INDISTINCT BORDER

Rentable living room for single business starters
1. BACKGROUND INFORMATION
2. URBAN DESIGN
3. ARCHITECTURE DESIGN
4. REFLECTION
1. BACKGROUND INFORMATION
BACKGROUND INFORMATION - ECONOMY RECOVERING

CONSUMER CONFIDENCE IN NETHERLANDS, 2014-2015

BACKGROUND INFORMATION - NEW VISA- STARTUP VISA, DEC 2014

1. YOUNG PRO
2. EXPAT

INTENDED FOR HIGH-TECH, INNOVATIVE COMPANIES

http://startupjuncture.com/2015/05/12/how-to-dutch-startup-visa/
# Background Information - Amsterdam's Opportunities

The world's 55 most youthful cities:

<table>
<thead>
<tr>
<th>Rank</th>
<th>City</th>
<th>Score</th>
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<tbody>
<tr>
<td>1</td>
<td>New York City</td>
<td>1024.12</td>
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<tr>
<td>2</td>
<td>London</td>
<td>1001.46</td>
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<tr>
<td>3</td>
<td>Berlin</td>
<td>924.37</td>
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<tr>
<td>4</td>
<td>San Francisco</td>
<td>915.93</td>
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<td>5</td>
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[Image: The world's 55 most youthful cities chart]

BACKGROUND INFORMATION - LACK OF YOUTH SINGLE DWELLINGS

LACK OF YOUTH SINGLE DWELLINGS

HIGH LIVING AND OFFICE COSTS
There is not enough dwellings and offices for business starters in the inner city of Amsterdam.
2. URBAN DESIGN
URBAN DESIGN - PLANS OF URHAHN - POSITIVE POINTS

- Infrastructure through the site
- Car free zone between blocks
- Building height fits the existing buildings
- Keep attractions as public space

- 19 Meters
- 25 Meters
PLANS OF URHAHN - NEGATIVE POINTS - SEPARATED ZONES AND LACK OF DIVERSITY

- Blocks are divided too evenly
- Similar typology repeated
- Not enough big open public space
URBAN DESIGN - URBAN PLAN 1.0 - PROCESS MODELS
URBAN DESIGN - URBAN PLAN 1.0 - MODEL
URBAN DESIGN - URBAN PLAN 2.0 - TOWER AS BARRIER

NOISE FROM THE CITY AND TRAINS
URBAN DESIGN - URBAN PLAN 2.0 AND 3.0

URBAN PLAN 2.0

URBAN PLAN 3.0
URBAN DESIGN - TRANSITION SPACE SHAPED BY BORDER - OKU CONCEPT
URBAN DESIGN- OKU CONCEPT- BORDER SHAPED BY MATERIAL AND LAYERS
What might have been and what has been
Point to one end, which is always present.

Burnt Norton, Thomas Stearns Eliot
**Figure 6.** Space contradistinctions in Chinese garden, Liu Yuan

**Figure 8.** Comparison of Chinese landscape painting and Daisen-in dry garden
URBAN DESIGN - OKU CONCEPT IN OOSTENBURG - FROM BIG SCALE TO SMALL

1. Site Entrance
2. Main Street
3. Crossing
4. Into My Plot
5. Into The Block Through The Strip
6. Inner Street
7. Into The Tower
8. In The Tower Elevator
9. In The Tower Gallery

Urban Design - Access Route
1. UNDERGROUND PARKING
2. SINGLE AND FAMILY DWELLINGS
3. TYPE-1 SINGLE BUSINESS STARTERS
4. TYPE-2 SINGLE BUSINESS STARTERS
URBAN DESIGN- BAY WINDOW CONCEPT

BAY WINDOW CONCEPT DAYTIME

BAY WINDOW CONCEPT NIGHT
URBAN DESIGN - MATERIAL - MATERIAL OF THE SURROUNDINGS

BRICK WORKS OF THE SURROUNDING BUILDINGS

GALSS AND OTHER MATERIAL OF INIT BUILDING
URBAN DESIGN - MATERIAL - MATERIAL OF THE URBAN BLOCK

BRICK

METAL

GLASS

WOOD

PLANTS

PLANTS LOVE SUN

PLANTS LOVE SHADOW
3. ARCHITECTURE DESIGN
ARCHITECTURE DESIGN- DWELLING CONCEPT

DWELLING OCCUPATION DURING DAYTIME


DWELLING OCCUPATION DURING NIGHT
ARCHITECTURE DESIGN - DWELLING CONCEPT - RENTABLE LIVING ROOM

LIVING ROOM ---- OFFICE

[Diagram showing Living Room and Office with Airbnb logo]
The workshop space could be used as office or workshop for the starters.

After years, when the family expands, the workshop space could be changed into an extra bedroom for the child.
ARCHITECTURE DESIGN- TYPE 1- TOWER UNIT CONCEPT- DWELLING MODE

FOLDING DOOR OPEN

FOLDING DOOR CLOSED

FOLDING DOOR OPEN

FOLDING DOOR CLOSED

PUBLIC/COLLECTIVE
PRIVATE
ARCHITECTURE DESIGN - TYPE 1 - TOWER UNIT CONCEPT - OFFICE MODE

FOLDING DOOR OPEN

FOLDING DOOR CLOSED

PUBLIC/COLLECTIVE
PRIVATE
ARCHITECTURE DESIGN - TOWER COLLECTIVE SPACE AND DWELLING UNIT - OFFICE MODE

TOWER UNIT - LIVING ROOM AS OFFICE DURING THE DAYTIME

TOWER UNIT - COMMUNAL OFFICE DURING THE DAYTIME

PUBLIC/COLLECTIVE
PRIVATE
ARCHITECTURE DESIGN - TOWER COLLECTIVE SPACE AND DWELLING UNIT - DWELLING MODE

TOWER UNIT - COMMUNAL PARTY DURING THE WEEKEND

TOWER UNIT - DWELLING DURING THE WEEKEND

PUBLIC/COLLECTIVE
PRIVATE
ARCHITECTURE DESIGN- FOLDING DOOR AS INDISTINCT BORDER

TOWER UNIT- LIVING ROOM AS OFFICE DURING THE DAYTIME

TOWER UNIT- BECOME PRIVATE DWELLING DURING THE NIGHT
ARCHITECTURE DESIGN - ARCHITECTURE IMAGE - FOLDING DOOR OPEN

BIG LIVING ROOM

SMALL LIVING ROOM
ARCHITECTURE DESIGN - TOWER UNIT - COMPACT STORAGE SPACE BY FURNITURE

CASE STUDY - NAKAGIN CAPSULE TOWER

TOWER UNIT - FOLDING DOOR AS UNIT ENTRANCE

FOLDING BED AND STORAGE

TABLE AND CHAIR, TV, STORAGE
ARCHITECTURE DESIGN - ARCHITECTURE IMAGE - VIEW FROM THE ENTRANCE OF THE TOWER LOBBY
ARCHITECTURE DESIGN- SUSTAINABLE DESIGN- SMART GRID
ARCHITECTURE DESIGN - SUSTAINABLE DESIGN - BUILDING MASS AND ORIENTATION

ARCHITECTURE DESIGN - SUSTAINABLE DESIGN - ENERGY CALCULATION

PVT PANEL DATA:
6 m² = 1 KW HEAT POWER
1 m² = 125KWH PER YEAR

ENERGY CONSUMPTION PER FAMILY (2.2 PERSONS) PER YEAR:
HEAT: 4KW HEAT POWER
ELECTRICITY: 3300KWH

ENERGY YIELD USING PVT PANEL:
HEAT
42.6 m² = 7.1 KW HEAT POWER ≥ 4KW
ELECTRICITY
42.6 m² = 42.6 * 125 = 5325 KWH

CONCLUSION:
BOTH HEAT AND ELECTRICITY ARE SELF-SUFFICIENT IN ENERGY PRODUCING.

PV GLASS DATA:
1 m² = 35.76 KWH PER YEAR

ENERGY CONSUMPTION PER FAMILY (2.2 PERSONS) PER YEAR:
HEAT: 4KW HEAT POWER
ELECTRICITY: 3300KWH

ENERGY NEED IN THIS BUILDING (61 UNITS) PER YEAR:
HEAT: 4/2.2 * 61 = 110.9 KW HEAT POWER
ELECTRICITY: 94500 KWH

ENERGY YIELD USING PVT PANEL:
HEAT
473.13 m² = 78.855 KW HEAT POWER ≥ 4KW
TOTAL: 78.855 + 15.5 + 9.14 = 103.495 KW
ELECTRICITY
PVT PANEL: 473.13 * 125 = 59141.25 KWH
PV GLASS: 1123.24 * 35.76 = 40167.0624 KWH
TOTAL: 59141.25 + 40167.0624 = 99308.3 ≥ 94500 KWH

CONCLUSION:
HEAT IS 93.2% SELF-SUFFICIENT IN URBAN BLOCK, THE REST HEAT SHORTAGE COULD BE EXCHANGED WITHIN THIS ISLAND.
ELECTRICITY ARE SELF-SUFFICIENT IN ENERGY PRODUCING.

TRIPLE SOLAR ROOF ELEMENT WITH PV PANEL ABOVE - BOTH HEAT AND ELECTRICITY PRODUCING

http://www.triplesolar.com/products/?lang=en

TRANSPARENT PV GLASS - ELECTRICITY PRODUCING

http://www.onyxysolar.com/
The foundation of the tower is heavier than the low house, so there will be a separation in the foundation and basement between them.
ARCHITECTURE DESIGN- SUSTAINABLE DESIGN- CLIMATE DIAGRAM

- Winter garden
- Noise insulation
- Transformator
- Heat recovery ventilation
- Use park as filter for grey water recycle
- Floor heating
- Green fence as neighbours fence
- Green roof as bio-insulation
- Triple Solar roof element with PV Panel produces both electricity and heat
- PV glass as outer surface of the tower, produces electricity
- Folding shutters as sun-shading elements covering the boxes
- Vertical shutters as sun-shading elements to control the sunlight from the interior
- Winter garden
- Double facade and climate gallery as buffer zone to control interior climate
- Collect the waste heat from shower and kitchen
- Heat well
- Aquifer
- Fresh air
- Cold wall
- Fresh water for cleaning trucks and irrigation
- Rain water for cleaning trucks and irrigation
- Surplus power grid
- Collected surplus power grid
- Fresh air
- Heat recovery ventilation
- Use park as filter for grey water recycle
- Heat well
- Aquifer
- Green fence as neighbours fence
- Green roof as bio-insulation
ARCHITECTURE DESIGN - SUSTAINABLE DESIGN - VENTILATION SYSTEM

Mechanical ventilation - Fresh air

Natural ventilation - Fresh air

Summer ventilation - Office mode

Summer ventilation - Dwelling mode

Winter ventilation - Office mode

Winter ventilation - Dwelling mode

Heat buffer layer

Exhaust air
ARCHITECTURE DESIGN - SUSTAINABLE DESIGN - GREY WATER RECYCLE

- Grey Water Reuse
- Open Public Space and Greenery
- Greener Irrigation
- Rain Water
- Cleaning Truck
- Dwelling

Grey Water from Bathroom and Laundry
- Recycled Water to Dwelling
- Kitchen and Toilet to Sewer
- Filter System
- Irrigation and Car Wash
- Grey Water Reuse
- Heat Waste
ARCHITECTURE DESIGN - SUSTAINABLE DESIGN - REUSE MATERIAL
ARCHITECTURE DESIGN- ROW HOUSE AS FRONT BORDER

URBAN PLAN- SECTION-1

PUBLIC
PRIVATE
ARCHITECTURE DESIGN - INNER STREET AS TRANSITION SPACE CREATING COMMUNITY
ARCHITECTURE DESIGN- TOWER PROGRAMME

- Toilets
- Small meeting room
- Big rentable living room dwelling
- Small rentable living room dwelling
- Circulation (stairs and elevators)
- Rentable loft office
- Lecture and meeting room
- Lobby- exhibition and relax
- Bar and bar’s facilities
- Laundry room and storage room
- Reception and house keeper office
- Solar facade
- Gallery
- Garbage room
- Roof terrace
- Balcony
4. REFLECTION
Personal Privacy

Living in Amsterdam

Using own apartment as office
Lower rent for office

Lower rent for single living

For business starter: easy connection with world
For business starter: lower office rent
For business seeker: lower office rent

For business starter: cosy working space
For office seeker: cosy working space

For office seeker: flexible period for temporary
rent, day, week, month and season
REFLECTION - BENEFIT - AMSTERDAM

- More job opportunities
- More taxes income
- More competitive than other cities
- Surrounding property value increase
REFLECTION - BENEFIT - MONEY FLOW - EVERY PARTY IS BENEFITED

New small company  House service company  Office seekers company

Employees

Gemeente Amsterdam

New small company  House service company  Office seekers company
This afternoon Secretary of State Fred Teeven presents the first Dutch startup visa to Finn Hansen from New Zealand, founder of Med Canvas. StartupJuncture first reported on the new Dutch startup visa in December 2014. Over the following weeks, the article attracted quite a lot of attention. If visitor numbers are any indication, visa law is indeed a hot topic!

Dutch minister Henk Kamp of Economic Affairs said this about the startup visa: “With this startup visa, the Netherlands will be more attractive for foreign startups and growing businesses. This is important because these startups can contribute to a high quality, innovative and challenging investment climate in the Netherlands.”

The startup visa allows innovative startups from outside the European Union to stay in The Netherlands for one year, so they can develop the startup. Startups need to be backed by a facilitator, for example one of the established accelerators or incubators such as Rockstart, Startupbootcamp, Utrecht INC, YES!Delft, ESA BIC or ACE Venture Lab. After a maximum of one year, the ‘normal’ procedures may be followed to apply for a regular immigrant entrepreneur visa.

When asked in December, the Dutch government expected to receive dozens of applications for the startup visa within the first year. Hansen will be the first to receive a visa today. The entrepreneur is also former operational director of Rockstart, so it comes as no surprise that Med Canvas will be backed by Rockstart during the first year.
INDISTINCT BORDER

http://allthingsd.com/files/2013/08/uber-logo.jpg
Impression along the river side
Georges Seurat, A Sunday Afternoon on the Island of La Grande Jatte. 1884-1886
FUTURE USE
NETHERLANDS-2028-OLYMPIC SUMMER GAMES FESTIVAL
THANK YOU

MSc 3-4 Graduation Studio Fall 2015, The Dutch Housing Graduation Studio-Amsterdam, P4 PRESENTATION MSC4 DECEMBER 4TH 2015.

Shuning Yang, 4314352. Tutors: Theo Kupers (AR) & Pierre Jennen (BT)