

EUROPEAN POLICY BRIEF



Sustainable Lifestyles 2.0: End User Integration, Innovation and Entrepreneurship (“EU-InnovatE”)

Finalised project

SUMMARY

Objectives of the research

For the past three years, the EU-InnovatE project has investigated the prospects and obstacles for Europe to achieve sustainable lifestyles and a green economy by 2050. It has specifically explored the creative, innovative and entrepreneurial roles of users and citizens in developing novel sustainable products, services and systems in the domains of food, energy, living and mobility (“Sustainable Lifestyles 2.0”).

Scientific approach / methodology

EU-InnovatE has been delivered through an innovative mixed-methodology research design, as a reflection of the interdisciplinary and transdisciplinary complexity around its central theme. Qualitative and quantitative studies and analysis have been blended with a “co-creative” approach to ensure active stakeholder inclusion throughout.

New knowledge and/or European added value

The project has highlighted the potential power of people to influence transitions and change in existing systems. In particular, it has revealed the multiple roles that users and citizens play in catalysing a “new normal”, and the shifts in strategic corporate and policy thinking that would better harness the potential of this new phenomenon.

Key messages for policy-makers, businesses, trade unions and civil society actors

EU-InnovatE highlights the value to companies and business stakeholders of taking a more holistic approach to user and citizen inclusion in open innovation processes for sustainability. Policy-makers need to consider modifying existing instruments, platforms and policies to inspire and support sustainable entrepreneurship and user innovation if longer-term strategic objectives are to be realised.

Objectives of the research

EU-InnovatE was designed around **two strategic, foundational goals**:

1. To explore, describe and explain the active roles of end users in shaping sustainable lifestyles and green economy in Europe;
2. To develop and disseminate concepts and tools to enhance the active roles of end users to (co-) invent, (co-) design, (co-) produce, and (co-) market novel sustainable products, services and systems, which shape sustainable lifestyles and the transition to a green economy in Europe.

To achieve these, the project addressed **five specific objectives** in line with the challenges identified by the European Commission, namely:

- ✓ Develop a deeper understanding of the complex relationships between natural resources, human needs, technology, and economics with a focus on consumers' values and behaviour (past and present);
- ✓ Assess the short- and long-term obstacles and opportunities associated with the transition to sustainable lifestyles and green economy (future);
- ✓ Investigate new business models enhancing sustainable lifestyles and green economy;
- ✓ Measure the prospects of sustainable lifestyles and the green economy through to 2050;
- ✓ Assess the political dimension of the evolution of sustainable lifestyles.

Scientific approach / methodology

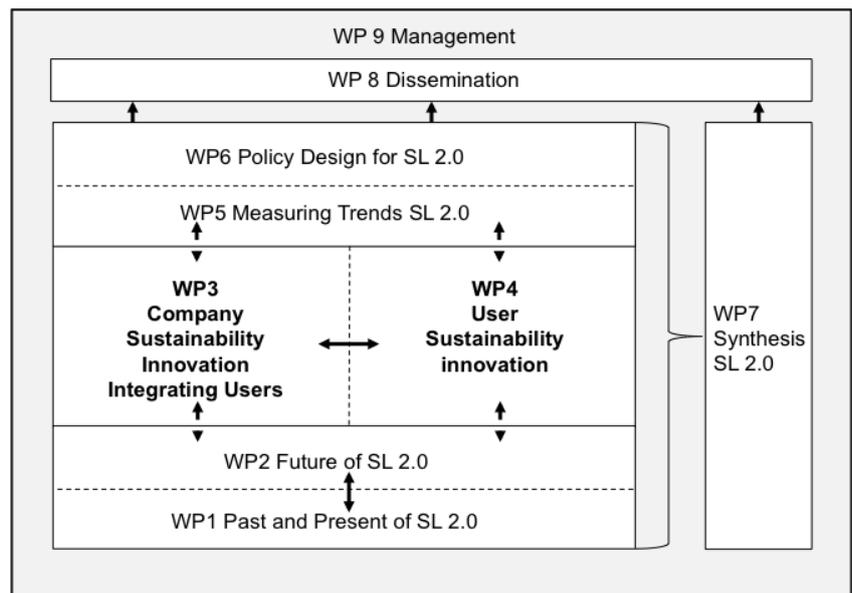
As a reflection of the interdisciplinary and transdisciplinary complexity associated with the five objectives outlined above, the EU-InnovatE project featured an innovative mixed-methodology design applied across seven empirical and synthesis work packages (WPs). The research design is shown below.

Qualitative designs and methods of data collection, analysis and interpretation were employed (e.g. case studies based on archival documents, expert interviews, and focus group discussions), given their suitability for exploring new and emerging research fields such as sustainable entrepreneurship and user innovation.

The findings were complemented by the application of quantitative data collection methods, including surveys, archival data, quantitative forecasts, and laboratory experiments. These collectively served to test and enhance the insights gained in the qualitative research.

Furthermore, the EU-InnovatE consortium adopted a participatory research approach, not limiting itself to doing research **on** stakeholders, but rather doing research **with** stakeholders. In this spirit, EU-InnovatE has actively integrated end users, entrepreneurs, companies, policy-makers, and experts in a “co-creative” research process throughout all work packages, and as lead recipients of the project outputs which have underpinned our wider Dissemination and Outreach activities.

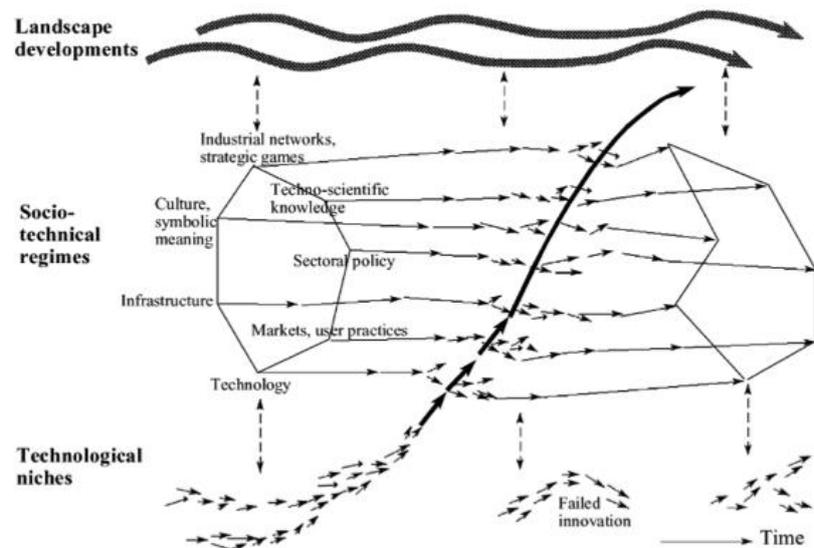
EU-InnovatE Research Design



New knowledge and European added value

EU-InnovatE has broken new ground by aligning research on user-driven innovation for sustainability with the so-called “Multi-Level Perspective (MLP)”, a widely adopted framework for analyzing socio-technical transitions.

The system innovation literature uses the MLP as a heuristic tool to trace and understand major structural changes in socio-technical systems. The key to explaining such change is the interaction between three nested levels, which constitute socio-technical systems over time: **niches** (micro level), **regimes** (meso level), and the **landscape** (macro level), as depicted below:



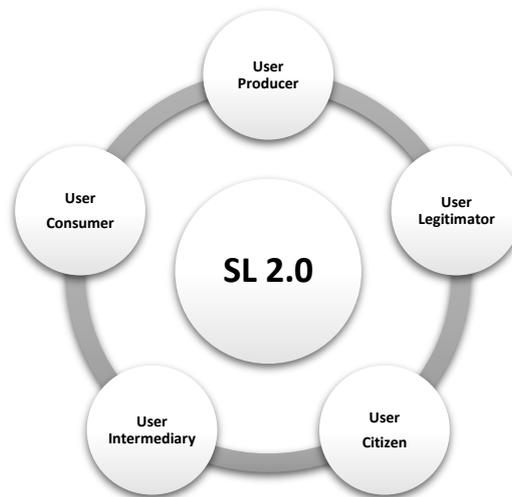
Source: Geels, F. (2002)

Arguably the most valuable findings to emerge from EU-InnovatE highlight the **power of people to change predominant systems**, and the **range of roles that users may play in realizing sustainable lifestyle scenarios by 2050**.

The transition towards sustainability can only be achieved when combining “bottom-up” and “top-down” approaches. While the former is needed to create radical innovations on a niche level, the latter is required to promote, distribute, and establish such innovations on a regime level. The compounded impact of sustainability-oriented small

and micro enterprises plus larger incumbent firms that engage in sustainability-driven open innovation activities has the potential to promote the transition towards a sustainable Europe.

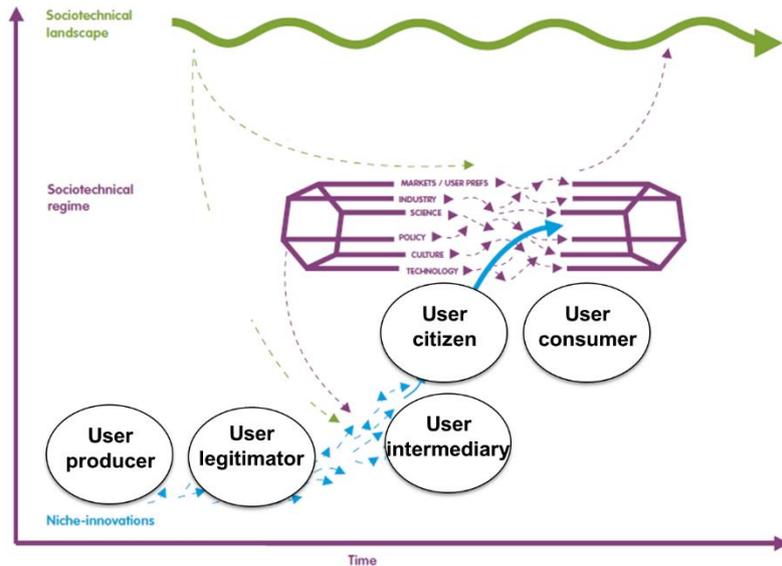
A more surprising finding, however, concerns the specific roles of users in influencing systems change and transitions, which are far more diverse than expected. Historically, users have tended to be viewed and defined (both by companies and public policy agencies) as a unitary, generally passive group. Our research has demonstrated, however, that they can and do take on **multiple active roles in transition processes** towards sustainable lifestyles (“SL 2.0”), as presented below:



These are present and play a pivotal role in shaping the entire transition process – albeit with differing levels of prevalence in specific phases, i.e., in creating, distributing and legitimizing innovations.

A notable spotlight falls on **user producers**: in our research, we identified a steadily increasing group of sustainability-oriented entrepreneurs who are driven by their values, norms, and beliefs in bringing about change. We also found first evidence of **user consumers** taking more progressive, dynamic roles in the sustainable innovation processes of companies.

Overall, this leads to the following visualisation of how user innovation and entrepreneurship brings pressure to change on existing regimes:



Based on Schot et al, Schot & Kanger (2016)

The new knowledge emerging from EU-InnovatE is of course not limited to the above. Other notable outputs include:

- An open access computational model which simulates the short- and long-term impacts of user innovations in the four primary domains of study, uniquely at the level of domestic European households;
- Augmented scenarios (based on the SPREAD 2050 initiative) that explore the possibility of major shifts in the role of both innovation and innovators across society and the economy to achieve SL 2.0;
- A longitudinal analysis of (un)sustainable lifestyles in Europe and the importance of cultural diversity in understanding lifestyle choices;
- In-depth analysis of 19 multinational companies taking steps to integrate users and other stakeholders into their sustainability-driven innovation systems;
- A pioneering analysis of sustainable entrepreneurship as a process;
- A 10-point framework of EU policy recommendations to accelerate sustainable entrepreneurship and user (citizen) innovation.

More information on these, plus the entirety of EU-InnovatE's publications and reports, can be accessed at www.eu-innovate.com.

**Key messages for
policy-makers,
businesses,
trade unions and
civil society actors**

EU-InnovatE's results provide compelling evidence of the increasingly active roles of users in sustainable transitions – either by taking part in sustainable innovation processes of companies (user-integrated innovation) or by starting their own ventures (sustainable entrepreneurship) – and suggest that firms and policy makers should place greater emphasis on enabling and harnessing user innovation and entrepreneurial potential.

At a policy level, our project has demonstrated the extent to which user innovation and sustainable entrepreneurship have the potential to play a significant role in addressing future societal and environmental challenges. However, sustainability and entrepreneurship have hitherto been addressed through separate policy regimes, which should ideally be unified going forward.

EU-InnovatE has developed a policy framework through an open innovation approach which engaged policy-makers, business executives, academics, entrepreneurs and other relevant actors, plus an online crowdsourcing event with 150 participants from over 20 countries. It incorporates five thematic sets of recommendations:

- Creating awareness and skills;
- Building networks;
- Funding and investing;
- Measuring impact and performance;
- Innovating government.

Against the backdrop of the MLP, it explains how policy can catalyse the facilitation and aggregation of innovations coming from the niche level, thereby evolving the socio-technical regime, in addition to the role of policy in defining the wider landscape. The framework can be applied by policy-makers to develop context-specific policies, as per our project's 10 High Level Recommendations to the EU.

From an industry (and business stakeholder) perspective, in the context of an increasingly volatile, uncertain, complex and ambiguous (VUCA) world, sustainable innovation seems to be an imperative for business survival. The notion that no business can succeed in a failed society, or in a world where natural resources are exhausted, is increasingly shaping European and global agendas. Disassociating growth from environmental footprints, while at the same time increasing positive

social impact, is key to guaranteeing that present and future societies and ecosystems thrive.

In their search for a value proposition aligned with social and environmental sustainability, companies have gone through several stages: from a more conservative legal compliance stance, to redesigning operations to foster more sustainable value chains, to offering more sustainable products and services as well as creating business models that will enable those offerings. The work of EU-InnovatE reinforces the point that a **collaborative and multi-stakeholder approach**, where each of the partners leverages its expertise and its access to networks, is a major driver for long-term corporate success.

However, the role of citizens in actively shaping this process seems to be less understood. In fact, the opportunities and challenges associated with encouraging citizens to take part in the sustainability innovation process (throughout the value chain) have not been properly addressed so far – but can bring huge added value for those who do it well.

A sustainable future depends largely on citizens, users and consumers not only making sustainable choices, but also actively engaging with established business, brands and governments (sometimes taking a stand, others voicing concerns, and in others also participating in elaborating alternatives). The rise of the collaborative economy, where ‘people are empowered to get directly what they need from each other’, means that traditional businesses are being disrupted by the collaboration of their former ‘customers’ and that ‘business as usual’ is no longer the only option.

Ultimately, whether it comes from companies or from entrepreneurs, the societal embedding of sustainable products and services requires a combination of the following factors: systems change thinking, transparent co-creation with different actors and stakeholders, the understanding of innovation as a network for learning, and the use of ‘different types of practices to influence societal norms and expectations as well as user habits and routines’.

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Further reading	<ul style="list-style-type: none"> • Innovating in Search of Sustainability: Citizens, Companies and Entrepreneurs • Practitioners Cookbook for Innovation with Stakeholders • Company-driven Open Sustainability Innovation (18 case studies) • Sustainable Enterprises (14 case studies) • International Webinar Series (6 presentations and audio recordings) <p>Available on the project website, plus links to all project deliverables.</p>
Related websites	<p>http://www.globescanforum.com/sustainability_innovation_exchange/ http://52.202.219.239:8080/user_guide (registration required) http://www.sustainable-lifestyles.eu</p>
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