A brand new neighbourhood for Amsterdam

Opportunities of a new neighbourhood

Manifesto

"Sluisbuurt offers a new life for everyone, where you can choose from a variety of living - from a high-rise vista to a canal house, you can grow your business, live energy efficient and expand your social circle. Join the life style of the future!"

Our proposal for Sluisbuurt stands for the idea of creating a high quality work-life blend while preserving the qualities of an Amsterdam neighbourhood. Therefore we create a high density lifestyle combined with variations from productive amenities to lively urbanity - the Productive High-rise.

We see Sluisbuurt as a pilot project to create a selfsufficient neighbourhood in terms of energy. In order to achieve this we incorporate a Waste to Energy production system.

Productive High-rise



- Diversity of living typologies
- Private terraces.
- Productive program attached to higher floors.
- More personal space. Community spaces embedded.

Learning from Amsterdam



- Rythm of facades. Heritage of a productive city.

Town house typology.

Diversity.



Waste to Energy Production

- Clean, safe and cheap energy
- Local, independent production.



Community Growth -Inclusiveness

- More community spaces to serve a diverse population.
- Integration of welfare institutions within the neighbourhood fabric.

A pilot project for the future



Shared Productive Spaces

- New types of collaborations between different productive
- Flexible use of space over time.

Productive Canals

- In 17th century built as productive infrastructure with strategic connectivity.
- Important urban space for social interaction.



De Stoep

- Transition zone between private and public space.
- Activity zone around entrances.
- Privately owned, publically accessable.



Productive Network

- Creates a spine connecting productive spaces on higher levels.
- Has a social identity where all commercial activity and production interaction occurs together.



More Urban Space

- More public spaces allows for more production interactions.
- Gradient of private to public



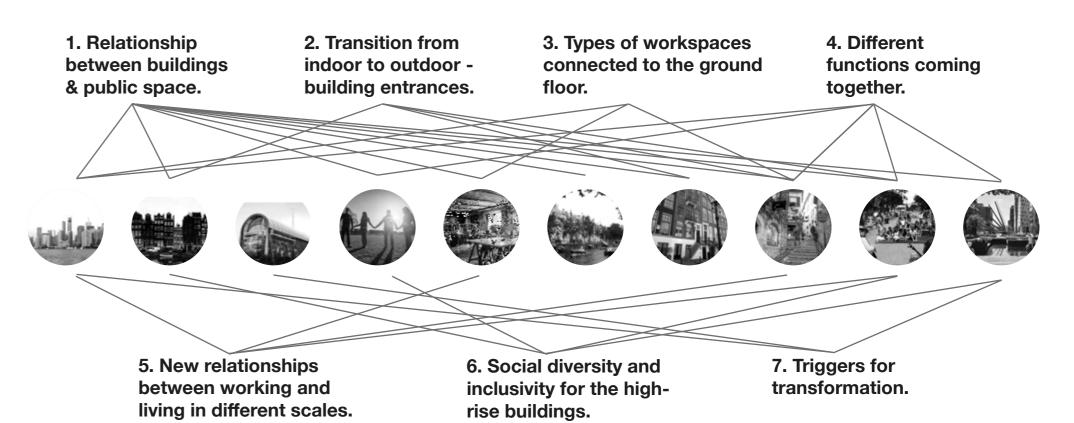
Floating Park

New generation park floating on the canals in between buildings is

As a neighbourhood of the future, Sluisbuurt

proposed. • More green space for kids.

Design parameters for urban guidelines

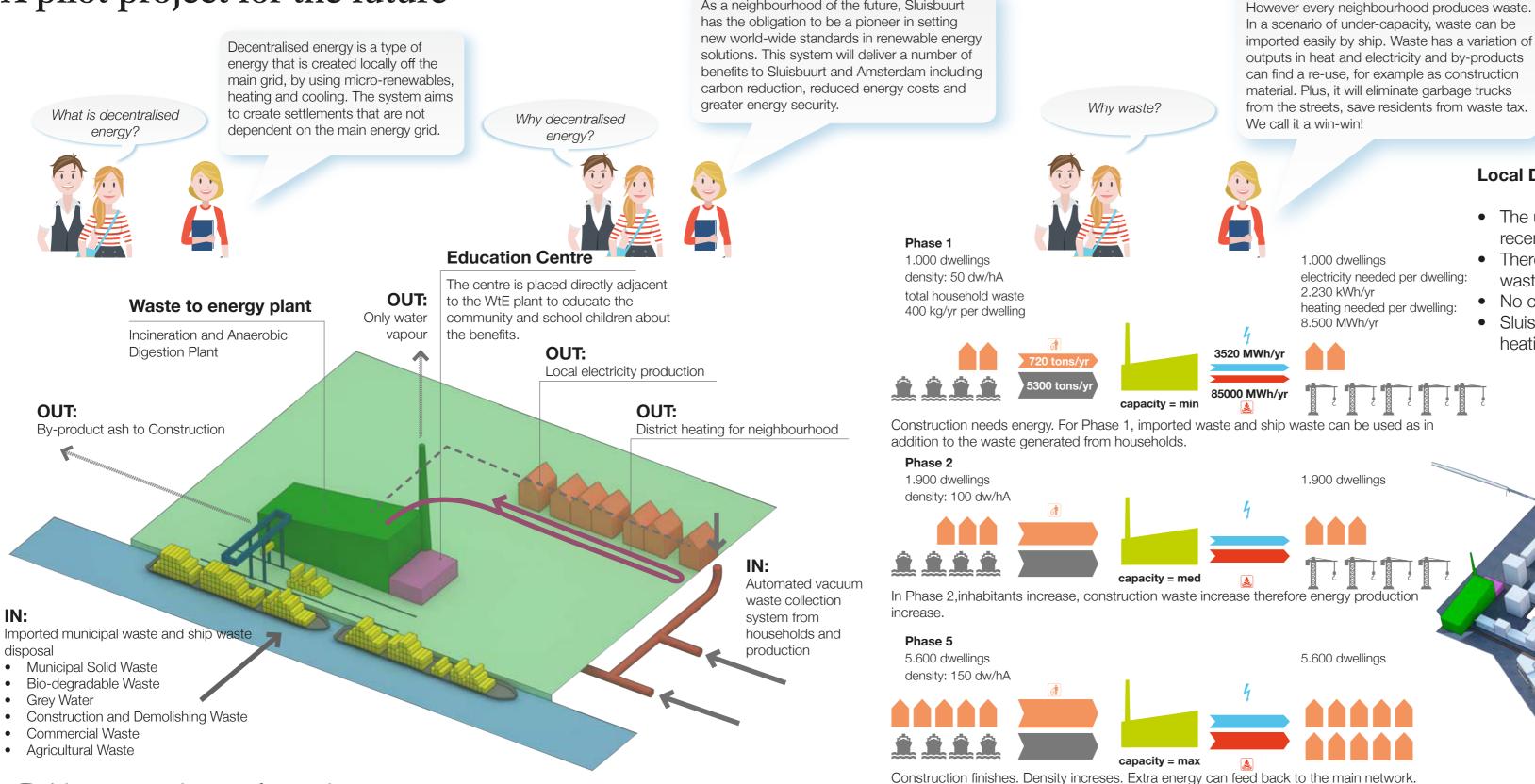


In order to generate renewable energy on a

neighbourhood scale, wind and solar sources

are limited by efficiency and spatial requirements.

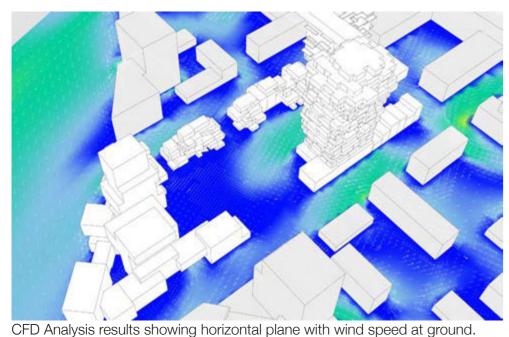
Decentralised Waste to Energy production



Climatic design aspects

Designing a high-rise neighbourhood such as Sluisbuurt demands a considerate design regarding wind and solar climatic aspects. These microclimatic concerns need to be addressed from the beginning of the design stages.

Fortunately we nowadays have the computational power and knowledge to assess these problems in a digital world and use it during design.



CFD Analysis results showing wind streamlines around the development.

Wind speeds naturally picks up over the height and therefore

uncomfortable high wind speeds to the ground floor creating

Pedestrian wind and solar comfort at ground level is essential

high-rise buildings generate down drafts bringing these

uncomfortable and even dangerous situations for the

to incorporate in the early stages in order to ensure a

pleasant neighbourhood for the residents and its visitors.

pedestrians in the area.

Assessment of analysis results

Wind is of our main concern for the design of Sluisbuurt. We have run Computational Fluid Dynamics (CFD) digital wind tunnel assessment on the urban design and highlight the improvements in the images below.

With the design guidelines presented here we will improve the wind behaviour around the towers, by placing them

CFD Analysis results showing wind streamlines around the development

strategically, creating 'roughness' on the surfaces, with the terraces and carefully places openings in the towers, that slow down the wind and minimise the nuisance of down drafts.

Automated Vacuum System

Automated Vacuum System all the waste

Therefore there is no need for any rubbish

is efficiently collected to the WtE plant.

Via a network of the underground

trucks in Sluisbuurt.

Is it possible to sustain an entire neighbourhood with

energy from waste?

• The use of our natural gas reserves are limiting due to the

Therefore, we suggest to use the heat generated from

No connection is being made with natural gas network.

• Sluisbuurt will be a self-sufficient neighbourhood on

Local District Heating in Sluisbuurt:

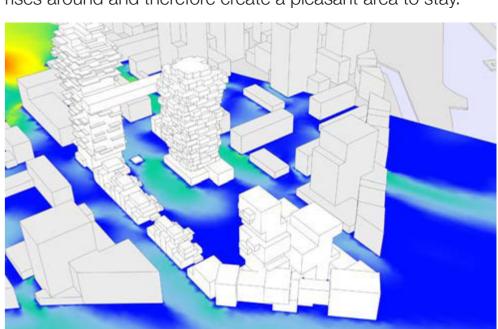
waste to heat our houses.

heating.

recent earthquake activities in Groningen.

Yes!

The courtyard with the new canal, floating park and kids play area are sheltered by the productive townhouses and high rises around and therefore create a pleasant area to stay.



CFD Analysis results showing horizontal plane with wind speed at ground.

Productive units on the interior and top of Town Houses with separate entrances from the street

Variation in widths of facade

Productive Spaces on ground floor

directly adjacent to street

Variation in facade

Canal has always been integral part of the productive route

heights

Potential subdivision of plots.

A generation park -

Meeting point for the block!!! With free wifi access, botanical plants and a tanning deck,

it provides a magnificent

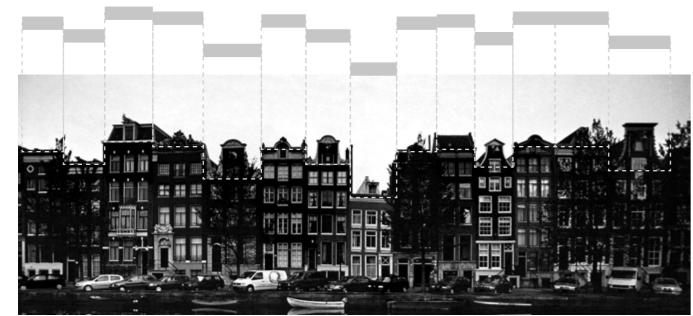
environment for all ages.

Floating Park

HG427 NIEUW AMSTERDAM

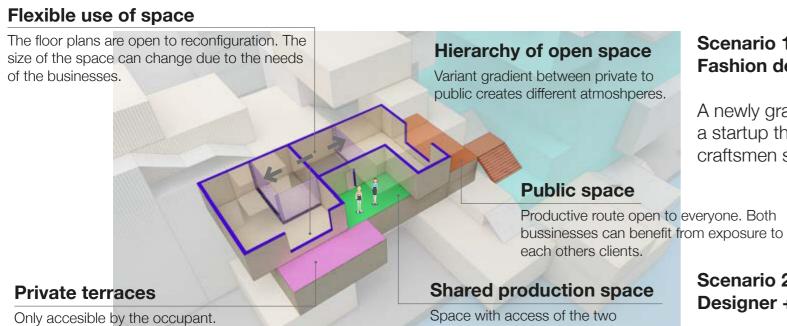
A brand new neighbourhood for Amsterdam





Dynamic rhythm of facades in traditional Amsterdam canal houses.

Productive Scenarios



bussinesses.

Floor plate shift It gives a differentiation on the programme and increases the architectural quality and the

Atrium and open plan Atrium gives a visual and social connection between different groups and allows the workshop on the ground floor to have a flexible floor height.

more open space with more social interaction and variety of public spaces . Also it allows all the buildings to have a front facade along an

By **introducing the canal to the neighbourhood**, the courtyard becomes a

Amsterdam canal.

Productive space on ground floor is flexible to extend to the 1st floor. This allows for tax benefits for rent benefits for tenants.

Scenario 1: Fashion designer + the tailor.

A newly graduate fashion designer forms a startup that hooks up with traditional craftsmen such as a tailor cobbler.

Scenario 2: Designer + fab lab. + DIY shop

Digital fabrication on the ground floor allows variety of production Designers on the upper floors can use this workshop to realise their designs. DIY store on the ground floor can supply materials for the production and other consumers.

Scenario 3: Startup + physical production

Lower floors are occupied with workshops, storage and distribution. High ceiling and the atrium serves for these functions.

Higher floors are assigned for workspaces and management.

> as affordable housing or housing+studios for artists and

craftsmen.



Productivity doesn't have to stay on the ground Elevated public route allows productive terraces

to connect on the larger network.

Public route acts as an integration of infrastructure and commercial activity.





France. Production is embbeded on the streets of daily life in the medieval town.





Individual facades have their own character

Connection through to the interior

Entrances directly from street to Productive Units

to break up facade length

Individual entrances to

1.5m buffer zone between public and private

is reinvention of the 'Stoep': privately owned,

but publicly accessible

Productive Town Houses

HG427 NIEUW AMSTERDAM

A brand new neighbourhood for Amsterdam

