

Peak-oil game-changer

2037: The EU is putting more power and resources into transferring knowledge in the field of "Local Loops management". However, the global economy has been stagnant for over a decade, unemployment is high in many European regions and the power of national governments is eroding even as there is less public resource to invest.

I have allocated a set amount of money each month for expensive foreign products, such as coffee and tea. Prices are high, as the transport market is dominated by a few global companies.

2040: Many countries that used to have a low standard of living have managed to raise the general level of their infrastructure, education and health care. This encourages many professionals from the developed world to migrate to these countries as international markets start to decline. The skills gap between "developed" and "developing" countries and regions starts to narrow.

Just last year, we managed to turn some old city railway tracks into state-of-the-art bicycle lanes. Cycling is a pleasure in Bratislava now!

2043: There is still a significant amount of global trade in energy, food and other basic commodities, but compared with levels in 2012, many of the most flourishing regions do not import many tangible goods. In these regions a discourse on the "crisis of 2020s" is already part of collective memory as people consider themselves to be part of a new era of development.

Rediscovery of local resources



I can quickly move within cities and between different areas of the cities inhabited by guilds with the new Super-bus system.

Local turn

2036: Cities agree on global evidence-based frameworks for regionally implemented policies on such key issues as health, environment and safety.

All workplaces in Sweden introduce a happiness index to measure employee satisfaction. This leads to a more fulfilling work environment and starts to reshape Swedish work culture.

2042: A new global treaty on the openness of research is negotiated. It defines the new thinking on science and technology, highlighting the benefits of the traditional virtues of science (openness, freedom, tentativeness...) and of the open-source approach to technology while at the same time bolstering a technological regime in which most technological applications are very local.

2044: A global guild of scientists is formed, with the right and duty to secure that technological knowledge is spread evenly across the world.

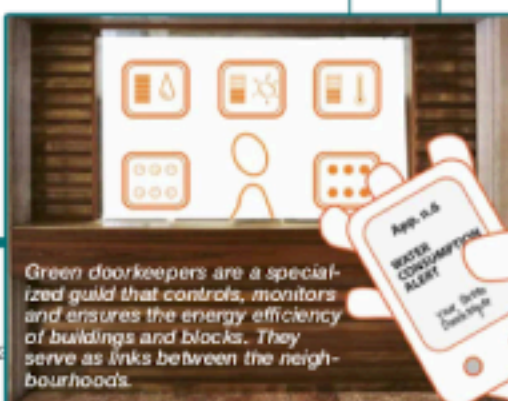
2046: Many Europeans feel that currently the EU is an interim solution on the way towards global government.



Home waste-management opportunities allow households to turn into suppliers of raw materials for local companies.

Craftsman attitude

In the area I live in, lots of workshops and workplaces have disappeared as there are many people here who don't belong in guilds.



Green doorkeepers are a specialized guild that controls, monitors and ensures the energy efficiency of buildings and blocks. They serve as links between the neighbourhoods.

2040: 2/3 of the population live in neighbourhoods that are defined according to a profession and a guild. These neighbourhoods also form the basic political units that have the right to elect their own representatives to regional council.

My guild bought me a service robot that takes care of cleaning and cooking so that I don't have to.



Inter-generational furniture is a new design trend that promotes local design that lasts for generations. It's easy and cheap to re-assemble and adaptable to a user's needs.

2044: Technically, people are still citizens of a nation. However, national politics is understood to be a ceremonial tradition that reminds citizens of such values as democracy, equality, freedom and solidarity.

My daughter just set off on her journeyman year to Bucharest to work in a local construction company. She's taking the international train.



I met my husband when I was doing my internship at Energy Saving Doctors, one of the town guilds for energy preservation and production. It was easy to find an apartment for our family. Now we have access to convenient lodging connected to our workspace.

Tomorrow, our guild will set up guidelines for zero net energy in construction. Our guild has the most expertise in this issue and our guidelines are expected to become the basis of legislation to be passed later this year.

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Local Loops



Empathetic Communities

The system breaks down

2038: Solutions of emerging cities, towns and regions focus on creating a new kind of local economy and new type of shared power between the public sector, companies and individuals.



Each neighbourhood's average level of happiness is something I follow closely when I'm looking to change apartments. The index allows me to spot the happiest areas to live in - I want to know about more than the material offerings of the area.

2040: The United Nations is practically transformed into United Cities, Towns and Regions as the significance of the nation state diminishes. A new Global Trade Council is formed through which micronations manage trade and commerce.

2040: Political participation takes place at the local level and new methods of direct decision-making are introduced.

The "We can" generation works together

2038: A group of initiators that allocate local resources emerges. They set up experiments on ways to take of care of local resources through new types of long-term planning of e.g. rare minerals.

I use a new service that provides efficient intra-city product logistics through a network of bicycles that deliver products whenever and wherever.

2040: The generation of people who have grown up within the empathy paradigm gain permanent positions in politics, companies and communities.

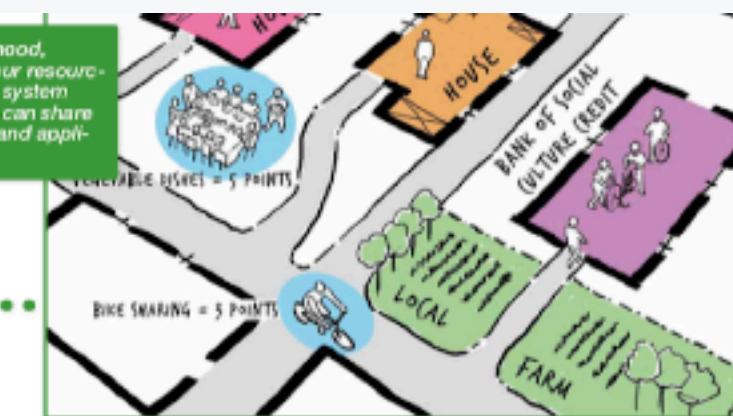
2041: Several micronations have adopted new decision-making processes assisted by Technology of Empathy tools. These tools make it possible to engage citizens at new levels, and they help in creating consensus on many far-reaching issues that in the previous era of party politics became locked in stalemate.

As most of my time is spent working and collaborating in very social settings, I spend my holidays going somewhere where I can be by myself in silence and reflect on past experiences and feelings.

Today is the final match of the World Cup for Cities where football clubs compete in this most prestigious of tournaments, held every four years.

2043: The new generation that now dominates the work life has greater experience working collaboratively than ever before. These people understand that brains also need some time off.

2045: The notion of leisure time changes. People seek "reflection time", time when they are free from information flows and social roles. Addressing this need for "reflection time" requires special services, because the majority of people live in such close neighbourhoods.



2047: People spend time that would previously have been called "vacations" in solitude in cabins located in the midst of nature.

Public, private and people (PPP) - the new welfare model

2037: One of the most successful methods of PPP has been the formation of neighbourhood cooperatives. These structures were kickstarted with the help of municipalities and PPP voluntary groups that went to advise neighbourhoods on how to organize peer-to-peer services, start their own energy and food production, gather resources for infrastructure alterations and how to form sustainable models for collaboration.

Some of my friends are educated to help the elderly. They're the most respected individuals among my friends.

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I'm pursuing an option that allows me to move into a better functioning neighbourhood. I know I have to work hard there, but I really appreciate that more prestigious communities arrange these type of PPP possibilities.

I work for a local council coordinating a network of neighbourhood health programmes. My routine working day is 6 hours long. In addition to my day job I spend two hours every day (occasionally a little bit more on weekends) working with my neighbours on farming and different types of maintenance work.

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Communitisation of urban planning

2037: Funds are collected from individuals, local enterprises and municipalities to form plazas, inner courtyards, meeting spaces and neighbourhood assembly yards where people can join their neighbours, start planning for local energy and food production, and learn how to form timebanks, peer-to-peer services and other types of sharing systems. Reorganising public space also helps reduce the need for individual space.

Former council blocks operate like self-sufficient villages. Parking lots have been turned into agricultural fields, new infill provides modern, well-designed flats and new types of communal space.

2040: "Sharing the village", a collaboratively created manual on planning local energy, food production and smart sharing of neighbourhood indoor and outdoor spaces, gains immense popularity all over Europe.

People who are ill can quarantine themselves from their wider community in flu hostels, thus reducing their impact on community's resources.

2044: Most of the villages in Europe have trained one or two of their inhabitants to be their "sharing architects". They take care of developing a village's buildings and spaces to serve the needs of the new era.

I've heard that they just started to slash and burn land to create better farming possibilities here in Finland. That's an old and local tradition, but it's now done by applying new technology.

My grandparents are still active members of society and their efforts in taking care of community well-being are very much valued. They take care of children in the street park outside our building.



"I love the fact that the old streets are now turned into urban farming plots while still maintaining plenty of space for walking and cycling."

Provides complementary food resources for homes and apartments nearby.

There's a monthly preventative health circle in my community. We discuss topics such as nutrition, diets and sleep cycles. These health circles are very popular.

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The European Green New Deal

2025: A new smart grid solution is announced that connects the UK, Germany and France's energy consumption. The amount of energy used in households drops significantly.

One of the suburbs in Bilbao was rebuilt with the newest state-of-the-art energy efficient materials. A friend of mine just moved there. It is attracting people who previously could not have imagined living in such a location.

2028: China, USA and the EU make massive investments in clean-tech that together with drastic price hikes in scarce natural resources bring the prices of ecologically sustainable goods below the prices of their unsustainable, resource-intensive rivals across all sectors. These three global powers drive sustainable industry.

Transparency gets the prices right

2026: Flying changes dramatically as the major airlines agree on minimum service efficiency standards. Planes can now only fly with over 90% passenger capacity; otherwise they must re-schedule or postpone take-off – unless someone is willing to pay full-price for the vacant seats.

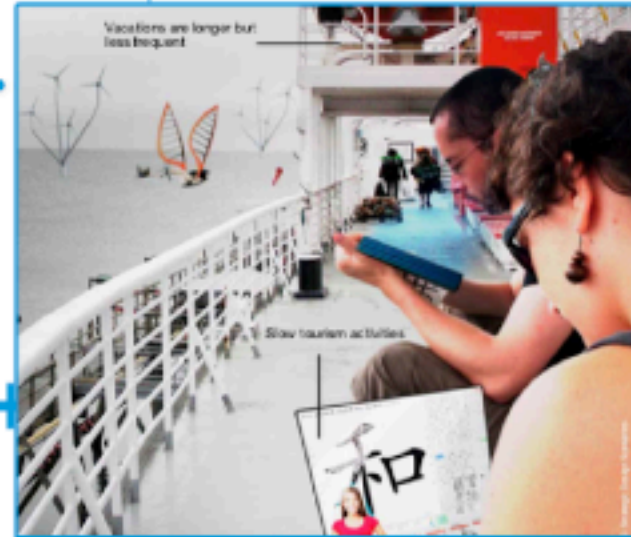
I eat only food that's hyper-efficient in terms of nutrition levels. Cabbages, lentils and berries are key elements in my diet. It just makes sense!

2028: With the help of transparent product data people learn to understand how individual consumer choices in food, housing, mobility build their overall lifestyle.

When I flew to Berlin last month, I had to wait 11 hours until the flight was fully occupied. Regardless, it cost me a month's salary, as aviation taxation is steeper than ever.

The upcycling economy

2025: Thanks to major leaps in technology, the first cost-effective large-scale upcycling processes are launched in the European markets. New enterprises start to develop around the provision and distribution of resources. They lease products in order to make sure that they retain ownership of resources used in production. Cradle-to-cradle is the fastest growing business and area of research.



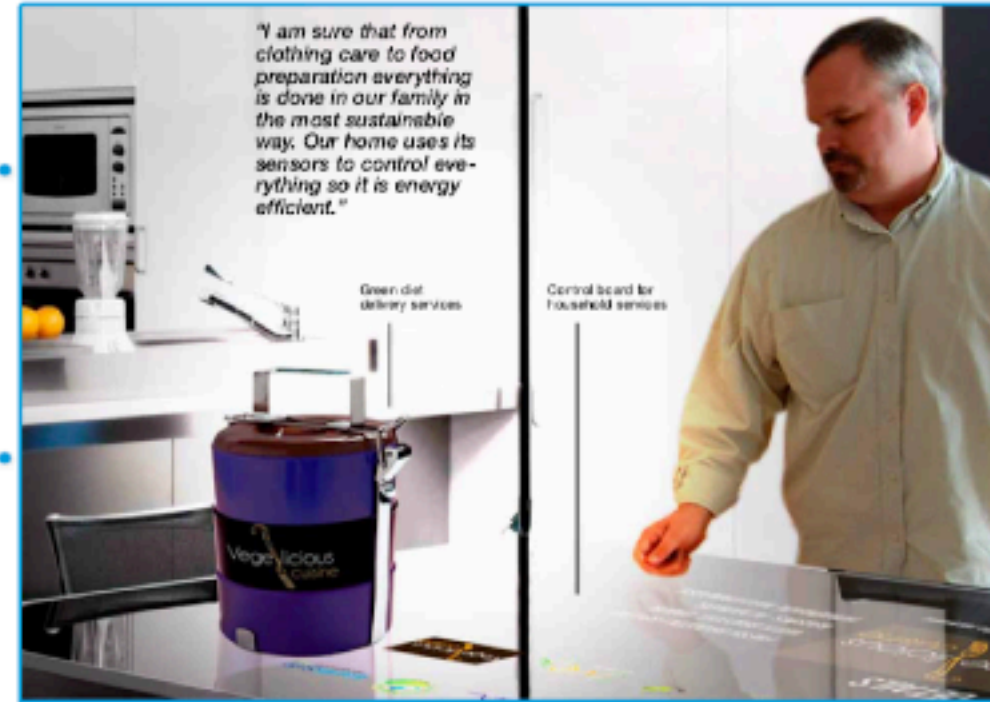
Vacations are longer but less frequent.

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

2030: Most of the major economic papers acknowledge that cradle-to-cradle is the most efficient production method regardless of production sector or materials required. It quickly reaches all parts of production systems. As a significant proportion of usable resources is owned by users, they also become part of these networks.

2030: Thanks to informatics apps, educational software and online learning networks, people are empowered to make excellent rational choices and their desire for material goods declines. Material goods decline.

Learning, not earning



"I am sure that from clothing care to food preparation everything is done in our family in the most sustainable way. Our home uses its sensors to control everything so it is energy efficient."

Green diet delivery services

Central board for household services

We lived in the suburbs when I was a child and drove everywhere. I can't imagine living so far away and having so much space at home now. My parents sold their house seven years ago and now live two blocks from us in a nice one living room apartment.



Intelligent and smart packaging of food for transparency, awareness and less waste.

A new waste mine opened nearby. They collect waste from old landfills and provide job opportunities for the locals.



I'm so proud of my daughter. She's so curious about her environment and enjoys the possibilities of the embedded education everywhere. To be honest, I enjoy it personally as well. I learn new things every day!

2034: Austrian children with the most potential to become members of the future champions are identified at an early age and hand-picked for future training. I.e. their skills are improved in learning studios and top schools.

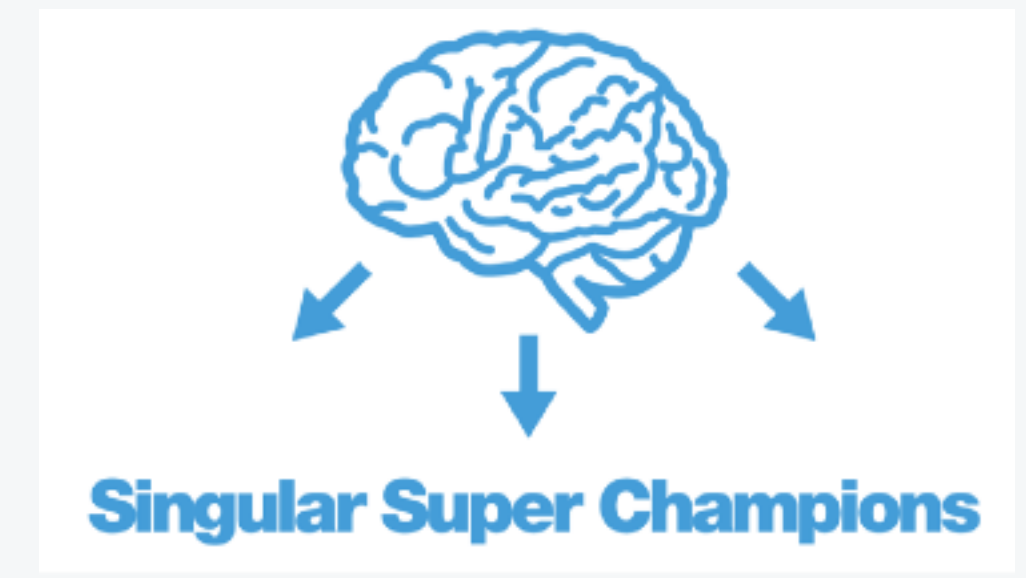
There's a dental club for those who want to learn and take care of their teeth in my apartment building. I go there every month to learn self-dentistry.

2037: There's a re-allocation of non-productive leisure time into an opportunity to learn, including subconscious learning (e.g. computer games that are linked with the city environment). Schools that hone skills are established, nourishing and nurturing individual skills.

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Singular Super Champions



Governing the Commons

The 3rd industrial revolution

2040: Different interest groups provide blueprints for individuals to gather resources and "print" their own items, although in highly customised ways. Most corporations have been succeeded by such interest groups.

Ubitech economy

2042: A global act for self-surveillance takes place, initiated by many of the peer-to-peer networks. Every digital item connected to the global network operates within sustainable parameters. Exceeding these parameters is only possible outside the digital realm (which for the majority of the people is impossible).

Better work creates well-being

Wikidemocracy

2040: Sustainability is not even talked about anymore as by 2034 global knowledge of what can and cannot be done within the boundaries of one Earth became apparent to everyone. What we see as sustainable lifestyles in 2012 are simply rational choices in 2040.

2044: Citizen movements replace traditional political mechanisms in decision-making. Peer-to-peer power forms the basis of "wikidemocracy."

I am a member of a health centre with my peers. This specific centre is optimised for people who have the same genetic risk profiles as I do.



"Our Active House is constantly optimising the way we live, from suggesting green cooking recipes and automatically preventing food waste to implementing Energy Watcher dining programs for the family."

2045: Newly set standards are formed for digital networks to serve as a platform for providing manufacturing blueprints. The internet is one of these ad-hoc networks of knowledge exchange.

I monitor my health constantly through these sensors that are installed in my arm. It's a relief. Whatever happens, my hospital is aware of my condition and I save a lot of money, energy and effort since I don't have to do the evaluations myself. I can trust my doctors to do them – no more futile visits to the hospital!

My wife and I have some old cooking books that we use for home decoration as we have no other practical use for them. It amuses us that so much emphasis was once placed on the preparation of food. Instead, we just use our 3D printers to print synthetic food that has very high nutrition value.



The Domestic Feedback Service allows seniors in households to use user-friendly smart home solutions to control and educate their families on sustainable living.

2046: The value of life comes from networks. To exist is to be part of a specific network. People build their reputations virtually and those with a good reputation can join networks more easily than others. While the rules and guidelines of different communities differ, interacting in the virtual realm is one of the basic forms of human behaviour.

2048: Consumers recycle everything in their "printers." The only traditional factory left in Europe produces apartment block-scale 3D printers.



"My father studied bio-engineering and organic farming and now he is a cook. Every morning he looks for micro-job offers he can respond to, from coaching young farmers to doing sustainable assessments of the food chain. And he loves it!"

I design my home's new interior by putting my old chair into my printer so that I can get a new one as a result.

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