Recreational green spaces



Wetlands



Green corridors for community



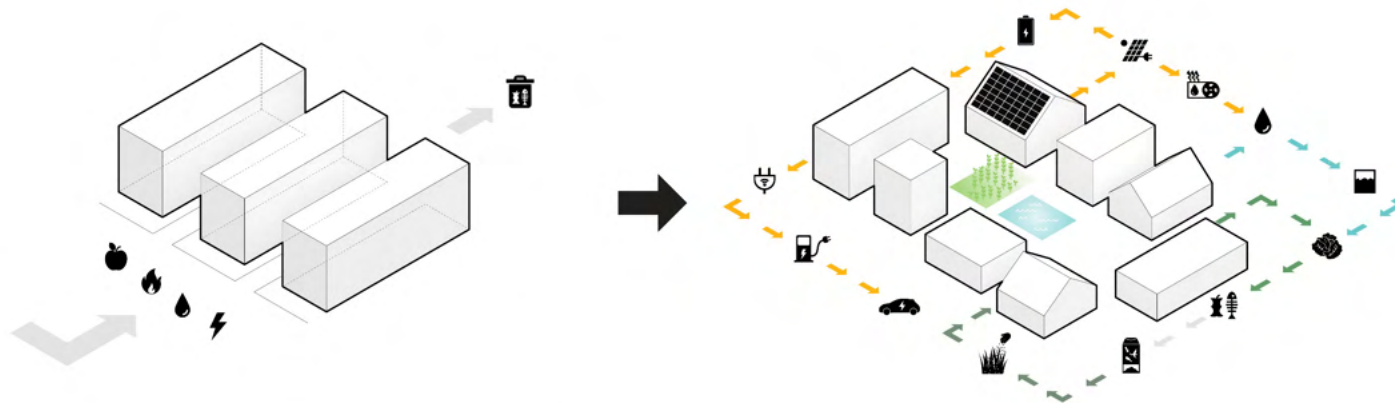
Green spaces for houses

Green spaces as regional attractions

Varied green outdoor spaces

Intimate green corridors

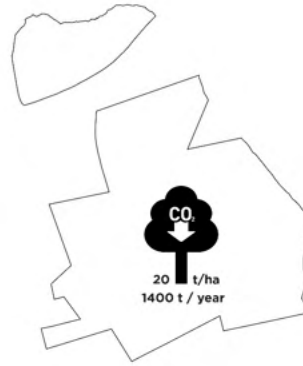
private green outdoor spaces



SUSTAINABILITY
FROM BURDEN
TO STRENGTH



Fossil free utilities



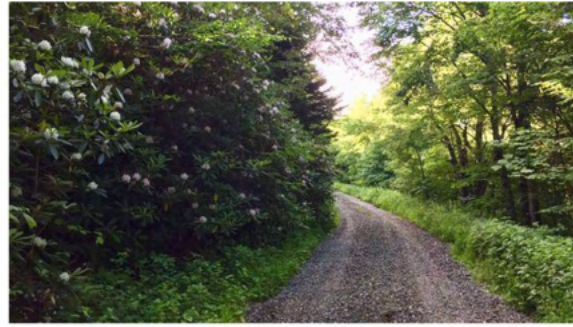
Carbon sequestering city



Circular economy



Green energy production



Carbon sequestration in green areas



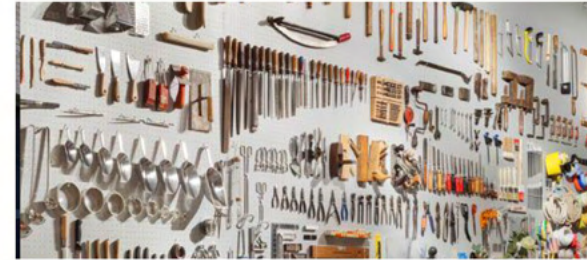
Sharing of mobility



Green waste water management



Carbon sequestration in wetlands



Tool libraries



From waste to heat and electricity



Carbon sequestration in recreational areas



Shared spaces

Fossil free utilities

Carbon sequestration

Circular economy

GREEN ISLAND

FOSSILE FREE UTILITIES

Energy sources



Solar panels



Wind mills



Bio gas



Pyrolysis

Energy storage



Batteries



Thermal storage



Bio mass

Suppliers

Emerson

EWT

Agro buisness park

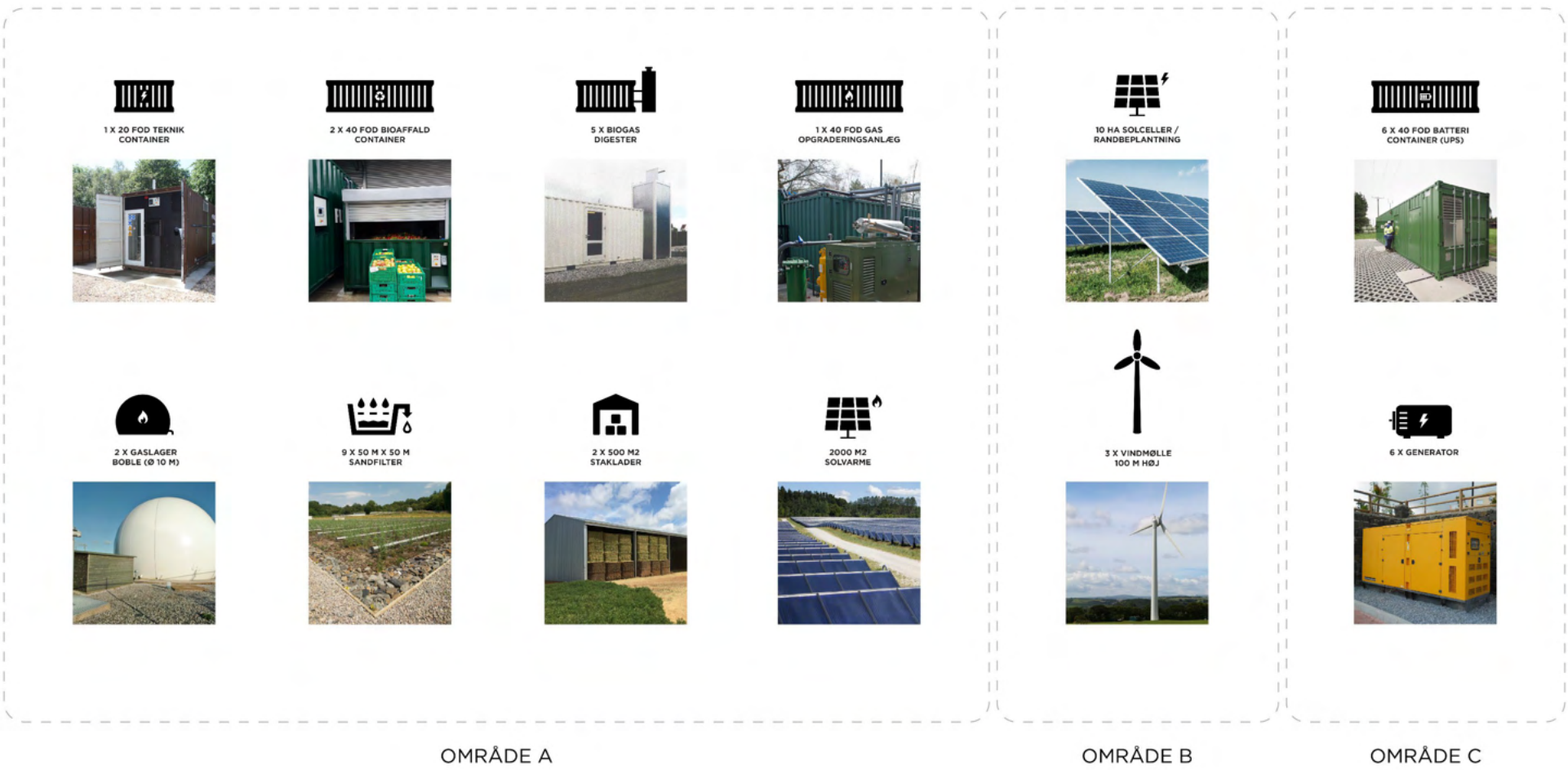
Aalborg CSP

SMA

Plan energi

BMZ

COMPONENTS



COMPONENT MATRIX

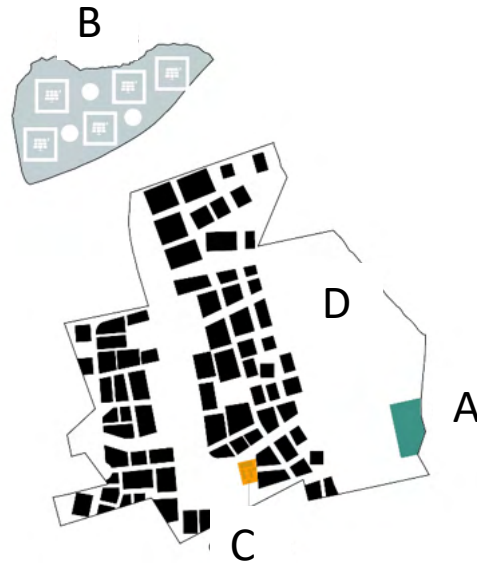
GREEN ISLAND DELIVERS

We design and calculate project cost

We assist the community with approvals and legal structures

We build, commission and operate fossil free solutions

We help structure loan capital to ensure financing for the project



A – Sewage, Bio and Pyr-Gas production

C – Generators and control/operations

B - 10 hectares of PV and 3 windmills

D – 40 hectares of biomass

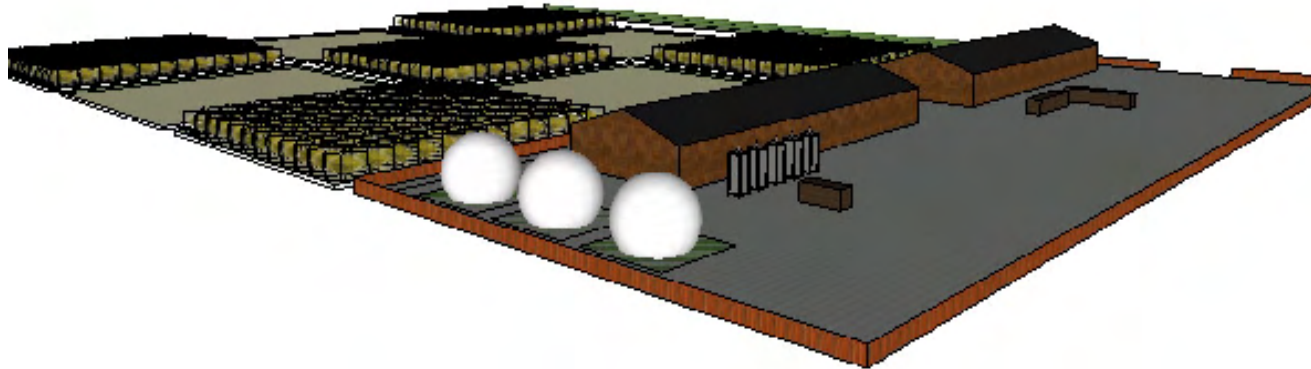
- 🌱 We deliver a carbon free utility and infrastructure solution, that meets 9 out of 17 UN sustainable development goals. (6,7,8,9,11,12,13,15,16)
- 🌱 We secure the circular resources and economic operation of the project.
- 🌱 Our utilities are build to the highest standards, meeting expectations for the good modern life.

Area A

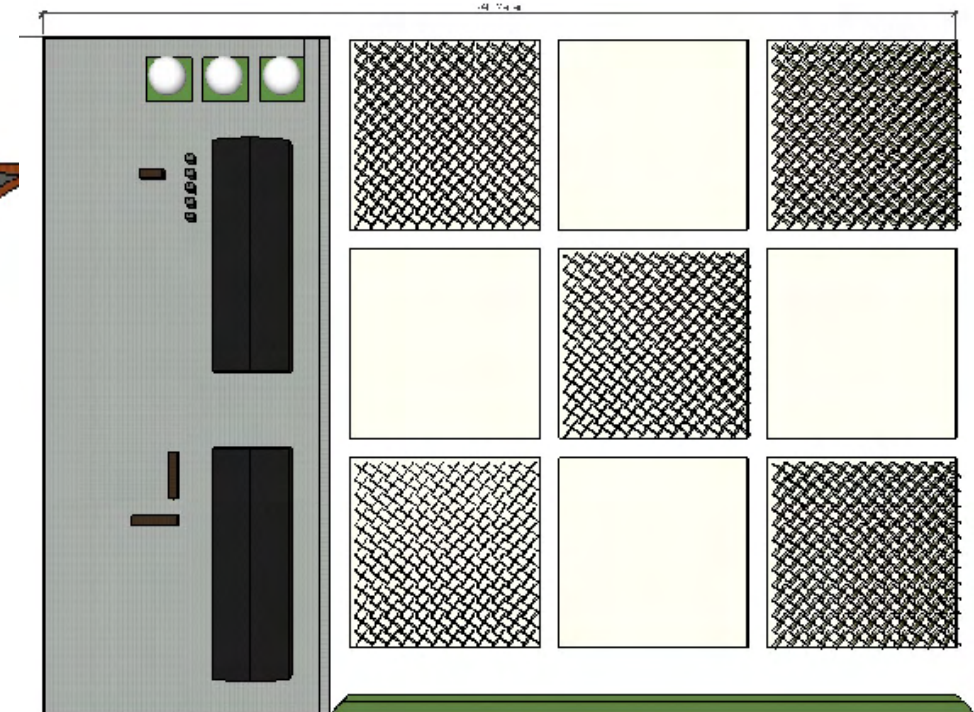
Biogas Production, Pyrolysis gas Production, Gas Storage,
Biomasse Storage and Sewage Treatment



A:



A – Sewage, Bio and Pyr-Gas production



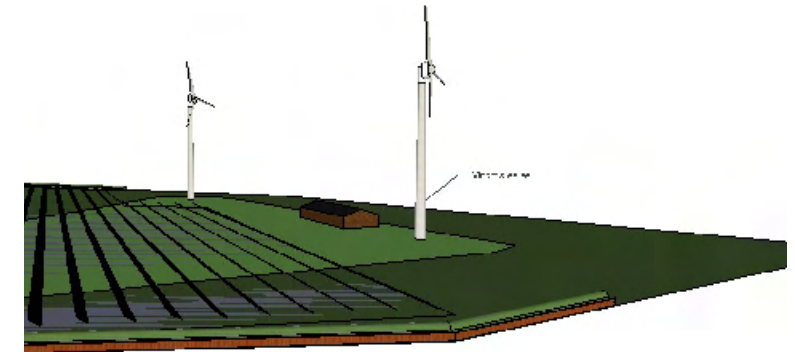
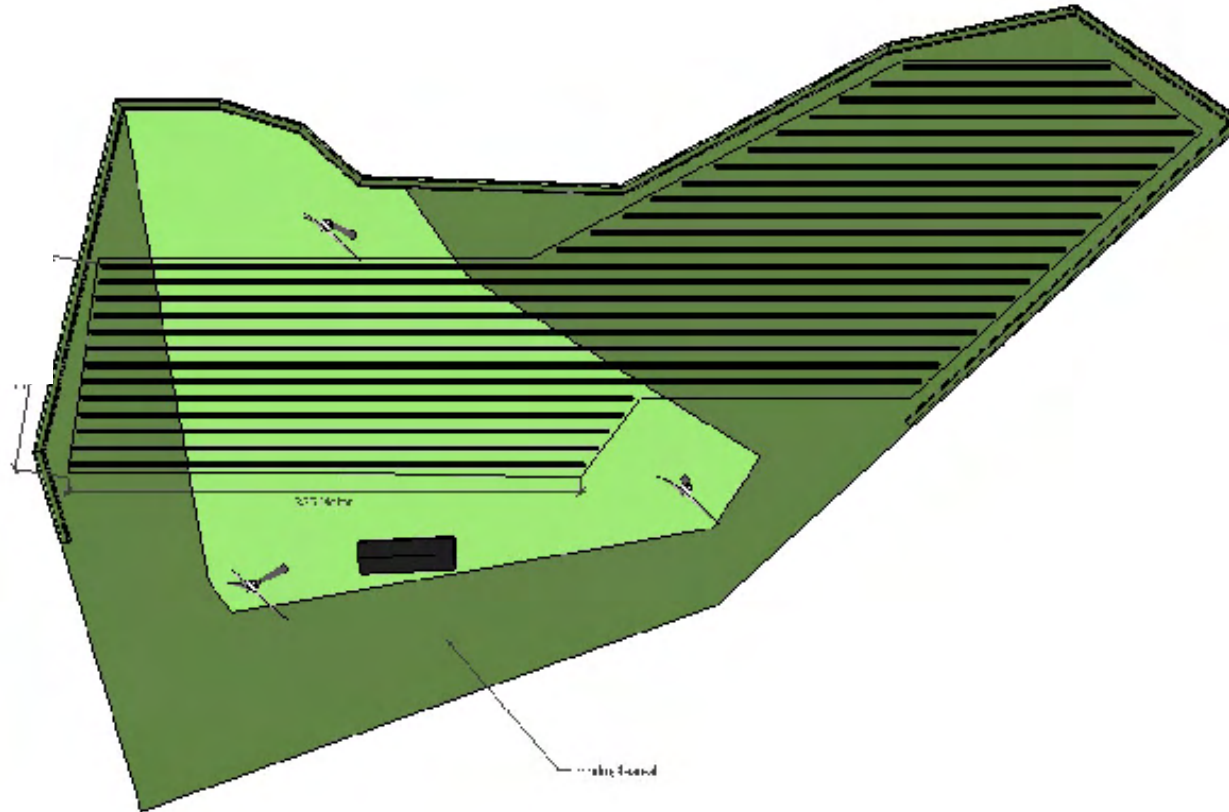
Area B

10 Hektares PV Solarcells

3 Windmilss, Height: 100 Meter



B:



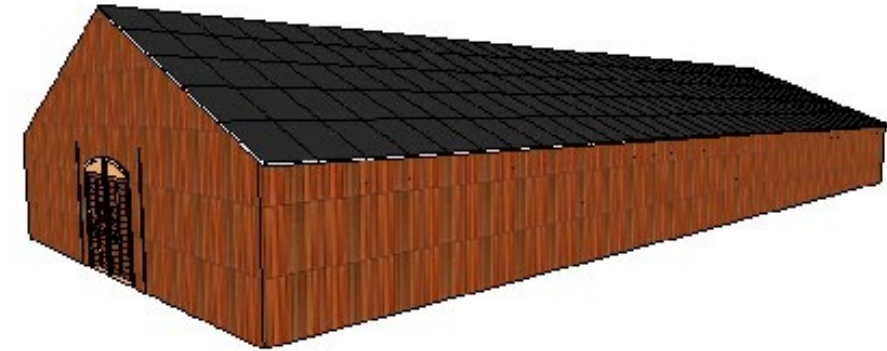
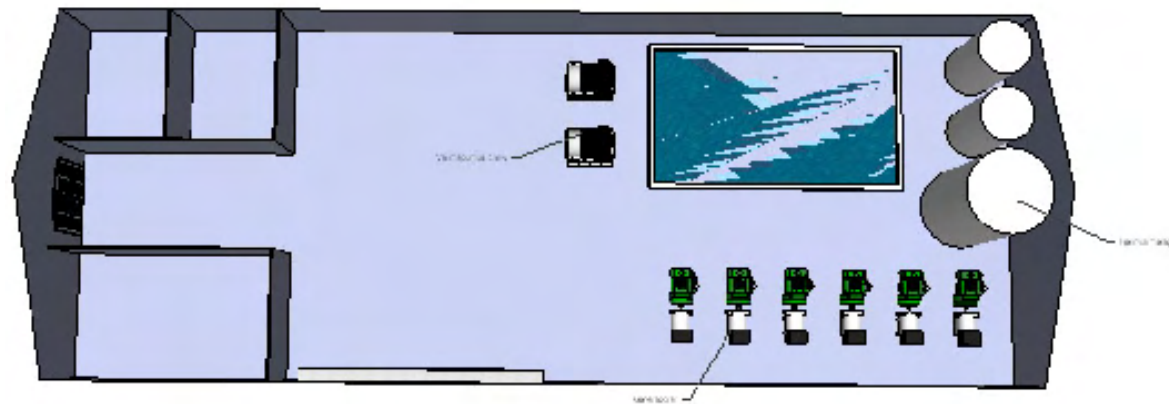
B – PV and WindmillsSewage

Area C

District Heating and Control/Operations

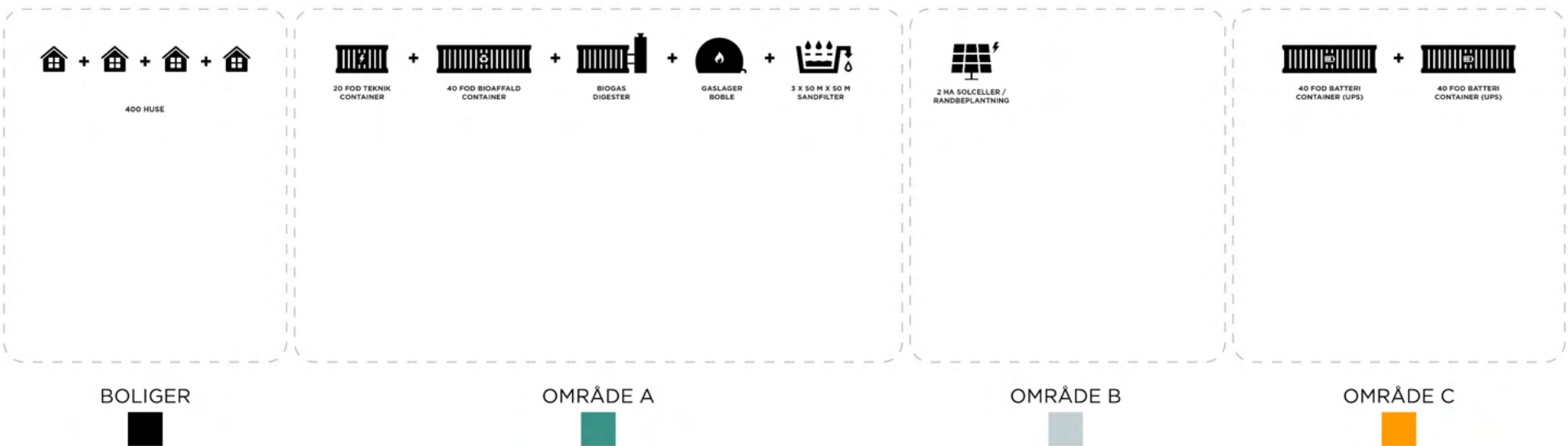
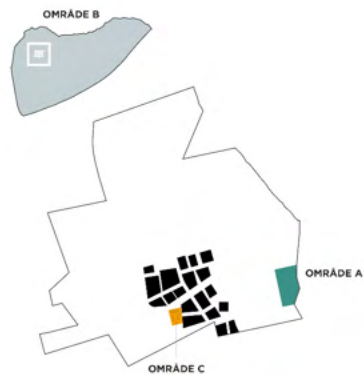


C:

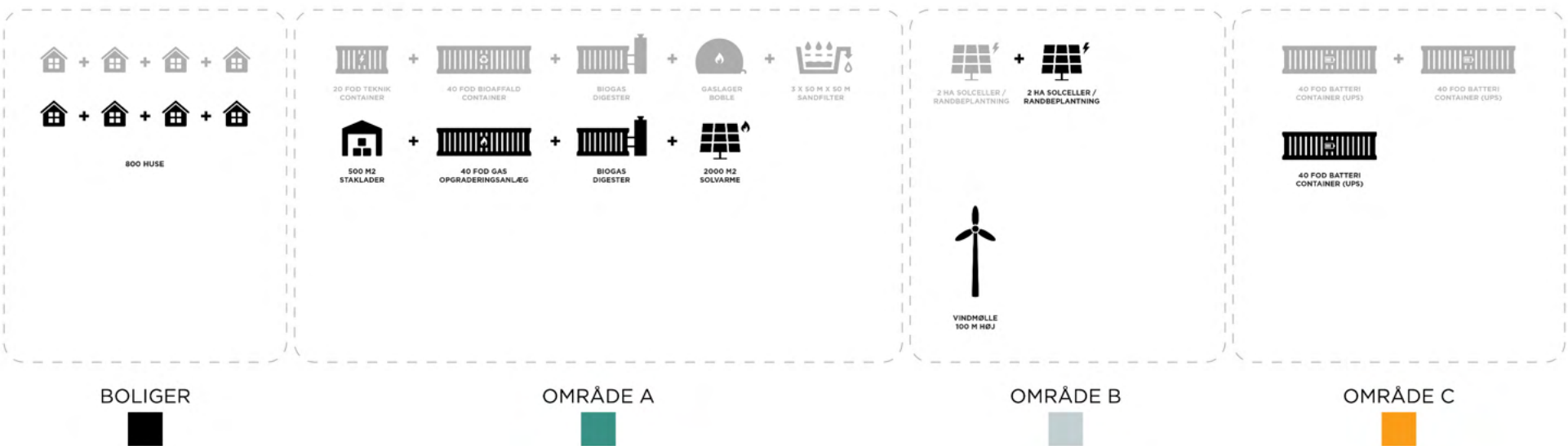
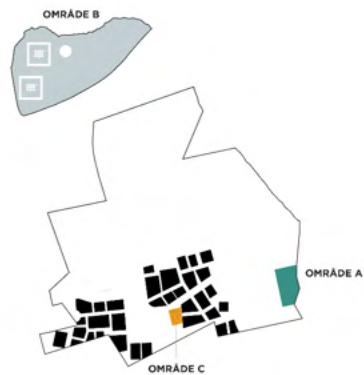


C – Generators and control/operations

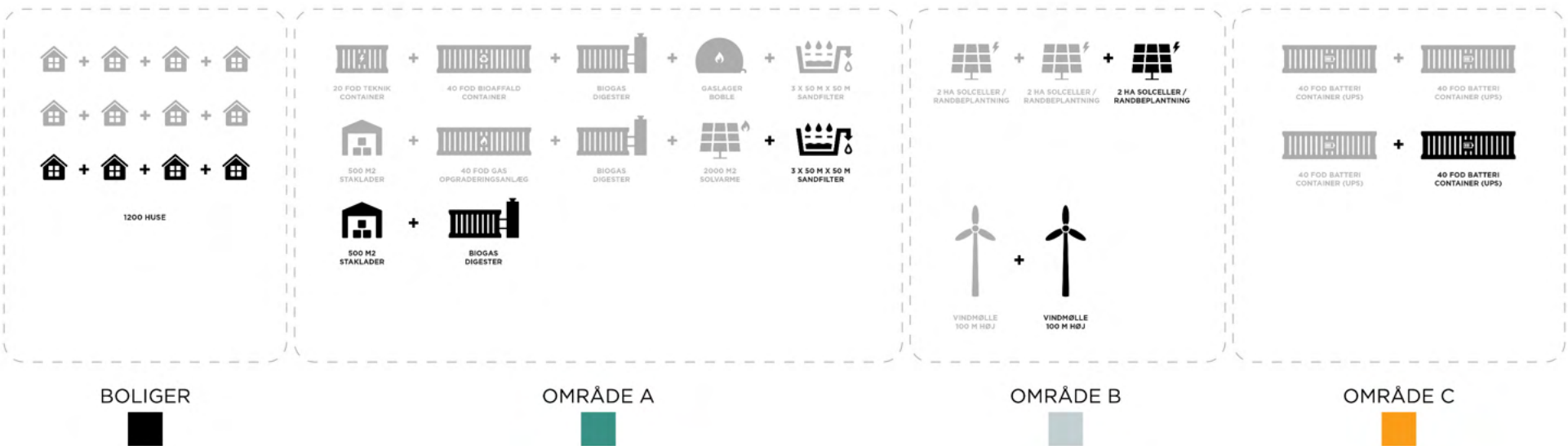
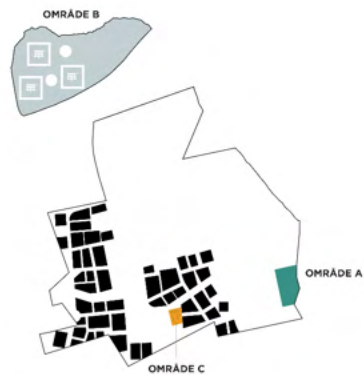
**CONSTRUCTION PHASE PLAN
IN VINGE NORTH**



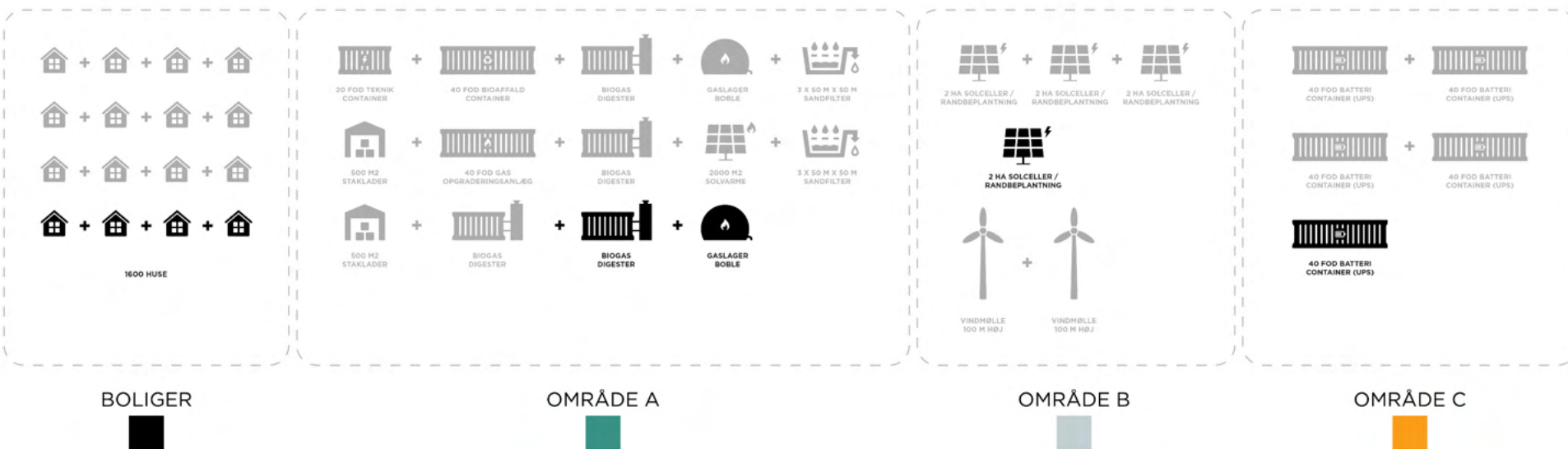
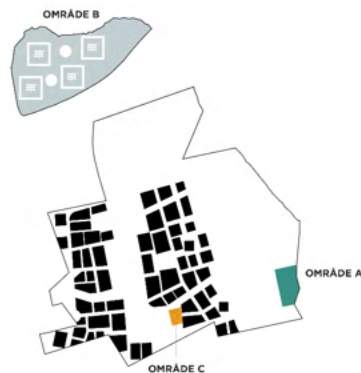
PHASE PLAN WITH COMPONENTS



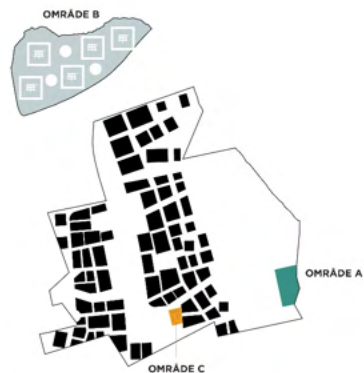
PHASE PLAN WITH COMPONENTS



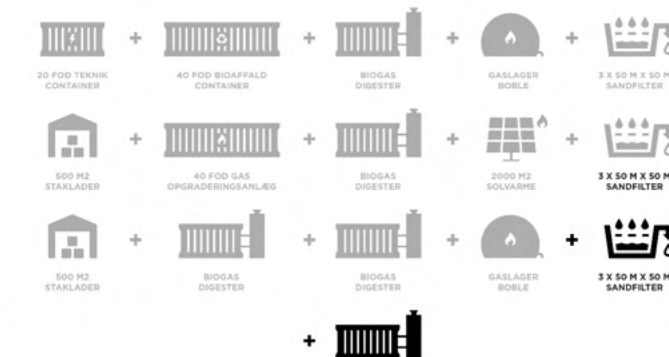
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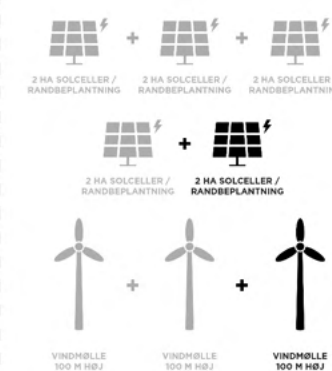
PHASE PLAN WITH COMPONENTS



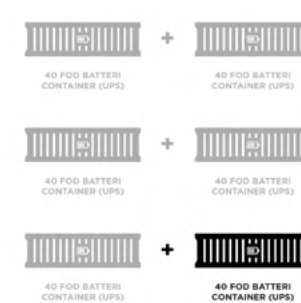
BOLIGER



OMRÅDE A



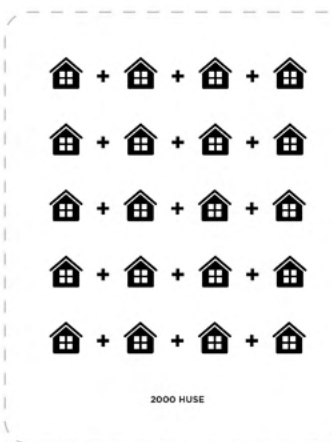
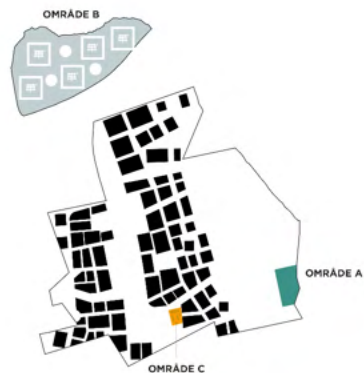
OMRÅDE B



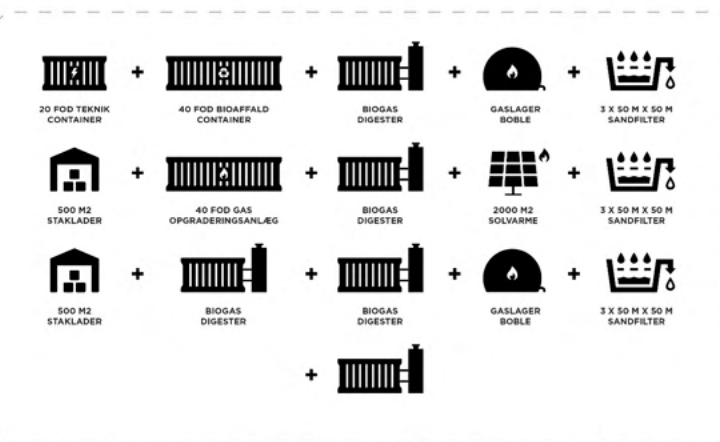
OMRÅDE C



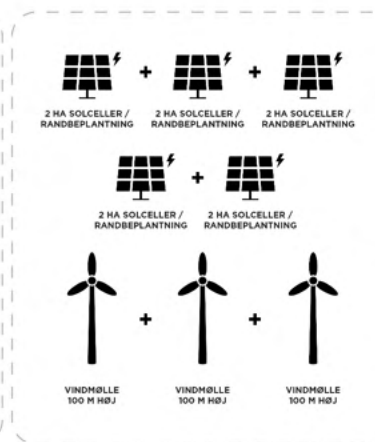
PHASE PLAN WITH COMPONENTS



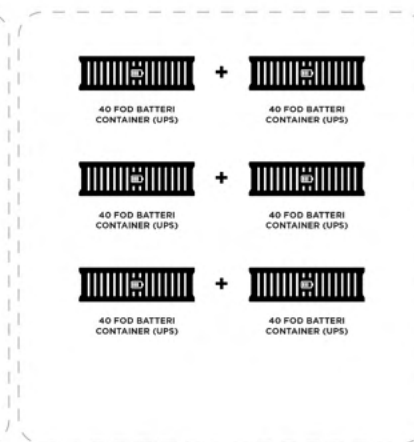
BOLIGER



OMRÅDE A



OMRÅDE B



OMRÅDE C

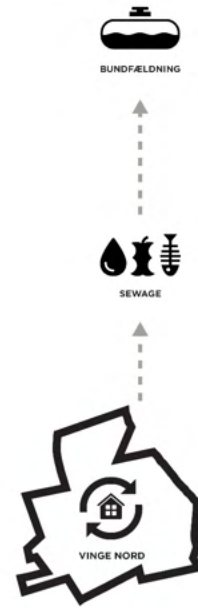


PHASE PLAN WITH COMPONENTS

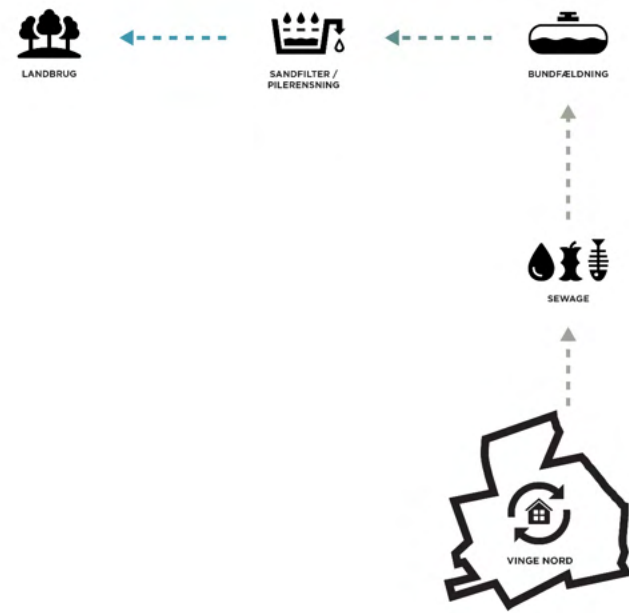
OVERVIEW

SYSTEMS DIAGRAM











LANDBRUG



MAD



SANDFILTER /
PILERENSNING



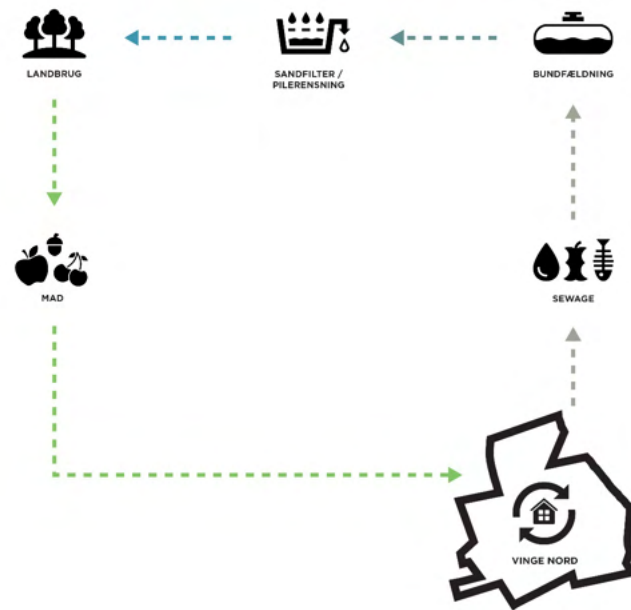
BUNDFÆLDNING

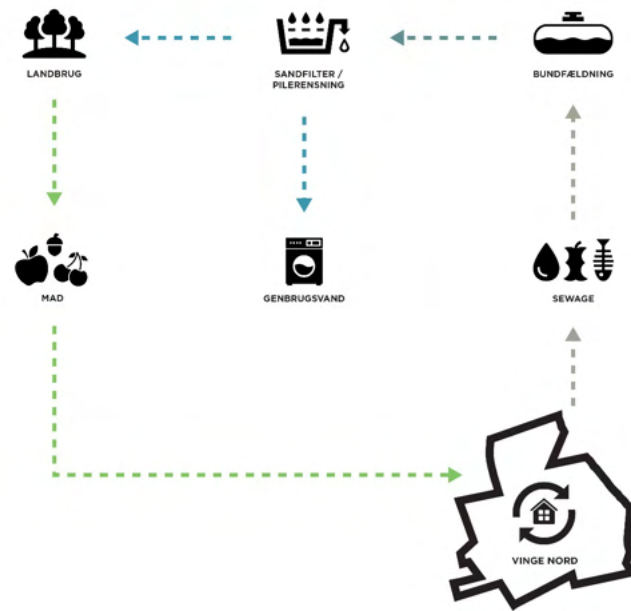


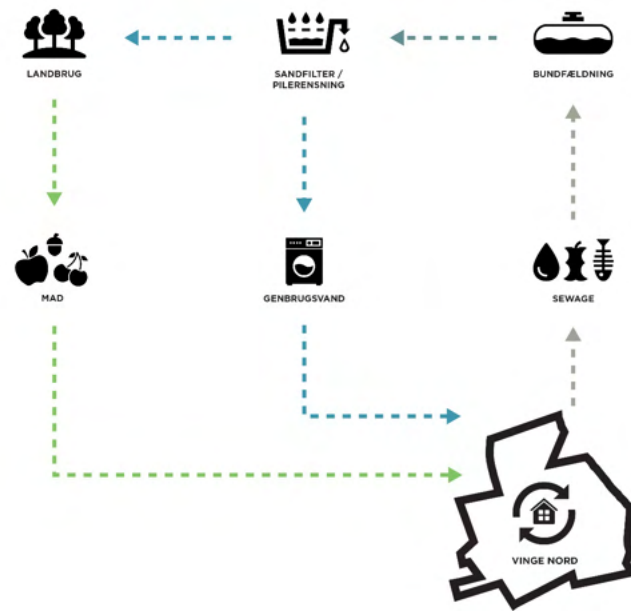
SEWAGE

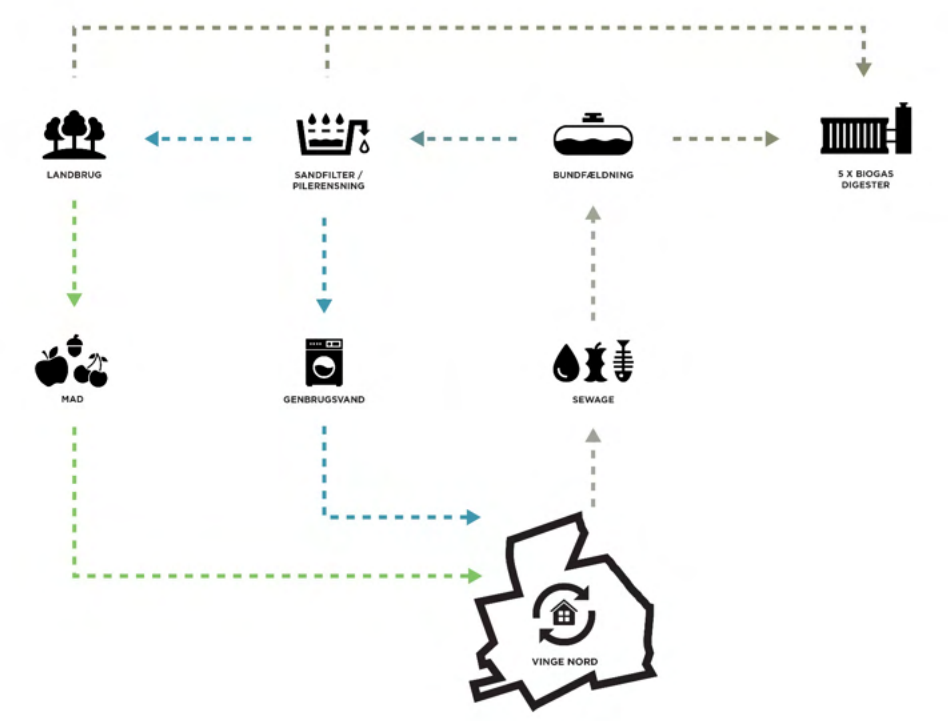


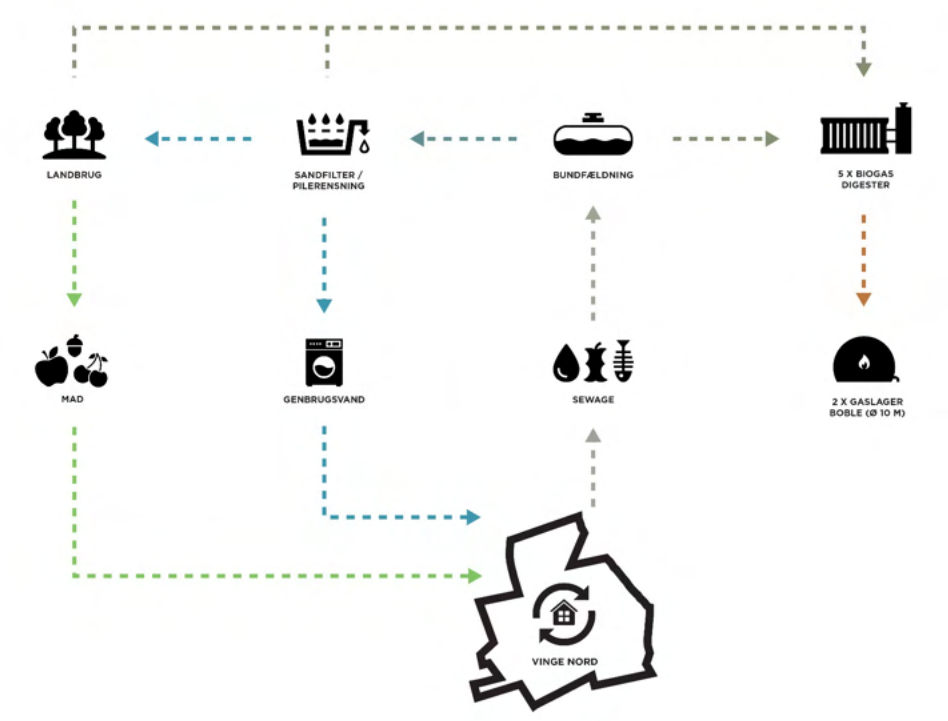
VINGE NORD

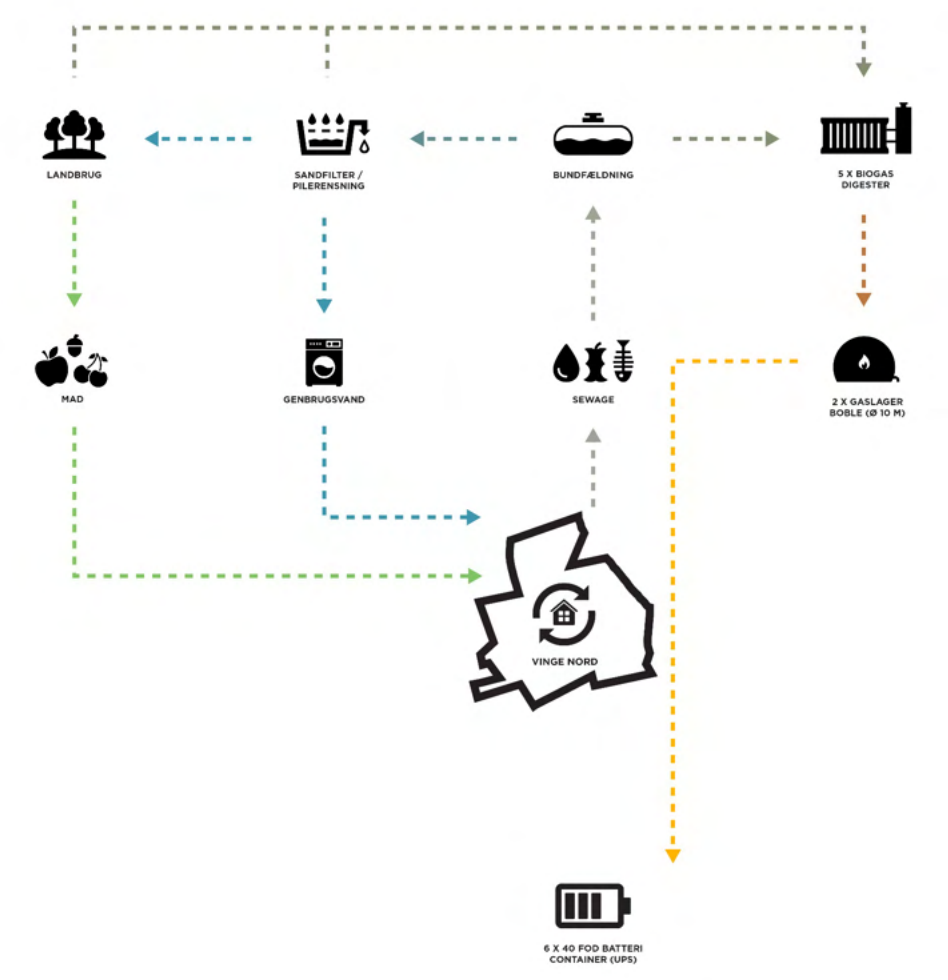


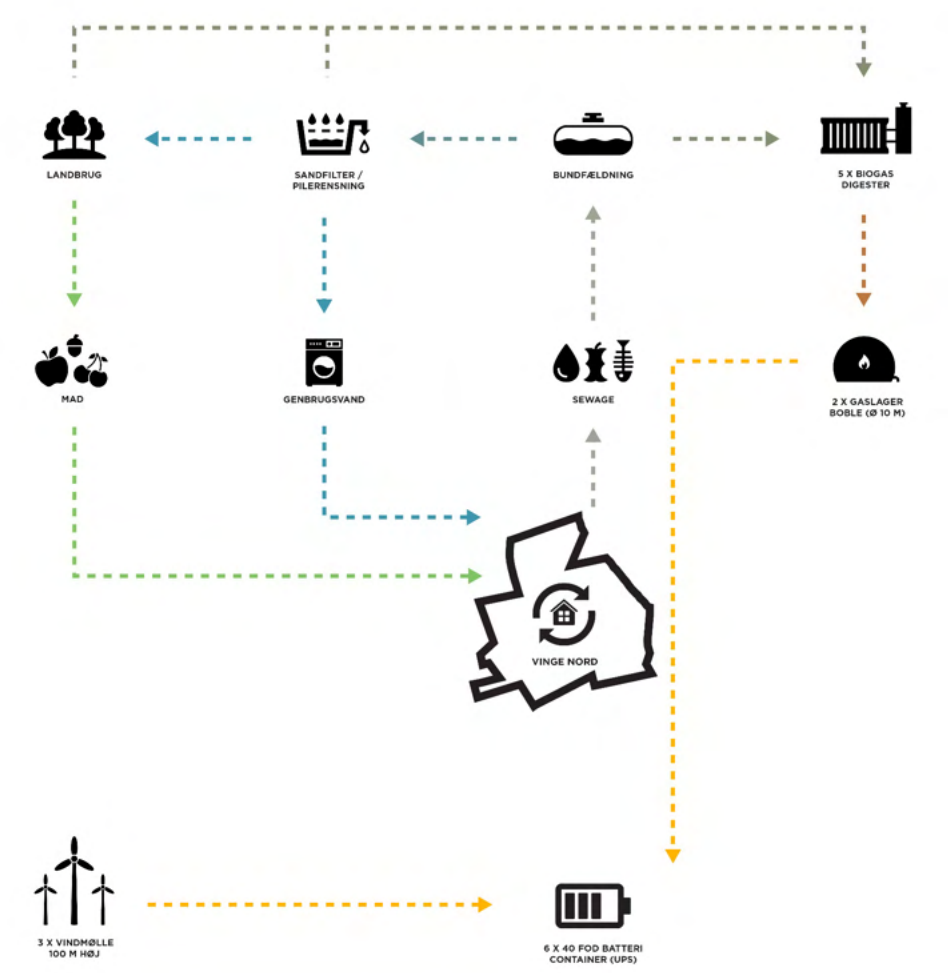


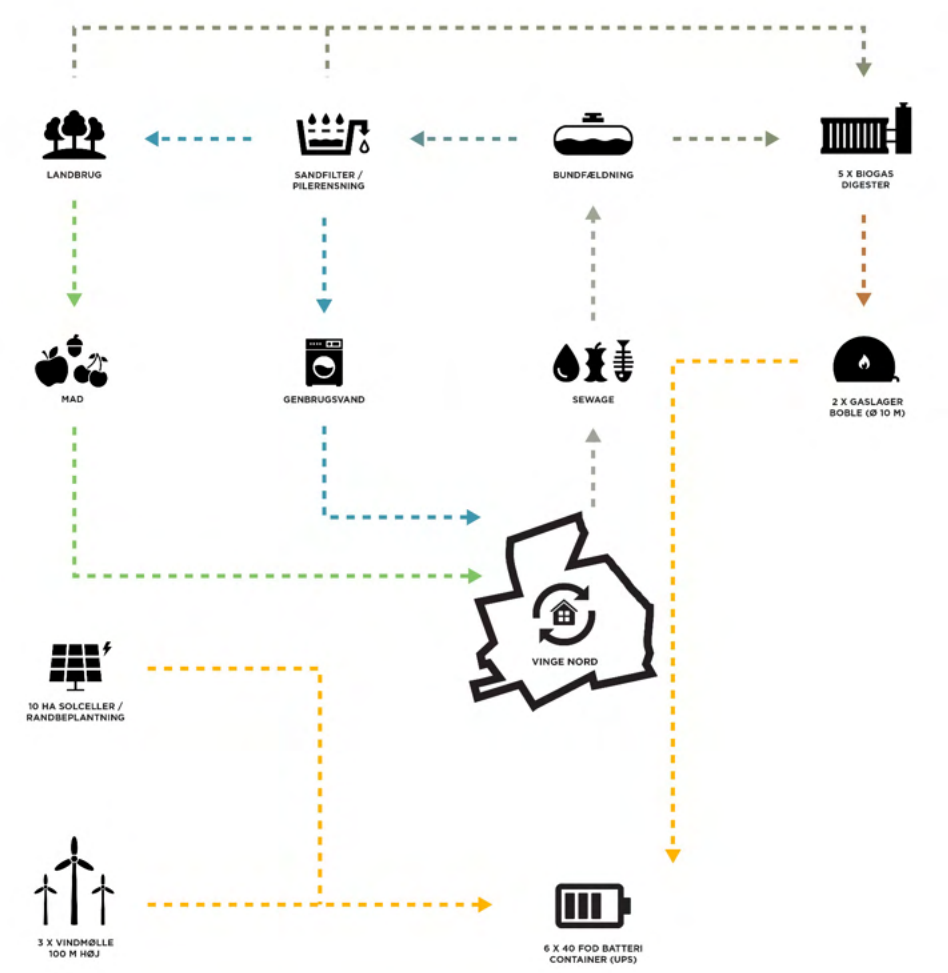


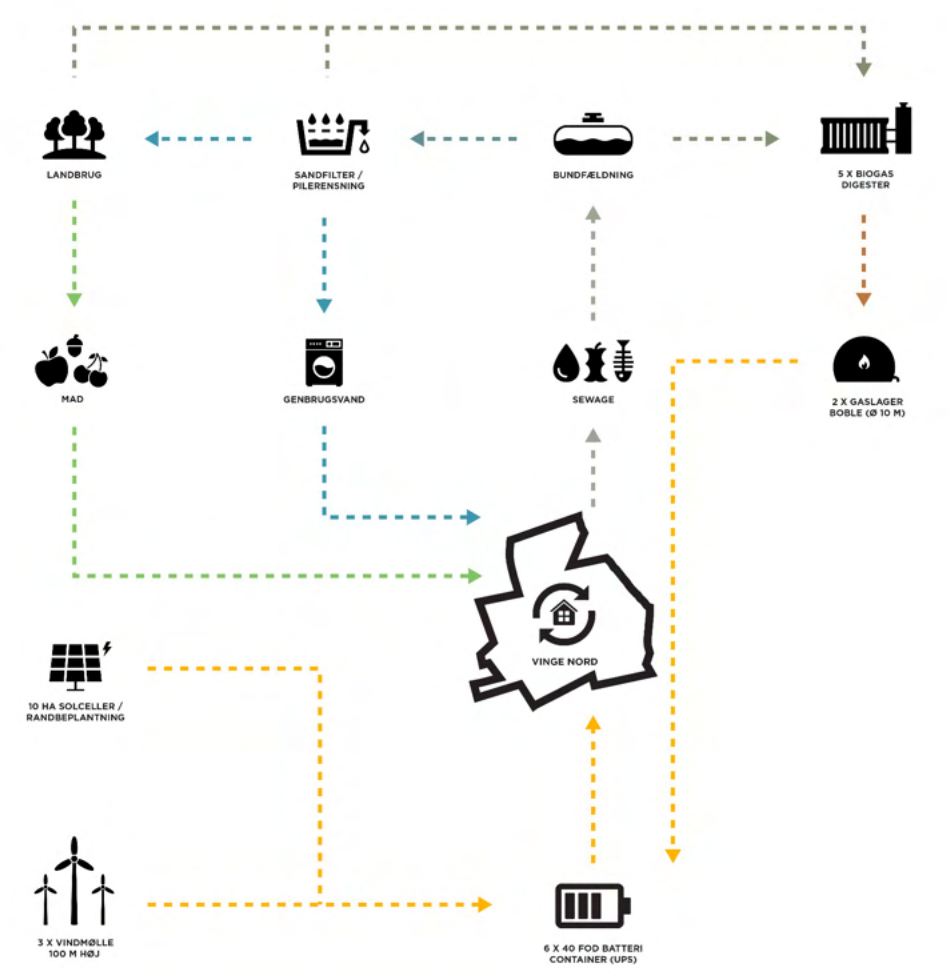


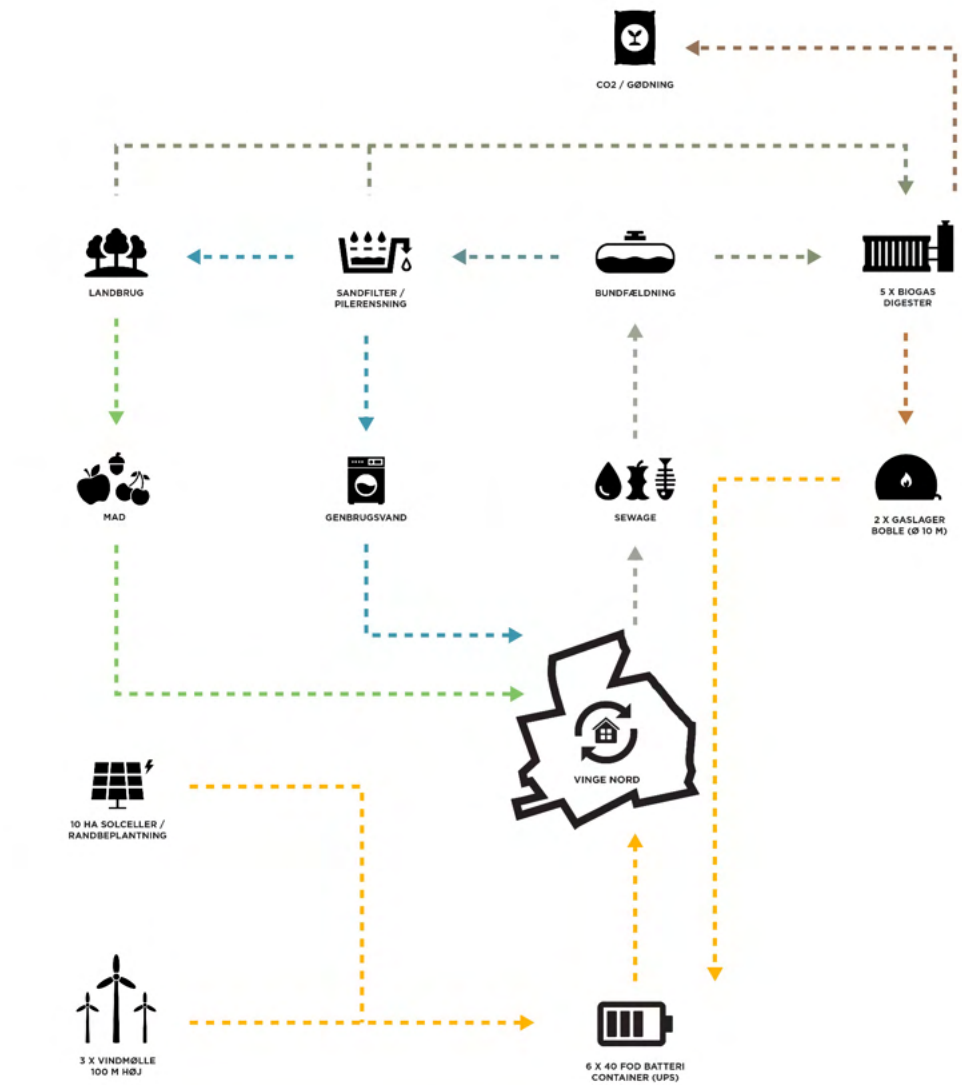


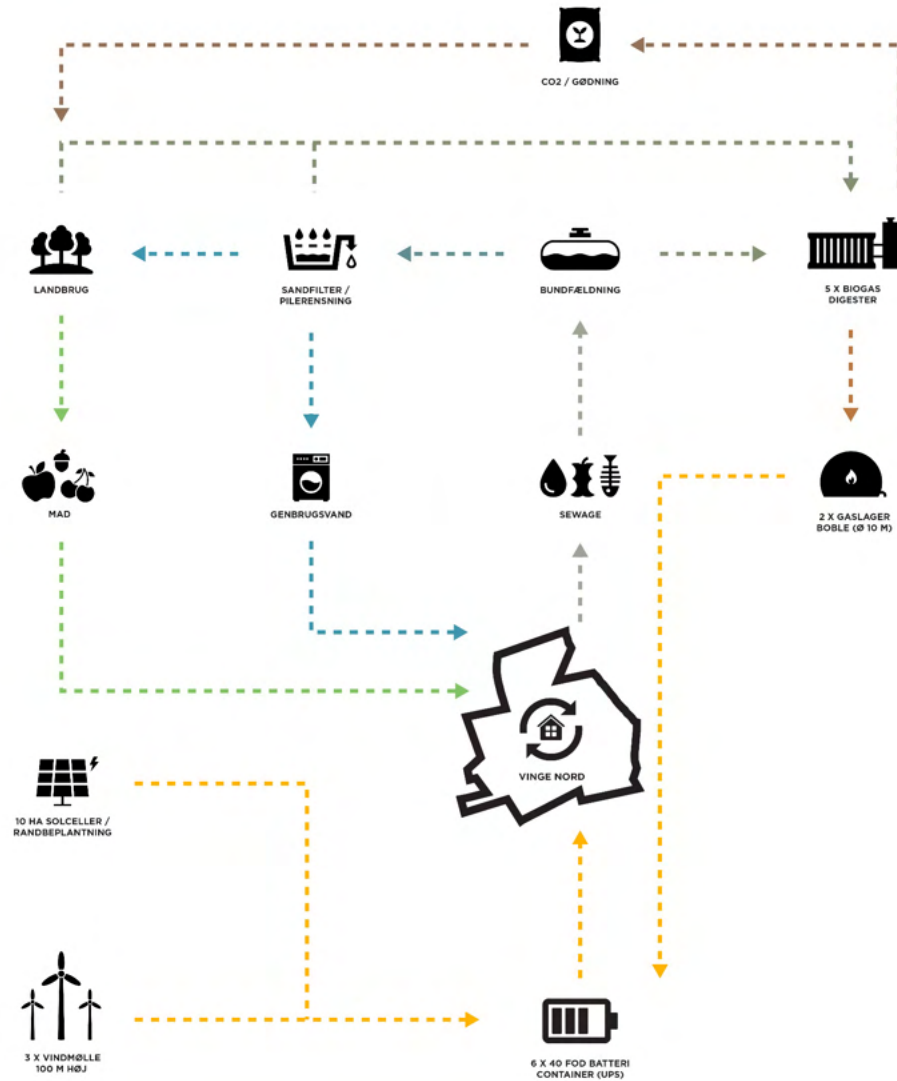


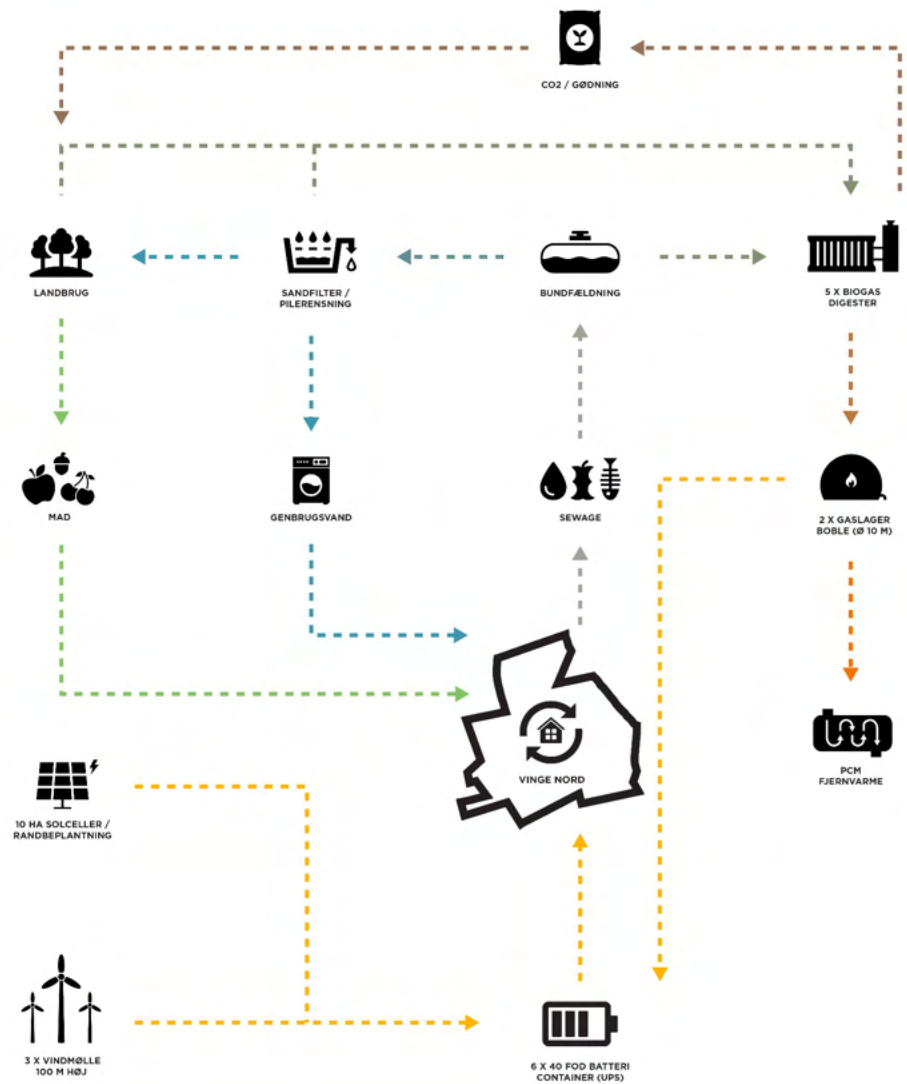


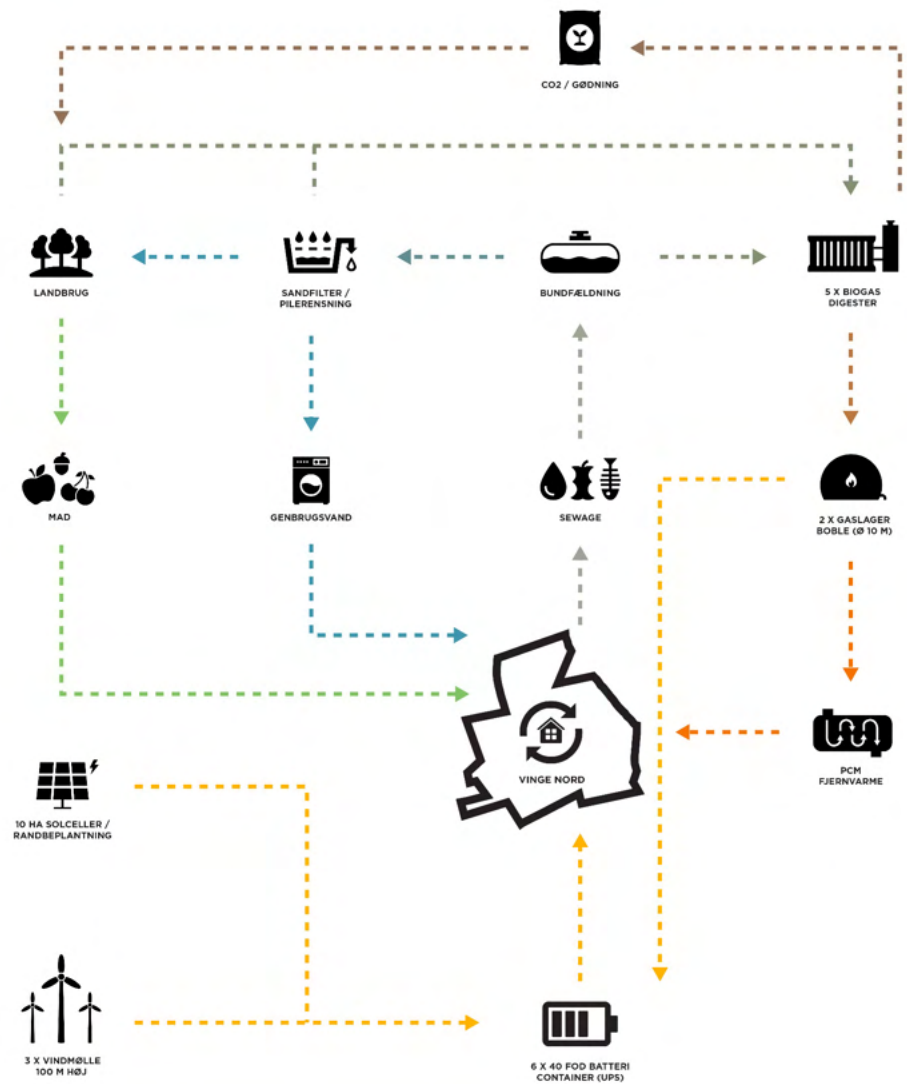


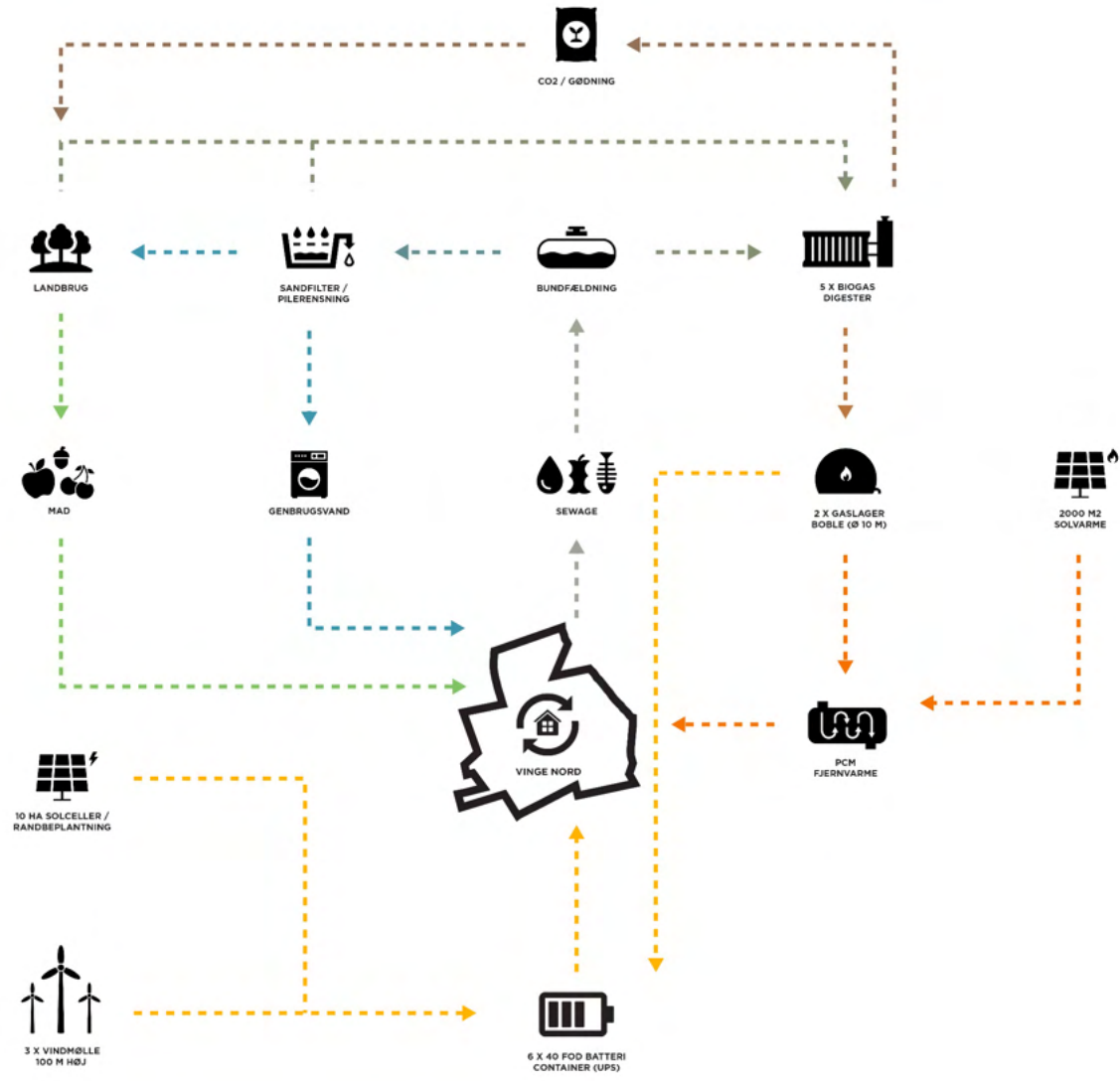


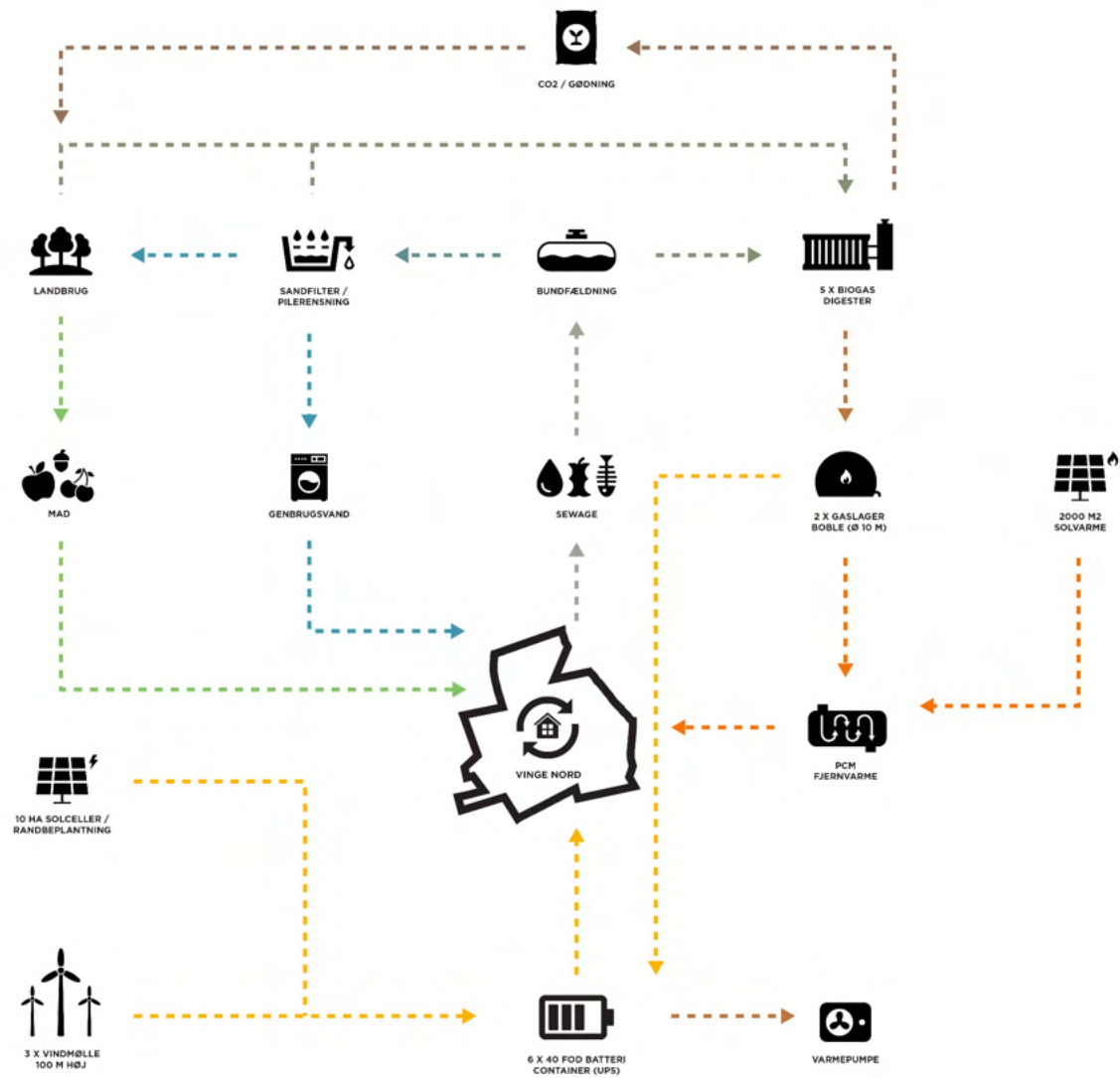


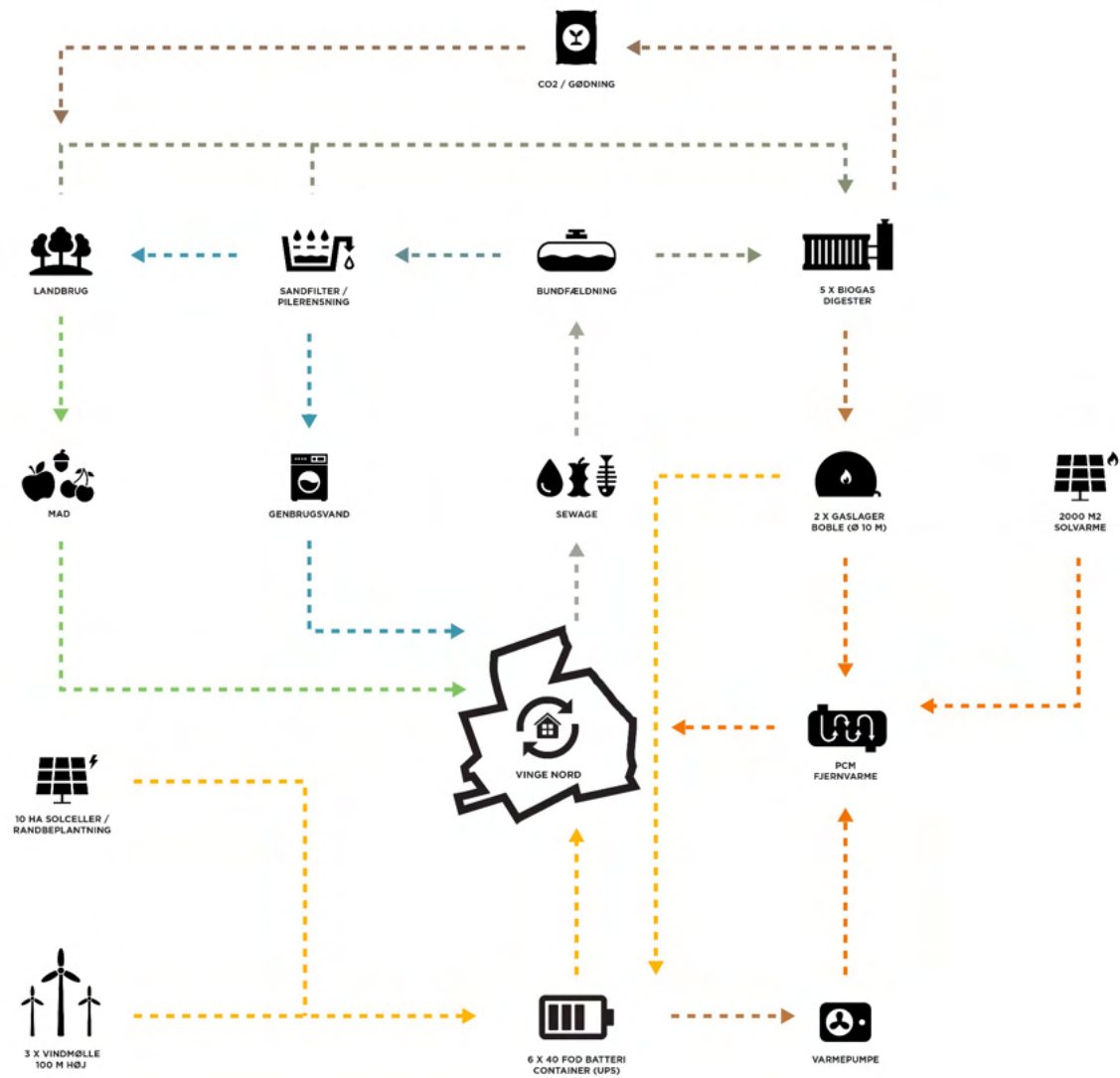


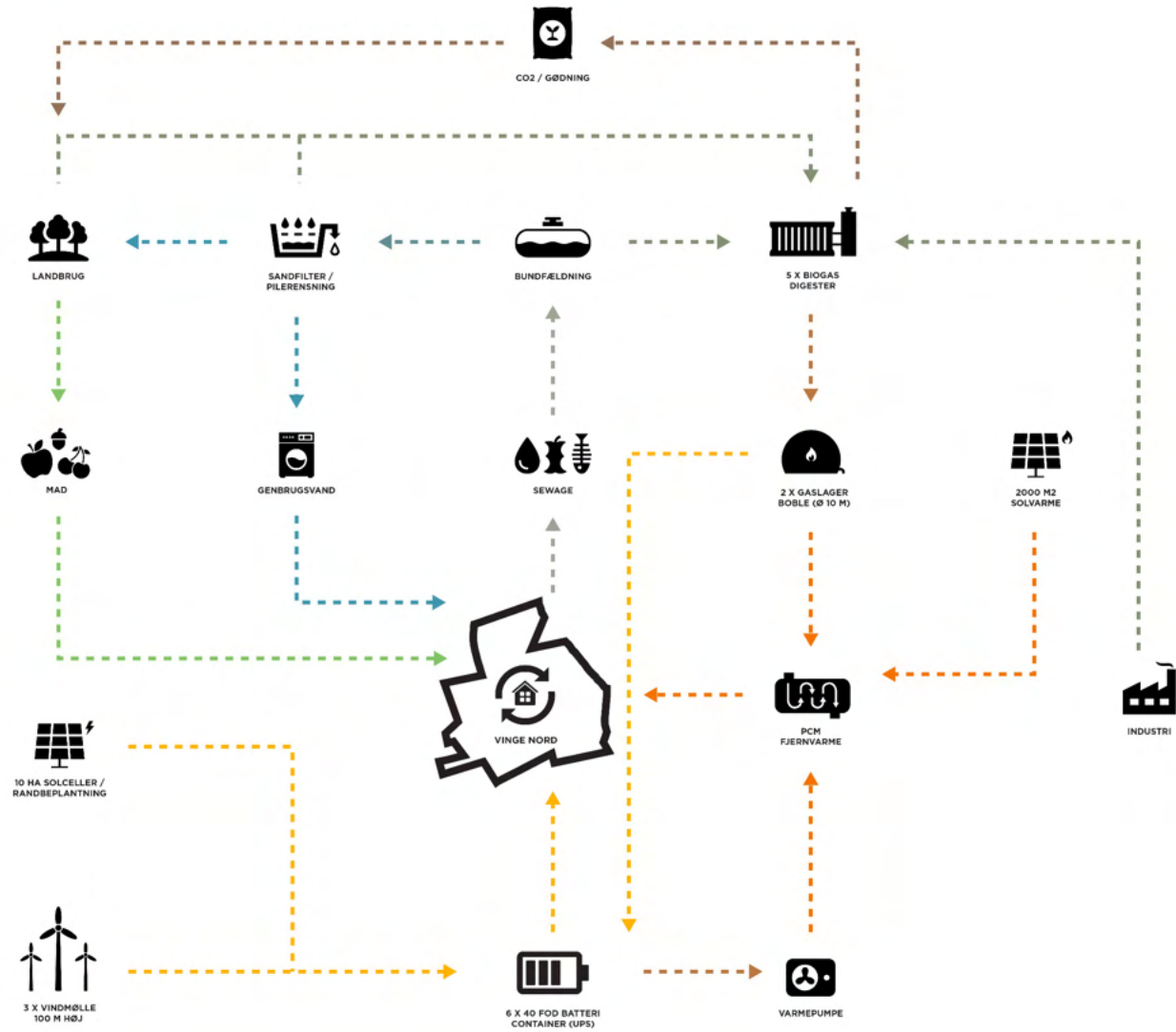


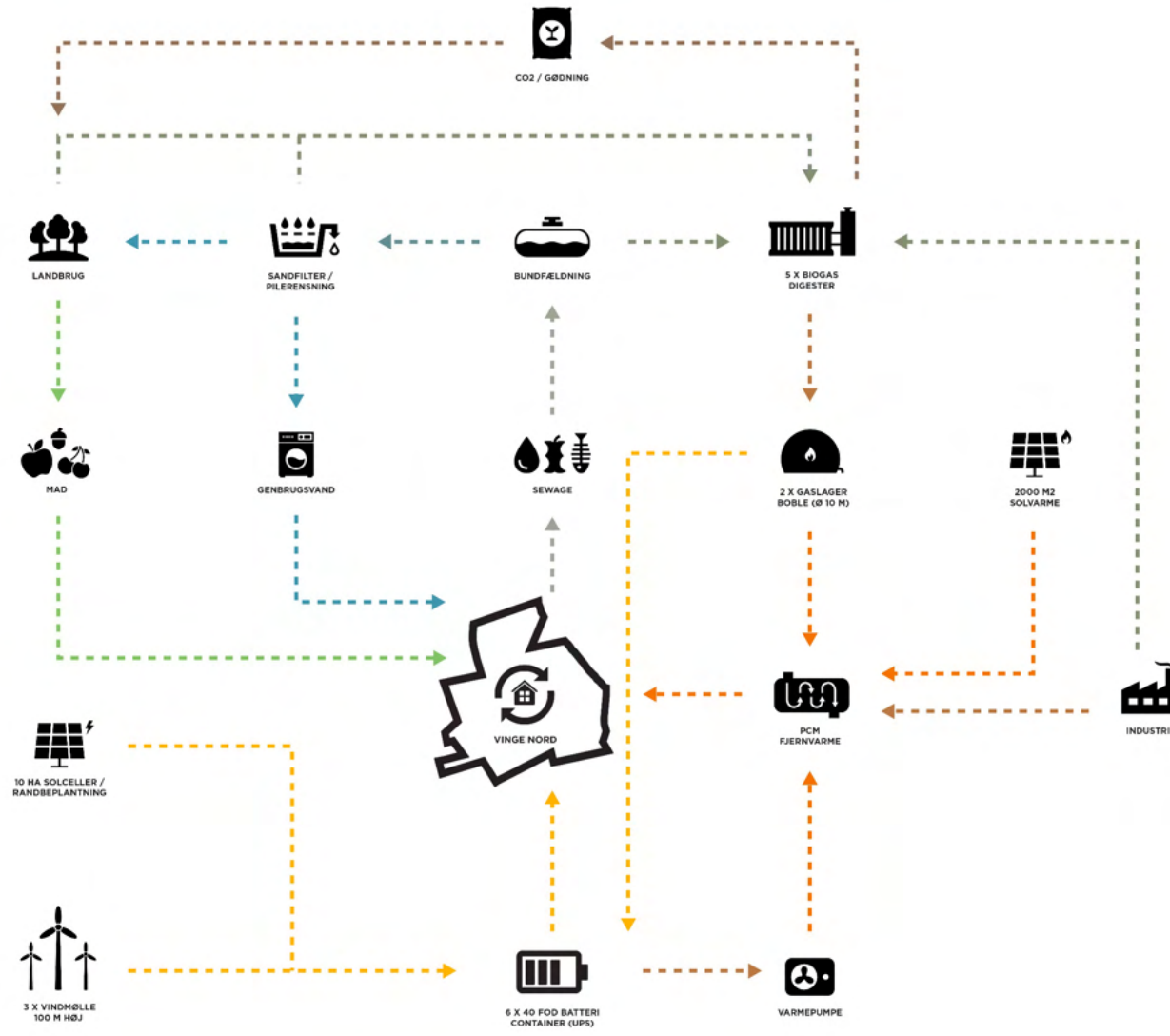












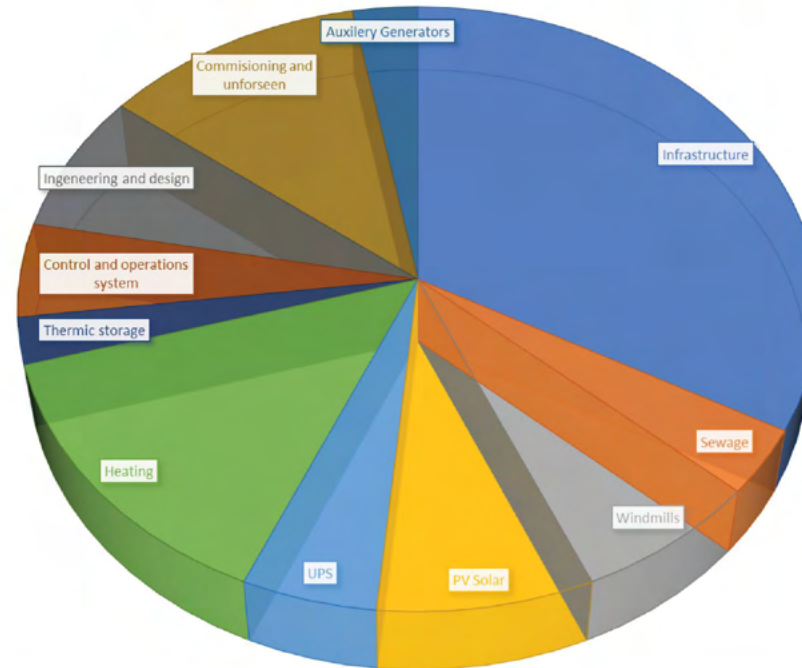
GREEN ISLAND

BUSINESS CASE

Cost pr house
Total Cost

160.000
318.015.620

BUILDING COSTS FOR UTILITY AND INFRASTRUCTURE



Distribution of Cost	
Infrastructure	33%
Sewage	3,5%
Windmills	7%
PV Solar	8%
UPS	5%
Heating	14%
Thermic storage	2,5%
Control and operations system	5,0%
Ingeneering and design	7,5%
Commissioning and unforeseen	11,6%
Auxiliary Generators	2,9%
	100,0%

UTILITY BUILDING COSTS