

Key governance pathway themes at a glance

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

current
impact trend

2012-2015

2020

2025

2050 targets

sustainable lifestyles
2050 scenarios

Governance Pathway: Systemic inclusive and participatory governance and policy decision-making

Policy-making structures are silo-ed vs. systemic which has caused a lack of coherence in policies that might support and foster more sustainable living

Policy assessment tools lack provisions for understanding the systemic risks of sustainability, early warning signals, stress testing and allowance for dynamic change mechanisms. Health and social equity impacts have not been adequately considered

Policy decision-making has been "top-down" which is becoming less relevant and representative of EU society as a whole. It has been lacking provisions for "bottom-up" inclusive decision-making processes

Policies are based on what we want in terms of economic growth, not on what is available in terms of ecological and social capital.

Centralized energy supply - dependence on fossil fuels and nuclear energy

Renewed European Strategy for Sustainable Development, includes a chapter on sustainable lifestyles - and the provision for personal footprint budgets (8 000 kg). Cross-sectoral, human-centred approaches to policy-making for sustainable living should include health, agriculture, education, finance, urban planning, social affairs, welfare, trade and transport, energy, environmental protection and climate change.

Review mechanisms implemented

Installation of (inter)national Ombudspersons for future generations. Establishment of parliamentary committee with the specific remit of "protecting the future"

Launch of International Panel on Sustainable Resource Use (IPSRU) which has the mandate to account for and fairly distribute natural resources per country/region

A broadening of the energy supply markets to be inclusive of renewables and cooperatives

- National Strategies on Sustainable Development in all EU countries include a specific chapter on sustainable lifestyles

- Binding resource consumption targets and legal frameworks

- Economic incentives (production & consumption) for sufficiency and quality consumption

Assessment tools are extended to parliament (National and European)

- Participation of civil society in local budget and policies to monitor public investments and support more sustainable lifestyles

- Voluntary code and guidelines for green procurement extended to become legally binding.

- The Future Generations Act is established guaranteeing constitutional rights

IPSRU proposes national quotas and targets for resource use

Energy mix moves towards the phase out of fossil fuels and nuclear energy

Sustainable development and lifestyles strategies form an overarching framework for all policies

European sustainable assessment tools become audited by external organisations to ensure transparency and accountability

A Congress of the Future is established, convened by parliament to provide direction on long-term strategies

Political decision on national resource use quota systems at International Resource Use Summit 2020

Launch of personal carbon and resource card test phases

50% decentralization and democratization (cooperative system) for renewable energy production and diversification of energy sources

Political and societal decision-making is systemic, inclusive, long term and visionary

All policy decisions consider systemic risks and warning signals related to sustainability, health and equity through the ubiquitous use of sustainability assessment tools.

National quotas established for the use of resources and energy worldwide

National policies for sustainable lifestyles are based on those quotas

European network of renewable energy providers is established as renewable energy comes online in all EU countries

Governing the Commons:
-New political movements have gained power and show resilience in systemic approaches –
- "wikidemocracy", digital interest networks.

Local Loops:
- Global networks link local loops

Governing the Commons:
- Abandon 20th century institutions and top-down governance systems in favour of new bottom up collaborations.

Empathetic communities:
- Communities, cities and towns govern vs. nation states. - Shared and active use / care for public spaces.

Key economy pathway themes at a glance

- ✓ Sustainable Economy Commission ensures systemic policies & beyond GDP indicators that promote wellbeing, equity & healthy lifestyles
- ✓ Transition from a debt based economy to a “common based economy” where the monetary system is fully linked with our ecological capital
- ✓ An economy that encourages savings to fund long-term investments in sustainable economy sectors & innovation for sustainable living
- ✓ Support for alternative economies, currencies, and new business models that support sustainable living

current impact trend	2012-2015	2020	2025	2050 targets	sustainable lifestyles 2050 scenarios
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Economy and Monetary Systems Pathway: An economy that supports people & sustainable living

<p>Unsustainable monetary system. New evidence of distributed economies. Promising practice emerging in complementary regional currencies</p> <p>Debt based monetary system</p> <p>Speculation and privatisation of basic needs</p> <p>Unbalanced distribution of labour: Widening gaps between the employed and unemployed</p> <p>Few examples of ownership of workers in management and production</p> <p>GDP focused growth based economies. Momentum starts to build for the internalisation of externalised costs not previously considered, including the true value of environmental and societal services</p> <p>Limited investment in the infrastructure and sectors needed to drive sustainable development and sustainable lifestyles</p> <p>Business models that foster and enable more sustainable living are limited.</p>	<p>- Creation of a Sustainable Monetary Systems Commission to support national governments in creating systemic policies combining economic development with socio-ecological benefits</p> <p>- EU establishes a legal framework in which regional complementary money systems can scale to connect underused resources with unmet needs - such as personal skills, community resources, and local authority assets</p> <p>EC position paper outlines plans to move from a debt based economy towards a common based economy</p> <p>New economic models established based on savings (vs. debt) to fund long term investment</p> <p>Tax on financial speculation.</p> <p>Review of privatisation of basic needs, (i.e. water, healthcare, education)</p> <p>Labour market reforms bolstered by public sector commitments to reduced hour work weeks (i.e. 25h/ week). Benefits and improvements to quality of life and well-being are monitored and communicated broadly</p> <p>The EU actively promotes cooperative movements in all cities</p> <p>A rethinking of the GDP-based value system to include externalised indicators such as environment, well-being and quality of life.</p> <p>EU promotion of sustainable investment in green economy sectors, and infrastructure to address social / societal market barriers to sustainable living</p> <p>New collaborative models explore alternative business models that connect big business with social entrepreneurs to foster more sustainable lifestyle solutions (i.e. mix of profit/not-for-profit, public/private, individual/collective)</p>	<p>- 25% of all monetary transactions are in complementary currencies, linked to services and local models in the EU</p> <p>- Provisions to pay local taxes in regional currencies; pay percentage of salaries in local currencies; pay utilities and services in local currencies</p> <p>- Evidence of redistributed wealth creation from scaling of local currencies becomes evident and accepted as dual currency systems through wide-spread improvements in quality of life</p> <p>- European households save more and borrow less</p> <p>- Responsible lending institutions are proliferated</p> <p>- Peer to peer lending structures are formalised</p> <p>Legal frameworks established to deter financial speculation on basic needs (i.e. water, health, education, energy) and to ensure access for all</p> <p>-25h work week established as a standard for governmental institutions and starts to influence corporate labour reforms.</p> <p>-Labour reforms in public institutions show evidence of stimulating employment, creativity, and growth in alternative currency systems</p> <p>EU support of cooperative models through policies that stimulate social entrepreneurship by default</p> <p>Treaties established for the management of environmental and social externalities</p> <p>Establishment of an Environmental Limits Act</p> <p>50% reductions in GHG achieved through investments in green economy sectors. Targeted investments to realize a 100% sustainable energy system by 2030 together with global trading partners</p> <p>New business models that enable sustainable living are rewarded: Access to goods and services are supported and incentivized as an alternative to ownership; cradle to cradle business models connect production to consumption; new technologies enable more sustainable communities; and sustainable supply chains foster SME infrastructure</p>	<p>- 50% of all monetary transactions are in complementary currencies linked to services and local markets in the EU</p> <p>- Provisions include systems of cash substitute smartcards, mutual credit accounting system, and community banks</p> <p>- 25% of businesses are trading in complementary currencies</p> <p>Evidence of local currencies' ability to reduce CO2 through the promotion of trading in closer proximities of communities</p> <p>The European economy has transitioned away from a debt based economy - in terms of both financial and natural capital</p> <p>Income distribution reforms in public institutions explore maximum income caps across the EU and reductions in the gap between the lowest and highest salary ranges</p> <p>Environmental and social externalities internalised into economic systems at 80%</p> <p>- 80% reductions in GHG achieved through investments in green economy sectors</p> <p>-Subsidies on fuel removed and inefficiencies disincentivised</p> <p>-Incentives are introduced to foster innovation into new materials and production chains that address environmental and social impacts.</p> <p>-Government frameworks support inclusive business solutions. Incentives for rural populations and the informal sector reduces costs for governments and supports sustainable lifestyles.</p>	<p>- Tax reporting requirements include converting existing local currencies to transfer credits</p> <p>-Acceptance of the state with detailed agreements on accounts for complementary currencies and internal controls</p> <p>The European economy is fully connected with the global commons</p> <p>Access to basic needs for all (food, housing, water, energy) considered a human right - financial speculation phased out</p> <p>Income distribution reforms establish maximum income levels for all job categories. The gap between lowest and highest salary ranges capped at a factor of ten</p> <p>- Regional and locally focused companies become just as competitive in the market as multinationals</p> <p>- Production-on-demand becomes a viable business model and addresses issues associated with overproduction</p> <p>- Cradle to cradle value chain business strategies become a minimum standard</p> <p>Environmental and social externalities internalised into economic systems at 100%</p> <p>Businesses create and distribute value. Consumers acquire, preserve and share value. Governments formalize market frameworks that support new role of business (value / inclusive). Civil society spots and address market failures. Eco Top 10 - use of stock exchanges</p>	<p>Governing the commons: - Control and management of the global commons.</p> <p>Local Loops: - Meritocracy - Craftsmanship and professional communities</p> <p>Governing the Commons: -3D printing</p> <p>- Consumers control their own production</p> <p>- From mass consumption to self-creation</p> <p>- Alteration of lifestyles by molding and recreating identities</p> <p>- Peer to peer service economy has disrupted globalized world of multinational corporations</p> <p>Local Loops: -Rise of logistics costs stimulates focus on local production</p> <p>- Local resources have new value</p> <p>Governing the Commons: - DIY manufacturing</p> <p>Local Loops: - Technical concept of local and regional production systems</p>
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Key social innovation & behaviour change pathway themes at a glance

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

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

Key sustainable consuming and living pathway themes at a glance

- ✓ “Re-boot” of individual diets, household food waste and the food production system
- ✓ Human-centred lifestyle approach to urban planning and the transition to ubiquitous zero-net energy homes

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Pathway to Sustainable Consuming

Unsustainable diets: Meat and dairy consumption accounts for 24% of total food consumption impacts; consumption of processed foods are increasing; food waste is increasing; and lifestyle-related health risks are rising - obesity, heart disease and cancers

Unsustainable food production systems: Significant increases in food imports to the EU in the last 2 decades (meat 120%, cereals 83%, frozen vegetables 174%, exotic foods); environmental and ecosystems' impacts of intensive agriculture, destructive and over-fishing; and increasing use of chemicals in food production

EU governments support bio food, local producers and review agro-business subsidies
Tax schemes deter unhealthy food (salt, sugar, processed levels) and environmental damaging products (polluter pays principle). Increased visibility of unsustainable products

Sustainable food options become the norm in public procurement

Labels show the origin of food products and make sustainability/health implications clear.

Veggie-days reach the mainstream at work (office canteens), at home, and in communities

Farmers markets become popular as communities see the benefits in easy access to fresh produce and support of local farming businesses
Increased awareness of healthy diets and nutrition that reduces environmental impacts and GHG (i.e. the LiveWell plate)

Review of cost/benefit scenarios for the cancellation of external debts of developing countries with the aim to support shifts from export oriented economies to self-sufficiency

30% of fresh vegetables & fruits are locally produced and sold in local markets & supermarkets

New policy mechanisms encourage the "right-sizing" of meat consumption to more sustainable levels - i.e. externalities (environmental degradation, CO2, soil degradation, water use, sewage etc) are internalised to reflect the "real" costs of food, especially of meat

Food waste on the household level is decreasing due to education and public awareness campaigns

Limited import and export of food based on the kilometers the food travelled

Community and urban gardens are popularized

Revised policy controls for increased transparency in regards to GMO foods and information on additives

National consumption quotas are introduced in conjunction with personal sustainable lifestyle footprint targets (8000 kg)

Tax incentives for locally produced food & services across the EU

Weekly meat days replace weekly veggie days as more balanced diets (with less meat and dairy) become the societal norm

Outputs from organic farming and conversion to sustainable farming practices show steady increases since 2012

Preference for fresh foods replace processed foods and there is a zero-waste culture as social and technological innovations in the food production system have enabled efficiencies, improvements and easier access for consumers

"Fast food tax" policies have increased awareness of unhealthy foods and catalyzed widespread behaviour change towards healthier diets

90% of food is produced locally and is organic or sustainably farmed. Food processing becomes regional

There has been a global shift to self-sufficiency in terms of food

Local Loops:
- Solutions and life improvements are focused locally versus globally

Empathic communities:
- Widespread unemployment drives experiments to improve living conditions through local energy and food production

- Peer to peer services grow through social innovation and with strong leadership from entrepreneurs, community leaders, new foundations and local currencies

- Cooperatives become providers of local education, health and social services, as well as local infrastructure
-Active use of public space promotes community kitchens and healthy living

Pathway to Sustainable Living

Increasing number of households (e.g. more single-person households)

Increasing individual living spaces

Increasing consumption of energy and water despite recent energy efficiency gains in household appliances

Growing number of electricity consuming appliances and devices in households

New houses: More ambitious regulations on housing development infrastructure such as renewable energy obligations for private housing

Home renovations: Subsidies at the EU level for energy-saving renovations (i.e. insulation)

Public buildings walk the talk with plans to transition all assets to "passive" buildings

Optimised performance standards for buildings, homes and appliances - such as individual metering and feedback systems or provisions for shared housing options - increase user efficiency

Vicinity goes hand in hand with efficient housing, as energy savings achieved through the design and construction of efficient buildings and appliances are preconditions for dense neighbourhoods

New houses: Public and private building becomes passive as the standard across the EU

Home renovations: 20% increase in energy saving home renovations since 2015 creates a flourishing sector. Particular focus and incentives to accelerate renovations for low socio-economic neighbourhoods

New forms of co-housing become trendy

All new houses in the EU are passive.

40% increase in energy saving home renovations coincides with significant increases in new jobs in the building and renovations sectors

Single Super Champions:
- Tech enables smaller homes, end of single car use dependency

Governing the commons:
- Built environment - chips and sensors enable smart living

Local Loops
- Driver - radical rise in resource prices and scarcity.
- Local regions self sufficient in key resources - builds / scale of Eco villages

Key sustainable moving and society pathway themes at a glance

- ✓ Right-sizing individual mobility needs by providing safe, equitable, accessible and sustainable choice
- ✓ Sustainable societies that support 8000 kg lifestyles integrate environmental sustainability with health, wellbeing and social equity.

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Pathway to Sustainable Moving

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

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