



RESEARCH
FOR LOW CARBON
INITIATIVES



TESS Main Lessons Learned: A Summary of Results and Reflections

About the [TESS project](#)

TESS (Towards European Societal Sustainability) is a European research project exploring the role of community-based initiatives (CBIs) in creating a sustainable, low-carbon Europe. The project is grounded in a diversity of disciplines, analytical approaches and methods. It brings together natural and social scientists, employs qualitative and quantitative methodologies, and develops tools for understanding the environmental, social, political, economic and innovation impacts of CBIs in the field of sustainability.

In this project CBIs are defined as initiatives aiming to serve the environmental and social sustainability needs and interests of (mostly) place-based communities. They may operate for profit or not. The results presented in this brief draw from a survey of 63 such CBIs in Finland, Germany, Italy, Romania, Scotland, and Spain.

These initiatives work in a wide range of sectors: producing and distributing organic food, recuperating food waste, recycling and reusing materials, promoting sustainable transportation, generating and distributing renewable energy and establishing adequate administrative frameworks or infrastructure in their surroundings.

The Sample

This research has shown that CBIs engaged with socio-environmental transformation are present in all studied regions, including rural and urban areas. The comprehensive TESS sample is composed of highly diverse initiatives working on multiple levels and domains, and focusing on the provision of multiple goods and services. Consequently many results are not easily generalizable. Moreover CBIs find it difficult to speak with a single voice, meaning that often multiple perspectives co-exist within one group. The highly heterogeneous character of CBIs implies that no representative sample can be drawn. The following results should thus be seen as extracts or indications of multiple and simultaneous tendencies, rather than as a universal conclusion of CBIs in Europe.

Key Impacts

To study CBIs' **environmental impact**, the emissions caused by their common activities have been compared with a baseline scenario. This scenario depicts how the provision of these same goods and services would have been achieved in the absence of CBIs. Results indicate that initiatives engaged in the provision of sustainable electricity, heat, personal transport and vegetarian/vegan meals have the highest potential for climate change mitigation. Detailed results in this respect are presented in the TESS policy brief on climate mitigation. The Track-It! tool and the Resilience Compass are the two online instruments developed as part of TESS to help CBIs self-evaluate their climate change mitigation performance and resilience.

In terms of **economic functioning**, CBIs make use of a variety of income generation approaches. Access to public funding is mostly difficult. In many cases financial sustainability is due to extensive reliance on contributions from members including a substantial amount of volunteer labour (on average 16 hours per month per participant). Nevertheless, initiatives have the capacity to deliver tangible economic benefits to participants, create new jobs either directly or indirectly, and sustain local economic revitalization and wealth retention. At the same time, many provide a number of intangible economic benefits in the form of training, improved skills and human capital, for example.

With respect to their **social and societal role**, the majority of the surveyed CBIs elicit substantial social engagement, developing or strengthening networks and partnerships in the local communities via their members and beneficiaries. Overall enhancing social capital was self-rated as a top priority by most initiatives. Yet, initiatives' capacity to involve and reach a diversity of beneficiaries in terms of personal characteristics, economic status and geographical location is often below their aims: The proportion of low-income beneficiaries is on average 14%, while approximately 90% of the beneficiaries for two thirds of the initiatives are medium- to high-income.

Regarding **innovation**, TESS research indicates that CBIs cultivate both social and, almost two thirds of them, also market-based forms of innovation. Many of the CBIs remain sceptical about the capacity of technological innovation and top-down policies to spark a sustainability transition on its own, which they conceive as requiring a more grounded approach. Thus, CBIs are not simply developing conventional technological innovation, which can be easily replicated or scaled up by private businesses, but rather focus on *grassroots innovation*¹, which pays due attention to the processes, rather than focusing on the final products alone.

In summary, CBIs' impacts can be classified as: tangible (which can be quantitatively or qualitatively assessed), and intangible (which are harder to evaluate using conventional methodologies). To obtain a full understanding on their role in inciting and sustaining low-carbon transition both must be considered. For example, CBIs engaged in providing sustainable energy show a higher performance regarding carbon reductions than other types, while community gardens emphasize more the enhancement of social capital and inclusion (see Figure 1). **Tangible** impacts are often considered the first and only measure of CBIs success. These include direct environmental or economic impacts such as greenhouse gas emission reductions or the generation of sustainable jobs.

¹Seyfang, G. & Smith, A., 2007. Grassroots innovations for sustainable development: Towards a new research and policy agenda. *Environmental Politics*, 16(4), pp.584–603.

Figure 1 presents the average performance of CBIs classified according to the type of activity they conduct, in terms of: total reductions of greenhouse gas emissions per year (carbon reduction), reduction of carbon footprint per participant (carbon efficiency), opportunities to create new social ties (social capital), beneficiaries' socio-economic heterogeneity and inclusion of disadvantaged groups (social inclusion), diversification of sources of income (financial sustainability), resources spent locally per participant (economic impact), intensity of involvement in political activities (political mobilization), intensity of collaborations with other CBIs and local stakeholders (external networking), creation/experimentation of new products/services (innovativeness), intensity of formal and informal learning opportunities (human capital).

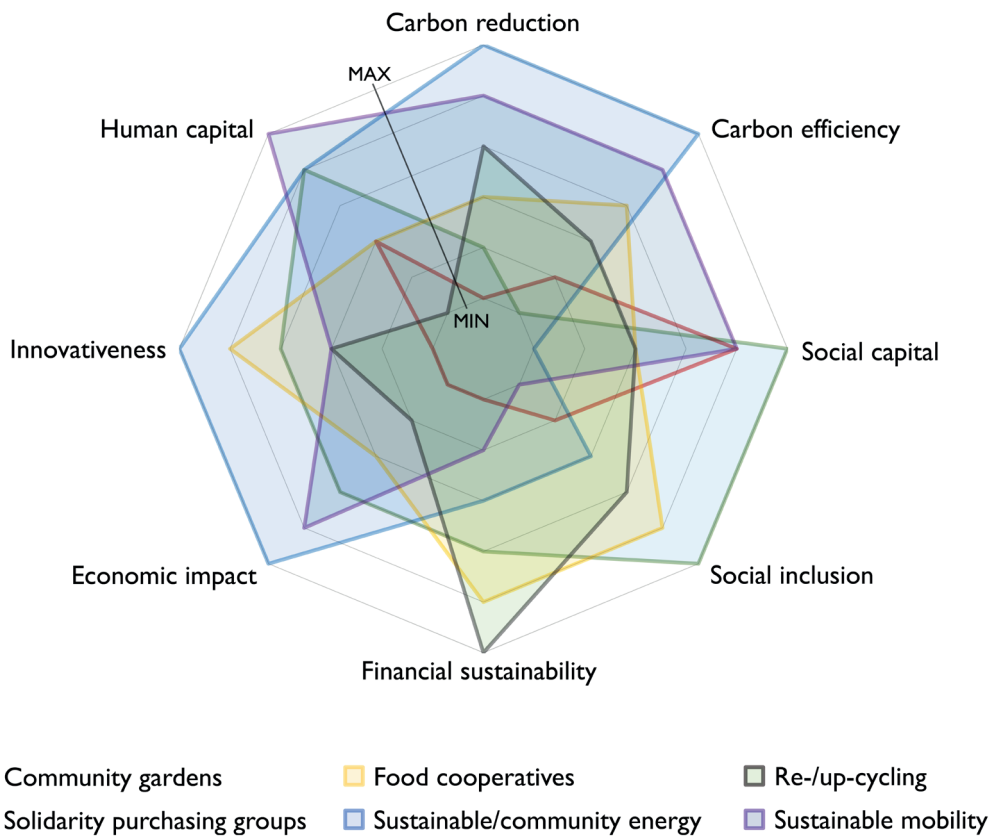


Figure 1: Relative performance of different types of community-based initiatives. Impacts have been averaged across all CBIs assigned to one type and ranked from 1st (best performance, "MAX" – e.g. high carbon reductions or strong financial sustainability) to 7th (worst performance, "MIN").

Intangible impacts include awareness-raising and educational activities, creation of long term social capital or improvements in health and well-being. They are often unknown to non-participants or public institutions and difficult to measure due to the diffuse actions and interactions of CBIs and since they are not a result of simple cause and effect mechanism but rather relational and dynamic. However, they are more durable and slower to manifest. For example, the direct emission reductions achieved for some CBIs' activities are often small in the short-term. Yet, their replication practice - and hence up-scaling potential - is high: About 63% of the surveyed CBIs have been replicated elsewhere, and 49% emerged using the blueprints of similar ones.

Establishing a dialogue with policy-makers

On average, dialogue between CBIs and public agencies is scarce. However, this varies greatly between regions: initiatives in Scotland, Germany and Finland tend to have much stronger links with public institutions than those in Spain and Italy. Moreover CBI members' opinions about collaboration with public institutions are mixed. Some CBIs feel that they fill an institutional gap and hence supplement public institutions; others fully abstain from such interactions. Third groups try to do a bit of both. Overall, public funding is important for the emergence and performance of CBIs, though not as much as the general policy environment in which initiatives are situated.

Policy environments characterized by transparency, accountability, coherence (between different political and institutional bodies, laws and regulations), simplified procedures and bureaucracy are found to strongly benefit CBI's emergence and performance. Even more important, however, is ensuring interest, understanding and openness on the side of policy-makers and public institutions for different and diverse types of socio-economic organizations. Establishing a permanent dialogue between policy-makers or public institutions and those CBIs that are interested in engaging in such a dialogue could be beneficial in terms of designing and testing scenarios for a low-carbon Europe.



Where do you find more information?

Potsdam Institute for Climate Impact Research (PIK)

Telegraphenberg A 31
14473 Potsdam – Germany

Prof. Dr. Jürgen Kropp

E-Mail: nsp@pik-potsdam.de

www.tess-transition.eu



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