**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**

**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**
**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!”

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**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.

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**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...”

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**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.
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 ‘diabesity’ 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.

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…"

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.
W.P.F.S. WISE PERSONAL FOOD SHOPPER

Elisa, 58-year-old, citizen

"...I have just recovered from surgery and with the mix of drugs for after treatment I can only eat certain kinds of food... The hospital lease me a Wise Personal Food Shopper set to my exact diet and it's a relief when doing my shopping. I feel safe for observing my diet and with combined recipes suggested, cooking lessons and information on food origins it's also much easier to achieve a sustainable diet. I think I will use it also after the end of the therapy as a guide in my daily life..."

How does it work?

• the Wise Personal Food Shopper system can analyze user's genetic data and fit a healthy diet to his/her food choices;
• the system can be accessed from any portable device in every food retail place and restaurant;
• the device displays properties of food the user would like to eat or purchase; includes it in the diet balance; shows quantity needed/allowed;
• it helps to make smart and right purchase choices, to raise individual awareness of responsible diet, consume less high-calorie food, more local food, organic food... and enhance sustainable lifestyles...

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.
INTELLIGENT AND SMART PACKAGING

A jar of honey’s self portrait:
“...the evening when I am eating alone I always buy a gastronomic food program package. I chose one of the programmed cooking processes when I put it in the oven while I learn on the kitchen screen about who produces it and how to finalize the recipe. The packaging contains also a cultural program relating to the dish, to watch when eating. It may seem a bit weird, but not so much if you think that when my parents were eating ethnic food they knew nothing about it nor who produced it... ”

How does it work?
• Intelligent and smart packaging is provided with active agents, smart graphics, intelligent chips and sensors that ensure fluid interaction at each step of the production-consumption chain;
• easy traceability of the food product facilitates quality control and dialogue with producers;
• intelligent packaging also records the quality and nutritional property of the food, connects with the cooking guide and preserving suggestions and directly programs certain cooking processes...

HOME WASTE MANAGEMENT BUSINESS

Teo, 61, engineer in a big company
“I'm systematic (and a bit neurotic): I love sorting plastic, paper, wood, glass, metal and organic stuff to perfection in my kitchen, so as to have high quality second raw material for my clients. In fact, I'm proud of supplying the best companies in the region. A few families like mine are in the group of the best suppliers, and I earn quite good money out of this.”

How does it work?
• family units can become hyper intelligent waste managers, making a business out of this. Specific equipment is provided to them if they decide to start this small enterprise, becoming second raw materials suppliers for companies (plastic, glass, paper, metal) and farms (compost);
• waste management relies on the distributed intelligence of the work carried out by the final users when sorting their own waste.
**INTELLIGENT FASHION COLLECTION**

*Chiara, 27, stylist*

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

**How does it work?**

- pret-a-porter fashion makes a point of value in creative multifunctionality and transformability: size and shape of the cloths are designed to be personalised and be fully modular and re-combinable, materials are chosen to play an active role in producing energy (i.e. photovoltaic textiles and accessories enable recharging of personal electronic devices);
- techno textiles help to sanitise the clothes, reducing the need for washing, to have different heat comfort levels and to change colours through simple washing and lighting processes
- body jewellery and underwear are integrated with active and passive devices, humidity and heat regulation and sensors that allow to check and regulate body functions and wellness

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**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..”

**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.
PERMANENT PAPER

Edoardo, 53, researcher
“... in the past I used to consume a lot of paper even though I was using recycled sheets, writing on both sides and trying not to print too many files. It was really cheap, actually. But now I just use permanent paper and its “washing machine” and I can use a sheet again and again and again before recycling it.”

How does it work?
• paper is now permanent: it costs more and the sheets are thicker, but they can be used several times;
• the combination of a magic non-permanent ink and a special appliance allows you to remove drawings and writings and get a new white sheet;
• the process can be repeated several times before recycling the paper

BOOKFIRST CLUB

Andrea, 28, gardener
“...tomorrow I will meet Anna, my colleague at the BookFirst Club, my favourite Bookstore. We will renew our subscription. Our booktrainer just told me of new interesting arrivals of ebooks that I can access or read there. I will immediately add them to my BookFirst shelf...”

How does it work?
• a part of regular bookstores is dedicated to the BookFirst Club
• thanks to a monthly or annual subscription people can access and rent ebook and paper books;
• a Booktrainer is there to suggest and provide new interesting readings connected to people’s interests or field of work;
• due to the cost of paper and the limited space at home, paper books are a really luxury exception: people can read them at the BookFirst club, paying as they rent them.
**NATURAL LIVING**

*Emily, 40 year-old, computer engineer*

“...As soon as I could get a remote job we moved into a natural housing right in the middle of the forest. It is a wooden structured “nest” hanging in the trees. Energy is generated by a river nearby and solar cells on the top tree branches. The little family has turned out to be nearly fully sustainable: the kids play in nature and John my husband is dividing his day between taking care of our little ‘zero impact’ jewel and growing our food in the garden!...”

**How does it work?**

- natural housing, a new way of building and living in close relation with the natural environment;
- hyper ecological buildings are set down in natural contexts: floating near the seaside or deep in woods, mountains and deserts... in full symbiosis with the natural environment;
- remote jobs are highly appreciated as the condition to escape urban environments and down shift to a more simple lifestyle but keeping minimum purchase power.

**GREEN DOORKEEPER**

*Massimo, 28, Doorkeeper in an eco-housing*

“...I’m the doorkeeper responsible for the energy consumption and production of the building. Thanks to the domotic intelligent system I am able to monitor the data, control and adapt the settings, etc. and give feedback and advice to tenants about their consumption. We are organized in a network with the other Green Doorkeepers: together we organize energy purchasing and selling groups, water harvesting and vertical agriculture, shared facilities and services...”

**How does it work?**

- buildings turn out to be more sophisticated and complex systems to optimize resource efficiency and manage collective consumption and production;
- maintenance and efficient running of best green buildings require a full time job technician;
- this new generation of doorkeeper coordinates collaboration between tenants, ensuring cohesion in the community.
**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.

**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-cafés 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.
**LIFE-LONG SUSTAINABILITY LEARNING**

**Arold, 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.”

**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.

**Comments**

**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...”

**SUSTAINABLE COMPANIONSHIP**

**Arold, 44 years old, primary school coach**

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**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**

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How does it work?

• In contemporary society elderly people have regained their role of “wise men in the community”: in every neighborhood, an elected group of elderly people constitutes a board that, supported by smart technologies, has the role of monitoring and supporting families in being more environmentally sustainable. This is the Domestic Feedback Service.

• In every housing complex, a domotic system detects the resource and energy performance of the building, to keep the board of elders aware of the situation and to suggest ways of adapting behaviour.

 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

DOMESTIC FEEDBACK SERVICE

Mary, 78-year-old, grandma

“...I am the grandma of a big family and my role as senior is to streamline the consumption of all my little tribe! This is what seniors do nowadays: teach responsible living, watch diets and also reduce the bills. We have a subscription to domestic feedback services: it helps me to monitor water consumption, energy balance, use of domestic appliances. But you know… evidence of over consumption is never enough to convince youth to change their habits. That’s why grandma is there: to bring my experience of life and the little wisdom I have gained…”

How does it work?

• In contemporary society elderly people have regained their role of “wise men in the community”: in every neighborhood, an elected group of elderly people constitutes a board that, supported by smart technologies, has the role of monitoring and supporting families in being more environmentally sustainable. This is the Domestic Feedback Service.
**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...

**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...”

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.
WEB 5.0 TOWN

Angelo, 51, lawyer, single person
“...Oh noo! Too much energy and water consumption the last week and so no meat for the next one! I must admit that this intelligent digital system is really smart in detecting and matching the consumption of my home and my lifestyle! Even too efficient! As a result, now, I have to compensate the overconsumption if I want to keep my ??? ranking!”

How does it work?
• the current generation of digital devices and pervasive computing (this is the Web 5.0) allows a fine monitoring of the built environment performance, suggesting to humans how to intervene to correct overconsumption or to compensate for it;
• the ecosystem comprised of humans and built environment can therefore be ranked according to its overall performance and get tax benefits in exchange.
• watchdog systems monitor energy and water consumption and domotic applications analyze data and formulate recommendations: “the house is consuming over the average level”; “try the eco-intensive program of the new washing machine”; “your winter meal habits are more carbon intensive than previous years”...

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.
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.

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.
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

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 interconnected 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
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

“...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!...”

Hélène, 36, mother of two children

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Hélène, 36, mother of two children

How does it work?

• mixed electric and non-electric bikes in one rental scheme help changing transportation habits in not so flat cities;
• rental systems based on international subscriptions (giving access to bikes in any city worldwide); specially designed bikes (e.g. three-wheel bikes for the elderly; cargo-bikes for transportation...);
• the product-service system is accessible to elderly, less energetic or slightly disabled people and tourists;
• privileged and protected lanes and parking/charging areas for bike use in public and private spaces;
• existing bike rental stations/recharging stations have been improved, and are now multi-service mobility hubs: changing from bike to public transport, recharging or exchanging batteries, small public repair kits for bikes available, etc;
• mobility hubs are equipped with solar cells and movement detectors transforming activity around the station into energy.
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 geolocation;
• 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...).
PUBLIC TRANSPORT IN THE COUNTRYSIDE

Peter, 46 years consultant

“…Since I set up my own business I can choose where to work from and so I enjoy returning to live at my parents place in the countryside. To visit friends and family around here the “rural express service” works on-demand: micro-trams start from the village nearby, join other micro-trams to make more energy efficient trains. We pass from one micro-tram to another before they split again and dispatch in all tiny villages…”

How does it work?

• public mobility services for rural areas which are accessible on demand via online and offline platforms;
• small/micro eVehicles joining in small trains and splitting again to reach the different villages using railroads (even old abandoned ones) and also streets;
• transport services for all: adults, young, old, disabled... (the number of people with driving licences has decreased dramatically);
• mobility services are developed locally, create jobs and support the whole region or a certain number of villages around;
• a mix of public services supported by volunteers (occasional drivers, light maintenance, co-mobility organization…), a credit system rewards volunteers with free access to public transport facilities);
• even modern zeppelins facilitate slow freight transport in these rural areas.

REST: IMMOBILTY 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 start 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.
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 into 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.

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.
**LUXURY TAXI SERVICE**

Cinthia, 45, prêt a porter stylist

“I love my work and I love to have and give all the best I can. I’m used to reaching clients and I love to be efficient and to spend with customers all the time needed to get in tune and in order to establish a pleasant relationship. That’s why I usually move around the city by the Luxury taxi service, it is brilliant! My provider offers the service included in the business mobile account: automatic supercars without drivers bring you everywhere according to personalized paths that you can plan and redefine along the way…”

How does it work?

- automatic cars without driver;
- dedicated online and mobile application for fully personalized path;
- market-based service: partnership between telecommunications companies, private taxis and local transport companies

**MULTI-SITS PEDAL VEHICLES**

Fabio, 5 years old, disabled child

“…I hurt myself playing and I have my leg in plaster. Every morning, when I go to school with my school-mates they ride the pedal vehicle as usual producing a lot of energy, while I’m sitting in the seats without pedals near Miss Marple, the old neighbour with that strange smell… I’m looking forward to going riding!…”

How does it work?

- multi-sits pedal-powered school bus and transport services with different seats and rates for the neighborhood;
- clean energy production for transportation;
- eco-minded school bus and educational aspect of the service (strengthening awareness).
VINTAGE PUBLIC SERVICE

Paula, 30, graphic designer

“…I love old vehicles and I’m very happy when I can see them around the streets of all European city centers: you can appreciate the real city lifestyle and have a taste of both memories and contemporary time. So, every time that I visit a European city, I really love going around by historical/vintage taxi services provided by local companies. Even city residents feel very much involved in this kind of service: people that own a vintage vehicle (e.g. Fiat 500) are engaged in hiring vehicles and/or guiding tourists around their city center or countryside... “

How does it work?

• iconic old-vehicles are converted into a sentimental means of transportation that serves the visitor and tourist demand;
• old telephone booths are partially converted as plug-in and charging stations;
• vintage services help develop slow tourism;
• the service is offered by local administrations that manage a network of citizens and private companies providing vehicles and services;
• the service empowers craftsmanship, providing employment and jobs for past technology amateurs and experts.

Comments
CLEAN MONEY

Andrea, 37-year-old, father of the 3 children family
“...taxes on personal income rose like mad to cover droughts here and tsunamis there and catastrophes after silly urbanization projects in mega-cities: now I prefer to earn less, with green and fair investments but I want to know what my money is used for and I want to be able to judge myself if the projects financed will be good or not for the future of my kids…”

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

HOME HOSPITAL

Gianna, 68-year-old, suburban inhabitant, retired
“...going to hospital nowadays mostly means staying at home! But at home I can meet the doctor on line and get the support of the neighborhood social care network.. I can be supported also by a series of remote health measure devices, self-medication appliances temporarily rented from the local health care center, and get advice from former patients from the neighborhood…”

How does it work?
• going to public/private hospital is getting more and more expensive and also carries the risk of contracting diseases when staying in hospital;
• for non-emergencies, home hospital is the norm: staying at home and supported by a series of remote health measure devices, rented self-medication appliances and neighborhood social care networks;
• health care providers provide ongoing medical support at home and remote treatment with appropriate technology;
• ‘eHealth’ helps to increase public medical knowledge and participation in treatment also reducing health costs;
• especially chronic patients and elderly people can stay at home for longer.
SELF-SUPPORTING ELDERLY

Giampiero, 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.

RESPONSIBLE PATIENTS

Ushita, 25, student in chemistry
“Since I discovered this severe diabetes I monitor it through a sensor installed in my arm. It is constantly watched by my hospital and it rings my phone when insulin is low: frankly speaking it’s a relief and I can forget about it in my daily living. But what is really helping me to face this life-changing disease is that this monitoring application is provided by my cooking club: I always loved to cook, exchange recipes and create new dishes… Now I do it for and with my diabetes community …”

How does it work?
• integrated systems of patient monitoring and automated health care facilitate daily living for patients with life-changing diseases;
• such self-medication systems are transparent for the patients that could enjoy quasi normal life;
• systems are also designed to put the patient in an active and learning position, facing up to his/her disease and therefore developing more responsible attitudes.
SUSTAINABLE DEATH

Sergio, 85-year-old, retired, still healthy
“...My old brother had suffered a lot due to his Parkinson's disease for last 3 years. Last week he chose euthanasia and left us. I did feel sad but I believe it is a release for him and also for his family... Although the treatment is covered by the state plus his private insurance, it still costs a lot of resource and effort to extend life often for just a few more months... I appreciate his sustainable and responsible attitude and I also add “responsible death” as part of my last will....”

How does it work?
- the highest health care costs in a lifetime are encountered in the last months of life;
- based on the ‘don’t resuscitate’ law in the UK, strict criteria have been debated in the public and the scientific community to agree different levels of near-death where euthanasia can take place;
- for many citizens responsible living includes signing an agreement to allow euthanasia at a level chosen by the persons themselves;
- in case of accident or reaching old age, medical treatment would be stopped according to the will of the person.

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
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;

How does it work?

- the diffusion of sustainable models requires quick exchanges between best practices available, research and experimentations in progress;
- best cases from personal practices to hyper-environmental companies are available on the platform with all data and collected know-how ready for dissemination;
- the platform fosters peer-to-peer exchange and coaching between different projects and researches;
- all together, the platform represents an updated demonstrator of cutting-edge sustainable society.

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?...”

Eleonora, 23, student

“...for us finishing school, the sustainable coaching platform is like a boiling pot of start-ups, projects, ideas for a more sustainable world: it's inspiring for us for what to do later, but it is also stimulating for a newly retired person or young parent just to find tips, helps, advice in a peer-to-peer mode and browse the most ambitious of sustainable living...”

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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.

Sulehka, 56, NGO managing director
“...when we moved from Bangalore to Dakar, I was scanning neighborhoods through the happiness index website: it shows where people are happiest on average and see themselves as a community. It’s an interesting way to look at towns where the most unbelievable places manage the best de-coupling between material wealth and citizens’ satisfaction…”

How does it work?
- research shows that the happiness of Countries is disconnected from material wealth;
- the local happiness index is used as a way for neighborhoods to stimulate collective action towards non-material based happiness;
- “dematerialization” of happiness is seen as a good sign of local diffused sustainability;
- a website allows people to scan places through the happiness criteria and search for a new sustainable and social quality of life.
IN THE OTHERS’ SHOES

Alice, 35-year-old, accountant
“...Last month I participated in a weekend in a sustainable neighborhood, organized by the school of my daughter. I was not so keen about it at first sight but I must admit it makes me rethink some of my routines here. We were hosted for the 2 days in a family and the game was to experience their living... We did not do anything special: riding bicycles, plotting the orchard and cooking with the neighbors... but it was so coherent and logical for them to live in a parsimonious way, to share with neighbors, to observe lower cleaning standards... Now I understand better how I could reduce my energy bill without having the impression of lowering my living standards!”

How does it work?
- current observations of behavior change in daily routines show that the best drivers are peer-to-peer advice and the experience of other peoples’ living conditions. This works very well in order to turn lifestyles into more sustainable ones
- stepping into other people's shoes for a while is a way to learn to live with lower impacts, empathize with age or gender issues, understand cultural positions;
- the public welfare agency organizes a range of experiences of sustainable living, cultural exchange and gender integration for schools, companies and for ordinary citizens (willing to open their mind and change behaviour) in order to make participants feel and experience different lifestyles.

GREEN GYM

Bob, 28-year-old, architect
“...we took part this week-end in the Patagonia harvesting rally: I ran so much carrying wheat sheaves, oh my god I was exhausted. I am accustomed to one hour of gym-plotting here in the agricultural public park nearby. It’s a classic orchard gym organized with all Decathlon sets that provide us with a third of our fresh veggies in summer. But here, the whole city was taking part in the rally, carrying the wheat to the mill. And this way, city bakeries make bread all year... In winter, or when it rains, I go to a regular fitness centre instead, where I exercise to produce energy or to purify water.”

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

Paolo, 9, primary school student

“...My mum says that when I was born, just before going home from the hospital, she received my personal ID_DNA card. It is a very special ID card: it contains all the history of my family and it will contain also my history. So when I will need some medicines, the doctors will already know everything and they will build a special therapy just for me...”

How does it work?

• personalisation of medicines is nowadays a standard practice;
• everybody has a personal ID_DNA card that contains: their genetic map and biological data, but also their daily diet, their habits, their sporting aptitude and the history of their family;
• every doctor or specialist has access to it in order to get a complete overview of the patient’s life;
• the card enables full personalisation of medicines and healing solutions, combining pharmaceutical and social remedies.

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.