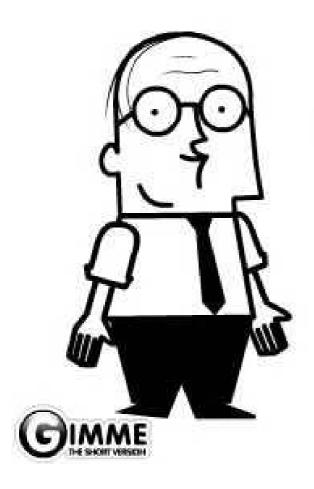
## exesios bdd

### SUSTAINABLE SUSTAINABILITY

PLANNED OR REACTIVE
GLOBAL & CLOSER TO HOME EXAMPLES FOR BOTH LIVING & TOURISM



### SUSTAINABLE SUSTAINABILITY WHAT IS IT?



#### Sustainability





#### FRAMEWORK OF POLICY INTENTIONS...

is basically a system of planning, which involves;

- Research
- Recommendations
- Implementation
- Outcomes... measurements...



## CONCENTRATING ON THREE PILLARS OF SUSTAINABILITY...



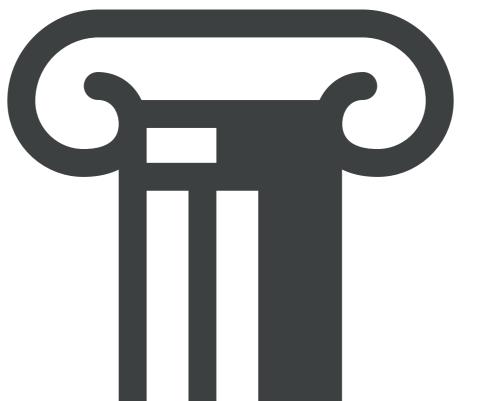
# **ECONOMIC**



# SOCIAL



## ENVIRONMENTAL





#### 3 PILLARS OF SUSTAINABILITY

These were decided by global leaders at the UN Conference on Sustainable Development (Rio+20) that "well-designed and well-managed tourism" can contribute to the three dimensions of sustainable development, to job creation and to trade.



### **EXAMPLES**



#### **MARCO STEINBERG**

Marco Stienberg lecture on Helsinki at the London DBA talk in 2012.

lo 2 no - competition for sustainable living, organised by SITRA, Helsinki.



## SITRA, HELSINKI



"The Finnish Innovation Fund Sitra is a future-oriented organisation that promotes Finland's competitiveness and the well-being of the Finnish people. We anticipate societal change, try out new operating models and accelerate business activities aimed at creating sustainable well-being."

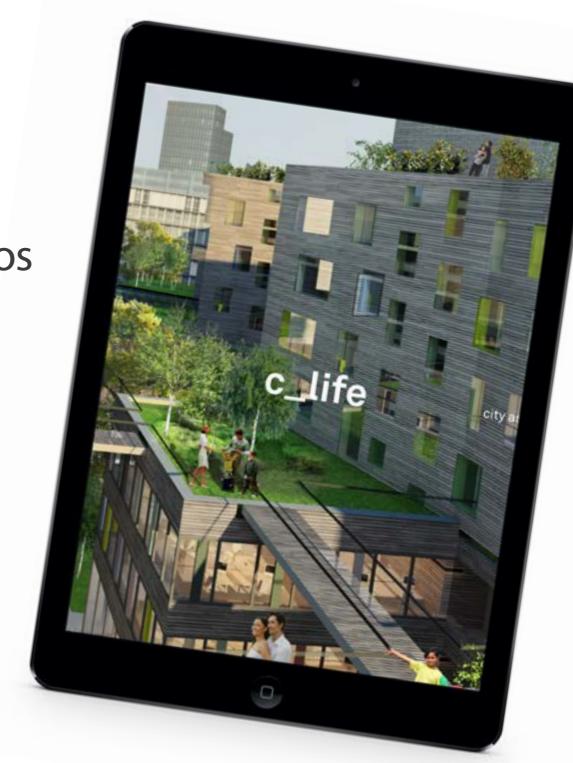


## PLANNED POLICY C\_LIFE

Arup consulting Studios

**WINNING ENTRY** 

City as living factory of ecology for the Jätkäsaari district of Helsinki



## THIS IS ESSENTIALLY A FRAMEWORK



### BUILDING/ ARCHITECTURE



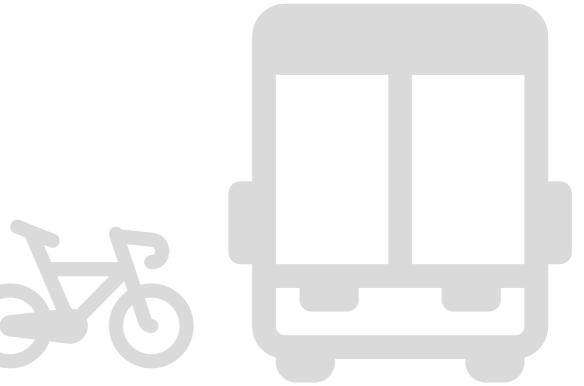


### FINANCE





## TRANSPORT POLICY



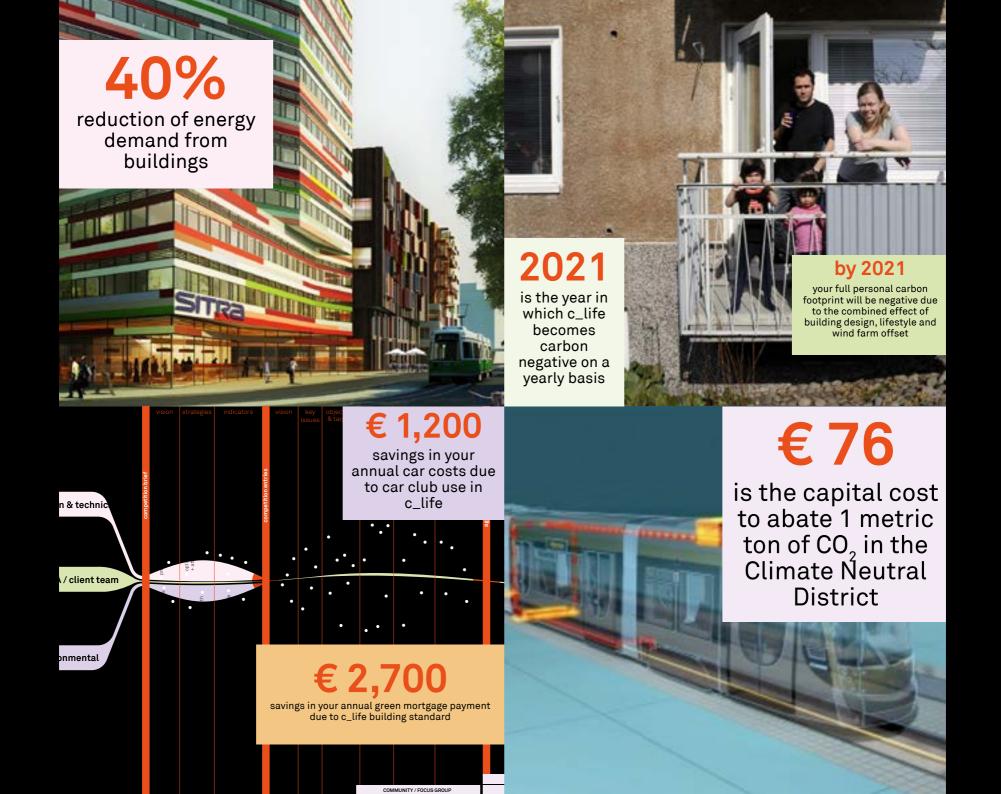


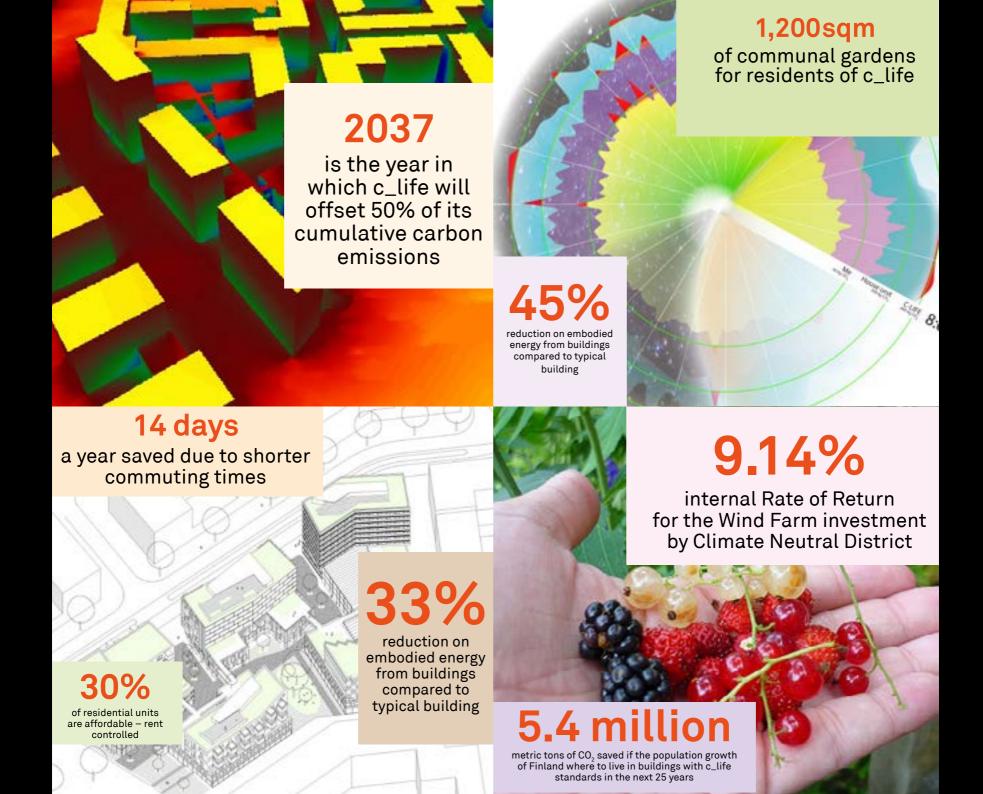
### **EDUCATION**











## THE 7 KEY ELEMENTS OF THE VISION ARE

### O 1 C\_LIFE: CITY AS LIVING FACTORY OF ECOLOGY

## THE MIX OF C\_LIFE: LIVING + LEISURE + INNOVATION & ENTREPRENEURSHIP

## EVOLVING THE CARBON STRATEGY: FROM LOW2NO TO CARBON SINK

## DESIGN, DEMONSTRATE, DELIGHT AND DIFFUSE

## DEFINING THE TOOLS FOR CHANGE: ACCESSIBLE AND TRANSPARENT DECISION MAKING

## ENABLING BEHAVIOURAL CHANGE: BUILT ON PEOPLE

## THE ECONOMICS OF C\_LIFE

## PRINCIPLES FOR SUSTAINABLE CITY MAKING IN C\_LIFE



#### MAKE IT ATTRACTIVE

Good design makes objects, ideas, strategies, lifestyles, buildings and cities attractive and appealing.



#### MONITOR & REPORT

To achieve long term sustainability of projects in the built environment is necessary to measure performance of key issues – such as energy consumption, carbon emissions, water, transport – and assess how they are faring against agreed targets originally established in the design and planning stage.

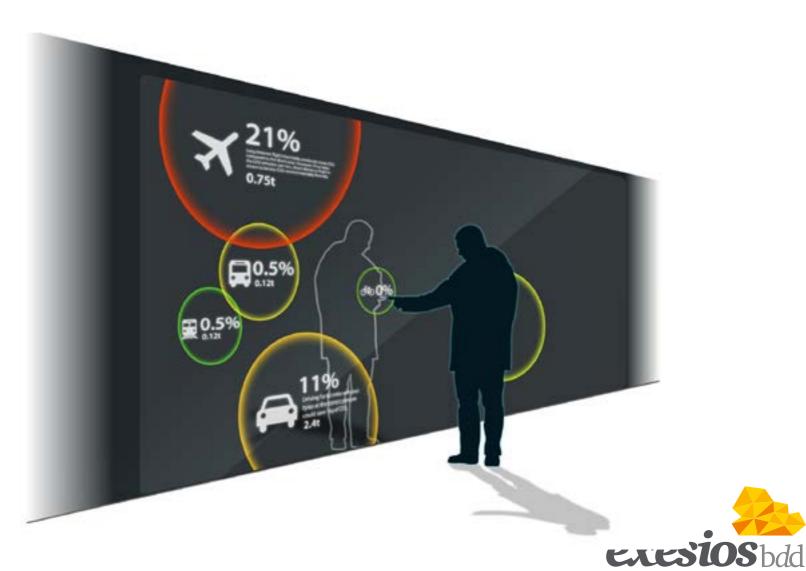


#### **CARBON CLOCK**

A digital display will be placed in the public realm within c\_life showing real time consumption of energy, the fuel mix composition of the energy supplied to c\_life and its associated carbon emissions.



#### **CARBON CLOCK**





Back		co&Price Comparison   Raspberries p 5 sources in order of price or footprint size.		
	Origin	Price / kg	Production	Est. footprint
	Espoo, Finland	€7.59		
0	Turku, Finland	€8.27		
•	Estonia	€9.05	•	
	New Zealand	€10.62		
7	Germany	€11.23		

# **BUILDING MATERIALS**

The embodied carbon in materials and structure from construction is reduced 45% from a typical building by using lightweight faced, punched windows, cement replacement timber in residences.



# ENERGY EFFICIENT OFFICE EQUIPMENT

Replacing office equipment with more energy efficient versions over time contributes to reducing building energy use.



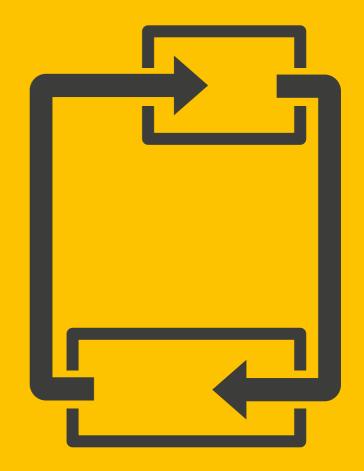
## NARROW BUILDING

The narrow floorplates enable natural ventilation, enhance daylight and are key for future flexibility and interchange ability of building uses.



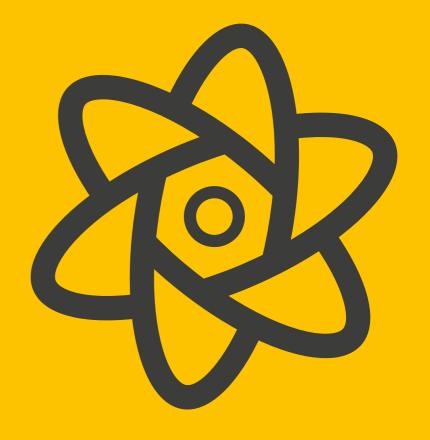
# FLEXIBILITY & INTERCHANGEABILITY

The routing strategy for services and use of common heating and cooling principles provide flexibility for future interchangability of uses, reducing the need for retrofitting in the future.



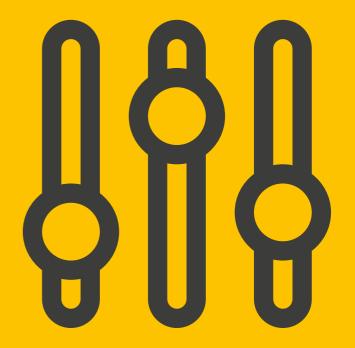
## **LIVING LABORATORY**

Demonstration and pilot testing of innovative technologies at SITRA helps spur a marketplace for promising technologies to reduce carbon emissions.



# SMART METERS AND CONTROLS

Real time display of energy use can influence behavioural dimensions of energy use, while smart controls can improve demand side management. Both approaches contribute to building energy use reduction.



## **FOOD GROWING**

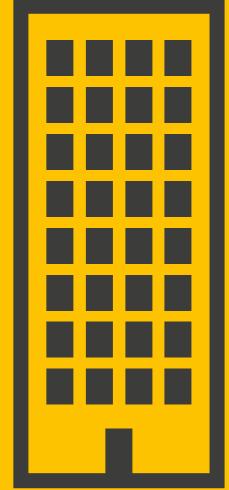
Pocket winter gardens for growing fruits and vegetables provide 10% of the typical vegetable intake and contribute to the reduction in emissions from food of 35% over baseline. Associated water demand is reduced 60% if fed by harvested rain water.



## LIVE/WORK LIFESTYLE

All residences in c\_life will be occupied by residents who also work on Jätkäsaari, thereby reducing transport emissions.











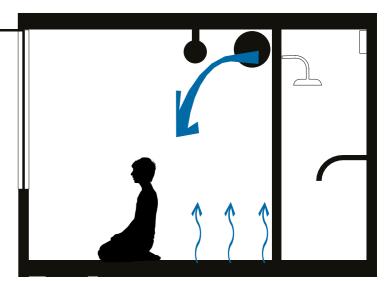
RESIDENTIAL





# RESIDENTIAL ENERGY USE REDUCTION

- 10% energy efficient lighting
- 6% high performance ventilation heat recovery
- 4% low energy fans
- 6% high performance building fabric high levels of insulation & good air-tightness
- 2% water efficient fittings result in low water demand







# OFFICE ENERGY USE REDUCTION

- 6% high performance ventilation heat recovery
- 10% energy efficient lighting
- 4% low energy fans
- 2% water efficient fittings result in low water demand

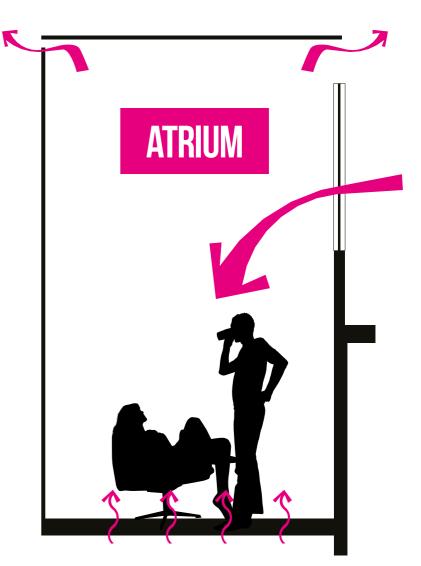






# ATRIUM ENERGY USE REDUCTION

- utilising excess heat from building
- heat regulated by vents
- highly efficient underfloor heating





**PLANNED POLICY** 

# PRODUCT SERVICE COMPANIES

Examples of service companies include car-share and equipment-swap clubs. They contribute to reducing goods and services carbon emissions.



**PLANNED POLICY** 

# IDEAS TO REDUCE CARBON

Strategies to raise awareness, influence behaviour and encourage more sustainable lifestyles can significantly reduce carbon emissions. Everyday lifestyle decisions can reduce emissions by 20%.



### **PLANNED POLICY**

## **CO-OPERATIVES**

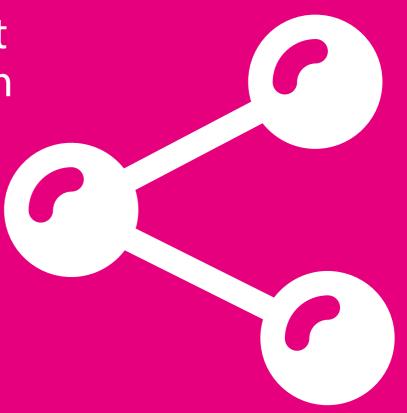
Shopping at co-ops providing locally produced food, goods and services, can contribute to reduction in food and drinks and goods and services emissions.



**PLANNED POLICY** 

# CLIMATE NEUTRAL DISTRICT

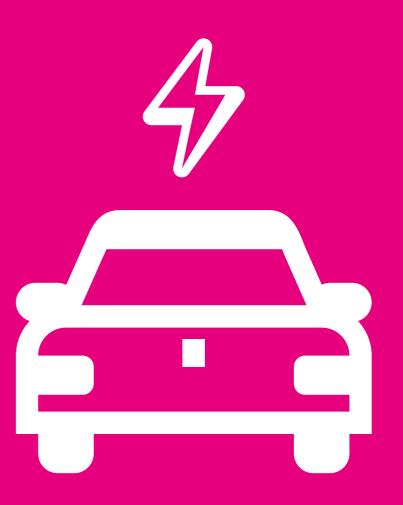
The Climate Neutral District is an innovative mechanism to finance and promote carbon neutrality.



**PLANNED POLICY** 

# LOW EMISSIONS TRANSPORT

The low emissions transport strategy and on-site electric vehicles contribute to reducing transport emissions by 31% over baseline.

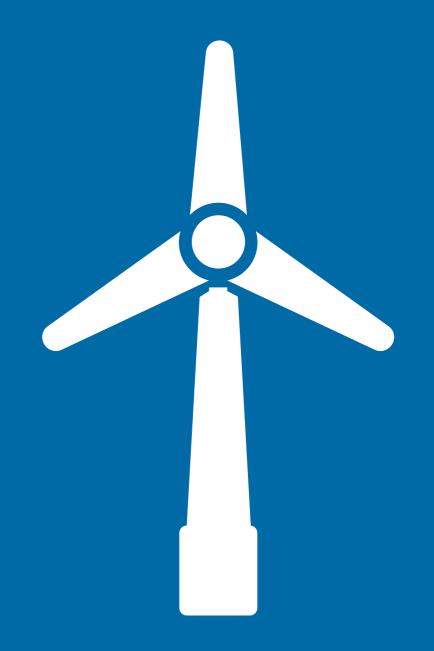


**OFFSITE** 

**PLANNED POLICY** 

## RENEWABLE ENERGY OFFSET

A revolving fund pooled across Jätkäsaari invests in renewable energy off-site to offset 100% of annual net carbon emissions.



## **OFFSITE**

**PLANNED POLICY** 

# ELECTRICITY GRID/ CHP ENERGY SUPPLY

The site uses the local electricity grid and Helsinki's existing CHP infrastructure.

35% reduction in grid/heat carbon intensity within 25 years.



**OFFSITE** 

# PLANNED POLICY WATER/WASTEWATER

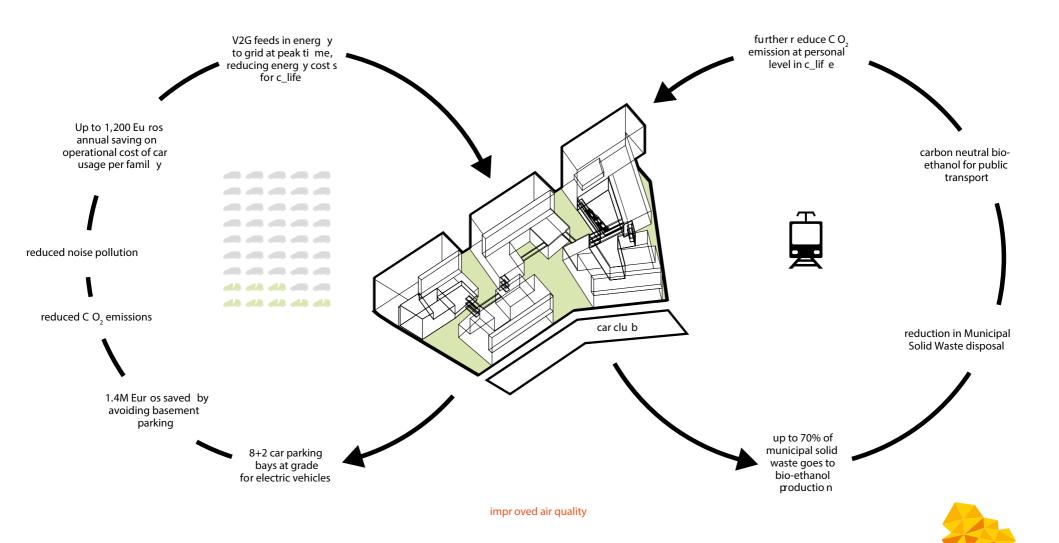
Rain water harvested will provide 60% of irrigation.







exestos bdd



# JÄTKÄSAARI DISTRICT OF HELSINKI



## JÄTKÄSAARI IN A NUTSHELL

Land area 100 HA DISUSED CONTAINER SITE

Parks 19,8 HA

Travel time to Helsinki centre 5-10 MINUTES

Total floor area

Residential buildings 600,000 M<sup>2</sup>

Business and services 300,000 M<sup>2</sup>

Residents 17,000

Jobs 6,000

Construction period 2009-2025



## **CHANGING IDEAS**

The whole idea that you can question traditional frameworks of governance and create alternatives is why I have included this example.





## THE URB ACT CITY LOGO PROJECT

http://urbact.eu/citylogo

Similar to the IBRAVE project in it's ambition but for cities.





## **LEAD PARTNER**

Utrecht - Netherlands Coimbra - Portugal Zaragoza - Spain Genoa - Italy

Alba Iulia - Romania

Warsaw - Poland

Vilnius - Lithuania

Aarhus - Denmark Oslo - Norway Dundee - UK





## **AARHUS...**

# AS PART OF THEIR BRANDING OF AARHUS 2015-2018 LOCAL ACTION PLAN

Aarhus good example

They have a totally different set of issues than our partner regions but their main points can be applied to our processes.

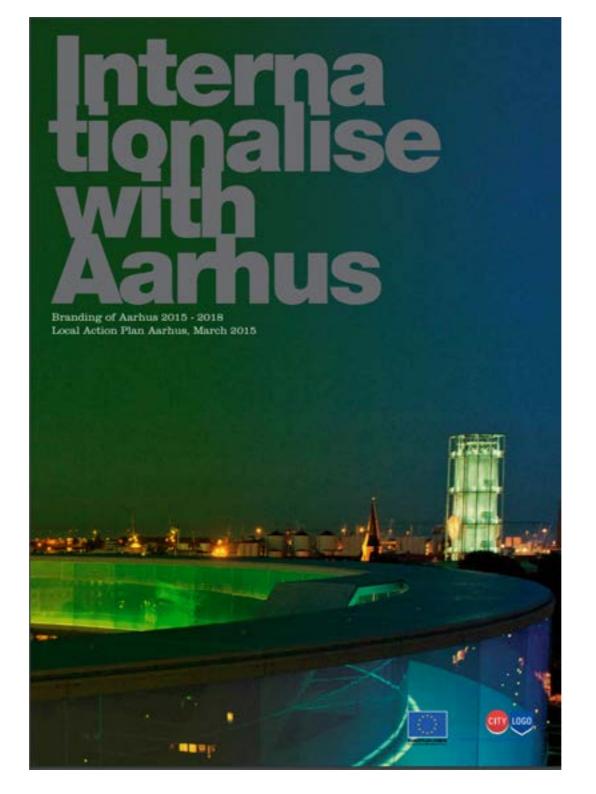
Essentially the sustainability frameworks explored.

Building this into the overall "story" has naturally

led to the overall brand image...

not the visual graphic version but the one implanted in people's 'hearts and minds".

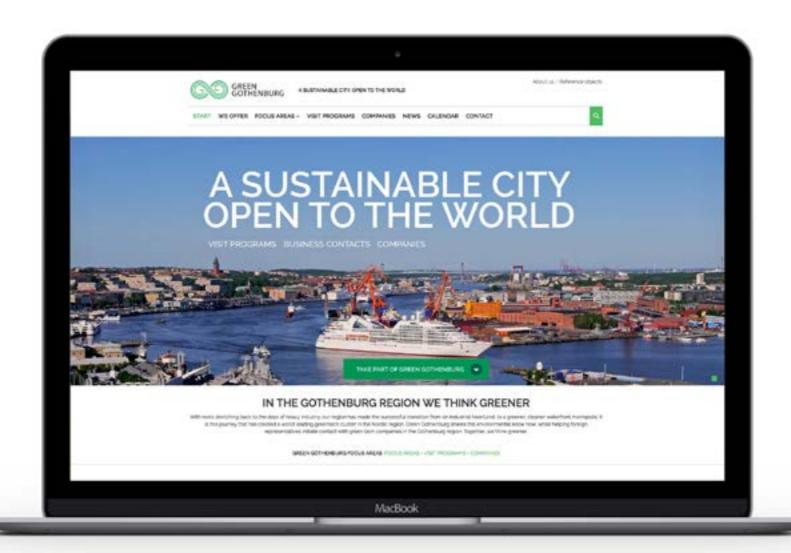






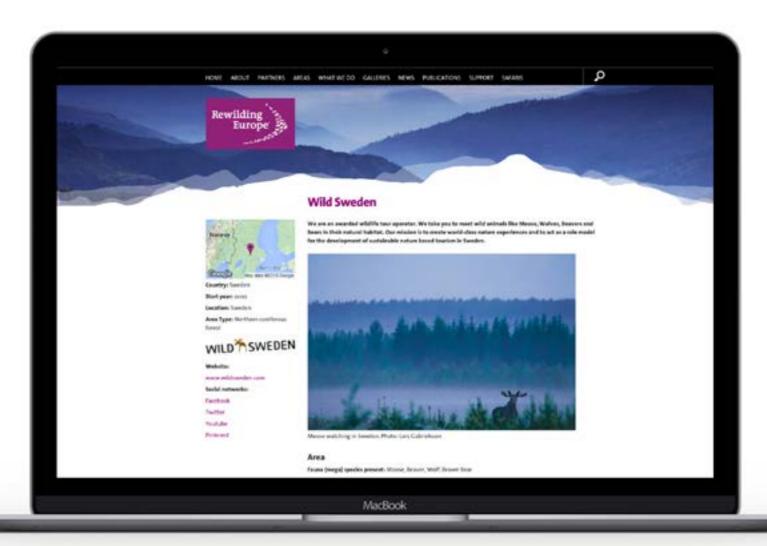


# PLANNED POLICY GOTHENBURG





## THE REWILDING OF REGIONS??



## THE REWILDING OF REGIONS??

Some whole areas are pinning their badge to the "Rewilding" concept of sustainable regions going back to nature and developing a complementary tourist sector as part of the framework or development system.



# RESPONSIVE SUSTAINABILITY



#### RESPONSIVE

## **COMMUNITY TOURISM**

- Year 2000 coffee crisis
- Closure of whole villages and communities becoming destitute.
- Funds from various organisations and travel companies helped create community tourism initiatives.



#### RESPONSIVE

## **COMMUNITY TOURISM**

- Tourists could 'live' the life of a coffee worker
- Self sufficient and sustainable
- Excellent educational project
- tourists benefit
- A brighter future for the younger generation of 'guides'
- Experiential brand development a natural way to improve the lives of all concerned.







A BRIGHTER FUTURE

### **RESPONSIVE**

# FINALLY THIS IS WHERE THE TALK FINISHES AND THE SUSTAINABLE DEVELOPMENT STARTS!!





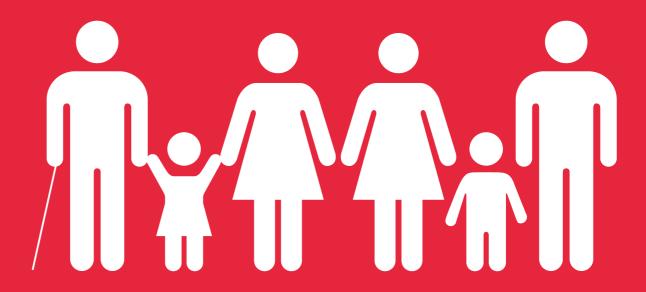
### THE GLOBAL GOALS For Sustainable Development



### THE 17 GOALS ARE...



### O 1 NO POVERTY



### O NO HUNGER



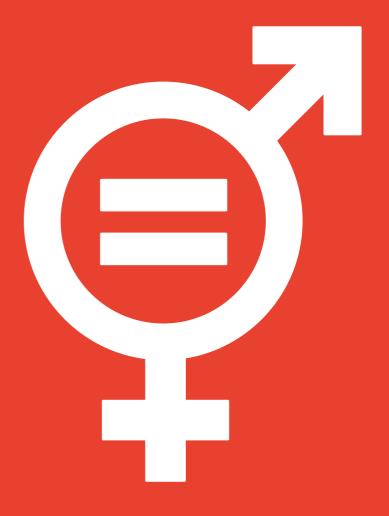
### OS GOOD HEALTH



### O4 QUALITY EDUCATION



## GENDER EQUALITY



### GCLEAN WATER SANITATION



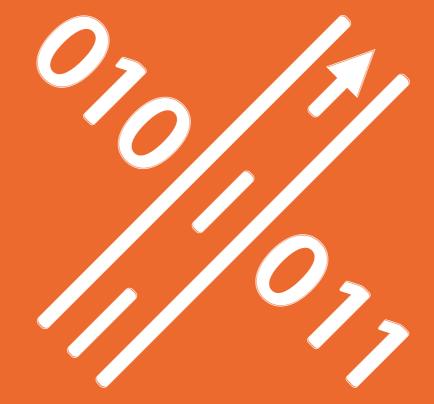
### O T RENEWABLE ENERGY



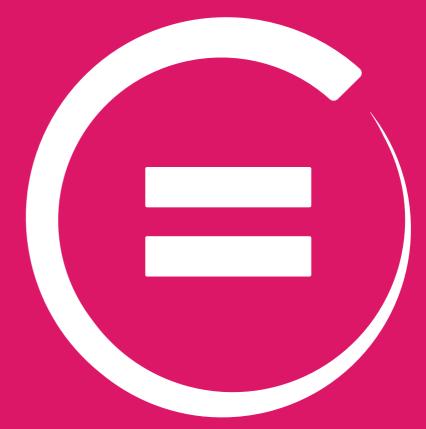
## OS GOOD JOBS & ECONOMIC GROWTH



## OG INNOVATION & INFRASTRUCTURE



## 10 REDUCED INEQUALITIES



### 1 1 SUSTAINABLE CITIES & COMMUNITIES



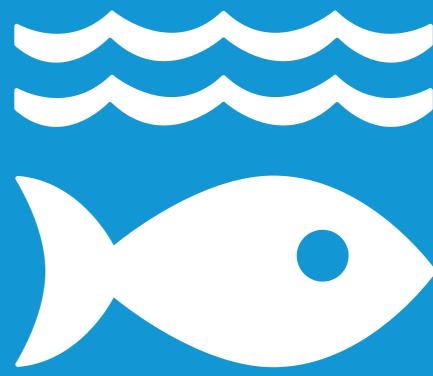
# 1 PRESPONSIBLE CONSUMPTION



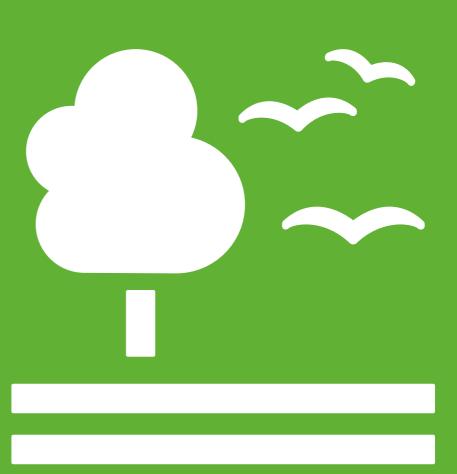
# 13 CLIMATE ACTION



## 1 4 LIFE BELOW WATER



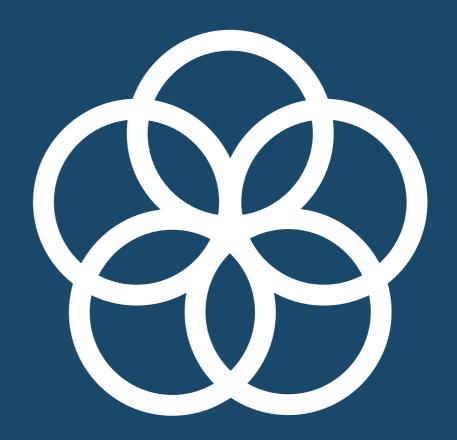
### TO LIFE ON LAND



## 1 G PEACE 8 JUSTICE



### 1 7 PARTNERSHIPS FOR THE GOALS



### **SUSTAINABILITY REPORTS**

There is actually a site for companies committed to making the world a better place.





### SUSTAINABILITY REPORTS

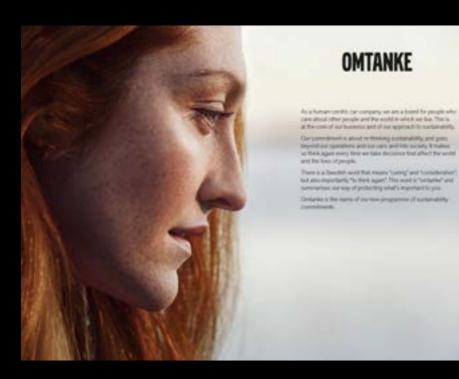
The first commercial company to use these goals in its sustainability report is here in Sweden...

and it is...











### PROTECTING WHAT'S IMPORTANT TO YOU







ROLL IN 300079

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- constitution of the same















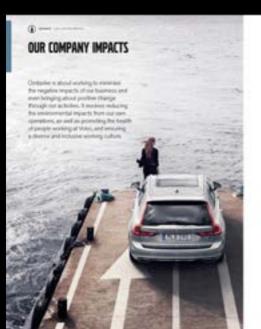














### RESOURCE EFFICIENT BUSINESS.

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### CLAWTE NEUTRAL OPERATIONS BY 2005













### SUSTAINABLE WORK LIFE.

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### NO NATALITIES OR SERROUS PLANTES AT VOLVO CARS.







### DIVERSE & INCLUSIVE CULTURE

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### to comment.

### 20% INTERNATIONALLY DIVERSE LEAGUES & 20% FEMALE LEAGUES BY 2000









### LIFE-CYCLE PERFORMANCE

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### 1 MILLION GLECTHIFED VEHICLES SOLD BY 2025









### READLIFE SAFETY.

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### OUR VISION IS THAT NO ONE SHOULD BE KILLED OR SERIOUSLY. PLUMED IN A NEW YOURS CAR BY 2020







### CUSTOMER EXPERIENCE

We specify the control of the party off is a first field growing relatively to produce the production of the control of the co

### CLEANZONE LEXCERSINE









### **OUR ROLE IN SOCIETY**

Ordanie is alread contributing bounds a better society and protecting people and our climate by creating partnerships for surfamilia disellipment and promoting. traffic safety in the car industry together with too plant international organisations. Egitor buildes ut in but work to encountage responsible humans practices freceghood





### PARTNER IN SUSTAINABLE DEVELOPMENT

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### ENGAGE IN CORPORATE PARTNERSHIPS







### SAFER BY SHARING

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### KNOWLEDGE SHARING TO MITROVE TRAFFIC SAFETY







### EMBODYING ETHICS & HUMAN RIGHTS

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### ETHICAL LEADERSHIP FOR RESPONSIBLE BUSINESS.













### **IN 2000**