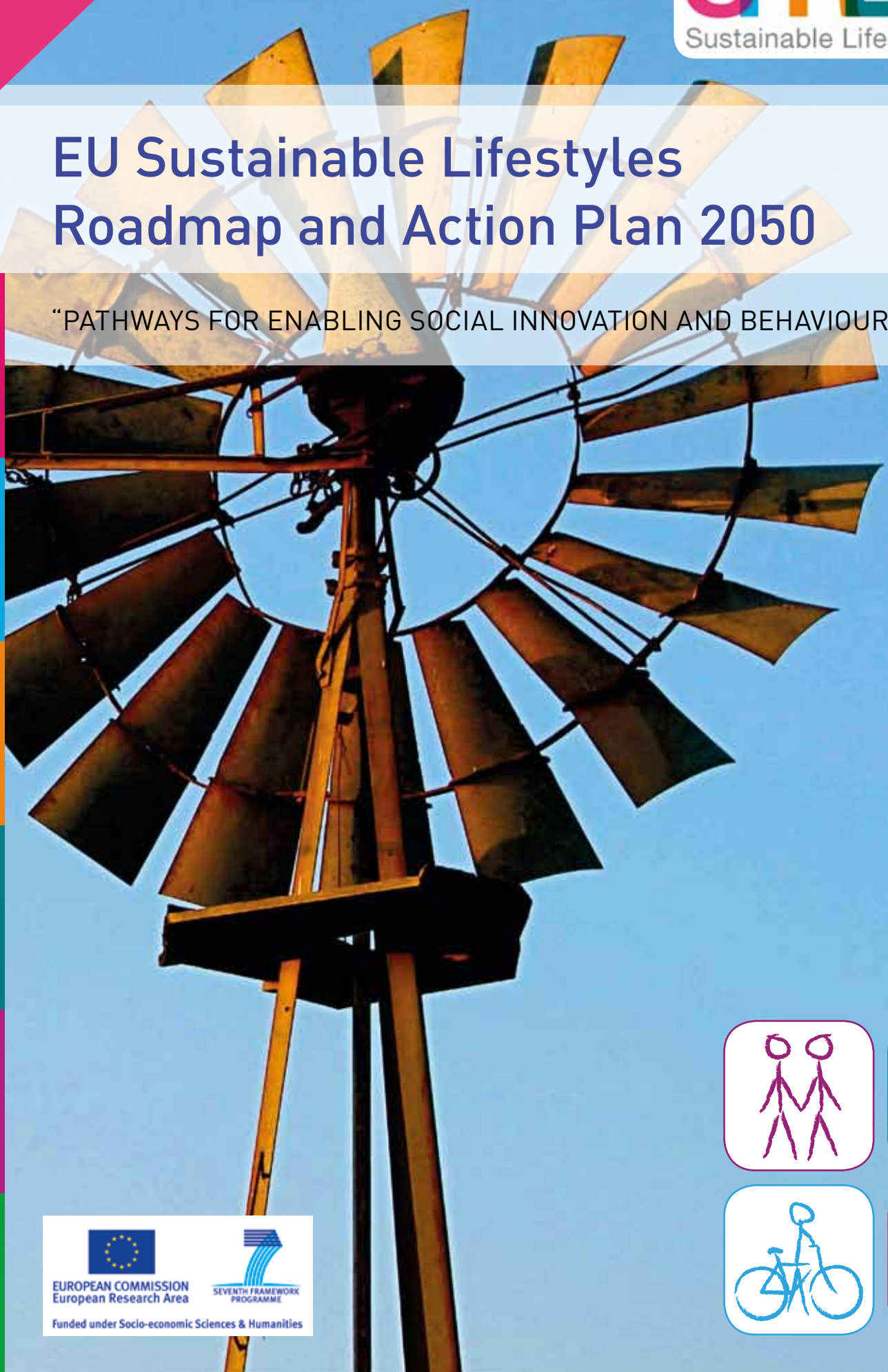
SPREAD
Sustainable Lifestyles 2050

EU Sustainable Lifestyles Roadmap and Action Plan 2050

"PATHWAYS FOR ENABLING SOCIAL INNOVATION AND BEHAVIOUR CHANGE"



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ABOUT SPREAD SUSTAINABLE LIFESTYLES 2050

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ABOUT THIS PUBLICATION

SPREAD Sustainable Lifestyles 2050, a European social platform project, has been running in 2011 and 2012 with the engagement of societal stakeholders from across Europe – from business, research, policy and civil society – who have participated in the development of visions and scenarios for more sustainable lifestyles by 2050. This process has resulted in a roadmap of possible actions and innovation spaces for policy, business, research and society to enable European society for more sustainable ways of living by 2050. A critical mass of promising sustainable living practices have been identified in this process, which provide inspiring examples of what more sustainable lifestyles could look like.

The EU Sustainable Lifestyles Roadmap and Action Plan 2050 is the final content deliverable of the SPREAD project. The roadmap uses the various outputs of the SPREAD project to: consider and quantify the unsustainable impacts of current European lifestyles today; to explore the increasing number of examples of promising, and more sustainable living practice; to classify current thinking about our lifestyles with four different future scenarios where current impacts have been overcome; and to propose actions that would get us on track to more sustainable living in Europe in this decade. This document outlines the action strategies and opportunity spaces for policy makers towards more Sustainable Lifestyles.

INTRODUCTION

This roadmap is the result of a two-year process and the final deliverable of the **SPREAD Sustainable Lifestyles 2050, European Social Platform project.** *It aims to provide guidance for policy makers to support the short and long term transformation towards more Sustainable Lifestyles in Europe.*

Current policy-making structures in Europe are often silo-ed (environment, social affairs, economic affairs) and have been rarely systemic. This has caused a lack of coherence in policies that might support and foster more sustainable lifestyles. At the same time sustainability policies have been primarily concentrated on technological innovation, as opposed to social innovation. **The SPREAD project has taken a systemic, human-centred approach and emphasizes the importance of social innovation and behaviour change in order to achieve more sustainable living for all by 2050.**

The SPREAD project has identified four key enablers to more sustainable living: Policy and governance; the economy and the monetary system; social innovation and individual behaviour change. The EU Sustainable Lifestyles Roadmap & Action Plan charts pathways to change in these key enabling domains.

The SPREAD project has sought out opportunity spaces for changes, across these domains that will disrupt current unsustainable living patterns in Europe. In this regard, the roadmap identifies possible actions for change that may, for the moment, seem politically unfeasible. The SPREAD project consortium and contributors believe that disruptive change is unavoidable and necessary to overcome the negative and unsustainable impacts of our current European lifestyles.

We hope that this roadmap and the work of the SPREAD project will stimulate further debate, and will trigger immediate actions from across societal stakeholders, to get on the pathways to more sustainable living. This report seeks to highlight that the pathways to sustainable living hold many opportunities for the development of sustainable and resilient economies and societies where all citizens of Europe are living well and healthy within the limits of the planet.

If we want to live in harmony with our planet, with the people in the less developed countries and with future generations, the Business-As-Usual scenario is not an option. Bold actions are required, and fundamental change is needed. These future unknowns create uncertainty and fear. Visions and pathways to the future we want, illustrated by positive narratives and real examples, help to breakdown uncertainties and stimulate dialogue, creative new ideas, actions and policy recommendations. **This roadmap provides a vision and pathways to more sustainable living in 2050. It provides a human-centred complement to the EU roadmaps for sustainability already in existence during the time of this project, 2011-2012.**

The SPREAD project developed four future scenarios of European societies that support more sustainable ways of living. These scenarios provide our vision for more sustainable lifestyles by 2050 and at the end point of the roadmap. The roadmap starts in 2012 and utilises the critical lifestyle impacts identified in the SPREAD project's baseline research. It also considers current promising practices, identified through the project's social platform, already showing evidence of lifestyle impacts being overcome through more sustainable living alternatives. The roadmap includes key elements of the scenarios and follows the areas where policy can play a role in supporting and fostering change.

ABOUT SUSTAINABLE LIFESTYLES

WHAT IS A SUSTAINABLE LIFESTYLE MATERIAL FOOTPRINT?

The sustainable lifestyle material footprint is a tool to measure and manage or optimize the resource consumption of our lifestyles, including the products and production processes behind them (i.e. in the areas of consuming, moving, housing and health). In this context, our sustainable lifestyle material footprint means the use of renewable and non-renewable material resources (excl. water and air) plus the erosion caused by agriculture and forestry. It covers the whole lifecycle from the extraction of raw materials to the processing industry, distribution, consumption, recycling, and disposal. The idea of the material footprint is to provide a comprehensive and understandable tool to reduce different kinds of present and future environmental challenges.
When the sustainable lifestyle material footprint of an average European lifestyle drops from 27.000 – 40.000 (approximate current average lifestyle footprint per person) to 8000 kg per year, the environmental and resulting social impacts of our lifestyles will drop and change considerably. It also provides a way to measure progress and milestones of success towards our future sustainable lifestyle goals.

What are sustainable lifestyles?

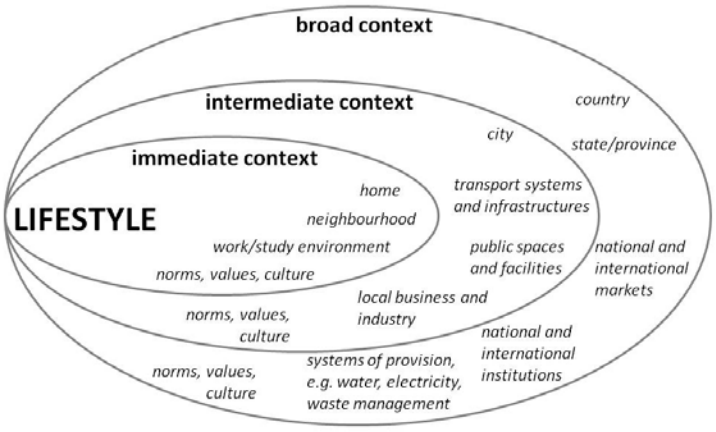
The unprecedented growth in material wealth in the last two decades has also led to unprecedented decline in global resources and extreme increases in CO2 in the atmosphere leading to global climate change. The global ecological footprint is in overshoot (where resource demands per person exceed available resources) and the world is struggling to limit global warming to the 2-degree target.

The environmental and social impacts associated with our current lifestyles and consumption patterns have been a major contributing factor to "unsustainable" trends. What then, is a sustainable lifestyle? **The SPREAD project has identified '8000 kg of individual material consumption per year in 2050' as a rough orientation of the ecological limits that our lifestyles would have to stay within in order to be sustainable.**

Today, across Europe, our current ways of living are unsustainable (SPREAD Consortium 2011). Current European societal structures, infrastructure, social norms and values, and the financial system are said to be driving unsustainable development. As an individual it has been difficult to disrupt these dominating norms and models. Although there are promising and encouraging examples like consumer-producer cooperation to support local farmers or multi generational living, our collective challenge and opportunity still lies in our ability to change the default and enable sustainable lifestyles at scale.

Enabling sustainable lifestyles

Enabling sustainable lifestyles will require more than promoting green consumerism (Bengtsson & Akenji 2010, Lorek 2010). Sustainable living goes beyond the consumption of the most sustainable material goods and/or services, into the re-design of ways of living, feeling, communicating and thinking. For example: personal and collective attitudes; how values are established over a life-time; how we interact and transact in the economic system; how our cities and education systems provide the infrastructure and skills for lifestyles that support more sustainable societies.
Even if there is willingness among people for change, they often fail to succeed in lifestyle changes because they are confronted with factors that "lock-in" their unsustainable behaviour and choices (Mont and Power 2010; Van Vliet et al. 2005). For example: a combination of sub-urban sprawl with insufficient public transport locks in private car ownership and use.



Source: SPREAD 2011 Baseline Report

Weblink to baseline report:

www.sustainable-lifestyles.eu/fileadmin/images/content/D1.1_Baseline_Report.pdf

Visual material presenting emerging promising practices:

www.sustainable-lifestyles.eu/fileadmin/images/content/D3.1_EmergingPractices_part2_visions.pdf

In addition to individual consumption and lifestyle change there is a need to strengthen the enablers that will facilitate the changes needed (or sometimes to force that change), as well as eliminating the blockers and barriers to change. Often those so called, "gate-keepers" have (economic) interests with the current (unsustainable) systems and traditions. There are also risks of **"rebound-effects"**. For example, an individual may save energy or materials, with a technological solution, but then they may apply that savings to extra energy and material consumption.
Social and political innovation is crucial to enabling sustainable and resilient change. Our baseline research on sustainable lifestyles research and practice has found that a lot still needs to be done. We have the knowledge to provoke a fundamental change. We also know what will happen and what it will cost the society if we do not act. Problem we face here is that a lot of this knowledge is not really taken seriously or implemented, due to other economic and political interests.
This roadmap identifies opportunities and promising ideas for policy-makers to consider for getting Europe on track to more sustainable living in the current decade as well as pathways to 2050. Change will require political leadership, collective actions and responsive citizens. All together we can do it!

OUR METHODOLOGY:

The SPREAD project has used a participatory action research approach to the development of this roadmap. We organized two main workshops, one in Milano on future visions 2050 (forecasting) and one in Helsinki on possible scenarios (backcasting) to concretise the future visions. These workshops were used to design this roadmap of actions and policy recommendations. In addition we organized 13 expert meetings on various key topics such as health, education, ICT, business and policy. Experts were asked to express "must haves" for 2025 and 2050 and milestones. We additionally organized 10 bilateral interviews with experts, to have more detailed reactions in the roadmap drafting process.

Role of Civil society

Civil society in general is very creative and flexible. And they are often the founding fathers/mothers of very new ideas and visions. The role of civil society is getting more and more important. They normally take care of awareness raising in society, defend the most vulnerable parts of society and ecosystems, claim for human rights and justice.
A well-organized and independent civil society is a democratic right. It is complimentary to the democratic voting system and parliament. Civil society has to be pro-active and function as watchdogs for policymaking.
Involving civil society organisations (CSO) in policymaking is important for several reasons: because of their expertise and knowledge, because of creating the ownership of actions taken, and because of their long-term visions and interest (beyond the 4 years of political decisions).

PROMISING PRACTICES FOR MORE SUSTAINABLE LIFESTYLES 2050

AT SCHOOL:

"I'm in secondary school. It is an open school, as also people from our neighbourhood can use it during community classes. We have classes, using all new and free available technology, from teachers, but also practical lessons from members of the different guilds in town. We participate every Wednesday in the community exchanges."

AT HOME:

"I live with my parents in a passive house. My grandparents live together with us, but in separate rooms. The water we use for the washing machine and toilet is collected rainwater. The energy we use is renewable."

ON THE ROAD:

"In our town we can do everything on foot or bike. If we need to go for longer distances we can use a (shared) car and of course the public transport facilities."

AT THE (SUPER)MARKET:

"It has everything you want: local products and from abroad. For products you have to pay much more, but sometimes it is worthwhile. We can pay in Euros or in our own local currency. If you pay in Euro, the amount of "environmental space" you use is calculated too, so limited in use."

AT THE OFFICE/WORKING PLACE:

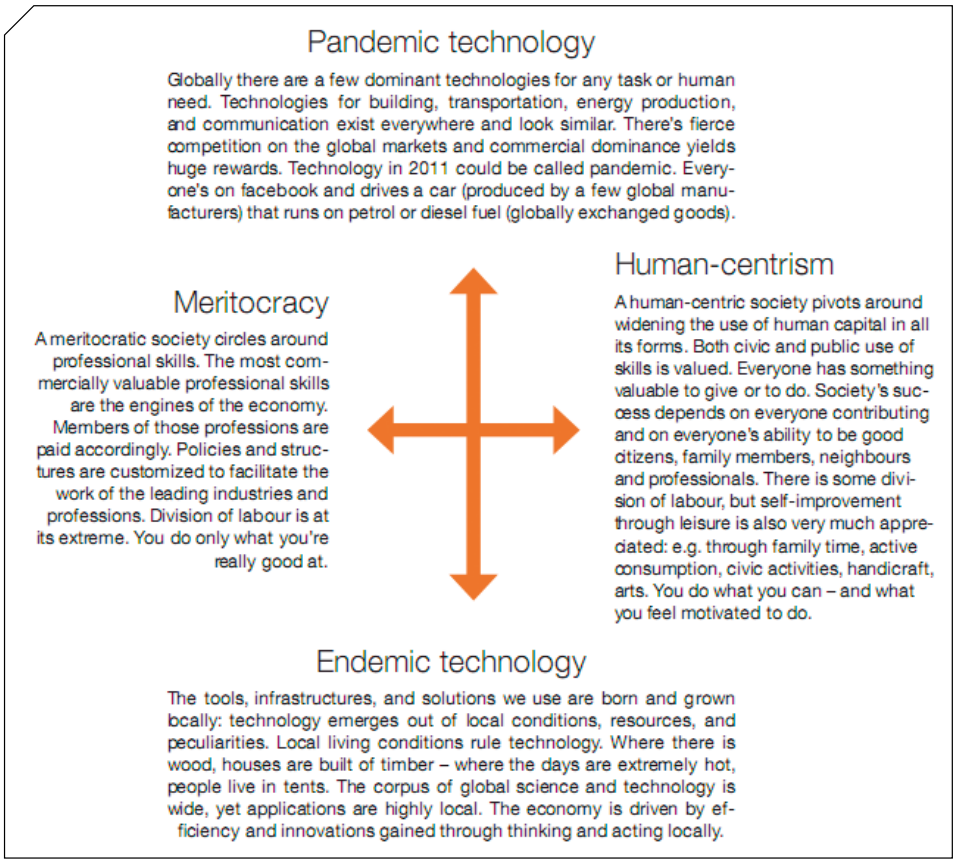
"My parents don't go every day to the office, because they can work from home too. The office is a nice and light place where they feel good and creative. In the cantina they serve healthy meals."

IN THE COMMUNITY:

"The community is a multi-cultural group of people and families. Every Wednesday we come together to exchange ideas and divide responsibilities. We have a common garden where we produce part of our food. Rest of the food comes from the rural side, sold on our Saturday market. Shops and all kind of (public) services are available in town."

SUSTAINABLE LIFESTYLES SCENARIOS 2050

To visualize what more sustainable ways of living could look like in the future, the SPREAD project developed four scenarios of future sustainable societies where current challenges have been overcome and more sustainable ways of living have been mainstreamed throughout society. The four scenarios represent different pathways to and options for sustainable living, all within an average of 8000 kg per person per year. The scenarios took into consideration dominant and opposing drivers of lifestyle behaviour, as identified in the SPREAD baseline research:

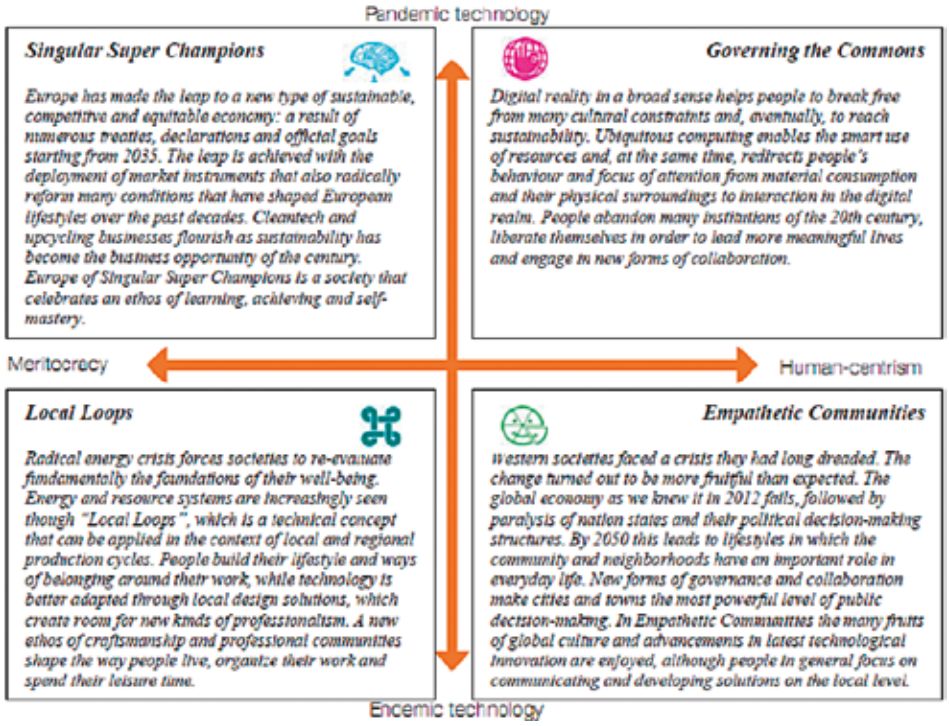


Sustainable lifestyles critical uncertainties matrix

These two critical uncertainties defined the main drivers shaping the scenarios and the scenario process.

- Technology is either pandemic or endemic.
- Society's governing principle is either human-centric or meritocratic.

In the Singular Super Champions scenario for example, there is a basic need for responsible and visionary business leaders. In the Governing the Commons scenario the collective responsibility of all citizens is the focus.
The Local Loops scenario demands individual responsibility and investment in innovation for local solutions and initiatives. In our fourth scenario, the Empathic Communities are based on sharing and solidarity. In reality all this kind of attitudes and values are necessary to achieve sustainable lifestyles, they are not contradictory. It also depends a lot on your own cultural and historical background, as well as on your personal skills and character.



Key themes and ideas catalysing each scenario:

Singular Super Champions:
- The European Green Deal
- Transparency gets the prices right
- The up-cycling economy
- Learning, not earning

Governing the Commons:
- The 3rd industrial revolution
- Ubitech economy
- Better work creates well-being
- Wikidemocracy

Local Loops:
- Peak oil game changer
- Rediscovery of local resources
- Local turn
- Craftsman attitude

Empathetic Communities:
- The system breaks down
- "We can" generations work together
- Public, private and people (PPP) the new welfare
- Communitisation of urban planning

TRANSFORMATION TOWARDS SUSTAINABLE LIFESTYLES 2050:

How do we get to more sustainable lifestyles? Our research and engagement with a multi-stakeholder group of experts and practitioners suggests that we need a shift in paradigm of thinking, values and acting. This roadmap proposes strategies to overcome key challenges. The main goal is to live within the limited space and resources provided by our planet while improving quality of life and wellbeing. Those are setting the boundaries in which Sustainable Lifestyles have to be developed. There is no "one and only Sustainable Lifestyle for all". Lifestyle and individual choices are infinite – hence there is no silver bullet or one size fits all. As a common criterion a sustainable lifestyle is a lifestyle that respects the limits of our environmental capital, respects well being and good health for all and can be continued for future generations.

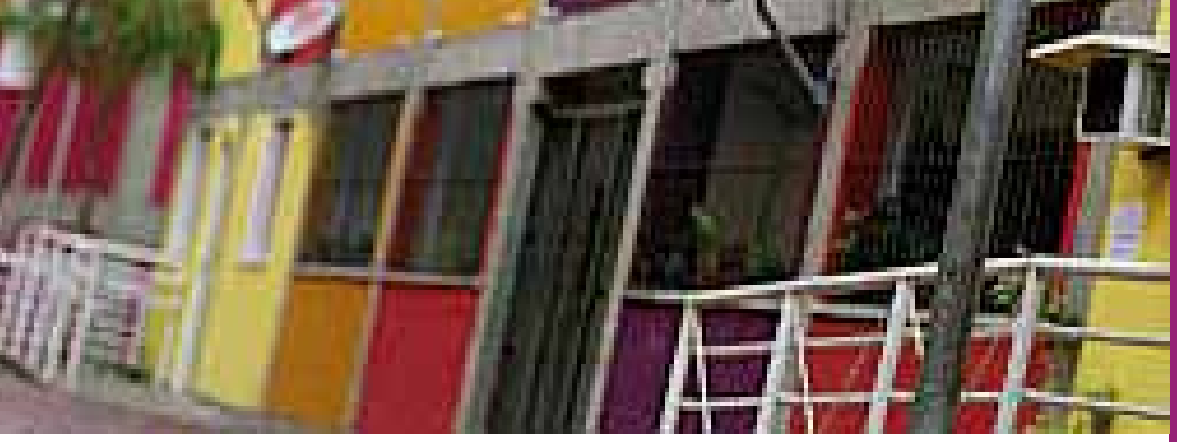
'[The] transitions to sustainable societies are like discovery journeys into the unknown, they are about exploration, learning, discovery and change. Since the destination (what is a sustainable society) is unclear and the road towards it highly uncertain, the only way forwards is to take small steps and regularly evaluate whether we are coming closer to or drifting away from our ideal situation. (...) along the way we will meet challenges, encounter problems, will be surprised by unforeseen changes, will meet new friends and perhaps enemies, and finally will come up with solutions never before imagined'.

(Loorback 2007).

Such transitions will only be triggered if bottom-up and top down approaches come together. **Four key enablers** have been identified through the multi-stakeholder consultation of the social platform. This Roadmap therefore explores how those four interwoven enablers – two top down and two bottom up – can contribute substantially to the transition towards 8000 kg Sustainable Lifestyles:

- Policy/Governance,
- Economy and monetary system,
- Social Innovation
- Behaviour Change.

Each pathway outlines opportunity spaces for policy makers and corresponding stakeholders to overcome existing lock-ins to unsustainable living.



I) POLICY AND GOVERNANCE:

Role and potential of the enabler
Governance and policy making is an important enabler for sustainable lifestyles as it designs the structure and the rules of the game for our societies. It has unique powers to establish top down approaches (by regulations, by imposing taxes, spatial planning etc), but can also support and sometimes even initiate bottom up approaches (upscale local initiatives, active participation facilities, ..) (Lorek et al 2008).

Developments to overcome
Governments and policy have also played a role in the current drivers of unsustainable lifestyles patterns, and to elaborate a system of unsustainable consumption and production. Some examples: unsustainable production stimulated by subsidies, investment facilities, tax regulations, marketing support, educational programs and also subsidies for research and development. Governments have financially supported the development of consumption infrastructure such as road construction, communication system protocols and shopping malls. Some say that without government support we would not have this consumerism society (Scheurs 2010). On the other hand governments have also been integral in implementing policies to support households in times of scarcity - such as World War II and the oil crisis in the 1970s. Various public health campaigns have played a key role in the moderating the consumption of alcohol and cigarettes.

The way forward
Policy and governance mechanisms can be important catalysts for sustainable or unsustainable lifestyles. Governments are the elected defenders and managers of a collective vision and interests of a country (region, city) and therefore must act responsibly for the long term well being of all citizens. Within this mandate it is important to set a good example. **Responsible leadership** is critical. Governments have to be held accountable for their actions and decisions.

Assessment tools for sustainability are helpful, before and after decisions are made. If governments put sustainable development and well-being at the core of their policy and long-term decisions, this will be a very important enabler for sustainable lifestyles. This includes an adequate evaluation of business initiatives. Voluntary agreements play a leading role in sustainable governance. Governments, however, have the responsibility to ensure the agreements are meaningful and businesses act in accordance.

The **subsidiarity principle** has to be optimal for all levels. Local governance is therefore also very important and can be responsible for many issues, like health care, education, spatial planning, etc.

Role of Business

Businesses around the world recognize that "9 billion people living well, and within the limits of the planet" cannot be achieved with technological innovation alone; that deep transformations in lifestyles and consumption patterns will also be needed. (..) Downshifting, product labelling, local consumption and other approaches have been offered as solutions to a more sustainable ways of living, but sufficient scalability has proven difficult to-date. It should be a key priority for business to work with governments, consumers and fellow entrepreneurs to shape progress toward a world where people live well and within the limits of the planet. This is a complex, systemic challenge requiring new ways of thinking, working and interacting. (WBCSD Vision for Sustainable Consumption 2050).

Participation is a critically important dimension of sustainable development, and therefore ultimately important for achieving sustainable lifestyles. Civil society organisations are key actors in the transition process. An open, transparent and institutionalized governance system is required.
On local level there are many opportunities to implement civil participation and create ownership for local policy in the community or neighbourhood.

General recommendations for governance and policy:

Focus:

- Well being, social equity, (fair share of) resource use and health indicators; measure what matters. Change of governance towards "to be" (quality of life) instead of "to have" (material wealth)
- The public management of the commons and public services (natural resources, but also health care, education, social protection and welfare)

Institutionalization:

- Using legal frameworks to incorporate sustainable development (SD) to enable Sustainable Lifestyles as basic goal. Like putting sustainable development in the Constitution. This includes targets for social equity and health
- Institutional framework for SD: National Interdepartmental Commission on SD, National Council for SD, where Sustainable Lifestyles are supported. Similar actions for regional and local levels, to guarantee public participation on all levels and to force sectoral approaches to integrate in a more holistic view
- Designing and implementing (long term) National (local) Strategies for Sustainable Lifestyles, with targets and timetables, which is compulsory framework for actual and future governments, and where civil society organisations and business play a key role. Ombudsman for future generations
- Support for pioneers and experiments, in public bodies and supportive to civil or private initiatives

Assessment and accountability:

- Review mechanisms for implementation
- Sustainability assessment tools must be compulsory
- Accountability tools for European and national parliaments, done by external audit bureaus, to asses the progress made towards sustainable development and lifestyles

Participation and local authorities:

- Open democracy; pro-active participation of civil society groups with non-profit purposes for well being for all and to defend a common and collective agenda
- Open and total transparency of public funds
- Participation in local budgeting and decisions
- Horizontal decision-making, empowerment of citizens
- Up scaling grassroots initiatives
- Open access to information with free Wi-Fi everywhere

ECONOMY AND MONETARY SYSTEM:

Role and potential of the enabler
The original purpose of the economy (oikonomia) was the management of the household in a way that would increase the well-being of all members of the household over the long term. Expanded, the scope of household could include the larger community of the land, of shared values, resources, biomass, institutions, language, and history - the definition of 'economics for community.'

Developments to overcome
In general we may say that our current economic system does not lead to sustainable lifestyles. In the last decades debt bubbles have been recurrent - not only monetary debt, but also ecological debt, as we are also indebted with our planet. In 2012 the "overshoot day" was the 22th of August (Global Footprint Network, 2012). This means that after that day our economy uses natural resources and energy that we don't really have or taking it already from future generations.

Barriers & blockers to overcome:

- The monetary system
- Recognising limits versus GDP Growth focus
- Management and pricing natural goods
- Current paradigm in economic theories

Our monetary system is mainly focused on centralized national currencies (or regional currencies in the case of the Euro), funded through the earlier mentioned debts, are enforced by a central bank (frequently private and profit making) and run as a monopoly. Our money system is a main problem for sustainability, according to Bernard Lietaer's latest book: Money and Sustainability (2011). Since 1970 there have been 145 banking crises, 208 monetary crashes and 72 sovereign-debt crises identified by the IMF. Lietaer also stresses that in the current Eurozone crisis - that it is also the money system that is responsible for inflicting high unemployment and other painful side-effects in several countries.

Recognising limits versus GDP-growth: One of the main goals of the Lisbon Strategy has been to ensure that the European Union is one of the most competitive economies of the world. It assumes the creation of jobs, GDP-growth, and to stop the outflow of industrial activities to the low-income countries. Instead, there has been evidence of a widening social gap and increase of health inequalities induced by this strategy, which is the main critic. Another burning issue is whether the EU will have the natural resources to achieve its growth targets, or at least raise the question where do those resources come from and on what (social and environmental) account? Another question lies in the assessment, monitoring and accounting of current resources and flows. Is it possible to keep on growing on a finite planet? Growth for whom and/or what does this growth look like?

Management and pricing natural goods: Until now there was not a lot of consideration that natural resources (and absorption capacity of waste) were limited. In former economic theories using environmental capital was more or less free. A lot has changed already, and more and more the use of natural goods is valued in monetary terms to integrate it in our market analyses. But is this enough, for instance to guarantee equal distribution, or do we need a management of the resources too? A look at the failed carbon market shows that pricing alone is not working to prevent climate change from worsening.

The way forward

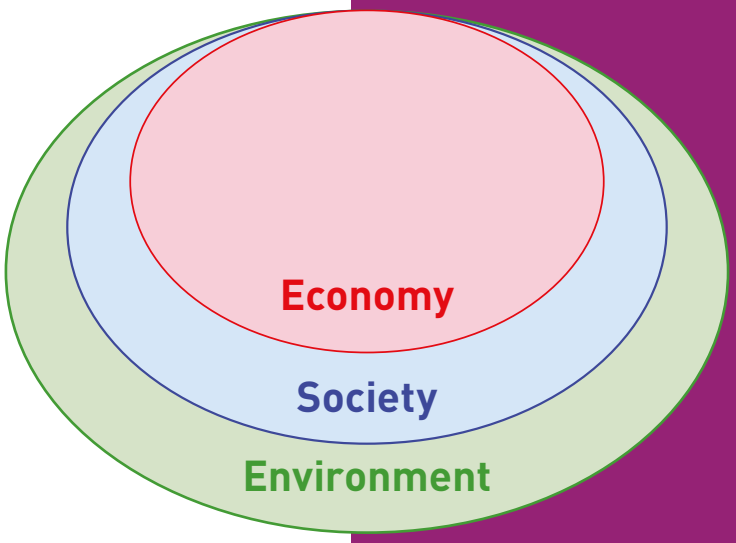
Monetary system: There is current momentum amongst European citizens and thought leaders to rethink our economy and monetary system (Jackson 2009, Lietaer 2011, Rogers 2012). Many theories advocate that our economies need to become more relevant to society, at the household and community levels. Money is simply a tool, with the function to give value to the exchange of products and services. In a sustainable society products and services are limited, it can be argued that the amount of money should be limited as well. One way would be to connect money to our ecological capital, as was the case before with the gold reserves in the National banks. Money as a tradable good, as it is now, has shown severe consequences for society and the environment.

Recognising limits versus economic growth: There are significant policy opportunities for the European Union to more systemically consider the health and well-being of people and their ecosystems, beyond GDP-growth. An economy that supports sustainable societies and lifestyles (8 000 kg per year per person lifestyle) respects the limits of the environment available and with a fair distribution of financial and material wealth. Economic strategy policies then would start from current resource capacity (supply side of natural resources and absorption capacity of waste) versus current consumption demand.

Management and pricing natural goods: Environmental economists have started to put a price on nature and environmental services, which is an important recognition of the value of nature. Policy support for this development could include taxes on the use of products and services coming from nature (minerals, water, soil, air,...). Payments for eco-system services (TEEB 2008) are now recognised across many governments and industries.
Future opportunities for ecological economics could include provisions for the equitable distribution of products and services considered basic human rights (water, food, fresh air,...) and the sustainable management (limitations if necessary) of the common goods.

A paradigm shift in economic theories: In the past ten years many new ideas have been proposed regarding the re-organization of our economy. Some very innovative, others based on knowledge already developed in the '70ties by economists like Herman Daly, Georgescu-Roegen, Robert Constanza and others. More and more questions are raised, not only about our economy, but also about the role of labour and about alternative business models.

Tim Jackson in his book 'Prosperity without Growth' suggests new economic models that focus on wellbeing and happiness. The reports of Stern, Stiglitz and Layard explore different indicators, beyond GDP. Bernard Lietaer and John Rogers provide many global examples of the benefits to using alternative and complementary currencies (Rogers 2012). Rachel Botsman, author of "What's mine is yours" (2010) advocates a sharing economy. Collaborative consumption is a growing concept, which gives another view on ownership, where it is more important to have access to a product than to own it.



General recommendations for the economy and monetary system:

The monetary system:

- Decentralisation of banks and diversity in sustainable investments
- Money (or any tool used) for exchange in markets related to amount of resources and energy reserves
- Promotion of local currencies and other complementary monetary models. (LETS, Civics, ECO, etc.)
- Consider deterrents and bans for speculation with money and natural resources (including food)

Recognising limits versus economic growth:

- Alternative indicators for well being, 8 000 kg lifestyles and development (beyond GDP)
- Economic activities (producing and consuming) fall within the non-tradable limits of energy and natural resources, for example by introducing carbon cards and other quota tools
- Transformation from a "debt-based-economy" to a "commons-based-economy": an economy that is based on what is available in respect to natural resources (incl. energy) and what is possible for emissions without damaging and overexploiting our environmental capital
- The (upgraded) International Panel of Resources is responsible for the international accountability and management of this kind of accounting and connection with the money systems. National or regional governments are responsible for national and regional levels

Management and Pricing Natural Resources

- Tax on waste/packaging and on use of natural resources (incl. transport) and less tax on labour ("tax the bads, not the goods")
- Immediate ban on perverse and harmful subsidies
- Internalisation of external costs into the price of goods and services.
- Increase in investments in sustainable projects and businesses

Current paradigm in economic theories:

- Integrate ecological economics as basic knowledge in economic education (from primary school to universities)
- Promotion and support of new business and value creation models and more diversification of economic activity (primary, secondary and tertiary)
- Let eco-efficiency prevail above economic efficiency in all levels of production chains

Role of Researchers

Need for more assessment of the impact of health, well-being and social equity of new technology, policies and business models. Researchers need to provide scenarios and analyze impacts for short and long term of existing trends, policies and business models. They need to work in multidisciplinary teams and with a holistic view.

NEW BUSINESS MODEL OPPORTUNITIES

- Short production chains
- Cradle to cradle product life cycles
- Instead of selling products, sell services (leasing)
- Ban planned obsolescence and support long life products (10 year warranty minimum)
- Production only on demand – no (aggressive) selling technics
- Bulk products accessibility
- Sufficient models for corporate revenue
- Fair salaries and labour conditions

NEW BUSINESS OWNERSHIP IDEAS

- Transformation to cooperative models: using the markets for (re)distribution of goods and services
- 25h work per week (or less)
- Maximum profit and wages (first voluntary, later compulsory)
- Added value creation models (profit or non profit)
- Peer to peer models
- Space for experiments (hybrid models)
- Personal accountability of CEO and management for environmental and social damage

SOCIAL INNOVATION:

Role and potential of the enabler

Achieving 8000 kg lifestyles, that will use sustainable levels of resources, can be achieved only partly through technological innovations. The rebound effect has been attributed to the lack of net savings of resources, even with increased levels of efficiency often through technology. Social innovation can provide the needed complement to technological innovation in order to achieve systemic, long-lasting social changes. Our trend research has shown that local and or grassroots initiatives have been successful in testing innovative ideas. Social innovations can be initiated by individuals or groups, but also by entrepreneurs. Social entrepreneurs and designers are promising actors, finding new solutions to existing social needs – or market failures. Through the so called 'acupuncture principle': small scale and local initiatives with potential for systemic change can be identified, and supported for up-scaling.

Developments to overcome

Social innovation is facing two main problems. First, social innovation competes with technological innovation for the focus of attention in political and business initiatives for sustainability as well as funding schemes, instead of being regarded as a complement. Second, due to the historically local nature of social innovations to-date they are seen to have niche impact only, as opposed to scalable and replicable solutions. A countless number of such initiatives are very promising solutions, however, their potential has yet to be sufficiently explored. Beyond the question of how to scale promising approaches, it is also necessary to establish political, and institutional structures (such as education) to foster them.

The way forward

To foster the social innovations that will enable more sustainable living on a general level it will be important to **communicate the gaps where social innovation can play a meaningful role.** For example, changes in social norms may be necessary to support initiatives for more sustainable living. Effective policy instruments could include **regulation, economic incentives and public participation**, as well as strong governance supporting social innovation. On the practical level we have learned that initiatives are not easily transferred from one situation to another. One size will not fit all. Instead, **combinations or hybrid models and the acceptance of provisions for dynamic structures that allow for change** will be needed in order to fit the diversity of contexts across Europe. **Continuous learning** can be fostered amongst initiatives through the establishment of networks to share experiences, practical skills and knowledge. Taken together collections of promising social innovations have the potential to further spread and contribute to the mainstreaming of more sustainable lifestyles. There remains a widely noted gap between the experience and skills of social innovators and their demonstration of their value to investors, policy makers and other relevant actors.

General recommendations for social innovations:

Upscaling promising practices:

- Upscale promising (local) practices (transition towns, local currency systems, car sharing, neighbourhood gardening)
- Provide institutional support for social entrepreneurs and change regulations to avoid autocratic blockers
- Promote sharing platforms (cars, tools,...), monitor innovation curves and impact , (could include collective insurance fit for this purpose (esp. cars), online tools, etc)

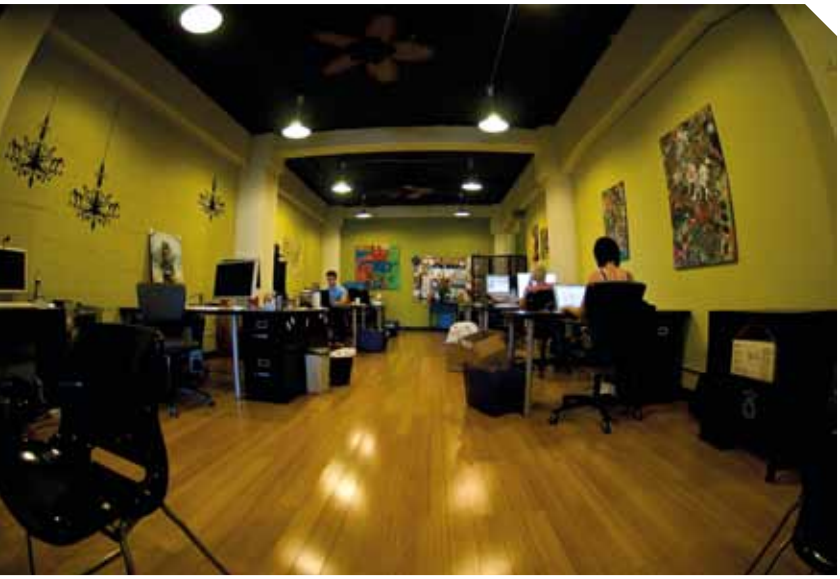
Facilitate social innovation:

- Facilitate breakthrough and creative thinking by establishing free thinking "designLabs"
- Provide opportunities for societal actors, business and policymakers leave their own "comfort zone" to experiment, prototype and test new solutions in collaborative open sourced platforms
- Work in partnership with other sectors such as with the health sector that aims to change current obesogenic environments into those facilitating more active and healthy lifestyles

INDIVIDUAL BEHAVIOUR CHANGE:

Role and potential of the enabler

Achieving 8 000 kg sustainable lifestyles will require sometimes strong shifts in behaviours and collaboration between individuals, communities and institutional structures. For example individual behaviour change can be fostered through social and technological innovation. **The transition towards more sustainable lifestyles will involve behavioural changes across age and life stages; socio-economic groups and cultural backgrounds with varying levels of knowledge, awareness, and interests.** Therefore understanding the needs, desires and future aspirations of different household segments is critical to offering a diversity of options and solutions for more sustainable living for all. On the other hand people have demonstrated the intrinsic capacity to think collectively for their survival (Rifkin 2010). **A shift in perception, to consider individuals as citizens (not merely as consumers)**, could provide a new lens in which actors can create more relevant provisions for social change to support sustainable living. Recent evidence of increased citizen awareness regarding issues of environment, health and justice amongst Europeans seems to be providing added momentum for behaviour change, new behaviours that support sustainable living as well as social innovation.



Developments to overcome

As part of a strategic re-orientation, the promotion of sustainable lifestyles has to overcome the shortcoming of limiting itself to merely individual consumer actions and habits. Instead of encouraging individuals to adopt simple and painless behavioural changes it is necessary to motivate people to engage in more significant changes related to engaging and facilitating critical societal issues, such as sustainable norms and values. Such an approach no longer draws on analogies from marketing strategies, but rather from political strategies articulating what sustainable lifestyles stand for and mean for the individual, friends and family and society at large.

The way forward

Many promising examples of the voluntary downshifting of individual material needs already exist. For example: working less to have more time for family, friends, leisure activities, voluntary community and caring work, etc. Those persons, also known as Cultural Creative's (Ray 2000) care about ecology and saving the planet, about relationships, peace, social justice, and about self actualization, spirituality and self-expression. Studies have found that these groups tend to be both inner-directed and socially concerned; they are activists, volunteers; and contributors to good causes more than others. Conscious consumerism is on the rise around Europe as consumers demand better quality and/or more sustainable products and services, but also support the idea to consume less – or a shift from ownership of goods and services to access to goods and services.

General recommendations for individual behaviour change:

Changing norms and ethics:

- Focus on "being" instead of "having" as main societal norm
- Being aware that our way of living has effects (negative or positive) on other lives
- Share things and owning less: sharing centres in every neighbourhood
- Communication: slow change of values towards wellbeing and happiness without material consumption (it is the use of something that is important)
- Mass communication and press approaches: demonstrate successful stories to inspire and encourage citizens and entrepreneurs. More social responsibility from media as well (content of programs)
- Criteria for advertisements: redefining the good life to a more sustainable one (vs. references to "material happiness"). Only advertisements for sustainable and/or local products and services are allowed
- Influential status symbols for sustainable living

Education and informal learning

- Education focused on "be" instead of "know". Students will think critically, are creative, innovative and responsible
- Curricula on all levels (primary and secondary school, vocational education, bachelor and universities) integrate sustainability knowledge
- Governments facilitate sustainable living courses in all informal learning institutions. (Local) governments facilitate community rooms
- Governments provide provision to employers to mandate 5 days per employee for training on sustainable living

OPORTUNITIES PER SECTOR

SUSTAINABLE CONSUMING (FOOD)

Consideration of individual diets, household food waste, and the food production system are key to addressing lifestyle impacts related to our consumption of food.

The review of unsustainable food production – such as harmful substances used in agriculture, (like pesticides and other toxic chemicals), and intensive livestock farming, will provide opportunities to innovate practices to more sustainable ones. In policy terms, a fundamental review of the EU Common Agricultural Policy (CAP) is recommended.

Shifts towards small scale and local production and consumption of food will require policy support and infrastructure. For example, fostering shorter production chains through the promotion of farmer-consumer markets, will not only give better access to regional products but will also aid shifts towards a more sustainable seasonal consumption. Current trends of individual and collective urban farming support food security and diversity. Local production and consumption of food integrated into community life also supports opportunities for the concepts of community kitchens, and exchange of practices for healthier food consumption habits.

If buying and producing food is getting more integrated in the neighbourhood, community cooking can be one of the activities to exchange ideas and practices on healthy food.

While the effects of human activities and lifestyles on terrestrial environments have been well-documented, the direct and indirect effects of these activities on oceans and their ecosystems remain sometimes overlooked (Hale 2009). Destructive fishing, bycatch fishing, commercial shipping and the introduction of invasive species for human consumption are affecting marine and coastal ecosystems essential for absorbing CO2 and regulating climate and temperature (Herr and Galland 2009). Agricultural pollution, such as organic and inorganic run off, nutrient inputs and product waste (such as plastics), all affect marine ecosystems.

The LiveWell 2020 Plate, produced for the UK, sets out a diet that will reduce GHG emissions from the UK food supply chain by 25% (based on 1990 levels) by 2020. The LiveWell plates for the pilot countries (France, Spain and Sweden) provide the same 25% reduction in GHG emissions from the pilot countries food

chains by 2020; As the pilote countries are large food producers this will contribute significantly towards the EC's overall GHG's by 2020 (LiveWellforLife EU 2012)

Technological efficiencies in food production won't be sufficient to reduce our EU food diets' impacts. We must change food consumption habits too. LiveWell research illustrates that our choices must be about balancing the proportions of different food stuffs and diets. This flexible approach allows different cultural religious and individual dietary needs or preferences to be taken into account. The LiveWell diet advocates five simple rules for sustainable diet:

1. Waste less food - up to 30% of what is brought home is wasted
2. Eat less processed food – they tend to be more resource intensive to produce and often contain high levels of sugar salt and fat
3. Eat less meat - by reducing but not eliminating animal-based proteins for EU diets we can meet recommendations for health and emissions reduction targets for 2020
4. Eat more plants - enjoy fruit and veg
5. Buy food that meets critical certified standards (examples include fish certified by the MSC, fair trade coffee and fruit, and meat and eggs with an RSPCA freedom to label

Promoting healthy and sustainable diets can be fostered through wider accessibility to sustainable foods for example in public canteens, as part of the Sustainable Public Procurement policies. Certified labelling can be used to inform consumers of the environmental impacts as well as health implications of their food choices.

The results of the EUPOPP project shows that reducing food waste (in food production, supermarkets, canteens and households) is necessary to achieve 8000 kg lifestyles. This issue can be confronted with consumer information on best-use-before labels and expanded sell-by dates of food in retail.

Promoting healthy and sustainable diets can be done by making them accessible in public canteens, as part of the Sustainable Public Procurement. Labelling can also be used to inform how sustainable the product is referring to food miles, water use and land use.

SUSTAINABLE LIVING

The built environment

Urban infrastructure planning that takes a human-centred lifestyle approach as well as resource efficiency approach is a key factor for enabling sustainable lifestyles in cities and communities. Considering the growing levels of population density and cultural diversity, compact city-structures with a well-balanced integration of green spaces, multifunctional buildings and accessibility to community services provide opportunities for continuous improvements in quality of life and safe, resilient sustainable living options into the future. Sustainable living must be the default option in cities and communities – smart, human-centred infrastructure can enable this – for example public transportation systems have to function optimally, be easily accessible, and desirable to reduce private car use.

The public sector can encourage and facilitate collective action of bottom-up neighbourhood initiatives (Agenda 21, Transition Towns, "edible parks", urban labs,...) to strengthen cohesion, social networks and create shared collective values and shared responsibilities between public and private actors. Community centres for informal learning and material sharing can also ensure mass adoption. A new layer into the legal framework can be introduced, adding "semi-public" and "semi-private" spaces. Both in public spaces and the built environment flexible and multi-functional use of spaces and building can exist.

Inclusive planning processes with diverse groups of stakeholders, and multi-disciplinary teams (architects, urban planners, transport engineers, biologists, social workers, health promoters,...) are needed to ensure relevance of design to optimize sustainable living cities. Desirable liveable cities with accessible opportunities for leisure activities may produce an added benefit of deterring long haul travel for holidays.
In case of good public transport accessibility industry and big office spaces can be built outside the city centre, while new huge shopping malls must be prevented.

Local governments can monitor levels of sustainable living with Urban Sustainability Indicators. Pilot projects should be fostered in the areas of closing the loops: zero energy and limited water consumption, zero waste, zero soil sealing etc. For sustainability, but also resilience, reasons cities have to move to more self-sufficiency, at least at regional level. By doing so, the creation of "eco-quartiers" or "eco-communities" can be promoted, initiated by public and/or private actors.

Housing
Initiate the transition to zero-energy houses both in building renovations and retrofits to new buildings, by establishing long-term strategies and financial support schemes at national, regional and local levels , for owners and tenants. Knowledge and education centres focusing on social and technical innovations for building materials, energy use renewable energy sourcing and behaviour change. Awareness raising through existing and new tools like energy labels for buildings and appliances, smart metering, energy advisory services,...

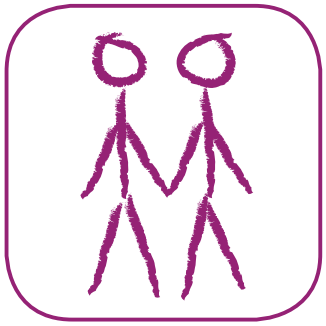
On local and national levels pilot projects should be promoted – such as new forms of home ownership, co-housing, increased shared services and facilities, community spaces in multiple dwellings, etc. Policy tools might include the adaptation of the legal framework (National Building Codes) to allow and promote new forms of living, flexible living and community services which incentives the reduction of living space per person (below 20 m2).

SUSTAINABLE MOBILITY

Sustainable individual mobility can be approached on two levels: the decrease in individual mobility needs and the transformation of remaining individual mobility has to be made more sustainable, safe, equitable and accessible choices. Businesses can promote and facilitate home-office working options or utilize local shared office spaces (i.e. HUBs). Cities and communities can benefit from new business models that demand hi-tech places where virtual meetings can be organized (national and international) for businesses, non-profit organisations, social networks etc.

To optimize sustainable individual mobility, cities should be as compact as possible- with all basic services and green spaces available in relatively short distances. This allows people to walk, bike or use public transport - rather than taking individual cars - which contributes to health and wellbeing. To enable sustainable mobility cities and communities, bike lanes, walking paths and smart design are required. For example, cities like Freiburg, Germany – where you can park your car only at a few hundred meters from your house – to avoid short distance use of the car. Car and bike sharing can be scaled to be accessible to all citizens, facilitated by the local government i.e. through the provision of public parking spaces.

Public transport will need to be transformed into an efficient and carbon free system at local, regional and pan-European levels (i.e. intermodal transport systems that allow the significant reduction in short haul air travel). To ensure optimal use of these systems, communications and information campaigns as well as infrastructure will be required – i.e. instructions, timetables, loyalty programs etc. online.



SUSTAINABLE SOCIETIES

Sustainable societies that support 8 000 kg sustainable living are those that integrate environmental sustainability with health, wellbeing and social equity principles. Sustainable societies successfully manage complex policy challenges on how to overcome economic weaknesses and high unemployment rates, how to preserve health and social services as well as environmental protection; how to become more inclusive and benefit from multicultural societies and ensure wellbeing for all across all socio-economic groups, ethnic and age groups and men and women.

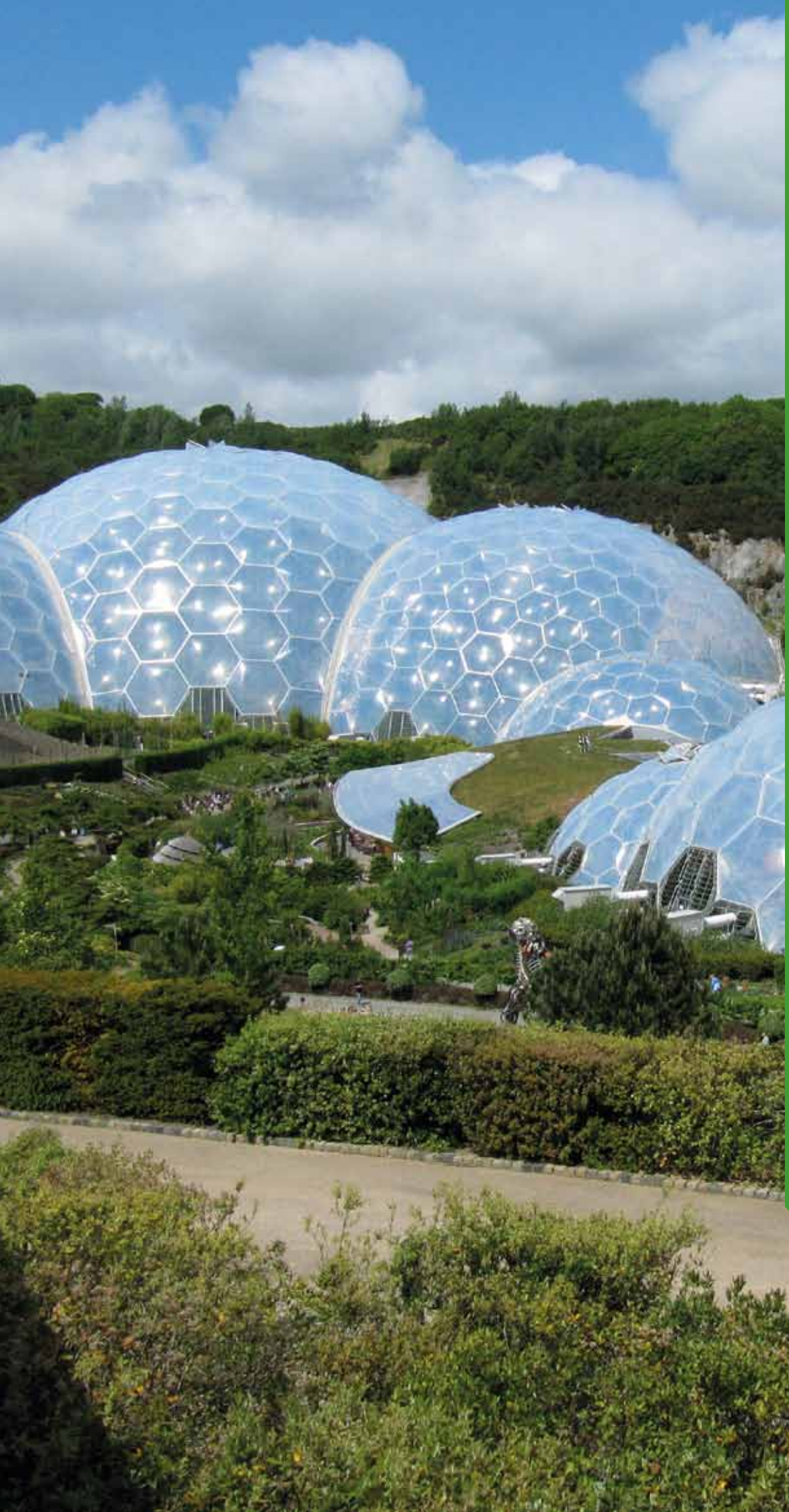
Appealing narratives, disseminated in education and media exposure need to encourage sustainable living: starting at an early age. Education must be available to everyone, and will always include sustainability thinking and reasoning. Sustainability should be the overarching framework conditions for all societal actors to operate within – including policy making and governing – and needs to be resilient to changing political views.

The key principles of environmental sustainability, health and social equity should be integrated in all societal levels. Arguments of an integrated and holistic view for development could be based on better knowledge of the costs and benefits to society from a health and well-being perspective of policies and interventions. Impact assessment tools are crucial for monitoring well-being and health.

A specific action that could benefit from immediate support would be to increase the number and capacity for health promotion programs in schools and at the work place to promote healthy diets and physical activity linked to sustainable development approaches. But also to develop and support local policies and programs that support changes of the environmental conditions in the most deprived areas; develop policies and social safety nets for the most vulnerable groups, with a focus on children and old people from low socio-economic groups as the most vulnerable and exposed to environmental health risks.

Workplace policies and programs for public institutions and corporations should be supported to develop sustainable workplaces (including sustainable employees), outdoor working facilities and support for teleworking.

On the local level there needs to be support for local community programs and the prioritization of the improvement of health and quality of life for the most challenged neighbourhoods. Through sports in schools and sport centres we can strengthen the social capital in low socio-economic neighbourhoods. The development of health prevention and health promotion can improve long-term health outcomes and decrease costs for chronic diseases treatment and long term care, in order to foster sustainable lifestyles health services.



Role of Trade unions

By rethinking the economy and business models we implicitly have to rethink labour too: that could be a task for the trade unions. Is it necessary that we all keep on working 38 hours a week? That we keep on selling products and delivering services, even if we don't really need them, nor have the natural resources to produce them? Besides the necessary creation of green and decent jobs, defend a social protection floor, and fight for good labour conditions, we all need to rethink the role of labour in our economy. That is a challenge trade unions will have in the future.

COMPLEMENTING CURRENT EU-ROADMAPS

This roadmap attempts to complement the various roadmaps presented by the European Commission in 2011:

- Energy Roadmap 2050
- Roadmap for moving to a competitive low carbon economy in 2050
- Roadmap to a Resource Efficient Europe
- Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system

As well as other strategies with a similar horizon

- Energy Efficiency Plan
- Thematic Strategy on the Prevention and Recycling of Waste
- Global Europe 2050. Social sciences and humanities
- On the Progress of the Thematic Strategy on the Sustainable Use of Natural Resources

Nearly all EU roadmaps refer to the Europe 2020 Strategy and intend to make it more precise in its respective field (energy, transport, low carbon, resources). A common element of all current roadmaps is the reflection on environmental challenges in terms of what they would demand from and impact the economy. Otherwise they tend to differ remarkably in terms of ambition as well as priorities. The 'roadmap for moving to a competitive low carbon economy', lists precise green house gas reduction targets for various sectors; e.g. for residential and services of -37 to -53% until 2030 and -88 to-91% until 2050 compared to 1990. The roadmap on transport – on the other hand – clearly states that 'curbing mobility is not an option' and therefore mainly focuses on technological innovation and competitiveness with environmental considerations as a secondary condition. The roadmap on resource efficiency is less precise regarding targets as well and only formulate in its vision that 'by 2050 the EU's economy has grown in a way that respects resource constraints and planetary boundaries'. The recommended instruments broadly build on exploring further efficiency gains and getting the prices right.

The EU Sustainable Lifestyles Roadmap explicitly takes a different starting point: Focus on the individuals in their own social context as opposed to the economy. In addition – and thus different from the other roadmaps - it sets an absolute target for 2050. Individual lifestyles should be based on a material footprint of 8000 kg instead of 27.000-40.000 kg average today. The EU Sustainable Lifestyles Roadmap and Action Plan illustrates pathways to more sustainable ways of living 2012-2050 for relevant actors, with emphasis and acknowledgement that there are infinite possible pathways, as infinite as the individual needs and desires of Europeans.

CONCLUSIONS

We may conclude that social innovation is a crucial strategy for individual behaviour change towards collective sustainable lifestyles, but not simple to implement. Social innovation means a very interlinked approach for policy making. Current policy making structures in Europe are often silo-ed (environment, social affairs, economic affairs,...) and have been rarely systemic. This has caused a lack of coherence in policies that might support and foster more sustainable lifestyles. At the same time sustainability policies have been primarily concentrated on technological innovation, as opposed to social innovation.

The SPREAD project has identified **four key enablers for policy making** for more sustainable living: **1) policy and governance; 2) the economy and the monetary system; 3) social innovation and 4) individual behaviour change.** This Roadmap & Action Plan charts pathways to change using these key-enabling domains.

On policy and governance there is a need to focus more on **well being** and less on material wealth growth: use the indicators that measure what matters. Market instruments are a good tool get pricing right for the use of environmental goods, but general management is also necessary (stewardship of the commons). **Participation** of civil society groups and citizens is crucial on all levels, and needs to be institutionalized. For **strengthening policy coherence** it is recommended that different departments of governmental bodies work together and define common long term goals.

On economy and the monetary system it is stressed that our current economic system does not lead to sustainable lifestyles. A paradigm shift is necessary, where we put more **human centred values** at the heart of the economy and aim to fit the economy again within the environmental limits. Recommendations are given on **tax reforms** and **promotion of complementary currencies.** But also **regulations for business and products, as well as advertisements** are considered. The integration of ecological economics in all level of education is seen as a very important tool for understanding and creating ownership for sustainable lifestyles on a long run.

On social innovation the roadmap values a lot the existing bottom up initiatives and gives ideas for to facilitate them in a way that they will be upscaled in an easy way. The government can also provide opportunities for societal actors, business and policy makers to leave their comfort zone for **experimenting and creating new solutions.** In partnership with other sectors like the health sector, attention has to be given for more and healthy lifestyles, at home and at the work place.

On individual behaviour change we are dealing with existing societal values and norms that makes it difficult for individuals to modify. **More transparent communication** will support, as well as (top down) choice editing. Integrating sustainable living knowledge is crucial for **education** from primary schools to universities; formal and informal learning.

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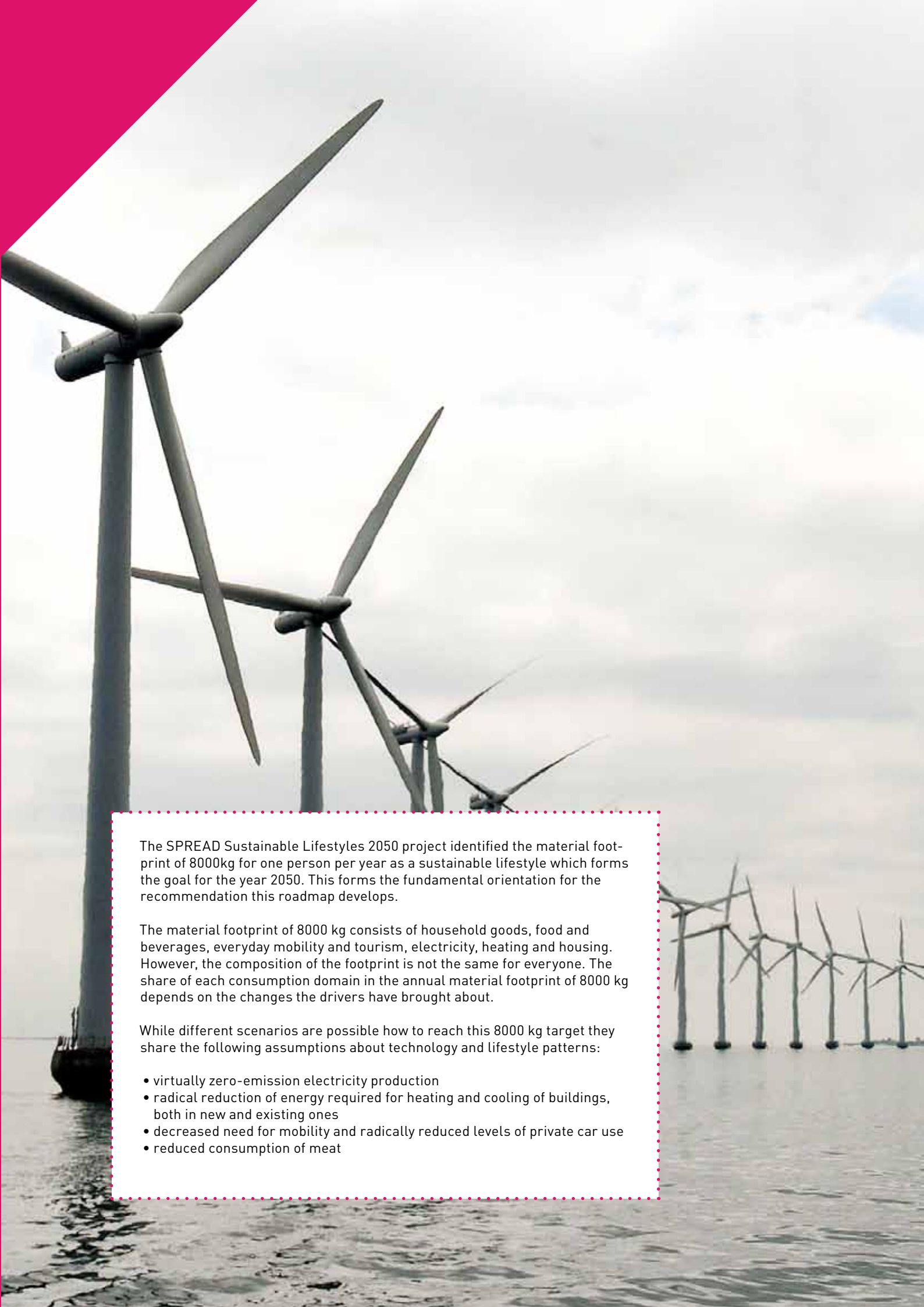

The SPREAD Sustainable Lifestyles 2050 project identified the material footprint of 8000kg for one person per year as a sustainable lifestyle which forms the goal for the year 2050. This forms the fundamental orientation for the recommendation this roadmap develops.

The material footprint of 8000 kg consists of household goods, food and beverages, everyday mobility and tourism, electricity, heating and housing. However, the composition of the footprint is not the same for everyone. The share of each consumption domain in the annual material footprint of 8000 kg depends on the changes the drivers have brought about.

While different scenarios are possible how to reach this 8000 kg target they share the following assumptions about technology and lifestyle patterns:

- virtually zero-emission electricity production
- radical reduction of energy required for heating and cooling of buildings, both in new and existing ones
- decreased need for mobility and radically reduced levels of private car use
- reduced consumption of meat

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SPREAD Sustainable Lifestyles 2050

EUROPEAN COMMISSION European Research Area

SEVENTH FRAMEWORK PROGRAMME

Funded under Socio-economic Sciences & Humanities

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