Identifying the strategic conditions to develop and strengthen sustainable social innovations as enablers of sustainable living through participatory processes

Georgina Guillen-Hanson (Germany) | Collaborating Centre on Sustainable Consumption and Production, Wuppertal

1 Introduction

Current consumer behaviour, actions and policy decisions symbiotically interact with the vision that well-being equals unlimited capacity for material consumption, defining a relationship of mutual dependency and bringing about serious negative environmental, social and economic impacts derived from the present development model (WWI 2010).

Societies must *reinvent themselves* without falling into the social trap of progress that depends on the self-reinforcing cycle of novelty and anxiety (Jackson 2009, 147) that sees consumers—individuals that demand and act according to their aspirations—choosing their lifestyles, as key actors of change.

Since lifestyles 'are framed by factors that range from the personal situation, through broader external socio-technical conditions, to physical and natural boundaries' (Vergragt et al. 2016), they constitute a key aspect of the transition to sustainable development, comprising a multitude of everyday activities that are deeply rooted in consumption and production patterns, being intricately linked to people's irrational choices and practices (SPREAD 2011, 9). Innovative activities that enable more sustainable living are emerging across nations and can play a fundamental role in the process of building a new vision of success based on sustainable lifestyles (SL) and paving the way towards such a vision. Hence, two questions arise:

- In what ways could social innovations drive the transition to future societies that support SL?
- How can sustainable, social innovations be activated, communicated and understood in different contexts worldwide?

To answer these questions, four propositions were drafted following studies of social innovation dynamics, conversations with innovators (both social and technological), studies of human-centred design (HCD) interactions with experts on the topics of sustainable consumption and production (SCP), systems thinking, design thinking, SL and education.

HCD is s a non-linear process based on the belief that all problems, 'even the seemingly intractable ones like poverty, gender equality, etc., are solvable. The people who face those problems every day are the ones who hold the key to their answer' (Ideo.org, 2015 – A field guide to HCD).

The four propositions are as follows:

1. The intention to find new social orders capable of shifting consumption-driven individual lifestyles to more sustainable ones comes from systemic approaches to understanding social transformations.

2. The co-creative processes of transition that enable the rise and growth of social innovations are the ones that educate individuals and societies into understanding sustainable living.

3. Education on SL is the result of co-created stories that appeal to individuals' (consumers') principles and values and offer an overview of the possible impacts that changing current choices may have.

4. Social innovations, when designed as sustainable, systemic interventions, are capable of addressing the issues of complexity inherent in social dynamics. The HCD approach helps decision-making processes at all levels.

Social challenges are part of a system where innovation plays a fundamental role in enabling transformations towards new ways of interaction and living, creating a new order. The *System Innovation: Synthesis Report* emphasises that *actions are to be taken across national borders; technological, economic and social structures and boundaries* are often hampered by 'over reliance on single market failure rationales, short-term political processes [...] System innovation is not just an economic, technological or managerial process, but also a *political and cultural project that will require leadership, inclusiveness and a shared social vision to drive it*' (OECD 2015, 7).

Social innovations (SI) are among the most notorious examples of why the status quo, and understanding relationships between individuals and their environment, must be questioned through *the design and development of new narratives*, widening the system and yet being able to identify the unique

characteristics of every element within. SI, as *narratives of change,* are 'sets of ideas, concepts, metaphors, discourses or storylines about change and innovation [...] they reveal, ideas about why the world has to change, who has the power to do so and how this can be done' (Wittmayer, et al. 2015). These, complemented by the understanding of sustainable living as a framework for a new order, represent an opportunity to address the challenges posed by increasing individual consumption patterns.

2 Social innovations and practices for SCP

2.1 Baseline study

The notion that SI brings about different relationships between individuals and institutions as 'new forms of cooperation and collaboration' (Murray et al. 2010), being 'any initiative, product, process, program, project or platform that challenges and over time changes the defining routines, resources and authority flows of beliefs of the broader social system in which it is introduced [...] successful ones have durability, scale and transformative impact' (Westley 2013). The systemic aspect implies 'an irreversible, persistent adjustment in societal values, imaginaries, and behaviours. Processes that co-evolve with and co-produce social transformation...' (Bauler et al. upcoming). An early study outlined the background of SI initiatives, and one of the outcomes was the 'Sustainable Social Innovations' Framework (SSI), which included details such as length and type of initiative, the definition of sustainability, originality and proved impact (Guillen 2012).

Figure 1: The SSI qualitative framework (checklist). Source: Guillen 2014.

Sponsored by the German Ministry for Economic Cooperation and Development (BMZ), the *Budding Ideas Glocally for 2050* (BIG2050) project began in 2012. It aimed to identify ways to support efforts towards SL, addressing the questions: What does SL look like, and what types of mechanism support and/ or drive them? How can sustainable, social innovations be activated, communicated and understood in different contexts worldwide? The project consisted of desktop research, participatory processes and findings-validation activities within these two processes.

> The study comprised five countries: China, Colombia, Germany, Ghana and the Philippines.

2.2 Desktop research

This section illustrates the process of determining the *DRIVERS of social change* (which have enabled the development and spread of social innovations) in different geographies, including the analysis of promising social innovations; it zooms into the development of a *consumer-centred* reference framework built on the Human Scale Development (Max-Neef 2009) and the identification of consumption *hotspots* based on current patterns of consumption and consumer aspirations.

2.2.1 Promising practices

Using a reviewed SSI checklist as a reference, over 200 practices were collected and classified as *promising* as social innovations on the basis that they met at least 35 of the points of the checklist. The highest-scoring practices were chosen for a consultation activity that yielded a total of 19 answers. Most of them focused on knowledge creation, education and empowerment, circular business models and living in cities.

Quick facts about the promising practices shortlisted for in-depth analysis (out of 35)

Geographical distribution of practices: 5 Africa, 10 America, 8 Asia, 11 Europe, 1 Oceania

Skype interviews: 11

Online questionnaire: 7

Email with case study: 5 (two partially filled)

Causes of no contact include lack of a valid email address or phone number, unanswered online contact forms and language barriers.

When revisited in 2016, almost all of these practices (13) were still ongoing, and most of them (8) had the status of a small business.

Scoring system of the SSI checklist: the highest weight (3 points) was given to the aspects of 'methodology', 'elements of systemic change' and 'ripple effect', and the value for each of the elements within 'actors involved' and 'action scope' was 1.

Some of the questions were an exploration of motivation and expected impacts (box 4). The answers were very personal and only a few innovators mentioned the topic of sustainability as a concept, with the majority focusing on social well-being or environmental preservation. The economic aspects appeared more as a consideration than an objective, with the exception of the initiatives planned as business.

Community support, ICT, legislation, social media channels, better supply chains, openness from users, 'luck' and 'the robust business case' were among the identified enablers for innovations to appear and spread.

Questions for innovators

– What would the activity look like in 2015, 2025 and 2050?

– Which challenges/opportunities were they intending to address when starting their solutions, and what kind of impact were they willing to generate?

– What kind of existing tools, laws, mechanisms, frameworks and partners enabled the development of their solution (and which ones were blunders)?

– Which existing practices/business models did they take inspiration from?

– If they were to start over, what would they tell themselves to do/ not do?

The findings of the promising practise analysis provided a first draft of the *DRIVERS of SSI:* policy tools, access to finance (including new products such as microfinance), technological innovation, supply chains, focus on value chains and social responsibility, new business models and changes in the markets' demands, infrastructure, social stability (security) and, to a large extent, behavioural change, where notions such as environmental awareness, open-mindedness, open innovation, rethinking our actions, learning from others, returning to our roots and new respect for traditional practices came across as strong motivators or supporting elements for the innovation to gain interest from the communities in which they were introduced.

The identified drivers have the potential to intervene in various levels of a system (Meadows 2004) and were later used as discussion topics with stakeholders during the events held locally.

2.2.2 The Human (Consumer)-Centred Framework

'The notion of sustainable lifestyles acknowledges the interconnection (and even the blurring of boundaries) between gainful and household work, civic interests and leisure, and recognizes the importance of social norms and values that enable, support and normalize sustainable everyday practices and

lifestyles' (Mont et al., 2014). In order to address the global challenge of shifting current lifestyles (and aspirations) into sustainable ones, it is important to understand that there is no single sustainable lifestyle, rather many ways to live sustainably depending on individual conditions that vary from personal values and beliefs to geographical contexts and traditions; it is also important to recognise the uniqueness within every society and individual. Hence, to have a human-centred perspective we need to depart from the notion that current *need satisfaction* is guided by the vision of continuous economic growth and increased consumption as an end. The question is, from the perspective of consumers, how to approach the concept of *needs* in a way that fulfils its mandate of enabling quality of life in harmony with the environment and with others in the long term.

Needs are currently defined as part of the dominant model of production and consumption of goods (Max-Neef 1991). People's behaviour, choices and everyday activities are encouraged to be directed towards material possessions, when actually most human needs cannot be fulfilled through material goods. The Human (Consumer)-Centred Framework explores the notion of differing human needs through the consideration of sustainable living as the vision of success. The Human Development Scale theory (Max-Neef 1991) defines human needs as the 'innate requirements that must be satisfied in order for people to remain physically, mentally and socially healthy' (Robèrt et al. 2010). These needs (such as participation and creativity) are translated into aspirations that work as a compass for individual lifestyle choices and are interrelated and interactive, weaving the social tissue where global challenges to sustainable living can be met through social innovations.

Clearly understanding this dynamic nature of aspirations and human needs—systematically interacting between them, with others and with the environment—facilitated the detection of the *satisfiers* required to support the process of building a vision for sustainable living influenced by the previously identified drivers.

> The impacts on/of lifestyles or satisfiers are: education and skills development, employment and work conditions, governance, nutrition (diets), health, leisure, energy, use of natural resources, communication, housing, mobility and urban/rural development.

These satisfiers are *glocal,* meaning that they conceive of sustainable living as a dialectic two-way road: on the one hand, global concepts, opportunities and cooperation forces are tailored to the different local realities and aspirations, with creativity and respect for diversity; and, on the other, local practices, knowledge and models are shared and incorporated globally, in different levels of action, improving global opportunities and fostering a continuous learning process towards sustainable living.

This systematic dynamic between the lifestyle satisfiers and innovation drivers enables the context for sustainable social innovations to emerge.
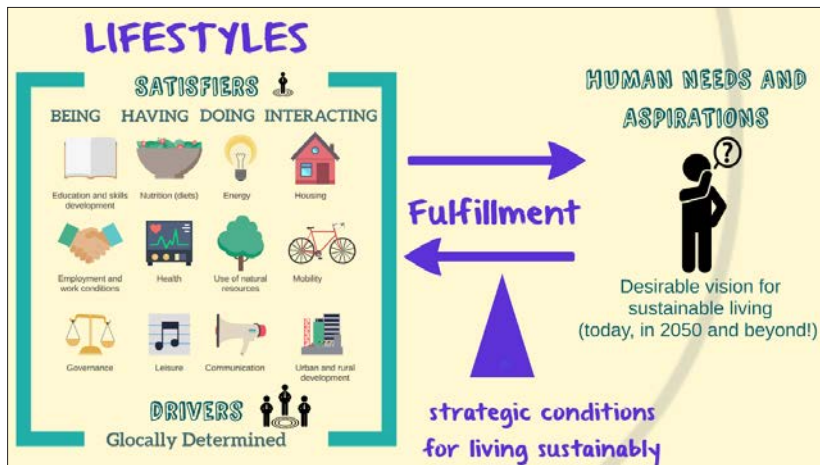

Figure 2: The Human (Consumer)-Centred Framework to identify the strategic conditions for living sustainably. Source: Guillen 2014.
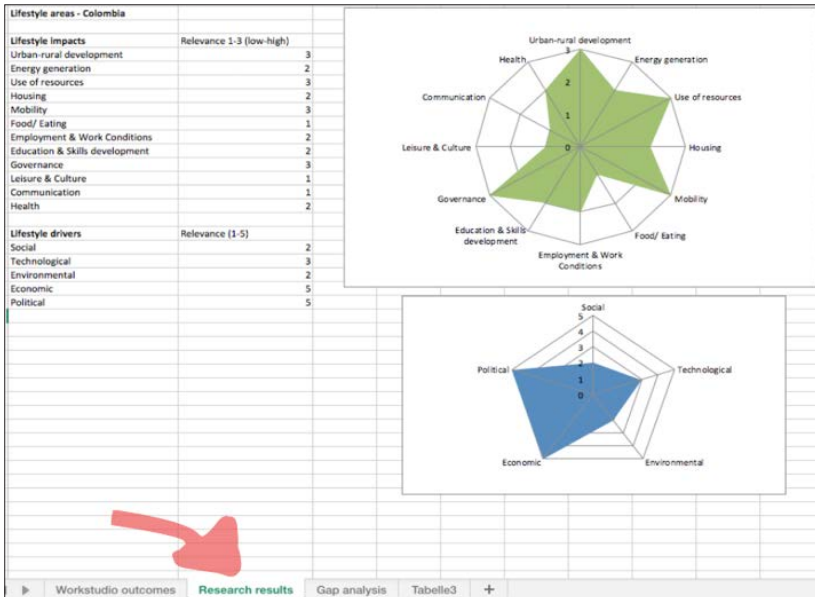
Figure 3: Visualisation of hotspots and drivers. Source: Guillen 2014.

2.2.3 Consumption *hotspots*

Having determined the theoretical frameworks, a qualitative assessment was carried out in terms of the potential impact and uncertainty that current and future trends for lifestyle satisfiers in the BIG 2050 countries represented for leading sustainable lifestyles; the higher the uncertainty and level of impact, the clearer the *hotspot*. A PEEST analysis enabled the types of driver that were most likely to trigger the creations of SI to be seen, in order to address the *hotspots*.

About the Workstudios

The Workstudios consist of a 1 or 1.5 day event. The agenda comprises keynotes from local experts, hosted roundtable discussions, group work and individual reflections. Each Workstudio gathered around thirty to forty national stakeholders – policy-makers, businesses of all sizes, academia and organised civil society.

A report was created after each work studio, specifying both the research and the work studio findings. These reports are available at the Global Network for Sustainable Lifestyles (GNSL), www.vision2050.net

This online community brings together work studio participants with people interested in the topic of sustainable lifestyles, and facilitates the follow-up of the processes begun, as well as serving as the main communication platform.

During the work studios, it was possible to compare the hypotheses derived from the baseline research with participants' perceptions, presenting strategic problem orientation. A role-playing session, where participants stepped into the shoes of local consumers in 2050, created a future vision of local sustainable lifestyles.

2.3 Participatory processes

BIG2050 engaged different actors in a bottom-up participatory process to craft local scenarios of sustainable living, opened several discussions about the most important consumption hotspots and drivers for systemic lifestyle changes, and created action roadmaps to enable the processes, partnerships and social innovations needed to live sustainably by 2050. These dialogues provided the basis for the strategic conditions for SI to support SL.

2.3.1 Participatory backcasting and the work studios

Backcasting, or *looking back from the future,* is an approach that allows a process of critically rethinking the vision of consumption and using creativity to reach beyond existing mindsets and paradigms to build and realise a new (desirable) vision (Quist 2007). The participatory backcasting experiments con-

sisted of a series of multi-stakeholder workshops, called *Workstudios*, which took place in the BIG2050 countries.

The Workstudios followed the five steps of Quist's methodological framework for participatory backcasting experiments, and had two building blocks: participation and learning. In relation to the first, they brought together different contributions and perceptions for envisioning and attaining sustainable lifestyles, creating an interdisciplinary and legitimate planning process towards sustainable living.

Quist's methodological framework's five steps (2007: 28–29, 2011)

1. Strategic problem orientation

2. Develop future vision

3. Backcasting analysis

4. Elaborate future alternative and define follow-up agenda

5. Embed results and agenda and stimulate follow-up

There are two types of learning process: 1) internal or local, as the Workstudios constitute unique opportunities to facilitate dialogue among different social sectors, giving participants the chance to learn about one another's activities and to identify synergies among them for future cooperation for sustainable living; and 2) an external learning process, which takes place when communicating the Workstudio's results.

The backcasting analysis entailed the assessment of current consumption trends and sharing existing promising practices to tap into alternative consumption niches (*hopeful niches*); and facilitated discussions to identify current actions, opportunities and challenges, as well as local needs and offers to support bridging the gap between the desired 2050 and today. Participants elaborated on the above from the perspective of the system drivers and as citizens, creating an agenda with recommendations for different stakeholders, including ongoing practices that can support sustainable living in their countries.

Figure 4: Selection of hotspots to be addressed today for enabling sustainable lifestyles by 2050. Source: Guillen 2014.

The Workstudios provided common notions that are relevant to enabling the emergence and growth of SI towards SL:

■ Policy-makers play a pivotal role in supporting innovators and entrepreneurs in the development of solutions that address local issues such as poverty, literacy and health.

■ Successful solutions require robust knowledge-transfer and local tailoring: going *glocal* enables inclusive, consumer-oriented, value-generating social innovations.

■ Understanding the success factors of solutions that worked in other contexts is as important as understanding local factors that need to be taken into consideration in the implementation of similar solutions on a different country/region/community.

■ The development of *ecological intelligence* allows a better understanding of the environment and its preservation. It also helps to shift aspirations and access to opportunities to change behaviour.

■ Learning from the perspective of a consumer helps to coordinate efforts from all stakeholders to rethink consumption and understand the relevance of sufficiency. This takes the discussion from efficient production to responsible consumption.

Figure 5: Qualitative analysis of the work studio discussion outcomes, together with the desktop research results. Source: Guillen 2014.
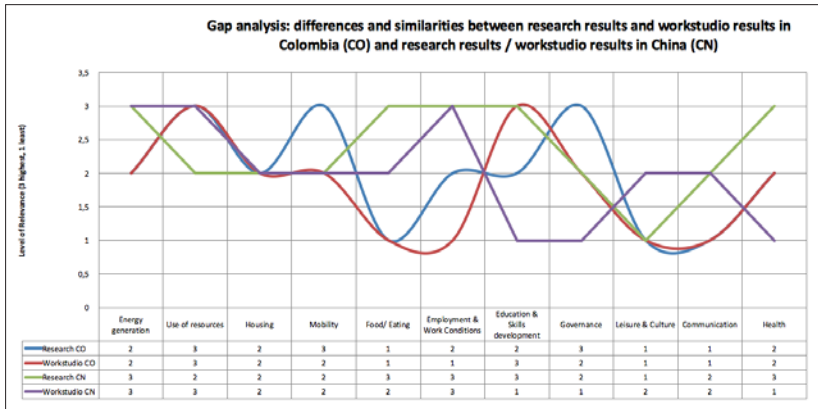
Figure 6: Gap analysis: differences and similarities between research and Workstudio results in two countries. The peaks are areas where sustainable social innovations could have a greater impact on shifting current lifestyles to more sustainable ones. Source: Guillen 2014.

3 Strategic conditions for sustainable living (SCSL)

'Innovation is not only an economic mechanism or a technical process [...] The purpose, impact and framework conditions of innovation are closely connected to the social climate in which they arise' (Muldur 1998:16). Thus, the parameters to define the strategic framework that enable the creation, diffusion and transformation of societies through sustainable social innovations consider the following conditions:

- They are applicable from individual to community levels, and they support decision-making processes and behaviour change towards more sustainable ways of living.

■ They enable opportunities for systemic change through co-creation based on empowerment and sustainable value generation.
■ They can be fulfilled through partnerships and collaboration among all social stakeholders (they are inclusive and complementary).

To present a clearer scope of action for different drivers of change, the conditions were drafted following an expert validation workshop and promising practices that exemplify the ways in which social innovations are meeting these conditions.

1. Brand sustainable living as an aspirational and affordable purpose

Living sustainably should become aspirational, yet realistic and accessible. This condition depends on a mixture of policies, innovations and business models that drive the reduction of consumption levels, while exploring opportunities for new personal recognition schemes and increased consumption quality.

2. Participatory governance: decentralise decisions and actions enabling local empowerment

The participation of stakeholders and consequent coordination of their actions should take place across different levels of social structure, from the global to the most local, and across different areas. Decentralisation enables reinvestment, allowing further social engagement and accountability, increasing the relevance and resilience of policies, while avoiding overlap and/or stagnation from a lack of actions.

3. Make the business case for sustainable consumption and production (SCP)

More sustainable consumption presents many product, service, infrastructure and new market opportunities. Countries can support and incentivise business development based on multi-sectorial risk assessment input.

4. Build knowledge, skills and capacity for future consumers

Experience-based education and research require going beyond access to information, by enabling the development of knowledge and skills that allow critical thinking, reconsidering the responsible fulfilment of human needs.

5. Facilitate transparency for trust-building

Reliable and consistent information-generation, coherent agendas and open sharing are required to build long-term-oriented joint actions that enable SL through mutual trust and cooperation.

4   Conclusions and the way forward

This section presents some general conclusions that validate the research's propositions, the key learnings regarding the role of an educated consumer and the proposed next steps for this study.

4.1 Conclusions

The *glocal* foundation of the strategic conditions for living sustainably in 2050 enables a system that proves a process of mutual learning and improvement between the local and the global levels. Promising practices and alternative consumption niches, when communicated and scaled up, help to bridge the gap that separates the current reality from the common desirable vision of SL.

> Key conclusion regarding the strategic conditions for sustainable living (SCSL)
>
> The SCSL is not meant to be an absolute truth about the coming transition towards more sustainable ways of living, but a starting point across different social levels, to perceive a more balanced and long-term relationship with the environment in which humans are equally and fairly treated. Changes in the conditions are expected to be the reflection of a dynamic process that pertains to a truly sustainable development.

Sustainable social innovations enable the existence of the SCSL, which, in turn, allow the development of more SSI by mainstreaming actions and solutions, constructing bridges between different undertakings and activating partnerships that strengthen practices of resilience, accountability, equity and citizenship. This is needed in order for SI to generate *added value* for consumers, and the pursuit of this value is what will enable the creation of solutions to adopt more sustainable consumption practices.

4.1.1 About the participatory processes

New partnerships have the purpose of deepening the understanding of the satisfiers (aspirations) of the needs and the best ways to address them. These activities could comprise undertakings, such as:

- Performing impact studies that consolidate and analyse the current research on each country's consumption patterns, household lifestyle segments and possible drivers (i.e. aspirations, infrastructure), and linking them to social and environmental impact areas.

- Widening the exploration of SI and building on the knowledge gained through in-depth research of the potential innovations and stakeholder engagement workshops, where social innovation networks and academic incubators will help to identify existing innovations for SL, mapping a landscape of promising local social and technological innovations for sustainable living, including recommendations to scale up and develop more opportunities for innovation.

- Development of regional and local visions, scenarios and roadmaps that connect with other areas and contribute to the creation of more detailed action plans that all stakeholders can use for their own projects.

- Capacity-building and skills development towards the promotion and scaling up of sustainable innovations by developing and/or tailoring existing training aimed at supporting youth in the development of sustainable initiatives.

The SCSL could be a powerful ally for stakeholders aiming to achieve the Sustainable Development Goals, because the participatory processes that led to the definition of the SCSL presented key actions needed to shape sustainable lifestyle choices and scale up transformative practices. This provides important knowledge from which to begin further research.

4.1.2 Chances and limits to consumer education through bottom-up approaches

During the process of identifying the conditions, the learning accrued showed many aspects of how the role of the consumer is understood and even valued by different stakeholders, and therefore the need to appeal to all social stakeholders as consumers themselves rather than representatives of the sector they work in. This is particularly relevant because topics such as *sufficiency* and *empowered consumer* still make many people uncomfortable and are rarely spoken about. *Education on SL for consumers has to be the result of the participation of all actors and a systemic, holistic process that builds on itself.* For this reason, collaborative, human-centred approaches, such as participatory backcasting, help to overcome the issues of mistrust, hidden agendas and dependency from *the top*, enabling the emergence of transformative, sustainable social innovations.

Main learning about consumer education

It is important to note that an educated consumer does not necessarily mean a responsible consumer that lives more sustainably. Communication, from awareness-raising to free access to information for individual choices, plays a crucial role in activating the consumer. Many initiatives fail to bring cohesion because of a lack of understanding of the ways in which knowledge generates value for the consumer, falling short in the provision of motivation for changing behaviours. It is our responsibility to be able to provide PERSONAL, CREDIBLE, REALISTIC, INSPIRATIONAL and ACCESSIBLE answers to these everyday challenges that our lifestyles pose.

4.2 The Strategic conditions for sustainable living (SCSL) as an analytical framework

Given the nature of the research process, the SCSL needs more scientific robustness in order to prove its relevance and potential to support the development and implementation of sustainable social innovations to systematically lead transformations towards more sustainable lifestyles. To this end, phase 2 analyses the underpinnings of complex systemic interventions (Rousseau 2016), examining the drivers, the conditions and their application through the Practice-Oriented Design methodology (Shove et al. 2012; Scott et al. 2012) and the Dynamics of Innovation Systems (Hekkert et al. 2011). Under these two lenses, the SCSL will be used as an analytical framework in various workshops focusing on the relationship between well-being and lifestyles.

Subsequent phases will consist of testing and consolidation of consumer-centred guidelines for designing and implementing sustainable, social innovations that enable transformations towards sustainable living.

References

Bauler, Tom, Benno Pel, and Julia Backhaus. 2017. 'Institutionalization processes in transformative social innovation: Capture dynamics in the social solidarity economy and basic income initiatives.' In *Social Change and the Coming of Post-Consumer Society,* edited by Maurie Cohen, Halina Szejnwald Brown and Philip Vergrat, 78–94. London: Routledge.

Caracostas, Paraskevas, and Ugur Muldur. 1998. *Die Gesellschaft, letzte Grenze: Eine europäische Vision der Forschungs und Innovationspolitik im XXI. Jahrhundert.* Luxembourg City: Amt für amtliche Veröffentlichungen der Europäischen Gemeinschaft.

Guillen, Georgina. 2012. 'Sustainable Consumption and Production as lever of social innovation.' *Zentrum für Soziale Innovation. Challenge Social Innovation: Innovating innovation by research 100 years after Schumpeter.* ZSI Discussion Paper no. 20. Vienna.

Guillen, Georgina et al. 2014. *Budding Ideas Glocally for 2050 final report.* Accessed 13 August 2016. www.vision2050.net

Harsch, Bradley A. 1999. 'Consumerism and environmental policy: Moving past consumer culture.' *Ecology Law Quarterly* 26 (3): 543–610.

Hekkert, Marko, Simona Negro, Gaston Heimeriks, and Robert Harmsen. 2011. *Technological innovation system analysis: A manual for analysts.* Utrecht University, Faculty of Geo-Sciences.

Ideo.org.2015. *The field guide to Human Centered Design.* San Francisco: IDEO.

Jackson, Tim. 2009. *Prosperity without Growth*. London: Earthscan Publications.

Max-Neef, Manfred A. 1991. *Human scale development: Conception, applications and further reflection.* New York: The Apex Press.

Meadows, Donella, and Jorgen Randers. 2004. *Limits to growth: The 30 year update*. Vermont: Chelsea Green Publishing Company.

Mont, Oksana, and Eva Heiskanen. 2014. 'Breaking the stalemate of sustainable consumption with industrial ecology and a circular economy.' In *Handbook of Research on Sustainable Consumption*, edited by Lucia Reisch, and John Tøgersen, 33–50. Cheltenham: Edward Elgar Publishing.

Murray, Robin, Julie Caulier-Grice, and Geoff Mulgan. 2010. *The open book of social innovation.* The Young Foundation & Nesta.

OECD (Organisation for Economic Cooperation and Development). 2015. *System Innovation: Synthesis Report.* Paris: OECD.

Quist, Jaco. 2007. *Backcasting for a sustainable future: The impact after 10 years.* Delft: Eburon Academic Publishers.

Quist, Jaco, Will Thissen, and Philip J. Vergrat. 2011. 'The impact and spin-off of participatory backcasting: From vision to niche.' *Technological Forecasting & Social Change* 78 (5): 883–897.

Robèrt, Karl-Henrik, Göran Broman, David Waldron, and Jamie MacDonald. 2010. *Strategic leadership towards sustainability.* Karlskrona: Blekinge Institute of Technology.

Rousseau, David, Jennifer Wilby, Julie Billingham, and Stefan Blachfellner. 2016. 'Manifesto for general systems transdisciplinarity.' *Systema* 4 (1): 4–14.

Scott, Kakee, Jaco Quist, and Conny Bakker. 2009. 'Co-design, social practices and sustainable innovation: Involving users in a living lab exploratory study on bathing.' *Proceedings of the Conference on Joint Actions on Climate Change.*

Shaw, Deirdre, and Edward Shiu. 2003. 'Ethics in consumer choice: A multivariate modelling approach.' *European Journal of Marketing* 37 (10): 1485–1498.

Shove, Elizabeth, Mika Pantzar, and Matt Watson. 2012. *The dynamics of social practice: Everyday life and how it changes.* London: Sage.

SPREAD. 2011. Sustainable Lifestyles 2050. 2011. *Sustainable lifestyles: Today's facts and tomorrow's trends.* D1.1 Sustainable lifestyles baseline report.

Vergragt, Philip J., and Vanessa Timmer. 2016. *Fostering and communicating sustainable lifestyles: Principles and emerging practices*. United Nations Environment Programme – Sustainable Lifestyles, Cities and Industry Branch (UN Environment).

Westley, Frances. 2013. *The history of social innovation.* Keynote address at NESTA Conference on Social Frontiers: The Next Edge of Social Science Research, 14–15 November, London.

Whitworth, Brian, and Adnan Ahmad. 2015. *The social design of technical systems: Building technologies for communities,* 2nd edition. Aarhus: The Interaction Design Foundation.

Willard, Bob. 2005. *The Next Sustainability Wave.* Gabriola Island: New Society Publishers.

Wittmayer, Julia M., Julia Backhaus, Flor Avelino, Bonno Pel, Tim Strasser, and Iris Kunze. 2015. *Narratives of change: How social innovation initiatives engage with their transformative ambitions.* TRANSIT working paper no. 4, October 2015.

Worldwatch Institute. 2010. *State of the world 2010: Transforming cultures: From consumerism to sustainability: A Worldwatch Institute report on progress toward a sustainable society.* New York: W. W. Norton & Company.