

Catalyzing Action: EU Sustainable Lifestyles Roadmap & Action Plan 2012-2050



Cheryl Hicks

Project Director, SPREAD Sustainable Lifestyles 2050

Team Leader, Sustainable Lifestyles

**CSCP - Centre on Sustainable
Consumption and Production**

About the Collaborating Centre on Sustainable Consumption & Production (CSCP)

Mission Vision & Mandate



CSCP 2.0 Sustainable Lifestyles, Products & Infrastructure, Entrepreneurship & Business Models

Rio+20: Global Networks on Sustainable Lifestyles, Innovation & Entrepreneurship

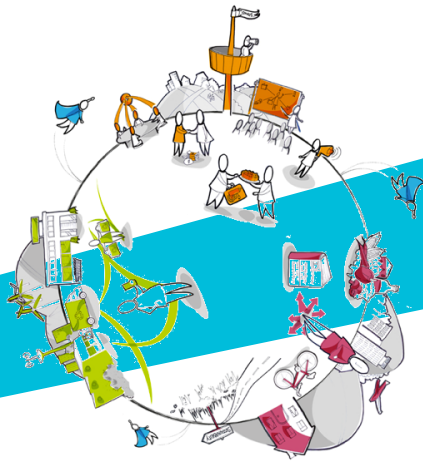
Investing in Sustainable Living



2012 / 2013



2012



2010 / 2011

UNEP Marrekech Process on Sustainable Consumption & Production



CSCP at a glance

CSCP Focus Areas & the way we work



Lifestyles



**Products &
Infrastructure**



**Business &
Innovation**

Action Research & Experimentation

Skills Development & Training

Networking & Match-Making

CSCP's Global Network

For Cooperation & Dialog on SCP

regional
& lokal



Europa
& national



international



Objectives

- Develop a **Vision** and **Scenarios** of possible sustainable living futures
- **Translate sustainability** into meaning for our diverse daily lifestyle options and choice
- Develop an **Action Roadmap** and suggest a **Future Research Agenda**

Project WP Elements

Baseline Research & Primary Household Research

Promising Practice via Social Platform & Online Community

Vision & Scenarios for SL

Roadmap of Actions for SL

Moving



Living



Consuming



Society



Entrepreneurship



Visualisation



Policy



Advisors



Online Community Platform



Human-Centered, Systemic & Participatory Approach

European Social Platform on Sustainable Lifestyles



What do sustainable lifestyles look and feel like – now and tomorrow?

MAIN GROUPS FORUM PHOTOS VIDEOS MEMBERS MY PAGE

MEMBERS

GROUPS

Research topics: 8 members, Health & society: 9 members, Consuming: 13 members, Moving: 7 members, Living: 8 members

SHARE YOUR PROMISING PRACTICE

Use this form to contribute your promising practice. To get input and to discuss, please share your practice also on the respective group. E.g. if your example is dealing with biking, please post a short description of it also on the Moving discussion forum. You can also upload a photo to your short description.

SHARE YOUR RESEARCH TOPIC

What research gaps regarding sustainable lifestyles can we pinpoint? Join the Research group and post your idea on the Research Forum!

WELCOME TO THE SPREAD

FORUM

CONTRIBUTORS: THE SPREAD SOCIAL PLATFORM

Our project has benefitted enormously from the many people from across Europe and beyond who became part of our social platform. These people have supported our work by sharing their ideas and knowledge during our conferences and workshops, both online and offline. Below is a summary of their contributions.

2011

May 2011 

Launch conference: The Future of Sustainable Lifestyles and Entrepreneurship, Hört, Germany

"People with similar interests are banding together to share and exchange less tangible assets such as time, space, skills and money." Laura Anderson, Collaborative Consumption

September 2011 

Working Group Workshop Series II: Envisioning the potential for new sustainable lifestyles and their enabling factors, Milano, Italy

"I think that the real challenge and possibility is to imagine a sustainable idea of welfare that we can define as active welfare, a welfare where the people are not individual and passive, but are capable to be active and to collaborate. It's a way to be part of the solution. I think that the sustainable services and the sustainable welfare is a welfare that is built by the same people with the help of experts, with the help of the organizations". Ezio Manzini – Politecnico di Milano

November 2011 

Future Scenarios and backcasting stakeholder workshop, Helsinki, Finland

"Creating scenarios with the backcasting methodology proved to be a very fruitful way of working. We started out drafting a vision for 2050. Then counted the time backwards step by step, working all the time on a very concrete level covering themes such as infrastructure and education without forgetting our vision of sustainable future for 2050." Workshop participant

2012

January/February 2012 

SPREAD People's Forum: Future Work-shops in Finland, Germany, Spain and Hungary

"I will be taking the aspect of collective consumption more into account. I hope to start right away with my family and give away everything I can to promote responsible consumption." Nuria, Future participant, Spain

June 2012 

RIO+20 United Nations Conference on Sustainable Development

"SPREAD Sustainable Lifestyles 2050. The Future of Sustainable Living, an European perspective" - Side Event at Rio+20, Rio de Janeiro, Brazil

"Social and technical innovation are important drivers for change that creates opportunities for sustainable, healthy and equitable lifestyles. Social innovation can stimulate and sustain lifestyle changes." Cheryl Hicks, SPREAD Project Director

October 2012 

Policy Workshop on the Research Agenda in Brussels, Belgium

"Design and visualization tools for devising future practices play an important role in demonstrating, communicating and connecting sustainable lifestyle solutions." Oksana Mont, Professor, International Institute for Industrial Environmental Economics at Lund University

November 2012 

Final Conference "Catalyzing Action: EU Sustainable Lifestyles Roadmap & Action Plan to 2050" in Brussels, Belgium

The highly interactive conference will bring together policy makers, business, civil society, researchers, designers and many others in Brussels. For the first time, the SPREAD Sustainable Lifestyles 2050 European Social Platform project will present the roadmap and action plan for sustainable lifestyles from today until 2050.

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Scenarios for Sustainable Lifestyles

2050:

From Global Champions to Local Loops



2015

2020

2030

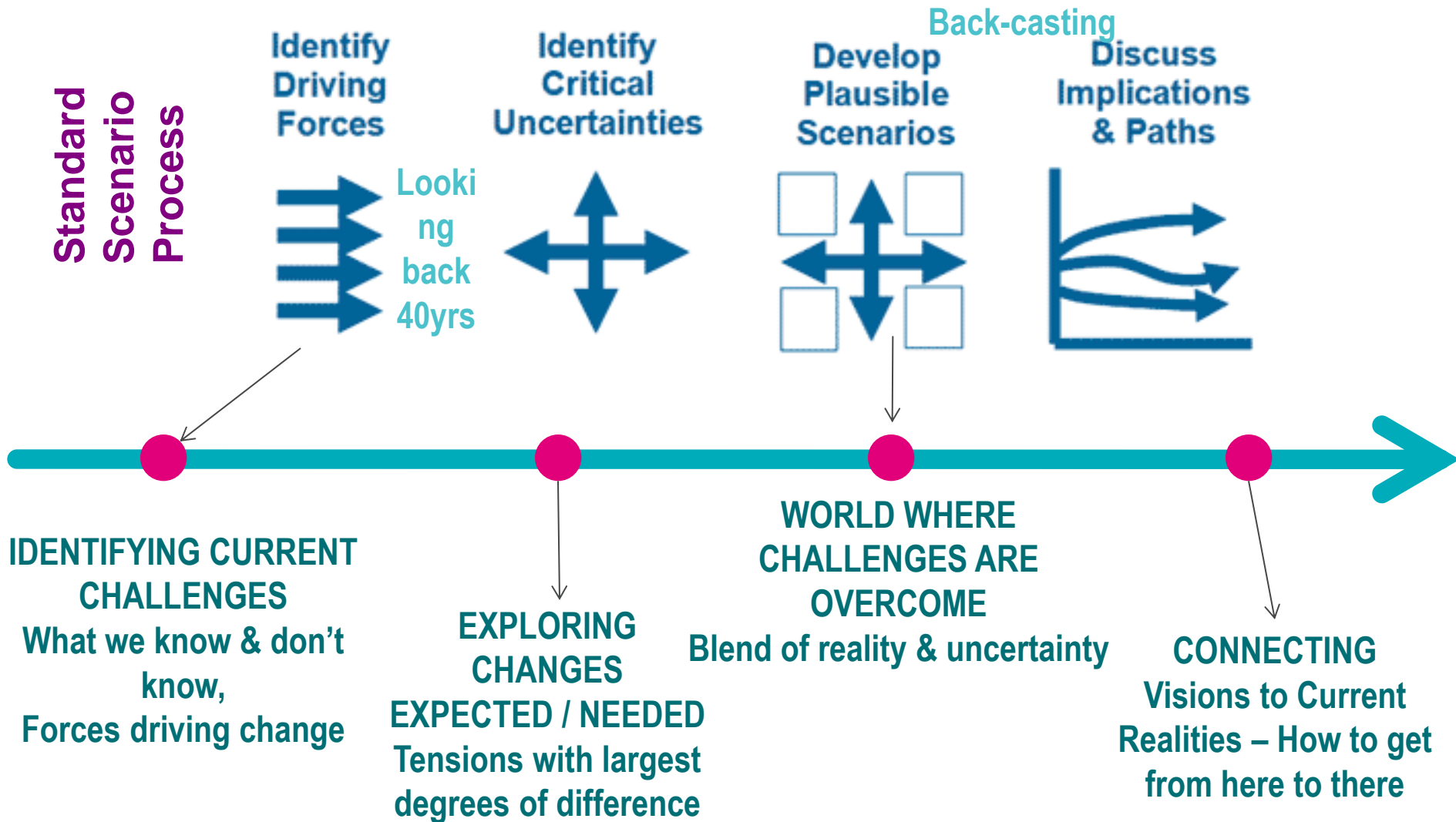
2040

2050



2050?

Scenario Development Process



Deliverable 1 – Current Challenges

Understanding the impacts of our current lifestyles

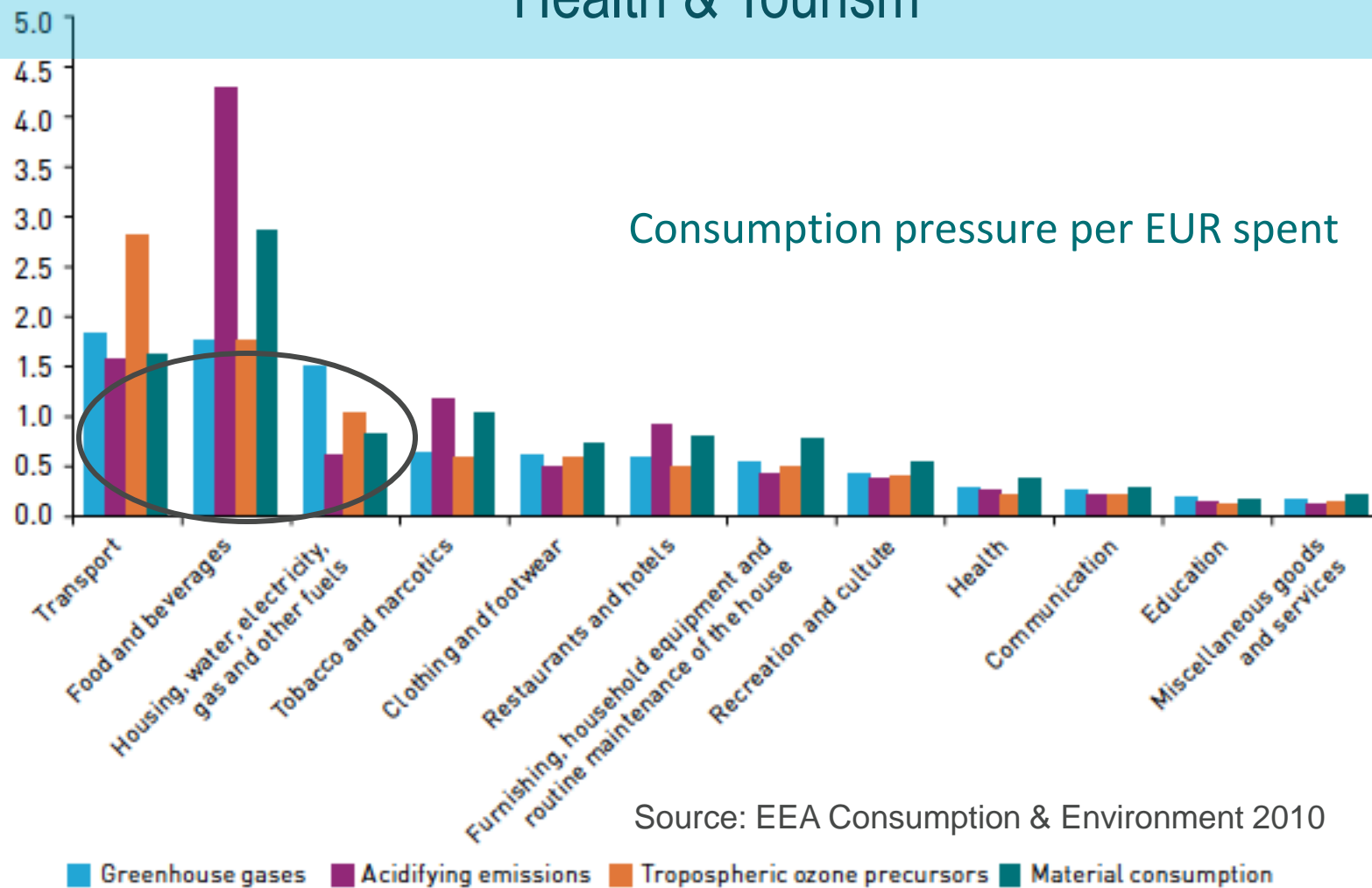


Today's Facts & Tomorrow's Trends



Food, Mobility, & Housing

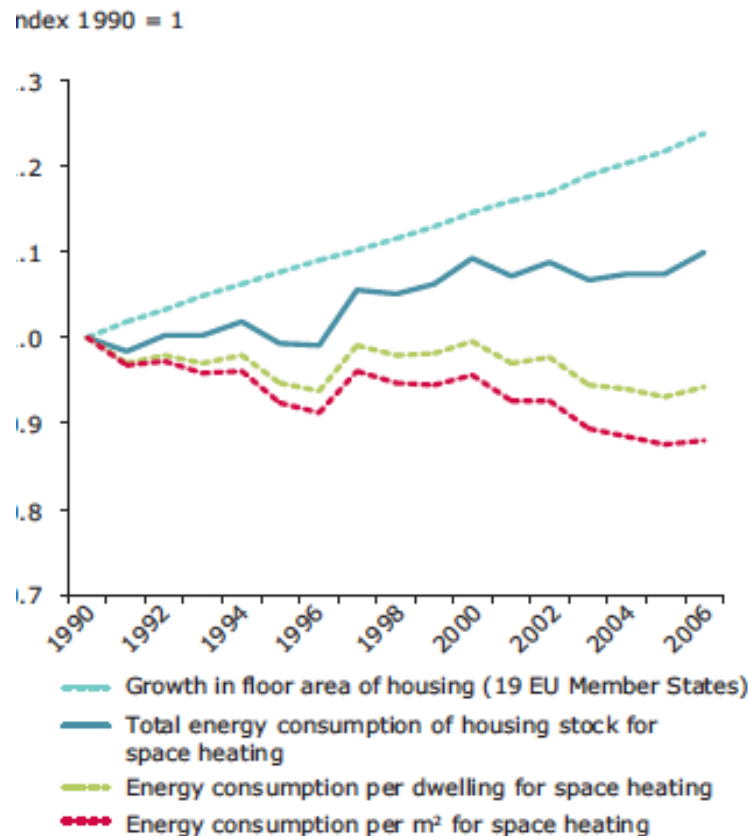
Health & Tourism



Source: EEA Consumption & Environment 2010

Housing – energy use

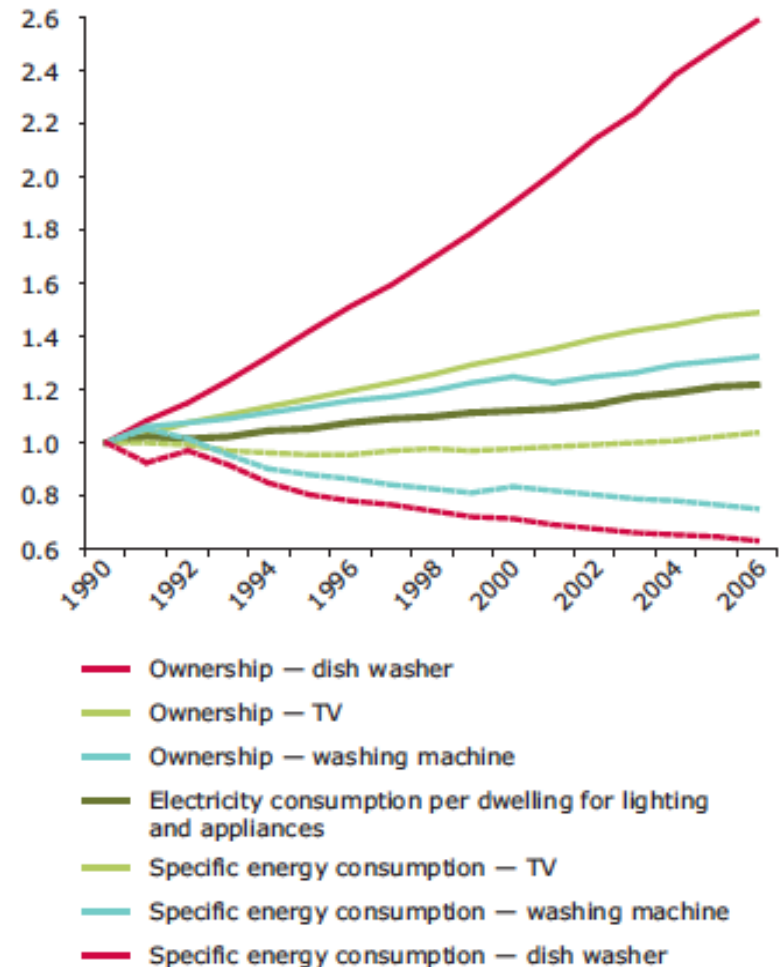
Figure 5.2 Trends in heating energy consumption and energy efficiency of housing, EU-27



Source: Odyssee database, 2010.

Figure 5.3 Trends in appliance energy efficiency and ownership, EU-27

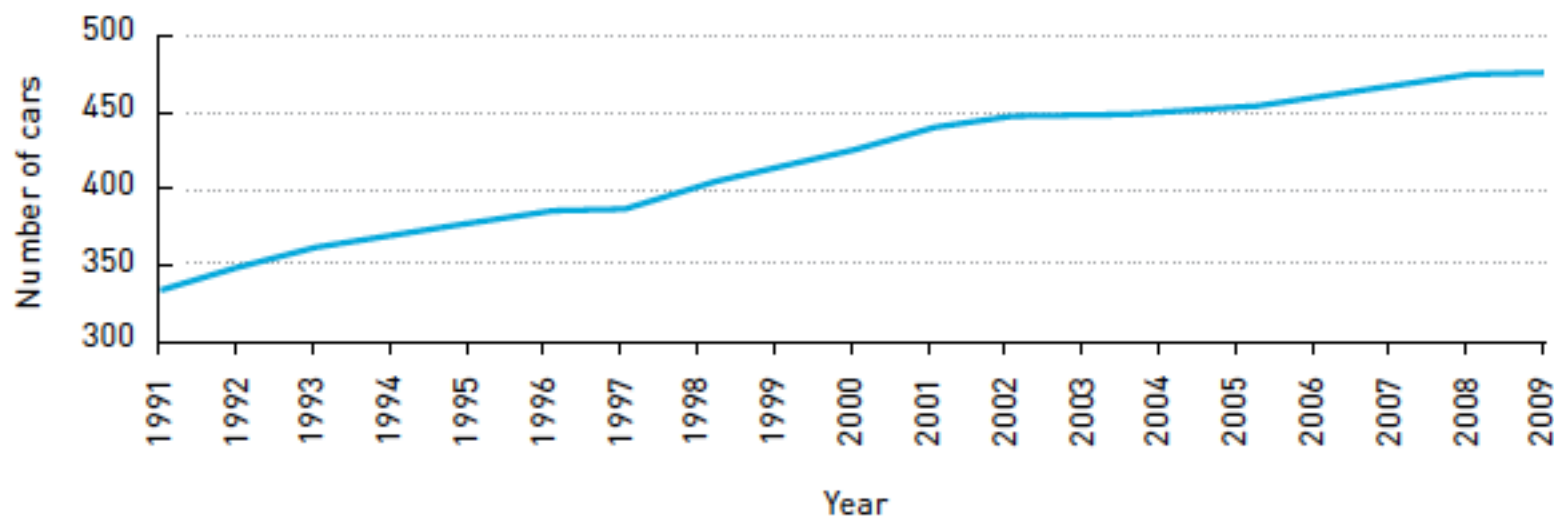
Index 1990 = 1



Source: Odyssee database, 2010.

Mobility – single car use dependency

Figure 13 Number of passenger cars per thousand inhabitants in the EU27

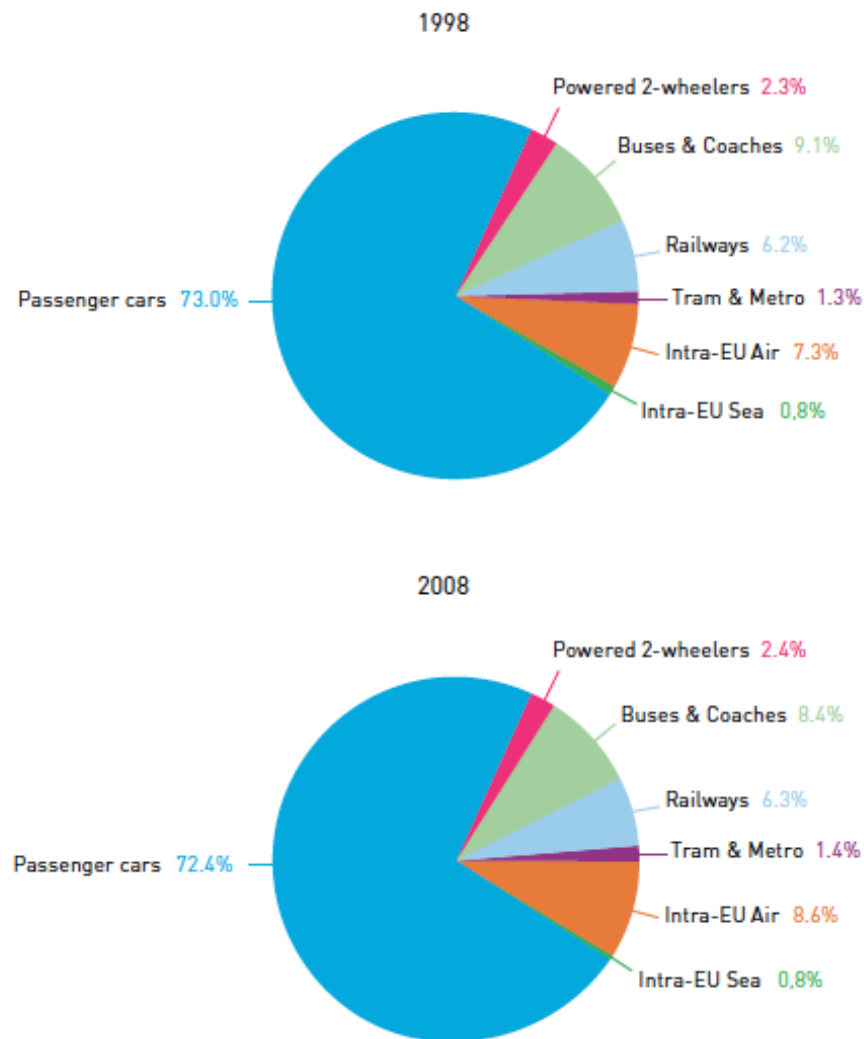


Source: EUROSTAT

Mobility

- increase in passenger cars '98-'08

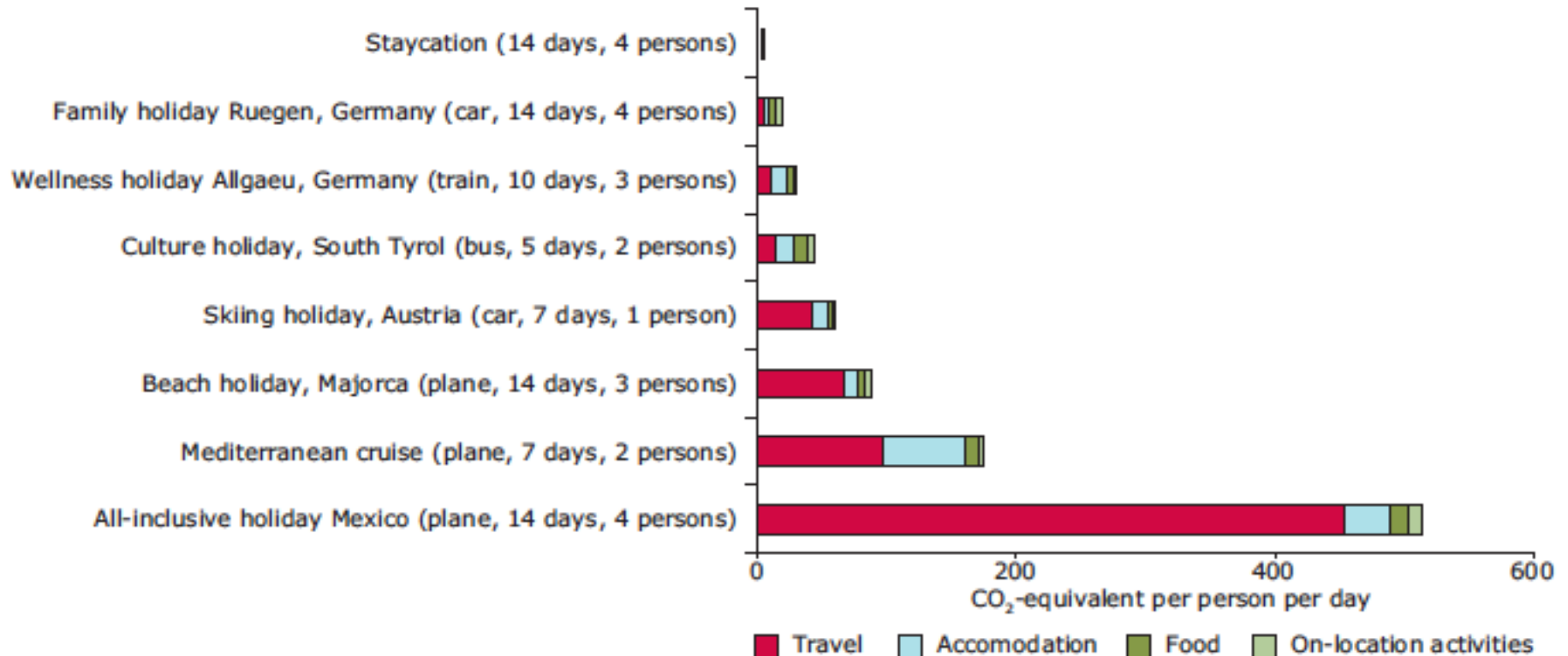
Figure 14 Modal split in intra-EU27 passenger transport in 1998 and in 2008



Source: EC 2011b, Eurostat, DG MOVE.

Mobility & Tourism – long haul air travel

Figure 7.2 GHG emissions for some types of holiday trips from Germany, CO₂-equivalent per person per day



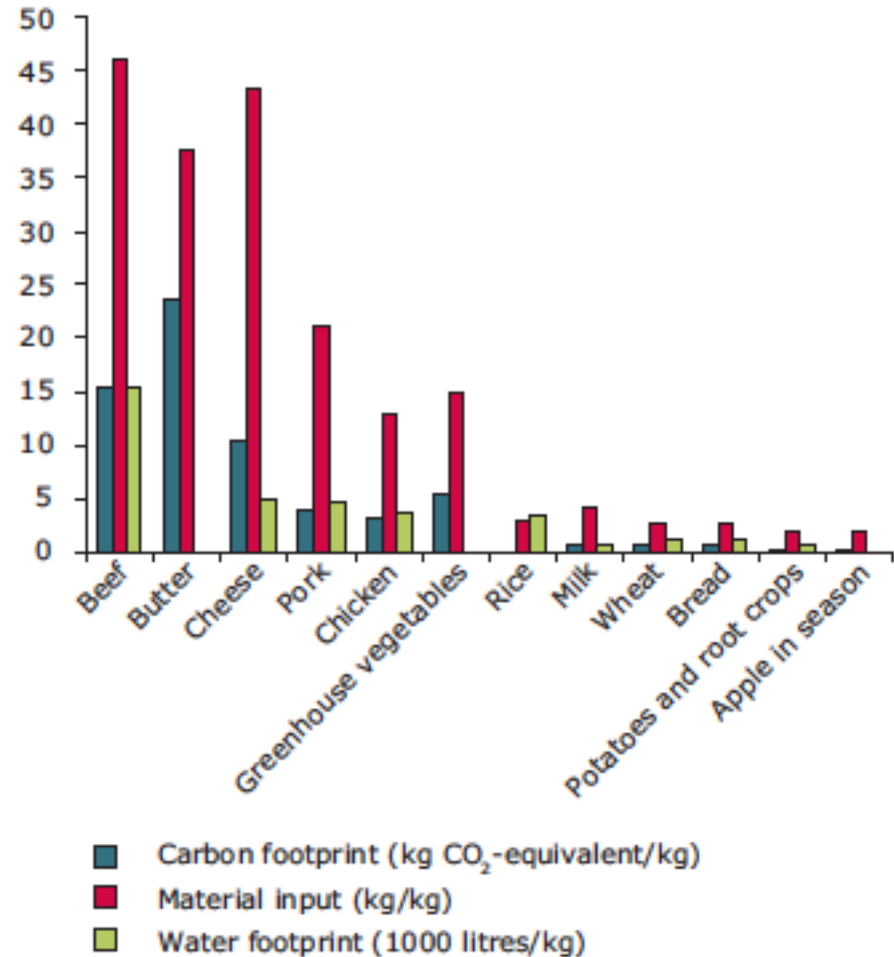
Note: Staycation means a holiday at home with holiday activities locally.

Source: WWF, 2009.

Food – meat & dairy

Figure 4.2 Carbon, material and water footprint for different types of food

Kg or 1 000 litres respectively



Source: Carbon: Angervall et al., 2008; Danish EPA, 2006; Fritsch and Eberle, 2007; Hirschfeld et al., 2008; Williams et al., 2006; Århus University, 2007; Material input: Kotakorpi et al., 2008; Water: Water Footprint Network, 2010.

2011 SPREAD Baseline Research: Unsustainable Lifestyle Trends & Hot Spots

40-60 tonne EU lifestyle

(total resource use)



Food: Meat & dairy - *24%* of all food impacts
(acidification emissions & material use)

Housing: Heating/cooling, water use, appliance & electronics use - *40%* of *total energy*

Mobility & Tourism: Single car use (*35%* increase)
Air travel (*9%* increase)

Health & Well-being: obesity (increased intake of sugars),
heart disease (fatty foods and smoking)
cancers (exposure hazardous chemicals)

Deliverable 2 – Current Trends

**Recognizing citizen movements
& social innovation**

Identifying promising practice

Emergent Promising Practice - EU

Consuming

INTELLIGENT FASHION COLLECTION

Chiara, 27, stylist

"...I've just launched my third collection! Well, it's not really my collection since I work in close contact with a team of doctors and engineers. It is a stylish fashion collection of cloths, body jewellery and underwear that are extremely functional and smart for everyday life wellness. Clothes can easily be changed in shapes and colours, so to fit with the diverse needs of the day and the seasons. Underwear and body jewellery are thought to check and regulate body functions. The need of washing and ironing has been reduced thanks to technologies. My clients are enthusiastic and now we are designing a new collection for kids..."

How does it work?

- pre-a-porter fashion makes a point of value in creative multifunctionality and transformability: size and shape of the cloths are designed to be personalised and be fully modular and re-combinable; convertible, non-obsolete as other are, thanks to its smart vision

Comments



Consuming

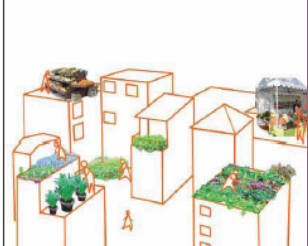
URBAN FOOD DISTRICT PLANNING

Martha, 36, mother of a 3 children family

"...we have the chance to live in a city where the municipality has decided to introduce the food district planning initiative. Our food mix must be at least nearly 50% locally produced and 10% self-produced among neighbours: garlic is growing on the balcony, cucumbers downstairs, tomatoes come from neighbours' vegetable gardens, commuters bring fresh dairy products from suburban areas into downtown. I still go to local supermarkets, once in a while I may buy some imported food..."

How does it work?

Comments



Living

URBAN WELLBEING INDICATORS

Ulla, 22, student

"...I have the privilege of studying in a town that is day-by-day more shining for its wellbeing! On my way home, today, I was astonished by the brightness of the urban sculpture in the square: wow! it seems that our capability of saving resources is dramatically increasing as well as overall domestic happiness. This is the town where I want to live and work in my future. It is so beautiful and makes me so proud!"

How does it work?

- the overall resource consumption and happiness factor is calculated and shown in real time in the public spaces of the city, thanks to urban sculptures and installations that raise public awareness about effective sustainable performance and capability to produce it
- buildings or surfaces display web contents (tags, pictures, tips) according to a semantic search engine. People can ask the city tells and shows how it's feeling or it gives advice about life today;
- if a city performs well, the more it is made beautiful and by its sculptures and sensitive art pieces in public space. This is cities in healthy competitions.

Comments




Moving

HIGH EFFICIENCY INTER-MODALITY

Jimmy, 54 years, manager

"...this week was busy. From Boston to Washington DC with the high speed train, then to Jacksonville and back. I didn't really feel like changing from one city to the other: In Washington I directly went with an e-bike from the platform to the client. I had to make an important call and so I left the bike on autopilot. In the afternoon I had to make it to Jacksonville, but my meeting went on endlessly. Fortunately the train operator organized me a car-pooling for the train I missed which took me right in front of the office..."

Comments



Society

RESPONSIBLE PATIENTS

Uliana, 21, student in chemistry

"...I've discovered this screen diabetes I monitor it through a sensor installed in my arm. It is constantly watched for my hospital and it rings my phone when insulin is low. I'm constantly checking it's a relief and I can forget about it in my daily living. But when it's really helping me to live like this, I'm changing because it's that this monitoring application is provided by my cooking club. I always need to cook, exchange recipes and create new dishes... Now I do it for and with my diabetes community..."

How does it work?

- integrated systems of patient monitoring and automated health care facilitate daily living for patients with life-changing diseases;
- such self-medication systems are transparent for the patients that could enjoy good normal life;
- systems are also designed to put the patient in an active and learning position, turning up to better disease and therefore developing more responsible attitudes.

Comments



Moving

REST: IMMOBILITY LIVING

Kiberto, 37 years, employee and married

"...This year with my wife we decided to take part in REST: the Reduced and Sustainable Transport training program. The idea is simple: make your life better where you are instead of striving to escape for leisure and holidays. We did not change our life a lot in fact but our mindset: I began to read the books I piled-up for years on the shelves of my library and my wife started art research instead of seeking for week-ends and mini-trips and we have been saving up our allocated mobility carbon credits for the last 3 years for a slow trip in China..."

How does it work?

- mobility carbon credits limitation per person and per year;
- promotion of low transport intensive activities and travel dieting programs;
- limitation to campaigns promoting mobility from holiday travel to urban journeys;
- development of slow tourism based on boat travel and bicycle.

Comments



Society

CLEAN MONEY

Andrea, 37-year-old, father of the 3 children family

"...taxes on personal income rose like mad to cover droughts here and tsunamis there and catastrophes after silly urbanization projects in mega-cities: now I prefer to earn less, with green and fair investments but I want to know what my money is used for and I want to be able to judge myself if the projects financed will be good or not for the future of my kids..."

How does it work?

- huge costs induced by bad sustainable management and catastrophe related increases induce people to pay more and more attention to what is done with their money;
- after many financial crises due to lack of investment regulations, transparency is the norm that also benefits sustainable projects;
- sustainable responsibility, ethical wealth and fair banking criteria is the norm on the financial market; investments are made only for sustainable proposals.

Comments



Society

GREEN GYM

Bob, 28-year-old, architect

"...we took part this week-end in the Patagonia harvesting rally: I ran so much carrying wheat sheaves, oh my god I was exhausted. I am accustomed to one hour of gym-plotting here in the agricultural public park nearby. It's a classic orchard gym organized with all Decathlon sets that provide us with a third of our fresh veggies in summer. But here, the whole city was taking part in the rally, carrying the wheat to the mill. And this way, city bakeries make bread all year... In winter, or when it rains, I go to a regular fitness centre instead, where I exercise to produce energy or to purify water."

How does it work?

- sustainable active life turns normal gyms into functional sport centres with different goals, such as producing energy;
- conventional gym sports evolved into growing food activities (self-production), doing gym in a natural farming place instead of indoors, taking part in plotting or harvesting, aerobic cleaning activities to the rhythm of music.

Comments



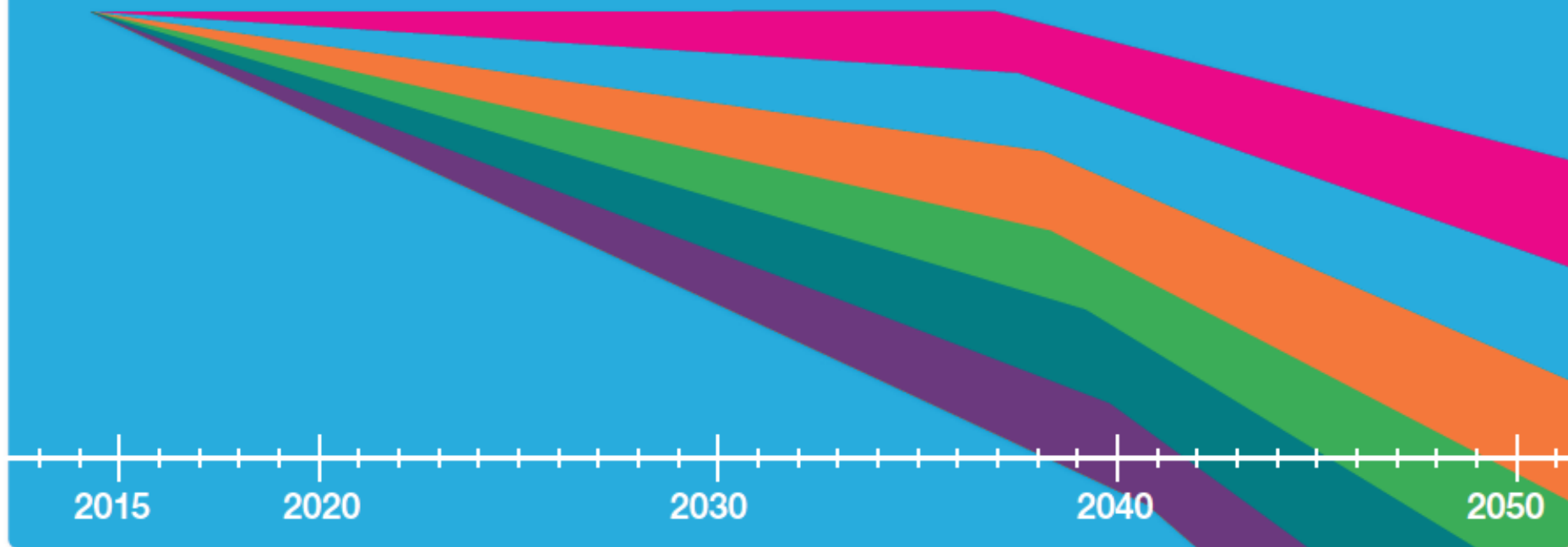
Deliverable 3 – Key Drivers & Barriers

Understanding behaviour drivers & aspirations

Defining a sustainable lifestyle in material terms

iFuture

– The Diversity of Sustainable Lifestyles



D7.3 People's forum workshop summaries



Funded under Socio-economic Sciences & Humanities

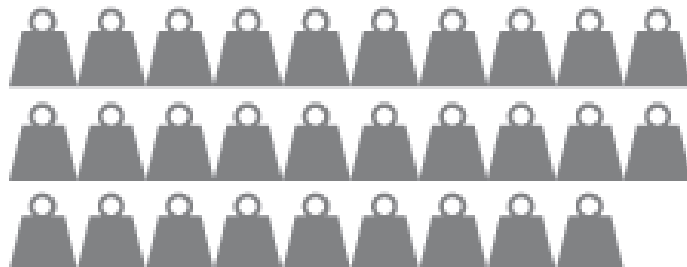
Introducing...

The Sustainable Lifestyle Material Footprint

THE AVERAGE EUROPEAN LIFESTYLE, TODAY (PER YEAR)

- 10 000 km car
- 2 000 km public transport
- 546 kg of food with 19% meat, fish and seafood
- 37 m² person heated living space
- Resources for other consumption items and leisure time

– MATERIAL FOOTPRINT OF ABOUT
29 000 KG



SUSTAINABLE EUROPEAN LIFESTYLE, 2050 (PER YEAR)

- 10 000 km by means other than private automobile
- 500 kg of mostly vegetarian food
- 20 m²/person in a zero-energy house
- 1000 kWh of wind and solar power
- Fewer but sufficient household appliances and other equipment
- Some resources for leisure time and other purposes

– MATERIAL FOOTPRINT OF ABOUT
8 000 KG





A new European-wide network of "villages in towns" is established. Members of the network establish urban farming cooperatives in their neighbourhoods and start negotiating with municipalities, real estate owners and inhabitants for access to under-used land for farming purposes.

Rosa put up a local gastronomy guild that became her life work and turned into lunch canteen.



"This is our guild canteen where people of the town enjoy their lunches and dinners."



When Rosa first moved to the town, she bought a big flat. Soon she started to rent out some of the rooms for her guild's visitors and eventually to her guild colleagues. Also taking care of the daily routines became much easier.

HOUSEHOLD GOODS

FOODS AND BEVERAGES

EVERYDAY MOBILITY AND TOURISM

53 228 kg

ELECTRICITY AND HEAT

7 990 kg

When one of her colleagues mentioned to her about a local solar panel expert, skilled to fit the panels to the conditions in Spain, she started to use his services regularly.

2/3 of the inhabitants live in neighborhoods that are defined according to a profession and a guild. These neighborhoods also form the basic political units that have the right to elect their own representatives to the regional council.

BUILT HOUSING

2012 2020 2030 2040 2050

ROSA



EUROPEAN COMMISSION
European Research Area
Funded under Socio-economic Sciences & Humanities



Sustainable Lifestyles 2050

www.sustainable-lifestyles.eu

Deliverable 4

– Journey to the Future & Backcasting to the Present

**Envisioning more sustainable futures
Supporting sustainable living**

**Societies where current challenges
to sustainable living have been overcome**

Scenarios for Sustainable Lifestyles

2050:

From Global Champions to Local Loops



2015

2020

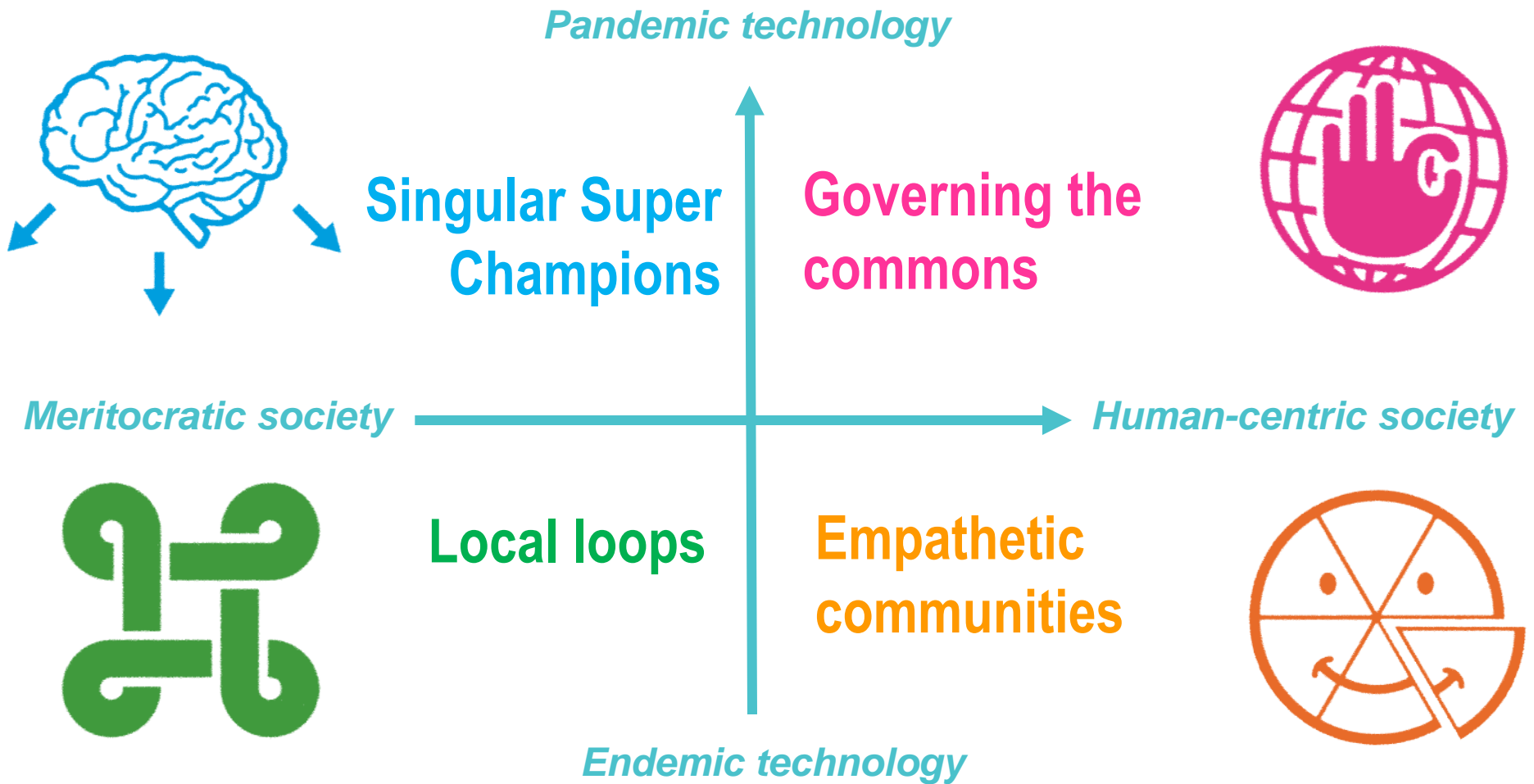
2030

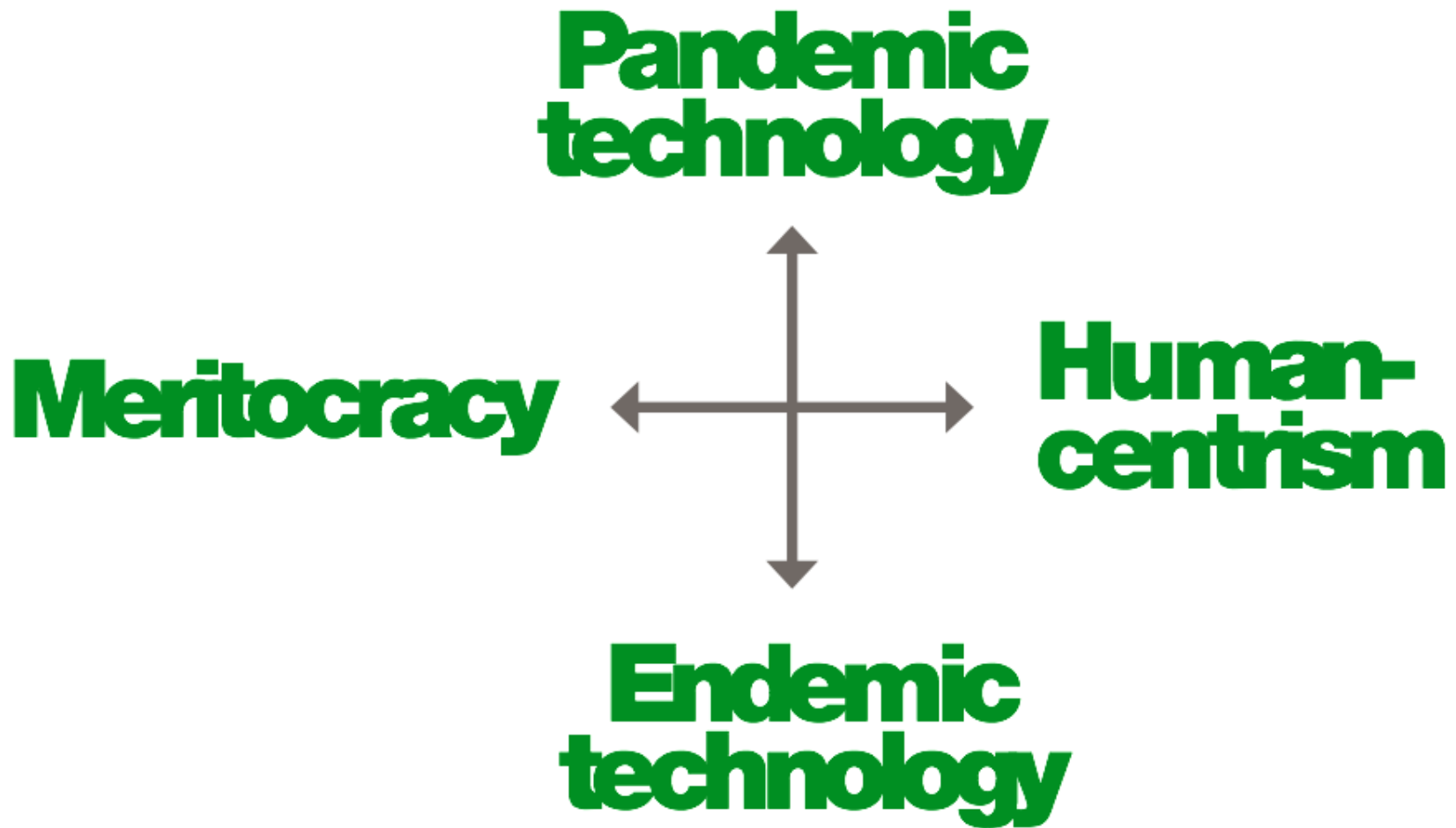
2040

2050

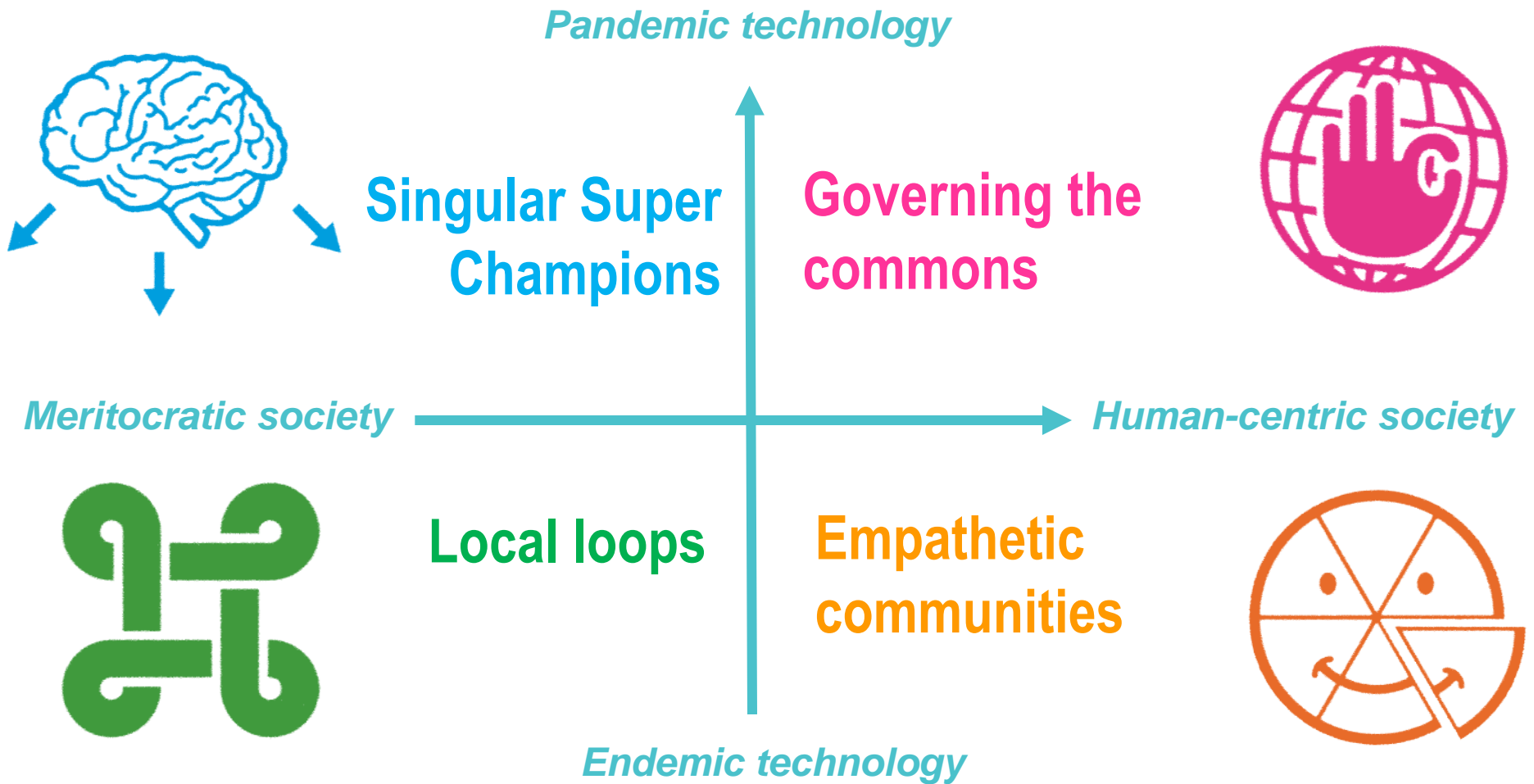
Four scenarios 2050

Societies that support sustainable living





Four scenario landscapes



The Singular Super Elite

Society will need to reward those who give more than they take.

The pressure on the welfare state will be too great.

Well-being business is growing. people will sought after happiness and better life and pay more for it.

A few large corporations run the global food chains. They have a long strategic approach and they understand that unhealthy food will reduce their market size.

We will need norms and legislation set by politicians.

Meat is not necessary for people. It has become very expensive luxury good, most people do not have it as often as twice a week. Finland produces meat but for export purposes.

Singular Super Champions scenario narrative – how did it all happen?

- The European Green New Deal
- Transparency gets the prices right
- The upcycling economy
- Learning, not earning

These drivers are depicted as events on the timeline.

What is life like in Singular Super Champions

What changes between 2012 and 2050?

Education: Embedded into everyday life and practices, offering instead of short cycles in the beginning of life. Individualised and personalised. Basis of welfare provision.

Work: Human resources highlight needs. Talent is concentrated in global organisations. Entrepreneur vs. super talented multinational class.

City: 10-15 highly urbanised metropolitan in Europe. Extremely dense. Lots of new infrastructures. New specialised areas of excellence.

Health: Personalised public healthcare. National diets. Well-being.

Living: Location compensates size of the flat. New materials and designs. Prior drives clearly.

Food: Price and health-efficient diet. Large-scale organic production.

Mobility: New rail systems within and between metropolitan. Personalised rapid transport systems. Shared mobility solutions. High prices.

Consuming: Meetings and activities get consumed more than products. Education and self-employment. Price motivation.

Economy: Large multinational firms. Efficiency. Competition. Four industrial modules. Standardised transparent data.

Driver of security: From technological progress. Transparency. Surveillance. Individual choices. Thought leaders.

Lifestyle: Investing in new education and training.



"We have carefully prepared a sustainable trip to China. We are going by boat and are starting to learn the language so that we can communicate with the people who will host us there."

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In order to live ecologically and economically, I have chosen the 'energy budget card' of master Shuang Shuang. I will follow his training so that my ecological footprint becomes as light as his, and I will save money while doing so.

Gatekeepers for lifestyle changes



Manufacturing and retail companies

...provide transparent lifecycle data on their products.



New digital service providers

...help consumers to translate open lifecycle and footprint data into smart consumer choices.



Super Champion lead user group

...change the status system behind consumer culture and spread best practices on sustainable lifestyles.



Urban planners

...create urban environments that attract people and enable dense, sustainable living.



Dietary experts

...provide detailed information on nutrition, resource and cost-effective diets.

Six-pack of most influential lifestyle triggers

1. Transparent product data allows people to understand the environmental cost of their personal consumer choices and their overall lifestyle. Comparing the sustainability of choices of food, housing, mobility and consumer goods in 2050 is as easy as comparing prices was in 2012.
2. Road pricing and the overall rise of transportation costs change housing preferences. People prefer short commuting distances, well-serviced neighbourhoods and a better access to spaciousness.
3. Improved design of public spaces and flats draws people to densely populated areas. In all countries, areas around city centres turn into the most desirable places to live. People are willing to trade off a spacious dwelling for the status and comfort provided by a flat in a central location.
4. New dietary alternatives emerge from a combination of rising food prices and increased health consciousness. Media, primary education and catering companies help environmentally rational diets become a mainstream lifestyle option.
5. Apps for personal informatics, educational software, online learning networks and a diversified educational services sector become attractive and influence people's spending. As a result, there is less desire for material goods, as more people have excellent skills in making rational choices.
6. New upcycling approaches to consumer goods have changed product lifecycles. All material goods are sold with an additional deposit on their material resources, which encourages people to return used materials to the retailer.



The average material footprint of a European in 2050 in the Singular Super Champions scenario (2000 kg per person in a year) compares to the average material footprint in 2012 (2000 kg).



EUROPEAN COMMISSION
European Research Area



SEVENTH FRAMEWORK
PROGRAMME



Sustainable Lifestyles 2050

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Governing the Commons



Behaviour change due to increased global solidarity and awareness of the need for sustainable development, technological innovation

Communities of interest to share knowledge.

We will need to be investing heavily in transport infrastructures as people become increasingly interconnected.

I believe that most of the major technological innovations are already underway, and while these will become more universally available, we will be relying more and more on human interactions and relationships

The interconnectedness of the global community requires an increase in global solidarity and appreciation of unity in diversity

As cheap labour no longer exists anywhere in the world.

Governing the Commons

Governing the Commons scenario narrative – how did it all happen?

- 1 The 3rd industrial revolution
- 2 Ubitech economy
- 3 Better work creates well-being
- 4 Wikidemocracy

These drivers are depicted as events on the timeline.

What is life like in Governing the Commons?

What changes between 2012 and 2037?

Education	The main focus of education is on Peer-to-Peer skills sharing. Learning by doing is emphasized, in flexible ways. Peer-to-Peer learning enables instant feedback loops, which accelerate sharing of knowledge. Focus on informal education where the real world.
Work	People's sources of income have fragmented. Compensation use of skills are valued. Everyone has something to offer. Work sharing projects include micro-tasks, manufacturing and being useful to one's peers.
City	Cities are based on already existing infrastructure. Office and school buildings have been converted into flats and job. Urban experiences are enriched by augmented reality. People find personalized solutions to fulfil their needs and enjoy the physical and virtual layers.
Health	Peer-to-Peer networks support a characteristic of both preventative and reactive health care. Public funding is provided over corporations. A wider variety of healthy lifestyles have become mainstream. Digital feedback tools are used by one.
Living	People live in small flats and work in many office flats. The digital layer is key to provide people with quality in their live. Smart homes, modern furniture and digital services characterize dramatically.
Food	Food production and distribution are managed by global food systems and small local change movements are in place. A multitude of diets are offered and energy intake is reduced. Vegetable shares and synthetic meat become affordable.
Mobility	Mobility is greatly reduced by the use of digital tools. Commuting is minimized and the combination of new traffic infrastructure necessary. Smart public transit and ride and ride sharing are the main forms of transport.
Consuming	3D-printing personalizes consumption. Material consumption is reduced by using modular appliances, which enable DIY repairs and upgrade of products. High degree of appliance personalization, virtual consumption and negligible risk from new design and production solutions, leading to reduced for overall number of appliances.
Economy	Micro-tasks characterize economic organization. New businesses are created in and by stable rich environments. Open source, open data and free distribution of information drive new innovation. Personal optimization, DIY, peer services and manufacturing are drivers of the new economy.
Energy & environment	Energy consumption is redistributed for sustainability in the new energy system. The environmental data becomes available. Energy sources are

"When I finish picking up and downloading files from several catalogues, I can just go downstairs and pick them up from the 3D printer space."

3D printing of self-organizing bodies

Gatekeepers for lifestyle changes



Consumer networks
...first organize into decision makers that affect local and global policies.



Agile marketing agencies
...make use of the peer information available in purchasing decisions.



Construction companies
...start selling small scale energy retrofitting services to homeowners.



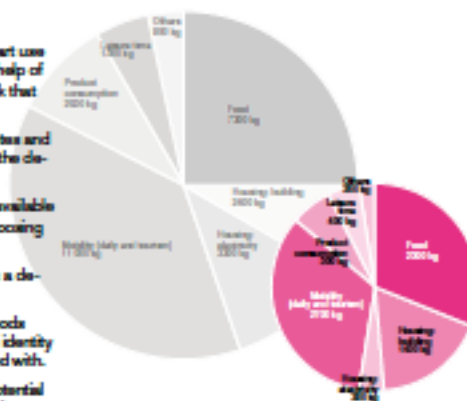
Gaming industry
...grows in significance and turns into a giant crowdsourcing mechanism that combines playing and work.



Smart mobility companies
...come up with personalized solutions that let people optimize their mobility based on their needs.

Six-pack of most influential lifestyle triggers

1. All appliances and buildings are equipped with the technology to advise their users on smart use and maintenance requirements. Smart, energy efficient use is the default option. With the help of diverse and plentiful data about their own and their peers' homes, people receive feedback that encourages them to repair their homes so they reach maximum energy efficiency.
2. Smart mobility services change the way people plan their time, and how they combine routes and modes of transport. These services help to optimize public transportation use and enable the development of vehicle and ride sharing schemes.
3. Ubiquitous technologies give rise to a new ecosystem of Peer-to-Peer—services that are available for people whenever they need or want them. These services with retrofitting homes or choosing sustainable dietary options, among other things.
4. A new generation of virtual reality and online communities becomes popular, which means a decrease in needs for large living spaces, furniture and even foodstuffs.
5. The scale up of 3D-printing changes the way people seek self-actualisation. Consuming goods designed and made by someone else is no longer the most elaborate way to express one's identity and style. Instead, people collectively design the goods they desire and want to be identified with.
6. Online networks built on a shared interest in lifestyle issues enable people to realise their potential and to constitute themselves as groups with political power. The example and support of other network members encourages experimentation with new sustainable lifestyle patterns. Gradually these networks and experiments grow into movements that start reforming the political agenda.



The average material footprint of a European in 2030 in the Governing the Commons scenario (6000 kg per person in a year) compared to the average material footprint in 2012 (25-300 kg).

Local loops



To eliminate the concept of waste means to design things – products, packaging, and systems – from the very beginning on the understanding that waste does not exist

Cradle-to-Cradle



- Peak-oil game-changer

- Rediscovery of local resources
- Local turn
- Craftsman attitude

There are also a number of caveats on the findings.

What is life like in the Local Loops?

What changes between 2012 and 2047?	
Education	Education is about transmitting and sharing skills. Craftsmanship and specialisation are promoted through mutual teaching and problem-based learning.
Work	Work is characterised by engagement with teams and collaboration within and among guilds. Needs met by applying similar thinking and formulating local solutions.
City	Cities are decentralised and formed into their own loops. Guilds working and living in the loops by their own strong characteristics or their loops.
Health	Work places provide health care and skilled services. There are basic rights that all regions agree to prioritise with regard to health care.
Living	Living in the loops is characterised by shared spaces, meeting infrastructure and networking systems. Guild members often live in the same neighbourhood.
Food	Food production and distribution are marked by locally optimised transportation and neighbourhood networks. Energy used for food production is optimised.
Mobility	Transportation is about reliability and cycling. Meeting infrastructure is optimised. Intensity mobility is combined into and services are home-delivered. Local tourism and long vacations are favoured by people.
Consumption	Consumption drives innovation to mass goods to reduce the environmental impact of appliances created through sharing solutions and replacement systems. Products are made with high-quality local materials and design. Durability of foreign goods is limited. All supplies are available.

Gatekeepers for lifestyle changes



Food, energy and construction companies

...focus on local alternatives and local markets to offer secure choices.



Profession specific networks and associations

...acknowledge their capacity and influence as experts and networks who have a shared responsibility to society.



Appliance industry

...tune towards business models that take local context into account and include repair in their products.

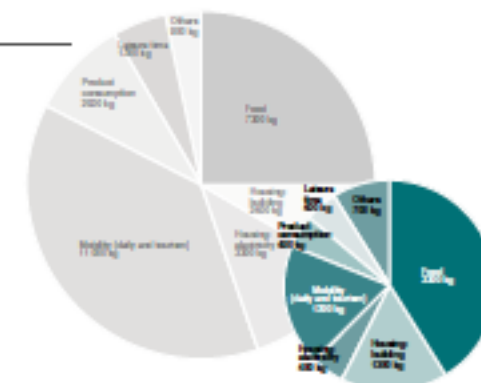


Service industry

...lease products that were previously available only as purchases and create a leasing economy.

Six-pack of most influential lifestyle triggers

1. Extremely high energy and food prices persuade people to focus their choices on local and secure alternatives.
2. Tight workplace and neighbourhood-based communities enable and encourage people to share space and equipment. The need for living space is reduced.
3. People live close to their guild peers. Ample service options mean minimal need to commute outside the neighbourhood.
4. People prefer appliances, furniture and clothes to be sold as services. Maintenance and adaptation services are improved and they significantly prolong the lifecycle of products.
5. Consumers can no longer make mistakes: policies built on scientifically backed environmental and health objectives eliminate bad choices.
6. People eat out more. Better food services ensure a healthy diet, adjust portions to optimal size, eliminate food waste and help people focus on their work and social life.



The average material footprint of a European in 2040 in the Local Loop scenario (4000 kg per person in a year) compared to the average material footprint in 2007 (20 000 kg).

Happy Communities



So, what this is all about is giving people more power and control to improve their lives and their communities.



We need people to act more responsibly, because if you take any problem in our country and you just think: 'Well, what can the government do to sort it out?', that is only ever going to be half of the answer.

– David Cameron

Happy Communities



Travel like a human.



EUROPEAN COMMISSION
European Research Area
Funded under Socio-economic

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Empathetic Communities

Empathetic Communities scenario narrative – how did it all happen?

- The system breaks down
- “We can” generation works together
- Public, private and people (PPP) – the new welfare
- Communitisation of urban planning

These drivers are depicted as events on the timeline.

What is life like in the Empathetic Communities?

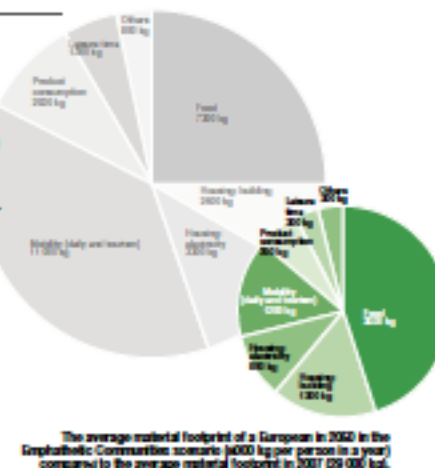
What changes between 2012 and 2050?	
Education	Education and learning are problem-based and collaborative-driven.
Work	What happens collaboratively in teams and people learn through making for input from colleagues. Merit or work is highly valued. What is neighbourhood-based and seen as contributing to the community.
City	Village life has spread to three villages. Parking lots are turned into places of food production. The public space gains great significance. Village and this village are key elements in the urban fabric.
Health	Perseverance of quality over quantity characterises the health-care system. This means that the meaningfulness of a person's lifespan is seen as more important than the amount of years lived. Local administration prioritises health-care and healthy living. Every municipality has a hospital. Healthy living includes shared preventative knowledge locally.
Living	Sharing opportunities value property values. People live in shared apartments and make use of shared systems.
Food	Growing food in urban farming circles means local food decreased. Food transportation costs are very low. In addition to production, high importance is also placed on food quality and distribution.
Mobility	Local mobility is emphasized and less road space is devoted for private vehicles. Old and new infrastructure is adapted for cycling.
Consumption	Consumption is general towards meeting people's basic needs. Buying, swapping and renting sustained private ownership.
Monetary	The economy is organized around the self-sufficiency of small units. Food production is prioritized. Deinstitutionalisation happens on the local level and high value is given to community activities.
Sense of security	Sense of security is generated by communities, shared circles, cooperatives as well as by health and food circles. PPP systems guarantee participation and sense of ownership in public and social affairs.

Gatekeepers for lifestyle changes



Six-pack of most influential lifestyle triggers

1. Rising energy and food prices combined with a long economic downturn lead to people becoming more interested in and aware of the structures that underpin their lifestyle patterns, as well as of alternative, cost-effective solutions to current food, housing and mobility patterns.
2. Do-it-yourself (DIY) farming, energy production and retrofitting solutions gain popularity among many of the unemployed. The internet and social networks help spread best practices quickly and create space for alternative economies.
3. New local partnerships empower people to shape their neighbourhoods to better facilitate self-sufficiency in food and energy production, and in different forms of communal consumption (shared use of tools, appliances and spaces).
4. Health ceases to be an individual issue and becomes a communal one. People practice preventive healthcare in workplaces and in neighbourhoods together with their peers.
5. New tools and services for interior designs make people think about their homes in new ways. The functionality and flexibility of homes are features that people in 2050 are able to compare and improve as easily as people used to compare living space in 2012.
6. Occasional shortages change attitudes and expectations. A reduction in food, living space, consumer expenditure, travel and other leisure time activities is compensated for by the richness of social life and a sense of purpose in one's work and communal activities.



EU Sustainable Lifestyles Roadmap 2012-2050

Pathways toward a sustainable 2050



2010s

ENERGY AND POWER - Meet increasing demand while s

Price of carbon in place, preferably on a global basis. Tax incentives / subsidies drive renewables e

Required to be on track for 2050
Energy R&D increases rapidly

Required to be on track for 2050
Major collection of international agreements on climate and energy. Not necessarily treaties, but perhaps bilateral and multilateral agreements



Required to be on track for 2050
Carbon has a price - cap & trade or carbon tax begin to transform electric power generation. Maybe through a comprehensive treaty or perhaps a series of multilateral agreements

Carbon Prices, R&D and international patent protection encouraging deployment of concentrated solar power combined heat and power, onshore wind

Required to be on track for 2050
Carbon sequestration funded for rapid deployment

BUILDINGS - Energy efficient and comfortable living an

Tough energy efficiency regulations begin

Approx. 40% of emissions are building related



Required to be on track for a sustainable 2050
Energy Efficiency (Buildings and Appliances)

- Implementation of mandatory minimum efficiency performance standards
- Revisit international standards periodically to ensure continuous improvement
- No delays in legislation of strong regulations and enforcement is the most cost-effective policy
- Key Areas of International Collaboration:
- Common standards set to discourage trade in sub efficient appliances.



Efficiency included in addition to building Fire, Safety and Health regulations and codes

Programmes launched to develop requisite skills and capacity in the construction sector, to monitor and record the implementation of energy efficiency, and to increase awareness among school children



MOBILITY - Low carbon

R&D and more deployment for low carbon mobility

Required to be on track for a sustainable 2050
Development and deployment of efficient internal combustion vehicles improve new-vehicle carbon intensity up to 30-40%, enabled by better policies and introduction of Electric Vehicles (EV) Plug-in Hybrid Electric Vehicles (PHEV)



Integrated urban planning, especially in the fast-growing cities, improves transport and allows for more choice among appropriate modes



Panama canal completed (2015 +/-), the maximum breadth of ships increases to 40m (from 32.25m), and max length to 366m (from 249m).



Required to be on track for a sustainable 2050
Transportation energy efficiency:

- Mandatory efficiency standards; eventually harmonized globally at highest efficiency level
- Incentives for new technology other than increasing size, weight or power
- Standards set for medium and heavy duty trucks (logistics, on-road efficiency)



Required to be on track for a sustainable 2050
Policy makers and industry partner to speed up research into and deployment of alternative biofuels and advanced ethanol

Required to be on track for a sustainable 2050
Policy makers and industry partner to speed up research into and deployment of alternative biofuels and advanced ethanol

MATERIALS - Closed-loop society

Accounting standards begin

Manufacturing emits more than one-third of all CO2
Iron, steel & cement account for half of these emissions
Chemicals and petrochemicals also make significant contributions



Required to be on track for a sustainable 2050
Global business and governments agree on a set of indicators & rules for accounting about resources, energy and materials. These rules establish the true cost of primary and secondary materials.

Global business begins to reduce product sizes, avoid waste in packaging & increase product lifetime

Validation of science

MacroVU® Analytics
Robert E. Horn, Stanford University
hornbob@earthlink.net
415-775-7377

Coming soon
...Nov 2012

www.sustainable-lifestyles.eu

Deliverable 5 – Vision to Action

Roadmap & pathways to more sustainable living in Europe by 2050

Must haves & milestones for different societal actors to enable sustainable lifestyles

Policy briefs



EU Sustainable Lifestyles Roadmap and Action Plan 2050

"PATHWAYS FOR ENABLING SOCIAL INNOVATION AND BEHAVIOUR CHANGE"

The transition to sustainable lifestyles: *Must haves & Milestones 2012-2050*

POLICY & GOVERNANCE PATHWAY
*Systemic inclusive and participatory
governance and policy decision-making*

ECONOMY PATHWAY
*Economies and monetary systems
support people and enable sustainable
living*

**SOCIAL INNOVATION & BEHAVIOUR
CHANGE PATHWAY**
*Opportunities in understanding
sustainable lifestyle diversity & re-
thinking the good life*



Key pathway themes at a glance

- ✓ Human centred, systemic and participatory approaches to policy making to promote sustainable living
- ✓ Individual resource consumption targets incentives and rewards (towards 8000 kg lifestyle footprint)
- ✓ Improvements in policy assessment tools to identify milestones of achievements towards more sustainable living
- ✓ National ombudspersons for future generations and parliamentary committee on "protecting the future"

actual trend	2012-2015	2020	2025	2050	Key messages from scenarios 2050
Governance: Systemic inclusive and participatory governance and policy decision-making					
<p>Policy-making structures are silo-ed vs. systemic which has caused a lack of coherence in policies that might support and foster more sustainable living</p> <p>Policy assessment tools lack provisions for understanding the systemic risks of sustainability, early warning signals, stress testing and allowance for dynamic change mechanisms. Health and social equity impacts have not been adequately considered</p> <p>Policy decision-making has been "top-down" which is becoming less relevant and representative of EU society as a whole. It has been lacking provisions for "bottom-up" inclusive decision-making processes</p> <p>Policies are based on what we want in terms of economic growth, not on what is available in terms of ecological and social capital.</p> <p>Centralized energy supply - dependence on fossil fuels and nuclear energy</p>	<p>Renewed European Strategy for Sustainable Development, includes a chapter on sustainable lifestyles - and the provision for personal footprint budgets (8 000 kg). Cross-sectoral, human-centred approaches to policy-making for sustainable living should include health, agriculture, education, finance, urban planning, social affairs, welfare, trade and transport, energy, environmental protection and climate change.</p> <p>Review mechanisms implemented</p> <p>Installation of (inter)national Ombudspersons for future generations. Establishment of parliamentary committee with the specific remit of "protecting the future"</p> <p>Launch of International Panel on Sustainable Resource Use (IPSRU) which has the mandate to account for and fairly distribute natural resources per country/region</p> <p>A broadening of the energy supply markets to be inclusive of renewables and cooperatives</p>	<ul style="list-style-type: none"> - National Strategies on Sustainable Development in all EU countries include a specific chapter on sustainable lifestyles - Binding resource consumption targets and legal frameworks - Economic incentives (production & consumption) for sufficiency and quality consumption <p>Assessment tools are extended to parliament (National and European)</p> <ul style="list-style-type: none"> - Participation of civil society in local budget and policies to monitor public investments and support more sustainable lifestyles - Voluntary code and guidelines for green procurement extended to become legally binding. - The Future Generations Act is established guaranteeing constitutional rights <p>IPSRU proposes national quotas and targets for resource use</p> <p>Energy mix moves towards the phase out of fossil fuels and nuclear energy</p>	<p>Sustainable development and lifestyles strategies form an overarching framework for all policies</p> <p>European sustainable assessment tools become audited by external organisations to ensure transparency and accountability</p> <p>A Congress of the Future is established, convened by parliament to provide direction on long-term strategies</p> <p>Political decision on national resource use quota systems at International Resource Use Summit 2020</p> <p>Launch of personal carbon and resource card test phases</p> <p>50% decentralization and democratization (cooperative system) for renewable energy production and diversification of energy sources</p>	<p>Political and societal decision-making is systemic, inclusive, long term and visionary</p> <p>All policy decisions consider systemic risks and warning signals related to sustainability, health and equity through the ubiquitous use of sustainability assessment tools.</p> <p>National quotas established for the use of resources and energy worldwide</p> <p>National policies for sustainable lifestyles are based on those quotas</p> <p>European network of renewable energy providers is established as renewable energy comes online in all EU countries</p>	<p>Governing the Commons: New political movements have gained power and show resilience in systemic approaches - "wikidemocracy", digital interest networks.</p> <p>Local Loops: Global networks link local loops</p> <p>Governing the Commons: Abandon 20th century institutions and top-down governance systems in favour of new bottom up collaborations.</p> <p>Empathetic communities: Communities, cities and towns govern vs. nation states. Shared and active use / care for public spaces.</p>

Key pathway themes at a glance

- ✓ Sustainable economy commission ensures systemic policies and beyond GDP indicators that promote economic development competitiveness and socio-ecological benefits
- ✓ From a debt based economy to an economy that encourages savings to fund long-term investments in green economy sectors and innovations for sustainable living
- ✓ Testing new financial instruments and facilitating open dialogue between financiers and the public to restore trust
- ✓ Support for alternative economies, currencies, and new business models that support sustainable living

actual trend	2012-2015	2020	2025	2050	Key messages from scenarios 2050
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Economy and monetary systems: Support People & Sustainable Living

<p>Unsustainable monetary system. New evidence of distributed economies. Promising practice emerging in complementary regional currencies</p>	<ul style="list-style-type: none"> - Creation of a Sustainable Monetary Systems Commission to support national governments in creating systemic policies combining economic development with socio-ecological benefits - EU establishes a legal framework in which regional complementary money systems can scale to connect underused resources with unmet needs - such as personal skills, community resources, and local authority assets 	<ul style="list-style-type: none"> - 25% of all monetary transactions are in complementary currencies, linked to services and local models in the EU - Provisions to pay local taxes in regional currencies; pay percentage of salaries in local currencies; pay utilities and services in local currencies - Evidence of redistributed wealth creation from scaling of local currencies becomes evident and accepted as dual currency systems through wide-spread improvements in quality of life 	<ul style="list-style-type: none"> - 50% of all monetary transactions are in complementary currencies linked to services and local markets in the EU - Provisions include systems of cash substitute smartcards, mutual credit accounting system, and community banks - 25% of businesses are trading in complementary currencies - Evidence of local currencies' ability to reduce CO2 through the promotion of trading in closer proximities of communities 	<ul style="list-style-type: none"> - Tax reporting requirements include converting existing local currencies to transfer credits - Acceptance of the state with detailed agreements on accounts for complementary currencies and internal controls 	
<p>Debt based monetary system</p>	<p>EC position paper outlines plans to move from a debt based economy towards a common based economy</p> <p>New economic models established based on savings (vs. debt) to fund long term investment</p>	<ul style="list-style-type: none"> - European households save more and borrow less - Responsible lending institutions are proliferated - Peer to peer lending structures are formalised 	<p>The European economy has transitioned away from a debt based economy - in terms of both financial and natural capital</p>	<p>The European economy is fully connected with the global commons</p>	<p>Governing the commons: Control and management of the global commons.</p>
<p>Speculation and privatisation of basic needs</p>	<p>Tax on financial speculation.</p> <p>Review of privatisation of basic needs, (i.e. water, healthcare, education)</p>	<p>Legal frameworks established to deter financial speculation on basic needs (i.e. water, health, education, energy) and to ensure access for all</p>		<p>Access to basic needs for all (food, housing, water, energy) considered a human right - financial speculation phased out</p>	
<p>Unbalanced distribution of labour: Widening gaps between the employed and unemployed</p>	<p>Labour market reforms bolstered by public sector commitments to reduced hour work weeks (i.e. 25h/ week). Benefits and improvements to quality of life and well-being are monitored and communicated broadly</p>	<ul style="list-style-type: none"> - 25h work week established as a standard for governmental institutions and starts to influence corporate labour reforms. - Labour reforms in public institutions show evidence of stimulating employment, creativity, and growth in alternative currency systems 	<p>Income distribution reforms in public institutions explore maximum income caps across the EU and reductions in the gap between the lowest and highest salary ranges</p>	<p>Income distribution reforms establish maximum income levels for all job categories. The gap between lowest and highest salary ranges capped at a factor of ten</p>	<p>Local Loops: Meritocracy - Craftsmanship and professional communities</p>
<p>Few examples of ownership of workers in management and production</p>	<p>The EU actively promotes cooperative movements in all cities</p>	<p>EU support of cooperative models through policies that stimulate social entrepreneurship by default</p>		<ul style="list-style-type: none"> - Regional and locally focused companies become just as competitive in the market as multinationals - Production-on-demand becomes a viable business model and addresses issues associated with overproduction - Cradle to cradle value chain business strategies become a minimum standard 	<p>Governing the Commons: 3D printing - Consumers control their own production - From mass consumption to self-creation - Alteration of lifestyles by molding and recreating identities - Peer to peer service economy has disrupted globalized world of multinational corporations</p>
<p>GDP focused growth based economies. Momentum starts to build for the internalisation of externalised costs not previously considered, including the true value of environmental and societal services</p>	<p>A rethinking of the GDP-based value system to include externalised indicators such as environment, well-being and quality of life.</p>	<p>Treaties established for the management of environmental and social externalities</p> <p>Establishment of an Environmental Limits Act</p>	<p>Environmental and social externalities internalised into economic systems at 80%</p>	<p>Environmental and social externalities internalised into economic systems at 100%</p>	<p>Local Loops: Rise of logistics costs stimulates focus on local production - Local resources have new value</p>
<p>Limited investment in the infrastructure and sectors needed to drive sustainable development and sustainable lifestyles</p>		<p>50% reductions in GHG achieved through investments in green economy sectors. Targeted investments to realize a 100% sustainable energy system by 2030 together with global trading partners</p>	<ul style="list-style-type: none"> - 80% reductions in GHG achieved through investments in green economy sectors - Subsidies on fuel removed and inefficiencies disincentivised 		
<p>Business models that foster and enable more sustainable living are limited</p>		<p>New business models that enable sustainable living are rewarded: Access to goods and services are supported and incentivized as an alternative to ownership; cradle to cradle business models connect production to consumption; new technologies enable more sustainable communities; and sustainable supply chains foster SME infrastructure</p>	<ul style="list-style-type: none"> - Incentives are introduced to foster innovation into new materials and production chains that address environmental and social impacts. - Government frameworks support inclusive business solutions. Incentives for rural populations and the informal sector reduces costs for governments and supports sustainable lifestyles. 	<p>Businesses create and distribute value. Consumers acquire, preserve and share value. Governments formalize market frameworks that support new role of business (value / inclusive). Civil society spots and address market failures. Eco Top 10 - use of stock exchanges</p>	<p>Governing the Commons: DIY manufacturing</p> <p>Local Loops: Technical concept of local and regional production systems</p>

Key pathway themes at a glance

- ✓ Community re-design for the people by the people through collaborative innovation
- ✓ Skills for sustainable living become intrinsic elements of formal & informal education
- ✓ Understanding individual lifestyle behaviour diversity and making sustainable living easy becomes the innovation opportunity of the century
- ✓ Smart ICT accelerates the transition to 8000 kg sustainable lifestyle footprints

actual trend	2012-2015	2020	2025	2050	Key messages from scenarios 2050
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Social Innovation & Behavior change:

Opportunities in Understanding Diversity and Re-thinking the Good Life

<p>Citizen movements towards community initiatives gain momentum across the EU</p> <p>The power of people's engagement: Non-governmental and civil society organisations foster debate on the need for meaningful change in values and norms in society to promote sustainable consumption values and encourage citizen engagement</p> <p>Skills for sustainable living have not been adequately considered in formal and informal education systems</p> <p>Collaborative consumption models and the sharing economy emerge in a perfect storm of increased use of technologically enabled social networks, environmental awareness and the negative impacts of the financial crisis on households</p> <p>-Deeper understanding of individual lifestyle diversity is required to develop a broad range of solutions and option that support changing behaviour</p> <p>-Addressing / overcoming unsustainable status symbols</p>	<p>Models of community self-sufficiency are explored and supported - - in terms of resources and new public-private linkages</p> <p>- Proactive mechanisms for behaviour change that support more sustainable living lead to a more participative society (i.e. through immediate feedback and monitoring systems)</p> <p>- Support for coalition building amongst stakeholders and the academic community to foster the practical applications of scientific knowledge</p> <p>-Advocacy for alternative ways to measure societal development and economic progress rise on the political agenda</p> <p>- Schools become multi-functional community centers and sharing platforms that promote healthy and sustainable lifestyles</p> <p>-Knowledge, learning and promising practice for sustainable living starts to be disseminated through the education systems</p> <p>-The sharing economy gains momentum across the EU and fosters increased awareness and interest in 'sharing' or having access to goods and services vs. owning them</p> <p>- Increased visibility of individual lifestyle footprints (consumption levels and resource use) kick-starts pro-active individual initiatives to bring lifestyle footprints to more sustainable levels</p> <p>- Increased awareness of health, well-being and equity is a societal leader for change</p> <p>- Media, communications and public campaigns are supported by policy to spotlight sustainable living experiments and "light house projects"</p>	<p>Innovative urban and community planning processes are supported by policies - - with focus on participatory processes, equity and sustainability</p> <p>Assessment tools are extended to parliament (National and European)</p> <p>Smart ICT/technological innovation (web and mobile) play a critical role in building the infrastructure for large-scale, sharing communities of the future</p> <p>- Sustainability and skills for sustainable living become an intrinsic element of formal and informal education</p> <p>- Community based skills and education projects for sustainable living fostered and supported</p> <p>-New business and trades skills - that will be needed in future sustainable societies - are explored at higher education and secondary education levels</p> <p>-Most neighbourhoods have now established sharing centers & design labs</p> <p>-Products are built to last und can be repaired</p> <p>-Global best practice examples of sustainable living SPREAD to Europe (communicated via social network channels) and become fashionable and desirable - from food, to personal mobility homes, fashion and travel</p> <p>-Communications and advertising laws are updated to consider sustainable living practice and minimise the promotion of harmful products, services and substances</p>	<p>- Products and services are designed for collective use and collaboration</p> <p>-Sharing centres are common in communities across the EU</p> <p>- 80% of all European cities establish an inclusive and participatory budget commission open to all stakeholders</p> <p>-New indicators are implemented at the city level to measure societal development and overall wellbeing</p> <p>-Education systems shift to active learning & cross curriculum learning</p> <p>-Teacher training promotes creativity</p> <p>-Students are encouraged to be curious, challenge, be creative</p> <p>-Co-creation of dynamic curricula based on dialogue between different actors in society and teachers</p> <p>Political decision on national resource use quota systems at International Resource Use Summit 2020</p> <p>- Most of goods are shared or leased and not owned</p> <p>-10 years of warranty on consumer goods</p> <p>-Sustainable living is the new normal</p> <p>-Public and private communications campaigns only promote sustainable living on a daily basis and through all media and communication channels</p>	<p>European cities support sustainable living through strong social networks and pro-active, participatory decision-making open to all stakeholders</p> <p>Students think critically, creatively, innovatively and are responsible citizens. Active learning is promoted and supported</p> <p>Former shopping malls are repurposed into community cultural centres</p> <p>Global Footprint Overshoot Day = 31 December (Europeans are living within the resource limits of one planet)</p>	<p>Local Loops: Solutions and life improvements are focused locally vs global</p> <p>Local Loops: Energy crisis and scarcity has been a catalyst to re-evaluate lifestyles and wellbeing needs</p> <p>Singular Super Champions: Learning, achieving, and self mastery. Universal access to education. Moral agreement for continuous development of skills for sustainable societies</p>
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Key pathway themes at a glance

- ✓ “Re-boot” of individual diets, household food waste and the food production system
- ✓ Human-centred lifestyle approach to urban planning and the transition to ubiquitous zero-net energy homes
- ✓ Right-sizing individual mobility needs by providing safe, equitable, accessible and sustainable choice
- ✓ Sustainable societies that support 8000 kg lifestyles integrate environmental sustainability with health, wellbeing and social equity.

actual trend	2012-2015	2020	2025	2050	Key messages from the scenarios 2050
Sustainable consuming					
<p>Food:</p> <ul style="list-style-type: none"> - Unsustainable diets: Meat and dairy consumption accounts for 24% of total food consumption impacts; consumption of processed foods are increasing; food waste is increasing; and lifestyle-related health risks are rising - obesity, heart disease and cancers - Unsustainable food production systems: Significant increases in food imports to the EU in the last 2 decades (meat 120%, cereals 83%, frozen vegetables 174%, exotic foods); environmental and ecosystems' impacts of intensive agriculture, destructive and over-fishing; and increasing use of chemicals in food production 	<ul style="list-style-type: none"> - EU governments support bio food, local producers and review agro-business subsidies - Tax schemes deter unhealthy food (salt, sugar, processed levels) and environmental damaging products (polluter pays principle). Increased visibility of unsustainable products - Sustainable food options become the norm in public procurement - Labels show the origin of food products and make sustainability/health implications clear. - Veggie-days reach the mainstream at work (office canteens), at home, and in communities - Farmers markets become popular as communities see the benefits in easy access to fresh produce and support of local farming businesses - Increased awareness of healthy diets and nutrition that reduces environmental impacts and GHG (i.e. the LiveWell plate) - Review of cost/benefit scenarios for the cancellation of external debts of developing countries with the aim to support shifts from export oriented economies to self-sufficiency 	<ul style="list-style-type: none"> - 30% of fresh vegetables & fruits are locally produced and sold in local markets & supermarkets - New policy mechanisms encourage the “right-sizing” of meat consumption to more sustainable levels - i.e. externalities (environmental degradation, CO2, soil degradation, water use, sewage etc) are internalised to reflect the “real” costs of food, especially of meat - Food waste on the household level is decreasing due to education and public awareness campaigns - Limited import and export of food based on the kilometers the food travelled - Community and urban gardens are popularized - Revised policy controls for increased transparency in regards to GMO foods and information on additives - National consumption quotas are introduced in conjunction with personal sustainable lifestyle footprint targets (8000 kg) 	<p>Tax incentives for locally produced food & services across the EU</p> <p>Weekly meat days replace weekly veggie days as more balanced diets (with less meat and dairy) become the societal norm</p> <p>Outputs from organic farming and conversion to sustainable farming practices show steady increases since 2012</p>	<ul style="list-style-type: none"> - Preference for fresh foods replace processed foods and there is a zero-waste culture as social and technological innovations in the food production system have enabled efficiencies, improvements and easier access for consumers - “Fast food tax” policies have increased awareness of unhealthy foods and catalyzed widespread behaviour change towards healthier diets - 90% of food is produced locally and is organic or sustainably farmed. Food processing becomes regional - here has been a global shift to self-sufficiency in terms of food 	<p>Local Loops: Solutions and life improvements are focused locally vs globally.</p> <p>Empathic communities: Widespread unemployment drives experiments to improve living conditions through local energy and food production</p> <p>Peer to peer services grow through social innovation and with strong leadership from entrepreneurs, community leaders, new foundations and local currencies</p> <p>Cooperatives become providers of local education, health and social services, as well as local infrastructure</p> <p>-Active use of public space promotes community kitchens and healthy living</p>

Sustainable living

<ul style="list-style-type: none"> - Increasing number of households (e.g. more single-person households) - Increasing individual living spaces - Increasing consumption of energy and water despite recent energy efficiency gains in household appliances - Growing number of electricity consuming appliances and devices in households 	<ul style="list-style-type: none"> -New houses: More ambitious regulations on housing development infrastructure such as renewable energy obligations for private housing - Home renovations: Subsidies at the EU level for energy-saving renovations (i.e. insulation) -Public buildings walk the talk with plans to transition all assets to “passive” buildings -Optimised performance standards for buildings, homes and appliances - such as individual metering and feedback systems or provisions for shared housing options - increase user efficiency - - Vicinity goes hand in hand with efficient housing, as energy savings achieved through the design and construction of efficient buildings and appliances are preconditions for dense neighbourhoods 	<ul style="list-style-type: none"> -New houses: Public and private building becomes passive as the standard across the EU -Home renovations: 20% increase in energy saving home renovations since 2015 creates a flourishing sector. Particular focus and incentives to accelerate renovations for low socio-economic neighbourhoods -New forms of co-housing become trendy 	<p>All new houses in the EU are passive.</p> <p>40% increase in energy saving home renovations coincides with significant increases in new jobs in the building and renovations sectors</p>	<p>Single Super Champions: Tech enables smaller homes, end of single car use dependency</p> <p>Governing the commons: Built environment - chips and sensors enable smart living</p> <p>Local Loops Driver - radical rise in resource prices and scarcity. Local regions self sufficient in key resources - builds / scale of Eco vial legs</p>
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Key pathway themes at a glance

- ✓ “Re-boot” of individual diets, household food waste and the food production system
- ✓ Human-centred lifestyle approach to urban planning and the transition to ubiquitous zero-net energy homes
- ✓ Right-sizing individual mobility needs by providing safe, equitable, accessible and sustainable choice
- ✓ Sustainable societies that support 8000 kg lifestyles integrate environmental sustainability with health, wellbeing and social equity.

actual trend	2012-2015	2020	2025	2050	Key messages from the scenarios 2050
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Sustainable moving

<ul style="list-style-type: none"> Increasing numbers of passenger cars Oil dependency (a consequence of passenger car use) Increasing mobility needs related to urban sprawl and urban structures that favour car use (e.g. shopping facilities in the urban periphery) Rising air travel and cheaper air fares 	<ul style="list-style-type: none"> Investments in public transport becomes priority for governments across the EU. New taxes on cars discourage private transport and incentivize car sharing initiatives New regulations stipulate the phase out of petrol-based vehicles with phase in of hybrid models by 2015 and renewables / electric by 2020 Investments in future mobility infrastructure (electric vehicle docking stations etc) Transportation of goods optimized (no empty trucks), accountability (fines) and monitoring systems established Increased taxation on short-haul flights (i.e. 600 km) 	<ul style="list-style-type: none"> Smart intermodal transport infrastructure solutions link air, rail, road and personal transport options significantly increasing efficiency and convenience for the user Communication strategies influence behaviour shifts in users from current transport preferences to widespread use of intermodal options City and community design integrates future mobility systems thinking to include provisions for short distances between local services to eliminate the need for transport where possible New systems for transport of goods underground is in its pilot phase around Europe starting with Switzerland 	<p>Car free cities are established as a norm in Europe enabled by intermodal personal transport access for all</p> <p>Transport of goods underground, people above ground enabled by new technology and infrastructure tested 2015-2025</p> <p>Increased taxation on short-haul flights (1000 km)</p>	<p>Public transport becomes the common and preferred transport option across the EU. (by 80%)</p> <p>Intercontinental flights reduced significantly (by 80%)</p> <p>Cycling becomes the predominant mobility option for inner-city distances</p>	<p>Singular Super Champions: Treaties from 2035 provide incentives for new materials and production, the removal of subsidies on fuel, punish inefficiency, and invest in R&D. - Driver - radical rise in resource prices and scarcity. - Transport especially single car use is much more expensive (and often cost prohibitive) than public options - Cradle to cradle bus - Extreme urbanization</p> <p>Empathic communities: Shared possession and active use of public spaces</p>
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Sustainable society

<p>Health:</p> <ul style="list-style-type: none"> Increasing levels of obesity and heart disease associated with poor diets and unhealthy lifestyle choices Increase in respiratory and heart diseases associated with poor housing conditions Increased availability and low costs for highly processed, unhealthy food products <p>Social inequity:</p> <ul style="list-style-type: none"> Per capita environmental impacts are considerably higher in high income groups vs. lower income groups Low income groups are more affected by adverse sustainability impacts (e.g. climate change, local air pollution, rising energy prices) 	<p>Increased health promotion programmes in schools and at the work place promote healthy diets and physical activity</p> <p>New investment in outdoors schools and kindergardens;</p> <p>Development of local policies and programmes to improve environmental conditions in the most deprived neighbourhoods</p> <p>Development of policies and social safety nets for the most vulnerable groups: children and old people from low socio-economic groups</p> <p>-Development of policies and programmes for public institutions and business that enable "green" workplaces (including green employees) i.e. outdoor working facilities and support for tele working</p>	<ul style="list-style-type: none"> New business models and initiatives for "greening" public institutions and workplaces are consolidated More and more communities across the EU are becoming "green and healthy" New emphasis on sports in schools as well as the development of social capital in low socio-economic neighbourhoods has led to a decrease in school drop-out rates to below 10% The efficiency and availability of flexible education allows 40% of 30-34-year-olds to complete third level education Targeted social capital and sustainable jobs development policies and interventions in deprived communities have resulted in 20 million fewer people in or at risk of poverty and social exclusion 	<ul style="list-style-type: none"> Health indicators show encouraging results in terms of decreasing incidence and prevalence of non-communicable diseases related to lifestyle factors (obesity, diabetes, cardio-vascular diseases) - less than 30% of the adult population being overweight and obese in adult and less than 10% of children being overweight Targeted interventions for low socio-economic groups have lead to a decrease in obesity with only 15% of low income men and 25% of low income women being obese Cost savings in the health care system (due to decreased costs for chronic diseases treatment and long term care), are reinvested in medical technology development and health care insurance support for low income families Far less respiratory diseases due to housing conditions and indoor air pollution 	<p>Health care systems are sustainable through the integrated efforts of policies and programmes across all sectors and stakeholders in the society, ensuring health and well-being for all</p>	<p>Empathic communities Cooperatives become providers of local education, health, social services, and local infrastructure</p> <p>Shared possession and active use of public spaces</p>
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European
Research Area

EUROPEAN POLICY BRIEF



Emerging Visions for Future Sustainable Lifestyles.

Preliminary policy considerations from the SPREAD Sustainable Lifestyles 2050 European Social Platform project. Developing pathways to more sustainable living.

First Policy Brief, February 2012

INTRODUCTION

Societal innovation is vital to drive significant changes in the ways that we currently live if we are to increase quality of life for all while reducing the negative environmental and social impacts of human activity. Creativity is needed to achieve the widespread changes that will shift current unsustainable lifestyle trends, and that will provide resilient support systems and infrastructure to make difficult changes easier.

Sustainable lifestyles refer to patterns of behaviour shaped by personal and social interactions that are influenced by environmental, cultural technological and socio-economic contexts. Lifestyles that support future sustainable societies will need to accommodate human diversity and reflect different approaches to work-life balance and personal wellbeing. Future sustainable lifestyles support equity, efficiency and sufficiency in order to live within global resource limits. People are supported by systems and infrastructure that enable, maintain and sustain more sustainable ways of living.

The SPREAD Sustainable Lifestyles 2050, European Social Platform project fills a gap in current research by consolidating knowledge, identifying trends and promising practices, and envisioning possible sustainable lifestyle futures. A roadmap of action strategies for different societal actors will be developed, including 2012-2050 pathways to enabling sustainable living across Europe by 2050. This roadmap will support future research and policy agendas on the EU and national levels.

This document presents the project's preliminary findings. It provides policy considerations from our review of existing knowledge and examples of current promising practice. It presents four alternative and emerging visions of future sustainable lifestyles, and it explores the drivers, barriers and gatekeepers that may help or hinder the proliferation of more sustainable living options.

A final policy brief will be delivered at the conclusion of the project, in December 2012, and will include concrete policy recommendations.

SOCIO-ECONOMIC SCIENCES AND HUMANITIES RESEARCH



European
Research Area

EUROPEAN POLICY BRIEF



SPREAD Sustainable Lifestyles 2050

Roadmap: The Transition to Future Sustainable Lifestyles.

Policy recommendations for the development of pathways to more sustainable living in Europe from today to 2050.

Final Policy Brief, November 2012

INTRODUCTION

The SPREAD Sustainable Lifestyles 2050 European social platform project has been a two-year inquiry that has engaged stakeholders from across Europe – from business, research, design, policy, civil society and citizens – who have participated in the development of a vision and scenarios of future sustainable societies. The social platform has identified inspiring examples of more sustainable living practices around Europe and has developed a EU Action Roadmap of possible actions to enable the transition to more sustainable ways of living by 2050.

The EU Sustainable Lifestyles Roadmap & Action Plan 2050 is the final deliverable of the SPREAD project.

The Roadmap integrates the following SPREAD project research and deliverables:

- > Qualitative and quantitative indicators and drivers of current unsustainable European lifestyle impacts on the environment, society and individual wellbeing.
- > Examples of current initiatives and ways of living that reveal promising solutions to current lifestyle impacts.
- > Four scenarios of future societies where current challenges to sustainable living have been overcome, sustainable lifestyles are the norm, and supported by society.

The SPREAD EU Action Roadmap towards sustainable lifestyles aims to complement the suite of roadmaps that have been presented by the European Commission as of 2011 in the fields of energy, transport, low carbon, and resources. The SPREAD roadmap focuses on individual citizens and how they live in their homes, use different means of transport, consume, or spend their leisure time.

SOCIO-ECONOMIC SCIENCES AND HUMANITIES RESEARCH

Deliverable 6

Future Research Agenda to accelerate sustainable living

EUROPEAN LIFESTYLES

The **Research** Issue

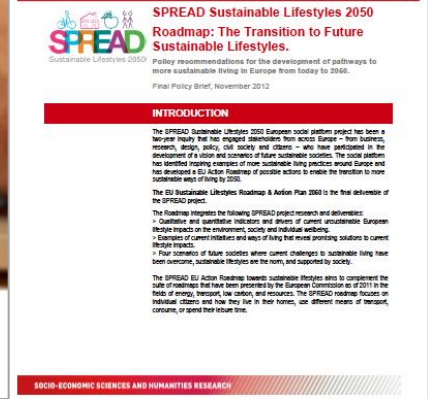
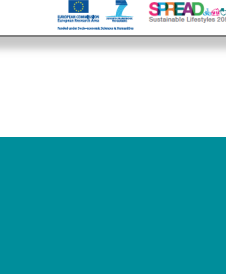
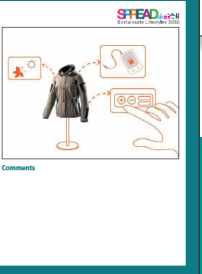
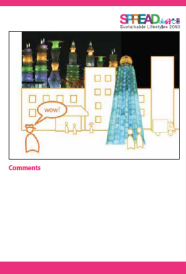
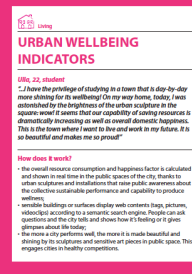
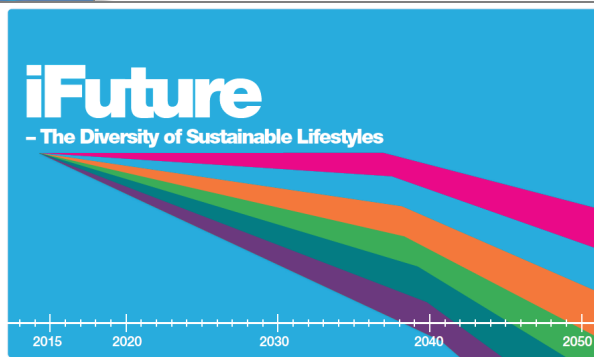
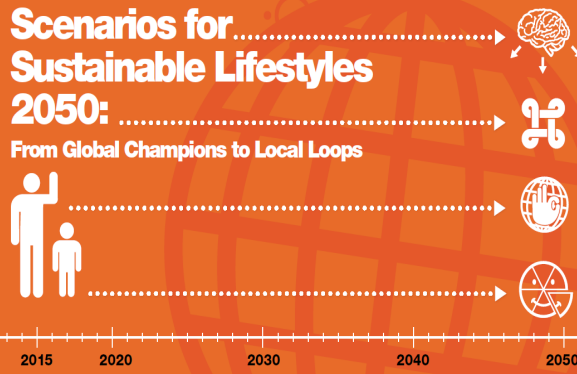


SPREAD Sustainable Lifestyles 2050

Enabling sustainable lifestyles: *Knowledge gaps & Research challenges*

- ☐ The economic system
- ☐ Policy frameworks
- ☐ Infrastructure & spatial planning
- ☐ ICT & social media
- ☐ Social institutions
- ☐ Collective actions
- ☐ Individual behaviour
- ☐ Governance processes
- ☐ New research approaches

Findings of the project



Re-designing The Good Life – Sustainable Living



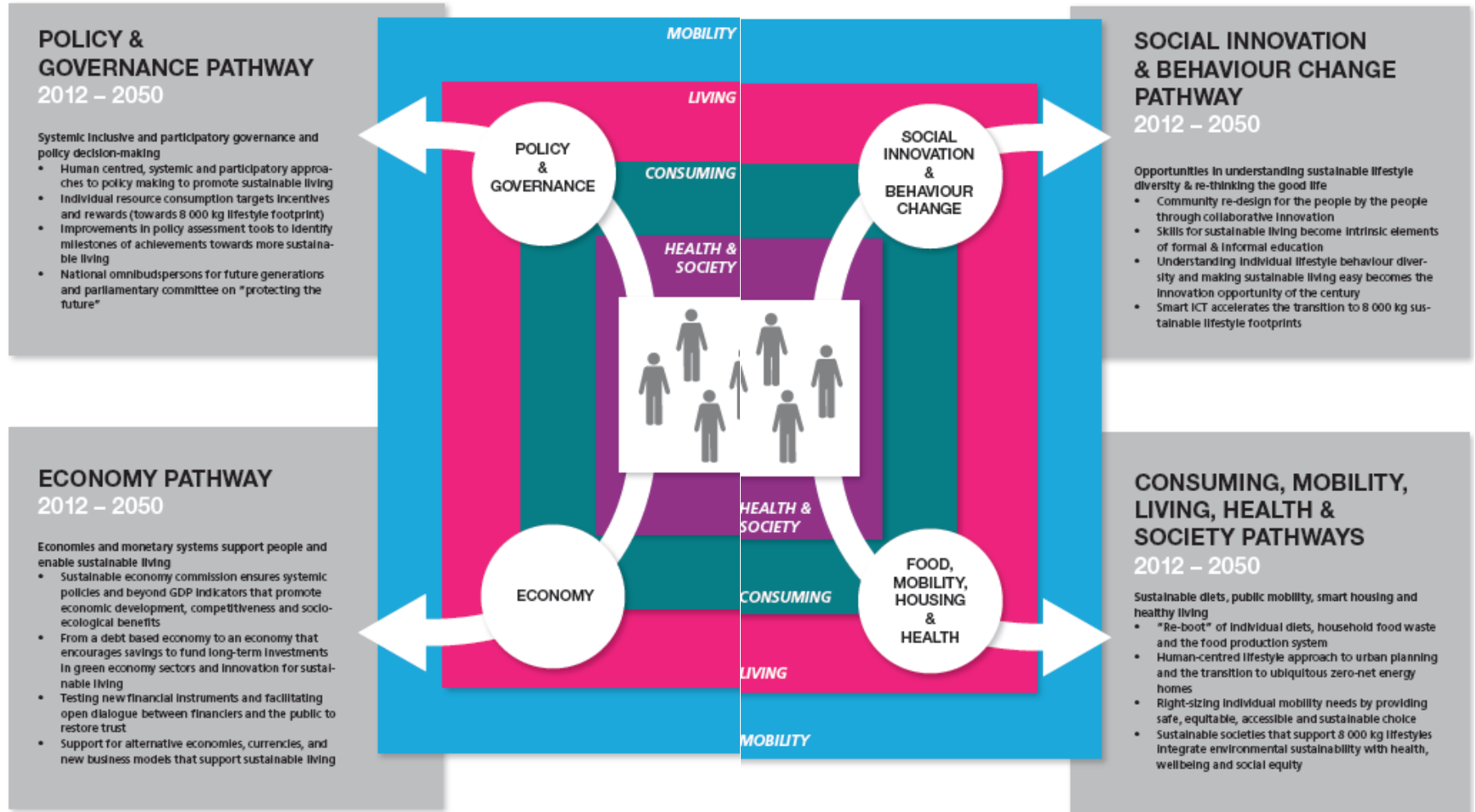
Disrupt unsustainable patterns to have the future we want

Translating Sustainability Goals into Daily Lives



Citizens need to activate the change
Connect social sciences to environmental sciences

Innovation Opportunity Spaces for Societal Actors



Participatory approaches – Growth alternatives – Diversity

Competitiveness starts with People



CURRICULUM VITAE

NAME

Juha Mirvonen

PAY

A solid salary and all veggies and fruits that I need.

HOURS

Depending on the time of the year, it can be up to 60 hours a week.

WORK-LIFE BALANCE

When the harvesting needs to be done, work can sometimes be overwhelming. However, I enjoy it a lot to be in the nature, so I don't mind.

BEST THING

The taste of the first ripe tomatoes.

WORST THING



CURRICULUM VITAE

NAME

Elain Ho

PAY

Enough to cover my costs!

HOURS

Per week 24 hours for BoE and 20 hours as a voluntary community advisor

WORK-LIFE BALANCE

As I support my local community I can be part of the changes that are taking place. Being part of this change makes me feel like I am not really working!

BEST THING

Being able to help people make difficult but important decisions. This can be very rewarding.



CURRICULUM VITAE

NAME

Iilan Yala

PAY

From the supermarket, 'Fundme' and donations for my music

HOURS

I work 20 hours in the shop and the rest of the time I concentrate on my music

WORK-LIFE BALANCE

It's a very good balance because I am always active and with other people which gives me plenty of energy and ideas.

BEST THING

The freedom to be able to develop my own work, pay my bills with something I know is useful for others and having a



CURRICULUM VITAE

NAME

Kelly Newsome

PAY

A lot of the work isn't paid as it involves research and work in communities. In return I get free working spaces and volunteer support

HOURS

Flexible

WORK-LIFE BALANCE

In a job like this your life becomes your work and vice-versa

BEST THING

The very broad and diverse network of colleagues and partners ranging from retailers, designers, researchers, engineers and local community members

Skills for sustainable societies that support sustainable living



Sustainable Living Globally



Financed by the German Ministry for Economic Cooperation and Development (BMZ), the projects aim to identify and contribute to global efforts towards living sustainably by :



Collecting **100 Big Ideas** for living sustainably,
Discussing them with stakeholders in **5 Cities**,
Bringing them to the **Global Network towards Sustainable Lifestyles**



Creating a **Framework for Scaling-up Innovations**,
Highlighting the **5 success factors** common to 100 enterprises with sustainable practices
Bringing the outcomes into the **Global Network for Sustainable Innovation and Entrepreneurship**



EUROPEAN COMMISSION
European Research Area



SEVENTH FRAMEWORK
PROGRAMME



www.sustainable-lifestyles.eu

THE GLOBAL NETWORKS

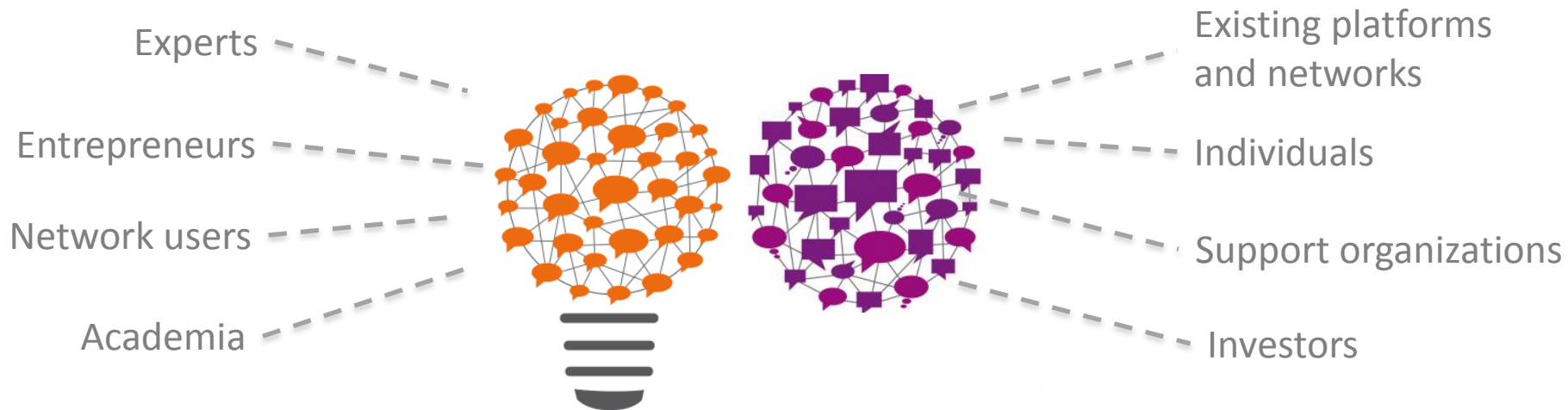


Host discussions and
share learning

Strengthen and linking
existing networks



OBJECTIVES AND PARTICIPANTS



Promote success
factors for scaling up

Link knowledge
and practices





WORKSTUDIOS AND WEBINARS 2012 - 2013

1 or 2 day interactive, multi-stakeholder meetings comprising key note speeches, visioning sessions, discussion panels and match-making activities.

Location



China

October 2012

Colombia

November 2012

Full back to back

Ghana

June 2013

Event component

Philippines

March 2013

Full back to back

Germany

September 2013

Event component



EUROPEAN COMMISSION
European Research Area



SEVENTH FRAMEWORK
PROGRAMME

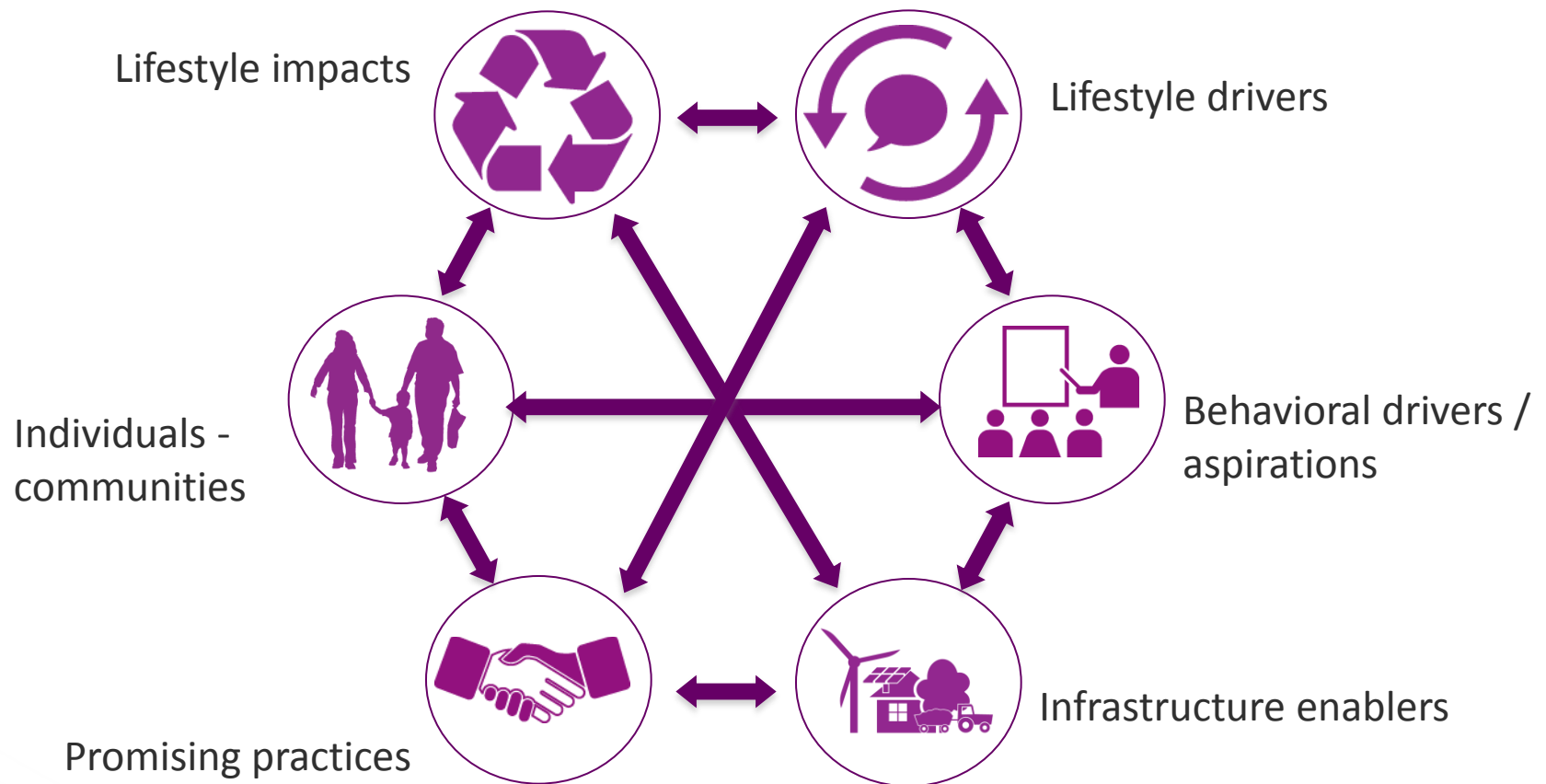


Sustainable Lifestyles in the Urban Environment

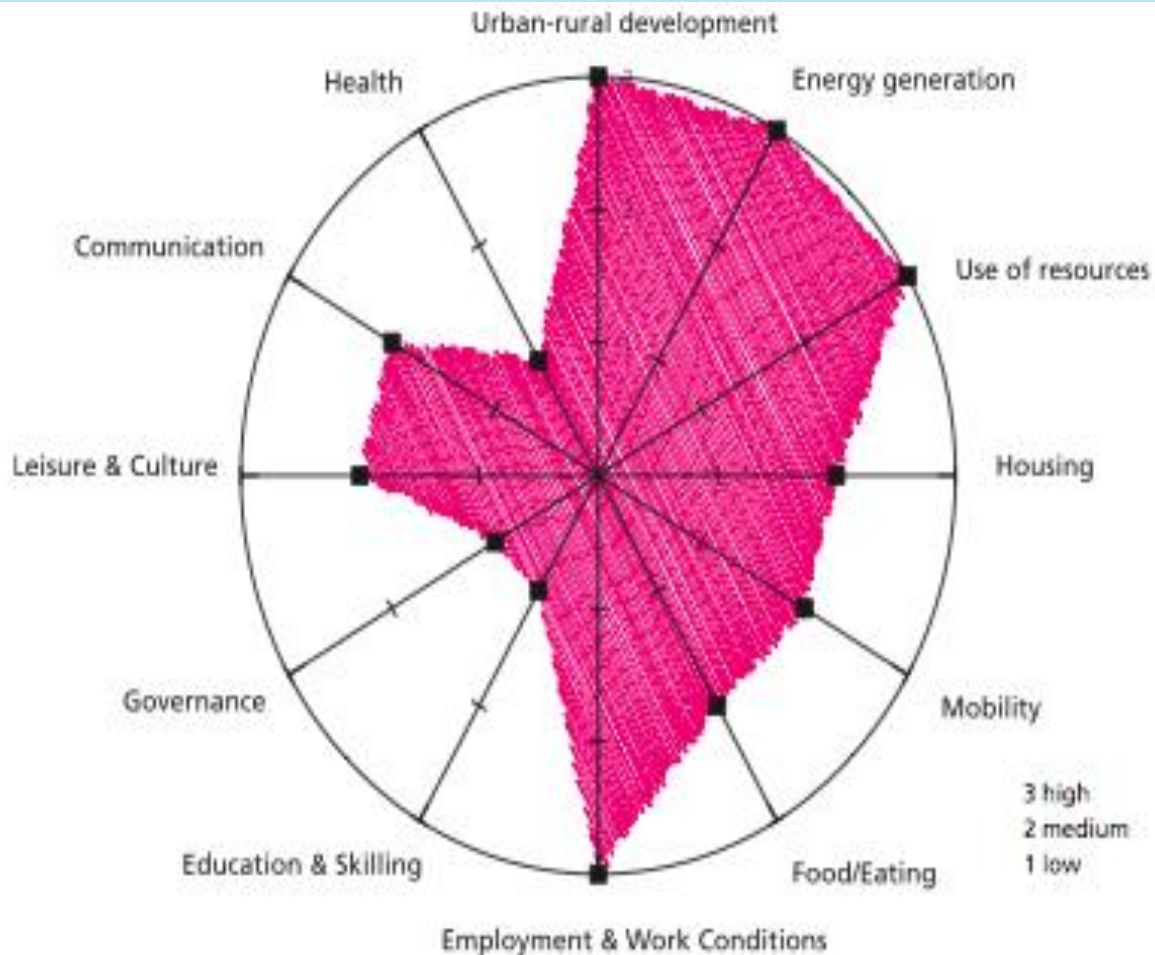


www.sustainable-lifestyles.eu

Global Network on Sustainable Lifestyles – Rationale

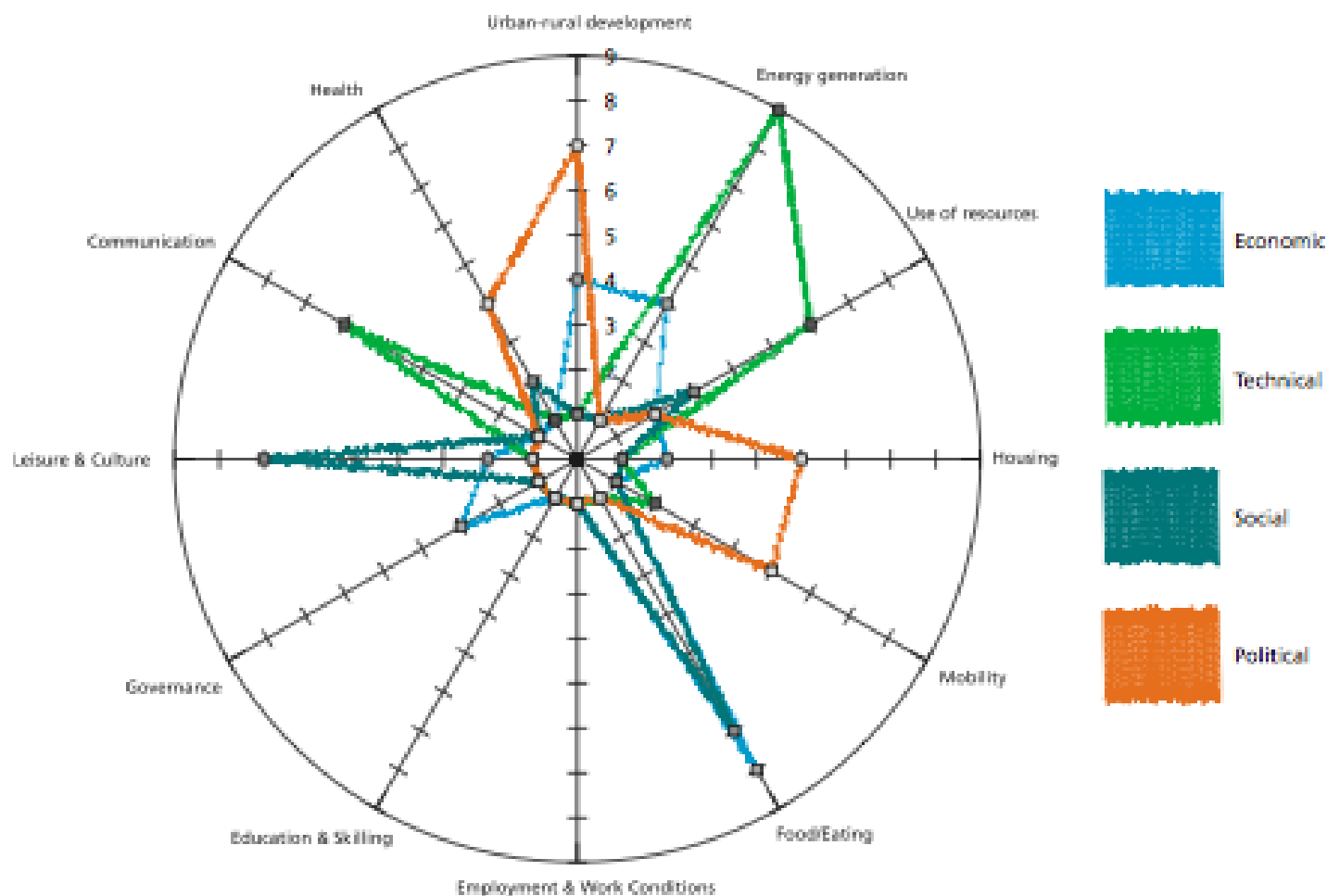


Findings China - Impacts



Areas with most relevant impact on/of Chinese lifestyles

Findings China - Drivers



Types of drivers for addressing lifestyles' impacts in China

FORMULATING MESSAGES
FOR RIO+20

VISIONS to ACTIONS

FOSTERING NEW BUSINESS
MODELS
TO SHAPE MORE SUSTAINABLE
WAYS OF CONSUMING AND LIVING

PROACTIVE
GOVERNMENT
= BUILD
TRUST &
MEASURE PROGRESS

PUSH
TRANSITION
INTO
GREEN ECONOMY

SME
FUNDING

ENABLE ENTRE- & INTRAPRENEURS

FRAME
WORK
TO SUPPORT
MODELS

CREATE
A NEW
ENVIRONMENT
WHERE
PEOPLE ARE
OPEN
TO
SHARING
-NOT OWNING-

FOCUS ON
EDUCATION
LEARNING

STRONG
DRIVER
FOR
HEALTH

MORE
LOCAL
FOOD
PRODUCTION

COMMUNICATE
CONSEQUENCES
OF OUR
LIFESTYLE

CLOSED
LOOP

WE
NEED
TO
COMMUNICATE

INVOLVE
YOUNG
PEOPLE

MAKE IT
EMOTIONAL

FOCUS ON
VALUE
CHAIN

AND...
APPEALING

COLLABORATION
-FIND THE DRIVER

SHARING
MODELS

SIMPLIFY
CURRENT
BUSINESS
MODELS



CREATE
A
PULL

PRICE
MECHANISM

INNOVATION SUPPORT

CHANCE
SOCIAL
MODELS

SMARTER
NETWORK