

# SUSTAINABLE STREET 2030

CORPUS TOOLKIT FOR COLLABORATIVE SCENARIO BUILDING



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# A POLICYMAKER'S POINT OF VIEW ON SUSTAINABLE FOOD FUTURE...



#### ELISABETH FREYTAG

Director in charge of EU-affairs (Environment), Ministry for Agriculture, Forestry, Environment and Water Management, Austria

### « ABOUT THE ACHIEVEMENT OF THE CORPUS WORKSHOP ON SCENARIO BUILDING...

CORPUS is about bringing together policy makers and scientists. This is a very good idea! In our ministry we meet scientists often only to commission studies but we never spend a whole day or more to jointly find solutions. One of the problems is that policy-makers always think they do not have enough time – travelling to a workshop is a good solution! I think we achieved a lot in terms of content, we heard interesting presentations and received food for thought. Scenario building is an interesting method and I would like to continue working on it.

#### ABOUT THE VISION EMERGING FROM THE REVISED SNAPSHOTS...

I very much like the outcome of the CORPUS workshops – the vision. On the one hand I – as most people – like to talk about food and to deal with the issue. On the other hand I like the outcome.

Some results were pretty obvious for me – like corners for local producers in supermarkets because we have it in the supermarket where I go – if I don't go to the market. Others were less obvious to me. Eg the canteen as leverage. I see this point more for events. Many people do eat in canteens – because it is cheap, easy, fast, etc. They do not necessarily go there because they like it and I am not so sure that people prefer vegetarian diet because they get that in the canteen.

I am personally against labelling that should act as a deterrent – smokers lungs on cigarettes and a fatty liver on a hamburger is not the way I want to educate people. Apart from the fact that the system already does not work for smoking it is not so easy to prove that a hamburger is dangerous or sugar is creating obesity – it is (in contrary to smoking) a question of quantity. And I am afraid useless labelling can easily have an adverse effect.

Having studied economy I am personally in favour of prices as a means to change behaviour – eg you can buy strawberries for Christmas if they are expensive enough. Internalising external costs is one possibility, adding extra taxes are another one. I am afraid in the times of crises if we live in additional taxes it can be difficult.



### ABOUT MY VISION ON POLICY MAKING IN THE FIELD AND HOW IT RELATES TO THE SNAPSHOTS COLLECTED THERE...

In Austria agriculture and environment are part of the same ministry. We therefore have many discussions concerning regional/local food, urban gardening, the reduction of food waste, etc. In some fields we have the advantage that we can implement our "sustainable" ideas directly into policies, in other fields the cooperation is more difficult. Our minister is responsible for the environment and climate but also for farmers. He can easily support regional food but it is pretty difficult for him to be in favour of a vegetarian diet since we also produce animals in Austria.

We are very far in public procurement and green events e.g. These are fields I am very active myself. I think public procurement is important because 16% of our GDP is spent from public authorities and their behaviours have a leverage effect. I like green events not only because I think it is our task and it is consequent to not only talk but also act. We have to motivate people to use public transport, avoid water and waste and eat sustainable food. We can prove that vegetarian catering is as good as meat and the seasonal / regional is better than what you buy without thinking in a super market. Events are more than only the meeting or the concert - it is a means to change behaviour by creating awareness.

We nowadays award an environmental label for events and people are eager to receive it!

Packaging is also an issue we deal with a lot. The discussion started because of the "plastic soups" that float around in the oceans. We are landlocked and don't have a huge littering problem in Austria but also we contribute to the problem. We encouraged the EU Environment Council to discuss the issue and we work on alternatives to plastic bags and voluntary agreements with retailers. We do not have a ban or a tax but alternative systems (cotton bags, etc.).

Working with schools and kindergartens is especially important, we do it as a ministry and award canteens in schools if they have a local focus.

#### MY PERSONAL VISION...

You can buy everything but prices are different – products that are not regional or seasonal become a lot more expensive. The government promotes sustainable food in Conferences, with the help of labelling, with awards, in canteens, by distributing cookbooks. Organic farmers are supported, direct distribution and local retailers get tax exceptions...Everybody can take a deliberate decision to eat vegetarian or to go to a luxury (non-vegetarian) restaurant.»



#### MARIA CRISTINA MAROLDA

Policy Officer in EC Directorate General for Mobility and Transport

« The Commission White Paper on Transport "Roadmap to a single European transport area – towards a competitive and resource-efficient transport system" states under § 18: "Curbing mobility is not an option".

An efficient, reliable, safe and accessible transport system is the indicator of the economic and social welfare of a region.

It is true that the present level of pollution, congestion, noise is no longer sustainable, and that is why the Commission has engaged in launching a long-term policy to achieve its vision of a competitive and sustainable transport system.

The roadmap included in the White Paper considers actions at different levels: from policy-making to technological research and development; from incentives to measure aimed at increasing public acceptance of new technologies and transport management tools.

It is important to raise public awareness around the problem and call for individual responsibility in addressing the change.

Nonetheless utopian visions cannot respond to the growing demand of mobility of European citizens and cannot contribute to a general progress in the whole transport system.



#### SAULI ROUHINEN

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Senior Environmental Adviser in the Finnish Ministry of the Environment and Secretary General of the Finnish National Commission on Sustainable Development

« The snapshots of the future make elegantly visible the potential solutions for sustainable housing – concrete utopias – in the framework of the selected scenarios. For a policy-maker they give a clear vision what would be realizable in the future. Technical innovations are contextualized socially or in a community. Each scenario is exemplified with realizable – or even now existing – solutions. But, what is most important, these solutions or innovations can be clustered into integrated "ecosystems" for synergy gains. In this clustering exercise both the practical expertise and policy planning expertise will be needed. What I have often heard is that the civil servants are not too innovative. Maybe this is true, but the policy-makers in this kind of knowledge brokerage activities can be safely led to landscapes never visited. The scenario exercises in CORPUS workshops were built against the sector-wise thinking. Policy-makers cannot be experts in every field of sustainability, but they can understand the potentially synergic linkages between technical, social and economic solutions if their imagination is supported by e.g. visualization. In the future workshops on sustainable housing we, the policymakers, could loosen our ties and work on equal footing with people from various backgrounds.

The scenario approach chosen for the CORPUS workshop is very demanding for the participants. Good facilitation is necessary for this approach because it is very intensive, interactive but also productive.



The six sub-scenarios opened the key policy areas in sustainable housing. Maybe the most difficult one is the sub-scenario on social sustainability. Having a quite good understanding on the state of art and on policy measures the researchers and policy-makers could step into the realm of the sub-scenarios.

My professional role as a national sustainable development coordinator and sustainable development process manager is very wide in scope. The energy efficiency of buildings has been in

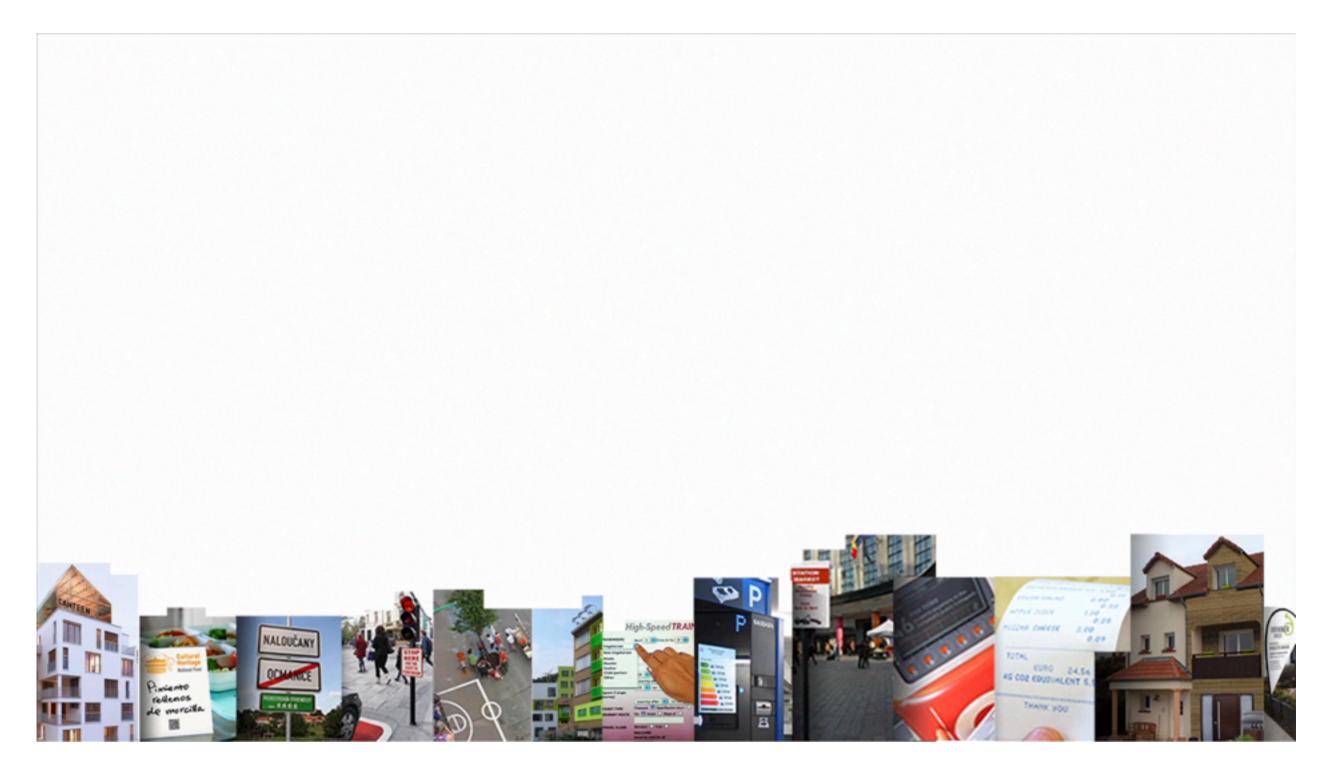
coordinator and sustainable development process manager is very wide in scope. The energy efficiency of buildings has been in the centre of policy programs. My vision is that the social sustainability issues will become more and more central and so are the urban ecosystem services. The urban sprawl has led to poor urban neighbourhoods and fragmented natural green areas outside the cities. Young families with small children seek for safe space, big single-family houses and lower ground rent. The cities are not seen as green, safe, pleasant and socially viable alternatives for the sustainable future. Household is a very important level in the economy and in the social decision-making. In the sub-scenario 3: 'Households' behaviour changes' - we touch very important aspects of sustainable housing. If we relate a household to a company we could imagine an environmental management system to be applied on a household economy level. Households are important energy and materials consuming systems. The energy and material flows – the throughput – have become bigger and bigger. The diversity of appliances, machines, chemicals etc. is huge. 'The domestication' of all this equipment is not an easy task. There's a plenty of brilliant green guidebooks but they don't seem to lead to behavioural changes. How to do this? The CORPUS scenario exercise showed that there are realizable alternatives.»

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(VIDEO) DISCOVER THE SUSTAINABLE STREET 2030 IN 2MIN...





WALKING DOWN THE STREET OF A SUSTAINABLE CITY IN 20 YEARS FROM NOW...



#### FRANCOIS JEGOU

Strategic Design Scenarios (SDS)

...was the vision that came up to design this toolkit for collaborative scenario building. Pulling ourselves out of our daily contexts and current mindsets to envision the future in an open and creative way is one of the bottlenecks in participative forward-looking activities.

The vision of walking for a short while on a street of a sustainable futures society, experiencing a walkable neighbourhood with refurbished passive houses in a food-resilient city brought to build a light exhibition with snapshots of the future, posters and manifestos that would immerse participants to a projection exercise into a stimulating, controversial, slightly provoking environment to set the right mood for an open strategic conversation.

This eBook publication intends to describe and make available some of the materials and approaches developed and tested during the CORPUS project aiming at supporting sustainable knowledge brokering at a science-policy interface.

The toolkit consists of a series of 24 visual posters produced for each of the 3 topics of sustainable food, mobility and housing developed for the CORPUS project and in proposing them as stimulating material to kick-off collaborative workshops between policy-makers and researchers or between other heterogeneous stakeholders using shared scenario building activities.

# BRIDGING THE GAP BETWEEN RESEARCH AND POLICY-MAKING IN SUSTAINABLE CONSUMPTION

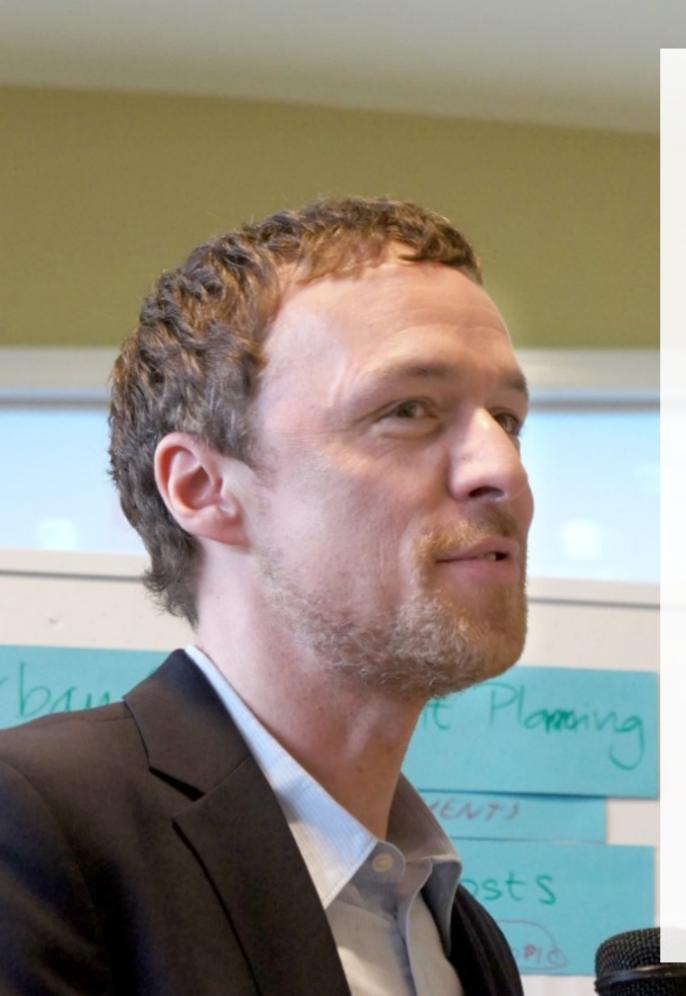


#### **GERD SCHOLL**

CORPUS project coordinator, Institute for Ecological Economy Research (IOEW)

Sustainable consumption has become an increasingly important topic on the European political agenda. In 2008, the EU published an "Action Plan on Sustainable Consumption and Production (SCP)". Moreover, the flagship initiative "A resource-efficient Europe", which was launched under the recent EU 2020 strategy, calls for empowering consumers to move to resource-efficient consumption and to drive continuous innovation. Also, several Member States have developed strategies to foster sustainable consumer behaviour. On the other hand, European researchers have explored possible ways to promote and facilitate greener consumption for many years now. The existing scientific evidence provides a sound basis for policy-making on sustainable consumption. Yet this huge body of existing research has up until now gone underutilised.

Hence, in order to enhance the policy impact of research, the knowledge created in science needs to be better brokered between the two communities. The project CORPUS tries to achieve this. It is a three-year research project, which started in January 2010 and is supported under the European Commission's Seventh Framework Program (FP7). It aims to explore and test innovative tools of knowledge brokerage at the interface of science and policy for sustainable consumption.



The main building-blocks for knowledge brokerage in CORPUS – an interactive website and a series of workshops between policy-makers and researchers in the domains of food, mobility, and housing – facilitate intense dialogue, build mutual understanding and trust, and enhance knowledge exchange between research and policy.

One major assumption of CORPUS is that successful knowledge brokerage, rather than only involving computers, data sheets and documents, heavily relies upon interactions between people. Therefore, creating communities of practice that include researchers and policy-makers, as well as knowledge brokers, is crucial for building and particularly maintaining stronger ties between science and policy-making.

The outreach of the project is remarkable. The "Policy Meets Research" workshops attracted almost 300 professionals from all over Europe and the website has evolved into a major knowledge repository for more than 800 registered users. The project reveals that online knowledge brokerage is essential for providing easy and customized access to existing scientific evidence and other knowledge items relevant to policy-making. The experience also indicates that providing opportunities for joint action, for instance, by means of participatory scenario building, is another effective way of bridging the gap between research and policy-making on sustainable consumption.



### SUSTAINABLE STREET

# 

Organic and fair trade foods, labelling, food safety, carbon footprint and climate, consumer behaviour, major trends, social and technological developments, good policy practices,

...



Over the last few decades there have been considerable changes in food consumption – such as eating habits, dietary changes, availability and accessibility of food. These are mainly due to an increase in productivity of the food sector, a greater diversity in product choices and a decrease in seasonal dependency due to global trade and storage and process technology. On the demand side, relatively high and stable incomes combined with low food prices have increased accessibility, availability and affordability of a highly diverse food supply. Yet, according to the FAO, total food production will have to increase by up to 70% in order to feed the growing population projected to be around 9 billion people by 2050 with the largest increase in low-income countries. It will be a huge challenge for agriculture to meet this growing demand in a sustainable way. Besides global population increase other driving forces can also be identified as having particular importance, namely: changes in diets and subsequent health problems, rising level of urbanisation, environmental impacts and (future) governance of the food system.

The food system is a complex socioecological system surrounded by unpredictable events and uncertainties, especially on long-term horizons such as 25-50 years ahead. In order to deal with these uncertainties, complexities and long-term challenges as well as to influence developments pro-actively, scenario planning is increasingly applied in both policy making and knowledge brokerage. Scenarios can reveal uncertainties, can help prepare for unexpected changes and highlight crucial decisions to be taken today. Scenarios can offer a clearer picture of the present and visions for the future, can help to identify key driving forces and their trends as well as assess potential outcomes of different policy paths.

#### DR. LUCIA A. REISCH

Lucia A. Reisch was in charge of the Food workshops for the CORPUS project

# INTRODUCTION TO THE FOOD FUTURE SCENARIOS



#### SUSTAINABLE FOOD STREET

## 6 SUB-SCENARIOS IMAGINING THE FUTURE OF FOOD

Based on prior research on key challenges and driving forces of sustainable food and guided by the discussions held in the CORPUS workshops, the focus is made on 24 strategies and visions divided into 6 sub-scenarios:

- PUBLIC FOOD PROCUREMENT
- 2 SUSTAINABLE AND LOCALLY PRODUCED FOOD
- 3 HEALTHY AND SUSTAINABLE DIET

- 4 HIGH TECH FOOD
- 5 QUALITY/ENJOYABLE FOOD
- 6 NEW SOCIAL NORMS.















(VIDEO) DISCOVER THE 24 SNAPSHOTS OF THE FUTURE OF FOOD IN 4 MIN...



#### SUSTAINABLE FOOD STREET / SUB-SCENARIO 1

### PUBLIC FOOD PROCUREMENT

Core strategy is leveraging on public canteen to create momentum for change both in the food chain and the market demand.





# FURO High-Speed TRAIN

PASSENGERS

Vegetarian

Non Vegetarian

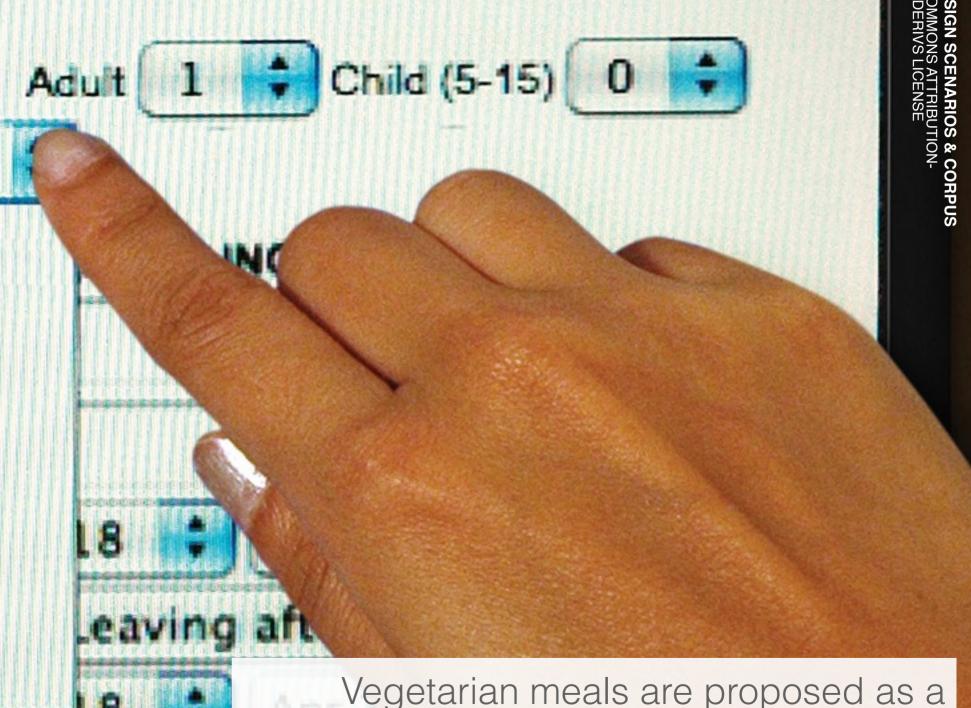
Hindu

Muslim

Casher

Child portion

Other



default option for public catering service

ignore if single

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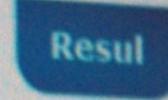
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News

Help

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FP10 Call



- + p 2. Timbacr
- + B 3.1. Strategic Impact
- + B 3.2. Plan fo the use and dissemination
- + B 4. Ethical issues
- + B 5. Gender equality
- B 6. Sustainable catering

Indication for completing the part:

Use of certific

FP10 research

Sustainable food is set as a standard requirement for events and activities supported by public funding

meetings that the project proposes. Describe now the

SCENARIOS & CORI DNS ATTRIBUTION-/S LICENSE





SUSTAINABLE FOOD STREET / SUB-SCENARIO 2

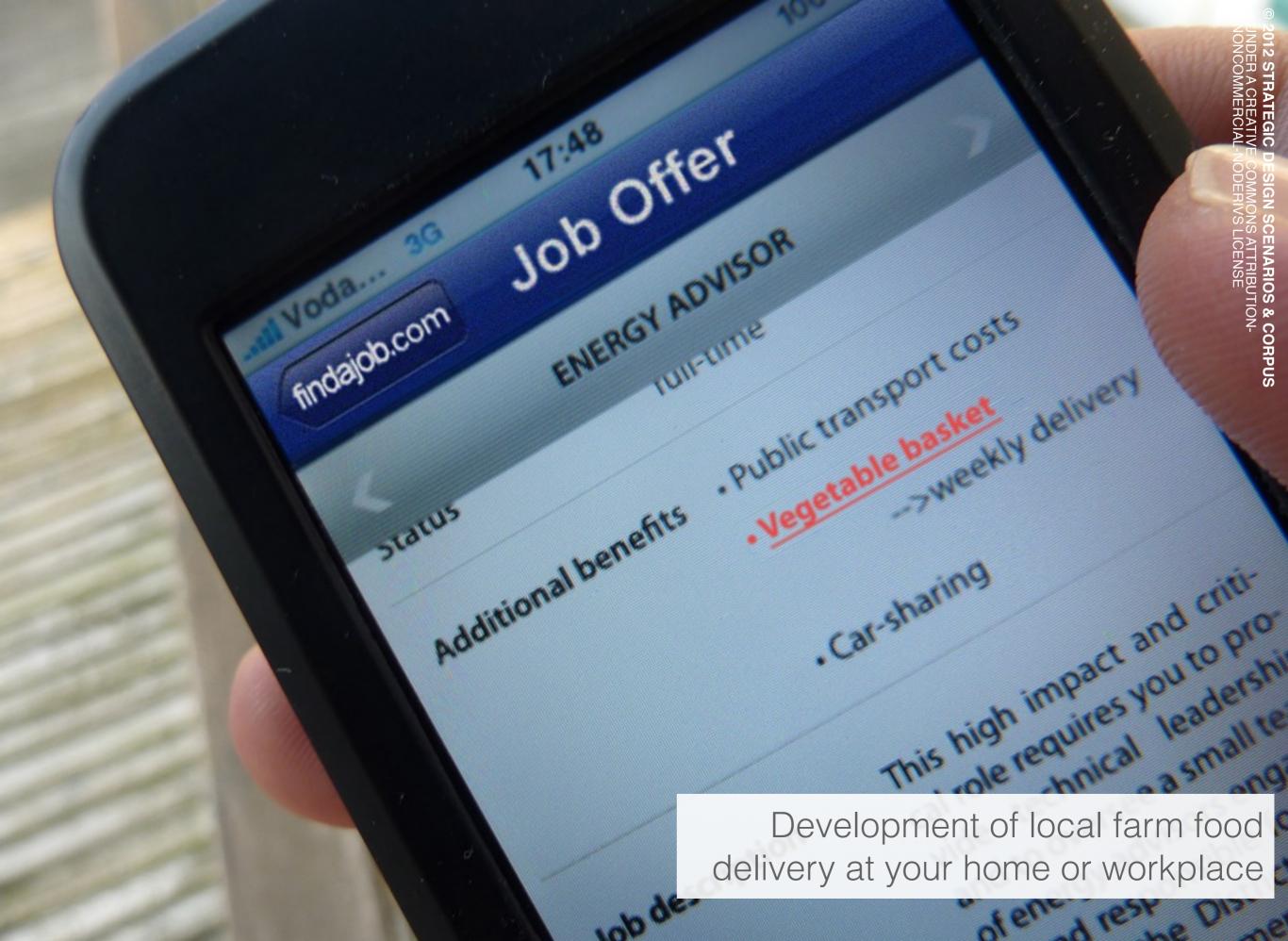
# SUSTAINABLE AND LOCALLY PRODUCED FOOD

Core strategy is to reconnect users with production promoting local traditional farms, urban agriculture, neighbourhood orchards.



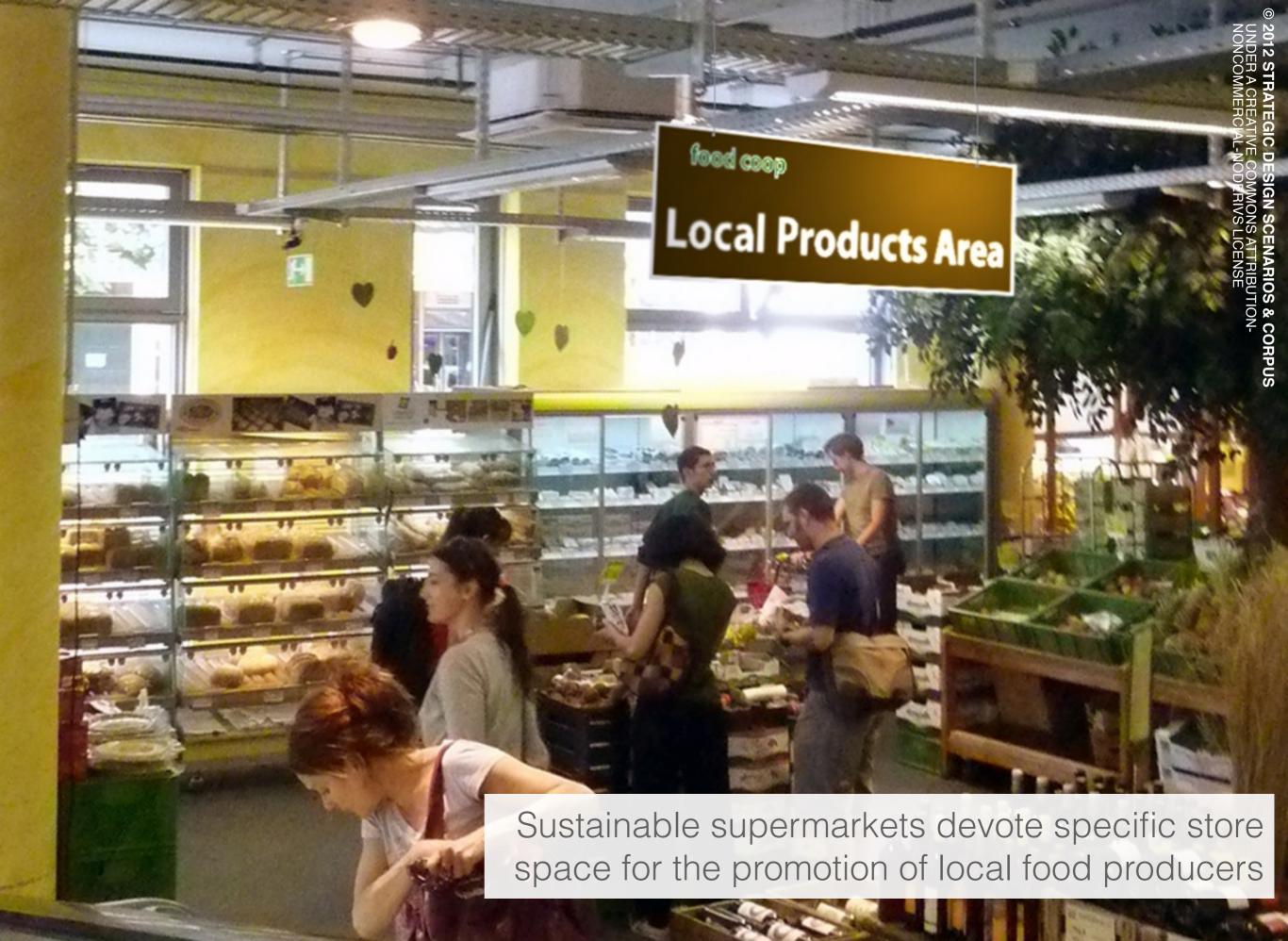












#### SUSTAINABLE FOOD STREET / SUB-SCENARIO 3

### HEALTHY AND SUSTAINABLE DIET

Core strategy is to leverage on obesity and unhealthy diets to promote more healthy and sustainable ways of eating.















A new range of baby food introducing low meat and balanced food diets

#### SUSTAINABLE FOOD STREET / SUB-SCENARIO 4

### HIGHTECH FOOD SUB-SCENARIO

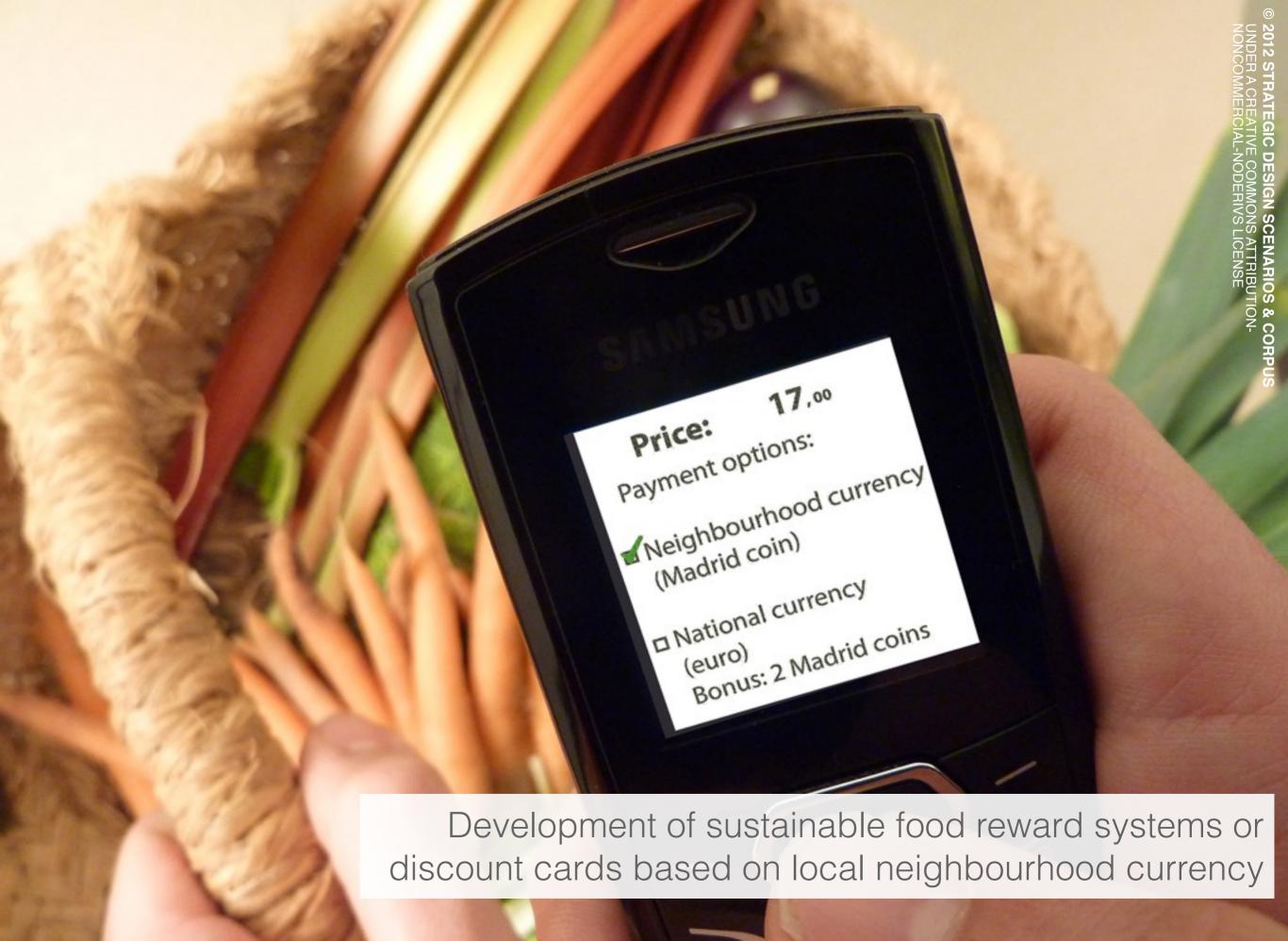
Core strategy is to explore what a controlled and safe development of high tech in food agriculture and food industry could be and how it could stay compatible with sustainability requirements.















#### SUSTAINABLE FOOD STREET / SUB-SCENARIO 5

## QUALITY / ENJOYABLE FOOD

Core strategy is to promote seasonal quality food and local gastronomy in a Slow Food-like approach.

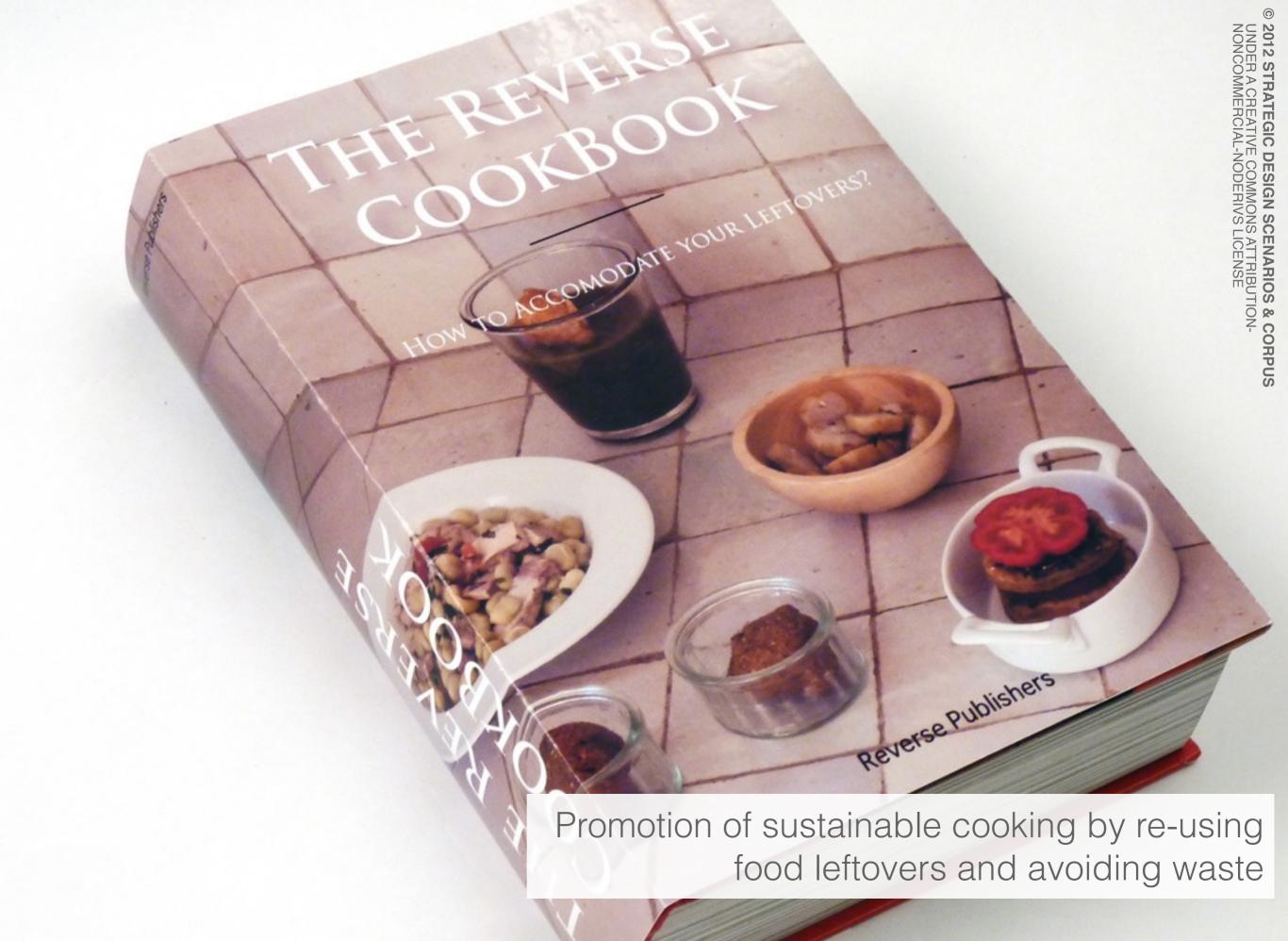








Generalization of vegetarian and low meat diets: meat becomes a delicacy







#### SUSTAINABLE FOOD STREET / SUB-SCENARIO 6

## NEW SOCIAL NORMS

Core strategy is to both play with information/ campaigning and with banning unsustainable products to establish a durable shift in consumers food practices.













#### SUSTAINABLE FOOD STREET

# COMMENTS ON SNAPSHOTS OF THE FUTURE

2 participants from the CORPUS food workshops sharing their view on the sustainable snapshots of the future...























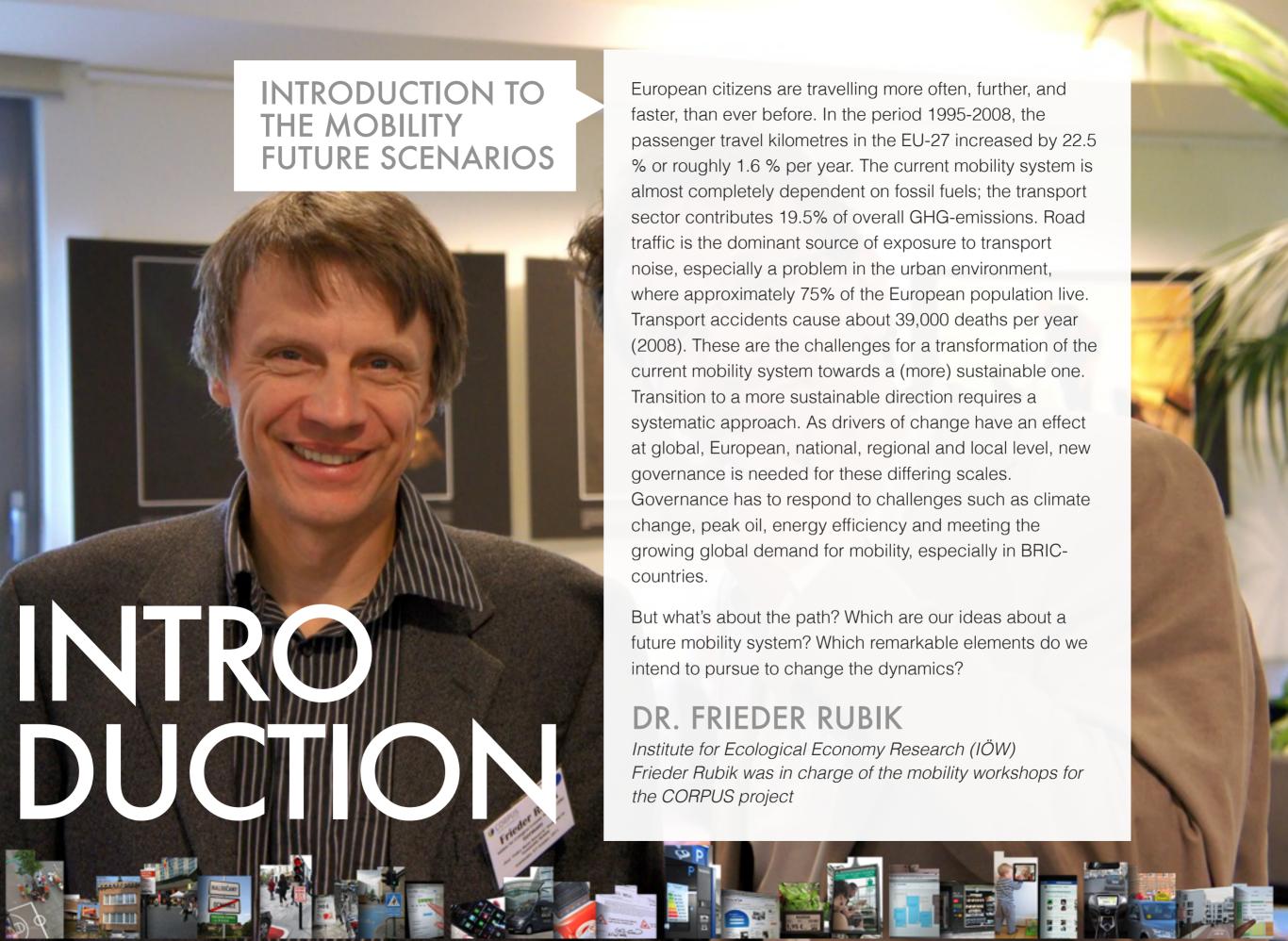
### SUSTAINABLE STREET

# MOBILITY

Personal mobility, public transport, air traffic, climate, consumer behaviour, major trends, social and technological developments, good policy practices,

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#### SUSTAINABLE MOBILITY STREET

### 6 SUB-SCENARIOS IMAGINING THE FUTURE OF MOBILITY

Based on prior research on key challenges and driving forces of sustainable mobility and guided by the discussions held in the CORPUS workshops, the focus is made on 24 strategies and visions divided into 6 sub-scenarios.

- RELOCALISED LIFESTYLES
- SLOW MOBILITY AND SHARED SPACE
- 3 FLUID PUBLIC TRANSPORT

- 4 TRUE-PRICES / INTERNALISATION
- 5 DISTANT QUALITY INTERACTIONS
- 6 SHARING MOBILITY SERVICES.















(VIDEO) DISCOVER THE 24 SNAPSHOTS OF THE FUTURE OF MOBILITY IN 3MIN...













#### SUSTAINABLE MOBILITY STREET / SUB-SCENARIO 1

## RELOCALIZED LIFESTYLES

Core strategy is to enhance the quality and accessibility of urban places in order to reduce the needs and desire of mobility.













#### SUSTAINABLE MOBILITY STREET / SUB-SCENARIO 2

### SLOW MOBILITY & SHARED SPACE

Core strategy is to bring in the forefront and give priority to bikers and pedestrians in urban planning and mobility policies.



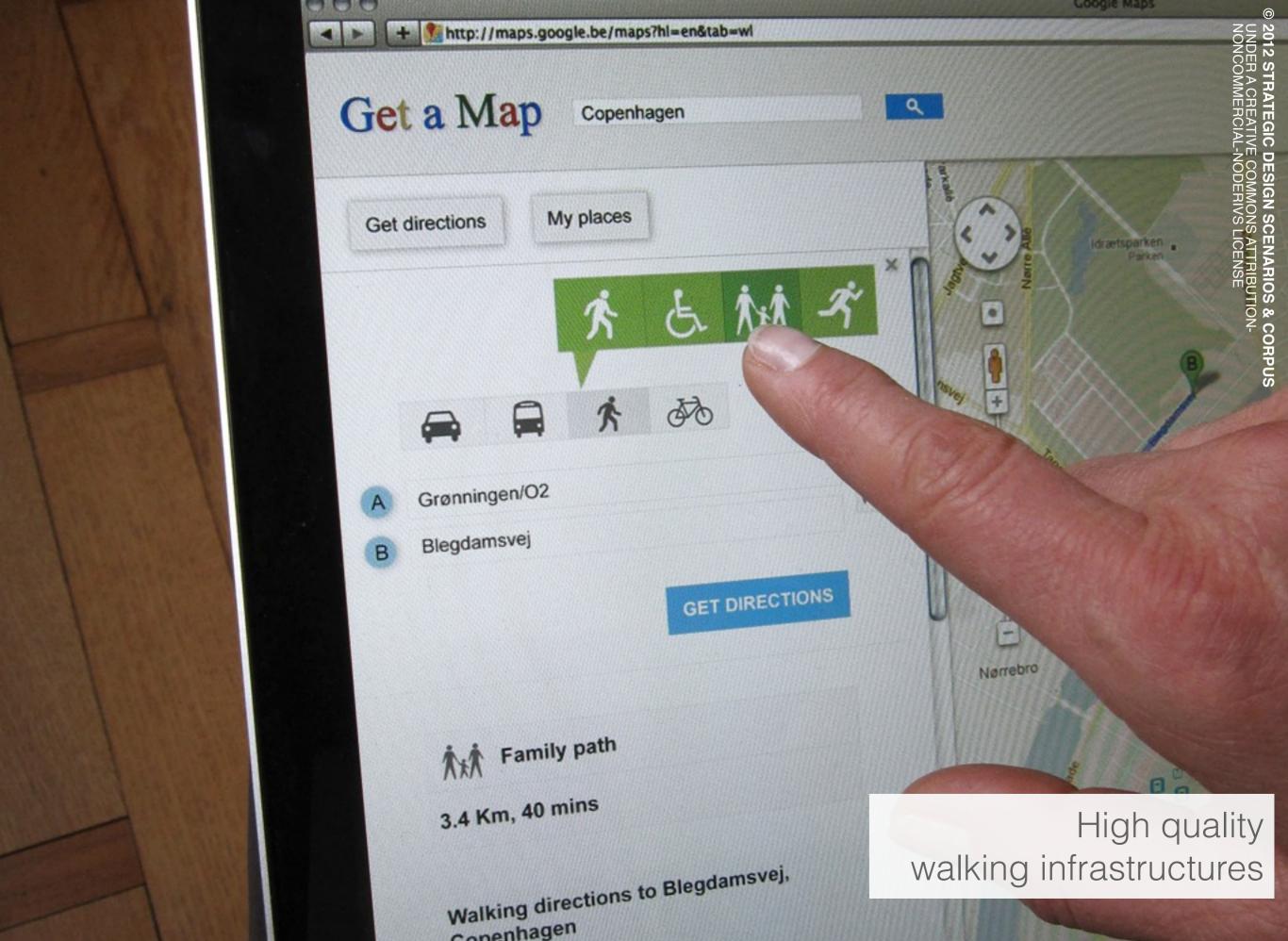












#### SUSTAINABLE MOBILITY STREET / SUB-SCENARIO 3

## FLUID PUBLIC TRANSPORTS

Core strategy is to improve the intermodality, fluidity, accessibility, wellbeing and effectiveness of public transports to make them more efficient and attractive.













#### MI AS BERLIN (Please use the back of the form if necessary) BRUILERS

Request of repayment must be postmarked no later than three weeks after the post he honored! Rules for travel According to EU the following rules must be observed when area travels to meetings: "The most economical method of travel should be used and possible full use should be made Apex flights and special discount rates. Air tra limited to economy class fare and for more than 800 km trip. Car travel must b trip up to 100 kilometers. Rail travel must be used for journeys up to 400 kilon case of emergency or where a sea crossing is necessary."



Flights for less than 800 km will not be reimbursed!



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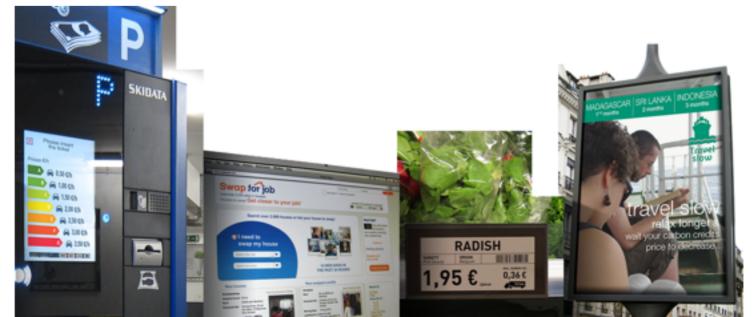
Ban of short distance flights

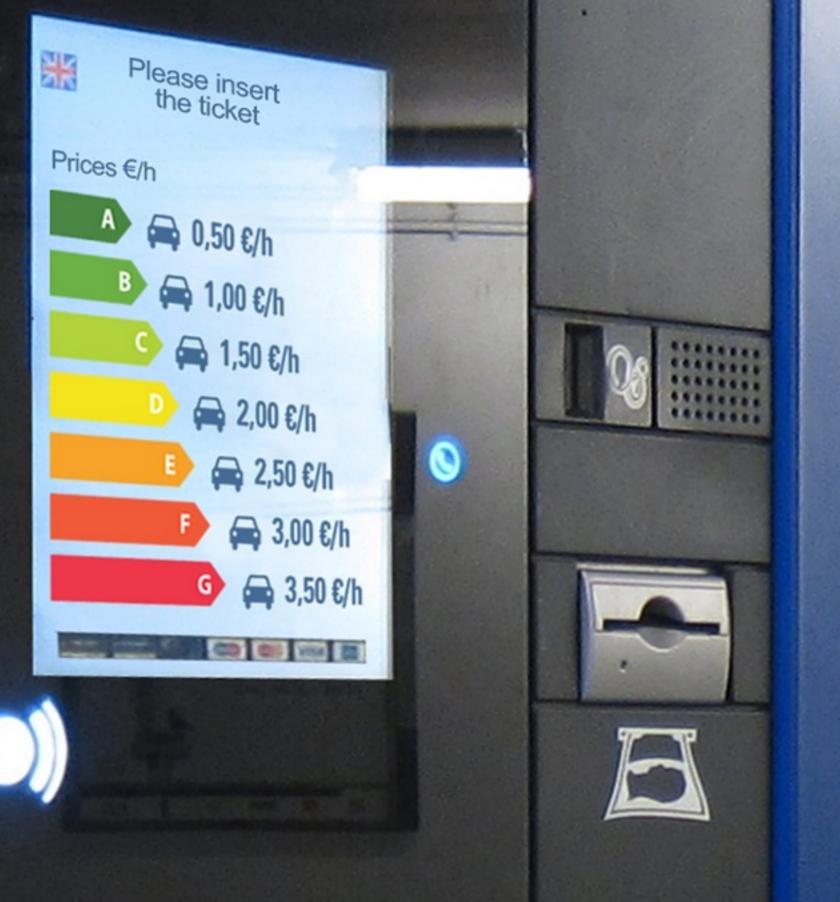
#### SUSTAINABLE MOBILITY STREET / SUB-SCENARIO 4

## TRUE PRICES, INTERNALIZATION

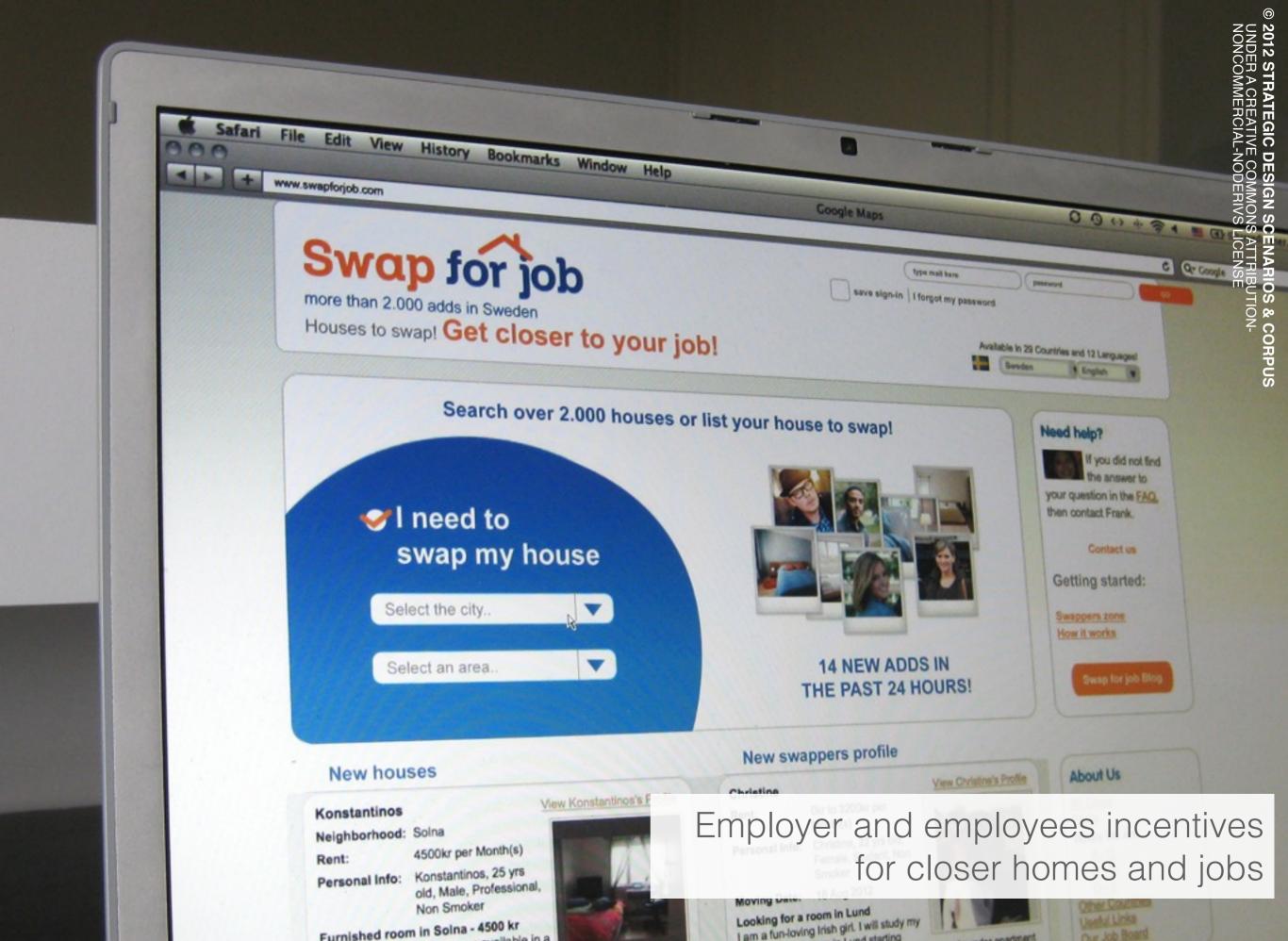
Core strategy is that all external costs due to transport impact are completely internalized and allocated to the polluter.





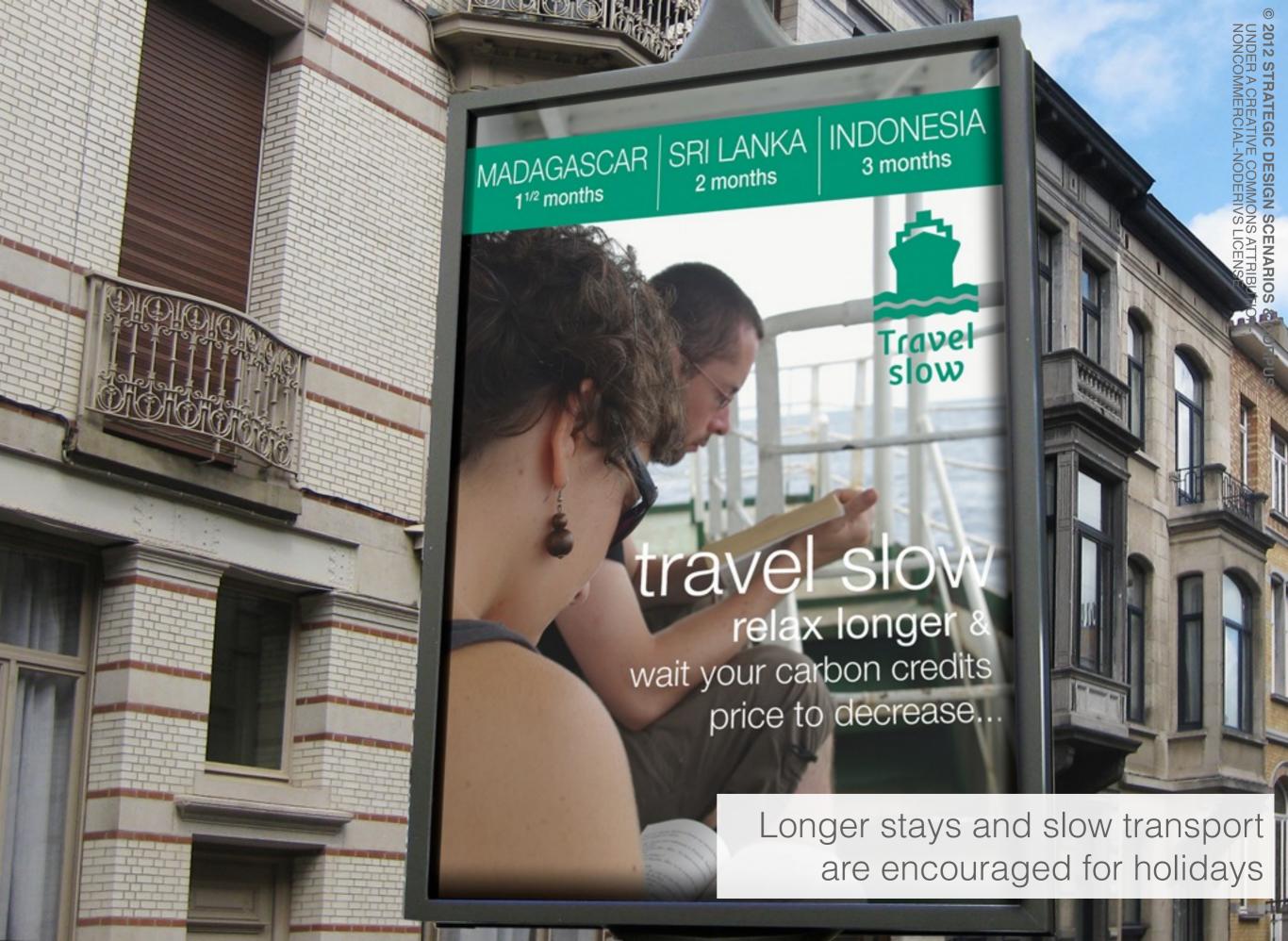








Product labels display transport impact



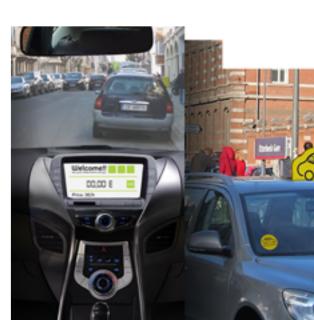
#### SUSTAINABLE MOBILITY STREET / SUB-SCENARIO 5

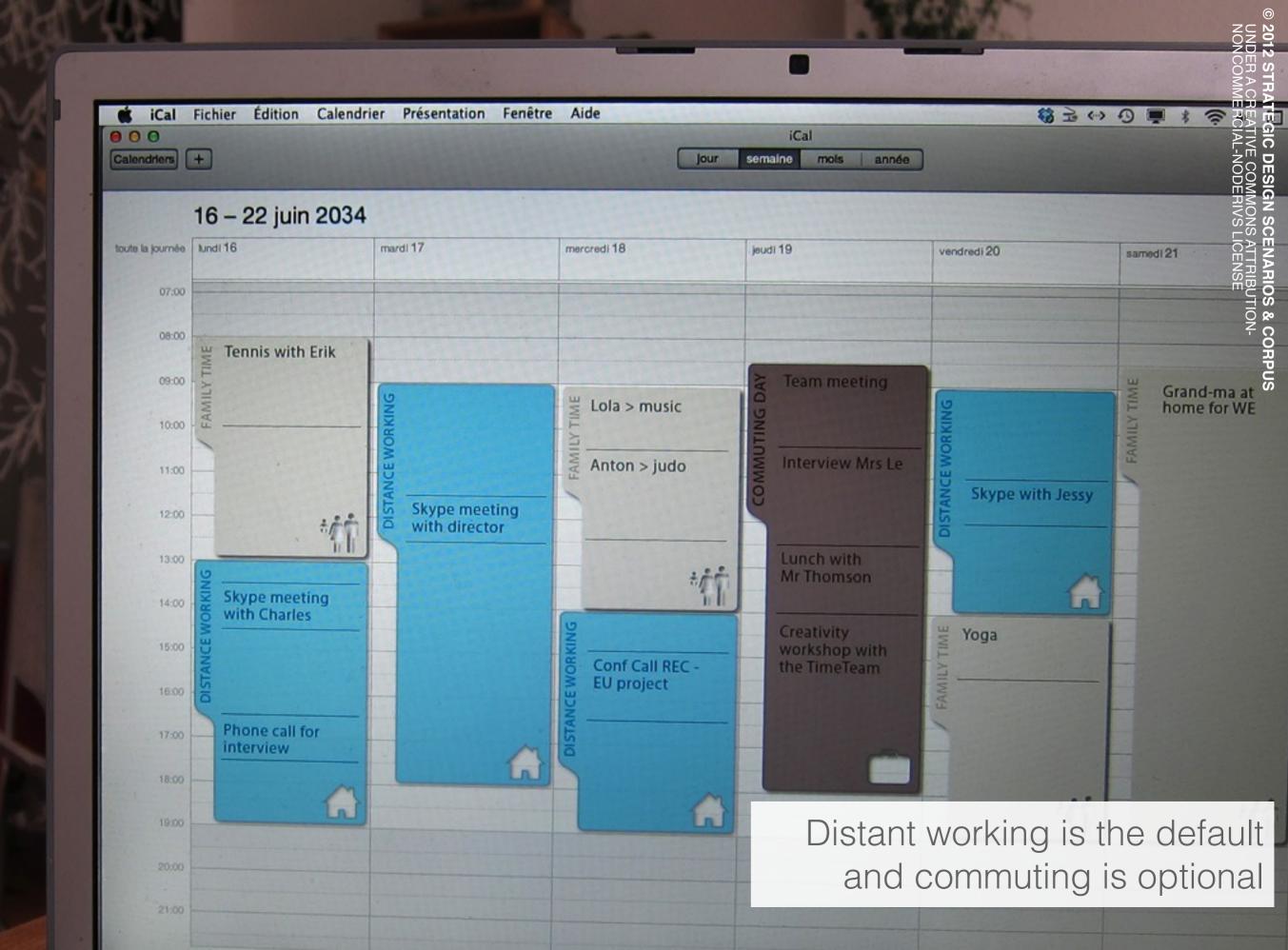
# DISTANT QUALITY INTERACTIONS

Core strategy is to develop the accessibility, comfort and efficiency of distant interactions to provide attractive local alternatives to access distant services, shops and physical gatherings.









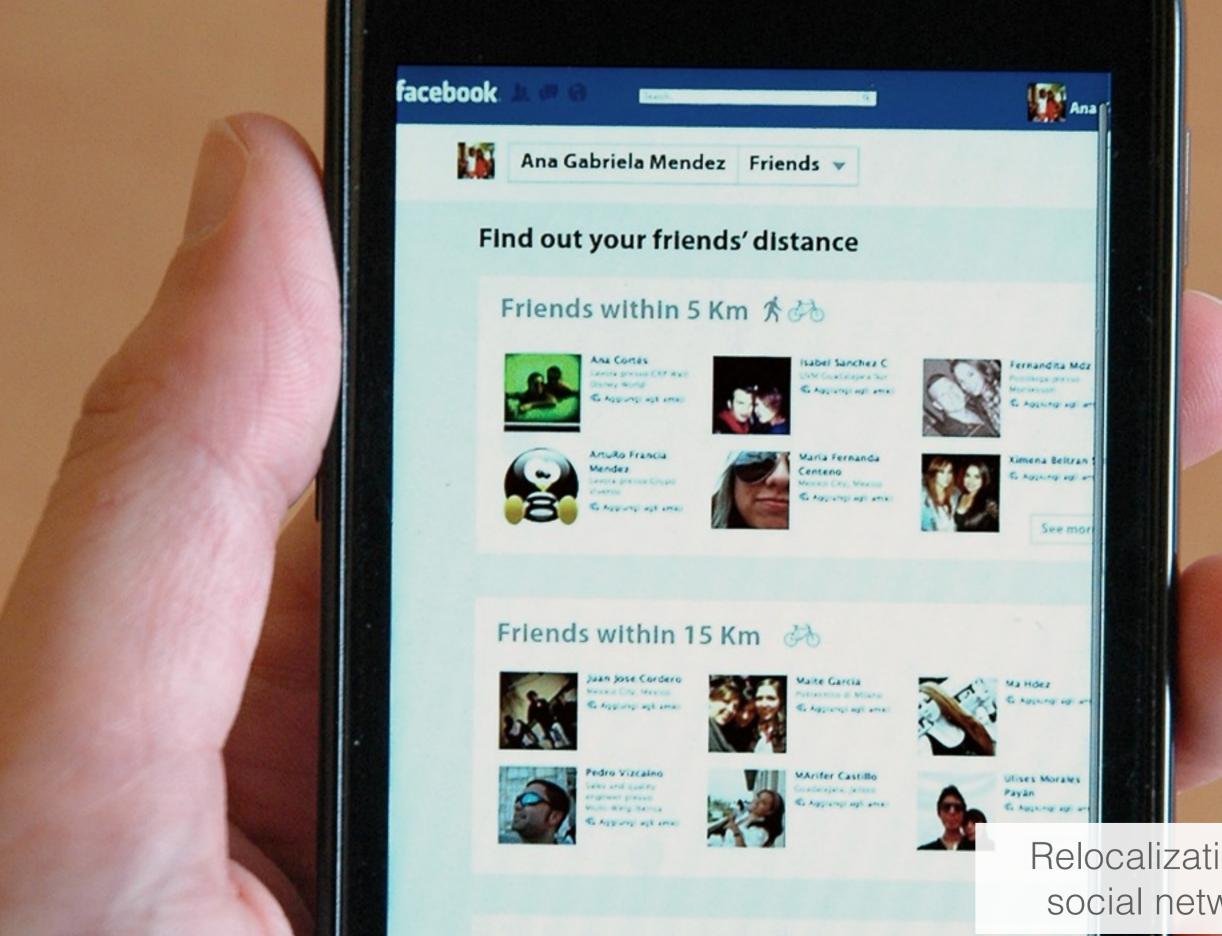






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High quality distant interactions are the default



Relocalization of social networks

Friends within 50 Km



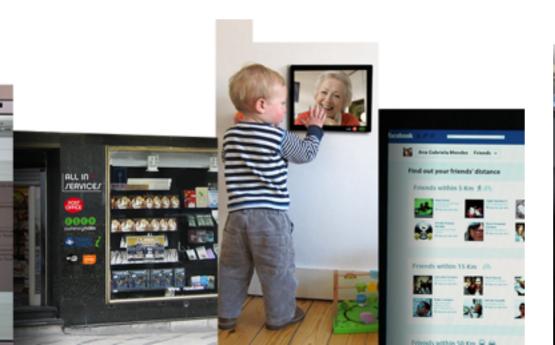




#### SUSTAINABLE MOBILITY STREET / SUB-SCENARIO 6

# SHARED MOBILITY SERVICES

Core strategy is to extend the concept of public transport, pooling all means of individualized mobility (and in particular cars) into shared, easy access to different modes of transport services.











#### SUSTAINABLE MOBILITY STREET

# COMMENTS ON SNAPSHOTS OF THE FUTURE

2 participants from the CORPUS mobility workshops sharing their view on the sustainable snapshots of the future...













#### CAR-FREE ZONES TO RECLAIM PUBLIC SPACE

«Car-free areas are a must! They offer many environmental, social and economical benefits, including lower per capita carbon emissions and family-friendly streets in residential areas (see Institute for Transportation & Development Policy's Europe's Vibrant New Low Car(bon) Communities Report) to the urban cooling effect and recreational potential of green spaces and water features, and greater consumer spending in pedestrian zones. »

#### SIMON FIELD,

freelance transport planner has been invited to comment on the snapshots of the future of mobility

#### HIGH QUALITY WALKING INFRASTRUCTURES

«These two scenarios go hand-in-hand and are essential requirements for a sustainable town or city. Safe, attractive and delay-free walking routes encourage active lifestyles, promote street life and can boost local economic activity. By slowing down the car traffic, pedestrian priority measures make driving a frustrating and slow experience, helping to 'push' motorists onto alternative modes.»



#### CITIES ARE COMPETING ON THE BASE OF WALKABILITY INDEX OF THEIR NEIGHBOURHOOD

«This is a great idea that could be incorporated into quality of life indices. It is no coincidence that pedestrian-friendly cities with low car use – such as Freiburg, Vienna and Zurich – are consistently ranked highly in such assessments. EU projects such as EcoMobility SHIFT and CIVITAS are already developing city labelling / award schemes that will/could include walkability.»

#### HIGH QUALITY WALKING INFRASTRUCTURES

«These two scenarios go hand-inhand and are essential requirements for a sustainable town or city. Safe, attractive and delayfree walking routes encourage active lifestyles, promote street life and can boost local economic activity. By slowing down the car traffic, pedestrian priority measures make driving a frustrating and slow experience, helping to 'push' motorists onto alternative modes.»

#### BAN OF SHORT DISTANCE FLIGHTS

«This is an attractive idea but perhaps would not be necessary if ticket prices included the external costs of aviation, thus reducing demand significantly. A flight ban would boost intercity rail travel enormously, possibly creating a capacity challenge. A major co-benefit would be the release of airport capacity for long-haul flights, reducing the need to build new terminals and runways.»







### SUSTAINABLE STREET

# HOUSING

Labelling and buildings, energy efficiency and energy savings, urban planning, infrastructure and renewable energy, consumer behaviour, major trends, social and technological developments, good policy practices,

...



#### PÅL STRANDBAKKEN

National Institute for Consumer Research (SIFO) - Pål Strandbakken was in charge of the Housing workshops for the CORPUS project

A lot of political bodies employ future studies techniques, like scenario construction, Delphi studies etc. in order to address, understand and move in their complex organisational surroundings. In general, future studies are supposed to help policy makers and business leaders to orient themselves towards the future: to make a habit of forward looking. For most organisations it is advantageous to be aware of continually changing surroundings; to be reflexive enough to realize that the one certain thing about the future is that it will be different from the past and the present. Scenario construction appears to be the most fruitful, at least the most popular, of the future studies techniques.

Most of European and member states planning in the field of sustainable housing have employed scenarios as tools, often with a strong focus on domestic energy use (and savings). As the theme of sustainable housing is often oriented towards energy saving and energy from renewable sources, technology becomes central.

For the fields of domestic energy use and savings, with existing policy instruments and known technologies, we see large potentials for reductions.

Other environmental issues like pollution and landscape uses are equally relevant; in addition, obviously, also the aspects of social sustainability, like urban poverty, crime rates etc. A general point is that scenarios for sustainable housing do not really need to be very futuristic and high tech. We are able to reduce the energy consumption of buildings for temperature control almost to zero, just by applying known technologies, and have been able to do so for a couple of years. This basically means that the main obstacles are social, economic and political, and scenarios addressing this will be interesting, useful and relevant to the extent that they address such constraints. The technology issue, then, is more about implementation than about invention. We believe the political, social and economic issues to be the main challenge for the development of sustainable housing in the coming decades.

#### INTRODUCTION TO THE HOUSING FUTURE SCENARIOS



#### SUSTAINABLE HOUSING STREET

# 6 SUB-SCENARIOS IMAGINING THE FUTURE OF HOUSING

Based on prior research on key challenges and driving forces of sustainable housing and guided by the discussions held in the CORPUS workshops, the focus is made on 24 strategies and visions divided into 6 sub-scenarios.

- HIGH QUALITY NEIGHBOURHOODS
- 2 ECO-RENOVATION AS A NEW SOCIAL NORM
- 3 HOUSEHOLDS' BEHAVIOR CHANGES

- 4 GREENING OF THE BUILDING SECTOR
- 5 SUSTAINABLE ARCHITECTURE
- 6 ENERGY INSECURITY & SOCIAL.















(VIDEO) DISCOVER THE 24 SNAPSHOTS OF THE FUTURE OF HOUSING IN 4 MIN...













SUSTAINABLE HOUSING STREET / SUB-SCENARIO 1

## HIGH QUALITY NEIGHBOURHOODS

Core strategy is to focus on housing blocks scale to generate energy saving and production, synergies between single households and social emulation.













SUSTAINABLE HOUSING STREET / SUB-SCENARIO 2

## ECO-RENOVATION AS A NEW SOCIAL NORM

Core strategy is to leverage on low energy housing as new norm to stimulate and enable massive refurbishment of existing housing stock.











#### Energy class



#### Description

Newly constructed 3 bedrooms executive situated in private cul de sac. Built with quality fixtures and fittings throughout, the home is designed for the larger family. Features tiled and air-conditioning throughout, the living and dining are...



Property No. 7331



Energy class



Desc

Well pres ground i with bui has ensu area, e verandal

High level energy saving standards are required by the market





## HOUSEHOLDS' BEHAVIOR CHANGES

Core strategy is to leverage on change of household daily habits and practices to reduce energy demand and enhance sustainable lifestyles.















### GREENING OF THE BUILDING SECTOR

Core strategy is to leverage on the building chain and related stakeholders to ensure promotion, diffusion and implementation of sustainable housing.













### SUSTAINABLE ARCHITECTURE

Core strategy is to leverage on new building technologies, energy generation and change in architecture patterns and standards to enable new generation of sustainable housing.













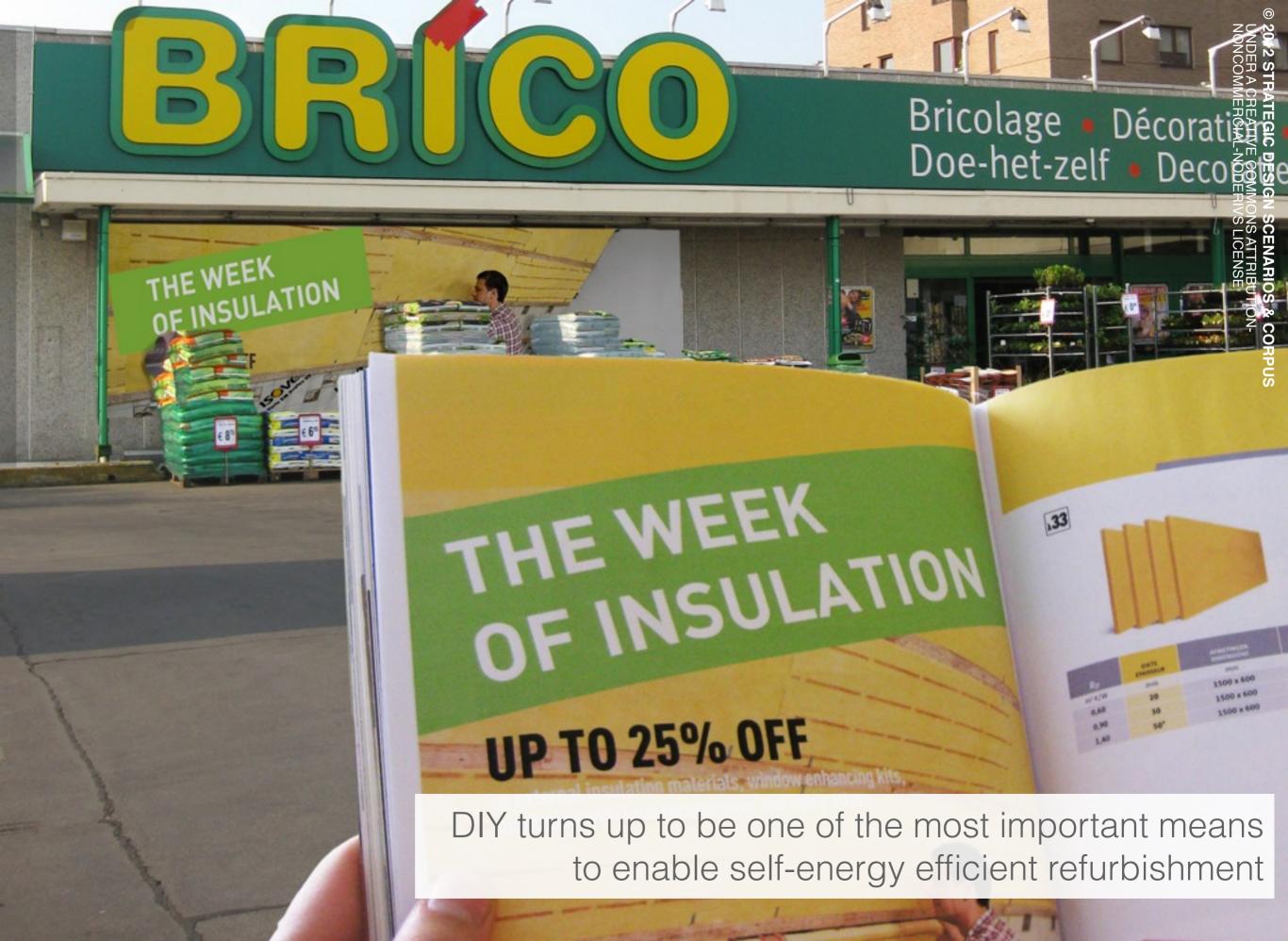


## ENERGY INSECURITY & SOCIAL INCLUSION

Core strategy is to leverage on poverty alleviation, eradication of homelessness, sub standards and unhealthy housing, unsecured neighbourhood to enhance sustainable lodging.







Selection

REALISABION:

Production

Distribution and Sales

Use and end-of-life

Another way to evaluate reasons for industry to erge in D45 is to analyse the various business opportunits arising from these initiatives. The following three at-

gories outline resulting business of

sustainability developing

isive for the ers, because A NEW HOUSE WITHIN A WEEK / FAST CONSTRUCTION CHALLENGE





Flash-reconstruction allows to exchange substandard buildings with new ones in a few days

# FOR 2 kWh THAT YOU SAVE, WE OFFER 1 kWh

TO THE ENERGY SOLIDARITY ASSOCIATION

**ENERGY SAVED** 



**ENERGY SHARED** 

An initiative by :

in partnership with:





Solidarity energy pricing and saving incentives



#### SUSTAINABLE HOUSING STREET

# COMMENTS ON SNAPSHOTS OF THE FUTURE

3 participants from the CORPUS housing workshops sharing their view on the sustainable snapshots of the future...



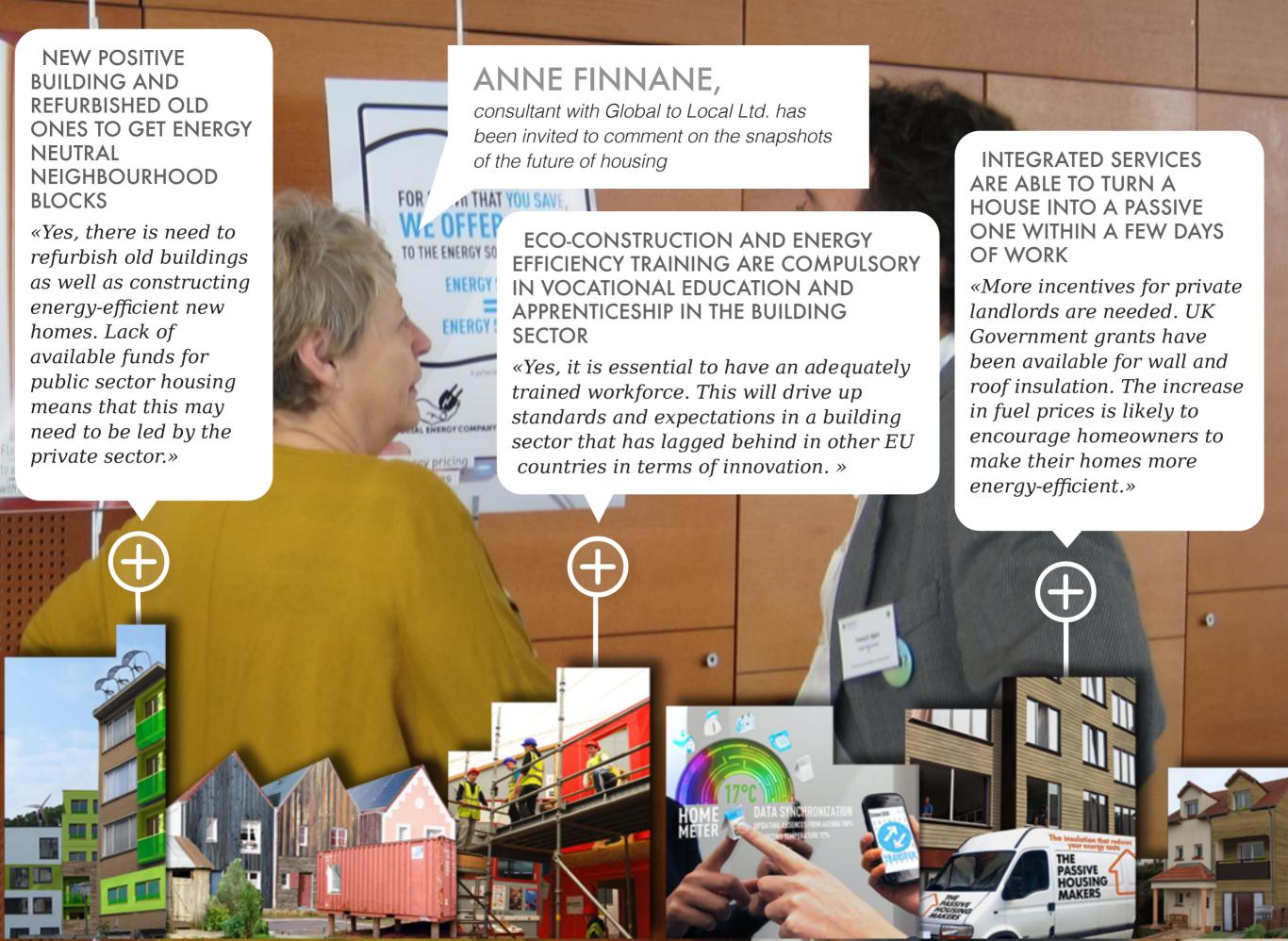




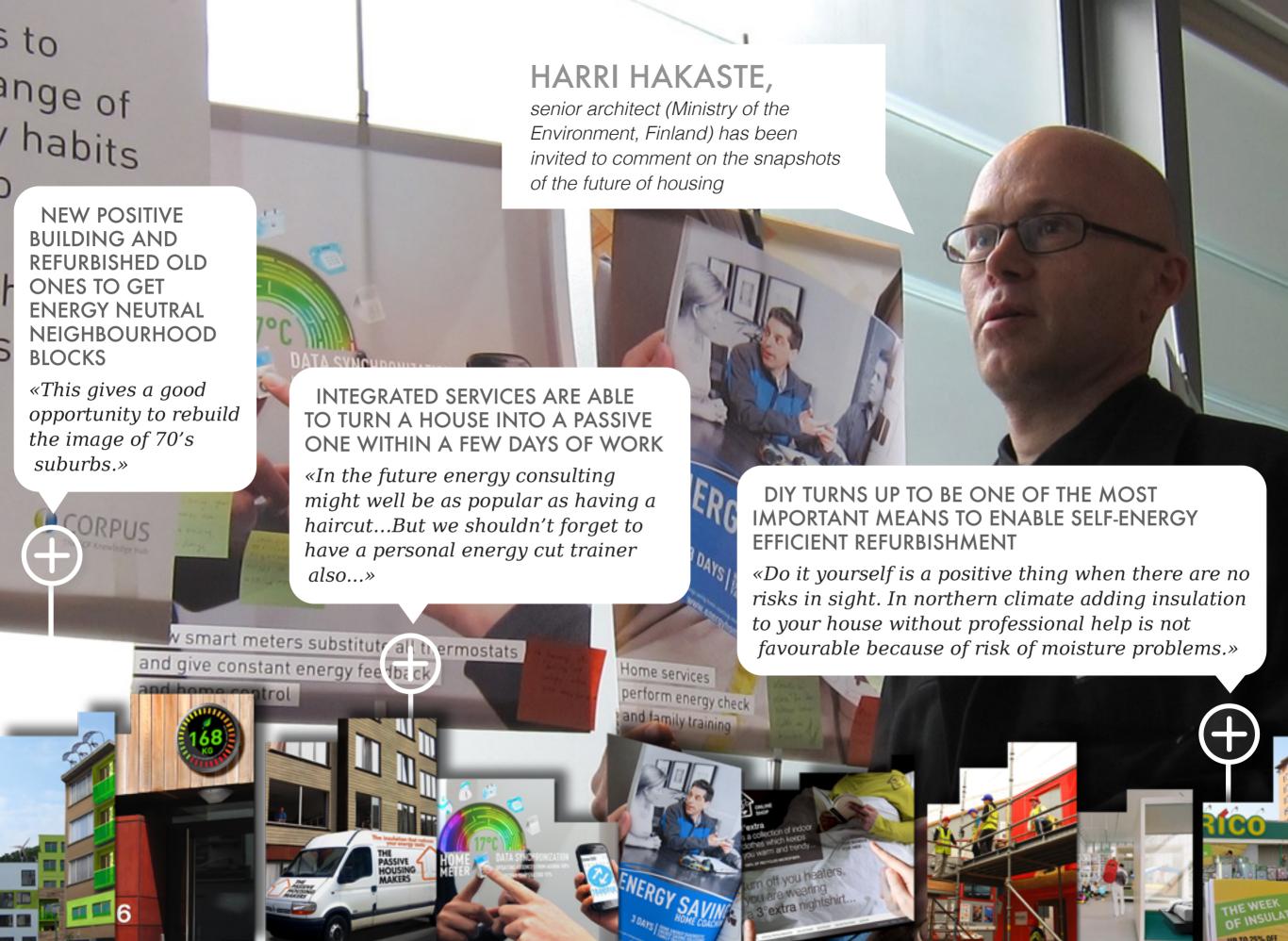






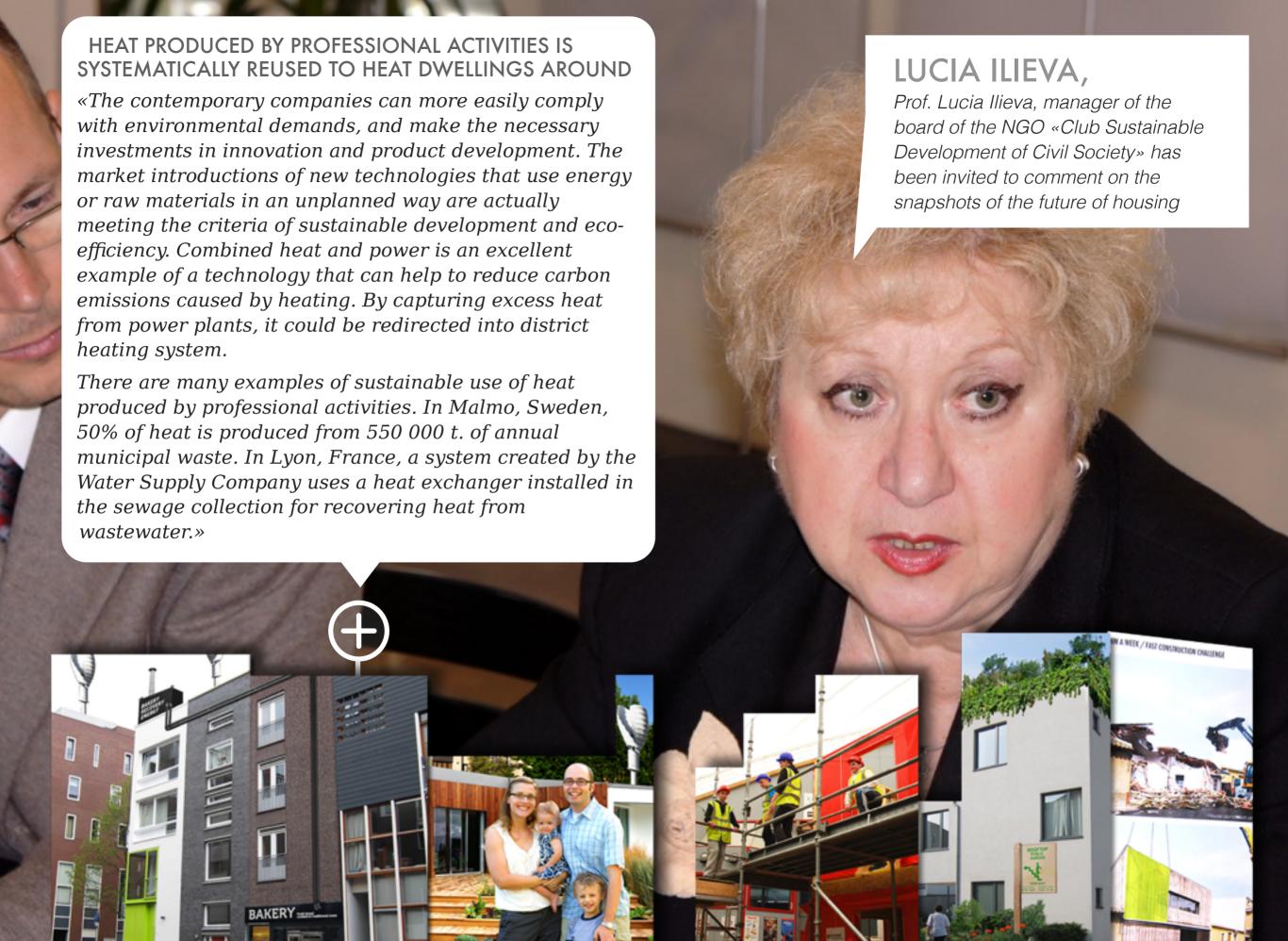












### HAPPY AND SAFE FAMILY LIFE DEPENDS FROM LOW ENERGY HOUSING

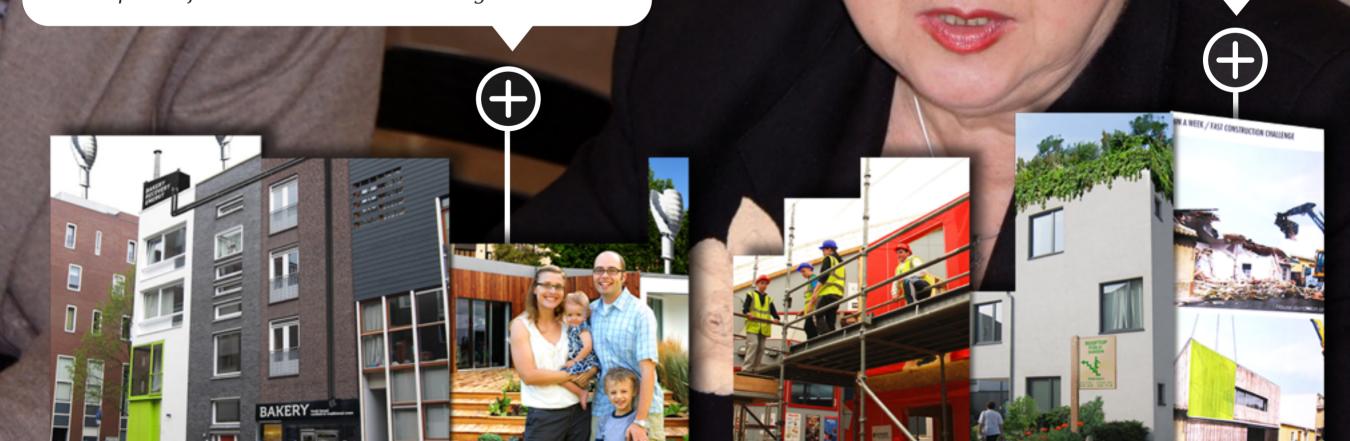
«It is largely known that buildings account for 40% of energy consumption in EU. For each household, reduced consumption means reduced expenditures that are crucial for the family budget in the crisis period.

For this reason the European Commission sets a number of tools for funding energy saving in member states. For the period 2007-2013 the Structural funds have been used partly to co-finance national, regional and local projects to insulate walls, roofs and windows, to replace old boilers and to install solar panels. The European Economic Recovery Program funds provided 1 Billion Euro to research methods and technologies to reduce the energy consumption of new and renovated buildings.»

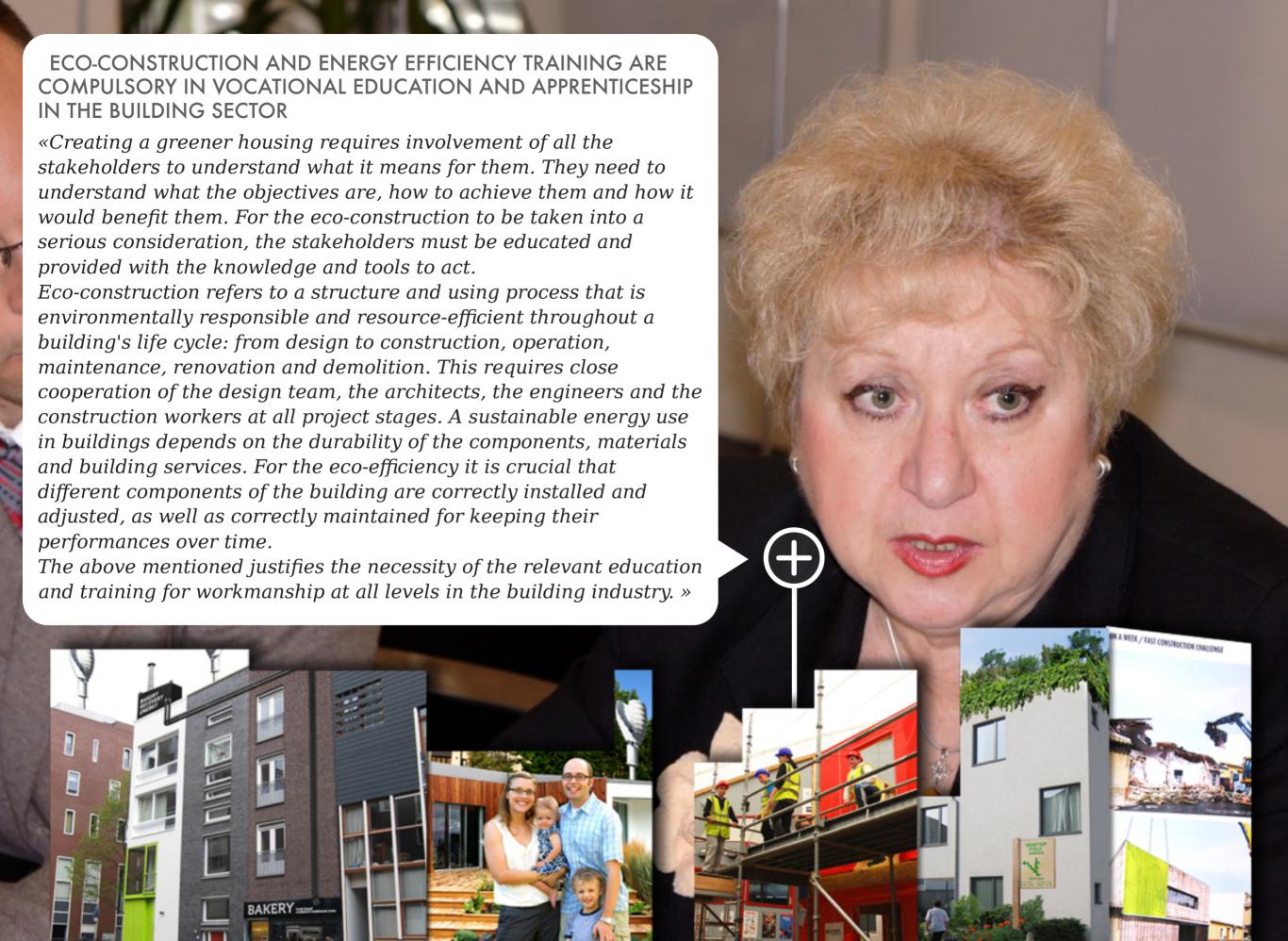
### FLASH-RECONSTRUCTION ALLOWS TO EXCHANGE SUBSTANDARD BUILDINGS WITH NEW ONES IN A FEW DAYS

«Buildings account for 36% of carbon emissions in the EU. Existing housing stock and especially substandard one is a significant untapped source of energy savings. Renovating and upgrading the building stock is of key importance. The green buildings are designed to reduce the overall impact of the built environment on human health and the natural environment by efficiently using energy, water, and other resources, protecting occupant health and reducing waste, pollution and environmental degradation

From the other hand, natural disasters as earthquakes, floods, land slides, etc. became already usual even in developed countries. In such cases there is an urgent need to provide safe dwelling for people in the regions facing problems. Flash-reconstruction can help providing new housing for the population in short time. »









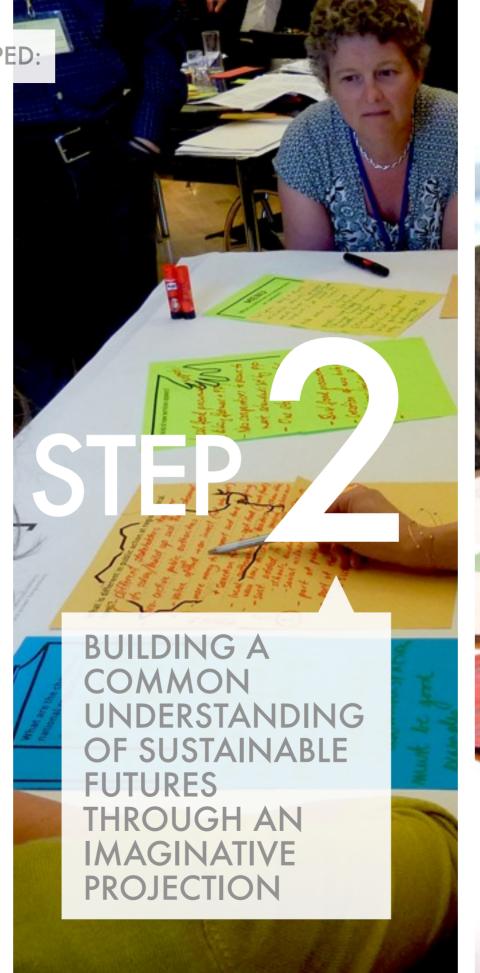


(VIDEO) DISCOVER THE MAKING OF THE CORPUS SCENARIO BUILDING WORKSHOPS IN 2MIN...











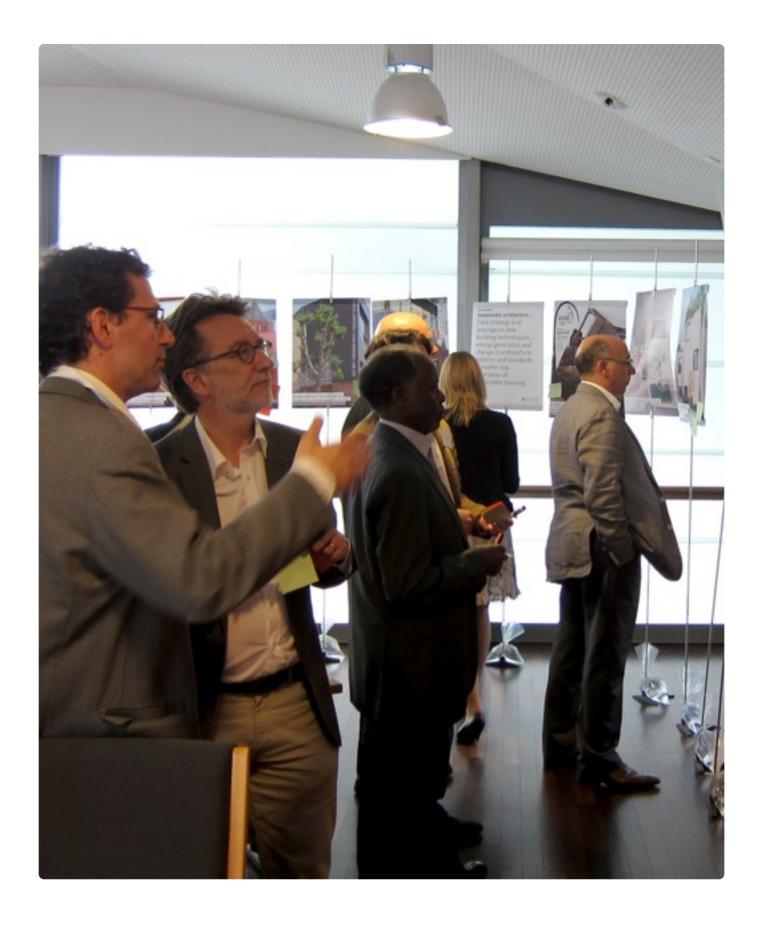




#### **RATIONAL**

The projection into possible futures of sustainable food, mobility or housing and their discussions requires more than describing characteristics of the scenarios. It requires the possibility to imagine what future everyday life may look like in order to appreciate what these alternative futures might be, and if they represent a desirable, acceptable option.

The scenario building process requires a simulation of each scenario through narratives, images or movies. Visual envisioning techniques are a powerful tool to immerge stakeholders in the vision they should discuss and transform. At the same time the vision will impact them (or not) and question their perception of the future by mimicking the co-evolution process between stakeholders and their environment. This mutual influence between the vision and those who generate it, is directly serving the brokering process.



#### IN PRACTICE...

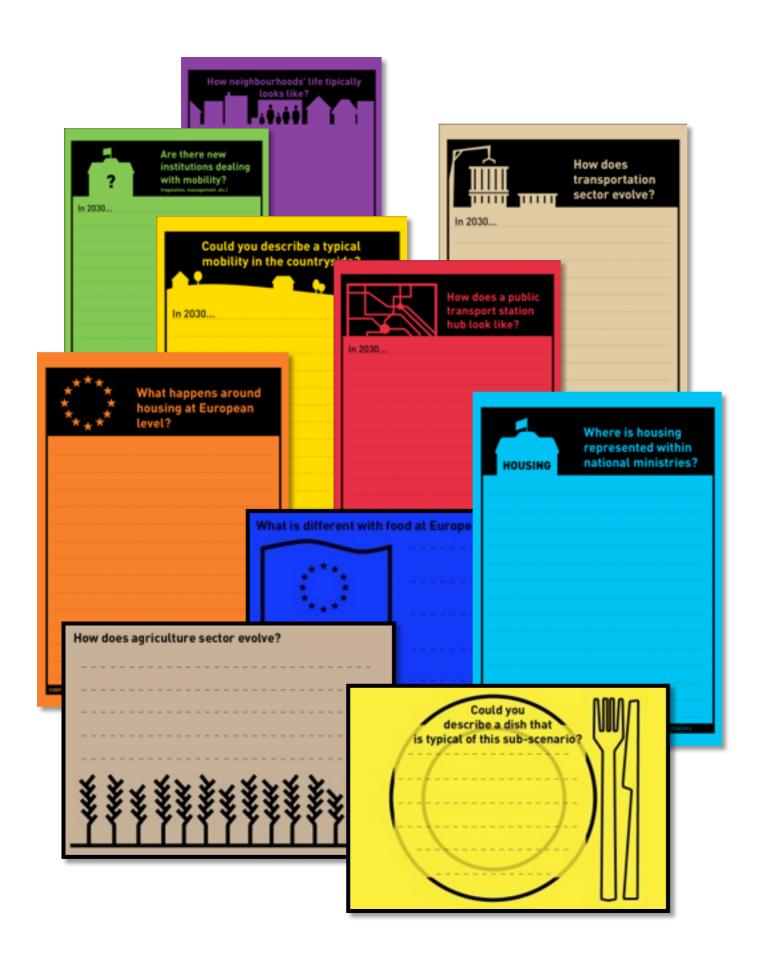
The first step of the workshop takes place within the poster exhibition proposing snapshots of sustainable food, mobility or housing perspectives organised in 6 sub-scenario directions. Participants are nudged into a context that is prompting innovative solutions, ideas, and aspects around sustainable food consumption. The poster exhibition is representing a street in a sustainable society with changes in the urban environment, in shops, advertisements, etc. This immersion situation is both helping participants to 'feel' what everyday living in such a sustainable society might be and enhance them to consider a context where sustainable living is mainstream.











#### **RATIONAL**

The future has to be invented and cannot only be extrapolated from inherited past. This is in particular the case when focusing on discontinuities within sustainable transformative structural changes of the society. The scenario building process starts with a creative phase where stakeholders participating to the workshop collaborate to imagine what a desirable vision of sustainable future might be. They share their views and exchange ideas until they agree on a common vision.

The scenario building process fosters a common understanding and a convergence between stakeholders. In terms of knowledge brokerage, this community building effect is an important outcome besides the identification of knowledge gaps that need to be closed through future research aiming to support evidence-based policy-making.



#### IN PRACTICE...

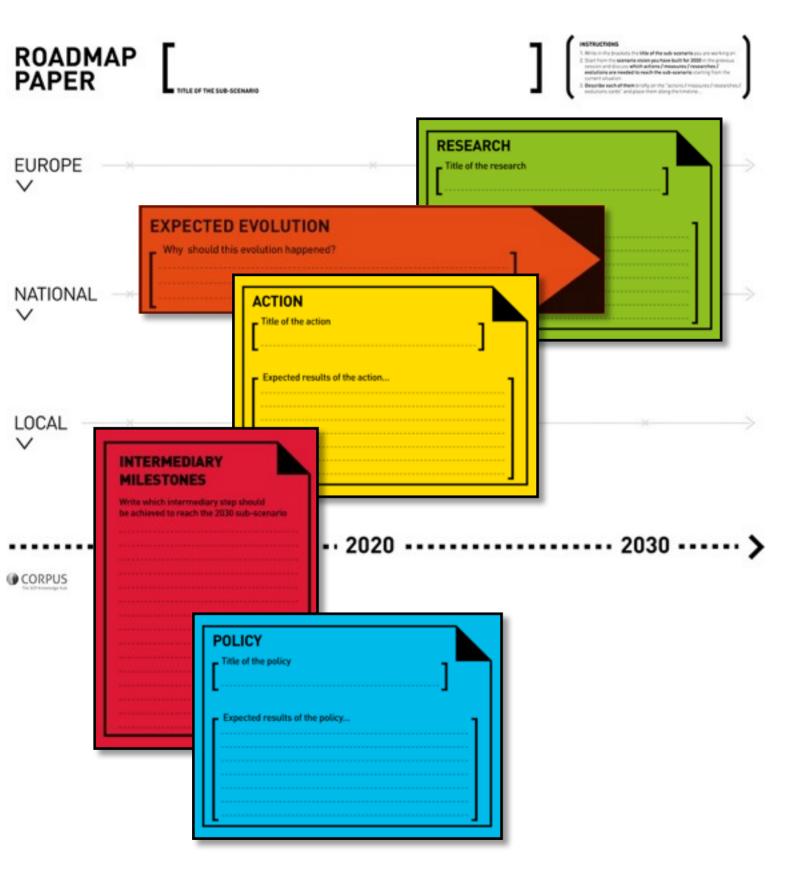
The second step of the workshop consists of a visioning exercise. Within the general framework of sustainable food, mobility or housing perspectives, the 6 different sub-scenarios have been outlined. Each of them focuses on a particular aspect of sustainable food, mobility or housing. These sub scenarios are not exclusive but complementary and may eventually overlap. Participants to the workshop are asked to further explore one of these sub-scenarios, extrapolating from a skeleton to imagine how all the subsequent aspects of society (from daily living to government or business) might look like.







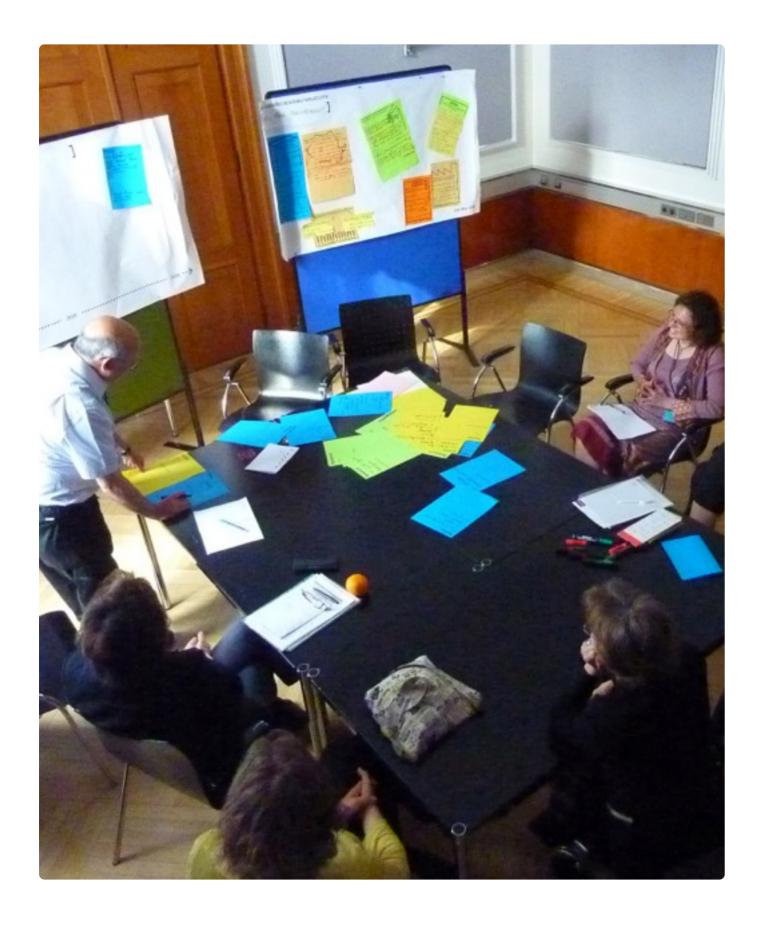




#### **RATIONAL**

The debate about the future is an open social conversation process and cannot be restricted to an experts-based interaction. A large stakeholder consultation is needed to make sure that the issue of the future of all is not overwritten by the interests of some and that enough diversity is taken into account to be sure to voice the key factors of emerging new paradigms.

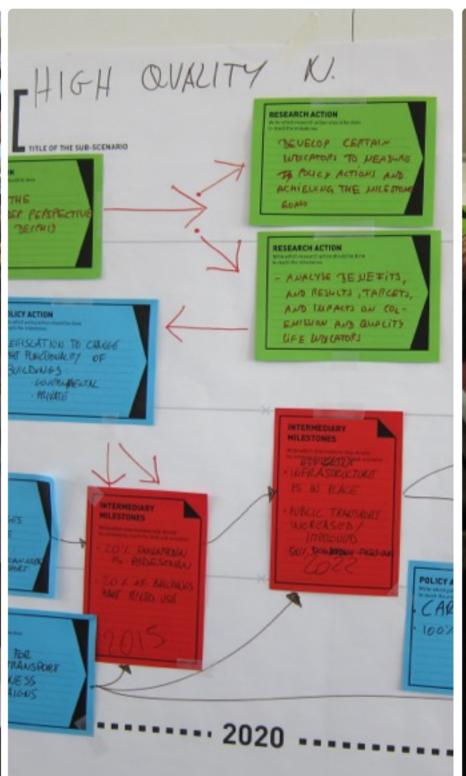
The scenario building process therefore needs to be an open deliberation involving the interaction of as many different stakeholders as possible. The CORPUS scenario workshop brings together two groups, researchers and policy-makers, by letting them debate a common future of sustainable food, mobility or housing.

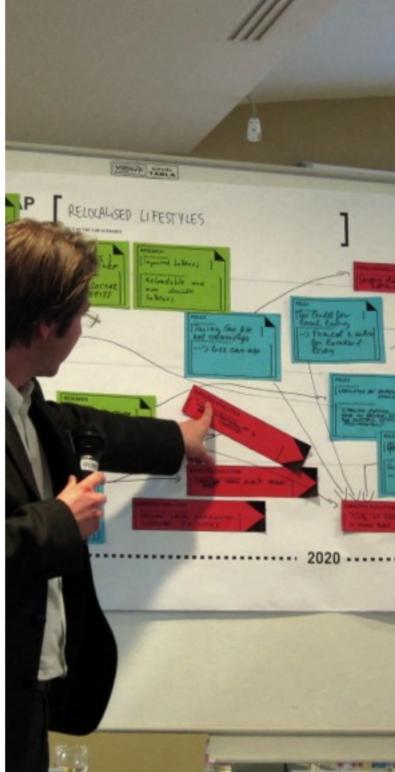


#### IN PRACTICE...

The third and last step of the workshop consists of a scenario back-casting exercise. From the vision that has been co-developed in the previous exercise, participants are required to discuss the necessary steps to move from the current situation to the future vision. These steps might be actions, measures, changes, projects, etc. in the economy, education, public administration, social sector, business etc. Particular attention should be paid to the interaction between the various categories of stakeholders (scientists and policymakers or others) in this transition to sustainable futures.









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Renovation

Quality of housing



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He is active in various fields and research projects from investigating Creative Communities for Sustainable Living in China, India, Brazil and Africa with UNEP to European research project investigating social innovation to support sustainable transition, exploring the future of innovation or building a deliberative platform on nanotech.



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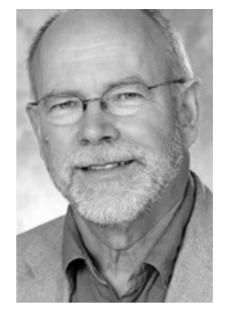
Carlos is an architect and historian with experience conducting academic and applied research in urban and rural sustainable planning, comparative metropolitan history and the sociology of everyday life in the UK, France, Germany, The Netherlands, Canada and Colombia. He has been a consultant in several planning projects including a WWF-funded research to relocate the community of La Plata Island to continental land in the Pacific Coast of Colombia.



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Planner in the Prime Minister's Office 1983;

Secretary General of the National Environment Council 1983 – 1995; SG of the FNCSD 1996 – 2012



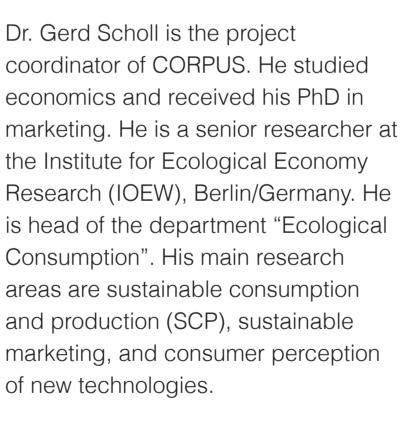
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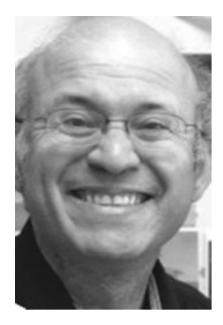
GERD SCHOLL (GERMANY)





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Adèle Seyrig is trained as a designer and holder of a master's degree in local development project management. After working for various European projects for the development of design and design management among public institutions and enterprises, Adèle specialized in the implementation of design tools and methodologies for public institutions. Through consulting and supporting various projects, she has developed her experience working on issues ranging from the renovation of public action to new sustainable food system, rural development or social innovation.



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Retired after twenty two years in Economic Development Unit at Tameside Council Greater Manchester

Now writing a dissertation at Salford University [Manchester] on public sector food procurement and sustainability. This is widely defined as environmental – minimizing pressure on the planet – economic – creating opportunities for small producers – and social – providing nutritious food for consumers.



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Strandbakken (1957) is a sociologist. He got a Magister degree from the Univ. of Oslo (1987) for a thesis on Protestantism and early capitalism in Norway. His PhD is from the Univ. of Tromsø (2007), for a thesis on environmental aspects of product durability. He works for SIFO since 1992, adressing themes like energy use, eco labeling, product durability, democratization of nanotechnologies.

# CORPUS PARNERS

All about the CORPUS partners



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#### INSTITUT FÜR ÖKOLO-GISCHE WIRTSCHAFTS-FORSCHUNG

(INSTITUTE FOR ECOLOGICAL ECONOMY RESEARCH) (IÖW), GERMANY

The IÖW is a leading German research institute on ecological economy research. It develops strategies and courses of action for sustainability – for an economy that secures a good living and protects its natural resources. The IÖW is non-profit public limited company. Its clients and patrons come from the German Federal Government, federal states, local authorities, companies, foundations, institutions of the EU and the UN.

WWW.IOEW.DE



#### BUNDESMINISTERIUM FÜR LAND UND FOR-STWIRTSCHAFT, UMWELT UND WASSER WIRTSCHAFT

(BMLFUW), AUSTRIA

The general responsibilities of the Ministry (BMLFUW) are mainly to prepare drafts of laws and ordinances, to implement EU legislation, to coordinate future-oriented planning and to give expert opinions on federal laws drawn up by other Ministries or provincial laws. The tasks of the BMLFUW in the specific field of environmental protection are air pollution control, water management, the environmental impact assessment, research in the field of environmental protection, information and training, waste management, remediation of contaminated sites, matters concerning species protection, nature and landscape protection, the protection of ionising radiation, general nuclear coordination and matters concerning the trade in toxic substances.

WWW.LEBENSMINISTERIUM.AT



## COPENHAGEN BUSINESS SCHOOL

(CBS), DEPARTMENT OF INTERCULTURAL COMMUNICATION AND DEVELOPMENT (DICM), DENMARK

The Copenhagen Business School (CBS) is the leading Danish business school – and due to its 15.000 students and 900 in permanent staff – one of the three largest business schools in northern Europe. Built in 1917 as a privately financed institution, CBS became part of the national university system in 1965. Its fifteen specialised departments cover a broad range of fields on economics and business administration, the social sciences, and the humanities.

WWW.CBS.DK







#### COPENHAGEN RE-SOURCE INSTITUTE

(CRI), DENMARK

The Copenhagen Resource Institute is a nonprofit consultancy conducting studies and analyses for private and public clients within the field of sustainable consumption and production. CRI is an independent body established by the Danish Environmental Protection Agency in 1997 to be the lead partner in the consortium behind the European Topic Centre (ETC) on Waste under contract with the European Environment Agency (EEA). Since 1997, CRI has acted as the Coordinator of successive ETC consortia on Waste and Material Flows. ETC on Resource and Waste Management and since January 2009 the ETC on Sustainable Consumption and Production (SCP) and hence has access to this valuable network of experts and policymakers. Clients of CRI are national governments, international organisations and private companies in Scandinavia and Europe.

## VRIJE UNIVERSITEIT BRUSSEL

INSTITUTE FOR EUROPEAN STUDIES (IES-VUB), BELGIUM

The Institute for European Studies (IES) is a Jean Monnet Centre of Excellence. It operates as an autonomous department of the Vrije Universiteit Brussel (VUB). The IES focuses on interdisciplinary research in European Studies and hosts advanced Master programmes, in particular on the role of the EU in the international setting. Within this scope, the IES operates as a think tank: it provides academic services to scholars, policy makers and the general public. The IES also fosters academic cooperation with a wide range of Universities and other public as well as private research institutions in Belgium and abroad.

WWW.IES.BE

## THE REGIONAL ENVIRONMENTAL CENTER FOR CENTRAL AND EASTERN EUROPE

(REC), HUNGARY

The Regional Environmental Center for Central and Eastern Europe (REC) is a nonadvocacy, not-for-profit international organization with a mission to assist in solving environmental problems in Central and Eastern Europe (CEE). The REC is legally based on a charter signed by the governments of 29 countries and the European Commission. It has its Head Office in Szentendre, Hungary, and country offices and field offices in 17 beneficiary countries in the region. During the last 17 years REC has played a key role in assisting the countries of the CEE region with accession to the EU and implementation of relevant legislation through its country office network.

WWW.REC.ORG

WWW.CRI.DK







#### PLANÈTE PUBLIQUE

(PP), FRANCE

Planète Publique is a young consulting company, with a specialisation in public policies, and a strong focus on environment and sustainable development. The company was set up in September 2006 to offer public administrations services in the field of evaluation of public policies and strategic consulting in the field of environment and sustainable development. The ambition of Planète Publique is to support public administrations for designing, implementing and evaluating sustainable public policies.

WWW.PLANETEPUBLIQUE.FR

## STRATEGIC DESIGN SCENARIOS

(SDS), BELGIUM

Strategic Design Scenarios (SDS) is a consultancy specialised in strategic design, scenario building, co-design with users and visualisation techniques. SDS is active in various fields such as sustainable design, interaction design, cognitive ergonomics, senior friendly design. SDS is consulting for industry and is involved in several cultural and networking activities. Offices are based in Brussels and offer facilities for co-design / interaction with users. The studio is equipped for video-sketching, rapid prototyping and product-service systems simulation.

WWW.STRATEGICDESIGNSCENARIOS.NET

## STATENS INSTITUTT FOR FORBRUKSFORSKNING

(NATIONAL INSTITUTE FOR CONSUMER RESEARCH) (SIFO), NORWAY

SIFO is a non-bias governmental institute that conducts consumer research and testing. The institute was established in 1939, and has been reorganised several times. The board of directors is appointed by the Ministry of Children and Family Affairs, which also provides the basic funding. However, SIFO has status as a special administrative public body, who are responsible for own income and expenses. SIFO has close relationship to the Norwegian Consumer Council and the Consumer Ombudsman.

WWW.SIFO.NO





#### WIRTSCHAFTSUNI-VERSTITÄT WIEN

(WU WIEN), AUSTRIA

With about 23,000 students the Vienna University of Economics and Business Administration is the EU's largest educational institution for business and economics, business law, and social sciences. The Research Institute for Managing Sustainability (RIMAS) at the WU Wien conducts research and policy consulting projects covering interdisciplinary issues such as Sustainable Development Strategies and Indicators, Sustainable Consumption and Production, Good Governance and Corporate Sustainability.

WWW.SUSTAINABILITY.EU

### FINNISH MINISTRY OF THE ENVIRONMENT

(FIMOE), FINLAND

The Finnish Ministry of the Environment is responsible for environmental and housing policies, coordinating local authority planning, strategic administrative planning, the drafting of new legislation, and international cooperation in its field of activity. The MoE works to promote sustainable development, and aims to keep the environment safe and healthy, to preserve biodiversity, to prevent environmental degradation, and to improve housing conditions. The Ministry's vision is of an eco-efficient society and living environments that promote well-being.

WWW.YMPARISTO.FI

# CREDITS

All about the CORPUS consortium

## IMAGE **CREDITS**

All the snapshots of the future ave been designed by Strategic Design Scenarios, using original picture or a mashup of...

(Text about the principle of mashup used in the posters pictures (see François))

#### **FOOD**

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image 3: Strategic Design Scenarios

image 4: Strategic Design Scenarios

#### SUB-SCENARIO 2

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image 2: Strategic Design Scenarios

image 3: Strategic Design Scenarios

image 4: http://article.wn.com/view/

2012/07/07/

Organic natural items grabbing bigger sh are of supermarket s/

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image 2: Strategic Design Scenarios

image 3: Strategic Design Scenarios

image 4: Strategic Design Scenarios

#### SUB-SCENARIO 4

image 1: Strategic Design Scenarios

image 2: Strategic Design Scenarios

image 3: Strategic Design Scenarios

image 4: Strategic Design Scenarios

#### SUB-SCENARIO 5

image 1: Strategic Design Scenarios

image 2: Strategic Design Scenarios

image 3: Strategic Design Scenarios

image 4: Strategic Design Scenarios

#### SUB-SCENARIO 6

image 1: Strategic Design Scenarios

image 2: Strategic Design Scenarios

image 3: Strategic Design Scenarios

image 4: Strategic Design Scenarios

#### MOBILITY

#### SUB-SCENARIO 1

image 1: Gaia Carabillo, Saint-Gilles, Brussels

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image 3: Strategic Design Scenarios

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File:Nalou%C4%8Danv-Ocmanice city signs.jpg

#### SUB-SCENARIO 2

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image 3: http://1.bp.blogspot.com/-

rw3 E2DQhSo/Tg3r1bgi1ol/AAAAAAAAB7g/

ltrdFUfBtCY/s1600/cycle- lights.jpg

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#### SUB-SCENARIO 3

image 1: Strategic Design Scenarios

image 2: http://www.unitednetworker.com/us/

2010/08/12/mercedes-benz-buses-and-

coaches-at-the-63rd- iaa-in-hanover-in-2010/.

http://www.lamigermany.com/2011/10/berlinhauptbahnhof.html

image 3: Strategic Design Scenarios

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#### SUB-SCENARIO 4

image 1: Strategic Design Scenarios image 2: Strategic Design Scenarios image 3: Strategic Design Scenarios image 4: Strategic Design Scenarios

#### SUB-SCENARIO 5

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#### SUB-SCENARIO 6

image 1: Strategic Design Scenarios image 2: Strategic Design Scenarios image 3: Strategic Design Scenarios image 4: Strategic Design Scenarios

#### HOUSING

#### SUB-SCENARIO 1

image 1: <a href="http://vaumm.blogspot.be/2011/08/12-viviendas-sociales-en-paris.html">http://vaumm.blogspot.be/2011/08/12-viviendas-sociales-en-paris.html</a>, Strategic Design Scenarios

image 2: <a href="https://www.nantes.fr/cache/offonce/urbanisme-habitat/actualites-urbanisme/">https://www.nantes.fr/cache/offonce/urbanisme-habitat/actualites-urbanisme/</a>
2011 4/halles alstom

image 3: Strategic Design Scenarios image 4: Strategic Design Scenarios

#### SUB-SCENARIO 2

image 1: Strategic Design Scenarios, Solar Decathlon, <a href="http://">http://</a>

www.mauiphotographerblog.com/2010/11/ maui- family-portraits-preview-heise.html

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#### SUB-SCENARIO 3

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#### SUB-SCENARIO 4

image 1: <a href="http://www.smartlife.org.uk/success-for-fenland-pathfinders/dsc">http://www.smartlife.org.uk/success-for-fenland-pathfinders/dsc</a> 0139

image 2: <a href="http://www.wrnsstudio.com/blog/">http://www.wrnsstudio.com/blog/</a>

image 3: Strategic Design Scenarios image 4: Strategic Design Scenarios

#### SUB-SCENARIO 5

image 1: Solar Decathlon

image 2: <a href="http://www.wrnsstudio.com/blog/">http://www.wrnsstudio.com/blog/</a>

image 3: Strategic Design Scenarios

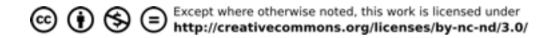
image 4: Strategic Design Scenarios, <a href="http://www.construplena.com.br/noticia.php?">http://www.construplena.com.br/noticia.php?</a>

id=7&categoria\_id=1, ?

#### SUB-SCENARIO 6

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