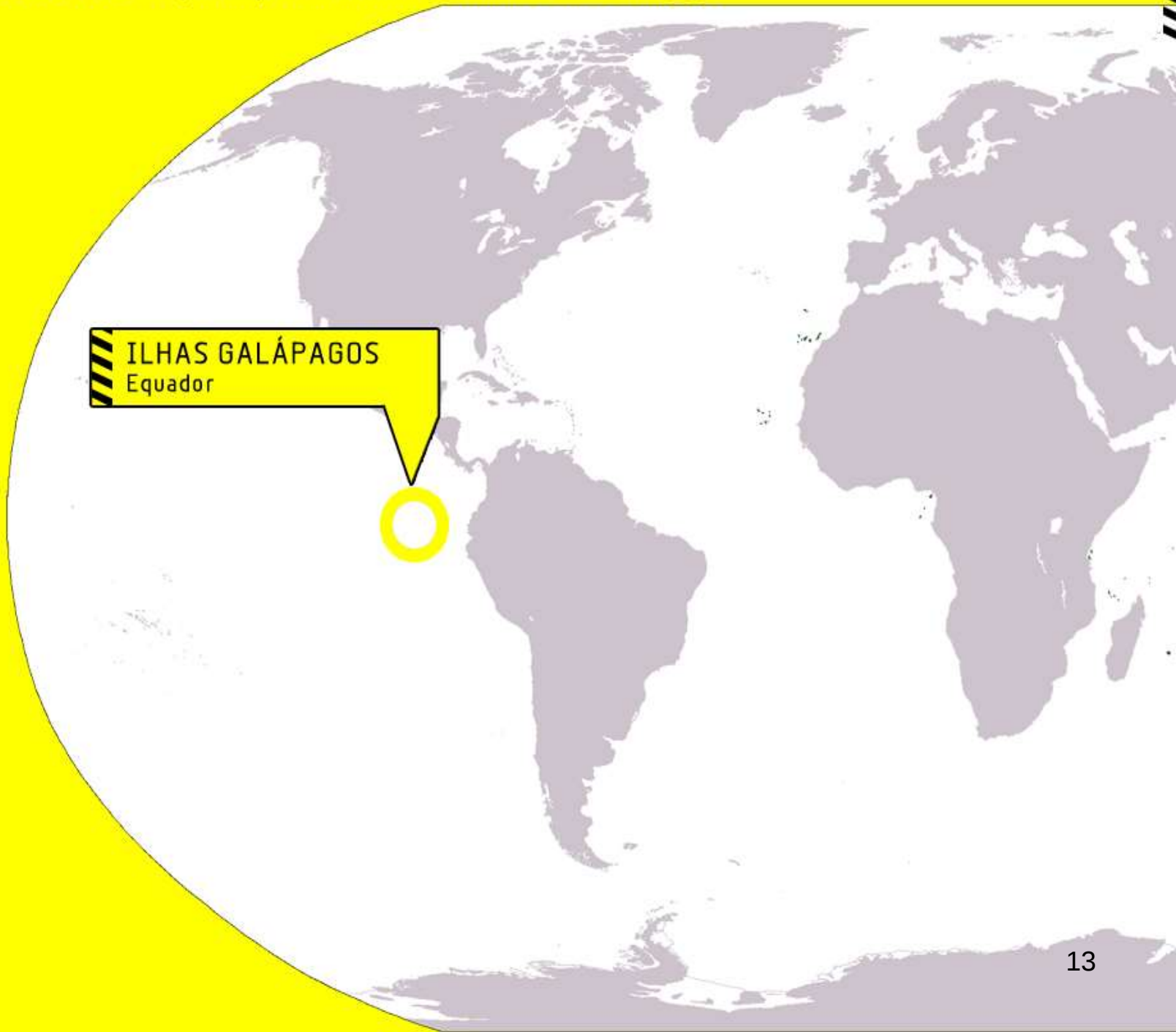


Universidade Lusófona  
Investigar em arquitectura  
MOOV



**HABITATS ABIERTOS 2006**  
PROTÓTIPO HABITACIONAL SUSTENTÁVEL  
Concurso Internacional Galapagos Latitude Zero  
Ilhas Galapágos | Equador







# vida selvagem





|      |                     |        |
|------|---------------------|--------|
| 1990 | População Galápagos | 9.735  |
| 2007 | População Galápagos | 20.000 |
| 2014 | População Galápagos | 40.000 |

**PUERTO BAQUERIZO MORENO**  
Isla Sao Cristobal



1960's > 1000 turistas / ano  
2001 > 80.000 turistas  
2006 > 140.000 turistas

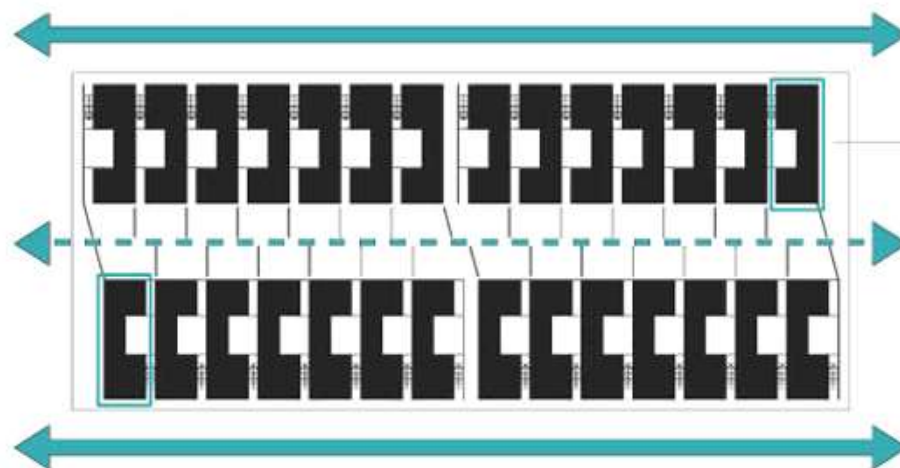
**AEROPORTO BALTRA**  
Galapagos

## ESTRATÉGIA URBANA

### CIDADE



### QUARTEIRÃO



60 CASAS/HECTARE



rua PTO. B. MORENO



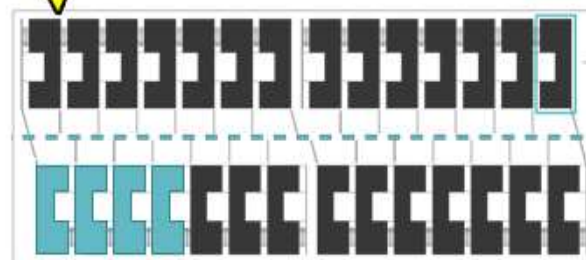
rua PTO. B. MORENO



**DIVERSIDADE FACHADAS**



**QUARTEIRÃO**



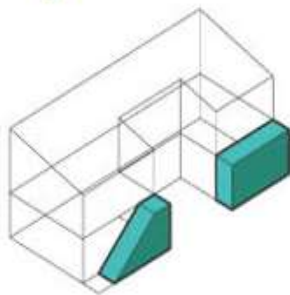


PADRÃO FACHADAS EXISTENTE

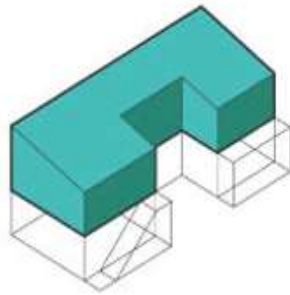


NOVO PADRÃO FACHADAS

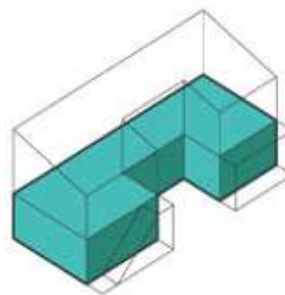
ESTRATÉGIA OCUPAÇÃO



ÁREAS TÉCNICAS



ÁREA HABITÁVEL



ÁREA EXPANSÃO

OCUPAÇÃO EVOLUÇÃO



5 DIAS



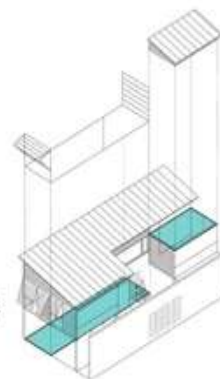
8 DIAS



8 SEM.



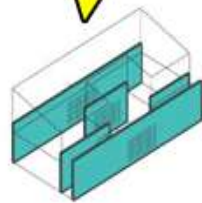
5 ANOS



10 ANOS



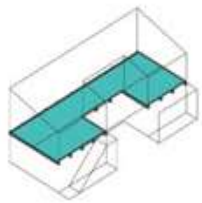
## MATERIAIS CONSTRUÇÃO



**(1) PLANOS EN ADOBE**  
Bajo costo, economía de materiales, posibilidad de hacer de obra local, buen comportamiento térmico.



**(2) PLANOS EN BLOQUE DE CEMENTO PISTO**  
Utilización de materia reciclada en proceso de fabricación de los bloques. Bajo costo, economía de materiales, posibilidad de hacer de obra local, buen comportamiento térmico.



**PAVIMENTO EN BAMBOO**  
Bamboo tiene mínimo impacto en ambiente, es una planta de crecimiento rápido (4-7 años) con gran resistencia, bajo costo y de fácil mantenimiento.



BAMBOO

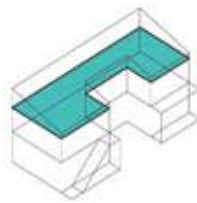


**MADERA RECICLADA**  
Paneles de paja de cosecha comprinda. Bajo costo, reciclaje de material, buena resistencia, fácil de trabajar.



**MADERA REUTILIZADA**  
Reutilización siempre que posible de las maderas de estandas des.

MADEIRA RECICLADA  
MADEIRA REUTILIZADA



**REDE DE CANHAMO**  
Rede de protección de los mosquitos y del agua de la lluvia (parte superior de la fachada es abierta). (Shamo es producto natural, económico y con **bueno comportamiento** térmico y acústico).

REDE CANHAMO



**RIPAS DE MADERA DE ESPECIES INTRODUCIDAS**  
Fachada permeable destinada a ventilación superior de la vivienda.

MADEIRA DE ESPÉCIES INTRODUZIDAS



**PANEL METALICO**  
Elevada resistencia, superficie de captación y aislamiento del agua de la lluvia.



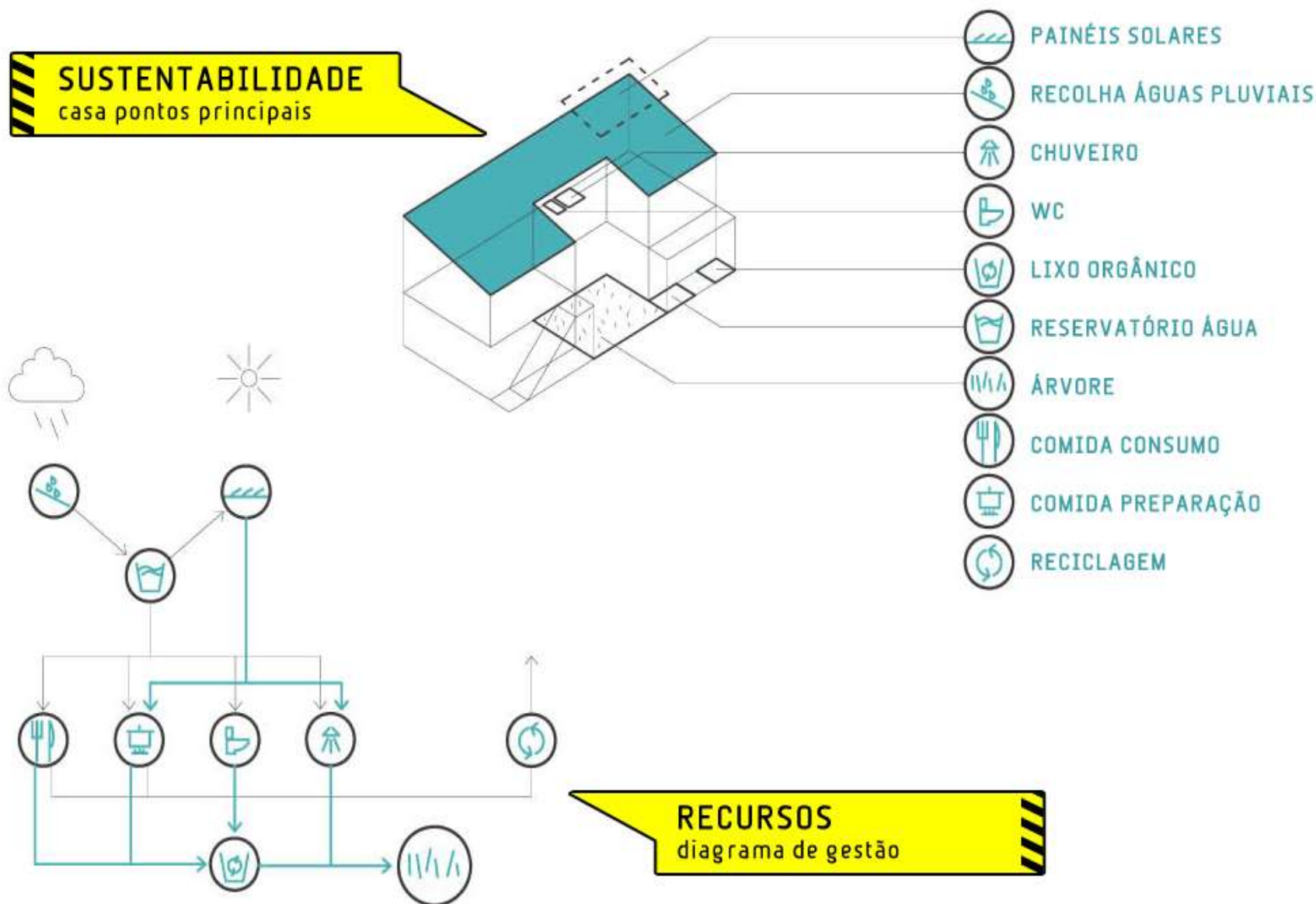
**ASLAMIENTO - CÁRAMO**  
Aún que Galápagos tenga un clima sub-tropical, la introducción de aislamiento en cubierta mejora las condiciones internas, además cáñamo es un producto natural, económico y con buen comportamiento térmico y acústico.

PAINÉIS SANDWICH RECICLADOS

TIJOLOS ADOBE  
TIJOLOS CIMENTO RECICLADO

## SUSTENTABILIDADE

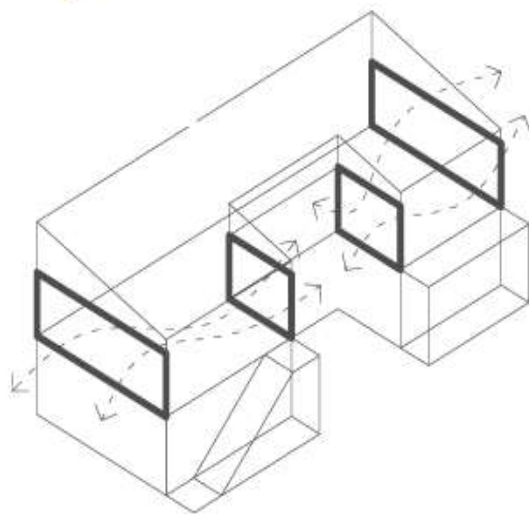
casa pontos principais



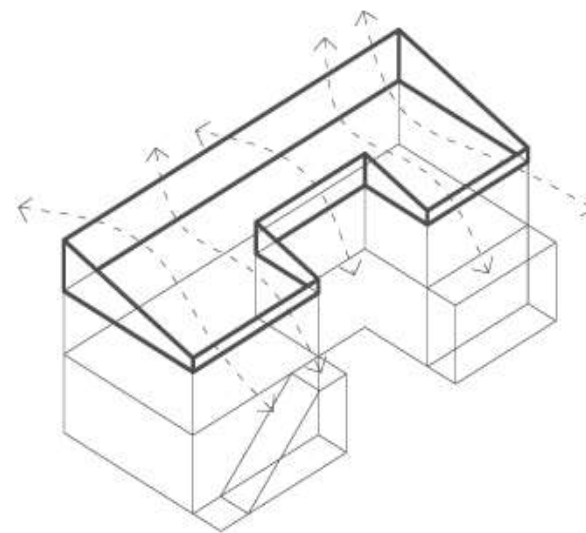
## RECURSOS

diagrama de gestão

SISTEMA DE VENTILAÇÃO NATURAL



VENTILAÇÃO CRUZADA  
30% permeável



VENTILAÇÃO SUPERIOR  
50% permeável

Quarto



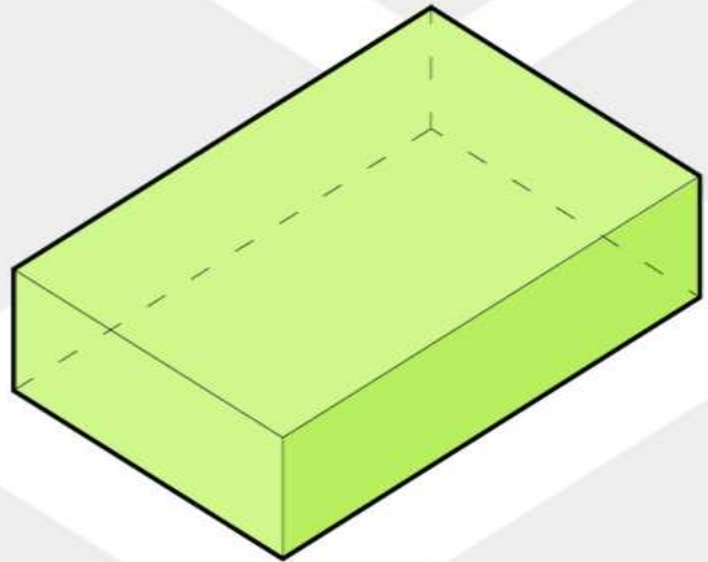
Sala





# GIVING SHAPE

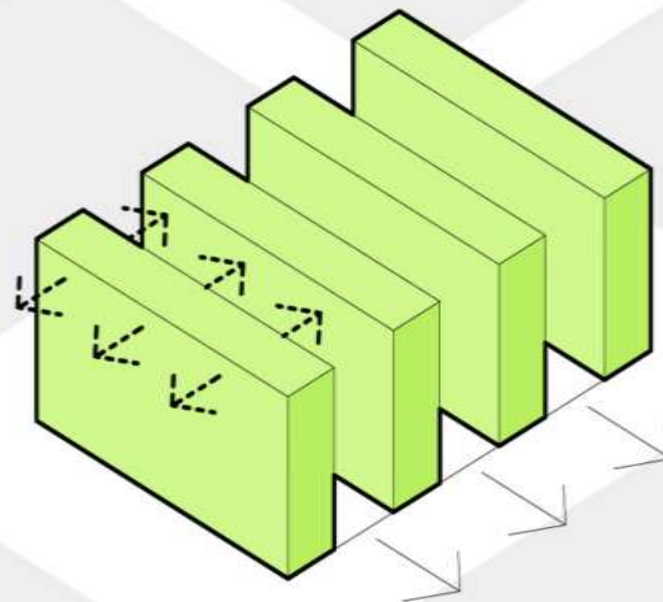
## BLOCK PROGRAMME



# GIVING SHAPE

BLOCK PROGRAMME

SLICED BLOCK

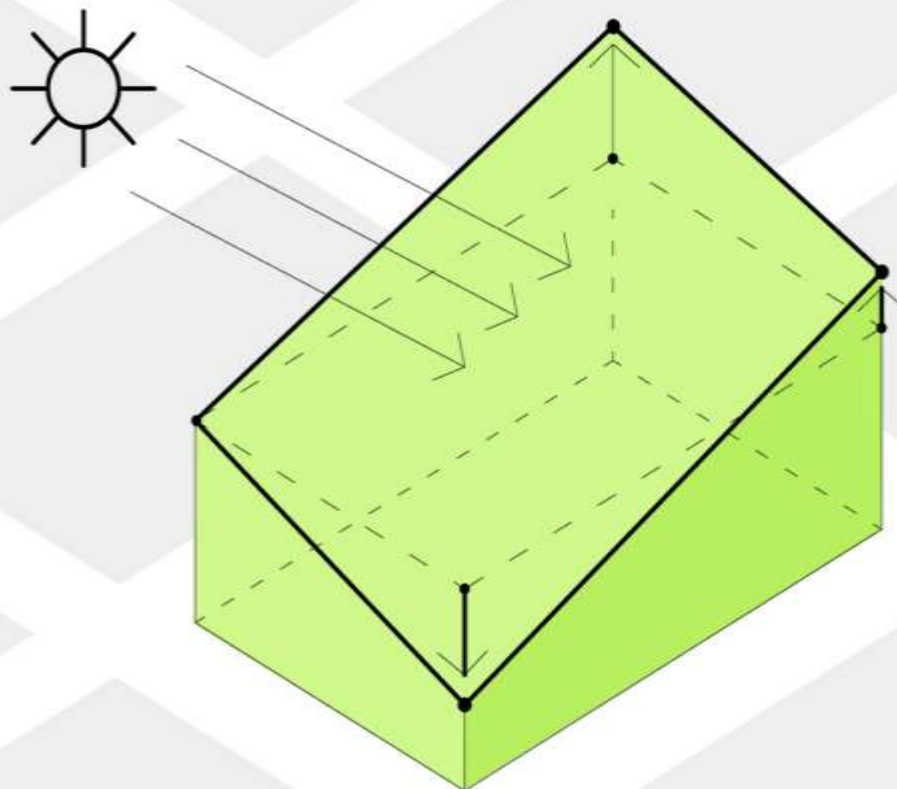


# GIVING SHAPE

BLOCK PROGRAMME

SLICED BLOCK

DEFORMING SLICES



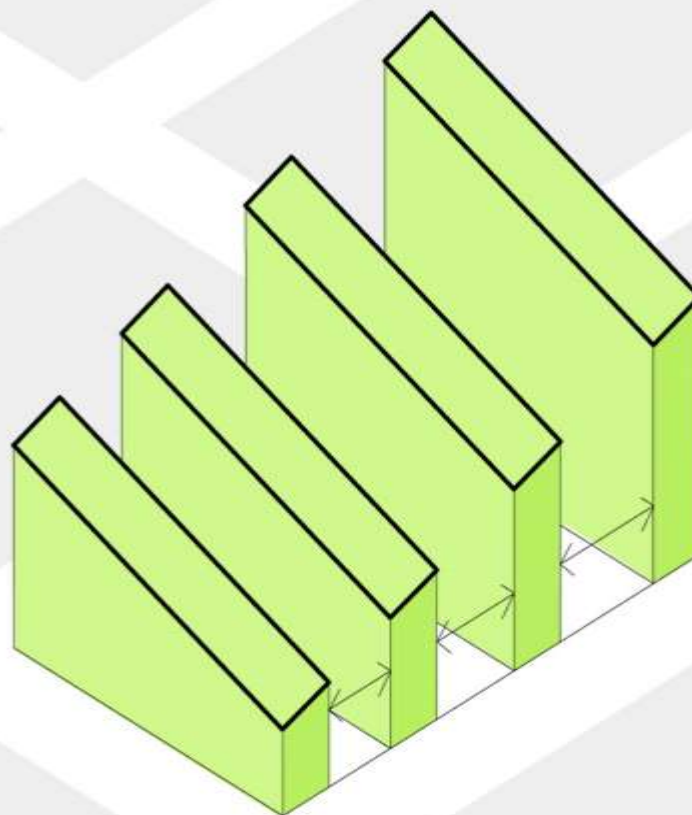
# GIVING SHAPE

BLOCK PROGRAMME

SLICED BLOCK

DEFORMING SLICES

OPTIMIZE SLICES DISTANCES



## GIVING SHAPE

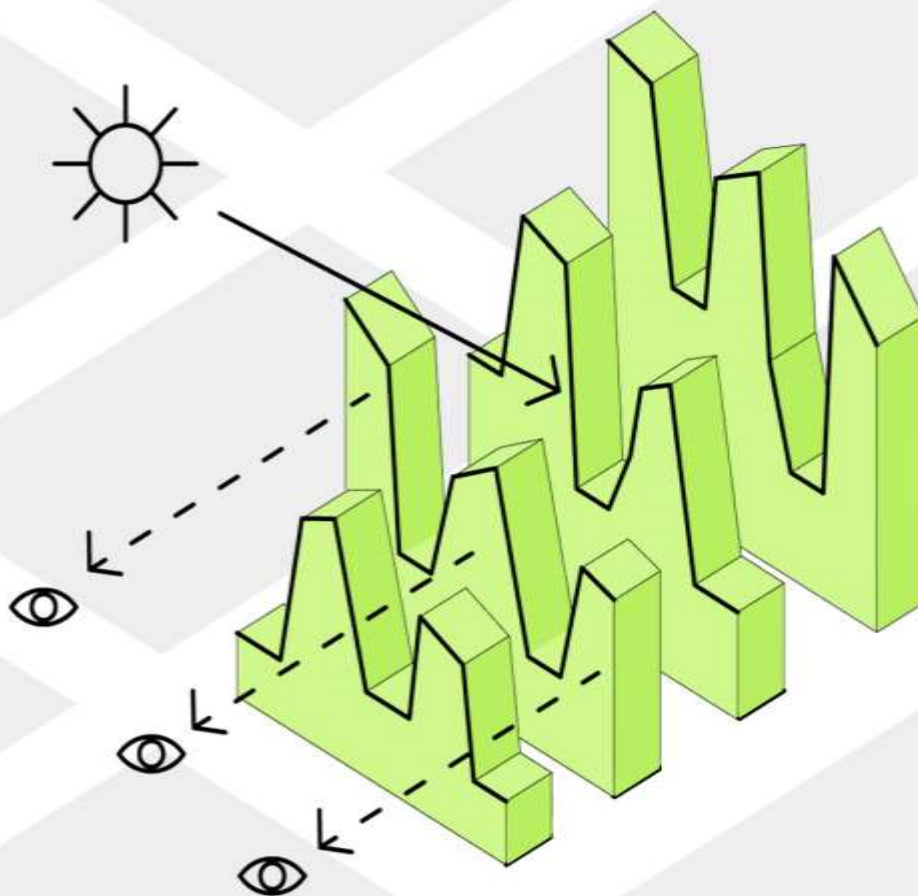
BLOCK PROGRAMME

SLICED BLOCK

DEFORMING SLICES

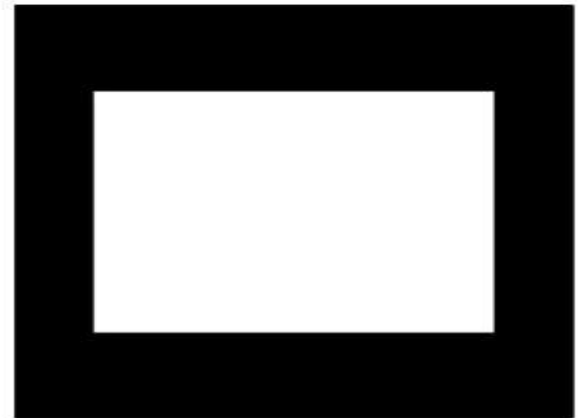
OPTIMIZE SLICES DISTANCES

SHAPPING THE SLICES



# URBAN STRATEGY

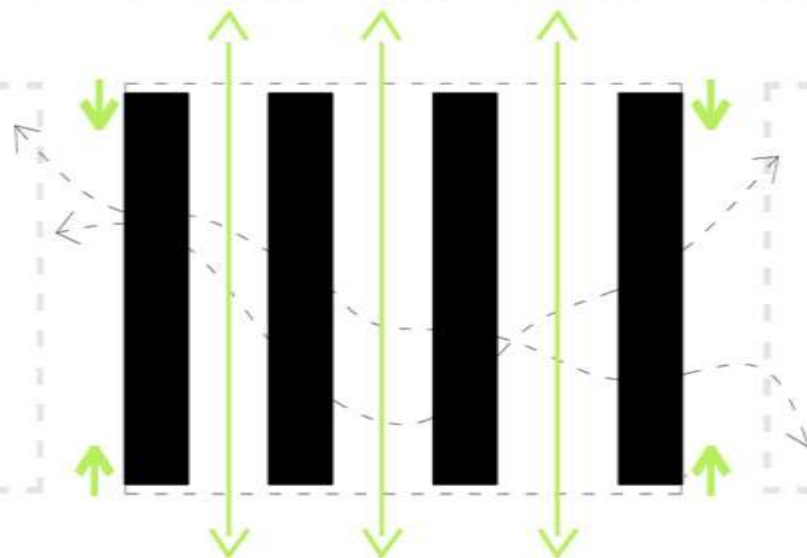
## CONVENTIONAL BLOCK ANALYSIS



# URBAN STRATEGY

## CONVENTIONAL BLOCK ANALYSIS

### SLICING THE BLOCK

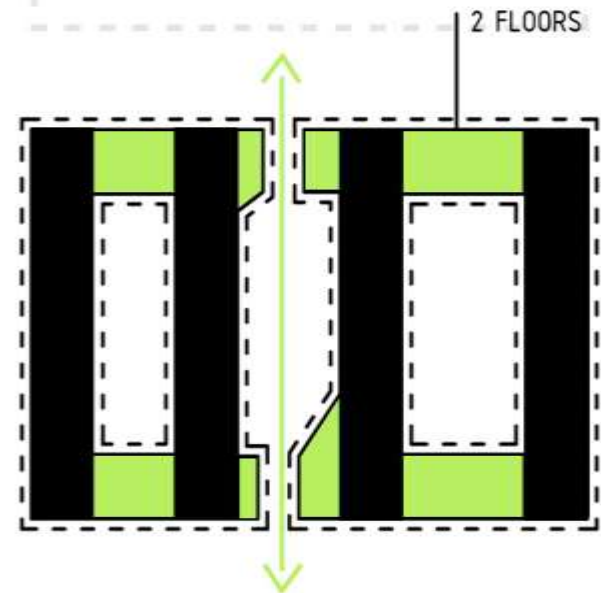


# URBAN STRATEGY

CONVENTIONAL BLOCK ANALYSIS

SLICING THE BLOCK

OPEN SPACES DIFERENTATION



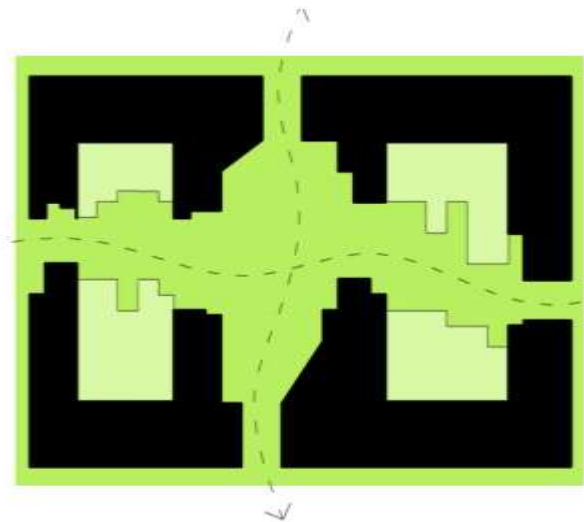
# URBAN STRATEGY

CONVENTIONAL BLOCK ANALYSIS

SLICING THE BLOCK

OPEN SPACES DIFFERENTIATION

CONTINUOUS PUBLIC SPACE



# URBAN STRATEGY

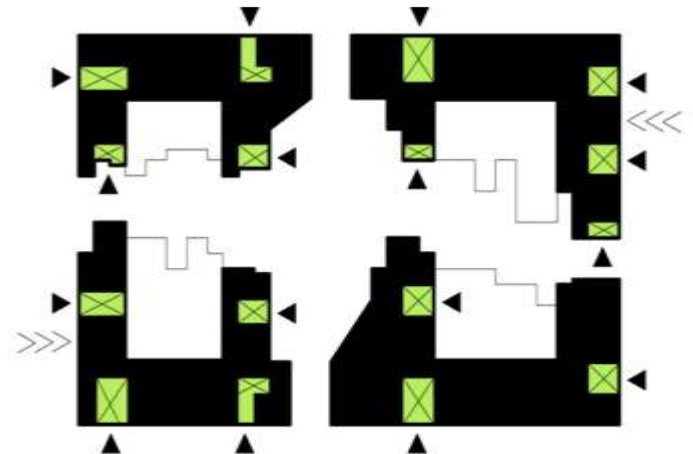
CONVENTIONAL BLOCK ANALYSIS

SLICING THE BLOCK

OPEN SPACES DIFERENTATION

CONTINUOUS PUBLIC SPACE

MIXING PROGRAME



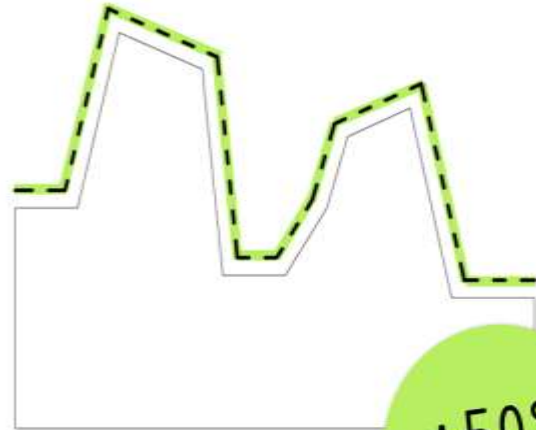
# ENERGY STRATEGY

INCREASE PRODUCTIVE SURFACES

+ MOUNTAIN ROOF



FLAT ROOF



MOUNTAIN ROOF

+50%  
AREA

# ENERGY STRATEGY

INCREASE PRODUCTIVE SURFACES

+ MOUNTAIN ROOF

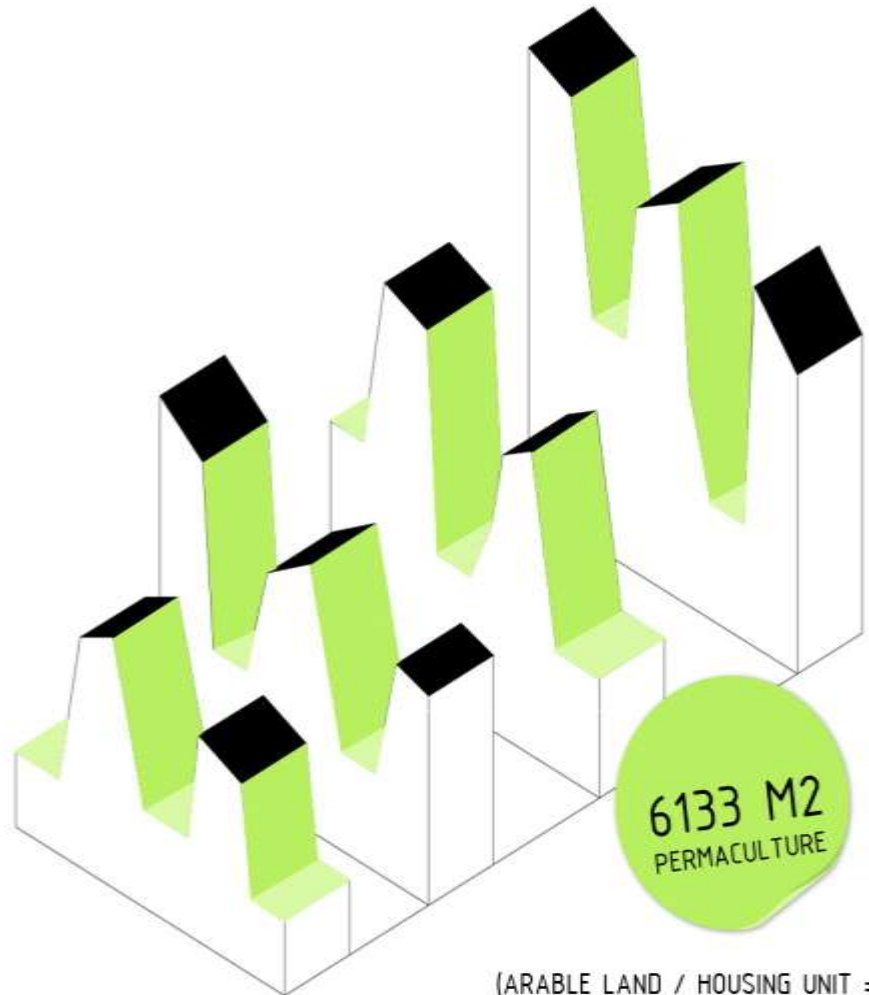


# ENERGY STRATEGY

INCREASE PRODUCTIVE SURFACES

+ MOUNTAIN ROOF

- ARABLE LAND



(ARABLE LAND / HOUSING UNIT = 5.5 M2)

# ENERGY STRATEGY

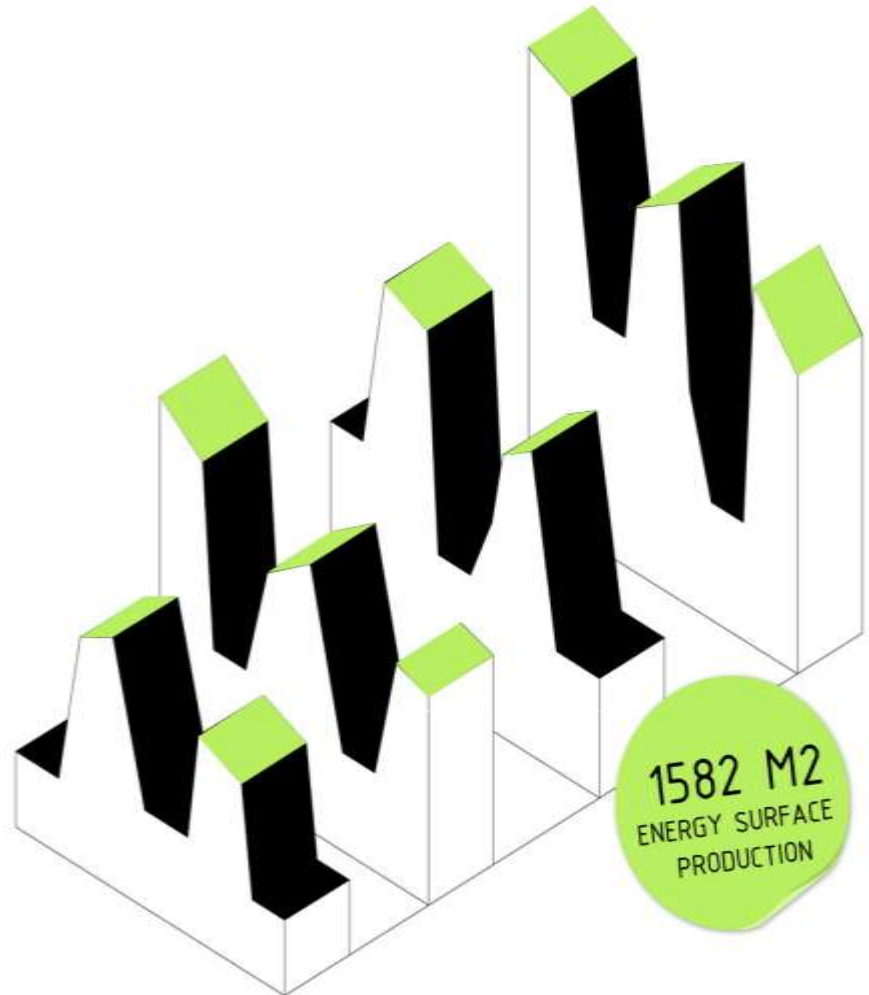
## INCREASE PRODUCTIVE SURFACES

+ MOUNTAIN ROOF

- ARABLE LAND

- SOLAR THERMAL ENERGY

- WIND ENERGY



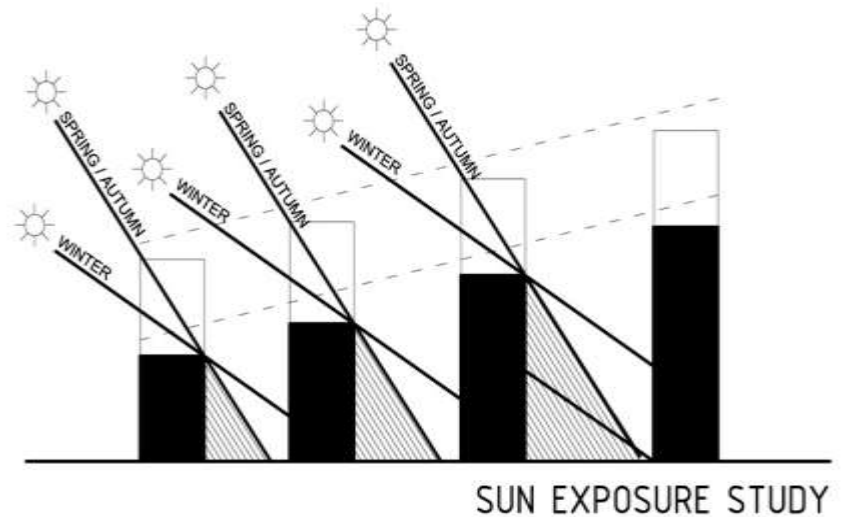
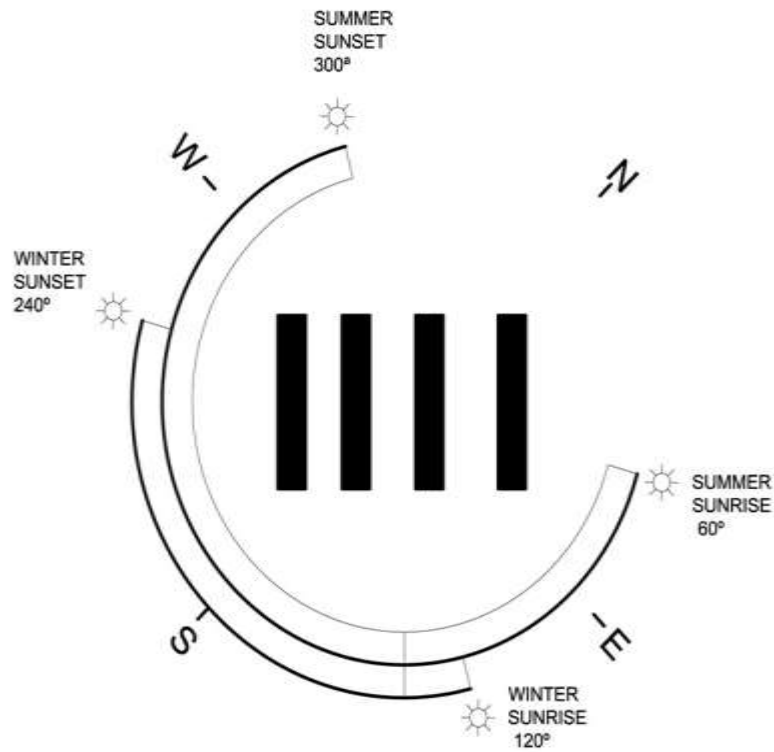
# ENERGY STRATEGY

## INCREASE PRODUCTIVE SURFACES

### + MOUNTAIN ROOF

- ARABLE LAND
- SOLAR THERMAL ENERGY
- WIND ENERGY

### + SOUTHWEST FACADE



# ENERGY STRATEGY

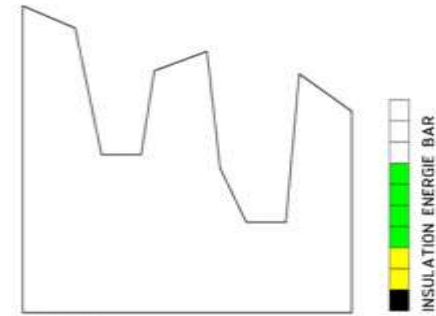
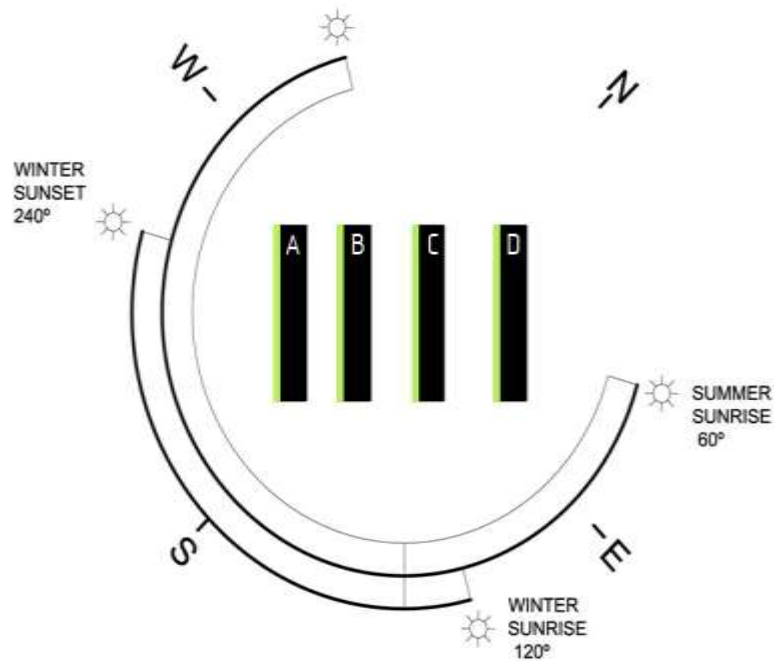
## INCREASE PRODUCTIVE SURFACES

### + MOUNTAIN ROOF

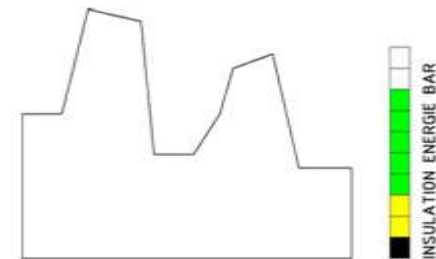
- ARABLE LAND
- SOLAR THERMAL ENERGY
- WIND ENERGY

### + SOUTHWEST FACADE

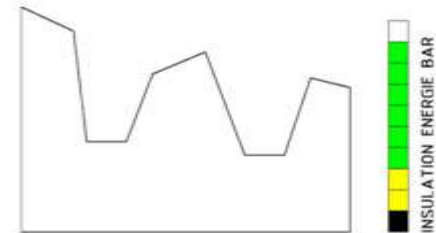
- PHOTOVOLTAIC ENERGY



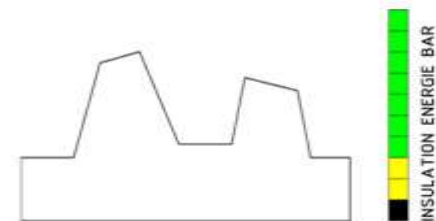
BLOCK D



BLOCK C



BLOCK B



BLOCK A

# ENERGY STRATEGY

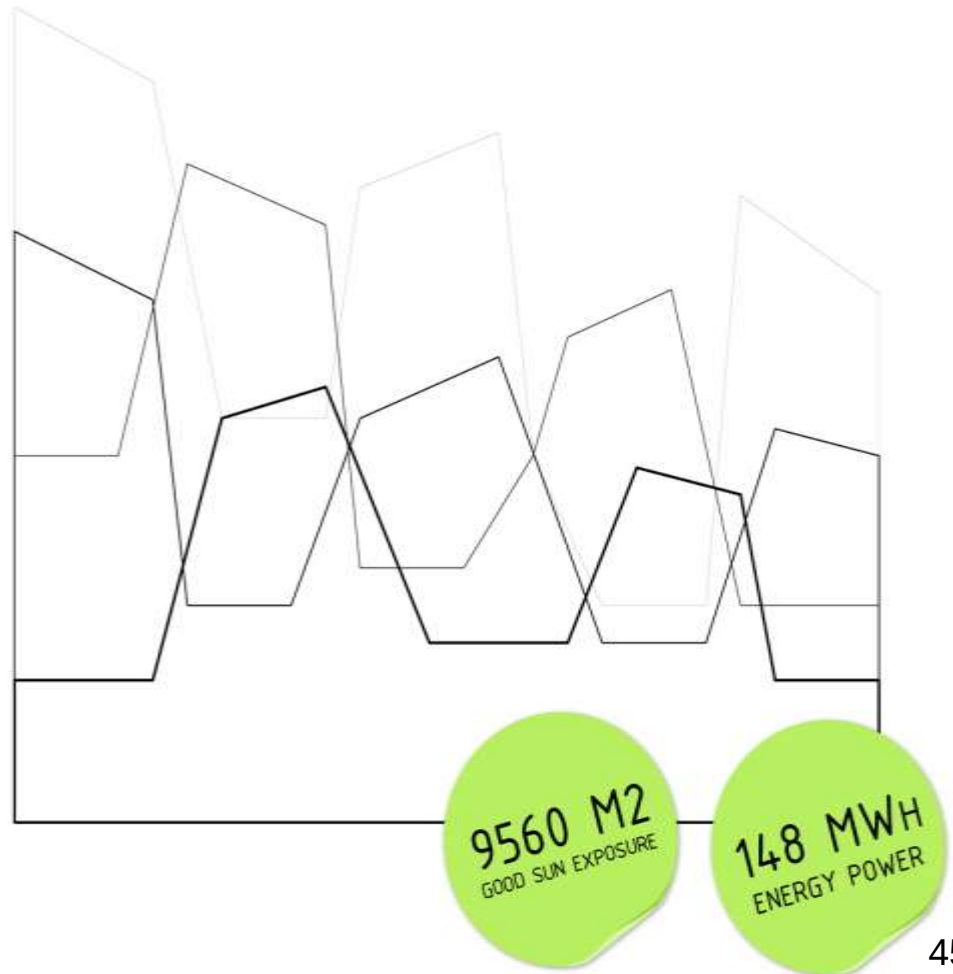
## INCREASE PRODUCTIVE SURFACES

### + MOUNTAIN ROOF

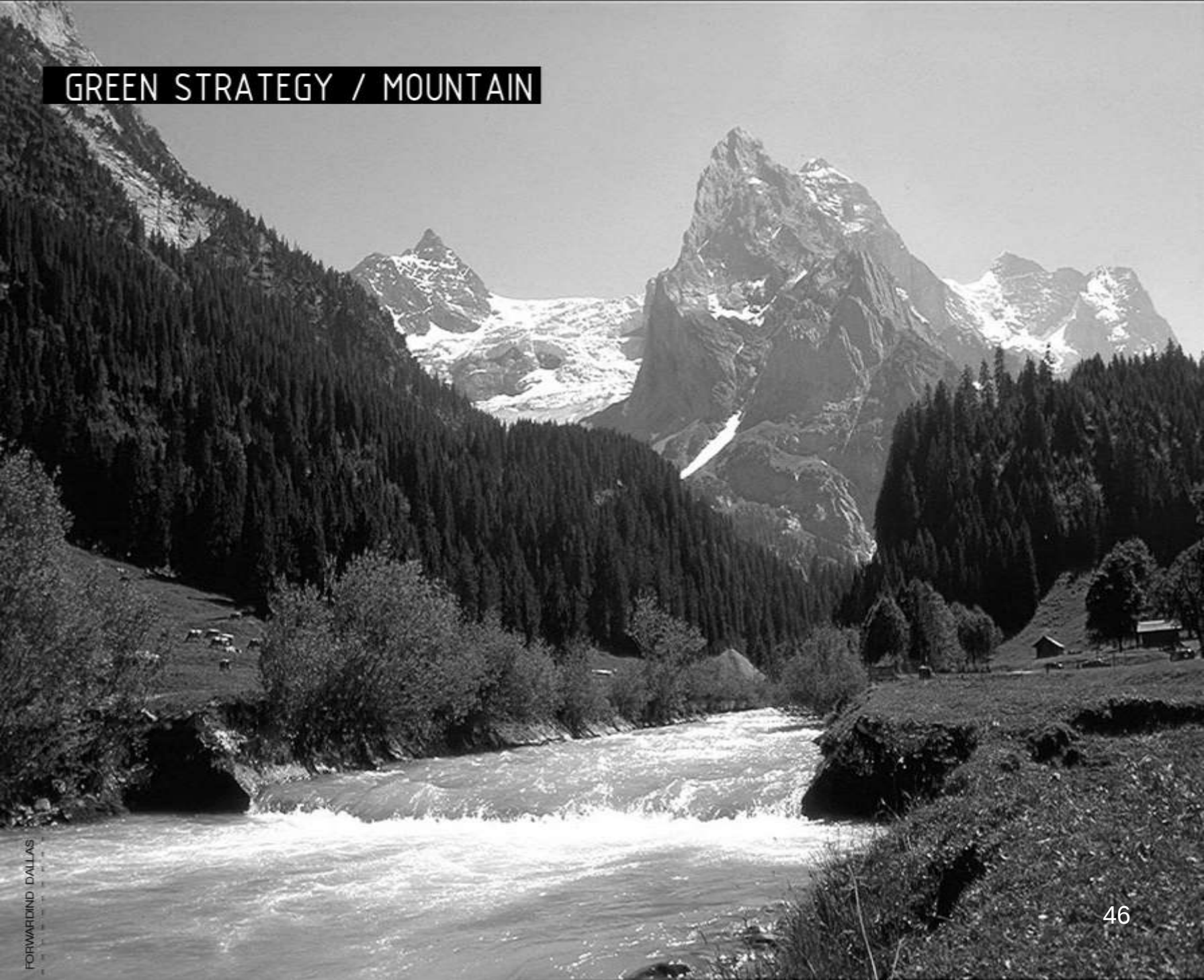
- ARABLE LAND
- SOLAR THERMAL ENERGY
- WIND ENERGY

### + SOUTHWEST FACADE

- PHOTOVOLTAIC ENERGY



# GREEN STRATEGY / MOUNTAIN



## GREEN STRATEGY / MOUNTAIN



### HIGHER

INTENSE SUN RADIATION  
EXPOSURE TO WIND  
EXTREME CONDITIONS  
ALMOST NO VEGETATION

## GREEN STRATEGY / MOUNTAIN



### HIGHER

INTENSE SUN RADIATION  
EXPOSURE TO WIND  
EXTREME CONDITIONS  
ALMOST NO VEGETATION



### MEDIUM

NORMAL SUN RADIATION  
PROTECTED FROM WIND  
REGULAR CONDITIONS  
MODERATE SIZE VEGETATION

## GREEN STRATEGY / MOUNTAIN



### HIGHER

INTENSE SUN RADIATION  
EXPOSURE TO WIND  
EXTREME CONDITIONS  
ALMOST NO VEGETATION



### MEDIUM

NORMAL SUN RADIATION  
PROTECTED FROM WIND  
REGULAR CONDITIONS  
MODERATE SIZE VEGETATION



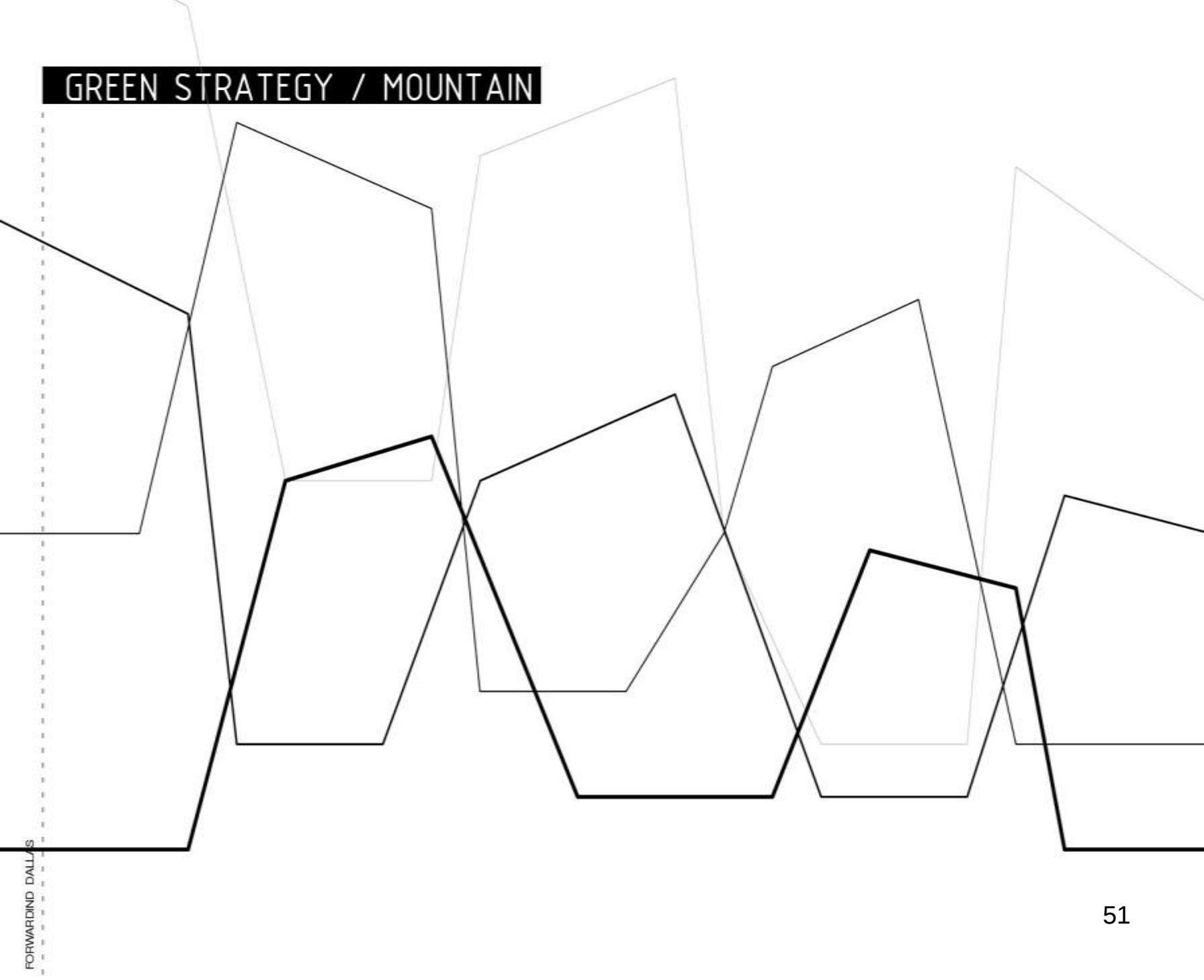
### VALLEY

GOOD SUN RADIATION  
PROTECTED FROM WIND  
VERY GOOD CONDITIONS  
BIG SIZE VEGETATION

# GREEN STRATEGY / MOUNTAIN



## GREEN STRATEGY / MOUNTAIN



## GREEN STRATEGY / MOUNTAIN

TOP: THERMAL SOLAR ENERGY + WIND ENERGY



# GREEN STRATEGY / MOUNTAIN

TOP: THERMAL SOLAR ENERGY + WIND ENERGY



HIGHER: MOSS - SEDUM



# GREEN STRATEGY / MOUNTAIN

TOP: THERMAL SOLAR ENERGY + WIND ENERGY



HIGHER: MOSS - SEDUM



MEDIUM: SEDUM - GRASS - HERBACEOUS - WILD SHRUBS



# GREEN STRATEGY / MOUNTAIN

TOP: THERMAL SOLAR ENERGY + WIND ENERGY



HIGHER: MOSS - SEDUM



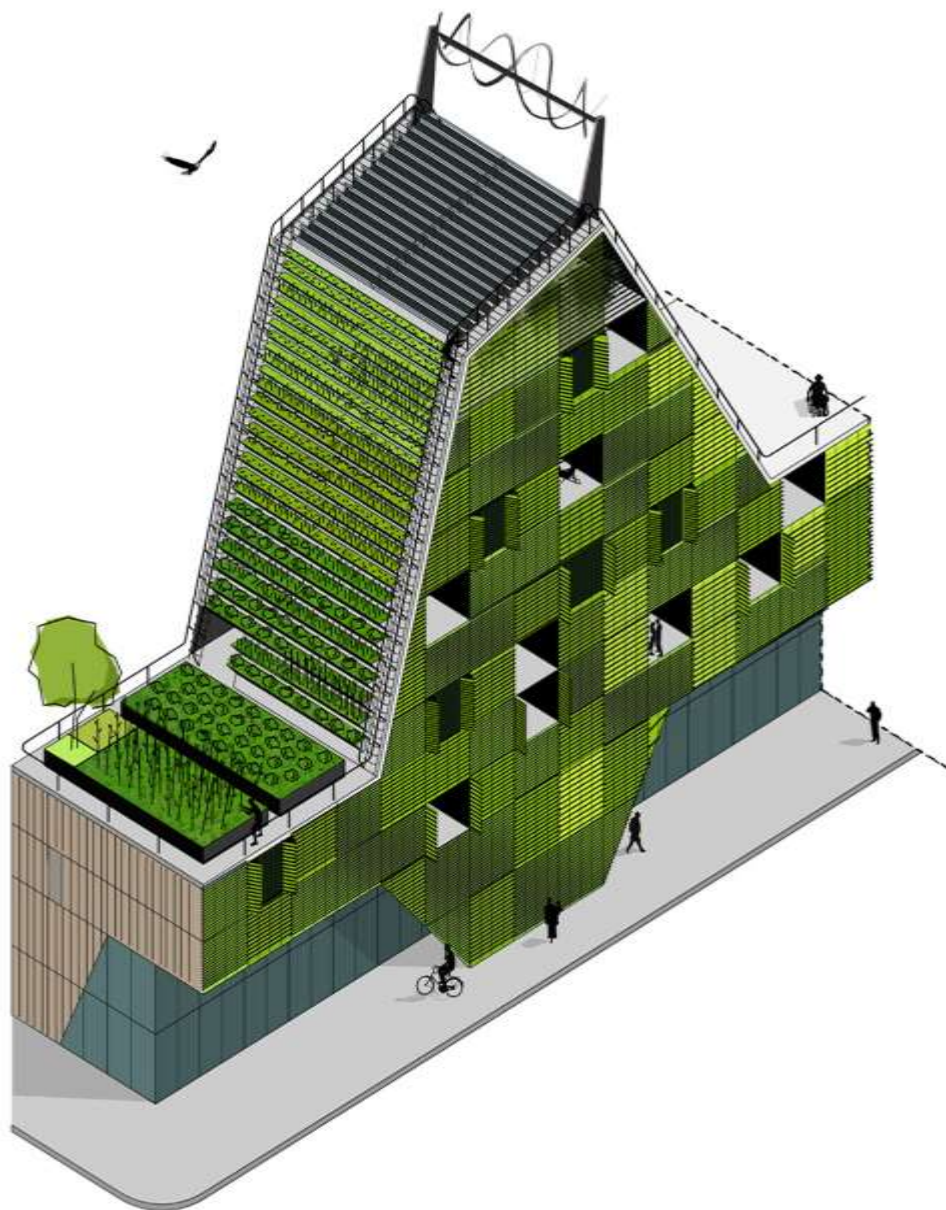
MEDIUM: SEDUM - GRASS - HERBACEOUS - WILD SHRUBS



VALLEY: HERBS - VEGETABLES



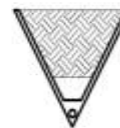
# GREEN STRATEGY / MOUNTAIN



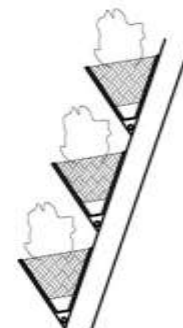
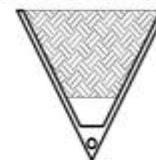
S :: MOSS/SEDUM VASE 1.5X2.7f



M :: GRASS/SEDUM VASE 2.1X1.1f



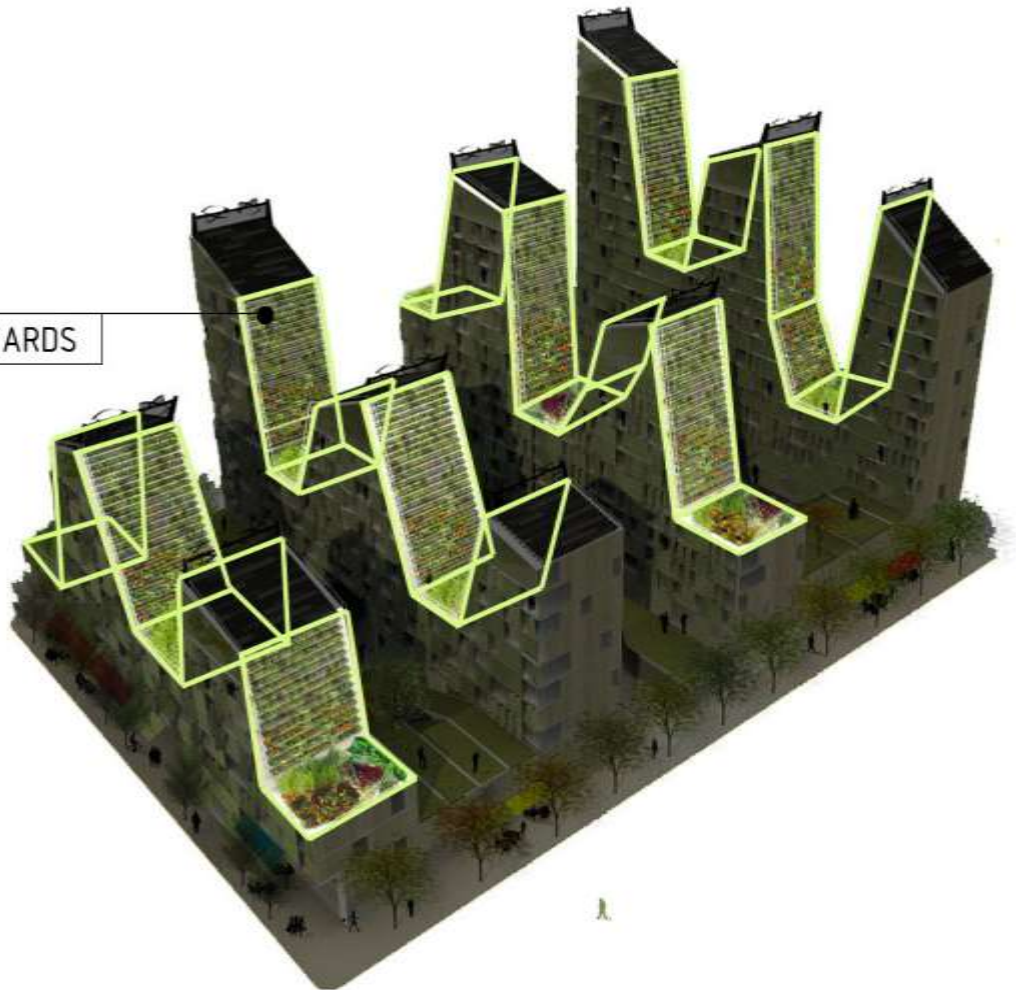
XL :: HORTICULTURE VASE 2.7X1.5f



# GREEN STRATEGY

MAXIMIZATION OF AREAS OF ORGANIC COATING PLANT

GREEN ROOF STRIPES + GREEN ROOF YARDS



# GREEN STRATEGY

MAXIMIZATION OF AREAS OF ORGANIC COATING PLANT



GROUND FLOOR GREEN STRIPES

# GREEN STRATEGY

MAXIMIZATION OF AREAS OF ORGANIC COATING PLANT

PLANTING TREES IN STREETS AND INSIDE BLOCK

## TREE NUMBERS

FAST GROWING TREES: 44 (14,14 ton)

MEDIUM GROWING TREES: 26 (0,75 ton)

SLOW GROWING TREES: 29 (0,30 ton)

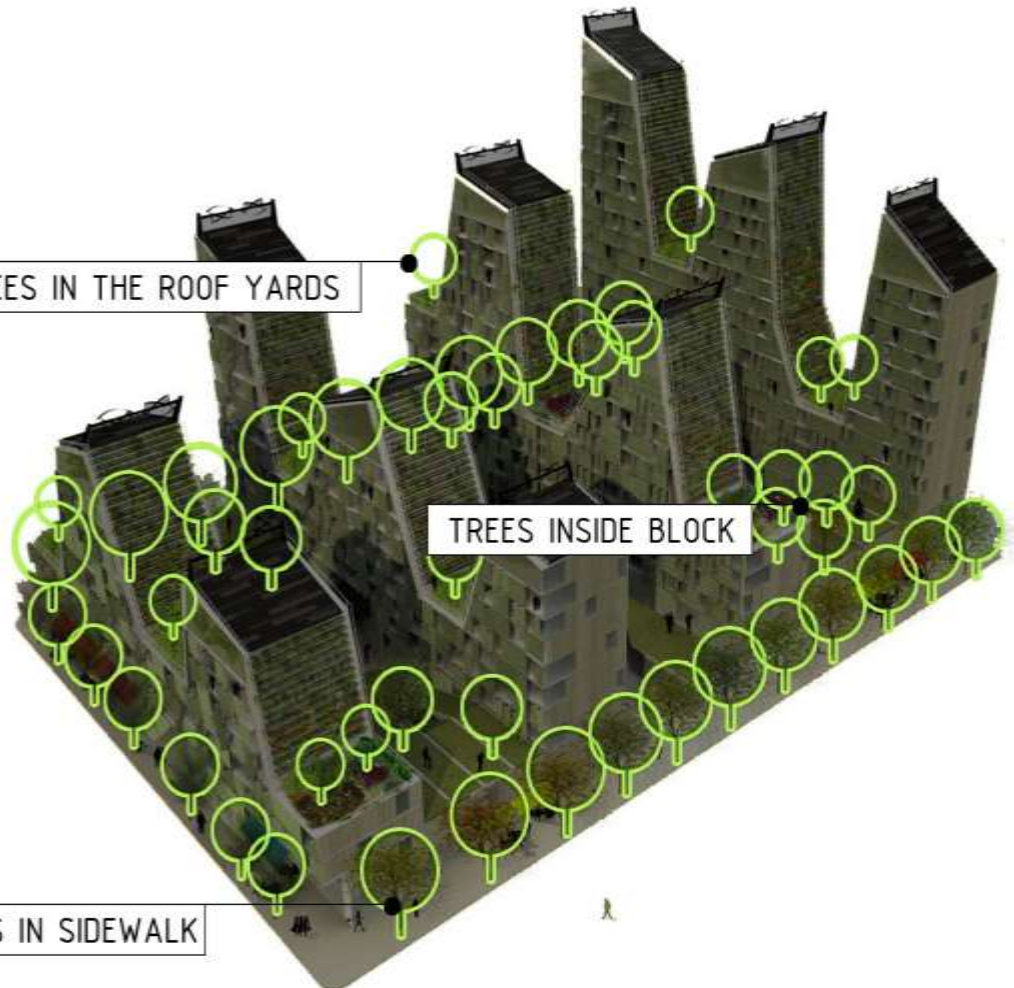
TOTAL TREES: 99

CO2 ABSORPTION: 15,20ton / 20 years

TREES IN THE ROOF YARDS

TREES INSIDE BLOCK

TREES IN SIDEWALK



# GREEN STRATEGY

MAXIMIZATION OF AREAS OF ORGANIC COATING PLANT  
PLANTING TREES IN STREETS AND INSIDE BLOCK

MAXIMIZING THE PERMEABLE SURFACE

GROUND FLOOR PERMEABLE SURFACE



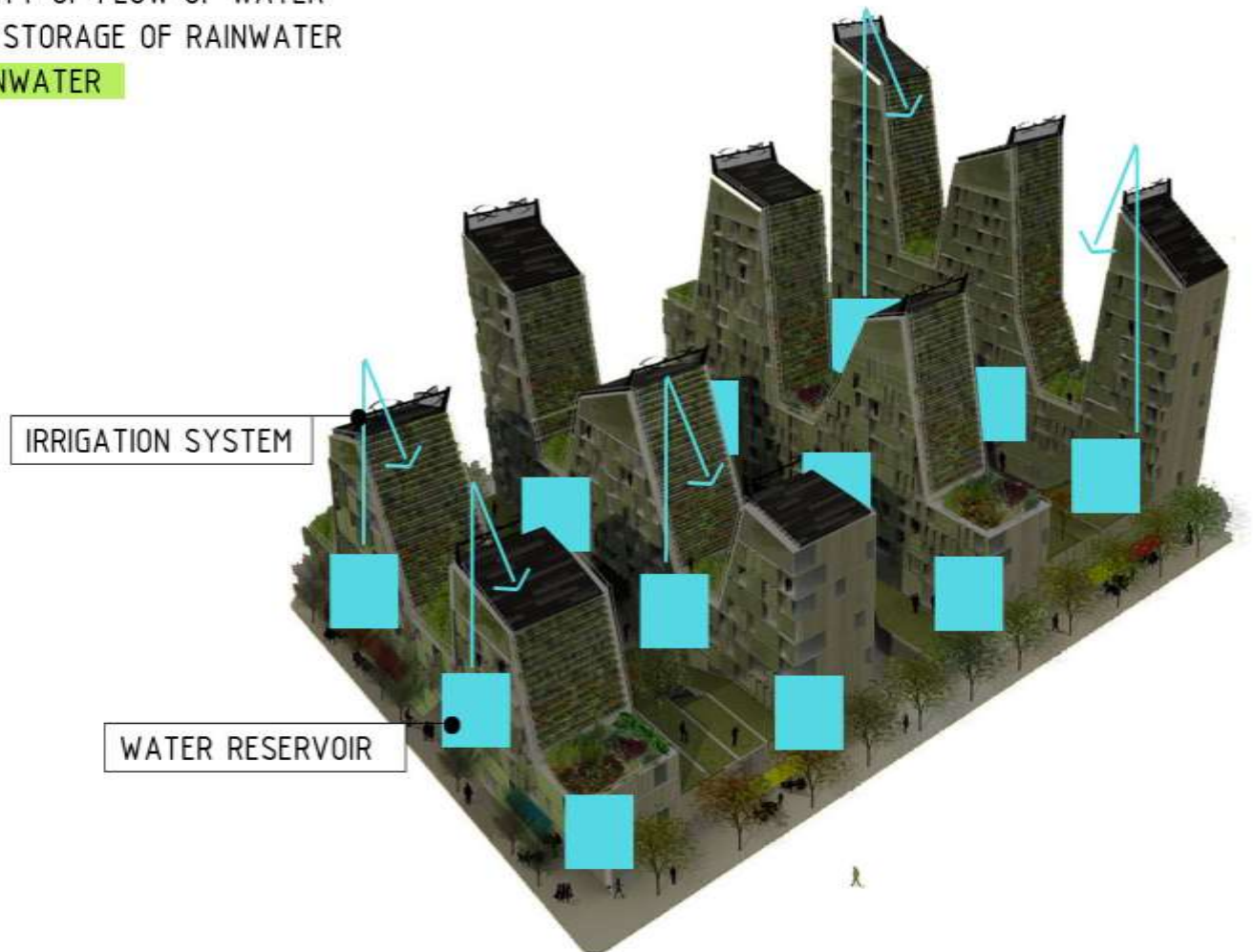
# GREEN STRATEGY

- MAXIMIZATION OF AREAS OF ORGANIC COATING PLANT
- PLANTING TREES IN STREETS AND INSIDE BLOCK
- MAXIMIZING THE PERMEABLE SURFACE
- CONCENTRATION AND STORAGE OF RAINWATER



## GREEN STRATEGY

- MAXIMIZATION OF AREAS OF ORGANIC COATING PLANT
- PLANTING TREES IN STREETS AND INSIDE BLOCK
- MAXIMIZING THE PERMEABLE SURFACE
- REDUCING THE VELOCITY OF FLOW OF WATER
- CONCENTRATION AND STORAGE OF RAINWATER
- IRRIGATION WITH RAINWATER



## GREEN STRATEGY

- MAXIMIZATION OF AREAS OF ORGANIC COATING PLANT
- PLANTING TREES IN STREETS AND INSIDE BLOCK
- MAXIMIZING THE PERMEABLE SURFACE
- REDUCING THE VELOCITY OF FLOW OF WATER
- CONCENTRATION AND STORAGE OF RAINWATER
- IRRIGATION WITH RAINWATER
- USE OF NATIVE VEGETATION

## TREES



*Cercis canadensis*  
var. *texensis*



*Morus alba*



*Prunus mexicana*  
s. *Watson*



*Prunus umbellata*



*Quercus macrocarpa*



*Ulmus crassifolia*



# SOUTHWEST FACADE

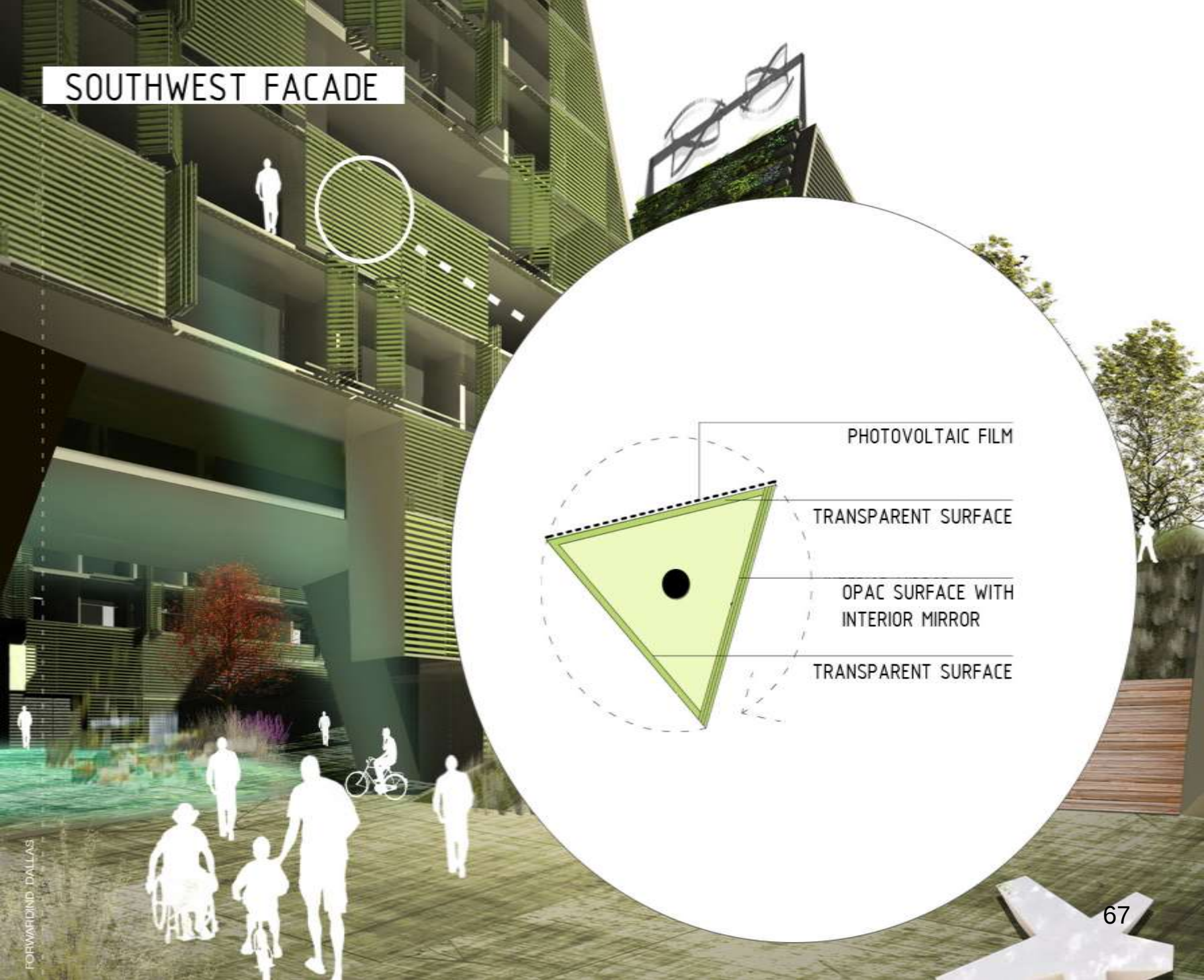


# SOUTHWEST FACADE

LOUVER MODULE FUNCTIONING



# SOUTHWEST FACADE



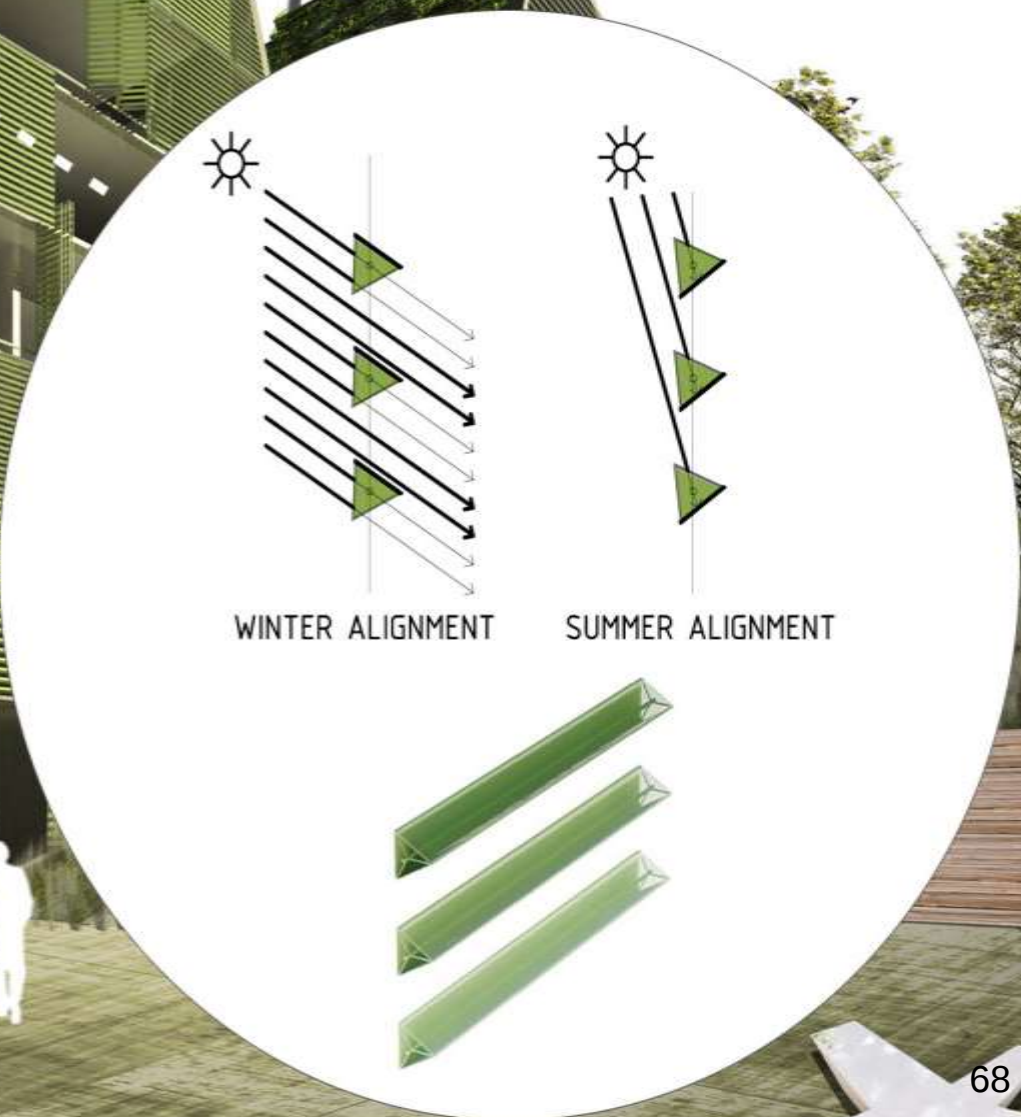
PHOTOVOLTAIC FILM

TRANSPARENT SURFACE

OPAC SURFACE WITH  
INTERIOR MIRROR

TRANSPARENT SURFACE

# SOUTHWEST FACADE



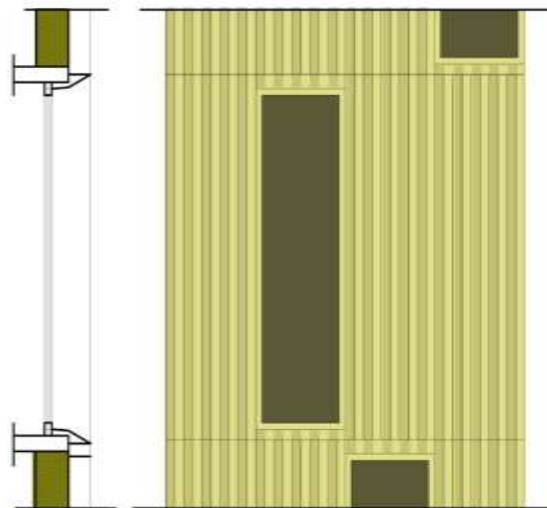
# NORTHEAST FACADE



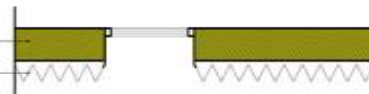
# NORTHEAST FACADE



NORTHEAST FACADE MODULE



PREFAB STRAW BALE WALL  
POLYCARBONATE SURFACE



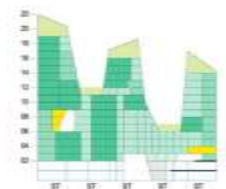
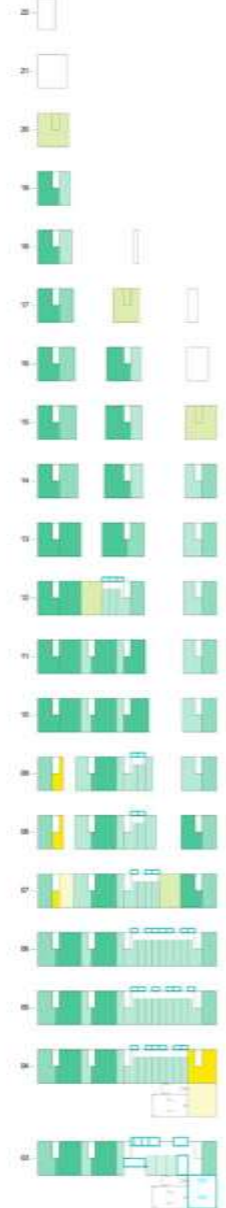
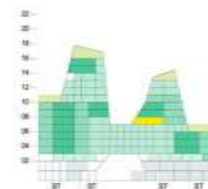
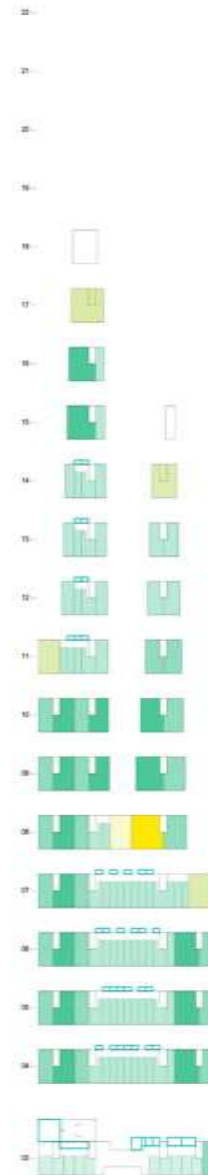
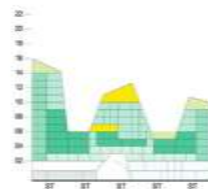
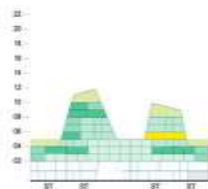
# NORTHEAST FACADE



PREFAB STRAW  
BALE WALL

# PROGRAM

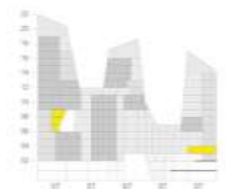
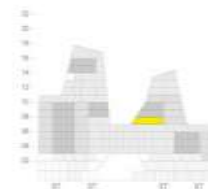
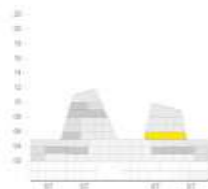
## HOUSING



# PROGRAM

## HOUSING

### COLLECTIVE SPACES

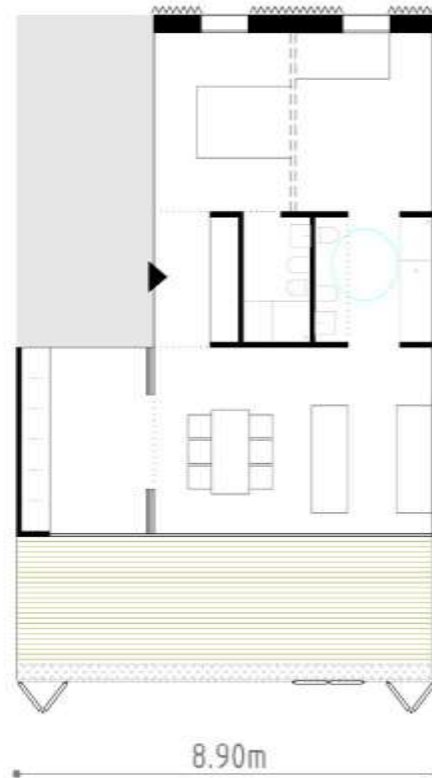


# PROGRAMME

HOUSING

- STRATEGIC LAYOUT

COLLECTIVE SPACES

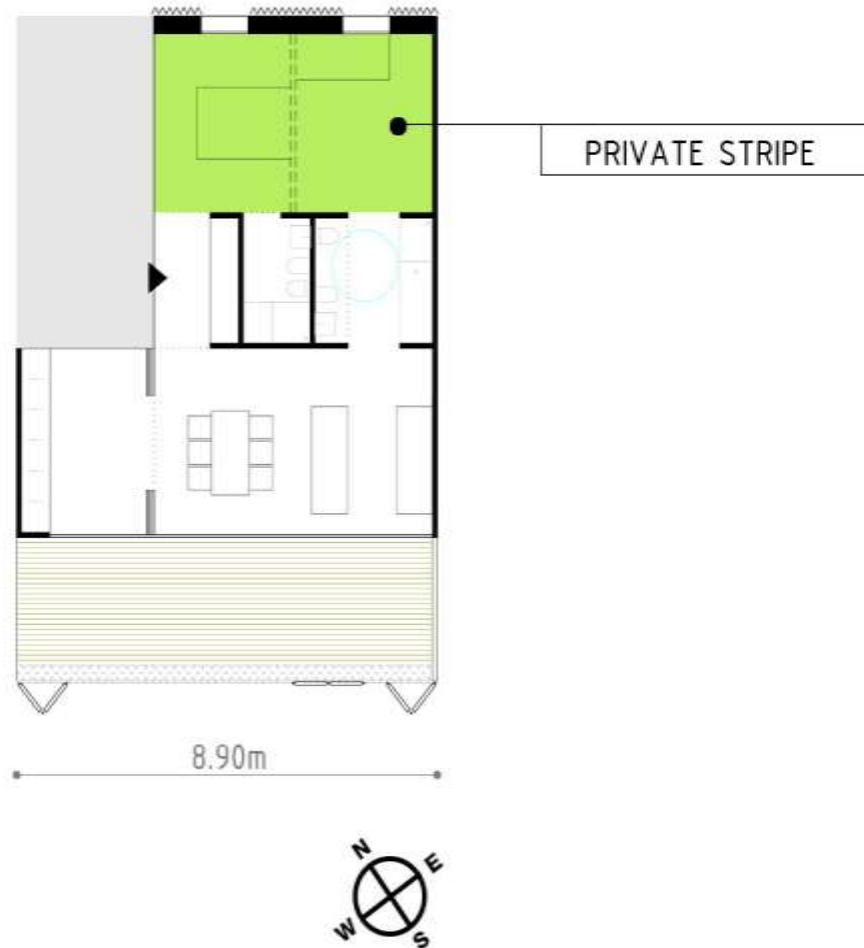


# PROGRAMME

HOUSING

- STRATEGIC LAYOUT

COLLECTIVE SPACES

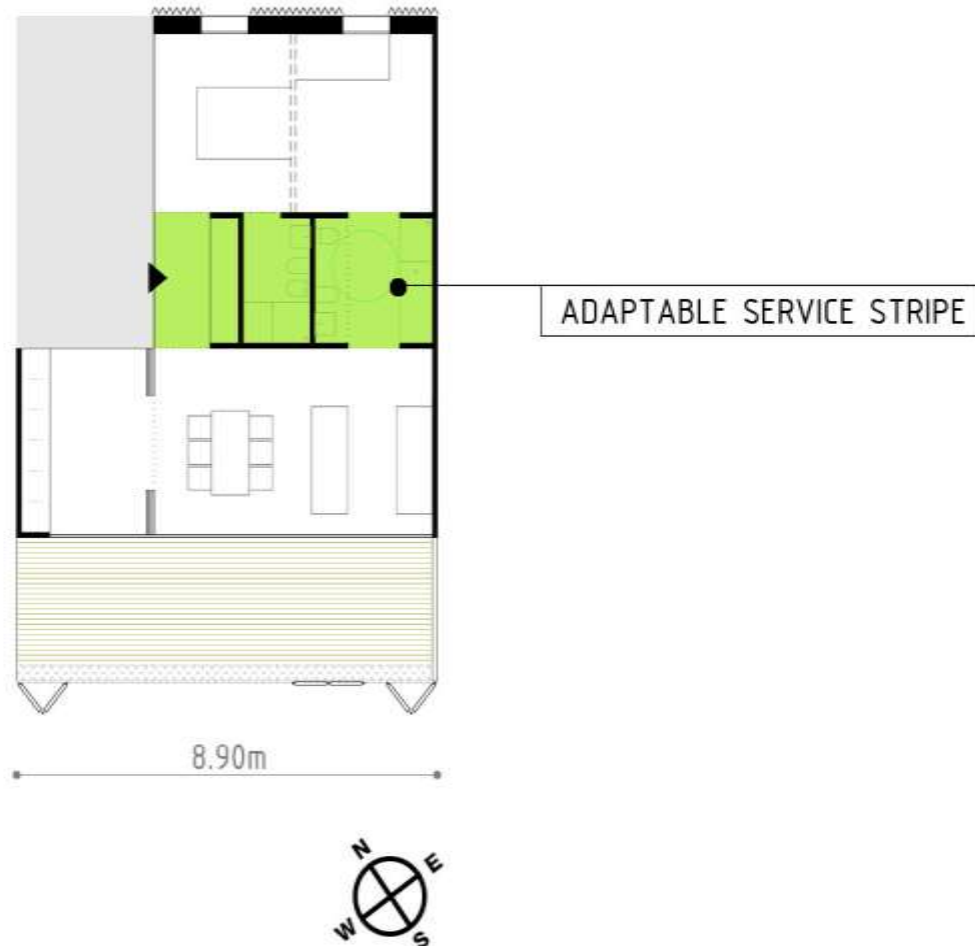


# PROGRAM

HOUSING

- STRATEGIC LAYOUT

COLLECTIVE SPACES

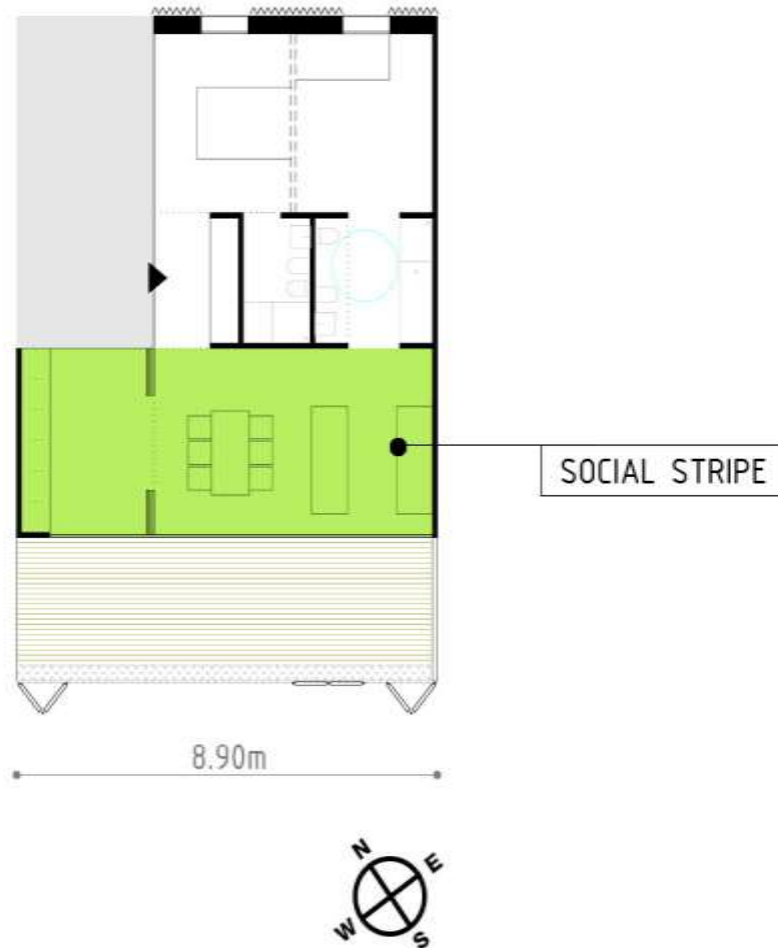


# PROGRAM

HOUSING

- STRATEGIC LAYOUT

COLLECTIVE SPACES

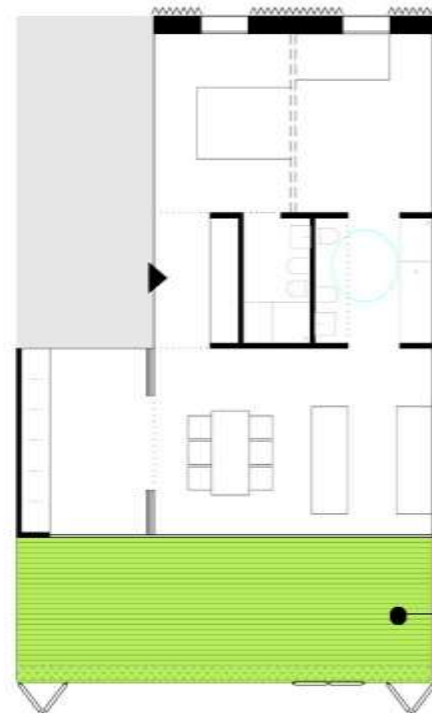


# PROGRAMME

HOUSING

- STRATEGIC LAYOUT

COLLECTIVE SPACES



NEGOTIATION EXTERIOR/ INTERIOR STRIPE

8.90m



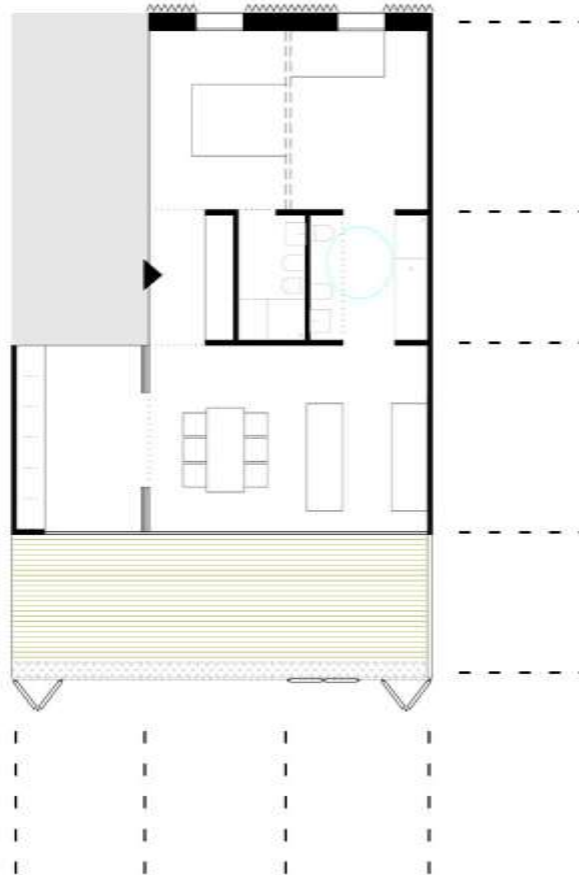
# PROGRAM

## HOUSING

- STRATEGIC LAYOUT

- CONVENTIONAL STRUCTURE

## COLLECTIVE SPACES



# PROGRAM

## HOUSING

- STRATEGIC LAYOUT
- CONVENTIONAL STRUCTURE
- DWELLINGS DIVERSITY

## COLLECTIVE SPACES



# PROGRAM

## HOUSING

- STRATEGIC LAYOUT
- CONVENTIONAL STRUCTURE
- DWELLINGS DIVERSITY

## COLLECTIVE SPACES



# PROGRAMME

## HOUSING

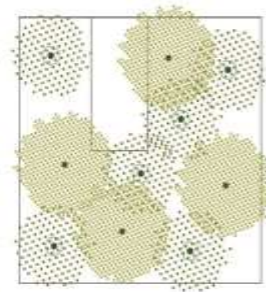
- STRATEGIC LAYOUT
- CONVENTIONAL STRUCTURE
- DWELLINGS DIVERSITY

## COLLECTIVE SPACES

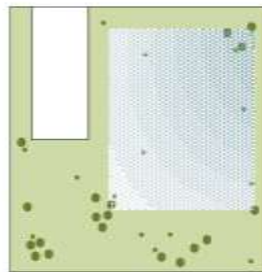
- GREENHOUSES



SENSORIAL GREEN HOUSE



PLANTS BABYSITING GREEN HOUSE



SWIMMING POOL GREEN HOUSE



MEETING POINT GREEN HOUSE



PEDAGOGIC GREEN HOUSE

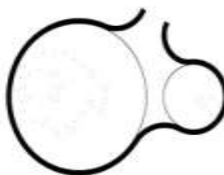
# PROGRAMME

## HOUSING

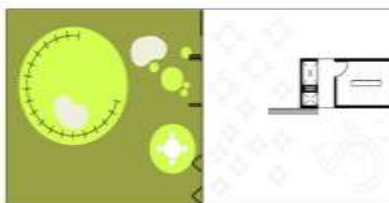
- STRATEGIC LAYOUT
- CONVENTIONAL STRUCTURE
- DWELLINGS DIVERSITY

## COLLECTIVE SPACES

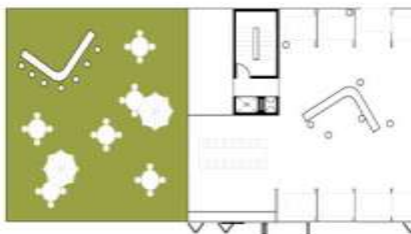
- GREENHOUSES
- EXTRA PROGRAMME



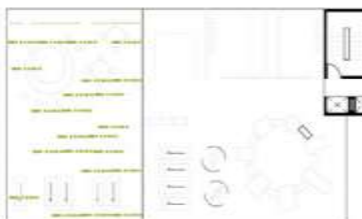
ECUMENIC AND SPIRITUAL SPACE



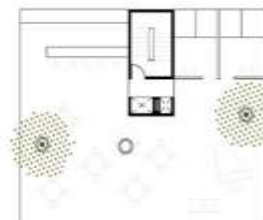
SHARE CHILDREN AND OLDER DAYCARE CENTER . CHILD



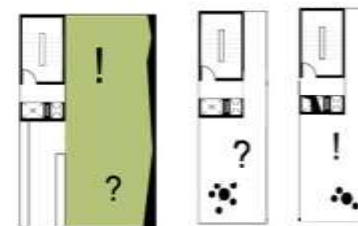
TEMPORARY ACCOMMODATION



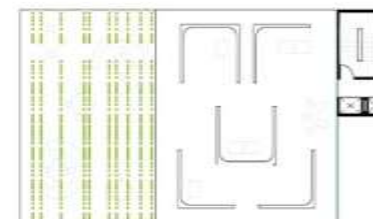
GYMNASIUM



CAFÉ CONCERT

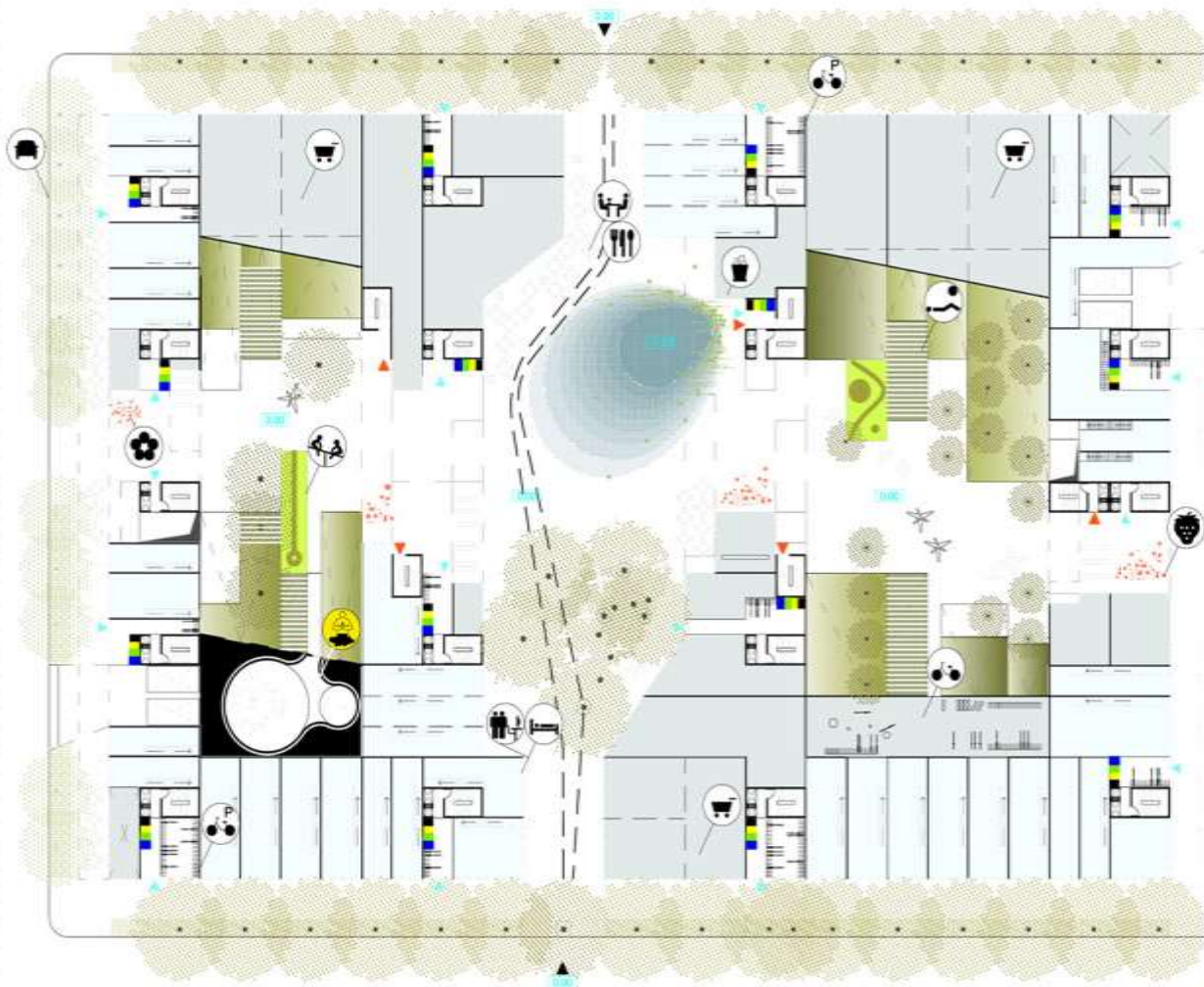


PEDAGOGIC . STIMULATE CEREBRAL SPACE



EXHIBITION SPACE

# PROGRAM



## ENERGY

ECO URBAN FURNITURE

WIND TURBINE

## MOBILITY

CAR SHARING

BIKE PARKING

BIKE WORKSHOP

## COMERCIAL

COMERCIAL SPACE . differents scales . double high

TRADITIONAL COMERCIAL SPACE

LOCAL VEGETABLE SHOP . produce in situ

LOCAL FLOWERS SHOP . produce in situ

RESTAURANT / CAFETERIA

LIVE / WORK

## SPECIAL PROGRAM

ECUMENIC AND SPIRITUAL SPACE

## OUTSIDE PLACES

SOLARIUM

CHILDREN PLAYGROUND

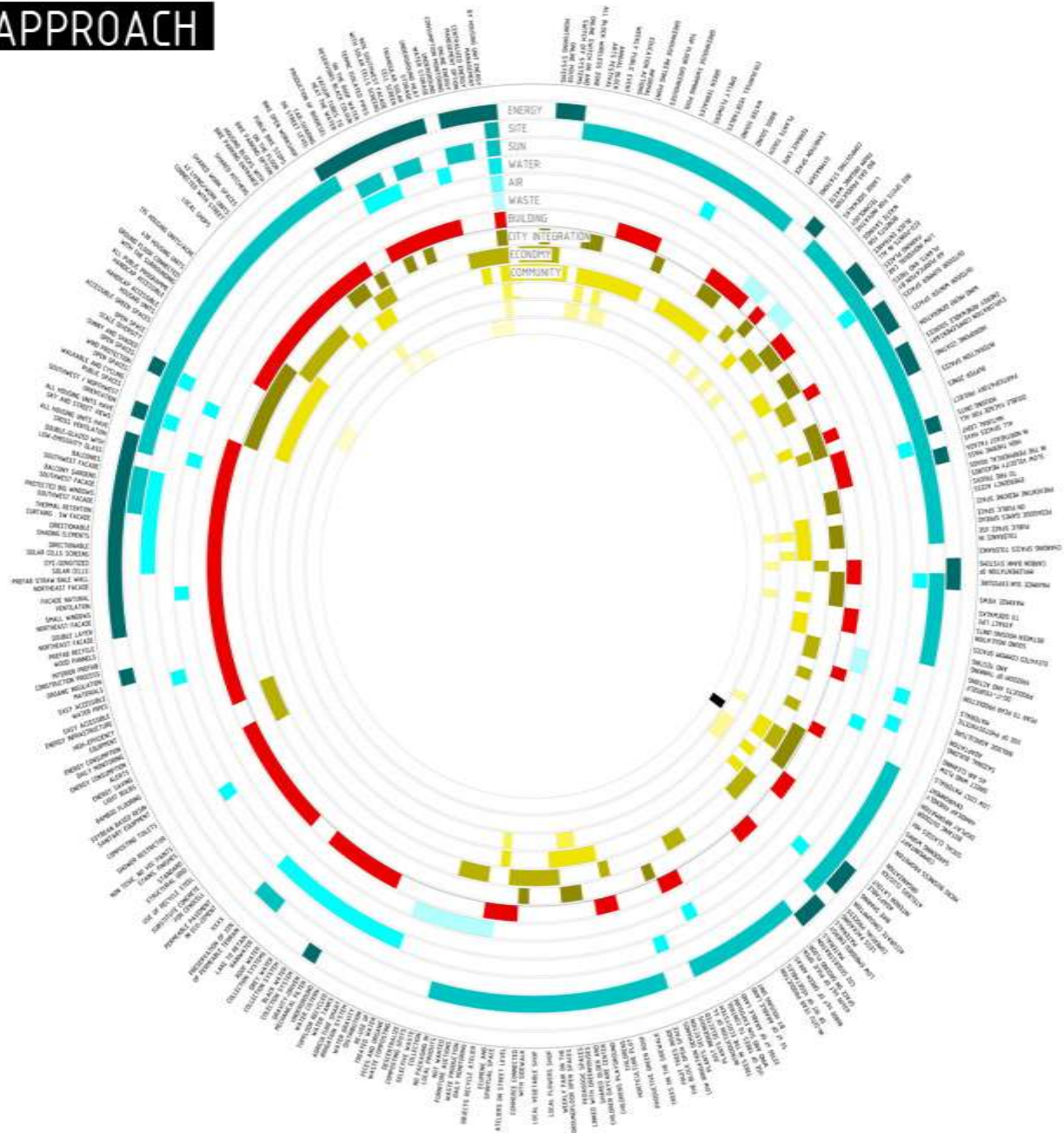
TERRACE

BUILDING ENTRANCE

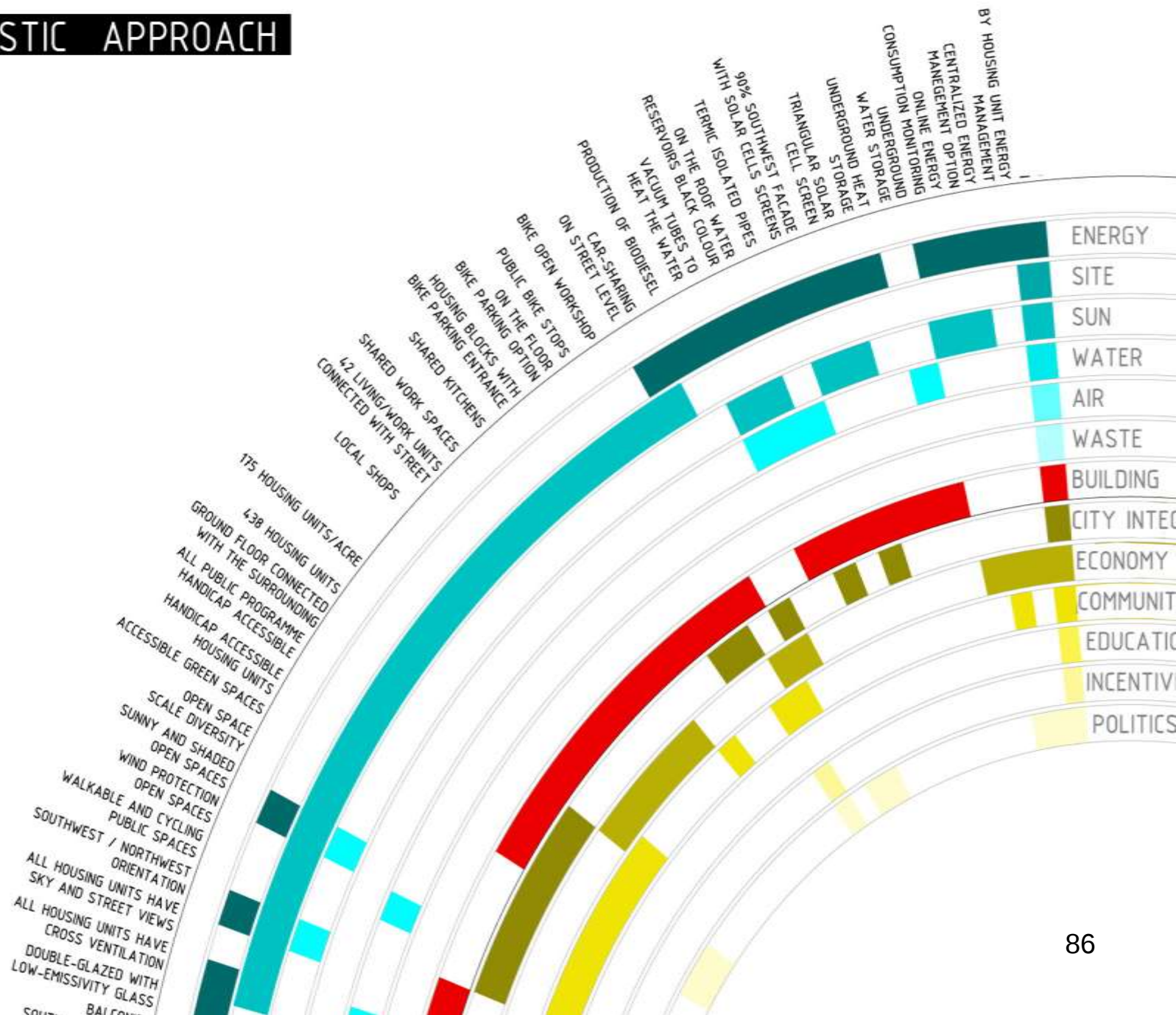
PARKING STAIRCASES

BIKE PARKING AND COLLECTIVE DEPOSITE GARBAGE

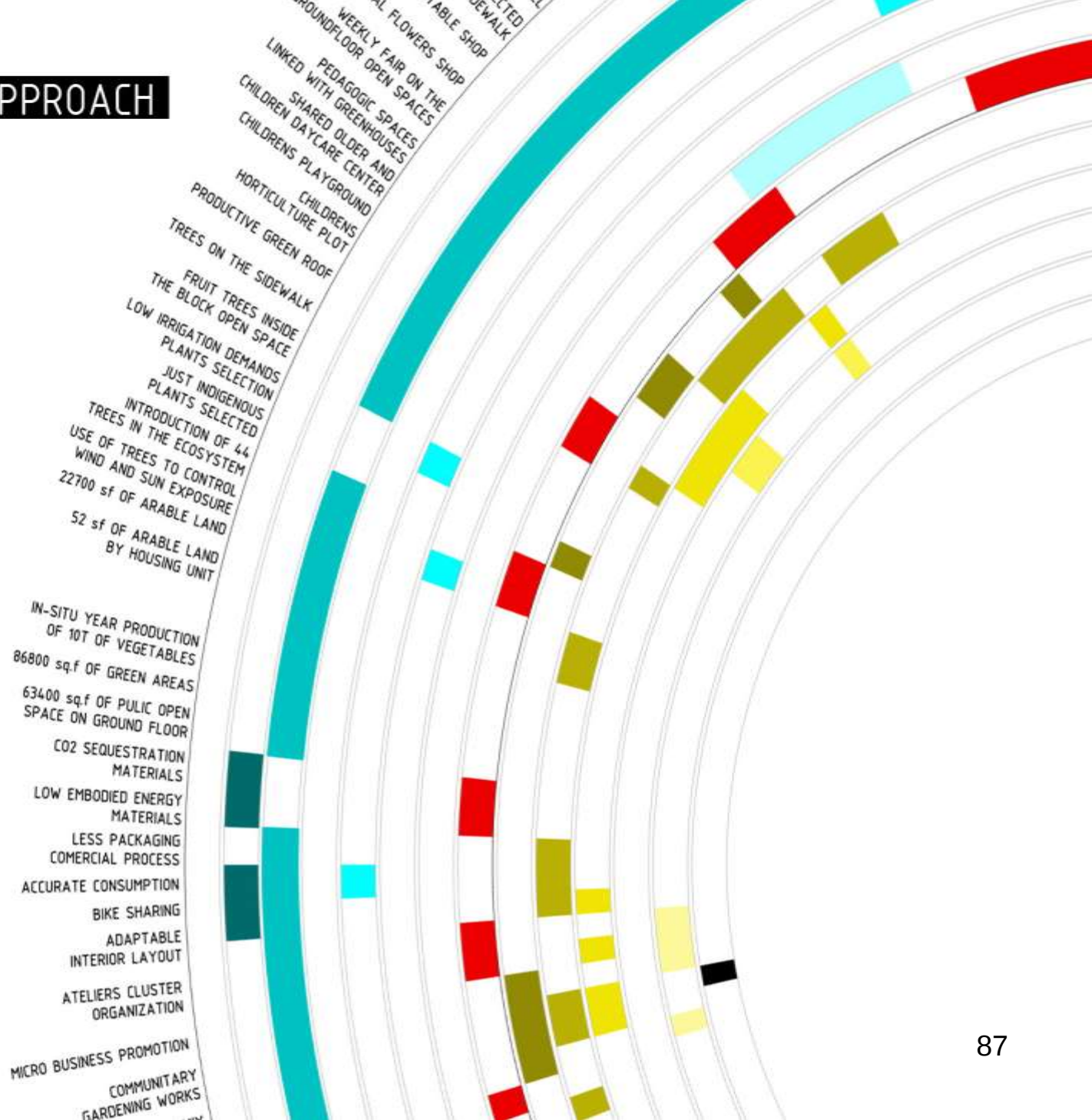
# HOLISTIC APPROACH



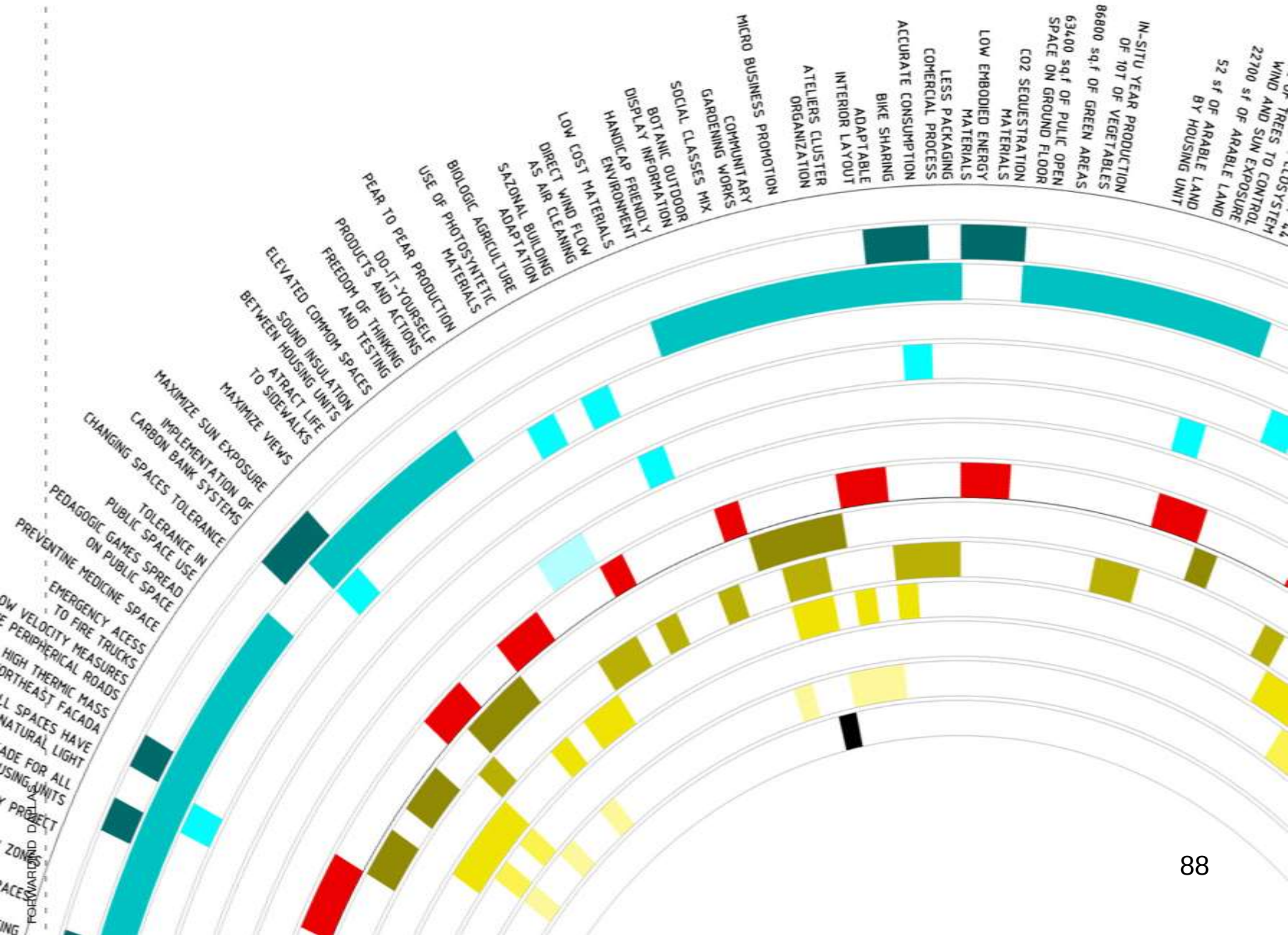
# HOLISTIC APPROACH



# HOLISTIC APPROACH



# HOLISTIC APPROACH





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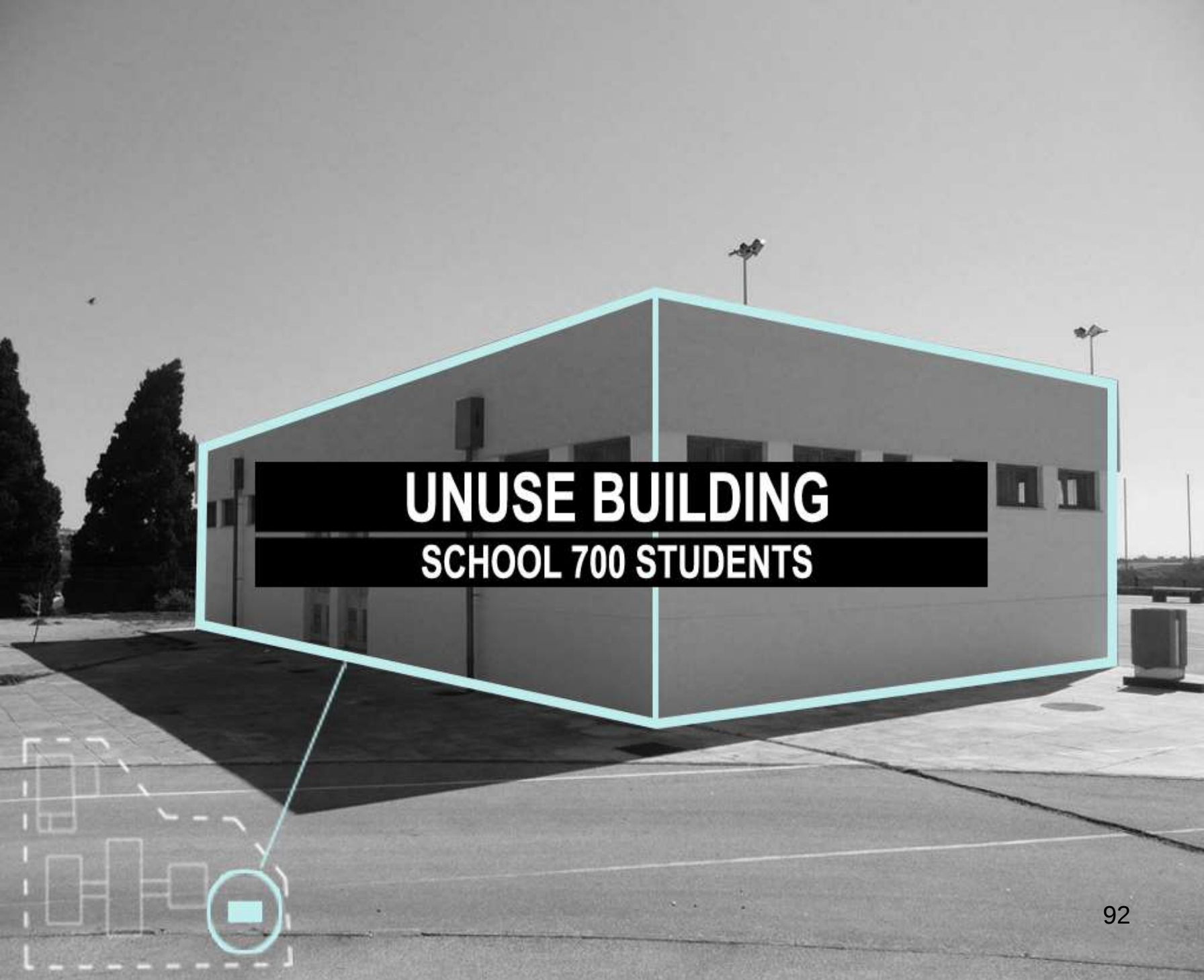
**Give Design**

**Get Design**

A photograph of a man in a dark blue polo shirt with a white bandage on his forehead, looking to the right. The background shows a busy street in a low-income urban area with a tall, multi-story yellow building, a silver car, and several people. A black text box with white text is overlaid on the image.

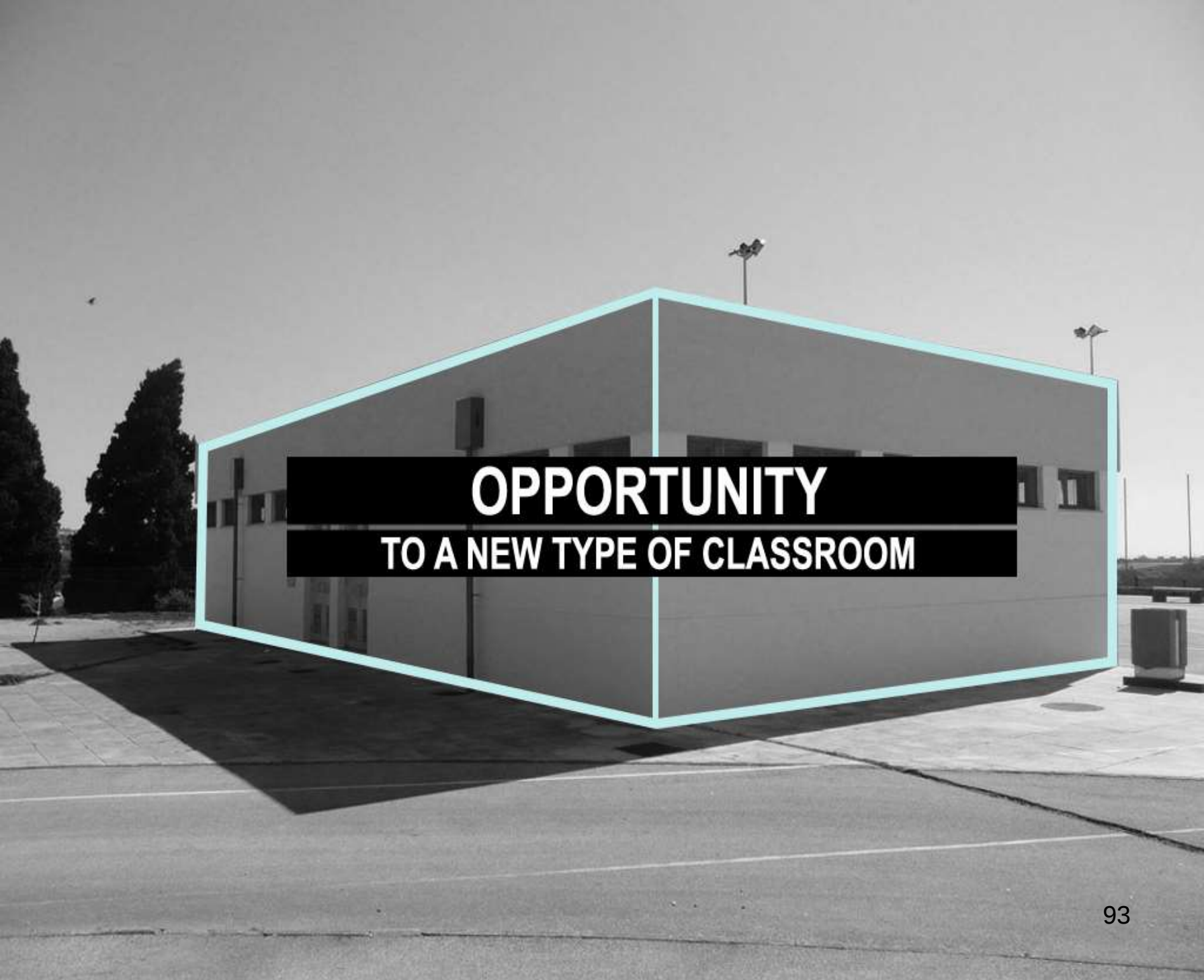
# QUINTA DA FONTE

## LOW INCOME QUARTIER 6000 INHABITANTS

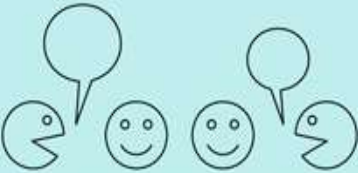


# **UNUSE BUILDING**

## **SCHOOL 700 STUDENTS**



# **OPPORTUNITY TO A NEW TYPE OF CLASSROOM**



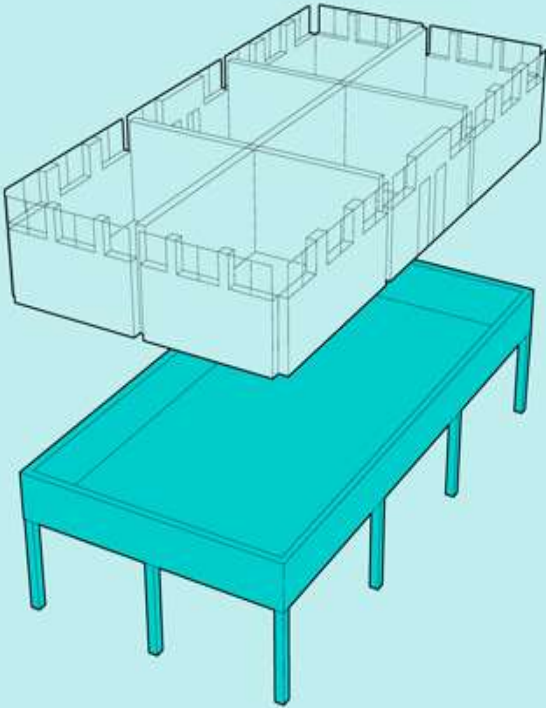
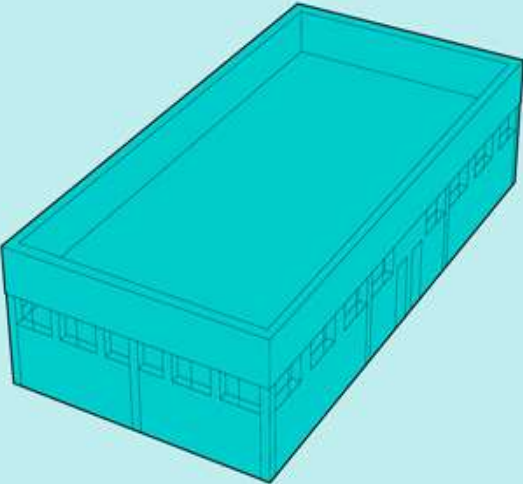
BRAINSTORMING BETWEEN THE PROJECT TEAM AND THE SCHOOL COMMUNITY

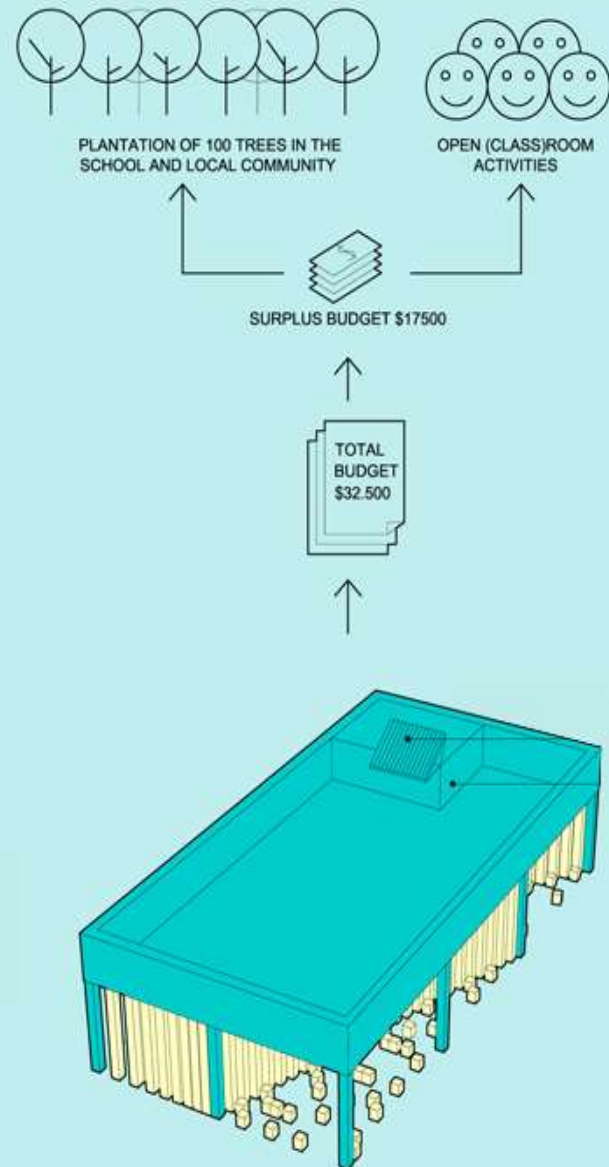
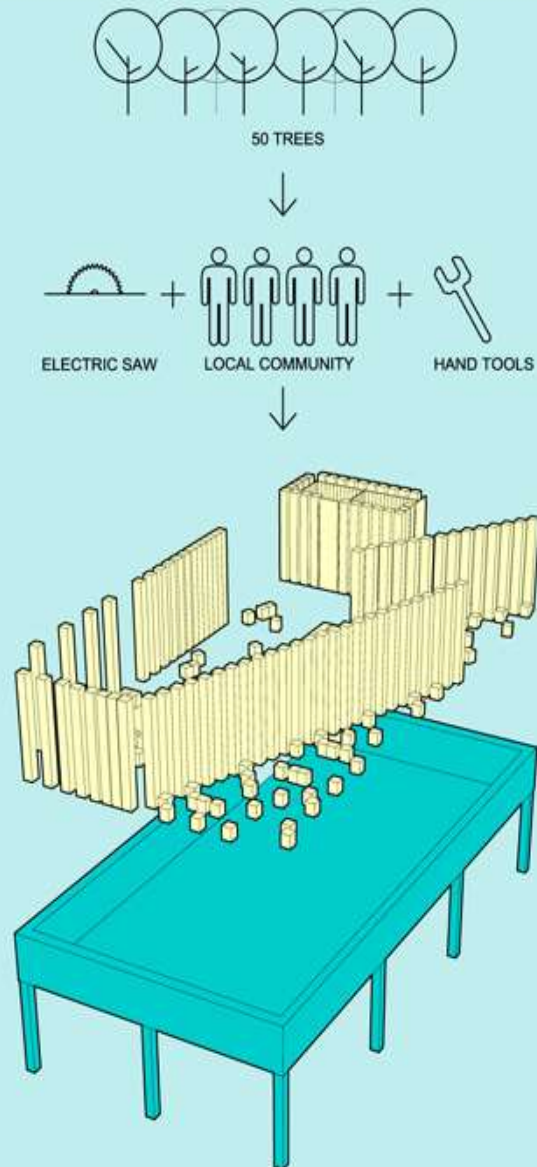


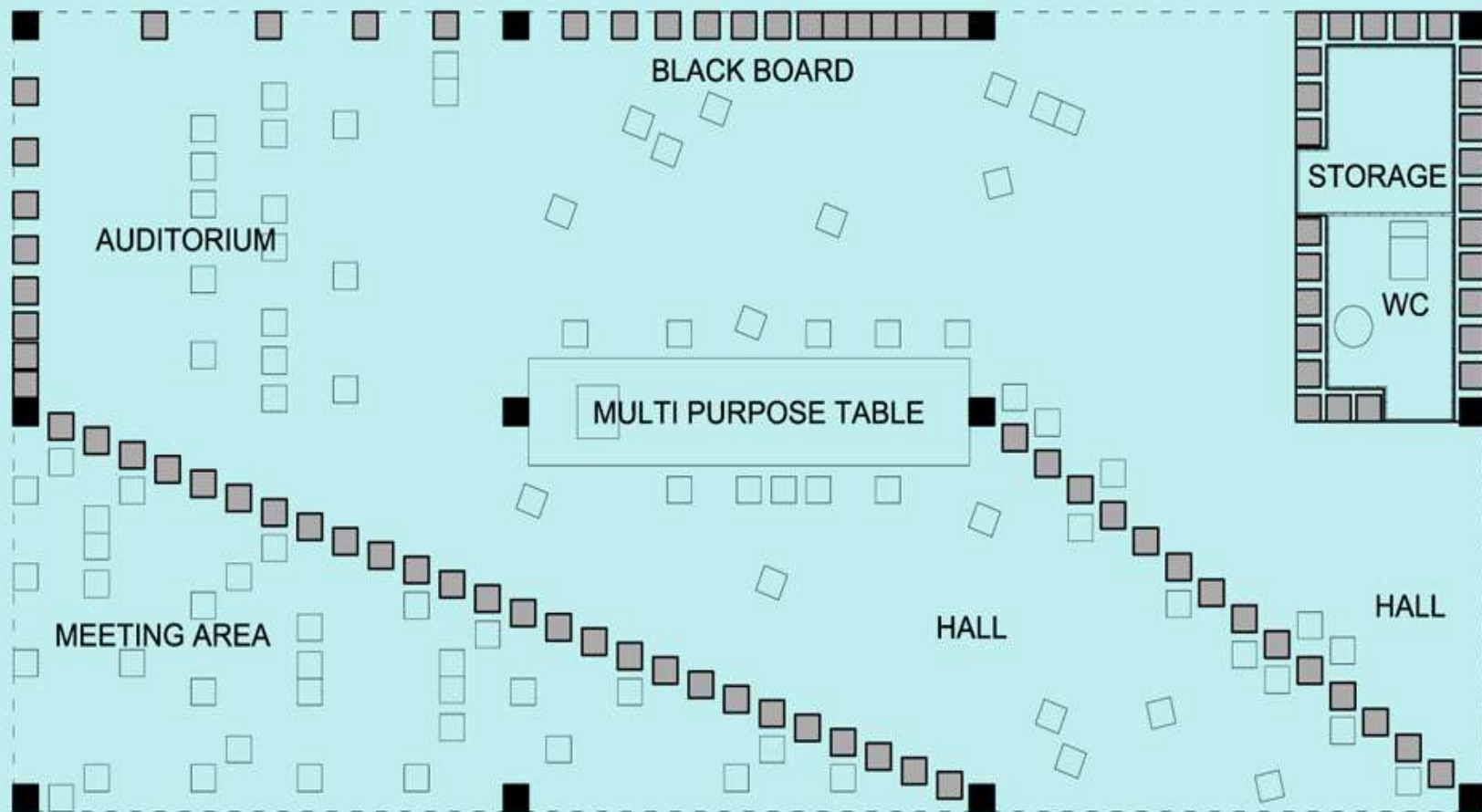
PROJECT BRIEF

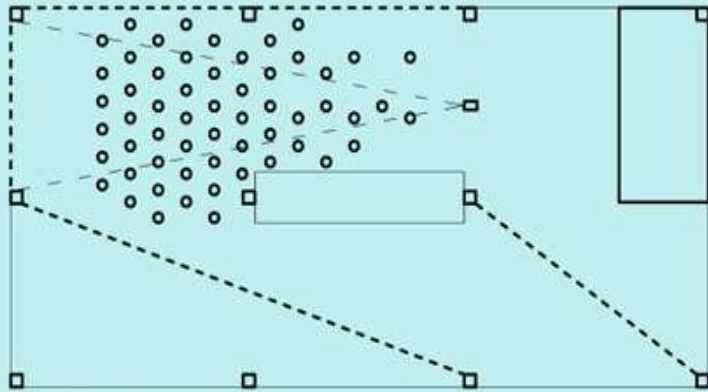


EXISTENT BUILDING 18 x 9 x 4.5 METERS

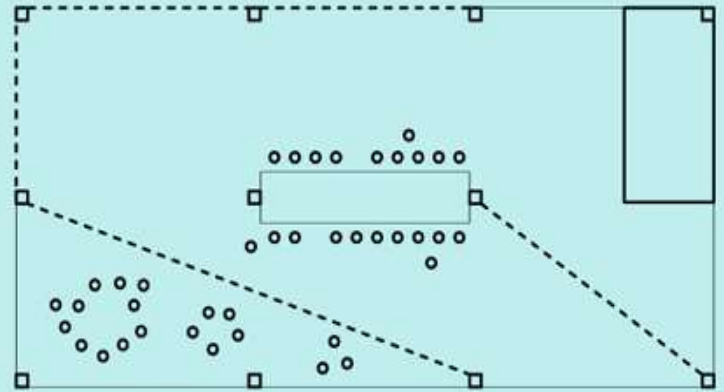




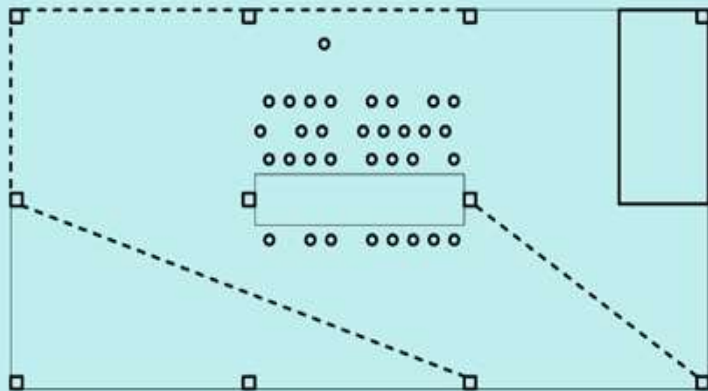




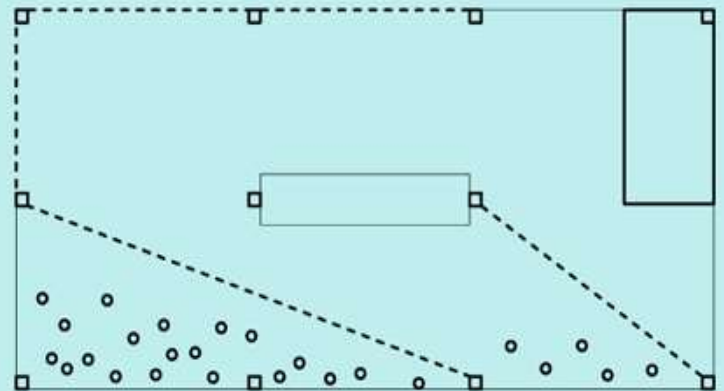
SCREENINGS



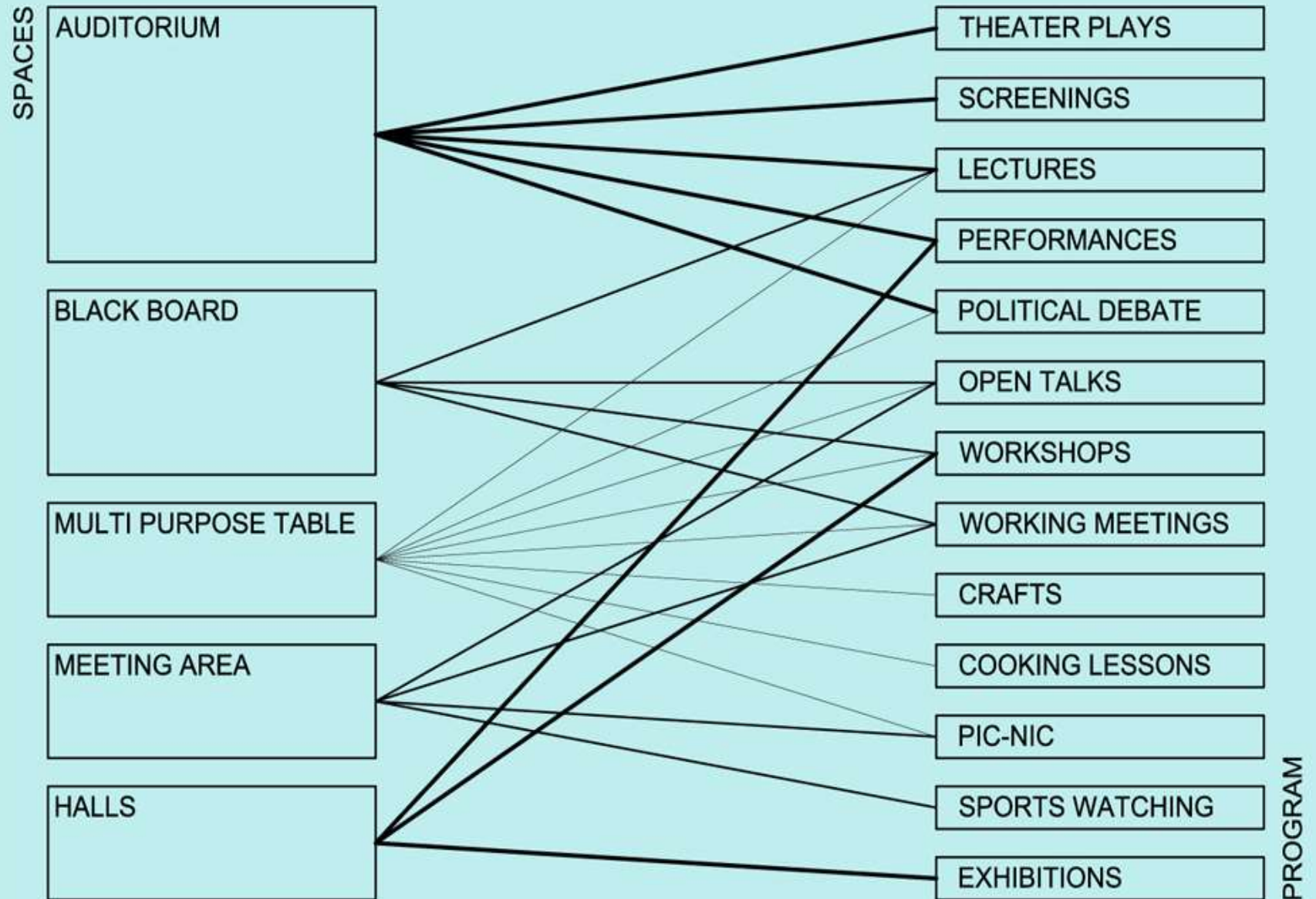
MEETINGS



BLACK BOARD LECTURING



SPORTS WATCHING











**SOAP CATHARSIS WALL 2009**  
INSTALAÇÃO URBANA  
SKYWAY'09 - TORUŃ, POLÓIA



CIASNA STREET . TORUN . POLÓNIA



115. Protect me, I am worshipping false idols.  
116. Give me the strength to resist

117. I no longer believe.  
118. My mom's an alcoholic and I let her drive with my younger siblings.

119. I hurt everyone who loves me.  
120. I lie, I lie all the time

121. I communicate just to get what I want  
122. I've been doing crazy stuff just to have something to confess at the end of the day.

123. I love being hit on by strangers.  
124. I'm male, but in the morning I put woman's deodorant between my legs before I go to work.

125. I am male and in the last five years I've been passing as a girl on the internet.  
126. I have felt so guilty lately, and I just don't know what to do.

127. I love to wear used women's clothing it feels like their hands are all over me.  
128. I am in love with myself.

129. I can't share happiness.  
130. Porn is what makes me turn the computer on.

131. I feel that my spiritual side is just too egocentric.  
132. I don't feel His presence anymore.

133. I think about **bashing her head in**  
134. **There are the voices of all my sins**

135. Everyday day when I wake up I just take my medication and spend the rest of the day waiting for it to wear off.

136. Chemicals rule my desires.  
137. When I pray I feel like a liar.

138. I never reach the Other  
139. I never love

151. Can I am  
maturity?  
152. I have compulsively  
skin. It's like I'm a recovering  
153. I am so sick of people asking about  
I'm sick of hiding them with band-aids and  
154. I'm jealous of my co-worker. Even though I  
I'm sick of that bitch.  
155. Despite loving my children I regret having them because  
jealous of them to be as it once was.  
156. I want other people praying for me.  
157. It would be really nice not to be jealous of the porn stars my  
boyfriend sees on the internet.

158. **The women I meet don't satisfy me.**  
159. I forced her into enjoying it  
160. Sometimes I just want to punch my fist into my chest and  
rip out my own heart, so it will finally stop hurting me.

161. I wish I could tell you how I feel. I wish it wasn't the wrong  
time, the wrong place, the wrong everything.  
162. I cry, but my tears change nothing.  
163. If I see a security camera, regardless of where it is, I dance  
in front of it because someone somewhere is either watching it  
live or will be playing it back later.

164. I am Gay. There I said it. I have been in the closet for over  
18 years. Do I have gay pride? I don't know, but I am happy with  
who I am.  
165. Ok, I download movies off the internet  
166. I want to get laid!

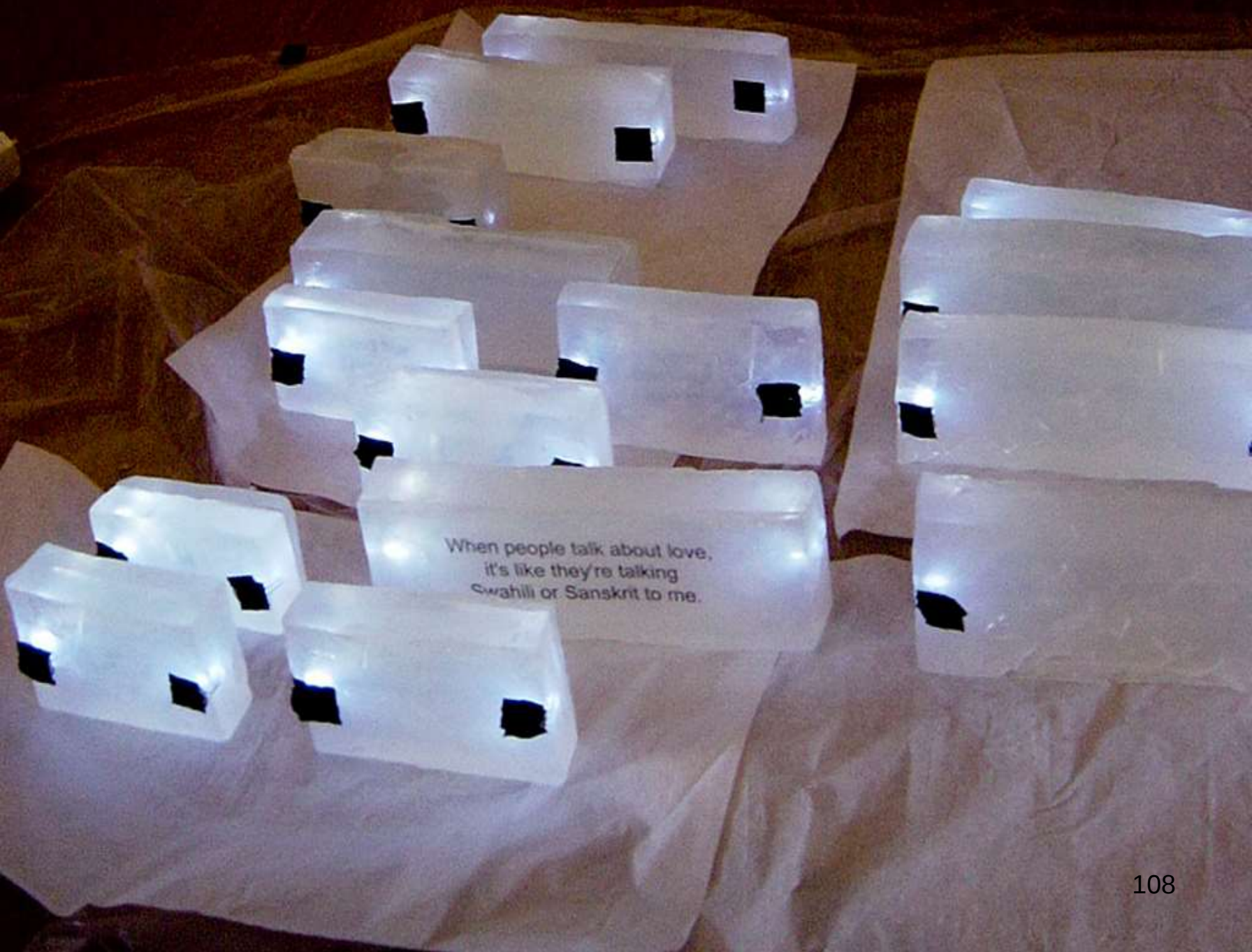
167. I feel more sad about Michael Jackson dying than I did  
about my grandfather's death.  
168. I pay for sex.  
169. I want to quit my job.

170. I have AIDS.  
171. I don't love you anymore.  
172. I doubt myself.  
173. I sold my daughter to buy drugs.

174. I saw it and I didn't do anything.  
175. I am sterile.  
176. I don't want to have kids.  
177. I preferred to watch the game  
I hate fat people  
my bills  
happy





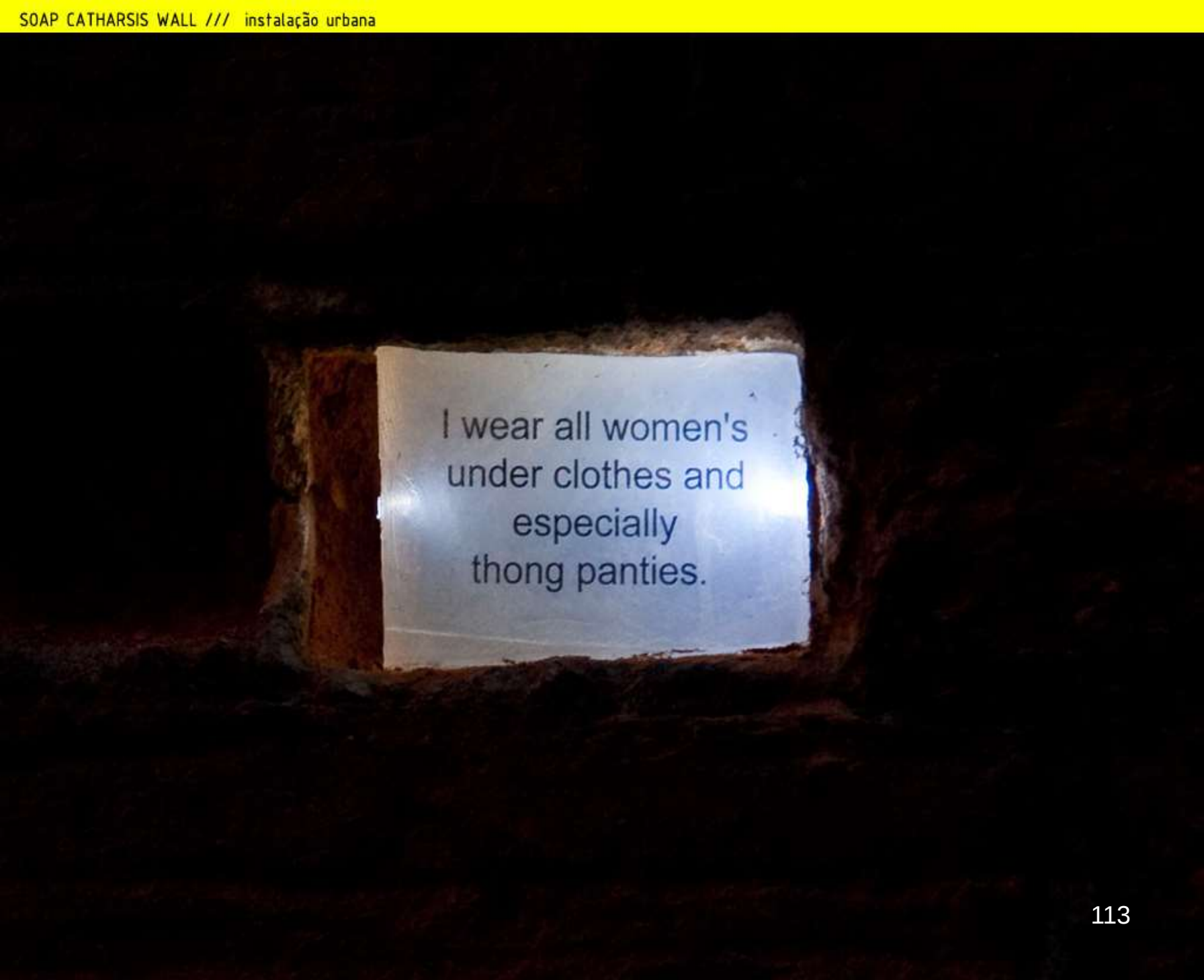












I wear all women's  
under clothes and  
especially  
thong panties.