

Sustainable Lifestyles 2050

Visual material presenting emerging best practices and emerging visions on sustainable lifestyles

THE EMERGING VISIONS

- Part 2 -

DELIVERABLE 3.1

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The emerging visions

The SPREAD consortium partners together with 20 European experts have created four *emerging visions* of sustainable lifestyles for 2050. This visioning process used the *idea cards* (outlined in the previous section) as a tool for thinking about the future and engaged project partners and external experts from the fields of futures planning, scenario planning, urban planning, design and sustainability at a workshop held in Milan on September 22nd and 23rd 2011. As a result, four *emerging visions*, possible futures of more sustainable ways of living, have been developed. These *emerging visions* are conceptual images of what the future could be and take a cross-cutting approach by looking across aspects of our lifestyles: consuming, living, moving and health and society related issues.

The four visions of possible sustainable lifestyle future are:

- “The convenience of trust”
- “Happy sharing communities”
- “Alternative economies for dense communities”
- “Entrepreneurial and self-aware society. Connected wealth”

Each *emerging vision* is presented here through a short description, a day-in-the-life narrative, a visualized depiction image and a selection of the *ideas cards* that inspired the vision narratives.

The research leading to these results has received funding from the European Union's Seventh Framework Programme (FP7 SSH-2010-4) under grant agreement n° 263962.

THE CONVENIENCE OF TRUST

Vision for Sustainable Lifestyles in 2050

A work in progress from the SPREAD Vision Workshop

Milano, 21-23 September 2011

Politecnico di Milano - Indaco Dept.

The vision is built upon the value of community/network as key social driver and principle.

It aims to turn the concept of community into a long-term value by 2050, one that informs the structure of everyday life and society, effectively supporting people's lives and becoming a pillar of public and private initiatives.

It seeks to enable communities to become self-sufficient, aware and resilient in terms of resources, health and well-being, social equity skills and competence. It is based upon the following three pillars.

By COMMUNITY we mean a group of people with a mix of strong and weak ties who create a supporting network of people and places around the individual that s/he can really rely on. A community can be made up of family and friends, but it can also be a group of people with weaker connections, such as shared interests, purposes and initiatives (i.e. a community of action and interest).

The vision is based on two key concepts: convenience and trust.

CONVENIENCE. The organisational principle of the community must be perceived as advantageous in various ways, if it is to be attractive and relevant to everyday life.

Infrastructure. The needs and desires of the community must inform the design and organisation of community services,

which will be based on collaborative and participatory principles.

Wellbeing and mutual support. Personal relationships and a feeling of belonging to the community can be facilitated by innovative contexts and solutions that make it easy and convenient to connect with other community members.

New business models. Innovation is needed to make communities more cost-effective and capable to interact conveniently. For example, household economies, collaborative economies and "support" economies all require new business models that mix profit and non-profit, private and public, small and big. They also require new forms of non-monetary exchange, such as reward and credit systems, with local rules (alternative currencies).

TRUST. The glue of the community system (even more when based on collaboration) is trust. It is the result of closer personal relationships and it is therefore based on practical behaviours.

Engagement is the individual involvement in community activities, in collaboration with others that builds trust between strangers.

Reciprocity is the positively reinforced cycle of contributing to the community and seeing members of the community contribute equally in return, or in parallel. Regulatory frameworks can support this.

Conviviality is the creation of pleasurable and collaborative

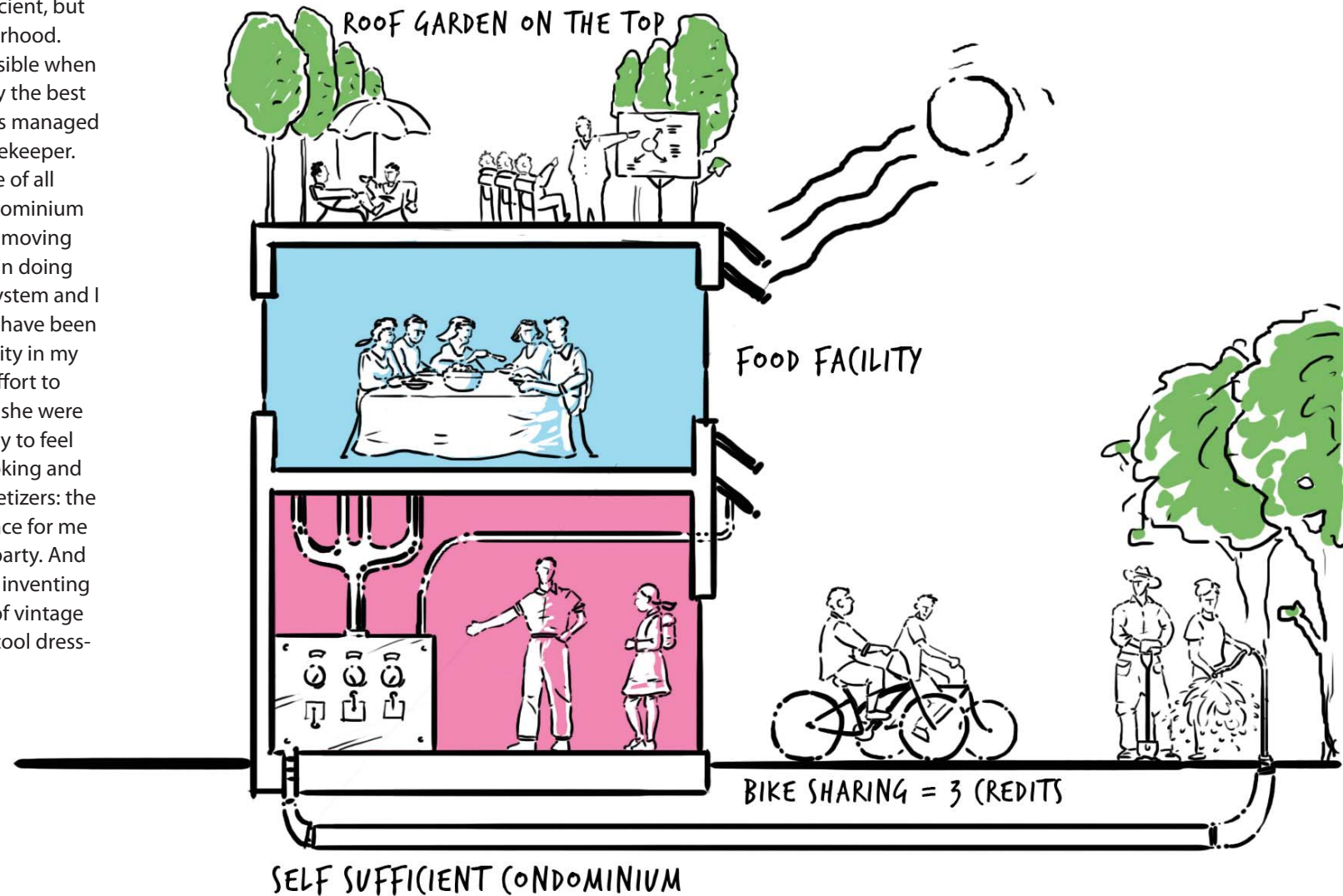
relationships (and situations) in every aspect of life. Food is an example of conviviality: pleasure, taking care of the others, loving and being loved. Conviviality is about connecting people, and providing meaning for the rituals related to everyday life. Conviviality is also about the sustainability of sociality and openness to the contribution of diverse groups of individuals.

People can contribute to the creation of this community-based organisation according to their capacities, motivations and lifestyles. Everyone is required and enabled to contribute in different forms and means.

THE CONVENIENCE OF TRUST

Carmen, 14 years old, at the 5th year of apprenticeship

"I live in a beautiful condominium, which is renowned in the town for being one of the best in the production of energy, food and water. We are not only self sufficient, but we also actually produce for the entire neighbourhood. Well, this is great, but it makes me feel so responsible when attending the farming classes. At least I can enjoy the best roof-garden of the town with my friends, which is managed by us with the help of Paolo, our super-block gatekeeper. He used to be an engineer and now he takes care of all the maintenance and technical tasks of our condominium to make smart use of our resources. I am used to moving around using public transportation and cycling: in doing so, I can collect a lot of credits from the reward system and I use them to spoil myself with leisure and sport. I have been educated to help the elderly and I have this activity in my weekly duties: at the beginning it was quite an effort to visit Bettina once a week, but now I love her as if she were my grandma. In the end, it makes me really happy to feel partially responsible for her happiness. I love cooking and I'm particularly good at preparing gorgeous appetizers: the food facility near my home is, in fact, the best place for me to meet my friends when we prepare food for a party. And I love fashion: I spend hours in the re-fashion lab inventing new styles and elaborating new collections out of vintage stuff. Well, in my desired future, I will be a super cool dress-maker!"



SUSTAINABLE COMPANIONSHIP

Jenny, 9 year old, primary school pupil

"...The curriculum for sustainable education in our school is based on 25 micro-internships per year consisting in day or half-day trips to organic farms, re-design and recycling companies, new traditional craftsman workshops, wild life protection projects, humanitarian programs... where we get in touch and learn the basics about growing food, providing goods and service, self-production, nature preservation..."

How does it work?

- sustainability education is embedded in daily living in the form of active education, project based learning...;
- friendly periods spent in contact with the real world form the basis of 'learning for life' education;
- 'learning for life', meaning acquiring basic knowledge on natural cycles, bio-diversity, regeneration processes, self-production... takes place on the field, in contact with communities, families, professionals...;
- many public and private institutions dealing with sustainable issues provide basic education on top of their main activities.



Comments

SELF SUFFICIENT CONDOMINIUM

François, 85-year-old, retired

"...It is almost incredible today how condominiums are built: looking around in my afternoon stroll, I love to observe the green walls blooming with flowers, the pump cleaning the water, the solar panels slowly turning to the sun... You know that we are almost self-sufficient? That is, we produce the energy we use, we capture the water, we grow food... When I was in my forties, all this would have appeared unbelievable!"

How does it work?

- new collective buildings are designed to become self sufficient in terms of energy production, veggies and fruit production, water supply, heating and cooling systems;
- indoor and outdoor spaces are designed with this purpose, and technology allows us to get the results.
- old buildings are renewed aiming at similar performances.



Comments

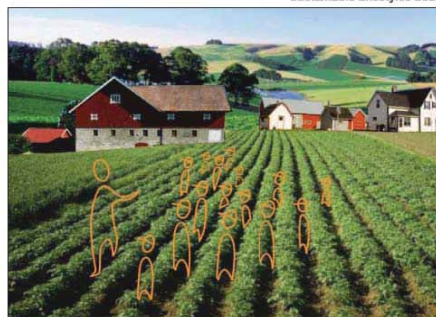
ACTIVE FARMING CLASSES

Ivan, 15-year-old, middle school student

"...In our school there is a vegetable garden where I've been attending farming class since primary school, and I've always done very well. I know lots of local crops and farming knowledge. The teachers teach us how to plant and harvest, we have regular farming work in the vegetable garden, and our generation feels therefore perfectly comfortable with taking part in urban farming to produce on the spot part of the fruits and veggies we consume..."

How does it work?

- sustainable active education goes through the normal education circle, activity based learning projects have become part of the formal education method;
- farming classes and other basic knowledge around sustainable food are mandatory at every education level to prepare aware citizens able to take part actively in co-production of the food they will eat;
- the classroom is no longer the only place to learn. School campuses are developed with farming, food transformation and preparation facilities;
- school canteens are supplied with vegetables cultivated in the garden.



Comments

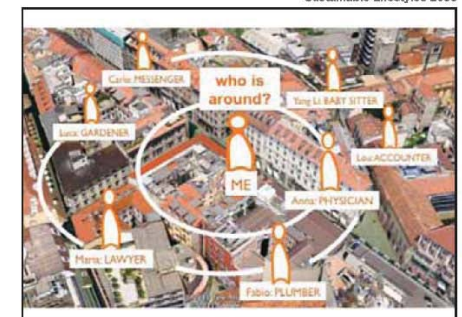
SELF EMPOWERMENT CIRCLES

Li, 25

"I moved yesterday, everything seems fresh to me, sadly again, my desk lamp was broken this morning, I should change the light bulb immediately, come on, I still have commitments to fulfill before tomorrow. Where can I buy a bulb nearby? I joined the community network when I moved here. Maybe I can ask for help there..."

How does it work?

- find help from those around you: who is where and available to do what;
- local bounds are strengthened by means of communication tools, intelligent sensors and geo-localization devices;
- activate instant support and close help in case of need;
- district personal networks are established.



Comments

URBAN FARMING UNITS

Elizabeth, 70, urban farming agronomist

"...when I studied agronomy it was focussing mainly on extensive agriculture and I had to return to school to learn principles of urban food production that go far beyond fruit and veggies orchards. It's first about town planning; to get as much public space turned into food production; coordination with progress of car free zones and food control; engagement and teaching the population to share gardens and available land, growing tasks, preservation techniques to maintain food after harvest... These urban farming plots are also a way for cities to ensure a minimum food production capacity in case of food crisis, so as not to repeat the errors of our recent past!"

How does it work?

- all urban gardens and public green spaces are turned to vegetable and fruit production, so that every neighborhood has its own cultivations, according to local conditions;
- as a consequence, every neighborhood has its expert farmer that assists inhabitants in cultivating pervasive agriculture in town;
- less car intensive cities guarantee a reasonably good quality of food produced in an urban context;
- urban farming units represent, additionally, a needed safety strategy against food crisis, bad market regulations and hazardous transformation processes. People consider having access to a minimum farming garden as a basic requirement for a household.



Comments

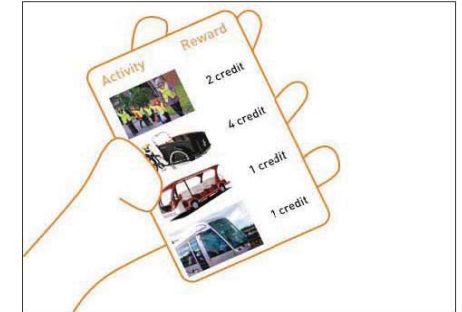
ALTERNATIVE MOBILITY REWARD SCHEME

Hélène, 36, mother of two children

"...Yesterday I changed our Mobilee-Miles against a bonus. You know since I'm walking and cycling to work and Henry and Elise use the 'walking bus' regularly to get to school we collected quite a lot of credits, so I get an E-Taxi Premium offer for my grandmother!..."

How does it work?

- alternative mobility reward scheme: citizens get credits when fulfilling sustainable activities: for walking and/or cycling; pedibuses move their children and carry out other sustainable everyday activities;
- the credit system fosters energy saving, non-polluting mobility schemes, lively public space, etc;
- measuring based on a mix of subscription cards and an on trust building system;
- credit exchange at key-points in the city or through online services of mobility providers.



Comments

FOOD FACILITY

Eduardo, 41, designer, single parent with a daughter

"...tortillas are the only food I'm really quite good at and, luckily, they are quite versatile. Today I have prepared stewed vegetables as filling and... voilà... a perfect dish!.. Philip prepared the salad, and Maria the dessert. A full dinner is finally ready for me and my little Jody: I just need to pick it up from the food facility and lay the table."

How does it work?

- collective kitchens open to food-group members are diffused all around the city. Food facilities are in fact services that allow people to save time in preparing food while increasing the quality of food prepared;
- every food facility gathers a food group that agrees on a weekly food scheme: each member is in charge of preparing a specific course of a meal, and cooks it for all the members. In return he/she receives the portions of the other courses prepared by the other members.



Comments

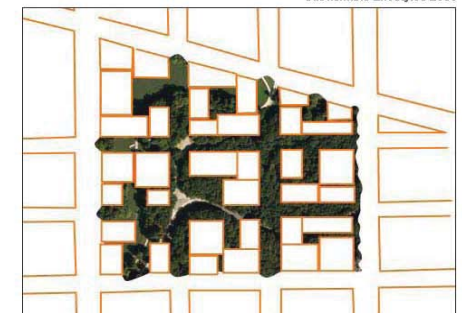
SUPERBLOCK GATEKEEPERS

Javier, 43, Superblock gatekeeper

"...30 years ago, neighborhoods were considered as public space nobody was caring for. Now groups of 5-8 blocks have been linked together under the supervision of a gatekeeper and that's my job! It's a little bit like an urban village where I organize projects between inhabitants. These are mainly social and sustainable activities: from co-ordinating the installation of solar production to e-car services for the elderly or spotting opportunities for collective water harvesting..."

How does it work?

- the 'superblock' development model transforms dense urban car dominated urban areas into car low/carless pedestrian and bicycle friendly space
- sensible building features, such as "superblock doors" and "urban sculptures" with smart sensors, provide info pillows and affective feedbacks about social and sustainable initiatives and behaviours within the superblock
- gatekeepers act as "social hubs" in charge of the social and sustainable development of the superblock area: from organising collaborative solutions between inhabitants to driving the energy-efficiency/production of the place;
- improve quality of public space/regain public space



Comments

HAPPY SHARING COMMUNITIES

Vision for Sustainable Lifestyles in 2050

A work in progress from the SPREAD Vision Workshop
Milano, 21-23 September 2011
Politecnico di Milano - Indaco Dept.

The vision deliberately conjures up a positive and desirable (perhaps somewhat idealistic) viewpoint based on the following five key-concepts.

SHARING COMMUNITIES. Emphasis on the sharing of assets and infrastructure, and access to culture. This change in daily practices is facilitated by good design of collaborative services and high connectivity between people. The sharing focuses on infrastructures such as pooling roofs for energy production or exchanging heat between houses, sharing places such as co-working spaces or collective community infrastructures.

SLOW / MORE TIME. Slow is intended in the sense of the Slow movement and general down-shifting of society. Fewer working hours leaves more time available and allows people to get involved in organizing the sharing between communities. Lower incomes are compensated by the direct benefits in terms of mutual help and shared goods. Slow is also intended as more time for education, for personal experience and personal development in the spirit of lifelong learning.

REASONABLY COMPACT. The necessary compactness of urban space is modulated between too packed for quality of life and compact enough to have most of all daily living facilities at a walkable or cyclable distance: a so-called 10

min city. Quality is also to be found in the open space for nature and agriculture that is available between 'vertical villages'. Density is also intended in a positive way as social intensity or local density of relationships.

COMMUNITY CENTERED. The concept of user-centred is here extended to the community: products and services are developed to be used collectively and to facilitate sharing and collaboration within the community. Here also the community-orientation is modulated to optimise advantages (e.g. equity, solidarity, mutual support, etc.) without the disadvantages of promiscuity and social inequalities and disparities.

PARTICIPATIVE / ENABLING. Engagement and participation is encouraged at each level. More than opposing bottom-up and top-down, a co-evolution between both approaches is preferred.

On top of these five key-concepts, a "*Toolbox for change makers*" is proposed to enable the transition towards happy sharing communities. It uses three sets of tools:

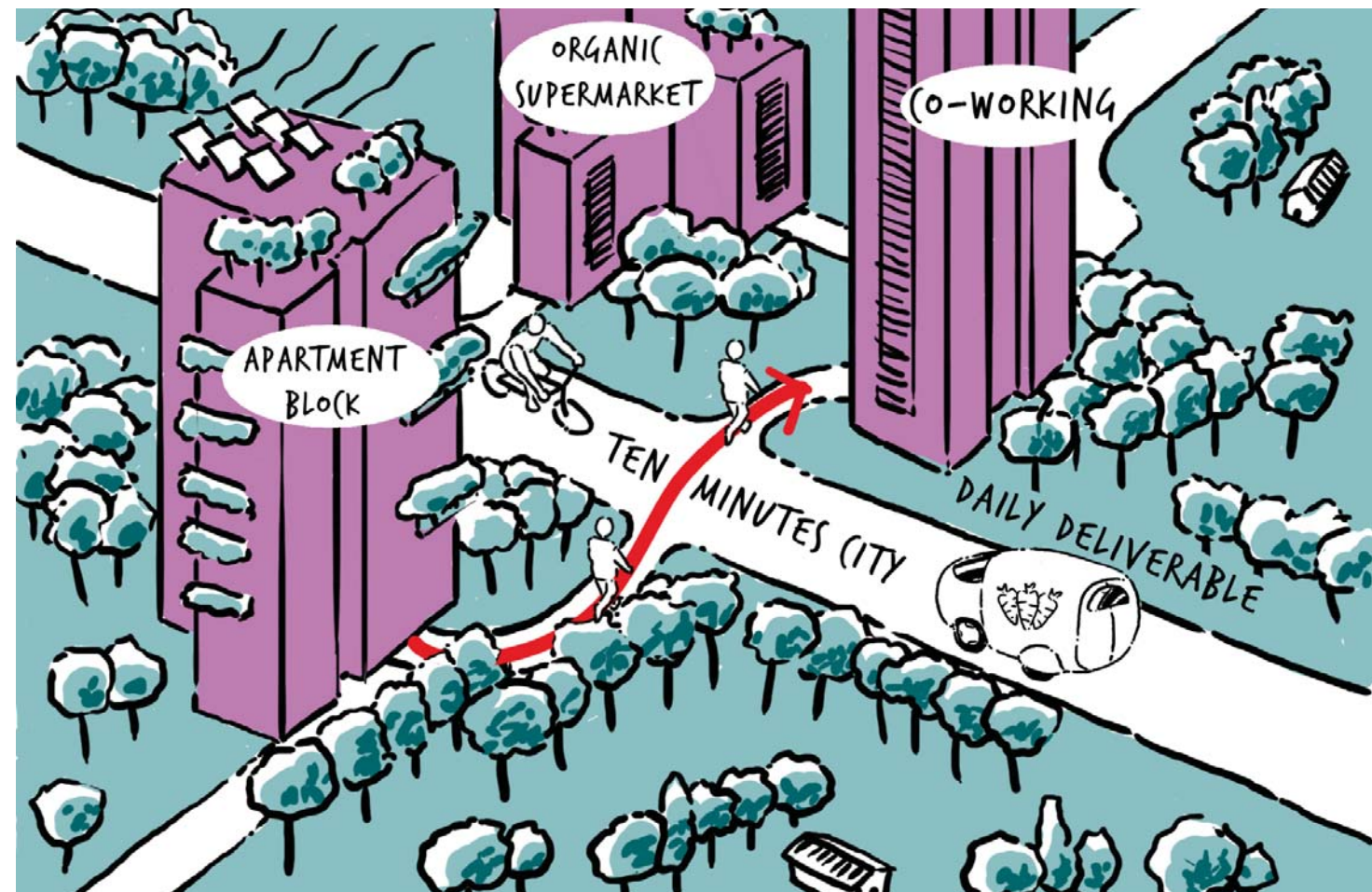
- local indicators of wellbeing and happiness show disconnection with owning material goods. The evolution of wellbeing in a neighbourhood or the average level of happiness are displayed in public space to enhance the social conversation;
- local or alternative currencies and reward schemes, such as a bank account based on energy megawatts to encourage behaviour change, incentives for healthy lifestyles or a system of credits linked to the use of alternative mobility;
- feedback systems that allow users to follow the consumption of water or energy at individual or community level and facilitate regulation and reduction of resource consumption.

HAPPY SHARING COMMUNITIES

Family Zhang: Mary, 41 years old, Lang, 43 years old and Jack and Ling, both going to secondary school.

Our family lives in a pretty dense and logistically well-organized city, with enough green spots for leisure and weekend visits. Our apartment block collectively owns the photo-voltaic panels on the roof top to produce our own energy. In addition, we own a windmill outside the city. This makes us an electricity-producing group of families. Heating is provided by heat from the nearby organic supermarket, where lots of heat is produced through the cooling system, or from the city's vegetable, fruit and toilet waste digesting system. We usually buy food in the organic supermarket. It partly comes from the cooperative farms situated outside the city. ICT-technology really helps us in the maintenance of these relationships with the local producers (of energy and goods) and the neighbourhood. Lang, my husband, is a middle manager at a bank providing green funds to green projects that are often initiated by the citizens themselves. He works according to a bonus/malus system. He has responsibility towards the citizens when not reaching positive figures. Of course he will not receive his bonus in such a situation. Unlike Lang, I am often free to choose where I want to work. Usually I take my laptop to the local hot-spot hub where I can meet other people and discuss interesting financial stocks during lunchtime. Sometimes I just work at home and have meetings with colleagues through a video system. Time spent travelling is not an issue for us: important services are 10 min away and, if needed, we can choose among different sustainable collective means of transportation. But we do not really need to move so much. Both of us have decided to work 4 days a week, like almost everyone in town. In our

free time we can contribute to the local services in our neighbourhood, help young people in their sustainable service (also our children will do this!), contribute in the food-coop and spend more time with our children. And even holidays are great. Since we work only 4 days a week, holidays are more spread out, but when the moment is there, we go on a long-long holiday visiting places during the trip.





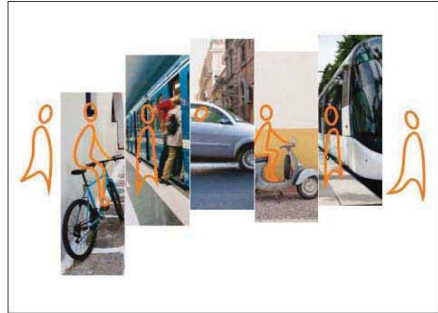
HIGH EFFICIENCY INTER-MODALITY

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..."

How does it work?

- upgraded mobility hubs: sustainable transportation possibilities for people and goods;
- switch from public transport to personal rental services (bikes, e-cars...), compatibility between city countryside;
- clear and communicative street-signs combined with multi-transport apps guiding people with geolocalization;
- paying complete trips including all local mobility services via mobile;
- train stations are sustainable mobility hubs where bikes and e-car rental, reselling train tickets, etc are centralized
- private and public service providers offer "on-demand solutions" for user journeys (i.e. taking the metro, switching to an electric bike and to an e-car...).



Comments



HIGH-RISE VILLAGES

Misaku, 31, physician

"...I am living in a high-rise village in the forest: it looks a bit like you've taken some blocks of Manhattan and settled them deep in the forest in Cornwall. At the beginning I did not believe that this 'zero density' breathing zones planning would be respected. Now I have the offer of a real city in terms of work opportunities and cultural life at a walking distance and surrounded by real woods or wheat fields. And I take the speed train if really I have to go to the next high-rise village..."

How does it work?

- densification of cities and new urbanization models limit mega cities and urban sprawl;
- promotion of medium size dense urban environments with dense public transport systems infrastructure inside the city and high-speed train connections between cities;
- urban planning standards based on succession of high density lodging and zero density green/leisure areas;
- new architecture movements following ideas like 'down town in the forest' or 'the high-rise/urban agriculture mix'...
- changing the relationship between parks and green areas within urban planning as a pattern made of high-rise blocks and forests blocks.



Comments



THE SUSTAINABLE SERVICE

Jim, 18, sustainable service servant

"My preferences for what I wanted to do for my sustainable service after finishing high school were not really clear... At the moment I am working in a mobility project for elderly people in a neighborhood of Lisbon. Sometimes it can be difficult but in general it's fun and I got new ideas for the time after the service!"

How does it work?

- former military service in Europe opened up to compulsory 'sustainable service' for all young adults from 18 year old before or after they finish their studies;
- it is a one year service in a sustainable field in any of the participating countries in the world;
- main work activities are environmental programs, sustainable community planning, work in elderly communities, disabled people, street work, etc;
- confronting young people with real life experience, helping them to learn about the diversity of society and non-mainstream activities;
- being part of a useful and sustainable activity is a valuable experience for self esteem, a way of raising sustainability awareness in future professional activities and also a resource to support sustainable transition where mostly needed.



Comments



BANK OF HAPPINESS

Dina, 76-year-old, urbanist

"...I am one of the active agents of the bank of happiness in my neighborhood: people exchange story-telling with music lessons, nature discovery, tai-chi training or any activity that may generate happiness disconnected from belongings. But beyond developing people's non material life, it's a good self-training at all ages, a personal quest: it seems incredible but so many people never explore the simple question: what makes me happy?..."

How does it work?

- promote non monetary value, transfer the physical value in to mental well-being;
- exchange system of cultural/spiritual activities and non directly functional knowledge on the basis of the time spent by participants;
- digital platform based or social networks based;
- beyond the exchange system is an attempt to refocus people on non-material or consumption oriented sources of happiness;



Comments



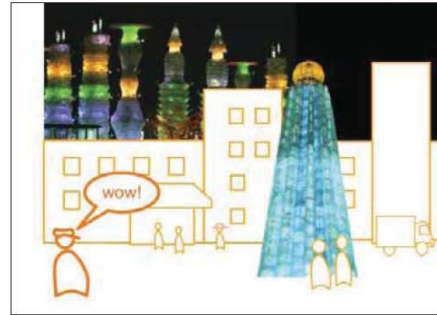
URBAN WELLBEING INDICATORS

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 the collective sustainable performance and capability to produce wellness;
- sensible buildings or surfaces display web contents (tags, pictures, videoclips) according to a semantic search engine. People can ask questions and the city tells and shows how it's feeling or it gives glimpses about life today;
- the more a city performs well, the more it is made beautiful and shining by its sculptures and sensitive art pieces in public space. This engages cities in healthy competitions.



Comments

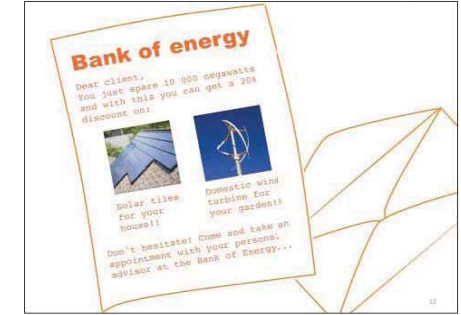
BANK OF ENERGY

Fabio, 22 year old, university student

"...my energy bank account grows both according to my energy saving and reducing. I can use my energy credits for energy saving investments such as home insulation or alternative energy production installations. It is like a dowry that I store during my life. Since I have a sustainable lifestyle, I have kept a good credit record..."

How does it work?

- energy banks and energy accounts have been established to raise people's awareness on the critical issue of energy;
- personal energy accounts give an overview of all energy spent or spared all along life;
- energy therefore plays the role of an alternative currency inducing more responsible behavior;
- analogy with money is limited (no interests on saving, conversion to money only for sustainable spendings...) to avoid rebound effects.



Comments

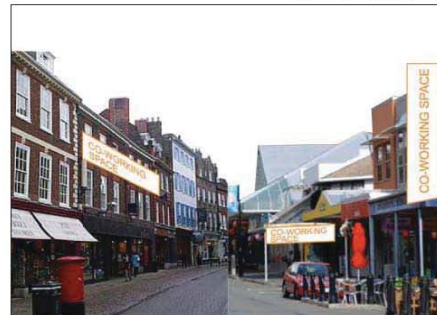
REMOTE CO-WORKING SPACES

Wang Yong, 24, agent in a call center

"...where am I going to work today? It's a question I ask myself nearly every morning: we have plenty of co-working options at a walking distance in the area. I used to go to some of the work-cafes when I started my first job: a messy environment, lots of people to meet! Now I prefer to cycle to the park to change atmosphere or stay on the first floor of the condominium where my old mum lives 2 blocks away..."

How does it work?

- jobs are designed as far as possible to allow remote working and reduce commuting in cities;
- neighbourhoods are equipped with different types of distant working facilities;
- socialization is a mix of local and remote connections with distant working partners and neighbours employed by different companies;
- where you work is more and more perceived as completely detached from who you work for;
- people enjoy changing social/physical environments especially for boring tasks.



Comments

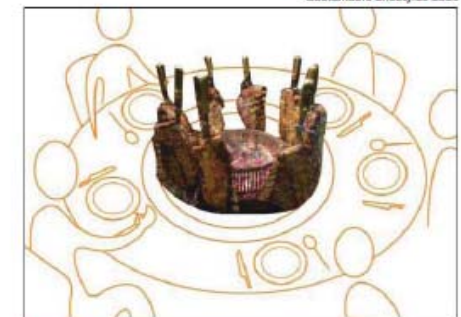
THE MEAT FEAST

Lily, 10 year old, primary school girl, describing Sunday meat feast at grandma's place

"...all the family gathers together in grandma's house on Sunday morning, to celebrate the meat feast. Grandma cooks some traditional meat dishes that I don't eat so often... Usually at home we do not eat meat and at school we have a green-vegetable canteen... It is good to enjoy some meat once in a while. I'll try not to eat too much today..."

How does it work?

- meat once a week in a vegetarian diet is the norm;
- the weekly meat feast, Sunday is the celebration day for meat, feasts are organized at home;
- meat is getting more expensive, so it is actually a pleasure and luxury that can be afforded only once a week;
- a low-animal protein diet has been promoted by both governments and social communities due to food crisis, economic reasons and necessary shift to more sustainable food consumption.



Comments

ALTERNATIVE ECONOMIES FOR DENSE COMMUNITIES

Vision for Sustainable Lifestyles in 2050

A work in progress from the SPREAD Vision Workshop
Milano, 21-23 September 2011
Politecnico di Milano - Indaco Dept.

The vision identifies four key concepts: reward systems, rationing, distributed systems and liveable density as important strategies to enable sustainable change in 2050. One concept, and relating strategies, cuts across the other four concepts and is central to this scenario: strategies must take into account the persistent sustainability challenges that we cannot escape from. There are some common goods that are limited and we will need to ration them.

REWARD SYSTEMS for lifestyle changes. The Reward System is an incentive scheme to promote sustainable living: sustainable mobility, physical activity, healthy and sustainable eating habits and social support. The proliferated reward system is possible thanks to a credit system that allows people to pay city services by credits gained, as a form of alternative currency, not only by cash. This idea is supported by alternative banks - banks of credits other than cash - and enabled by policies that foster the creation of alternative money systems.

RATIONING. The lack of resources has to be managed not only through individual, voluntary behavioural change but also through top-down approaches that edit our choices and availability of products. For example, individuals decrease their impact, reducing the average square meter per person, which means less space in the houses. Mobility prices are entirely based on resource use intensity and there is an

individual contingent amount of miles for distance travelling, which is personal and fixed by the government. Taxation, and the control of common services by governments, depends entirely on resource impact.

DISTRIBUTED SYSTEMS. As much as possible, people strive for local production and consumption. The idea of community goes much further and includes sharing between communities. Until a community can be completely self-sufficient, it is embedded in a larger system and whatever is lacking is still traded on a larger scale. If you over-produce energy it can be used by another community, if you under-produce food you can buy it from another. In many cases there is still need of experts to help you acquire and manage basic needs such as energy or food (via farming).

It is vital to be able to provide services locally (e.g. availability in the vicinity of special skills and competences, doctors etc.). This leads to social cohesion which brings diverse people together and allows them to live together in spaces that are now designed to be complex: combining production, consumption and service provision (e.g. co-working).

LIVEABLE DENSITY. We expect eleven billion people on our one earth in the future! If we want to leave most of the territory open for farming or more sustainable activities (such as green energy), we have to compact the way we live. The idea of distributed systems is not contrary to density,

but complementary. People are now concentrated in dense nodes, where private spaces are reduced and where common services and spaces emerge with their multi-function qualities. For example, common neighbourhood rooms are part of every building, in order to facilitate the management of daily tasks (shared kitchens, co-working – living rooms) and the creation of links between generations. The dense presence of local services and competences increases mutual and micro support, e.g. in the health sector: more responsible patients and home hospitals.

ALTERNATIVE ECONOMIES FOR DENSE COMMUNITIES

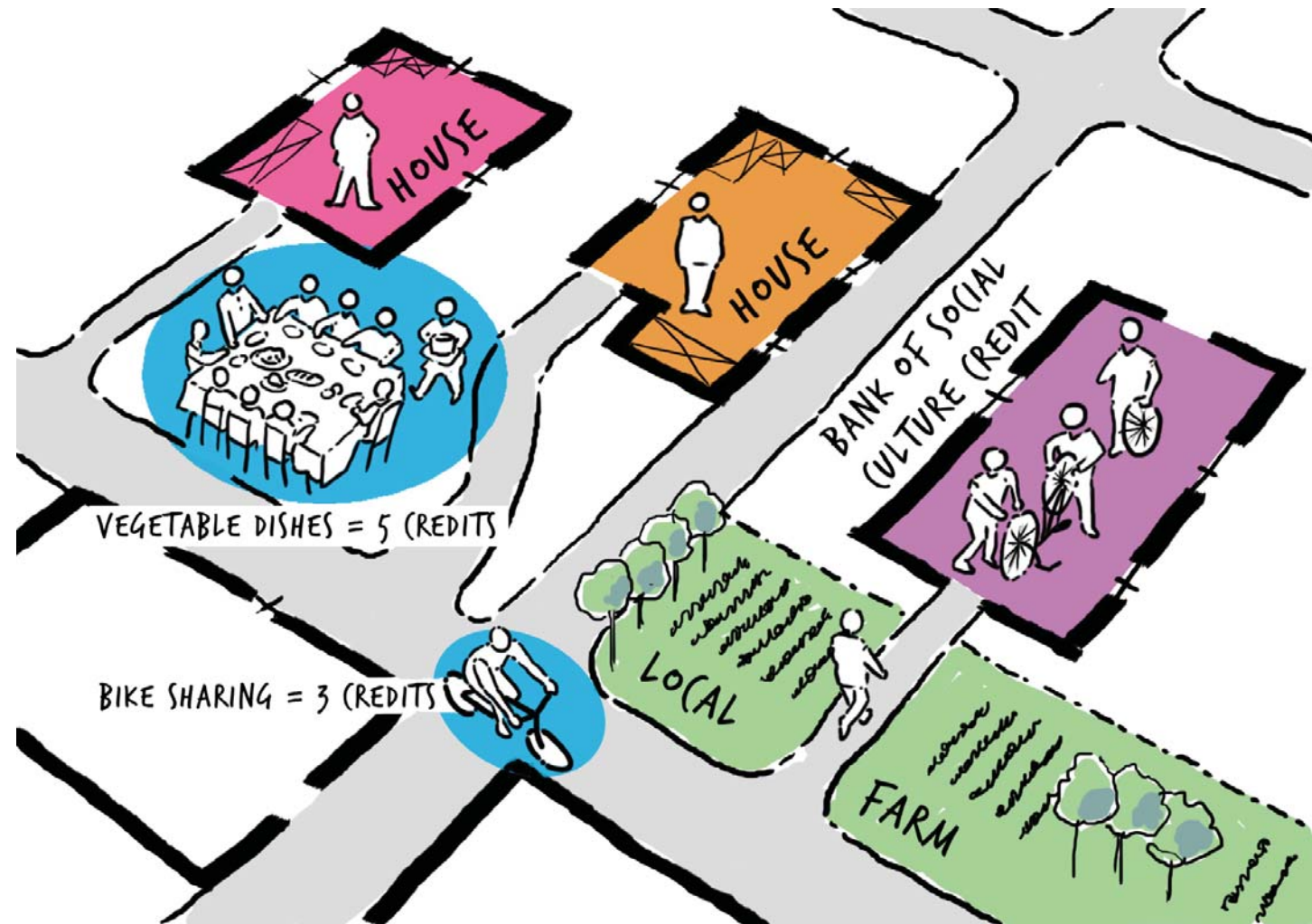
Steve, 28 years old, superblock gatekeeper

It is just three years since I moved to my first house in a car-free district. The building has been renovated with the help of the municipality and we are now mostly self-sufficient in the consumption/production of energy. As gatekeeper, I'm in charge of the social and sustainable development of the superblock: from organising collaborative solutions between inhabitants to driving the energy efficiency/production of the place.

It happens that sometimes we even over-produce! But thanks to our neighbourhood resources' management system, the condominiums can share and trade energy with other buildings. Mine is a really small flat, but it is very comfortable: there is enough space for all my stuff and me and for some friends if I'd like to invite some people. All the furniture I own comes from a swapping system where I could choose among lot of different styles.

When I was buying the apartment I also decided not to have a kitchen. Every time I would like to have dinner or lunch, I just go down to the first floor where all the common facilities are. Moving into a smaller apartment is now a really positive step, and not just for the money (you can really earn a lot for credits) but also for the social connections you can find there. My condominium can be considered as a hub for the neighbourhood, since it hosts many small, local services for both young and elderly: there are co-working spaces, a green gym, shared living rooms, but also home hospitals and intergenerational initiatives. This was a pretty good year; I really earned a lot of credits on my bank account. Many of them come from my attention on mobility issues, of course, but I have also saved a lot of water on my personal water account and reduced

the meat I eat in a week! Let me think how I can use them for my vacations...



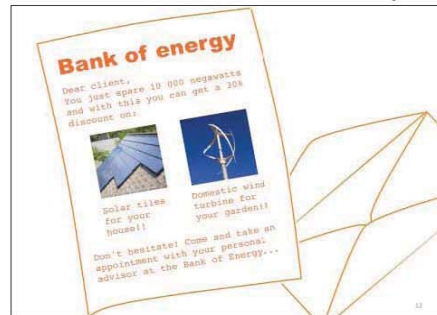
BANK OF ENERGY

Fabio, 22 year old, university student

"...my energy bank account grows both according to my energy saving and reducing. I can use my energy credits for energy saving investments such as home insulation or alternative energy production installations. It is like a dowry that I store during my life. Since I have a sustainable lifestyle, I have kept a good credit record..."

How does it work?

- energy banks and energy accounts have been established to raise people's awareness on the critical issue of energy;
- personal energy accounts give an overview of all energy spent or spared all along life;
- energy therefore plays the role of an alternative currency inducing more responsible behavior;
- analogy with money is limited (no interests on saving, conversion to money only for sustainable spendings...) to avoid rebound effects.



Comments

BANK OF HAPPINESS

Dina, 76-year-old, urbanist

"...I am one of the active agents of the bank of happiness in my neighborhood: people exchange story-telling with music lessons, nature discovery, tai-chi training or any activity that may generate happiness disconnected from belongings. But beyond developing people's non material life, it's a good self-training at all ages, a personal quest: it seems incredible but so many people never explore the simple question: what makes me happy?..."

How does it work?

- promote non monetary value, transfer the physical value into mental well-being;
- exchange system of cultural/spiritual activities and non directly functional knowledge on the basis of the time spent by participants;
- digital platform based or social networks based;
- beyond the exchange system is an attempt to refocus people on non-material or consumption oriented sources of happiness;



Comments

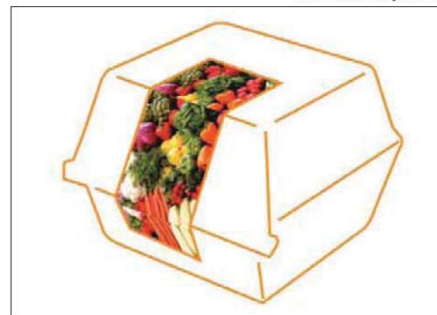
FAT TAX

Peter Istokul, 45-year-old, a junk food lover, overweight and diabetic.

"...During my school time, I used to stuff my tummy with fast food, super-burgers, fries with plenty of mayonnaise, soft drinks were also my first choice. Now with all the taxes against unhealthy food and incentives for sustainable non-animal proteins the only food that I can afford are the Indian vegetarian curries that are buying up all the Turkish kebabs and burgers restaurants of my childhood..."

How does it work?

- taxation of junk food and high-calorie diets is applied like taxes on cigarettes to reduce consumption of unhealthy food and compensate increased 'diabetes' health costs;
- price increases impact on consumption behaviors, raises individual awareness of health responsibility;
- fat tax combines with low meat and dairy oriented measures to make fruits and vegetables the most affordable diet.



Comments

PERSONAL WATER ACCOUNT

Zhang, 25,

"Previously, I took showers as long as I wanted; now I use a key to obtain water. As I plug in the key, the proper 38 degree water comes out: the key automatically deducts litres from my account. If I want to daub soap, I just press the holding button, the water is stopped, which saves water."

How does it work?

- everybody can use a daily average amount of water that is calculated according to the place of living. This is related to the personal water account and is regulated by a key. People can spend or save water on their account;
- the key is a device needed to get water from whatever tap, shower, or public water distributor.



Comments



Living

NEIGHBORHOOD LEISURE CAMPS

Léo, 30, living with family in an urban environment

"...I used to live in an experimental neighborhood supposed to be a model of new planning concepts aiming at engaging citizens in the re-appropriation of urban space... Ho gush, has tried so many things: a street transformed into a wood with trees; summer resorts terrace with sand on roofs; climbing path on a building; biodiversity animal reserve... In my kids eyes I was living in an 'urban jungle!'"

How does it work?

- urban tourism is a way for citizens to enjoy leisure activities in town, and to 'change the atmosphere' just going in the street nearby;
- a huge part of the urban public space is turned into local leisure camps, children/adults playgrounds, green areas, sports and gyms;
- car traffic is banned from many streets that are permanently or temporarily equipped for leisure activities;
- rethinking of urban life and urban happiness, an enjoyable city is created by people's behaviour, activities...



Comments



Society

SELF-SUPPORTING ELDERLY

Giampero, 98, retired

"I am 98 and may last 10 or 20 more years, who knows! I am living near an elderly community where younger people are helping older members together with the support of domestic assistance, robot helpers and medical remote watching: it's more cost effective and more sustainable than those sad senior homes where I put my parents in the early 10's. I live in a co-housing right in the middle of the town and spend most of the time gardening in the kinder garden in front of my flat..."

How does it work?

- actively engaging elderly people in society promoting mutual help and interactions with other generations;
- human and mechanical aid (by a robot) combined with mutual help in elderly communities provide a both social and economic mix of care-taking in aging societies;
- homes and elderly communities in central urban areas allows intergenerational support augmented by supporting technology for elderly with reduced mobility and distant health monitoring.



Comments



Moving

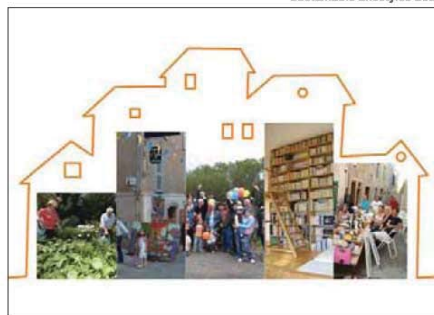
REST: IMMOBILITY LIVING

Alberto, 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



Living

INTER GENERATIONAL FURNITURE

Luca, 22, student

"What an emotion: my home! This is my first home and I'm about to experience living independently from my parents! Well, actually something that I was given by my parents may turn out to be useful: the furniture! With the re-furniture service I have been assisted in resizing and reassembling my father's furniture kit in order to suit my home. The basic modules were still good, but the style was old-fashion and the finishing a bit ruined. Now, everything is perfect"

How does it work?

- today furniture is designed and made to last and be transformed to suit more than one generation's needs;
- special materials and finishing make it convenient, easy and cheap to re-assemble and transform existing modules, so as to adapt to different contexts;
- furniture companies transform and adapt, the furniture elements and components to the user's needs, managing the offering as in a leasing system.



Comments



ENTREPRENEURIAL AND SELF-AWARE SOCIETY CONNECTED WEALTH

Vision for Sustainable Lifestyles in 2050

A work in progress from the SPREAD Vision Workshop
Milano, 21-23 September 2011
Politecnico di Milano - Indaco Dept.

The vision connects differing insights, from across societies, for the purpose of building one society. It is based on four principles that influence sustainable lifestyles in 2050. *Community*; global and self-aware of one's role in the broader system that promotes health and well-being. *Individual*; socially engaged and entrepreneurial. *Wealth*; generative of values and decoupled from material growth. *Technology*; systematically empowering at every level of society. Entrepreneurship, in this context, refers to the capacity to take the initiative and make things happen. It includes both communities and individuals, who endorse a culture of mutual improvement and empathy.

Drawing from these four principles, the vision is built upon 5 key concepts.

SOCIALLY ENGAGED & SPATIALLY ORGANIZED FOOD-SYSTEM. People as consumers, producers, entrepreneurs, and communities directly involve themselves in a socially engaged food system. It is educational and participatory, entrepreneurial and supportive of diverse newcomers. There is openness to rethinking and redesigning the system of food production in terms of scale, actors, roles & responsibilities, and cultural norms. For example, the personal meaning and importance given to the consumption of food has changed in favour of organization and optimization (i.e. delivering improved health). In this future, resource consumption

and material flow management are efficient and spatially organized to optimize the food-system. The production and delivery of food has been scrutinized and optimized with the help of enabling technologies. The new production management system allows people to consume, but also produce food according to their preferences, time availability and competences. Multimodality in the consumption of food is mainstreamed.

SMART PERSONAL MOBILITY < COMMUNITY > SMART GOODS MOBILITY. The mobility system balances the understanding of people (individual and groups), goods and materials (efficiency and technology). It is a world where the super efficient management of transport can also fulfil personal needs, desires and on-demand requests for mobility. The movement of materials is in accordance with the resources available. This system is empowered and facilitated by a community, which provides the link between people and goods transportation.

SMART MATERIALS MANAGEMENT. This vision emphasizes the management of material resources in society. For example, this may be carried out through, personalized production: very small-scale production empowered by technology, which can optimize and control the resource consumption of a business. It enables people to become micro-scale manufacturers. New organizational models have

been developed which take into consideration a specified resource input, in terms of material flow, for the creation of "smart products".

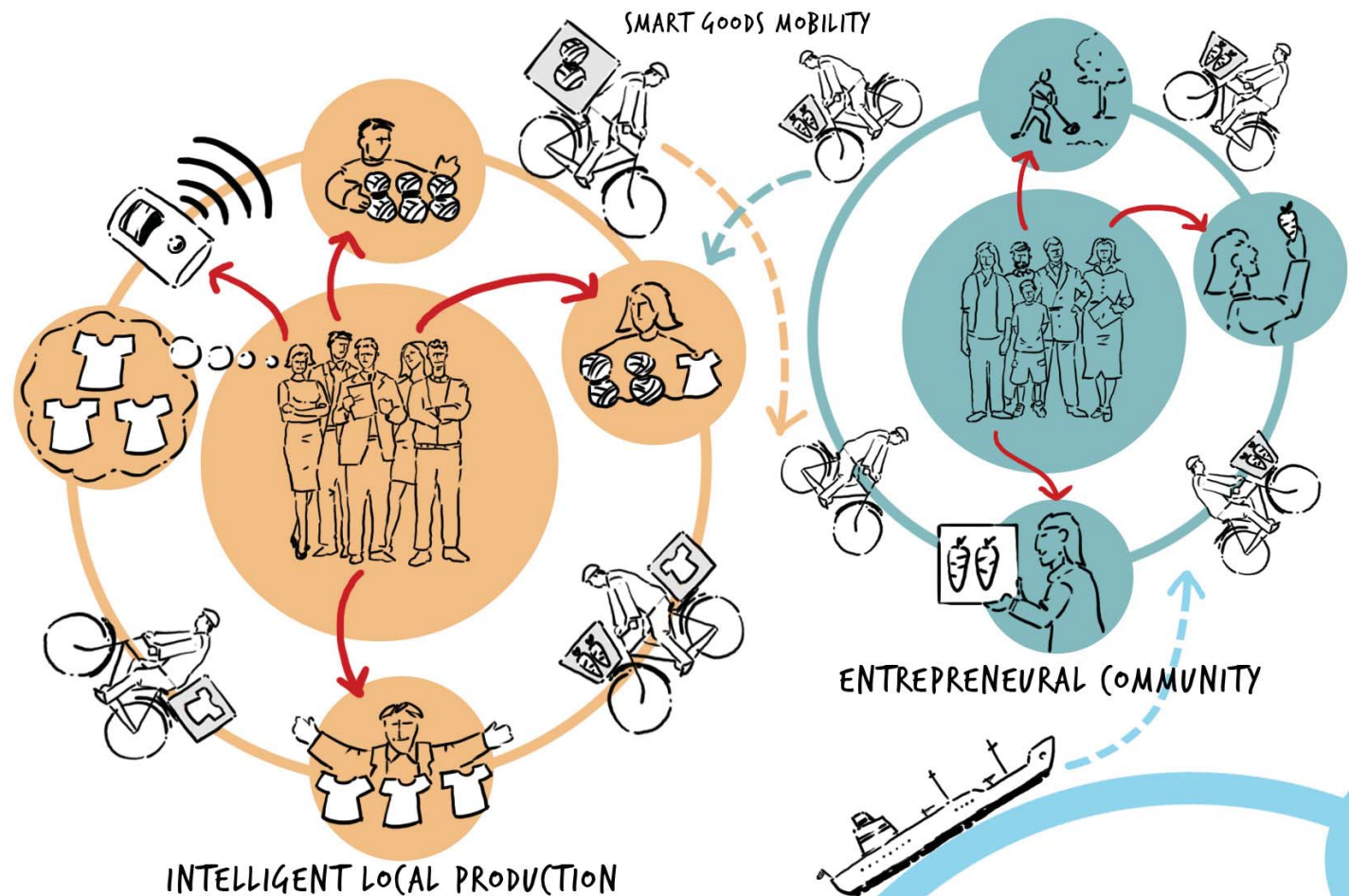
INDICATORS AND INCENTIVES. A system of "physical fabric" indicators in the city signals performance back to people, whether community or individual, in terms of energy and material consumption but also in terms of well-being, health, equitable distribution of resources and welfare. In addition to the indicators, a system of rewards and incentives encourages people to change and maintain sustainable behaviour.

COLLABORATIVE and ENTREPRENEURIAL COMMUNITIES. Empathy is the core value that drives collaboration among people. The key concept of collaboration and entrepreneurship is organized around three categories: *Learning*, education is embedded in the texture of the daily life of every person and community (from children to adults). It is supported by hands-on learning that encourages a revolution in the educational system and a broader sense of community; *Participation*, an evolution of the social, where circles of people support each other and where people engage productively in communities; *Space*, the design of common spaces is a driver for collaboration, developed through the availability and optimization of spaces related to functions.

ENTREPRENEURIAL AND SELF-AWARE SOCIETY CONNECTED WEALTHS

Alexander, 65 years old, micro-manufacturer

I am an entrepreneur in both my working and free time. And I love it. I have been working in the textile industry for 40 years and I can say it has changed a lot. When I started, this work was made up of standard and repetitive actions: choosing a fashion collection, buying the clothes from a central dealer, waiting for the delivery and selling them again. Everything many times in a year! It was no longer sustainable: either economically or environmentally, and I found it so boring. More or less 15 years ago, I changed completely. Now I produce my own small collection that is designed by local stylists. It is an ICT on-demand fashion collection. Clothes are produced at minimum resource consumption, thanks to the Resource Control System that informs me how to optimize the production. I work within a little community of net-workers: besides the stylists, I work with "remote" tailors and a local transportation community which moves collectively both people and goods with an on-demand approach (the same as me!) Thanks to them and to my micro-factory, I no longer have a warehouse, it was very expensive! During my free-time, I am member of a co-operative for food production. Growing vegetables and fruits is my passion! There I can find people with the same interests and I can both teach and learn a lot while doing things together. The food we produce goes to local supermarkets. There, people can choose among a wide range of options: neighbourhood production, food co-op products, but also global goods.



FOOD FOR HEALTH

Lin Fang, 40-year-old, mother of 2 children

"...I do care for my family members' health: I believe that natural food is fundamental to health. This comes certainly from the culture of my Chinese grandma and it's now very fashionable again after years of junk and low quality food... I have a recipe to 'recover energy' for my son after a soccer match, special dishes for my daughter before her examination, and even special recipe for my husband who tends to be sometimes lazy in bed..."

How does it work?

- long-standing traditional culture of using natural food to treat ailments; complements modern trends towards healthy diets;
- natural food has a function for health and good diet can improve general health;
- consumers are more knowledgeable about food, they are more understanding about how to tailor food for specifically targeted function;
- the meaning of shopping and cooking has been changed: quality food is required both for taste and healthy function;
- eating is more functional oriented rather than only a pleasure.



Comments

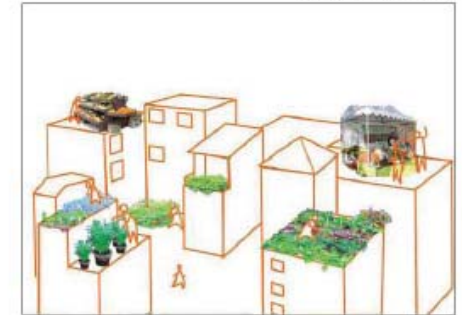
URBAN FOOD DISTRICT PLANNING

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?

- the mix of food production has changed: domestic production, condominium urban farming areas, neighborhood, peri-urban and national production and some international importation
- it is called urban food district planning. The city is now divided into food districts that must be as self-sufficient as possible. Each food district relies for a certain quota on self-production of food and for the rest on local farms and producers.
- urban neighborhoods are twinned with peri-urban farms and food-hubs so that food production and consumption are related, mutual commitment and mutual responsibility.
- a well connected food supply chain is necessary, which can help consumers get the closest resources and switch with a certain flexibility;



Comments

COMMUNITY MOBILITY ORGANIZER

Peter, 95, retired couple

"...Usually I love walking but it is raining and at my age that's not much of a pleasure...! So I order a taxi-bike or I hitchhike via the CMO. After the worship our group leaves for the weekly cultural afternoon. This time we share the bus with the kindergarten as we go in the same direction. And to go back, I carpool and Luis, one of our younger neighbours, picks me up driving back from work in his personal bus-taxi! Moving becomes easy with this the 'Sustainable moving community' application..."

How does it work?

- a CMO (Community Mobility Organizer) is based on mobility applications inter-connected on the personal mobile devices of a local community;
- via the organizer one knows the availability of community vehicles, e-taxis and car-pooling possibilities in real time and can book them;
- the manager creates a profile of the person using it and then suggests sustainable mobility and transport possibilities;
- the community level allows more efficient sharing + more care of community vehicles;
- results are behaviour changes or cost reductions (sharing e-taxis and community cars with other groups or persons);
- development of community centred/friendly private and public terminals and applications by companies or local administrations



Comments

URBAN MOBILITY OF GOODS

Tanja, 29, single mother of two children

"...normally get our weekly veggie box delivered to our home, I just take a little trolley from the corner station and take it back to the station just below the house; but today, given all the shopping for the party, we need at least a cargo-trolley, the same as we used to move grandma from her former flat to the room near where we live now..."

How does it work?

- urban planning towards less car accessible neighborhoods, mixed living and commercial zones enabling more walking and cycling;
- development of renting schemes for different sized trolleys for the transportation of goods by pedestrians, from simple weekly shopping to second hand furniture exchange or moving home at walking distance;
- parking stations, where trolleys can be rented for transport and returned, are available in all superblocks in the city.



Comments

TAILOR MADE FASHION OF THE FUTURE

Catherine, 23, student

"...I can not wait to see my new dresses I ordered. They will be adapted just for me, on my body! I was not sure which model was the best for me before trying them on the screen..."



Comments

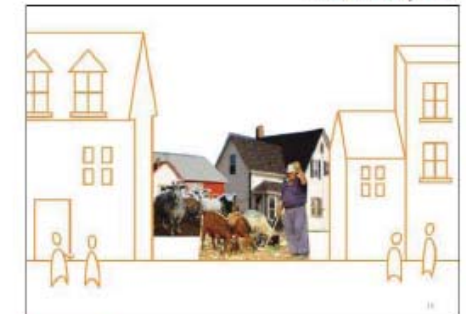
How does it work?

- on-demand fashion system produces just what you wear, tailored on your body;
- new 3d video screens and full-body sensors 'capture' your figure and allow you to see what you would look like in a dress you aren't really sure about;
- you get suggestions for the right cut and model for your dress, or the jeans that enhance your beauty;
- the production system is based on the real demand for clothes.

0-MILES FOOD CO-OP

Alexander, 38, blog journalist and suburban dairy producer

"...I am what you call nowadays a micro-producer, putting everyday 30-40 litres of goat milk on the local co-op network. Most of the time it is sold out just by the orders placed by the families around; that's the best! If not, the local co-op network enlarge the offer to the local neighborhood food stock exchange or supplies other suburban micro-restaurants or micro-cheese factories..."



Comments

How does it work?

- collaborative platforms managed by neighbours for trading food on a very local basis;
- retail services are fully managed by the community organized in structured Local Cooperative Networks;
- digital databases and smart labeling for raw material help supply and delivery, while increasing transparency and food security;
- the same networks manage, in a collaborative way, other hyper-local services such as nurseries, entertainment, gardening;
- participation is regulated by having benefits and credits in return.

LIFE-LONG SUSTAINABILITY LEARNING

Aroid, 44 years old, primary school coach

"...kids no longer rely only on schools for their education: the layer of IT embedded in our daily life is providing a very responsive and diffused didactic environment for them and sustainability issues are present everywhere in the day-to-day environment, from the energy smart meter display at home to the water harvesting control system in the neighborhood, from the intermodal mobility organizer to the distributed air quality control scheme...Everything works for them just like a reward-based game to play."



Comments

How does it work?

- striving to steer general behaviour towards sustainable lifestyles constitutes a diffused dynamic context providing learning opportunities at any moment in daily living;
- the system works by rewarding good behaviour;
- pervasive IT in products and augmented environments provides feedback to stimulate sustainable living, which plays as a teaching environment that changes according to age and situation;
- distance learning, using more traditional forms of education, enables still open questions to be answered and integrates all the knowledge in the student portfolio;
- this learning process starts with primary education and goes on for life.

NEIGHBORHOOD LIVING ROOMS

Deniz, 41 married and mother of 2 young kids

"...when we rented our flat I first checked how collaborative the neighborhood was: as my Turkish grand parent used to say: visit your neighbours before deciding for your house! And we chose well: small flat and many places to be outside: playgrounds, ateliers of many kinds, community open air spaces and in the evening we mostly eat at the 'street canteen' and spend the evening in the public library..."



Comments

How does it work?

- new range of shared collective spaces in the neighborhood: i.e. a place to organize a party; a restaurant to cook together; a collective wood workshop to repair, change and build for the home; hub-like places for informal and co-working; playground where kids rent games and play instead of in their own room; street canteen where families eat and spend the evening;
- living standards shift from home-sweet-home to densely equipped areas with a range of collaborative services and an active social life.