

# LOOP CITY \_ COPENHAGUE

**BIG**

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### 10. MIGRATION

A metro connected to the cross border Region could strengthen DTU, optimize the workforce and create an international research network.

En metro forbundet til den internationale region kunne styrke DTU, optimere arbejdsstyrken og skabe et internationalt forskningsnetværk.

### 6. BIODIVERSITY

Green roofs on all new buildings absorb heavy rain falls while improving biodiversity.

Grønne tage på nye bygninger absorberer kraftige regnskyl og sikrer biodiversiteten i området.

OBJECTIVO

1. INDUSTRIALIZATION
2. MIGRATION
3. MOBILITY
4. HEALTH
5. ENERGY
6. NATURE PRESERVATION
7. FOOD
8. WASTE
9. DRINKING WATER
10. GLOBAL WAR



"PERSONALLY I THINK THAT THE BIGGEST RISK IS TO UNDERESTIMATE THE TECHNOLOGICAL PROGRESS!"

"PERSONLIGT TROR JEG DEN STØRSTE RISIKO ER, AT UNDERVURDERE DET TEKNOLOGISKE FREMSKRIDT!"



FINGER PLAN  
1947

ANTECEDENTES

PROBELMÁTICA  
DEL CRECIMIENTO  
URBANO A LO LARGO  
DE LOS AÑOS

ANTECEDENTES

URBAN FABRIC 1947

URBAN FABRIC 1960

URBAN FABRIC 1990

In the early 90's Copenhagen realized that the fingers had grown out of proportions, leading to urban sprawl and traffic congestion. We needed to focus on densifying the areas of the original hand!

I de tidlige 1990'ere gik det op for København at fingrene var vokset ud af proportioner, hvilket førte til øget trafik og manglende sammenhængskraft i byen. Vi havde brug for at fokusere på fortætning inden for den oprindelige hånd!





DENSIDAD EN  
LOS BARRIOS  
ADYACENTES A LOS  
(POTENCIALES)  
NUEVOS CENTROS  
URBANOS



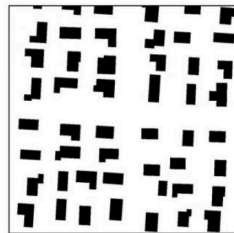
11 KM2



COMPARATIVA DE  
OCUPACIÓN DE  
SUELO Y DENSIDAD  
CN OTRAS GRANDES  
CIUDADES

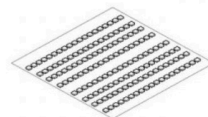


INDUSTRY PARK, HVIDOVRE  
DENSITY 25%

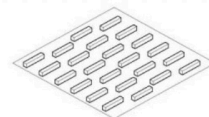


ONE FAMILY HOUSING, BRØNDBY  
DENSITY 25%

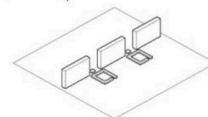
ANÁLISIS



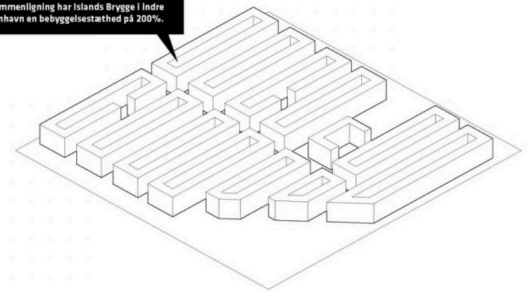
SKOVLUNDE  
25%



BRØNDBYVÆSTER  
25%



HØJE GLADSAXE  
25%



ISLANDS BRYGGE  
200%

By comparison, Islands Brygge in central Copenhagen has a density of 200% (FAR =2.0).  
Til sammenligning har Islands Brygge i indre København en bebyggelsestæthed på 200%.

Development areas: 11km2

Carlsberg 0,42km2

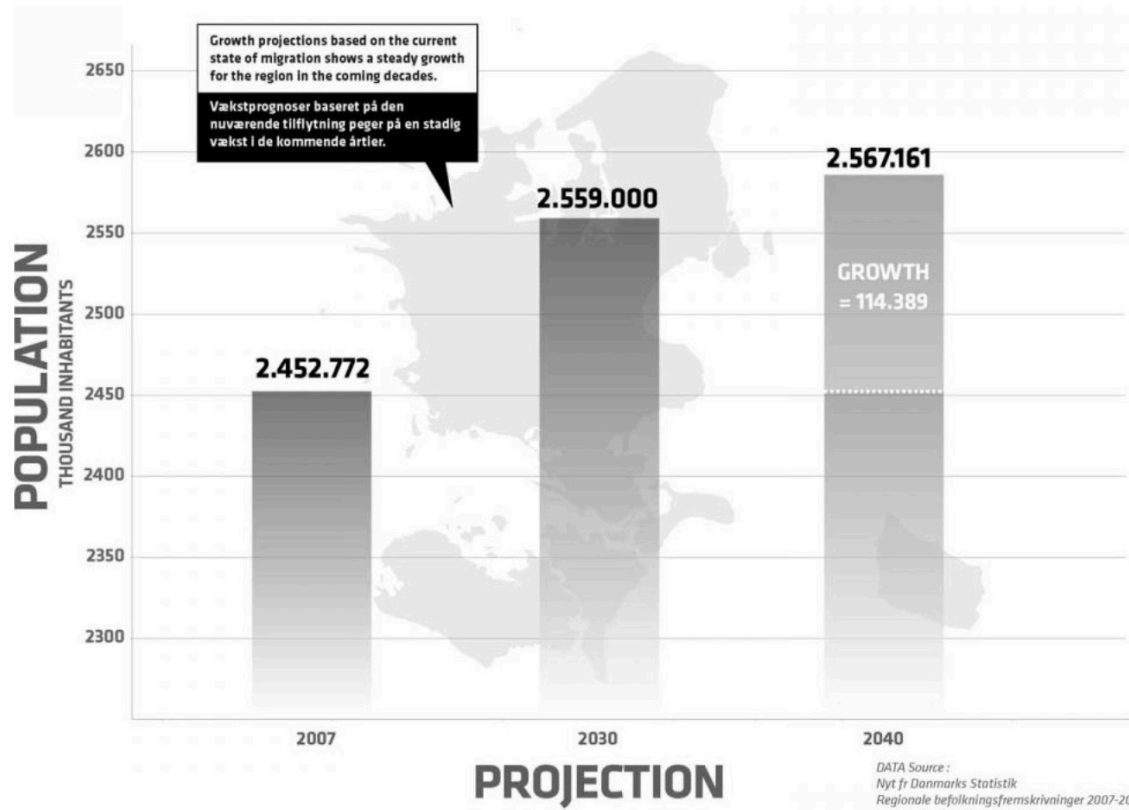
Nordhavn 1,9km2

Ørestad 3,1km2

Copenhagen City Center 3,6km2

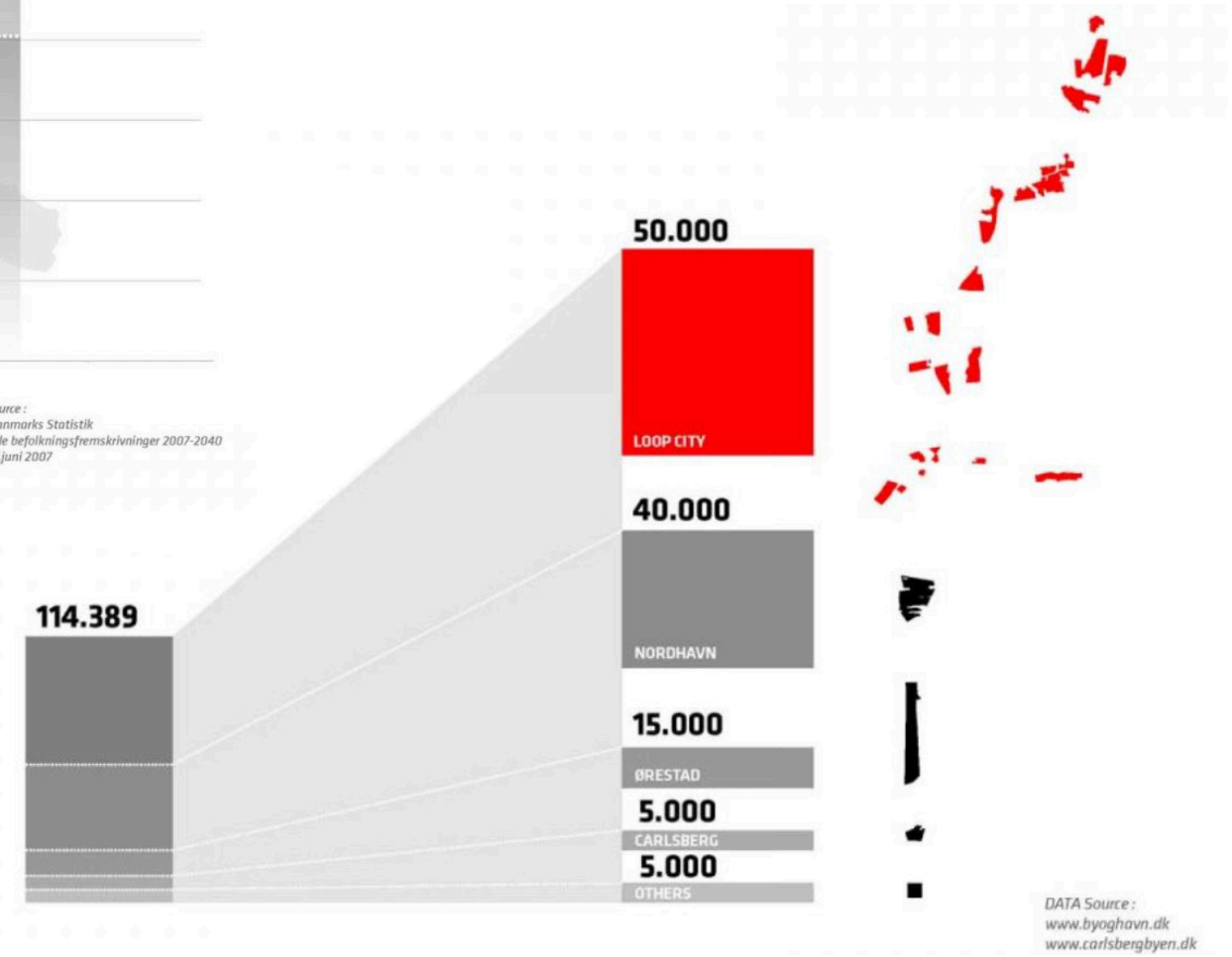
Manhattan 50km2

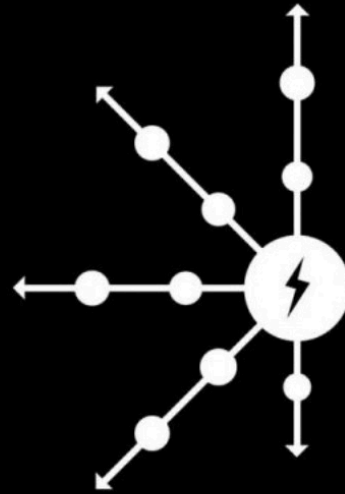
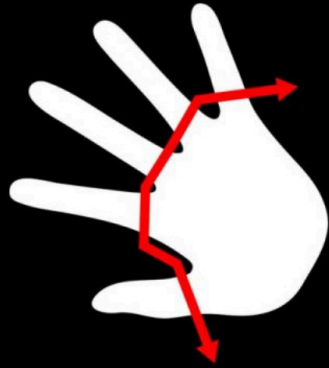
The area would be the size of Midtown Manhattan!  
Området har samme størrelse som Midtown Manhattan!



EL ÁREA DESTINADA A LOS NUEVOS CENTROS URBANOS ES INSUFICIENTE COMPARANDO CON EL CRECIMIENTO DE POBLACIÓN

**ANÁLISIS**





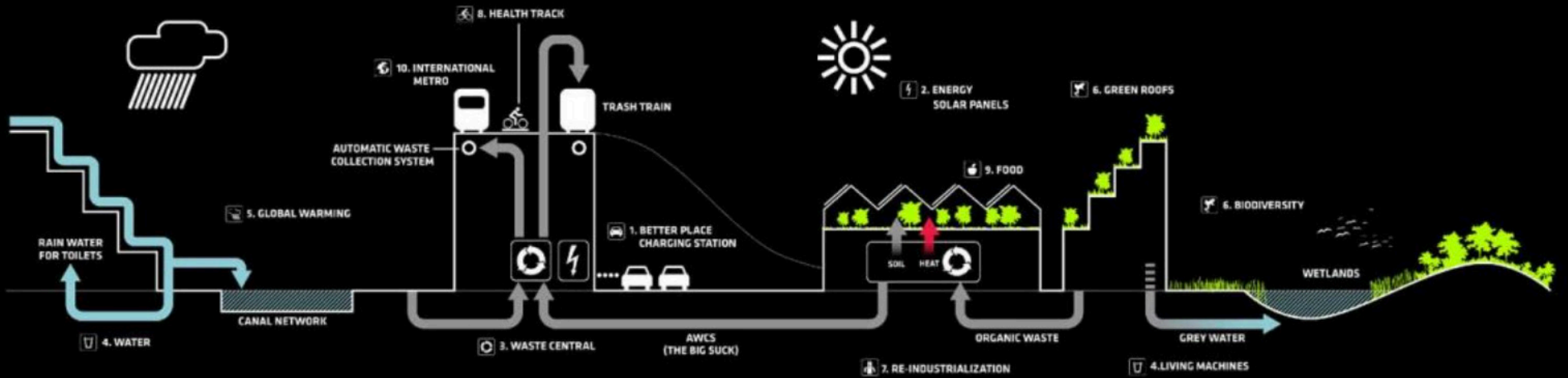
**1947**  
CENTRALIZED CONSUMER GRID



**2047**  
SMART GRID

BIG PROPONE USAR LA NUEVA LÍNEA DE TRANSPORTE COMO INFRAESTRUCTURA BASE PARA EL CRECIMIENTO Y DESARROLLO SOSTENIBLES DE LA CIUDAD, INCORPORANDO UN SÉRIE DE ESTRATEGIAS

**PROPUESTA**





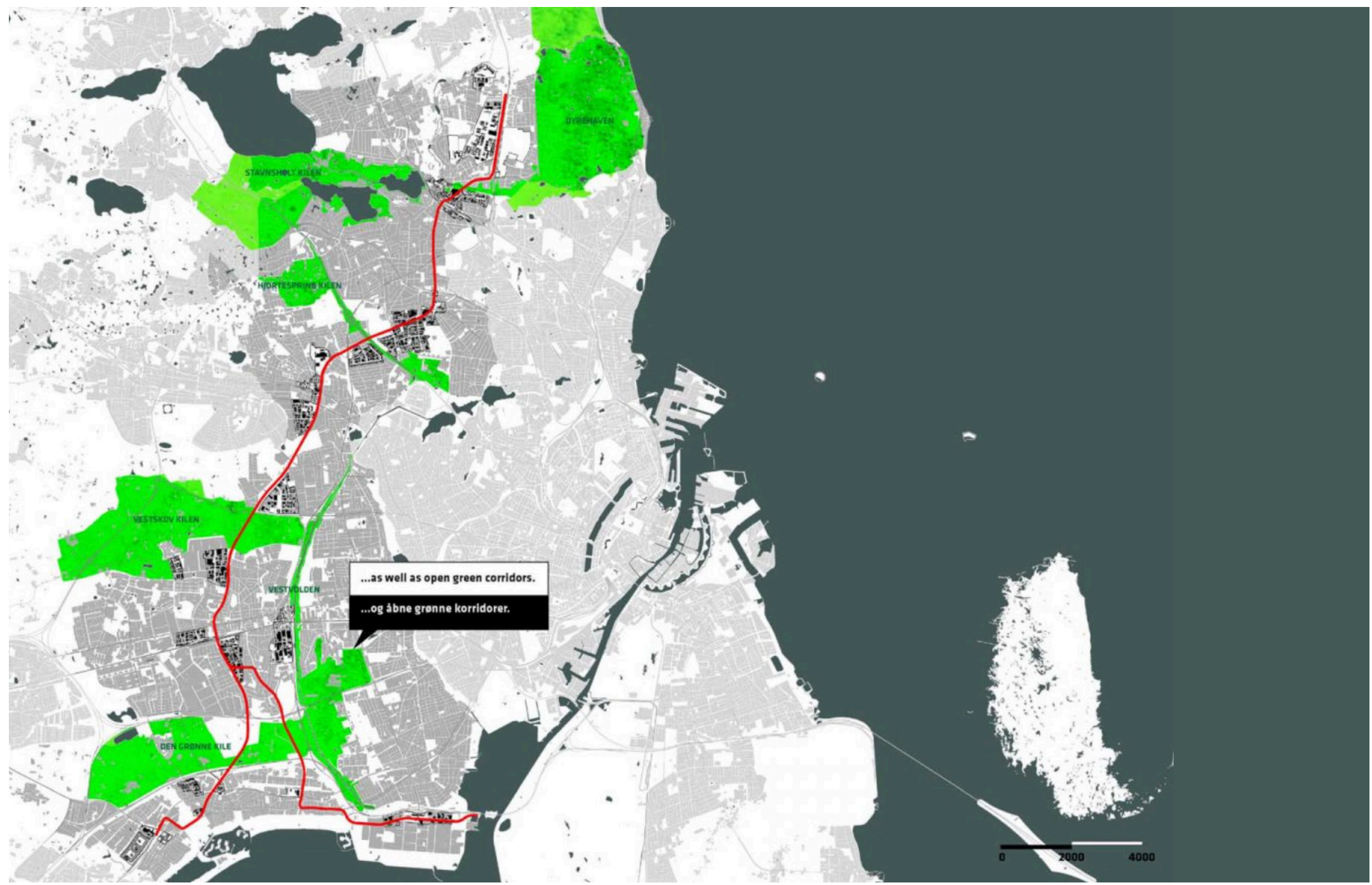
ANÁLISIS DE LA  
NUEVA LÍNEA DE  
TRANSPORTE  
PLANTEADA

PROPUESTA



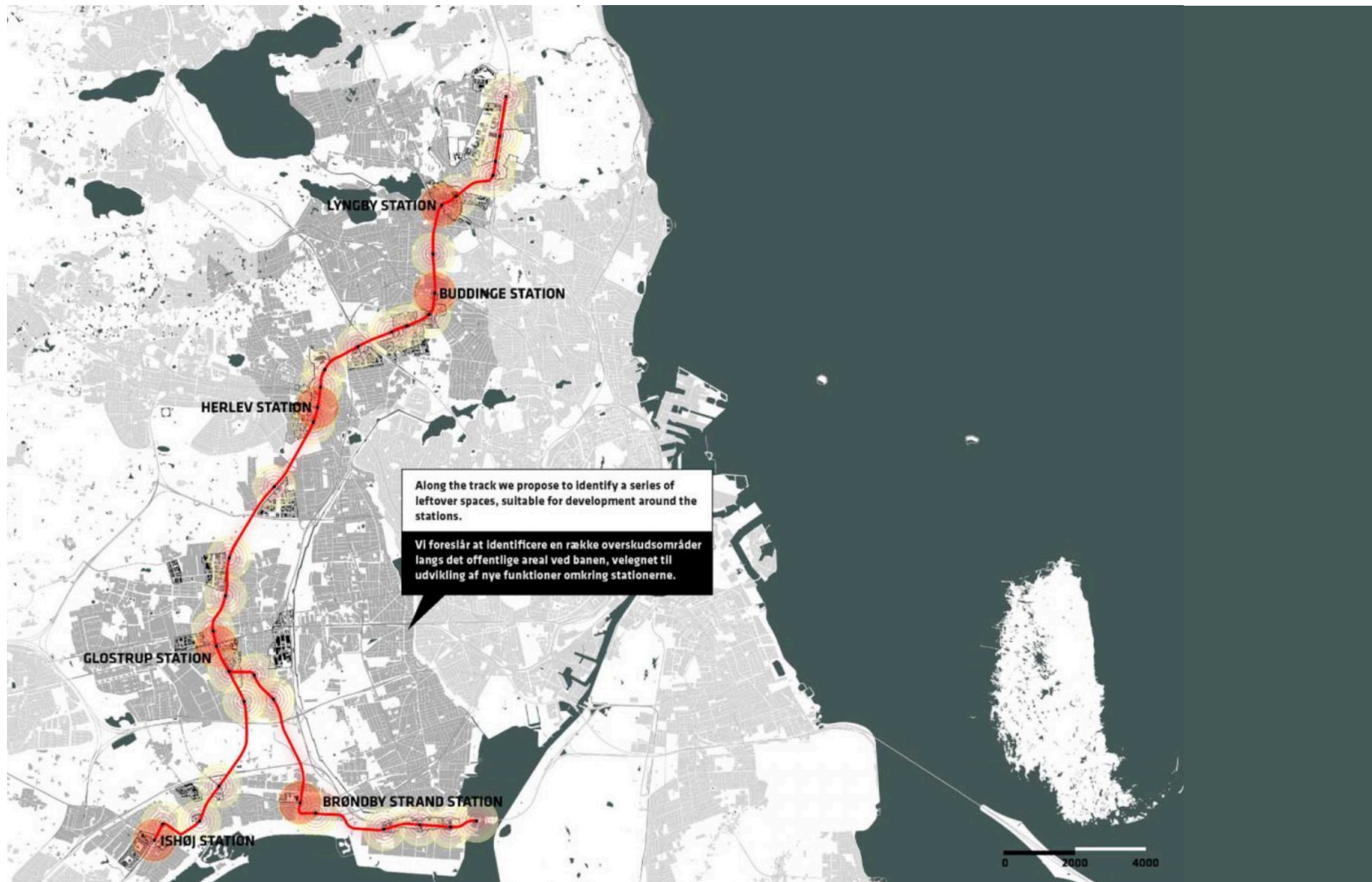
ANÁLISIS DE LA  
NUEVA LÍNEA DE  
TRANSPORTE  
PLANTEADA Y LA  
RELACIÓN CON  
LOS CORREDORES  
VERDES

**PROPUESTA**



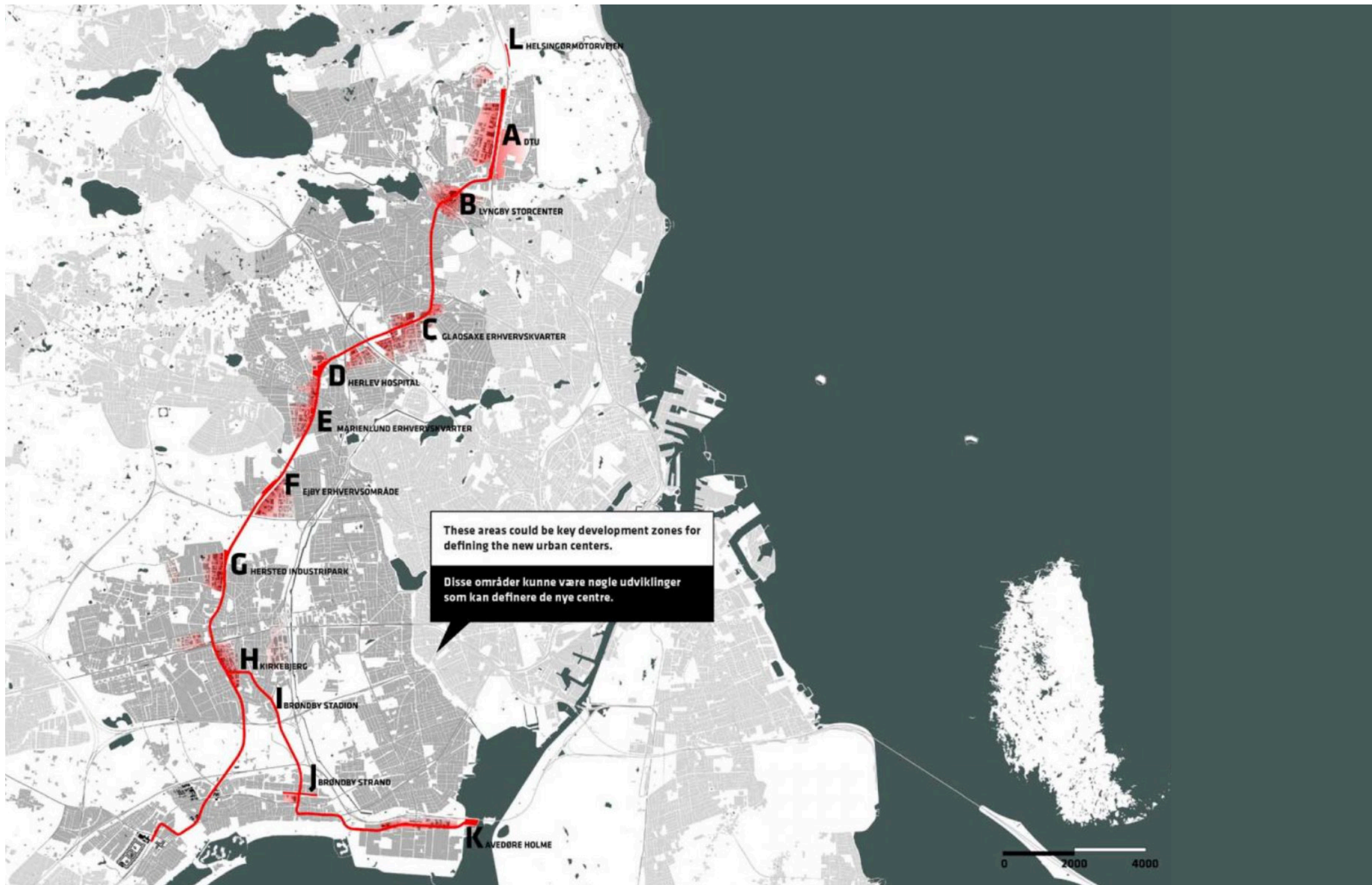
ANÁLISIS DE LA NUEVA  
LÍNEA DE TRANSPORTE  
PLANTEADA Y POSIBLES  
ESPACIOS PARA EL  
DESARROLLO URBANO

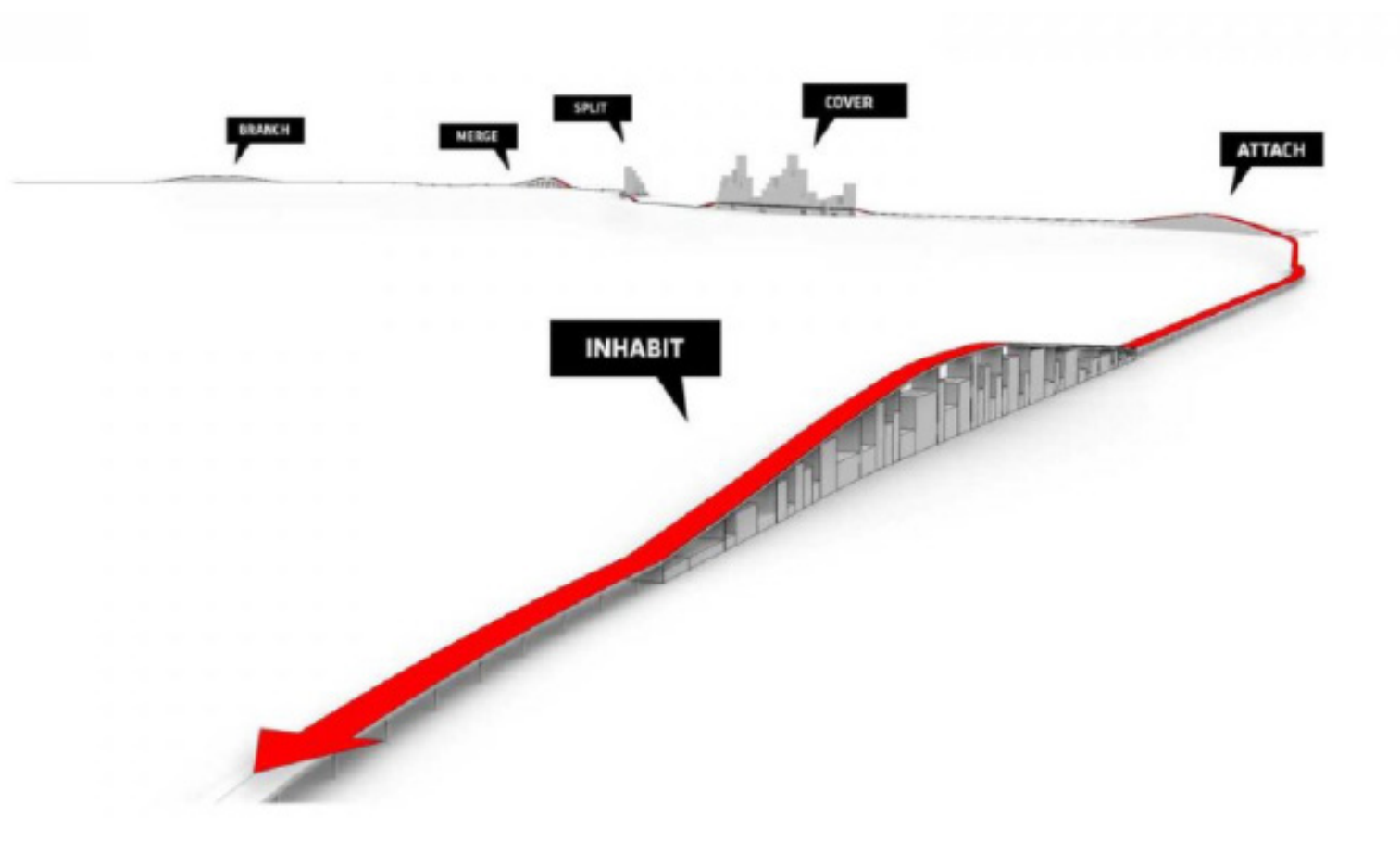
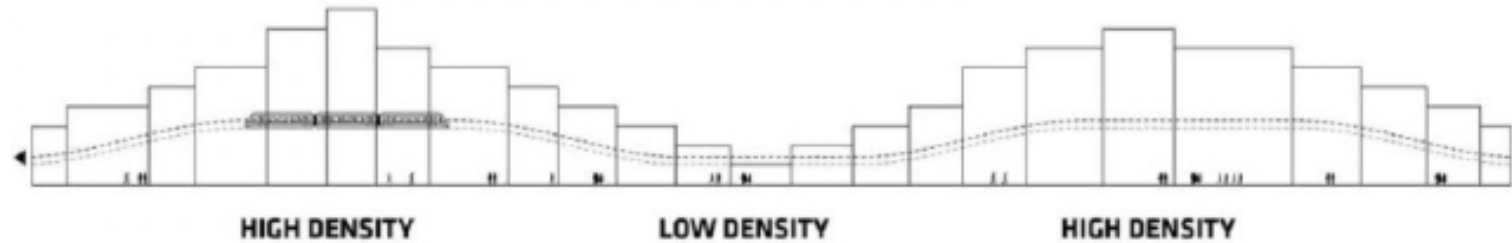
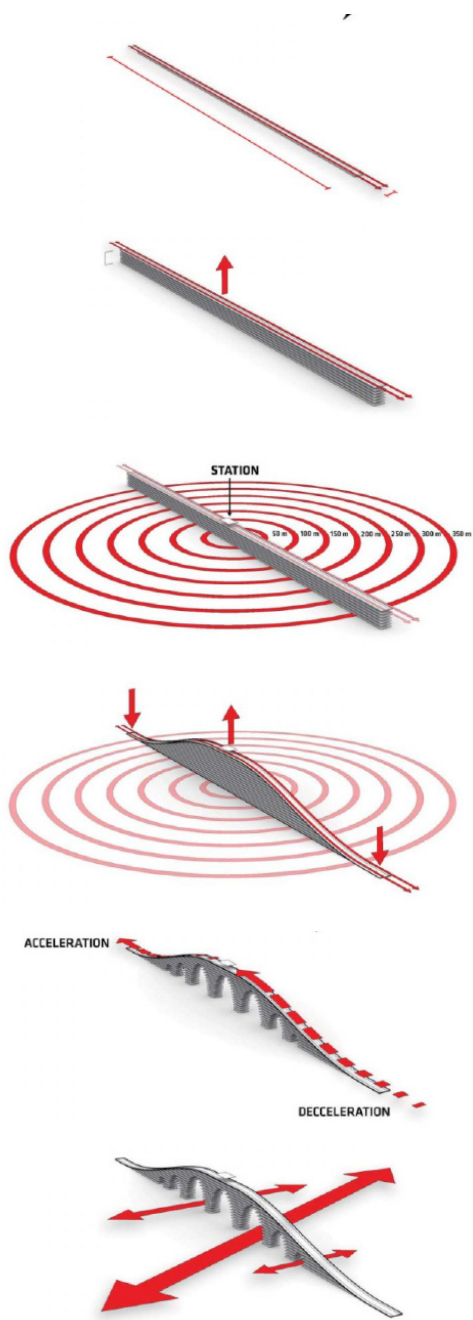
PROPUESTA



ANÁLISIS DE LA NUEVA  
LÍNEA DE TRANSPORTE  
PLANTEADA Y POSIBLES  
ESPACIOS PARA EL  
DESARROLLO URBANO

PROPUESTA





USAR LA PRÓPIA ESTACIÓN COMO ELEMENTO DE DENSIFICACIÓN

PROPUESTA

TIPOLOGIAS DE ESTACIONES / ESTRATEGIAS DE DENSIFICACIÓN

PROPUESTA



A: SURROUNDED

B: ENCLOSED

C: INHABITED

D: ATTACHED

E: COVERED

F: SPLIT

The series of stations could become a catalogue of different ways to combine buildings with stations, ranging from real hybrid solutions to clusters around stations or landmark developments.

Kæden af stationer kunne blive til et katalog af forskellige måder at kombinere bygninger med stationer. Fra sammenbyggede versioner til små tætheder omkring stationerne eller bymæssige pejlemærker.



G: MERGED

H: BRANCHED

I: SUPERIMPOSED

J: SANDWICHED

K: WRAPPED

L: HIDDEN

How could a metrobuilding upgraded with technologies addressing the 10 new challenges look?

Hvordan kunne en metrobygning opgraderet med teknologier der adresserer de 10 nye udfordringer se ud?

Green roofs on all new buildings absorb heavy rain falls while improving biodiversity.

Grønne tage på nye bygninger absorberer kraftige regnskyl og sikrer biodiversiteten i området.

Electric trash trains collect waste at night time for recycling in the industrial ecosystem on the Loop.

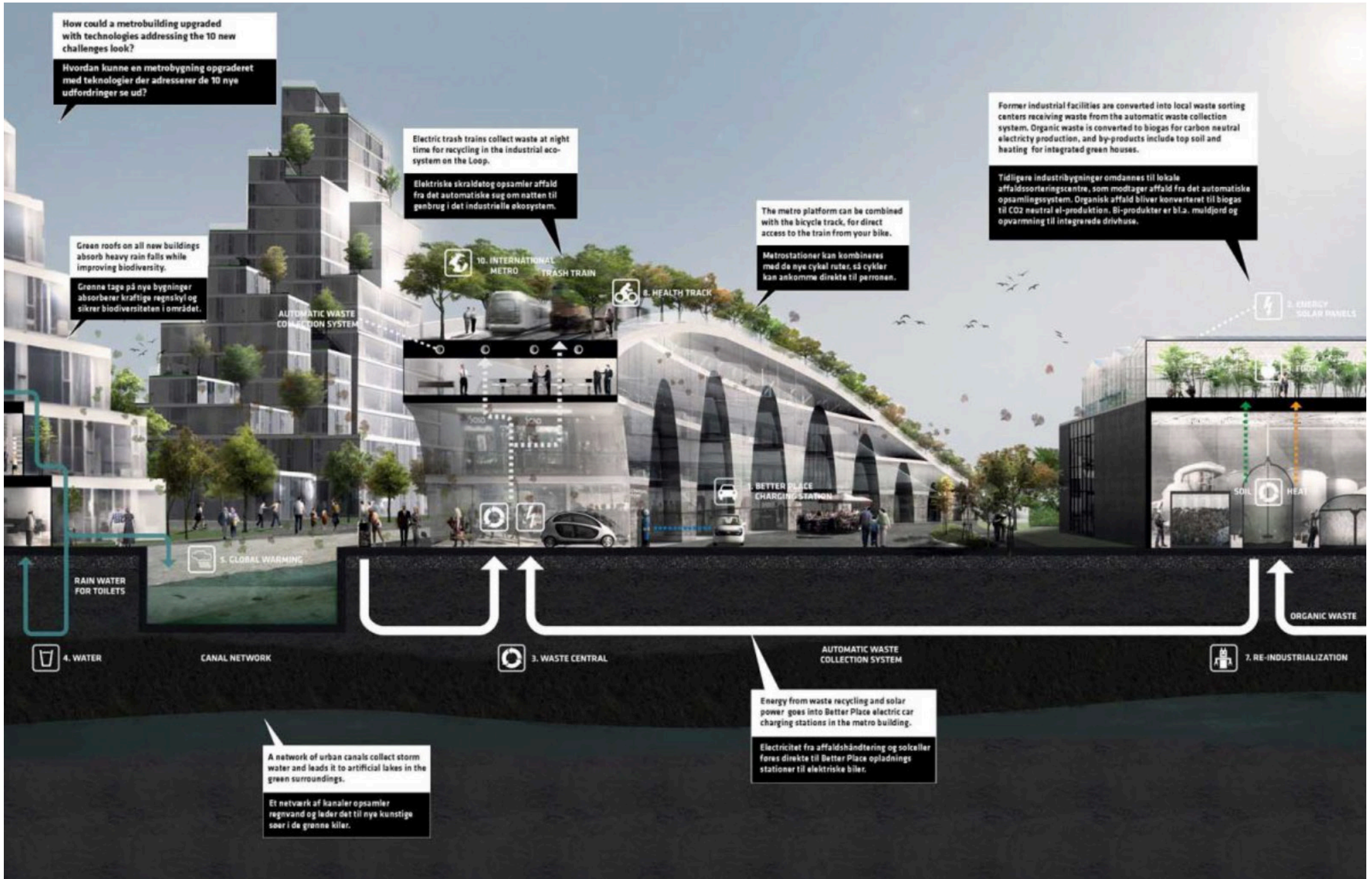
Elektriske skraldetog opsamlers affald fra det automatiske sug om natten til genbrug i det industrielle økosystem.

The metro platform can be combined with the bicycle track, for direct access to the train from your bike.

Metrostationer kan kombineres med de nye cykelruter, så cykler kan ankomme direkte til perronen.

Former industrial facilities are converted into local waste sorting centers receiving waste from the automatic waste collection system. Organic waste is converted to biogas for carbon neutral electricity production, and by-products include top soil and heating for integrated green houses.

Tidligere industribygninger omdannes til lokale affaldssorteringscentre, som modtager affald fra det automatiske opsamlingsystem. Organisk affald bliver konverteret til biogas til CO2 neutral el-produktion. Bi-produkter er bl.a. muldjord og opvarmning til integrerede drivhuse.



RAIN WATER FOR TOILETS

4. WATER

CANAL NETWORK

5. GLOBAL WARMING

3. WASTE CENTRAL

AUTOMATIC WASTE COLLECTION SYSTEM

7. RE-INDUSTRIALIZATION

ORGANIC WASTE

2. ENERGY SOLAR PANELS

10. INTERNATIONAL METRO TRASH TRAIN

8. HEALTH TRACK

BETTER PLACE CHARGING STATION

PROPUESTA

A network of urban canals collect storm water and leads it to artificial lakes in the green surroundings.

Et netværk af kanaler opsamlers regnvand og leder det til nye kunstige søer i de grønne kiler.

Energy from waste recycling and solar power goes into Better Place electric car charging stations in the metro building.

Electricitet fra affaldshåndtering og solceller føres direkte til Better Place opladningsstationer til elektriske biler.

ADEMÁS **BIG** PROPONE  
 EXTENDER LA ESTRATEGIA  
 DE MANERA A CONECTAR  
 DINAMARCA Y SUÉCIA APARTIR  
 DE UN ANILLO QUE PERMITA  
 ABSORBER EL CRECIMIENTO  
 DE POBLACIÓN Y PROMOVER EL  
 DESARROLLO SOSTENIBLE

**PROPUESTA**

