# **Solution scenarios**

# 1. Post Growth



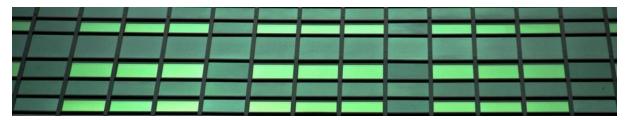
By 2050, society and economy have undergone a profound transformation. Daily life, production and consumption and politics are shaped by active local communities. Communitarianism not only encompasses the community but also nature and not only current generations but also future generations. A strong de-growth orientation as well as the wish to reconnect with nature constitute the dominant mind-set which leads the way to achieve this vision of a Sustainable Europe.

## Main drivers

- The need to preserve and reconnect to nature and the local community is part of society's common sense and has a high impact on daily life, politics and the economy.
- Technology is approached in a conservative way: new technologies are utilized only when clear benefits are visible and when no harm to people, animals or plants are expected.

- A fundamental shift towards a post-capitalist paradigm takes place, including a degrowth orientation, which actively promotes limitations of the market.
- The idea of "less is more" leads to downsizing consumption and resource use, enabling low carbon, self-sufficient and low resource intensive lifestyles.
- There are many not-for-profit companies which are owned by cooperatives and there is a strong preference for services and sharing of goods over private ownership.
- Also peer-to-peer platforms, including not-for-profit initiatives such as repair shops and FabLabs, are thriving.
- Communitarian and egalitarian systems are realised with a focus on bottom-up processes and representation of local regions at the European level.
- Citizens and other non-governmental groups are directly engaged in public decision-making and there are all kinds of experiments in governance.
- Lessons learned are shared and discussed broadly and active participation is key to political influence.

# 2. Pragmatic Way



By 2050, the necessary transformation towards a strong sustainable Europe is managed by a powerful and steering Brussels. Growth is promoted but only within environmental limits. Pragmatic regulations shape what is available on the market and innovation takes place within limits to ensure the protection of natural capital. This fosters an anthropocentric transformation with a focus on sufficiency and leads the way to achieve this vision on a Sustainable Europe.

#### Main drivers

- Recurrent shocks linked to the environment and human health bring a major shift in the economy, politics and public awareness leading to pragmatically sustainable solutions.
- Many environmental rules to promote the necessary transformation come from a strong and steering Brussels, which considers sustainability is a strong guiding principle.

- A far-reaching political and economic integration at the European scale is realised and there is a strong emphasis on centralised structures and state and interstate responsibilities.
- Shared environmental commitments, fiscal transfers between regions, privately-owned platforms, etc. are highly supported.
- Economic activities and open markets are promoted but only within environmental limits and regulatory constraints.
- Within a clear EU-wide legal framework numerous companies shift towards providing services instead of products.
- Public and privately-owned platforms at all scales from local to EU-wide enable the sale, rental or exchange of goods and services.
- The majority of people is convinced that there is no choice but to adopt sustainable lifestyles, emphasizing ecological sustainability to secure their very own wellbeing in the long term.
- They favor low hanging fruits of sustainability efforts that do not require too much investment and change.
- Their attitude towards technology is pragmatic. New technologies are introduced on a regular basis and applied when they prove to be beneficial.
- Policy design has a anticipatory character: there is an emphasis on precaution, acknowledging uncertainty in managing complex systems and innovation.
- A reflexive and adaptive approach to system innovation with long term goal orientation is strongly supported.
- Citizens actively participate in a wide range of political debates, but political institutions make the decisions and take care of their implementation.

# 3. Green Growth



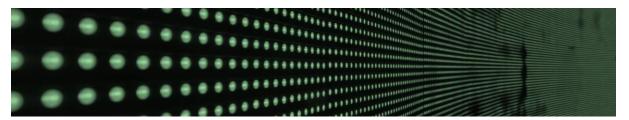
By 2050, a philosophy of economic growth within the planetary boundaries and free markets which are only regulated to correct for externalities reigns. Market-based incentives aim to protect essential natural capital and provide a framework for innovation activity, infrastructure investment and education. Growth has lost its fright thanks to technological innovations and the circular economy decouples economic growth from environmental impacts. Society's own free will, responsibility and motivation together with market-based instruments lead the way to a achieve this vision on a Sustainable Europe.

#### Main drivers

- A green growth attitude dominates in the highly individualised societies of Europe in which people value freedom, change and environmental responsibility.
- Economic growth is considered necessary for societal well-being, but it is also recognized that growth can only be sustained in the long term when the planetary boundaries are respected.
- Where needed, markets should be corrected by market-based measures and that economic growth can be decoupled from environmental impacts by technological innovations.

- The free markets and a libertarian ethos in society promote the emergence of disruptive business models and a highly dynamic circular economy.
- The bio-economy is integrated into the economy through a variety of biomass value chains which appear to be profitable: from primary biomass production to biotechnology.
- Thanks to the decoupling, economic growth, hedonistic lifestyles and sustainability are compatible. They are not mutually exclusive, but go hand in hand by 2050.
- Market-based measures, such as pricing impacts of economic activities on the environment, create an incentive for companies to correct environmental and other harms.
- Policy design pursuits the idea of a reliable policy framework instead of a more adaptive approach in order to facilitate security of investment and business activity.
- EU policy design is based strongly on the subsidiary principles. Cooperation between the Member States is flexible and pragmatic.
- Following the liberal ethos, policy focusses on equality of opportunity, rather than equality of outcomes. Inequality is accepted given that social mobility is high.

# 4. Usable Technology



By 2050, there is widespread acceptance that prosperity and sustainability is best achieved through central planning. Governments rely on engineering the digital sphere and on the market power of state-driven businesses to steer behaviours towards desirable outcomes. People acknowledge their own limitations, and digital tools hit the zeitgeist of quantified self-service. People are steered towards a mix of buying efficient products and using them in sustainable ways. Political capitalism and technocracy lead the way to a achieve this vision of a Sustainable Europe.

## Key drivers

- Frustrations with liberal market economies produce a swing towards rather utilitarian governance.
- State bureaucracies are given substantial powers to swiftly and resolutely reply to economic shocks and environmental problems.
- Society is highly rational, puts trust in experts and data, and seeks to improve well-being and to avoid uncertainty.

- Dominant state bureaucracies shape societal outcomes towards sustainability. This is grounded in widespread acceptance that prosperity and sustainability is best achieved through social and economic planning.
- The emphasis is on gatekeeping of information and discourse, steering attitudes and behaviours towards socially desirable outcomes.
- Large investments in ICT enable utilitarian governance, the monitoring of environmental pressures and the monitoring of trends that allow for efficient use of biotic resources.
- People accept quantified-self services and nudges as tools to overcome their limitations and weaknesses and to foster pro-social and pro-environmental lifestyles.
- All aspects of society and the economy are digitally transformed, e.g. ubiquitous connectivity, Al systems and high automation in industry.
- Strong state control of businesses and increased state ownership lead to "big businesses", e.g. businesses that collect vast amounts of behavioural data and that develop powerful AI tools.
- National governments are strong and independent but actively coordinate to promote economic exchange and environmental management.
- People are informed about public issues and policies, but it is widely accepted that many policies are adopted and implemented without active participation of citizens.
- There are, however, optional digital forms of societal involvement that function as a corrective, e.g. clicktivism. NGOs work hand in hand with governments.