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D3.3:
Report on qualitative success factors

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| <p>Short Description: This deliverable provides a synthesis of the critical factors behind the success of community-based initiatives (CBIs), understood as their emergence, persistence, growth, replication, dissemination of new technologies and business models; and contribution to social and environmental justice. This qualitative work is an outcome of Tasks 3.3 and 3.4, in which TESS researchers studied the processes and conditions favouring the success of CBIs, while they also paid particular attention to institutional arrangements at various scales, internal governance, power dynamics, and participants' aspirations and rationalities.</p> | | |
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List of Abbreviations

| | |
|------------------------|---|
| CBI | Community based initiatives |
| DAS | Data Assessment Sheet |
| Key initiatives | Community-based initiatives studied in depth through semi-structured interviews, participant observation, and observations within WP3 |
| Supportive initiatives | Community-based initiatives studied through the close-ended survey (DAS) within WP2 |

1 Executive Summary

This deliverable provides a synthesis of the key factors behind the success of community-based initiatives (CBIs). The present analysis is an outcome of Tasks 3.3 and 3.4, in which TESS members analysed the processes and conditions favouring the success of community-based initiatives, defined as their emergence, persistence, growth, replication, contribution to social and environmental justice and promotion of new technologies and business models.

Our intention here is not to cover the success factors already identified by the literature, such as strong leadership and agency, existence of steady financial resources, or institutional support, but rather to spot the new and nuanced features of the internal and external context that enhance or constrain CBIs' formation and evolution and positive social and environmental impact.

Starting with the most original success factors that contribute to CBIs' *emergence*, we have generally clustered them into the following categories: a vacuum in the socio-political field, aspirations for economic and political autonomy, a shared history of social organization on community level, and supportive, or non-constraining, institutional environment. Next, the multitude of success factors driving CBIs' *persistence and survival* has been organized in the following sub-categories: a diversity of aspirations, adaptive organizational structure, and a diversity of political and income generation strategies, as well as strategic and targeted collaborations with public institutions.

Over time, our results reveal that some community-based initiatives opt for maintaining a (small) size that allows for more participative forms of operation and higher degree of flexibility, expanding their impact and ideas through replication. Others choose to grow in membership, activity and income. For this reason initiatives' success is also defined here as *growth and replication*. If initiatives decide to grow, the factors contributing to their successful up-scaling have to do with CBIs' capacity to undertake structural changes, to deal with conflicts and value clashes, to renovate members and leaders, maintain a 'healthy' level of dependence from governmental institutions.

CBIs' success is also defined here as *dissemination of new technologies and business models*. The latter most often takes place in the form of innovative models for organising work and enterprises, raising funds, and delivering services. Our data shows that technological advancement is mostly occurring in the domain of energy, with solutions for decentralized, local and renewable heat and electricity provision put in place.

Last, but not least, success in TESS is also understood as *achieving social and environmental justice*. Overall, our research indicates that CBIs' location in multicultural neighbourhoods, ability to create working places and their willingness to contribute to the struggles of marginalized groups, enhance their inclusion of socially vulnerable groups. On the other hand when CBIs are confronted with restricted resources and institutional or logistical support, having an exclusive, paternalistic and colorblind discourse and communication style they are less successful at achieving socio-environmental justice.

This said a reoccurring finding concerning all CBIs in the TESS sample is that each initiative is a unique social construct. This implies that recommendations in this document shall neither be considered generic for the entire universe of TESS CBIs, nor representing the opinion of all interviewees or project stakeholders.

2 Introduction

TESS data has been gathered using a close-ended survey, referred as Data Assessment Sheet (DAS) in this document, conducted among 50 (supportive) initiatives, together with a series of semi-structured interviews, observations, and participant observation for 14 (key) initiatives. Results below are primarily drawn from the content and discourse analysis of this qualitative data, carried out in the context of WP3 through qualitative coding work and analytical memos (see D.3.2 for more detail on the methodology). Selected facts and numbers from the DAS covering the 50 supportive initiatives are nevertheless also extracted and presented.¹

The results presented here have been derived from the synthesis of the analytical memos (see D 3.2, p.70-400), which were organized around the following five themes: **“Trajectories of Community-based initiatives”**; **“Power and politics”**; **“Governance and governing relations”**; **“CBI”s Aspirations and Rationalities”**; and **“Money and Community-Based Initiatives”**. The type of analysis undertaken under Tasks 3.2 and 3.3 has helped understand complex causal relationships between various factors as well as the potential spill-over effect of specific initiatives and their networks². Data from each theme is now being transformed into one (or more) academic paper as proceedings of the TESS project.

For the aims of this D.3.3 deliverable, a synthesis of the factors that contribute to the success of community-based initiatives, or rather constrain them, has been extracted from each thematic memo and structured around selected measures of CBIs’ success. These have been already established in the DoW as: the emergence, take-off, development, and acceleration, or up-scaling (of community initiatives), as well as their persistence and potential spin-off. Another measure of success listed in the DOW and used here is consideration of societal and environmental justice, or the extent to which traditionally disempowered and marginalised groups benefit from participation in community-based initiatives. CBIs’ contribution to technological and business innovations is another measure of CBI success, elicited in the DOW.

Upon conducting a literature review on traditional success factors for CBIs (as part of Task 3.1) and analysing the interview transcripts from the qualitative surveys (Task 3.3), we refined the **measures of success** described above into the following categories:

1. CBIs’ emergence;
2. CBIs’ continued existence, or survival;
3. CBIs’ growth and/or replication;
4. CBI’s use and dissemination of new technologies and business models;
5. CBIs contribution to social/environmental justice.

This list does not necessarily represent the amplitude of approaches to perceiving the success of community-based initiatives. Most of these measures reflect the various phases of the CBIs’ life-path, each bringing a different nuance in terms of their socio-environmental

¹ The methodology for data collection and analysis has been extensively presented in the previous two TESS deliverables corresponding to WP3 (D3.1 and D3.2).

² Social network analysis, taking place as part of Task 3.4 is inserted in the deliverables of WP4

impact. They also elicit a different approach to sustainability transition. In that sense a community-based initiative can be considered successful when it emerges in the context of a hostile social or regulatory environment, or when it continues existing despite lack of financing or loss of members. Emergence as a measure of success is particularly important as all other types of success (persistence, replication) cannot be materialized without proper group establishment. An initiative can also be deemed successful when it manages to spread its transformational socio-environmental message among a wider public (that their close circles), through its growth or replication. Yet, an initiative can be thought of as a success, even if it is small in size, but using genuine inclusion strategies through which vulnerable and marginalized individuals or groups could also benefit from the CBIs' socio-environmental activities. Finally, initiatives developing innovative and frugal technologies (ones that contribute to a reduction of resource consumption, for example) as well as CBIs experimenting with new forms of economic organization can be considered successful in offering much needed practical approaches to a socially-just transition towards sustainability.

Furthermore, TESS partners explicitly decided to limit the measures of success to the five ones above for two reasons. One is compliance with the DOW and the second is based on the size (and innovative features) of the analytical work associated with listing and elaborating the factors contributing to each of measure of success. For this reason, the interview instrument we used for qualitative data collection was based on the evolution and overall development of the CBIs.

At the TESS project meeting in Oulu (Finland) in January 2016, the syntheses of the factors that contribute to the success of community-based initiatives extracted from the thematic memos were reviewed, discussed, and organized into one single document. For the purpose of this deliverable, **success factors** have been further summarized and clustered in key categories with the contribution of partners (See Sections 3.2.1 – 3.2.5 and Appendix I). In the same way a synthesis of the constraints to CBIs' success has been developed (Section 3.2.6).

In order to contextualize the synthesized findings below, the list of key initiatives on the basis of which much of our analysis of the success factors has been drawn is presented below.

Table 1. Description of key initiatives per country.

| Country | | | |
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| Finland | The Herttoniemi Food Co-operative (HFC) is a community-supported bio-dynamic agriculture project close to Helsinki, which is managing 0.2 hectares of land, owned by approximately 200 households. The farm, run by two full-time | The Eno energy co-operative is a social enterprise providing inexpensive heat from local (left-over) wood for the local community, thus decreasing reliance on imported oil. Wood sellers are provided with a fixed price so that money is retained | “Recycling Centre” (RC) is a not-for-profit recycling enterprise (shop) located in Southern Finland and running 5 stores in which donated objects are sold. The CBI, dedicated to reducing waste and increasing environmental awareness has been |

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| | <p>employees grows around 40 different types of vegetables. Work is distributed between employees, interns, work-camps and members of the cooperative, who are organized in groups, managed by a board.</p> | <p>in the local economy and jobs are created, while reducing carbon emissions.</p> | <p>active for over 20 years and presently employs more than 400 people. The majority of the employees have been long-term unemployed who obtained a job at RC through governmental subsidies.</p> |
| Germany | <p>Foodsharing is a network of individuals and retail shops working to reduce food waste. It operates in Germany, Austria, and Switzerland. It originally started with individuals doing “dumpster diving” who intended to legalize the act of saving food which had been thrown away by supermarkets. It is now organized through online platforms, where members can share (edible) food that would otherwise be wasted among themselves. Unwanted food can also be brought to openly accessible shelves or refrigerators called “fairteiler”. The online food-sharing platform is also available to retailers, such as bakeries and supermarkets that are willing to donate the (edible) food they would otherwise throw away. Currently food-sharing has more than 11.000 members and 2.000 cooperating retailers.</p> | | <p>Bürger Energie Berlin (BEB) is an energy cooperative aiming to acquire the energy grid of Berlin and change the energy mix towards renewable energy only. As of 2015, it has raised €11 million from 2300 members for purchasing a grid worth €2 billion. The money is saved on a bank account and not used for campaigns, which are supported by external stakeholders and sponsors. The CBI started in 2012, inspired by the experiences of the city of Schönau, where a cooperative bought the energy grid in the 1990s. Due to procedural errors, the bidding process has been paused until the end of 2015. This time has been used by BEB to raise awareness on public participation in energy politics and the necessity of changing the electricity mix in the city.</p> |
| Italy | <p>Association Ciclonauti is a community bike repair shop working to promote sustainable mobility through the promotion of a cycling culture in an urban context. Their primary objective links closely with their political vision for a more sustainable, livable and just city. The CBI is a spin-off of the Critical Mass movement, initiated by bicycle activists gathering once a month to reclaim “the right to be the</p> | | <p>Casale Podere Rosa (CPR) is a non-for-profit association established in 1993 in a peripheral area in the north-east of Rome. It manages an old country side building, a library and some fields on behalf of the local municipality. In over 20 years of existence it developed a wide network of activities with the aim of protecting the natural environment, supporting social and workers’ rights and promoting a life-style based on</p> |

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| | <p>traffic". Over time members of these groups realized they needed physical spaces for meetings, bicycle maintenance and creating sustainable mobility actions. Having its roots in squatted social centres for bicycle repair and activism, over time Ciclonauti obtained a rented space from the Municipality of Rome. Over the course of its 11 year history the initiative refined its activities. Its radical political positioning faded a little with the change of people, making the initiative more inclusive and consequently increasing attendance.</p> | <p>better and lower consumption. Its activities include a solidary purchasing group, an educational botanic garden, 100 urban garden plots, a farmers' market twice a month, an organic restaurant, an "Ecological Culture Centre", a library, and energy production through solar panels. Around 500 people and more than 100 families in the neighbourhood benefit from (and contribute to) its activities and its presence has strongly contributed to shape the current identity and quality of the surrounding area.</p> |
| Romania | <p>Cycling Club Napoca (CCN) is a civic and ecologist association working on raising awareness in the field of sustainable transportation and the promotion of bicycle use in cities and for tourism. The association has been active for more than 20 years and has a long history of civic engagement and volunteer action.</p> | <p>EcoBucovina (EB) is a relatively young non-governmental organization, founded in 2014, promoting environmental preservation and protection, focusing on forestry and environmental policy-making. The initiative started with a group of young enthusiastic students, doing actions for a clean and healthy environment. Over time, its objectives evolved to targeting public policies on environmental protection. To this end, the initiative collaborates intensively with local authorities and civil society in Romania.</p> |
| Spain | <p>Totacucaviu, (TCV) is a cooperative of 23 households which organize and commit themselves to purchasing (seasonal) fruits and vegetables from a local organic producer on a weekly basis all year long. Their producer (Aurora del Camp, AdC), is a peri-urban small business producing up to 200 baskets with organic vegetables per week for food cooperatives in Barcelona. Initiated 5 years ago AdC initiated a network of organic producers in the Maresme region,</p> | <p>Som Energia (SE) (key initiative) is an energy consumers' cooperative with more than 20.000 members across Spain, who jointly purchase energy with a green certificate and are gradually starting to invest in generating their own (renewable) electricity. The initiative is managed by three groups with different functions: a professional technical team (about 15 people based in Girona), a board (5 people, elected every 4 years, on a voluntary basis) and more than 30 local groups</p> |

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| | located about 20 km distance from Barcelona. | | distributed throughout Spain (with different levels of engagement). Local groups are generally working towards the dissemination of the initiative, communication with local actors, and small technical tasks. |
| UK | <p>Colintraive and Glendaruel Development Trust (Colglen) is located in a remote rural area with a small, sparse population and a fragile economy. Its primary concern is rural regeneration, reviving the local economy through moving to a re-localised and low-carbon future. For Colglen this means ownership of 600ha of forest, partly financed through selling the rights to most of the timber for the next 99 years while leaving the community areas of native deciduous woodland. Generation of renewable energy, creation of jobs in the forestry sector and running a derelict former hotel are some of the key income generation tracks for Colglen.</p> | <p>Huntly and District Development Trust (HDDT) is situated in Huntly in NE Scotland. It has around 300 members and is managed by a board of directors. The Trust has a broad range of activities – it is developing a renewable energy project (a wind-mill) at Greenmyres farm (a piece of land they bought in early 2015) and a sustainable transport hub. In the past they have done different activities such as community consultations for the Local Authority, developing signage for the town, setting up a farmers’ market and developing a footpath to connect Huntly with other towns.</p> | <p>SHIFT is a student-led food and energy initiative which is part of the Students Association of Aberdeen University. SHIFT is organised into three main parts: Shared Planet comprises a café, a vegetable bag scheme and small food retail ‘shop’ called The Corner. Sustainable Futures is an association training students to be energy aware and then train others how to decrease energy consumption. The Environment and Ethics committee is engaged with lobbying the university to become more sustainable and change its policies where possible.</p> |

3 Success factors

The current section firstly reviews the various measures of success according to which CBIs can be evaluated, listing key findings from the literature and contrasting them with the ones identified during the project. Next, a distinction is made between the types of success (*measure of success*) and the factors that contribute to them (*success factors*). Section 3.2 examines the success factors for each of these (measures) separated in sub-headings, as emerging from the semi-structured interviews and other qualitative data collected among with the 14 key initiatives and backed by fact and figures from the Data Assessment Sheet (DAS).

3.1 Measures of success

Throughout the project and the various interactions with community-based initiatives' members we have seen that success is perceived in multiple ways. Overall, we find a substantial degree of compliance between the measures (of success) identified in the DoW and those elicited by initiatives' members. The following measures of success should not be considered ubiquitous, nor exhaustive, but rather emergent and providing a rough outlook on the possible ways of understanding success (for community-based initiatives). Below we first provide a brief review of CBI success as identified in the literature on community initiatives in the transition movement to a low-carbon economy. Next we move on to examine the categories and types of success suggested by our findings in TESS.

3.1.1 Measures of success for community initiatives in the literature

In a review of transition initiatives life cycles, Feola and Nunes (2013) identify social empowerment, the critical mass of individuals participating in the group, the duration of the initiative, and the **progress made towards the commonly established goals** as the major metrics through which initiatives' success, or failure, can be defined. Using interviews, Hoffman and High-Pippert (2007) draw a wider set of perceptions of success among which are: recognition by policy makers, **breadth of the dialogue with the public administration**, **low rate of participant drop out**, spill-over effects and provoking changes in individual lifestyles and community resilience. Seyfang and Haxeltine (2012) further add **diversity of membership** as a way of seeing success in community initiatives. Another perception of success, coming from Transition Town studies, is initiatives' **ability to shape their own pathways and adapt** to each unique local environment, rather than blindly replicating existing examples (Thatcher 2013). The **increase in profile, scope, and scale** of the groups and their activities is a common measure of success for those Transition Town members who are oriented towards getting more funding (Aiken 2014). One environmental consultancy in the field of Transition (Changeworks) defines success in terms of **initiatives becoming more stable and institutionalized**. Alternatively, **exiting the stage on the right time** so that gains are not ruined by clinging to a given position, and allowing more effective, or relevant actors to come in, is recognized as an achievement of the Transition Movement (Aiken 2014). **Success** in this view **does not necessarily mean sustaining the institution** but steepening its fall. 'Failure' of a group, could in this sense actually be a success "**in that they have gone with the flow, served their allotted time span**, and avoided a catastrophic collapse" (such as climate change, for example). Success for many Transition Town members also lies in **not being complicit with what one disagrees with** in society; in not engaging with, or legitimizing established structures. At the same time **defining success in**

terms of narrow carbon reduction figures, as done by the Climate Challenge Fund in the UK, is **seen** by many involved with Transition Town as “missing the wood for the trees’, or **not recognizing the ineffable, tacit ‘community’ dimension within”** (*ibid*). This literature review is certainly brief and aiming at noting the wide amplitude of ways success and failure are conceptualized in research papers.

3.1.2. Measures of success for community-based initiatives found by of TESS

The diversity of success measures above imply that a single monolithic vision of success in either quantitative or qualitative terms is unlikely to reflect the multitude of existing perceptions, nor the key aspirations of CBIs. Based upon the literature, responses to the in-depth, semi structured interviews, as well as on guidelines from the DoW, the following list of success measures have been identified in TESS.

- CBIs emergence,
- CBIs survival,
- CBIs growth and/or replication,
- CBIs use and dissemination of new technologies and business models,
- CBIs contribution to social/environmental justice.

These measures of success are reflected in the titles of the following sub-sections. While they correspond to the aims of the DOW, their exact formulation has been refined throughout the project, and particularly after conducting the literature review and data-collection and analysis. Emergence and survival (or simply “being there”) is the most common response participants in community-based initiatives provide to questions regarding their perception of the CBI’s success. Growing (up-scaling) and/or replicating come second in terms of frequency of reported responses on success. A section on the constraints to success measured (perceived along these lines of enquiry) has also been added as presumed in the DOW.

Next, CBI’s contribution to sustainability transition (with technological or business innovation) and to socio-environmental justice, on the other hand, stand at the core of the research questions that TESS puts across. In particular, we are interested in the level of compatibility between these two measures of success, or whether focus on new technologies and business profitability could go at the cost of contribution to environmental justice; and vice-versa – whether focus on inclusion goes at the cost of, or hinders (business/techno) innovation.

CBIs’ ability to provide services and products in a socially equitable way has been here defined as a measure of success for a number of reasons. Firstly, the exclusivity of certain types of initiatives has been remarked in the transition literature, which has described them as a pleasurable leisure-based community movement carried out by highly skilled hobbyists. Critiques argue that these practices are “little and temporal islands reserved for a concerned but exclusive middle class and a selective urban creative milieu” (Bialski et al. 2015, pg. 6) and that their impacts are too-localized. In contrast, if CBIs are able to share their products, services, or activities with groups from more socially vulnerable groups, we can logically assume that their societal impact will be broader and that historically marginalized groups will also be able to benefit from environmental amenities. Second, CBIs’ scepticism towards the state, their often depoliticizing character and strong emphasis on individual rather than structural change, are seen as insufficient to challenge the current capitalism paradigm (Guthman 2008) and the socio-economic and political structure that play a role in the

marginalization of low-income and minority groups from benefiting from environmental goods and services.

3.2 Factors of success

3.2.1 Factors contributing to CBIs' emergence

Socio-political vacuum

Many CBIs were constituted **in response to needs still unmet through existing organisations and state-based institutions** e.g. in the fields of sustainable transportation and food production. For example, one of the reasons for the emergence of the community-based initiative Colglen in Scotland was the perceived disenfranchisement of the state with respect to the social services expected by local citizens. The existing institutions (such as local authorities, or municipalities) were not suitably structured or able to fulfil the role required to drive forward or facilitate the process of empowering the community and regenerating the local economy. In other words, physical distance and a feeling of disconnection from local government were a driver for the formation of the Development Trust. Meanwhile, the arrival of large multi-national supermarkets in the Aberdeenshire (Scotland) and the perception of poor public consultation processes increased the demand for a local organization that would be owned and led by local people. Meanwhile, Foodsharing (Germany) has built itself around issues of food waste at community level that are not being effectively addressed by local and national institutions, or by mainstream business. Similarly, Ciclonauti, in Rome, emerged around the lack of government and institutional action in promoting sustainable transportation options in the city.

History of social organization in the community

A history of social struggles can play a key role for the emergence of a CBI. A community which has experienced various forms of social organizing tends to keep the memory and learning experiences, and can easily use them at the initial stages of forming a community-based initiative. For example, the Casa Podere Rosa (Italy) was initiated more than twenty years ago, in the context of a neighbourhood community from a peripheral area of Roma which had been highly industrialized over the previous decades. There, a politically aware working class with a 'social memory' of workers' mobilization was still present, creating the right conditions for the emergence of the initiative. Over the years, CPR has developed a wide network of activities with the aim of protecting the natural environment, supporting social and workers' rights, spreading and promoting an environmentally sustainable way of living and a life style based on lower consumption.

In several other examples, CBI members spoke of the importance of drawing inspiration from other organizations that had embarked on similar processes. Bürger Energie Berlin (BEB) in Germany, for example, was partly inspired by the town of Schönau, where a citizens' cooperative purchases the energy grid. Some of the people involved in the Schönau cooperative are now part of the BEB team, thus bringing in their history of social organization, media work, and public awareness skills to the community of the people supporting the transition to renewable energy in Berlin.

Bold aspirations and a sense of shared identity

While it is difficult to pinpoint aspirations of founders and/or members as drivers of an initiative's birth, it is plausible that these played an important part in the motivations for founding an initiative. This appeared quite obvious in the Italian CBI Casa Podere Rosa whose activities (a solidarity purchasing group, an educational botanic garden, the management of more than 100 urban gardens and a farmer's market) were inspired by **the desire to combine 'red' and 'green' (political and environmental) motivations**. Here, members highlight the importance of mobilizing participants' pertinent values for creating a shared sense of identity.

While we do not have a good record of what motivated CBIs emergence in terms of aspirations, some trends have been spotted. The emergence of CBIs tends to be driven by the **desire to change the status quo**, even if the initiative takes a more pragmatic turn over time. Many of the older initiatives in Spain and Italy, for example, emerge because of the founders' idealized vision of **embarking upon a profound societal transition**, or transformation, which becomes a source of inspiration for people to join over time. In other cases (i.e., Colglen in Scotland; Cycling Club Napoca in Romania), CBIs were careful to craft their aspirations in a politically non-partisan direction (political radicalism was thought to run the risk of alienating potential members), opting not to directly confront the global (economic) system but instead to **demonstrate an alternative** in terms of creating green space for recreation, producing their own electricity or being economically independent.

Varied role of regulation and partnerships with the government

Partnerships with local governments or public sector organizations feature strongly in the emergence of some of the CBIs, particularly those we studied in Scotland and Finland. In Scotland, **partnerships with local councils**, as well as private sector bodies (providing core funding), have largely created the context for the emergence of CBIs. In Aberdeenshire, the CBIs grew out of a state led, publicly funded partnership. This not only provided important funds for the development of the CBI but also allowed the CBI to develop skills and a strong network required for 'doing it alone' after the funding dried up a few years later. Similarly, to date, Colglen has been strongly dependent on working within the current system of financial support for non-for-profit organizations, taking advantage of whatever opportunities are offered through government initiatives and policies that allow the CBI to take forward its own agenda and vision. Meanwhile, in Finland, the Eno Energy cooperative emerged from an **active partnership with the local forestry advisory organization** and the local municipality, being particularly dependent on the latter in its early stages. In the case of Bürger Energie Berlin (Germany), support came less in the form of core funding. Instead, Berlin's energy cooperative worked together with certain political parties (especially the Greens, and more generally with left-wing parties) to profit from their expertise and networks. In the cases of BEB, the group's capacity to take advantage of institutional windows of opportunities (such as the opportunity to bid for ownership of Berlin's electricity grid) can be considered as an important trigger for their emergence.

Other initiatives were developed independently from institutions. Foodsharing (Germany), Ciclonauti (Italy), or Totacucaviu (Spain) **emerged without the support of any government actors**. The Totacucaviu and Som Energia food/energy cooperatives (Spain) were **created despite unfavourable regulations**, or even perhaps, thanks to a regulatory gap. It was the need for more social entrepreneurship in the field of agroecology and renewable energy provision that prompted the creation of Som Energia. The same can be said about the organic farm Aurora del Camp (the provider of Totacucaviu food cooperative). Foodsharing

(Germany), on the other hand, emerged out of the need to **get around legal regulations** prohibiting activities that can be considered socially and environmentally legitimate from an ethical perspective (such as recuperating good quality food from supermarkets' waste bins). Collective organising through CBIs may emerge as one viable response to prohibitive scenarios.

The findings above match relatively well results from the Data Assessment Sheet (DAS), indicating that almost half the responses from members of the supportive initiatives³ believe that some policy regulations were relevant (thus either helpful or supportive) for their emergence or development, while a higher proportion (almost 2/3 of the sample) thought that policy regulations had in some way been an obstacle to the emergence or development of community-based initiatives.

In sum, the role of public regulations and partnership with the local/national governments tends to play a varied and at times, an ambiguous role in the establishment of community-based organizations. Public regulation can thus either stimulate or hinder the emergence of community-based initiatives, depending on the particular cultural and historical context in which each initiative is immersed, and most importantly – on its thematic focus.

Aspirations for economic/income-generation autonomy

Whilst in some cases, the **aspirations for autonomous income generation** have been present at the establishment phase of the CBIs, for many initiatives money is considered an instrument, rather than a goal in itself. This was reflected in the semi-structured interview as well as in the results from the DAS⁴, indicating that initiatives consistently rank environmental and social objectives highly, averaging 4.1 and 3.9 respectively (on a scale from 1 for low to 5 for high). Political and technological objectives have the opposite distribution, both averaging 2.1 with very few high rankings. Having an economic impact is most variably ranked with an average of 2.7. Only 4 initiatives rank economic objectives as their top priority.

Dependence on income generation is generally higher among the initiatives in the energy domain. The Eno Energy cooperative (Finland), operating on a local level, saw income generation as a crucial tool for the CBI's operations right from the start. The creation of Som Energia (Spain) and Bürger Energie Berlin (Germany) energy cooperatives, aiming at a wider social change and energetic transition, is also conditional upon members' financial contributions. Yet, while the importance of income generation grew with the CBIs' evolution and expansion, it was not the central driver for their emergence.

In other contexts, **the financial crisis** and the subsequent shrinking of state social provision provided **an important background for CBIs' development** – particularly in Scotland. In 2008/2009 the financial crisis led to substantial budgetary cuts for community based projects and the size of public sector was significantly cut. As state agencies decreased these services, there was an increased pressure on CBIs (Coglen, HDDT) to fulfil the role of the state and supply crucial services instead, which required an independent source of income generation.

³ See section 2 for a definition of “supportive” versus “key” initiatives

⁴ Section on community-based initiatives taxonomy, TESS Deliverable 4.1, Msika et al.

The potential to generate an income did serve as an important motivational factor for the establishment of **small-scale organic farms** (Aurora del Camp, Spain, for example). In the case of (CPR, Italy) while income was not intentionally pursued at the very start, being able to provide a small salary to people collaborating on a regular basis was considered important.

General conclusions in terms of the role of income-generation potentials for the initial phase of CBIs are difficult to pinpoint for the entire TESS sample. Nevertheless, we can definitely assert that the possibility of earning a living, or covering personnel/material costs, is central for the emergence and consolidation of initiatives providing a tangible service (especially food, energy or recycled goods).

3.2.2 Factors contributing to CBIs' survival and continued existence

A diversity of aspirations and rationalities

Data on the extent to which the diversity of aspirations and rationalities contributes to CBIs' survival is scarce. Interviews indicated that people tend to get involved with the studied initiatives for a number of different reasons, ranging from professional to personal and ethical goals. **Allowing members to take on different roles and pursue their own projects** within the initiative (which aligns with their aspirations) seems important for CBIs' continued existence. By offering **flexibility and a range of projects** (or aspects of projects) to get involved with, the CBIs in Scotland have offered a rewarding environment for volunteers which has kept them on board over the years. At the same time allowing for the creation of a **shared identity** (while keeping a diversity of ideas and perceptions about the CBI) has strongly contributed to the success of the initiatives in Italy (Ciclonauti and Casale Podere Rosa).

Type of organizational structure, volunteers and paid staff

Most of the initiatives survive, or continue existing, thanks to the work and commitment of **volunteers**. This is particularly the case with Foodsharing (Germany), Shared Planet (UK), Ciclonauti (Italy), Totacucaviu (Spain), HDDT (Scotland) and Cycling Club Napoca (Romania). On the one hand being a volunteer-based structure (or resting upon the skills of volunteers) lowers costs, hence liberating CBIs from the obligation to search for (large) pools of funding or outsource work, eventually opening space for greater flexibility. For example, Colglen's success (survival) is largely ascribed to a particularly **motivated pool of retired, professional people with time, skills and commitment**. Having a **structure run by volunteers** only (as in the case of Ciclonauti, Totacucviu, Shared Planet, CCN and Foodsharing) is furthermore **giving a sense of sociability of the CBI**, or having a greater social outreach. As an illustration, the flexible and effective internal governance has been crucial for the survival of Ciclonauti as it allowed for changes in founding members without gaps in the provision of good quality bicycle-repair service. Having a volunteers-based organizational structure can however be both a strength (a success factor) and a challenge (a constraint). CBIs' ability to have a broader impact on society is also perceived as relying upon continuity and regular time commitment. Volunteers' fluctuation and limited time/financial availability (as in the case Totacucaviu and Herttoniemi Food Cooperatives) pose a clear constraint to the survival of the two initiatives. As a result, professionalization, in

the sense of having paid staff, appears as a desirable development for some members in Ciclonauti (Italy), Shared Planet (Scotland) and Totacucaviu (Spain). Results from the DAS⁵, for example indicate that nearly half of our sample, 31 initiatives, had no paid employees. The remaining 32 had a median number of employees of 8 and 75% had less than 16 staff members. The initiative with the most staff employed 316 people.

The CBIs with paid staff demonstrate the existence of a tipping point from which initiatives feel the need to get more professional (in terms of reaching a wider audience, or a market segment) and to overcome the inefficiencies caused by member rotation (Som Energia, BEB, CPR). CBIs which place equal importance to having a strong volunteer base and professional, or paid, staff (such as HDDT, CRP, BEB, Som Energia) find that such a combined strategy helps maintain both a cohesive focus and drive, while compensating for the high turnover rate of volunteers. The particular role of professionals in this case is storing information (on various technical aspects, as well as fundraising) about past activities, or keeping an institutional memory.

Yet, if an initiative is partly volunteer- partly professional-based, there is increased potential for conflicts because decision-making patterns become more complex. When a CBI is faced with a short time frame to make a decision (in a response to a demand of a client, for example) employees who are more involved with daily operations are likely to have a heavier weight on the decision-making process (as in the case of Som Energia). Likewise, paid staff's focus on delivery of project outcomes for grant funders can be demotivating for volunteers, making them lose interest and feel disconnected from the CBI. Initiatives having only employees tend to do well in terms of survival, or continued existence, but often at the cost of having a narrow, business-oriented focus.

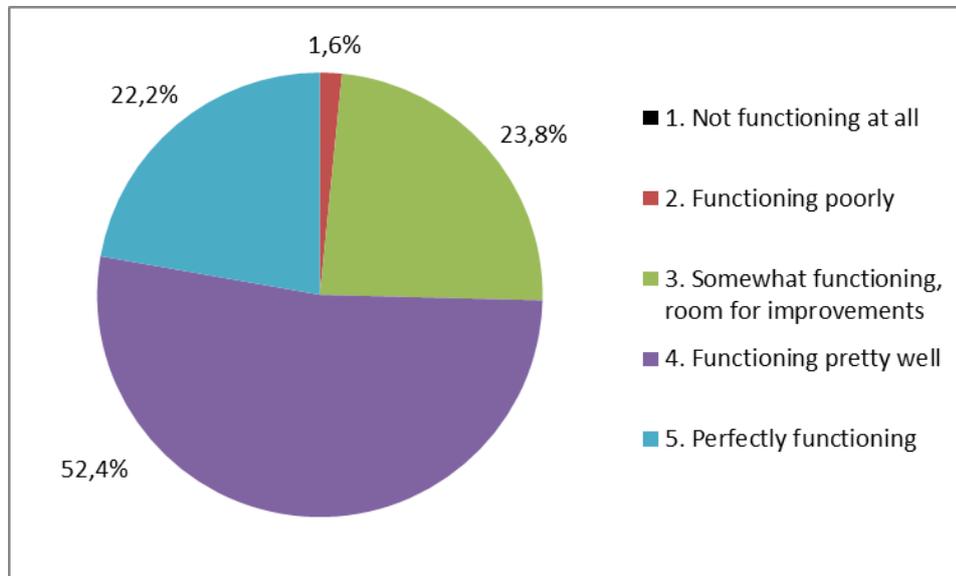
In addition, **the type of organizational structure that CBIs adopt has an impact on their trajectories**. Having a hierarchical structure has been important for the establishment of BEB and Foodsharing in Germany because a more hierarchical structure with clear roles and responsibilities helps them to better manage relationships with different stakeholders, including politicians and the media, and strengthen organizational efficiency. At the same time, BEB members describe themselves as “the people owning the energy grid”, implying that their internal management structure aims to reflect the (democratic) choices of Berlin citizens. The Eno-energy co-operative in Finland, on the other hand, has been mainly managed by the same group of active core members from the start, which they claim, ensures its financial sustainability and hence their continued existence. Conversely, food cooperatives in the sample tend to have a horizontal organizational structure and high level of members' commitment.

On a final note, the DAS provides the self-evaluations of respondents on the effectiveness of their CBIs' organizational structure. Figure 1 shows that a substantial amount of CBIs (22.2%) perceive their organizational and management method as “perfectly functioning”, and the majority of them (52.4%) consider it “functioning pretty well”. On the other hand, 23.8% perceive this as “somewhat functioning, but with room for improvement” and a minority (1.6%) consider their organizational and management method as “poorly functioning”. Such results indicate that most initiatives seem to have provided a productive

⁵ Section on community-based initiatives taxonomy, TESS Deliverable 4.1, Msika et al

and clear organizational structural and decision-making environment for planning activities and for moving forward with the development of the initiatives.

Figure 1. Effectiveness of the CBIs' organizational structure as perceived by members⁶



Income-generation strategy/dependence

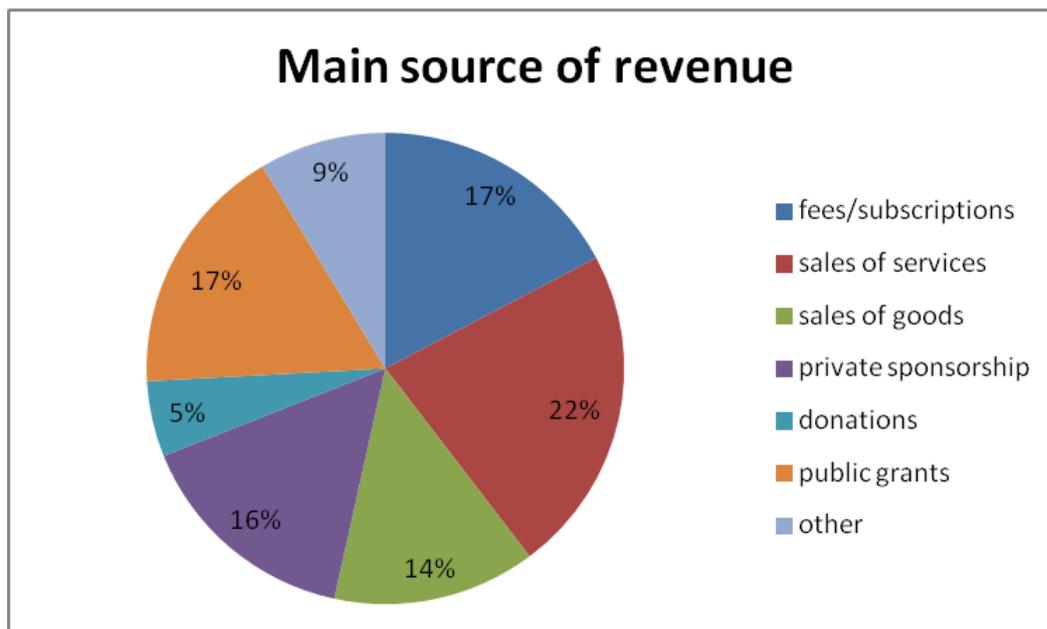
Obviously, the **availability of economic resources** strongly **influences the survival of most CBIs**. However, the type of income-generation approach that CBIs choose influences their evolution in several ways: firstly with respect to the amount of *time* members need to invest to get funding, and secondly, with respect to the *method* of income generation. Starting with the first, for CBIs operating in the market of energy and food production or provision, such as Aurora del Camp and Som Energia in Spain, and Eno energy cooperative in Finland, income generation is an imperative for achieving their objectives. For other initiatives which are providing a service free of charge (such as Foodsharing in Germany, Ciclonauti in Italy, Totakukaviu in Spain, CCN in Romania) there is little pressure to generate income. Regarding the second factor, we observe a substantial **divergence with respect to initiatives' income generation strategy**, as also shown in Figure 2. In the DAS, the sale of services was the most common source of income (22%), followed by fees and subscriptions (17%), public grants (16%), sale of goods (14%) and donations (5%).

Money for many of the interviewees is considered a helpful, rather than inevitable, condition for reaching a social goal. **The means of generating income range from reliance upon grants, ownership of an asset, membership fees and a mixture of all of these strategies.** Funding that is long-term, reliable and without many restrictive strings attached (such as relying on a close collaboration with the local authority) is seen as central to the success of HDDI and Coglen (Scotland). This comes in contrast to closely targeted

⁶ Section on community-based initiatives taxonomy, TESS Deliverable 4.1, Msika et al

governmental aid (meaning, having strict requirements with regards to what funding is being spent on). Evidence on how far state funding contributes to CBIs' persistence is mixed and indicates that **overreliance on donor grants can make initiatives dependent and thus highly vulnerable to changes in the financing regime** (as is the case with the two CBIs in Scotland). In some cases, the reduction or elimination of administrative work (on grant applications) has freed time for campaigning, and has eventually contributed to initiatives' survival (as in the case of Cycling Club Napoca in Romania).

Figure 2. Sources of income for the CBIs surveyed by TESS (Source: DAS)



In the cases of more technical projects such as HDDT, Colglen, Eno Energy cooperative, AdC and Som Energia, the creation and institutionalization of income-generating projects (or having CBI-based sources of income) are preferred over state funding. These are believed to ensure financial resilience and hence survival. Such strategies often mean adopting a more 'business-like approach' at work, using professional staff and focusing on tangible projects, rather than on social, educational activities which have unclear results or outcomes. In the case of HDDT, **asset ownership (of a wind turbine) is expected to provide the stable long-term stream of revenues that will ensure the CBI's survival**. Renewable energy in UK is particularly attractive for CBIs due to the presence of Feed in Tariffs which provide owners with a set payment per kW of energy produced. Yet, developing renewable energy involves very high start-up costs, where supportive government policy and funding mechanisms are crucial. **If a CBI's success is tied to securing an asset, ensuring governmental support in terms of financing and regulation is fundamental**. Two examples are the Scottish Land Fund which allows communities to buy land and the Community Energy Scotland which facilitates the wind turbine development process through grants and loans for start-up costs.

On the other hand, some interviewees have pointed to the **trade-off between the income generation focus of a CBI and its capacity to meet the needs of the local community**, or enhance social equity. Setting a too strong emphasis on income generation could undermine the legitimacy of the CBI, eventually reducing its support within the local

community. This is especially the case with the Scottish trusts (HDDT, Colglen). In striving for financial sustainability, their members tend to have less time to pursue projects which may be considered as more socially useful or desired, or projects that are more in line with the original aims of the organisation. In this case, initiatives' survival has required that they transform, or soften, their original vision aiming at a transition which is purely community-oriented or lead.

On a final note, **having a good material base, or a space to work from, is another key factor ensuring initiatives' survival.** On several occasions, once a space for work/operations has been procured, the imperative of income generation is not so demanding for CBIs' survival. This is especially the case with Shared Planet in the UK, which has restaurant and kitchen facilities provided by the University. Another example is Casale Podere Rosa (Italy), which is facing substantial difficulties in maintaining the building in which they work, a place successfully run for more than twenty years, but still owned by the municipality. This makes the initiative highly vulnerable to the political changes in the local administration. Foodsharing (Germany) is also using spaces and equipment donated by various members for organizational reasons, which strongly influences its survival and overall existence.

Strategic and targeted relationship/collaboration with governmental institutions

In many cases in which a fruitful or healthy collaboration with governmental institutions and public companies has been established, this partnership has enhanced the existence, and hence success, of community initiatives. The agreement between Ciclonauti and the waste management company in Rome, through which the latter donates thrown away bicycles, is one example. Similarly, despite a perceived lack of interest in urban cycling and in the activity of Ciclonauti, the Municipality of Rome contributed to the survival and institutionalization of the initiative, renting them a cheap office space in an attractive part of town. Another example is AdC (Spain), whose grant from the regional government for young farmers was instrumental for their consolidation.

Yet, **the excessive dependence on such collaboration can make initiatives highly vulnerable.** The establishment of Casale Podere Rosa (CPR) in a building owned by the local administration is an illustration. While the survival of CPR has been ensured through the low rent provided by the local municipality, political changes could end up destabilizing the project. In the case of Scotland, government funding for CBIs is still provided in the form of small, short-term, project-specific calls, which initiatives win through competitive tenders. The two Scottish trusts in the sample depend on state aid to cover their administration and project costs. In the case of HDDT, for example, the local municipality provides an office space, which is fundamental for the functioning of the trust. For Colglen, connections with politicians in the Scottish Government have been very helpful for resolving bureaucratic issues and signposting group to future opportunities. According to some interviewees the hidden cost of such funding schemes is prioritizing institutional (donor-based) requirement to serving local needs.

Being part of alliances (such as Development Trust Association in Scotland) has also been important in Colglen's lobby work on re-interpretation of policy guidelines (e.g. around State Aid). Similarly, BEB in Germany is using political contacts and supporters for their campaign. Cooperation with the local administration is pivotal for purchasing the energy grid. The CBI is trying to find a fine balance between staying independent from political parties while

influencing a governmental decision. Yet, their success largely depends on utilizing well the institutional window of opportunity, provided by the change of procedure for operating the power grid in Berlin.

Not all CBIs have a relation with the government, which could be interpreted as a success factor. In the case of the food cooperatives (Totacucaviu and Herttoniemi food cooperatives) the lack of interference from regulatory bodies has facilitated the survival and flourishing of the initiatives. In the case of the Som Energia energy cooperative (Spain), state energy regulations represent an impediment rather than a contribution to their survival, due to the extra tax imposed by Spanish laws on the generation of renewable energy. Foodsharing's continued existence in Germany is also partly due to the initiative disengagement with party politics, regulatory bodies, and grant funding. This said, members of the initiative state that they would like to see changes in the regulations and laws on food policy (so that edible food is not thrown away). Such changes could eventually facilitate their work.⁷

Diverse levels and strategies for political engagement

The level of political engagement ranges substantially among the CBIs. The majority of the CBIs are reluctant to be politically-involved, on the grounds that radicalism could jeopardize the CBI's goals and continued existence. **When asked, in total 40 CBIs (64%) reported not having been involved in campaigns, protests, petitions or other type of political pressure.** In the case of HDDT, Ciclonauti, and Eno Energy cooperative, for example political (activist) involvement was perceived as alienating volunteers and potential new members. The lack of explicit political activism, however, did not necessarily mean that the initiatives do not work towards societal change. In many cases their members were convinced that the transition could take place with the replication, or growth of CBIs of the kind, and the promotion of respective behaviour change (especially in terms of consumption). This is particularly relevant for the food and energy cooperatives in the sample. In the case of EcoBucovina (Romania), for example, survival required that members moderate their politically (activist) tone in order to secure funding. In other cases, political activism simply means a time and resource investment on the part of the initiatives which might draw funds away from survival.

The CBI which considered political action desirable (Shared Planet) saw political activism and building networks with like-minded organisations as a way of gaining and exchanging knowledge and developing skills (e.g., through attendance of conferences or big events) which eventually contributes to the initiative's continued existence. Some members of Totacucaviu (Spain) argued that more political engagement and activism would avoid rendering the food cooperative as mere alternative marketplaces (for those who can access it) and enhance its impact on society.

The lack of political positioning (against the current paradigm of consumption and inequality), however, could make some consumption-oriented initiatives (food cooperatives) an "easy target" for co-optation by bigger market players. Food cooperatives focusing exclusively on consumption, rather than building ties with their local socio-environmental community, tend to

⁷ One example is the recent law, passed in France, prohibiting supermarkets from throwing food

convert into social enterprises that are more disconnected from their surroundings. In other cases, they can be constrained by the entry of large supermarket chains in the ecological food business, which end up competing with them. Increased and unequal competition damages or destabilizes small-scale local organic producers, as well as the alternative food distribution chains as a whole.

Unclear political positioning of a CBI could in other cases create the grounds for internal tensions. For example, divergences in members' expectations about the level of political engagement of Som Energia (Spain) and the lack of a common vision on its "place on society" have generated tensions. Such tensions could either discourage the entry of new members, or de-motivate current ones from participating. On the contrary, if resolved properly, such tensions could enhance innovation and diversity within the CBI.

Local community support

The presence of a supportive or receptive local community seems to largely facilitate the work of community-based initiatives. In the Scottish context, CBIs suggested that in some cases they were more a suitable provider of social services to local people than local governments because of their closer contact with residents and less cumbersome administration. They implemented a number of projects which may traditionally be thought as a 'local government' activities, such as projects designed to alter local behaviours in relation to transport use and car-sharing, the re-establishment of a local market and the development of footpaths. Arguably, one of the crucial effects of such interventions was strengthening their local legitimacy— CBI members asserted that **the continuous support of local residents is a critical factor in ensuring organisational survival**, since it justified their continuing existence.

3.2.3 Factors contributing to CBIs' growth and/or replication

Organizational structure: roles of volunteers and employees; preferences for level of hierarchy and bureaucracy

Mature CBIs can be perceived as ones that have grown up in services, activities and members to **a limit beyond which no more growth can occur without undertaking structural changes**. When a CBI reaches maturity, there are a number of responses. **On the one hand, CBIs can replicate**: rather than growing, they stick to having a "right-size", while inviting or encouraging interested individuals to start a new CBI, using the blueprint of the 'old' one. This has been observed in the case of the Ciclonauti bicycle workshop, Totacucaviu and Herttoniemi Food Co-operative food cooperatives, and - to an extent – also in Foodsharing. **The other option is to adopt structural changes that allow for additional growth**: this often means up-scaling resources, investing in better production tools, widening the scope of activity, and increasing professionalization. This latter path is associated with higher levels of bureaucracy, higher time-requirement for management and decision-making, and overall - additional labour efforts to coordinate staff and keep focus. This process may be accompanied by a number of internal debates, coming from conflicting aspirations. This has been the case with Cycling Club Napoca whose members have resolved the clash between the time/effort required for administrative work (fundraising) and the time available for campaigning by opting out of project funding. The CBI decided to resume activities and

work with volunteers only. In the case of Eno Energy, however, the cooperative chose a growth/expansion strategy where job-creation was given priority to providing more intangible services (such as environmental education). Such strategy aligned better with the original mission of the CBI, namely, provision of low-carbon heat for the local region.

Growth is often taking place in the context of commercialization, and is associated with higher levels of professionalism. Employing staff is perceived as an indicator for higher professionalism (in the case of Eno energy and Som Energia), but also as an indicator of social commitment and equity (in the case of Casale Podere Rosa). Overall, increasing staff (and membership) tends to create the need for a more formalized human resource management structure which may not be feasible with existing organizational models. At the same time, reliance upon outside funding streams can also sour a degree of professionalism, because of reporting requirements from funding bodies (as in the case of Sustainable Futures). Nevertheless, in some cases becoming more professional goes against the very essence of the CBI and is not supported by a majority of members (as in the case of Ciclonauti, Totacucaviu). **Professionalization often requires different ways to enhance participation, because self-managed (volunteer-based) structures tend to be more appealing for volunteers.** One of the biggest challenges for Som Energia, for example, is how to respond to the growth in contracts and keep its positive image, without watering down its ‘transformational’ aspirations.

The following table summarizes responses on the replications/spill-overs which the key TESS CBIs have experienced, as extracted from the DAS. As seen below, **11 out of the 14 initiatives have had a form or replication/spill-over elsewhere**, or have emerged by imitating a similar initiative elsewhere. At the same time **less than half of the CBIs (6 out of the 14) have explicitly adopted a strategy based on growth in members, clients or income** (in this case these are Eno energy, RC, BEB, SE, HDDT and Colglen).

Table 2. Data on the replication of TESS key initiatives

| Country | Replication effects | | |
|---------|--|---|---|
| Finland | The Herttoniemi Food Co-operative (HFC) Several community-supported agriculture projects emerged out of HFC. | The Eno energy co-operative. Initiatives in Ireland, Iceland, Russia and Canada have been inspired by the co-operative. | “Recycling Centre” (RC) Many recycling centers have been inspired of RC. Uuskasutuskeskus in Tallinn, Estonia is one example. |
| Germany | Foodsharing Many CBIs replications have been initiated but none of them survived . | Bürger Energie Berlin (BEB) BEB is a replication of Netzkauf EWS citizen cooperative in Schönau. | |
| Italy | Association Ciclonauti The initiative has about three off-springs . | Casale Podere Rosa (CPR) Gas San Basilio and the urban garden of Gas La Torre are two of | |

| | | | |
|---------|--|---|--|
| | | the initiatives which followed the CPR example. | |
| Romania | Cycling Club Napoca (CCN) helped setup: Bate Shaua Association Bucharest, Som Energia (Spain), Association Sibiu, Sport Club Surmont Sibiu , Iasi Bike Association, Brasov Pedaleaza | EcoBucovina (EB) | No replications. |
| Spain | Totacucaviu, (TCV) The food-cooperative La Horteras was initiated by TCV members. | Som Energia (SE) | A similar cooperative in the Basque country emerged, inspired by SE. |
| UK | Colintraive and Glendaruel Development Trust (Colglen) No information. | Huntly and District Development Trust (HDDT) No replication. | SHIFT Robert Gordon University (Aberdeen) developed a similar program to the Carbon School of Sustainable Futures. |

One of the structural changes accompanying growth concerns hierarchy and **the management of a more vertical organizational structure**. The ex-provider of local organic food and vegetables of Totacucaviu (Kosturica) provides one illustration in this respect. The farm was forced to choose efficiency (through increased hierarchy) over horizontality in order to avoid economic losses. In other cases, while hierarchy increases efficiency and allows for the effective management of larger groups (Foodsharing, BEB), it discourages participation. The story of Som Energia, for example, shows that some members of the volunteer groups felt the strong 'weight' of the technical office in decision-making, which demotivated their participation. At the same time, **some form of invisible hierarchy is also present in horizontally-managed initiatives**. Issues of differential treatment of members in regards of their age and gender, tend to remain more invisible and disempowering participation (as in the case of Totacucaviu). **The successful evolution of these initiatives may thus require mechanisms to monitor and tackle power imbalances by facilitating an open dialogue about such tensions.**

Change/clash of values: free versus paid service; participation versus punctual management

The values that lead to the creation of a CBI tend to clash with the commitments needed for its growth. This is most clearly observed in the cases of Som Energia (Spain), Totacucaviu (Spain), Ciclonauti (Italy), and Herttoniemi Food Co-operative (Finland). Overtime, some of the values initially posited by these CBIs, such as commitment to socio-

political action (in the case of food cooperatives), participative decision-making (in the case of energy cooperatives), and free service provision (in the case of Ciclonauti) are questioned by the entry of new members. The resolution of these tensions (in the field of decision-making, political activity and with regards to the level of professionalization) tends to influence the type of evolutionary path a CBI might take. For example, the experiences of the food and bicycle repair cooperatives in the sample indicate that if CBIs maintain values of horizontal participative self-management, they tend to follow replication patterns in order to accommodate growing consumer demand. If, on the contrary, initiatives aim at professionalization and service delivery (at a competitive price) via the market, up-scaling is the most likely outcome (i.e., Som Energia and Eno-energy cooperatives). To some extent such tendency can be observed with the organic farms in the sample. Certainly the implications of both evolutionary paths differ.

Renovation of members/leaders

While strong leadership and professionalism within the CBI provides a vision, secures funding, and might ensure legitimacy with respect to the local political figures/population, **renewing the membership base often appears to be one of the factors driving the growth and replication of the CBIs**. The level of openness to new members among the CBIs varies. According to results from the DAS, many initiatives (35%) are completely informal and open to anyone. Another 9.5% of them are also open to anyone but have a formal enrolment process (i.e. new participants have to sign up), and 35% have a formal joining process with certain criteria for members' eligibility (e.g. residency in the area). Finally, 16% have a selection process by which new participants can join.

Some of the CBIs have become overly dependent on one committed leader, whose succession is not easy to manage, which in turn makes it difficult to stimulate entries of members who could take on a leadership role (HDDT). The legal organisation and degree of individual personal liability of core members/directors may furthermore influence their levels of risk aversion and willingness to expand into uncharted territories (as in the case of Colglen, HDDT). The legal status of organisations could therefore also discourage people from volunteering for management positions and impact CBIs decisions about future directions/projects (HDDT, Som Energia).

On other occasions, **openness and participatory approaches strengthen togetherness and lead to membership growth** (as in the case of Herttoniemi Food Co-operative). On the one hand, new members come with new ideas, which could also clash with the current status quo. On the other hand, the lack of generational continuity and intergenerational understanding can constrain the CBI into choosing between inventing completely new approaches and keeping those adopted by older members. **Organizations thus need to look for ways of striking the right balance between renewal and continuity**, keeping the most resilient features of both. In this context, informal recruitment has an important place. Attracting new members in volunteer-based structures tends to happen by word-of-mouth, or by organizing and hosting social events, like fundraising parties or dinners, which strengthen the social capital and the sense of community (especially in the case of Ciclonauti and Casale Podere Rosa)

Reliance upon stable income streams

Income generation is central for those initiatives aiming at professional/service- and membership- growth (Som Energia, BEB, Eno Energy, Colglen, HDDT), while it is **not particularly important** for the ones using the **replication** strategy (Ciclonauti, Totacucaviu, Foodsharing). In the latter, CBIs avoiding monetary intermediation and providing free and solidarity-based service can be more inclusive of economically disadvantaged individuals, and even enhance their replication potential. In the former case, **strong entrepreneurial and creative business approaches** were fundamental for acquiring ownership of a forest (Colglen), a wind turbine (HDDT), an energy distribution network (BEB), and a thermal-heating central (Eno energy). The central idea here is that the autonomous generation of a regular stream of revenues enhances the growth of CBIs. External funding/donors can be essential at the initial phases of obtaining either of these assets, by way of softening administrative requirements for small social enterprises or by offering protection from competing market players/forces.

Diverse types of relationship/collaboration with governmental institutions

Relying on the support of local authorities is an **important condition for the growth** (and to some extent - the replication) of the CBIs in the field of energy (such as Eno Energy, as well as Som Energia). The trend in many of the CBIs is however towards autonomous management, for which the most frequent petition made towards regulatory bodies would be to avoid obstructing their activities. This is especially the case with the food cooperatives and the bicycle workshops in the sample. Yet, **some members have manifested aspirations for more favourable public regulations**. In the case of Ciclonauti, the lack of public policies in the field of urban cycling and sustainable transportation limits the extent to which bicycle transportation can be promoted. In the words of the farmers on the other hand, setting more restrictive regulations against contaminating farming practices or public regulation that prioritizes local producers would favour the growth and replication of their projects.

3.2.4 Factors contributing to CBIs' dissemination of new technologies and business models

The factors that influence the dissemination of new technologies and business models by the CBIs are identical to the ones that contribute to their persistence, growth and replication. This is often due to the growth/replication impetus which technological innovation tends to have. The introduction of new resilient business models, on the other hand, often enhances CBIs' economic sustainability, and thus their persistence and growth. For this reason, below we describe and contextualize the types of technological and business innovation we observed within TESS CBIs.

3.2.4.1 Promotion of innovative solutions and technology (in the field of energy and transportation)

The innovative solutions in the field of transport are mostly associated with the promotion of carbon-neutral (bicycle) transportation in urban zones and settings where cycling is uncommon and the infrastructure does not support it. Some forms of car-sharing have also

been promoted by one of the CBIs. In the field of energy, the key innovations are the provision of heating by recycled wood chips derived from locally sourced wood, installation of a community-owned wind turbine and the local community purchase of the power grid in town facilitating a transition to a 100% sustainable energy. All these innovations are presented in the form of case studies below. Other key technological innovations that initiatives have undertaken are in the field of schemes for energy saving, machines that replace manual weeding, and online platforms for food-sharing.

Transportation

One of the few TESS initiatives active in the field of transportation is Ciclonauti, focused on engaging citizens in the **promotion of cycling in Rome through a community bike repair shop** and a wider network of bicycle centres. Although cycling is not necessarily innovative, in the context of the city of Rome, characterized by heavy traffic and no bicycle paths, the promotion of bicycle use and encouraging citizens to experiment a non-motorized means of transport is an out-of-norm initiative and thus highly innovative. When the first community bicycle workshop (from which Ciclonauti emerged) was founded, cycling in Rome was rare and seen as a strange practice. However, since 2000, together with the Critical Mass movement, the community-based bicycle workshops from the Ciclonauti family connected with other civil society organizations and engaged an increasing number of people under the theme of sustainable transportation. This mostly happened through the construction of a community of people around the use of bicycles as a means of urban transportation. Bicycles have been a common attraction point around which people have come together to reflect upon what society should look like, starting from public transport infrastructure to a wider social issues, including social justice. To this end, Ciclonauti has engaged in a wide array of social projects, among which: working with homeless people; doing arts and crafts with mentally ill or disabled people; encouraging parents to bring kids to school via bicycles; organizing tandem cycling for blind people; developing bicycle recycling websites and cycling maps for Italy and Europe; and collaborating for the development of cycling corridors running in parallel to the major national train networks in Italy. Connecting the use of bicycle with all dimensions of life (by organizing various social events at key public places), the CBI has demonstrated that cycling is an activity with the transformational power of bringing people together towards a socially beneficial end.

Another example of transport-related innovation is the car club in Huntly (Scotland), established by Huntly and District Development Trust (HDDT) with funding from the Climate Challenge Fund (CCF). By entering into a franchise agreement with the UK-wide car sharing social enterprise (Co-Wheels), HDDT was able to deploy the online infrastructure of an existing company whilst also gleaning some income to maintain and expand the car-sharing service. **The car club makes a small number of cars and electric bicycles available for use in the town centre**; members pay a one-off membership fee of £25 and then pay a low amount per hour or day of hire. They can also use any Co-Wheels car throughout the country. After around a year of functioning, at least some Huntly residents seem to have decided to give up their private car due to the existence of the car club. The Trust is now exploring the possibility of expanding the club so that the cars are more accessible to those living throughout the Huntly District, not just within the town centre.

Moreover, several of the TESS case studies in Scotland have been involved in innovative approaches to encourage a modal shift from cars to bicycles. **Highland Perthshire Cycling**

piloted a 'green bike' scheme to make free bikes available in small rural towns, adapted from models now common in urban areas. Whilst successfully demonstrating that this can work at low cost, they have not had the resources to continue this trial. They also developed the concept of a 'Cycle Friendly Community' which has been picked up by Cycling Scotland and used to provide a standard against which any community can judge its provision for cyclists. They have also developed a week-long cycle festival format that successfully normalises cycling and active travel through a combination of both competitive and family friendly recreational events and activities. Transition Black Isle has been particularly successful in encouraging a shift to cycling through using a network of community cycle trainers embedded in their local villages/settlements. Their 'bike bus' initiative encourages primary school children to cycle to school as a group, along a former railway line.

Energy

The majority of the technological innovations in the energy domain introduced by TESS initiatives are oriented towards overcoming the limitations of the dominant infrastructure model designed to deliver power outwards from large, singular central sources rather than multiple, distributed, and fluctuating, renewable energy generators.

HDDT, for example, has been among **the first community organisations in Scotland to negotiate a direct share of local wind turbine profits with developers**, and is in the process of installing its own community-owned turbine. Such arrangements are contributing to the process of decentralising energy infrastructures and resources, such that local residents (rather than distant energy companies) are able to exert more control over the generation and management of electricity, as well as the distribution of profits.

Another example is the Eno energy co-operative in Finland, owned by local forest owners, which **providing the local community with heating services produced with wood chips derived from locally-sourced wood**. The project is innovative in what concerns replacing fossil fuels with renewable raw sources of energy, which would otherwise be wasted. The CBI is also involved in various research, development and educational projects for the continuous improvement of the existing combustion technology in relation to the quality properties of the wood chips and the management of the district heat plant.

A third example is the German Bürger Energie Berlin (BEB)'s innovation with respect to the management of city electric grids. BEB promotes **the remunicipalization of the power grid and transition to a 100% sustainable energy**. In order to achieve its goals, the BEB intends to purchase 25% of the energy grid in Berlin and to reinvest potential earnings in support of the sustainable energy transition. Politically, the initiative plans to cooperate with the state of Berlin, so as to intervene in the structure of energy grid in general and to open up new avenues for a progressive climate policy. Strategies behind those approaches include maintaining close contact with political parties and the media to get sufficient information about new legislations and votes concerning their topic. In the meantime BEB organizes information stands, conferences and network summits in order to spread their message and engage more supporters and eventually have a higher chance to democratize the energy sector.

Agriculture

In the field of agriculture, a case worth mentioning is the Colgen lever and mulch technique for uprooting *Rhododendron Ponticum* which replaces the conventional carbon intensive, 'cut, burn and spray' method. A related technological innovation is a **weeding machine introduced by Aurora del Camp (AdC)** in Spain, which saves weeks of manual work for small-scale organic farms. AdC is a farming project cultivating about 5 ha of organic and seasonal vegetables in the outskirts of Barcelona. While the members of the project had little prior knowledge of organic agriculture at the very start, overtime they kept introducing various practices such as **green manure and no-till systems**. They furthermore introduced a system of mechanical weeding as part of institutional programs for technology transfer. AdC is the first farm to import this type of weeding machine for Spain from a small family business in Germany. It was bought with an EU grant for young farmers. Currently AdC promotes the benefits of the weeding machine at fairs, workshops and public events.

IT

An example of innovation in the sphere of IT, is the development of a **website platform that facilitates the coordination of all transactions** within Foodsharing (Germany). It is designed not only for members who give away/receive food but for organizers and retailers who manage food handover among a large number of actors and stores. The platform has been developed by a volunteer and greatly facilitated the expansion of the CBI.

In sum, the majority TESS CBIs do not only make use of the technologies that are already available, but rather creatively re-invent and adapt these for their own purposes, while sharing common practices. Overall technological innovations in the context of community-based initiatives tends to emerge in situations when small-scale, local solutions and community empowerment have grown sufficiently (in demand) and come into conflict with the prevailing orthodoxy of large-scale, centralized, top-down infrastructure and governance. The vacuum space generated between these two opposing forces has been a fertile ground for the development of (technological) solutions that allow for participation and community involvement on the one hand, and for considering planetary boundaries, on the other.

3.2.4.2. Promotion of new business models

The promotion of new business models among the CBIs mostly takes the form of social innovation, such as models for working together, organising enterprises, raising funds, and delivering services. The business models promoted by the TESS CBIs are innovative in terms of their ethical or social orientation and **social enterprise or cooperative structure**. Below we provide a few examples.

Cooperatives

Starting with the cooperative business models, **Bürger Energie Berlin develops a new business model inspired from an existing cooperative from Schönau**. BEB is established as an energy cooperative, which enables its members to directly participate and benefit from license-selling processes of the energy grid. In that sense, BEB works towards

democratizing the power grid while providing a role model for other cities and initiatives willing to work towards an energy transition in a novel and democratic way.

Another innovative energy cooperative is Eno energy owned by forest owners in the Oulu region. The forest owners sell the inputs (wood chips) to the cooperative which produces (heat) for the local community. The cooperative represents a business model targeted towards benefiting the local people and economy.

HDDT in Scotland is also innovative in what concerns modes for partnership between local communities and commercial actors, such as wind-farm developers. **HDDT is currently in the process of establishing a cooperative style community share company that will exert collective ownership over the local wind turbine the CBI is set to build.** This community benefit company will be constituted of local residents who opt to purchase shares in the wind turbine. Not only will such community-based shareholders thereby garner a significantly better rate of interest from these shares than by holding savings in a bank account; they will also ensure that residents of Huntly directly participate in the financing and management of a locally-sited energy infrastructure. This community-share company will be linked with HDDT, but will be formally independent from it. The arrangement is designed to ensure close collaboration between the two bodies, whilst also putting in place a framework for enabling the community share company to hold HDDT to account for the way revenues from the wind farm are spent in the local area.

Similarly, CGDT and Comrie Development Trust (CDT) are both examples of the Development Trust model that has become common in Scotland (and other places) as a way of providing a not-for-profit legal structure that can initiate and develop projects and enterprises for local community benefit. For example, **CDT used an innovative way of financing the purchase of a former army camp: They obtained loan finance from charitable trusts that normally provide grants and later refinanced these loans through bank finance and selling off part of the asset for housing sites and a data centre.** They are now developing parts of the site as a community enterprise park, providing flexible, affordable workspace that opens up new, local employment opportunities. It has also encouraged and inspired new business start-ups. Moreover, CDT now has a scheme that allows people to contribute sweat equity⁸ to renovation of the existing buildings on the site in return for a rent-free period. This provides a relatively easy way for new businesses to test the market with little financial risk. CDT are also developing a new market for heritage tourism, providing self-catering accommodation in renovated army camp buildings, financed through a community share offer. In order to raise the balance of the finance required to purchase the 600ha Stronafian Forest, CGDT sold most of the timber rights for the next 100 years. They considered this to be worthwhile so as to open up opportunities to develop the forest for tourism, employment and skills training, woodland crofts, conservation projects and to provide sites for renewable energy generation. In partnership with three other local development trusts, they have established a community interest company to take forward provision of superfast broadband in remote rural areas –something that they consider essential for the future of existing business and to attract new business start-ups.

Another example of cooperative business project is **the Herttoniemi Food Co-operative (HFC), which is a pioneer in introducing community supported agriculture (CSA)**

⁸ Contribution to a project or an enterprise in the form of work effort.

business model to Finland. HFC remodelled the original CSA idea in such a way that **the CBI rents a field and employs farmers to take care of the production, using funds from one-off membership fee and production sales**. Eventually, two CSA models are being put into practice in Finland, one is a consumer-driven model introduced by the HFC and another is a farmer-based model, where the farmer himself has a more active role in reaching the customers. Moreover, HCF is currently establishing a new solidarity-model, where crop-shares are donated to those in need of food aid, in exchange for community and farming work.

Social enterprise

The other type of business innovation observed in the sample can be generally defined as a social enterprise. The **Metropolitan Area Recycling Centre** (in Finland) is one example of an enterprise that contributes to ecological and social sustainability. Its initiation responds to the growing need for **purchasing well-conditioned recycled items** in Finland, which can be found/donated in the shops of Recycling Centre (RC). The CBI **uses the monetary proceedings to create jobs for long-term unemployed people**. In recruiting its employees RC has been also utilizing the Finnish pay subsidy system, which is a government funding model for employing people in a socially and economically disadvantaged position. RC has been growing in the context of the recent economic recession. Remade in Edinburgh (Scotland) is a comparable initiative, which has successfully created a new market around re-use and repair, based around repair education. Customers do not simply pay for something to be repaired but learn how to do it themselves. Remade in Edinburgh have done this successfully with computers and textiles and are now developing a furniture project.

Initiatives using little or no monetary intermediation

The third type of economic model used within TESS case studies is represented by **initiatives that exchange/provide goods and services without monetary intermediation**. One of these is **Ciclonauti**, which is funding its operations through donations, membership fees, and bi-annual bicycle auctions. The CBI **does not charge for any of their services** and thus indirectly promotes an alternative approach to conducting economic exchange. Their bicycle repair equipment has either been donated or purchased with the funding from fundraising events, while materials and parts are mostly recovered from abandoned bicycles collected by the members. Moreover, they are training members to use traditional bike repair equipment and to deconstruct abandoned bicycles for parts. A distinguishing factor for the bicycle workshop in the context of Rome is their agreement with a public waste company to recover abandoned bikes from the garbage. Ciclonauti members emphasize the fact that they are not a business but a community center and repair shop that is open and available to everyone (both members and non-members). Friday evenings, for example, members often offer food and drinks to share with whoever is present. The **principle of sharing is perceived as a base for building a community**, while monetary exchanges as something that could undermine community values and solidarity on local level.

A comparable initiative is Foodsharing in Germany, emerging from the movement for 'dumpster diving' trying to legalize the saving of food wastes from supermarkets and the movement of people sharing the extra food they have with others. The two movements merged into the **Foodsharing** initiative in order to effectively pursue their common objectives. Over the years one of their most important achievements is legalizing the

recuperation of food waste, through the help of volunteer lawyers who formulated a legal contract for the purpose. Foodsharing **has grown exponentially, reaching people via social and mainstream media, distributing food on the streets, organizing workshops in schools**. Their members approach many food retailers and big supermarket chains, including organic ones.

In sum, the three models of business innovation listed above (cooperative, social enterprise or groups based on non-monetary reciprocity/exchanges) should not be considered clear-cut categories. Some initiatives, for example, have features of a cooperative and a social enterprise. If we search for a common thread between the diversity of business models the CBIs manifest, this could probably be the extent to which they rely on relational goods (on inter-personal dependence) and the physical closeness/presence of a “community” (either smaller, or bigger, more diffuse community) as a factor for economic decision-making.

3.2.5. Factors contributing to CBIs’ promotion of environmental and social justice

Our results within TESS indicate that the small scale (community-based) at which initiatives develop their work does seem to limit CBIs’ impacts to a (relatively) small group of people with similar interests and needs and/or who share a common geography (generally middle class to wealthy neighbourhoods). We observe this trend in the TESS database of initiatives (that can be considered as being representative of the “alter-economy” communities in Europe), which are mainly representing a certain economically or educationally privileged class. The exclusive character of initiatives has prompted questions and concerns about the real impact of initiatives on the broader society and its transformative ability for a more just and not only low-carbon societal transition.

We observe that even when CBIs put emphasis on their role in improving social and economic welfare, and highlight capacity-building and individual change as important achievements, **they often do not account sufficiently for potential socio-economic and cultural inequalities that prevent certain more marginalized groups from accessing their activities or that prevent CBIs from reaching out to such groups**. As a result, “the community” can be a very homogeneous and isolated assemblage. Thus “social exclusion along class or other lines may be a partial or unintended consequence of some community initiatives” (Hinrichs and Kremer 2002). The need of CBIs to consider social inclusion in their projects in order to promote a more just transition requires us as researchers to reflect on the change these initiatives propose: Is it desirable, feasible, priority for everyone? Does it benefit all classes and groups? Is it the only change possible to contribute to a low-carbon transition? Does this change bring unintended consequences for others?

To this aim, the CBIs’ impact on disadvantaged and underrepresented groups has been analysed. Based on the qualitative data (covering the 14 key initiatives) and the quantitative analysis (DAS) for all 63 CBIs, we list a number of **factors that influence CBIs’ ability to have a wider impact on society** and include groups that are underrepresented in the activities and projects of CBIs.

Generally, results from the DAS indicate that the TESS CBIs cannot be considered to be particularly inclusive, as shown in the following numbers. In the database of 63 TESS initiatives, 84% of the users of CBIs are nationals (the minimum 30 number of members, maximum 1000, and median 100). Only 11% of them are from other European countries

(ranging between 0 and 50 in absolute numbers, with median 5). Moreover, only 5% of the users/utilizers are non-Europeans (ranging between 0 and 100, with median 2). Within 54 of the studies initiatives, only 15% of the users/utilizers are poor residents (ranging between 0 and 100 members, with a median 5). No data on the share of poor people is available for 8 initiatives and for one initiative this question was not applicable. In total only 3.8% of the users/utilizers (ranging between 0 and 45 in absolute numbers, with a median of 1) were considered disabled by the initiatives (among 53 TESS initiatives). No data on the share of disabled people is available for 7 initiatives and for three initiatives this question was not applicable. However, when asked, initiatives state that in their communities there are people from socially disadvantaged groups (including refugees, immigrants, and unemployed). This occurs on 31 cases (49 of the surveyed initiatives). Below we list and describe the factors that contribute and foreclose inclusivity and equality within CBIs.

The factors that (jointly) contribute to inclusivity and equity within CBIs can be defined as: location and visibility, ability to create working opportunities, initiatives' domains, ability to replicate in diverse neighbourhoods and capacity to contribute to the struggles of more marginalized groups.

The **location** of the community matters, as does its interaction with the neighborhood. Initiatives located in urban areas, especially those in diverse and mixed neighborhoods, tend to interact more with (or be more integrated in) their surroundings than those in the rural or peri-urban areas. On average, CBIs reported that 90.8% of their users live in the local area where the initiative is based. This means that only initiatives based in heterogeneous environments (that is in neighborhoods or towns representing a variety of social classes, ethnicities etc.) are likely to be able to reach a wide variety of users. CBIs based in diverse urban neighborhoods are more likely to participate in, or organize neighborhood activities, assemblies, and celebrations. By organizing such events, they become a recognizable and more legitimate local actor, even if they are not direct or long-term members of the community. This is the case of the socio-ecological community-squat of Can Masdeu in Barcelona, for instance, which has created several community gardens for the low-income residents of Nou Barris and regularly organizes training workshops for them. In contrast, formal farming initiatives located in peri-urban or rural areas of Barcelona or Helsinki tend to serve urban consumers who have the capacity to pay for more expensive fresh produce and connect with local cooperatives. At the same time, those farmers are more isolated from the surrounding villages and the more informal farming practices that are often initiated by lower-income residents in peri-urban areas (at least in the Barcelona case).

The **creation of job opportunities** is a factor that can facilitate the integration of different social classes (especially members of lower-income classes who might not be able to volunteer). This is particularly the case of CBIs selling products/services (i.e., generating an income) since those CBIs might be able to create jobs that can benefit disadvantaged populations. However, the quality of the jobs created should be also taken in consideration (number of hours, salary, etc.) as many of the jobs might be poorly paid or translate into difficult working conditions. In Spain, we observe that farming projects have the ability to create jobs for immigrants, which has helped their founders regularize their immigration status in the country. That said, the high professionalization of some initiatives and the jobs they offer often require high levels of expertise and qualification, which makes it difficult for

their managers to hire disadvantaged – and less educated - populations. There are limits to increasing equity by creating jobs. This is typically the case of CBIs operating in the energy sector, such as BEB in Germany, whose staff is represented by highly skilled workers with a background in the energy sector. In the case of Eno Energy in Finland, the cooperative provides a source of income for their members, but these are all local land owners.

The **domain** in which initiatives operates (transportation, waste, food, or energy) is also an important factor affecting the potential social impact of CBIs. **For food and transport initiatives, it seems easier to reach marginalized populations.** These two domains seem to be associated with visible and concrete everyday activities, where the changes that CBIs propose are relatively easy and affordable to implement. For instance, in Rome the Ciclonauti initiative offers free technical workshops for low-income residents and recycles bicycles that they might be able to donate. On the contrary, in the case of energy cooperatives, due to their more technical nature and the strong centralization that has characterized the sector, the possible changes that initiatives are trying to bring generally involve more complex planning, production, and management activities. Such projects seem incapable of engaging people who are not familiar with renewable energy projects, or are less conscious of the shift towards renewable energies, or less aware of their importance.

When initiatives are able to **replicate themselves**, they are more likely to reproduce themselves **in different neighborhoods**. This is the case of food initiatives and bicycle workshops, which have proliferated in diverse socio-economic locations of Barcelona and Rome. A model open to replication can be considered as a success factor to achieve a wider social impact. Yet, if no specific attention is paid to the process, CBIs tend to be replicated in white educated middle class milieus, where most of the entrepreneurial capacity and resources resides. This has been especially the case with the energy cooperatives. If initiatives were able to conduct outreach adopting the socio-cultural codes, ideas, and needs of lower-income and minority residents, those would help initiatives to widen their social impact.

Lobbying activities and **support to the campaigns and struggles of other social classes and groups** are other factors that can make CBIs more socially coherent and can help them have a wider impact. The CBIs studied within TESS are, however, not highly politically active. Among 40 of the initiatives, 64.1% reported that they have not been involved in political activities, campaigns, protests, petitions or other type of political campaigns during the past years. It seems that CBIs' advocacy/political capacity is linked to the resources available (especially time) as well as to their ability to recognize the different interests and needs of other under-represented groups in society. On the other hand, **undertaking political action CBIs can serve a wider range of social or ethnic groups and make the low-carbon transition/economy more widely accessible.** The Shared Planet café, for example, which is run by volunteers, allocates some of its income to supporting political and environmental campaigns carried out by other university groups, including climate justice, anti-fracking regulations or supporting Palestinian land struggles, which in turn helps the CBI have a broader transformational impact. In contrast, some initiatives are “only” focused on changing consumer behaviors (for instance consuming organic food, buying alternative energy, or commuting by bikes) and seem only to be alternative market places for those who can access them.

The factors that foreclose inclusivity and equity within CBIs can be defined as: the low availability of resources and external institutional support; CBIs' a limited imagination, existence of logistical or technical barriers, presence of exclusionary discourses, paternalism and colorblindness, as well as participatory decision-making without attention to underlying power structures.

Financial, material, and time resources are needed to conduct certain activities, such as training workshops or events, among a diversity of audiences. Without resources, activities and efforts towards a more integrative community can hardly be implemented. For instance, a substantial amount of time and money is required to design and prepare dissemination campaigns or events directed at individuals or groups outside CBIs closest circles. This "extra" time is either absent (in volunteer-based initiatives) or is dedicated to what initiatives consider as fundamental tasks to ensure the economic sustainability and the survival of their projects. In general, money is a scarce resource within communities (especially in food and energy initiatives), which makes it hard for CBIs to use financial resources for subsidizing certain users in order to achieve participation from more disadvantaged populations that probably cannot afford their services otherwise (i.e. paying the organic food weekly basket or the membership fees of the cooperatives).

Some CBIs seem to have **difficulty moving beyond existing imaginations** and/or interests in order to find solutions for addressing the low heterogeneity of their members and the lack of inclusion of marginalized groups. Subsidizing families to get products at a lower price, promoting activities and events that could attract a wider range of cultures and classes, dialoguing with other initiatives to identify commonalities, or disseminating the CBIs activities beyond the "usual suspects" enclaves are some of the measures that CBIs can implement in order to include a wider range of people. For example, members of Som Energia (Spain) regional groups, decided to subsidy the membership of those who wanted to engage with the cooperative but couldn't afford the fee (where entrance of 100€). They offered a rate of 20€/month and discussed the possibility of offering solidarity support by other members. The solution offered by the management of Som Energia consisted in offering the possibility of contracting services without being a member if invited by other member. Members can invite up to 5 (non-member) individuals to contract with the energy cooperative. However, this is not a very inclusive solution, since it only benefits members' "friends" -- and not individuals outside members' circles.

The **lack of support from external institutions**, such as regulatory and planning agencies at national scales or from funding bodies, hinders CBIs' broader impact on society since this lack of support is (partially) what brings precariousness and lack of resources. Many energy or food initiatives find it difficult to access the subsidies offered by their government, which then limits their ability to offer more affordable services or products. Institutions should not only support CBIs so they are able to maximize their positive impacts on society, but also promote their principles and ideas in a wider variety of environments.

Some barriers are easier to tackle, such as the **use of technical language, ID-check requirements, the organization of meetings during times and days in which a wider variety of participants could participate, and the offering of services that better respond to the preferences of more excluded social groups** (for instance spices, herbs or produce that represent the culture and foodways of immigrants from the Global South). In the case of the TESS database, only 22 initiatives (34.9% of the sample) reported that their

membership process was informal or had no rules (i.e., anyone can join). Most of them - 41 initiatives (65.1% of the sample) - have some type of membership selection process. Here, membership eligibility is based on specific eligibility criteria, formal enrollment procedures, membership fees, and interview or screening (i.e., a selection process), or a combination of all. In total, 29 initiatives (46.0% of the sample) do not collect membership fees. While many of the initiatives collect small fees had starting from 1 euro per year, some (mostly consumer cooperatives) require as much as 100€ or more for joining. Moreover, some initiatives also seem to test the 'fit' of potentially interested new members. Foodsharing in Germany, which claims to be fighting against inequality, designs and administers quizzes to make sure that members know about, and even share, the values of the initiative. This sort of incoherence further discourages some new members from joining it.

Access is not only an issue of resources or material barriers. **Narrow discourses and visions** and the lack of recognition of others' values can make CBIs unattractive to some groups. Discourses around "organic food", "back-to-the-land" or "livable city" have different meanings or relevance for different social classes or ethnicities. For example, an initiative promoting food "waste" recycling in Germany has a limited ability to integrate minorities and poor residents. Members often fail to realize that receiving food "wasted" by others is not seen as sustainable or as an anti-poverty measure by everyone. Indeed, many potential "beneficiaries" see such initiatives as something denigrating, or as charity. However, CBIs seem to often fail to recognize such differences, and tend to play "politics of conversion" instead of "politics of respect" (DuPuis and Goodman 2005). Thus it seems important for initiatives to carry an open and continuous reflexive processes related to the ways in which they might be able to include a more broad representation of people.

Initiatives led by more privileged groups seem to display assistance and **paternalistic behavior**, which limits their ability to play a strong role in addressing socio-economic and ethnic inequalities in the system in which they are inserted and ensure that more marginalized groups become empowered through their projects. **Many also seem to be colorblind**: Most of the initiatives assert they are open to everyone and do not discriminate based on race or ethnicity but in most of the cases CBIs do not develop clearly articulated programs that benefit or attract underprivileged groups (they are colorblind). Colorblindness can be exclusionary and reflect meta-privileges: the inability to recognize one's own privileges.

Broad participation of varied social groups and classes arguably improves social inclusion. However, in their move from nominal to substantive participation, CBIs should ensure that all members have the capacity to participate pro-actively and effectively on their own terms. **Participatory decision making tools**, which are common in CBIs, can be a great tool for inclusion, but if no attention to members inequality is paid, or facilitation is missing, differences of power, status and underrepresentation of certain groups (that are less likely to speak or express their opinions in public or less likely to have the time to participate in lengthy and time-consuming meetings) persists.

3.2.6 Constraints to CBIs' success

The list of constraints to CBIs' emergence, durability, growth/ replication and socio-economic impact, resembles closely the list of success factors, but in its inverted form. Any insufficiencies within the success factors listed in the earlier sections tend to act as constraints to CBIs. For this reason, only the least obvious constraints to CBIs' success are listed here.

Money, pricing and income-generation strategies

In the monetary domain, financial instability is what one would expect to find to be a major constraining factor for CBI's emergence, institutionalization and growth. Yet, we find that **it is not financial instability as such, but rather the identification of a common ground on how to manage costs and incomes, (levels of pricing, or quotas), that creates major turbulences within the initiatives.** This has been the case with the Totacucaviu food cooperative in Spain, where members came together to collectively bargain the price of the local organic vegetable basket as low as possible. Such a practice has destabilized the economic viability of Totacucaviu's first provider (Kosturica). Similarly, the possibility to "pay your share of voluntary work out", (as in the case of the Herttoniemi Food Co-operative), has been a source of conflicts, which undermined (to an extent) the successful operation of the initiative. Not all conflicts in the monetary domain are however constraining CBIs. Differences in views on charging (money) for services or not, as in the case of Ciclonauti, do not necessarily create a constraint. They can be a point for inflection in CBIs' evolution leading to more creativity of economic organization.

That said, **the lack of economic viability is a strong limitation for the productive CBIs in the sample.** The organic farms we studied are extremely vulnerable to regulatory changes in the financial field or to entries of more competitive (or larger) players in the niche of organic food provision. Although subsidies for small-scale organic agriculture projects are available, these are not designed (or easy to apply) for low-income time-constrained peasants. Even if selected for a subsidy, farmers (Kosturica in this case), have been obliged to first spend the entire sum (of the grant) in order to eventually get hold of it, thus forcing producers to ask for bank loans.

Evidence on the extent to which the constant search for funding constrains the success of all CBIs is nevertheless inconclusive. Indeed, the question of funding for the HDDT, Colglen and Casale Podere Rosa has been a core and ubiquitous issue but something that is very difficult to come by. **Even the most 'successful' examples of CBIs are precarious because of their constant search for funding.** A focus on purchasing an asset and making a business can also alienate the community base of the initiative. On the other hand, being reliant on small pots of money can be strenuous, time consuming and disruptive for the continuation of CBIs core lines of action. The focus on funding means that at times all the energy/attention is directed to securing survival, and there is little space for carrying out activities associated with community development. Yet while the reliance on the search for funding does limit certain more intangible activities related to public awareness and education, it strengthens others, such as the construction of a community wind turbine (HDDT), or a community purchase of a forest (Colglen). In the case of Cycling Club Napoca the clash between the efforts required for fundraising and the time available for campaigning has been successfully resolved by opting out of project funding.

Overall, the majority of the key initiatives studied in TESS have not been at a point of closing down due to financial difficulties alone. It is difficult to argue up to what extent the choice of income generation strategy is constraining the overall success of an initiative. Yet, there is some evidence that **while the focus on asset-based income generation strategy might contribute to initiatives' success in terms of stabilization and growth (HDDT, Eno Energy), it might act as a constraint for the CBIs' success when it comes to contributing to environmental and social justice.** Thus compatibility between the different measures of success is not always perfect: sometimes focus on new technologies and generating economic return could go at the cost of contribution to environmental justice.

Participation and volunteer needs

Working for (and with) the community lies at the core of all TESS CBIs. Yet, the way each initiative defines the "community" and chooses the type of sub-community to work within, influences the factors that will constrain its success. The level of participation is one of these (factors). Some of the volunteer-based organizations (e.g. such as food cooperatives) find it **difficult**, though not impossible, **to continue** their activities **if volunteer participation rates drop or if there is fluctuation in members.** In the case of EcoBucovina and Cycling Club Napoca, for example, low participation rates, coupled with **distrust and scepticism towards the CBI's activities from the local population** tends to be a limiting factor for the initiatives' growth.

In the cases of HDDT, Colgen, Som Energia and BEB, the reliance on volunteers tends to clash with the need for technical capacity and timely response (for fundraising, media or public relations work, for example). Overall, the energy and food producing initiatives in the sample are unable to meaningfully fulfil their mission if participant engagement is only voluntary or hobby-based. In contrast, others (the food recycling and distribution groups) function well with volunteers only. At the same time, energy cooperatives' more transformational message and role tend to be constrained if these are run by employees only (as in the case of Eno Energy cooperative, BEB and Som Energia). In sum, **relying on volunteers' participation and engagement could mean enforcing one measure of CBI's success (inclusivity) and constraining another one** (development of new technologies, for example).

The role of internal and external power structures

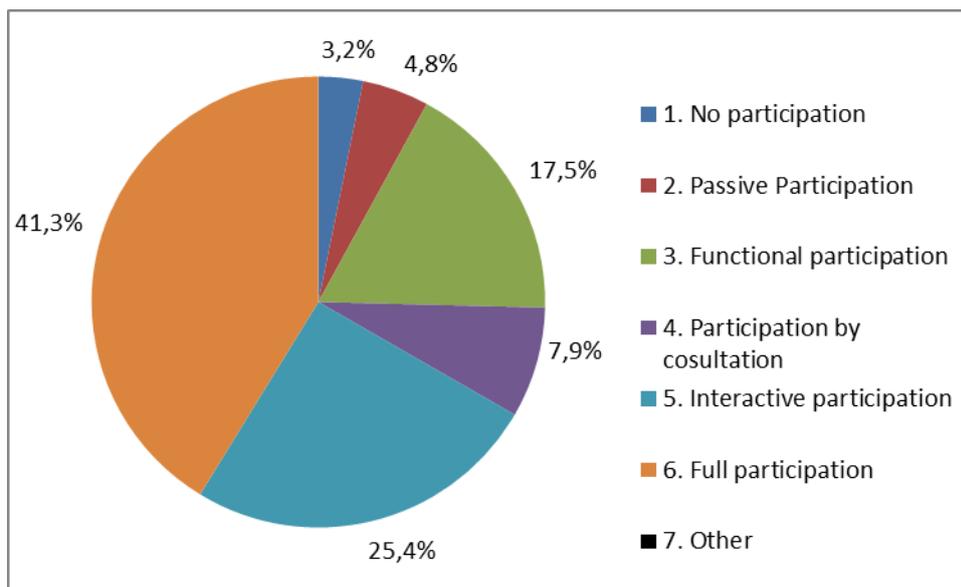
Starting with the internal power dynamics, most of the key CBIs in the TESS sample tend to have horizontal or participative structures. This is clearly indicated in the DAS. The majority of supportive case studies (41.3%) declared that their structure is strongly based on the full participation of participants, followed by interactive participation (25.4%), and functional participation (17.5%). Participation by consultation scored 7.9%, passive participation 4.8%, and completely vertical forms of decision-making 3.2% (see Figure 3).

Yet the implications of the CBIs decision-making structures vary. While horizontality seems to enhance participation and thus continuity of a food cooperative, it might be constraining in a more professional set-up where fast, well-informed and efficient decision-making is required, (as in the case with organic farms, or energy-producers).

From the perspective of external regulatory environment, governmental actions can both constrain and enhance certain aspect (or type) of CBIs success. While providing a source of

income for desirable activities, **rigid funding rules and regulations could stifle bottom-up creativity within CBIs**. In the case of HDDT, for example, legal obstacles in the planning permissions of community-owned wind turbine and cuts to the subsidies for renewable energy in Scotland might put at risk the economic viability of the CBI's productive project and its prospects for financial autonomy. For Scotland, the EU state aid regulations limit the amount of governmental support that a single CBI could receive, which has constrained the growth potential of Colglen. Regulation in this case can be particularly damaging for CBIs' success, when governmental priorities are not in line, nor consulted, with the needs of communities.

Fig. 3 Classification of CBIs according to the strategic decision making method adopted.



This said, support from the local authorities can play a crucial role for the establishment of CBIs. The Eno energy co-operative in Finland emerged thanks to the initial financial support provided by the local municipality. Over time the initiative gained grounds, stabilized and purchased the heat plants and heat distribution network from the municipality. This has not been the case with all energy co-operatives in Finland, however. Some of them keep being entirely dependent on the heat production facilities being owned by the local authorities and thus subject to constant public tenders and uncertainty. Likewise, uncertain regulations and administrative frameworks for the bidding procedures required for purchasing the energy grid in Berlin constrain the success of BEB in fulfilling its core objective (making the city of Berlin consume 100% renewable energy). The CBI has found it difficult to access expertise and although good relations with the mayor of town are established, political changes might jeopardize the objectives of BEB. Overall, **relations with external power/governmental bodies tend to both constrain and enhance the survival and growth of CBIs**, depending on the type of project that is being put forward, where activities that are non-conflictive and aligned with the political impetus receive priority.

Clashing aspirations and rationalities

Differences in aspirations and rationalities within a CBI are common and perhaps unavoidable part of structures based on horizontality and deliberation. On the one hand,

tensions arising from aspirational clashes (associated with differences in the level of desired political engagement within the CBI, or with the perceived need for a focus on income-generation rather than socially oriented non-productive activities offered free of charge) can foster reflection and the generation of new ideas (such as a community wind turbine project). On other hand, if not managed properly, tensions can lead to the self-exclusion and drop-out of certain participants who do not feel represented by the CBI. However, **when radical voices/members leave, it seems that CBIs' capacity to respond to cooptation pressures shrinks.**

4 Conclusion

The content of this deliverable builds upon the analytical synthesis of the memos developed in the previous stages of WP3 written on the following five themes: “Trajectories of Community-based initiatives”; “Power and politics”; “Governance and governing relations”; “CBI’s Aspirations and Rationalities”; and “Money and Community-based initiatives”. For the aims of this deliverable, a synthesis of the factors that contribute to the success of community-based initiatives, or rather constrain them, has been extracted from each thematic memo and structured around selected measures of CBIs’ success.

Upon conducting a literature review on success factors for CBIs (as part of Task 3.1) and analysing the interview transcripts from the qualitative surveys (Task 3.3), we refined the **measures of success** into the following categories: CBIs’ **emergence; continued existence, or survival; growth and/or replication; use and dissemination of new technologies and business models; and contribution to social and environmental justice**. This list need not represent the amplitude of approaches to perceiving the success of community-based initiatives. The measures reflect the various phases of the CBIs’ life-path, each bringing a different nuance in terms of their socio-environmental impact, but also eliciting a different approach to sustainability transition. The success of each organization can be thus assessed in multiple ways, beyond the measures listed above. Successful initiatives, for example, can thus be considered CBIs which are small and young, but engaging a diversity of members, including socially and economically disadvantaged individuals in sustainability transition.

Although the trajectory of each CBI is unique, the major factors to their success tend to be common. Notably, here we focus only on the factors which have not received (much) attention in the literature. Starting with initiatives’ *emergence*, the factors contributing to this type of success have been clustered as: the presence of **socio-political vacuum; a history of social organization; the presence of bold aspirations** and a sense of shared identity; **state regulation; and aspirations for economic autonomy**. The factors that favour the birth of a CBI may thus be considered external and internal. The former are related to the socio-political context and the regime of governmental regulations, including perspectives for partnerships with state authorities, while the latter includes shared values within organizations, and aspirations for increased autonomy in economic and socio-political sense. Desire for increased autonomy can be found as a building block in the initial stages of most TESS initiatives.

These sets of factors still influence the success of CBIs, defined as their *survival and continued* existence, but in a more nuanced way. The factors contributing to this type of success have been classified in the following categories: **aspirations and rationalities; type of organizational structure; income and resources; strategic and targeted collaboration with governmental institutions; political strategy and local community support**. Unpacking a few of them, the type of organizational structure that a CBI adopts seems to strongly influence its trajectory. Having a volunteer-based organizational structure, for example, can both be strength and a challenge (a constraint). Next, if an initiative is partly volunteers and partly professionals based, potentials for conflicts are higher because decision-making patterns become more complex. Evidence on how far state funding contributes to success in terms of survival is also mixed indicating that overreliance on donor

grants makes initiatives vulnerable to changes in the financing regime. While not all CBIs have a relation with the government, if an initiative's success is tied to securing an asset, ensuring governmental support in terms of funding and regulation is still needed. Moreover, a trade-off between the income generation focus of a CBI and its capacity to meet the needs of the local community is also observed. A diversity of members' profiles, aspirations and rationalities is another ingredient ensuring initiatives' survival and successful persistence.

Once a CBI has reached a mature phase of development, the discussion on whether to maintain a small ('right') size versus to upscale tends to emerge. The first solution – and a measure of success - is reached through the *replication* of the initiative in other places and contexts, while the second - through its *growth* in activities, members, employees, and income. The factors influencing CBIs' growth and replication can be roughly summed-up in the following categories: **organizational values, structure, leaders/members, income-generation strategy and relationship with governmental institutions**. Debate on whether and how initiatives should expand their impact is lively and present among many of the TESS initiatives. While up-scaling enables hiring (more) staff and the provision of more goods and services, it may corrupt the transformational spirit/radical voice of a CBI. Some CBIs, and most often – the energy cooperatives, see up-scaling as a goal per se, while others would rather focus on spreading blueprints and knowledge spill overs. The decision to up-scale often requires structural changes (introducing a higher degree of hierarchy), and can involve a clash (and a change) of organizational values. Growth may also entail the renovation of its membership base and of formal/ informal leaders, as well as an increased attention to strengthening entrepreneurial approaches and collaboration with public institutions. Replication of TESS initiatives, on the other hand, tends to be based on initiatives intentionally deciding to preclude further growth. The decision to 'right-size', or keep a size that allows for horizontality and flexibility in operations, tends to be more common among food cooperatives, small farms and groups based on volunteers only, and less likely among initiatives working in the field of energy.

The next measure of CBIs' success is defined above as *dissemination of new technologies and business models*. The factors that influence this type of success are identical to the ones that contribute to CBIs' persistence, growth and replication. The most frequent CBIs' transport-based technological innovation is the **promotion of carbon-neutral (bicycle) transportation in urban settings** which are culturally and infrastructure-wise unsuitable for cycling (such as the city of Rome). **Forms of car-sharing** are also promoted. In the field of energy some of the key technological innovations CBIs have developed are the provision of **regional heating services** through wood chips derived from locally sourced wood, **construction of a community-owned wind turbine** and citizens' campaigns for the re-municipalization of the power grid in town in order to convert it to 100% renewable energy consumption. The new business models used and disseminated by CBIs most often take the form of **cooperatives, social enterprises or organizations providing goods and services without monetary intermediation**.

With respect to CBIs' *promotion of social and environmental justice*, we find that the respective factors of success are: **initiatives' location in multicultural neighbourhoods**, ability to **create working placements** and **replicate themselves** in a variety of contexts and most importantly – their willingness to **contribute to the struggles of marginalized groups**. On the other hand **when CBIs have limited financial and time resources, when institutional and logistical support is lacking**; when members' imaginaries are limited, **when technical language and exclusive discourses are used**; and when paternalistic and

colorblind communication patterns are present, the accessibility of “less-privileged” individuals to the environmental goods generated by CBIs is obstructed. Horizontal decision-making structure where no attention to facilitation and rank/status is paid can also preclude inclusivity.

As a means of conclusion, the analysis above shall not be considered generic. If there is a common finding that pertains to all CBIs studied within TESS, this should be the fact that each initiative is a universe. Even when a strategy or a practice is adopted by another group, replication is never an exact copy of the original initiative, but evolutionary, or containing a new feature. It is thus difficult to argue what projects should be supported at higher institutional and industry levels. While we have brought forward some of the factors that contribute to the development of innovative solutions in regards to energy and transportation, none of the initiatives found that the Smart Cities and Communities European Innovation Partnership has been relevant to the CBI’s field. Many initiatives have a common fear of cooptation by the corporate sector or higher-level governance, and feel skeptical about the capacity of technological innovation alone and about the role of top-down policies to spark a transition to an ecological and socially-sustainable society.

Overall, the innovation provided by community-based initiatives tends to emerge in situations when small-scale, local solutions and community empowerment have grown sufficiently and come into conflict with the prevailing orthodoxy of large-scale, centralized, top-down infrastructure and governance. The vacuum space generated between these two opposing forces has proved to be a fertile soil for the development of solutions and organizational models that hopefully allow for staying within the planetary boundaries while ensuring participation and community involvement.

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Appendices

Appendix 1

Guidelines for TESS partners on how to proceed with the contributions for D3.3

For the meeting in Oulu we pulled all reflections on success factors together in a single document, which can be found here:

https://drive.google.com/drive/folders/0B3Pj8_u2ywAIVE9yRGNFN2hydHc

Under the title: Combined-document-success-factors-final, uploaded on Jan 28th

This document has an updated structure and **includes ALL points and sections** (as available **before we splitted** into small groups). **Most likely each of your groups has a separate document** only on your section containing what you have done during the session in Oulu. This is fine, **the combined document** is still there **for your reference** and any unclarities in terms of structure and content. Please **do not work on the combined document** – it is our archive for reference. Continue working on separate files, we will put everything in the end.

In Oulu, each section was revised through working in small groups, with the idea of organizing inputs, checking for inconsistencies, and missing success factors. Work is nevertheless still needed to conceptualize better the factors around each of the evolutionary stages (see points 1 to 7 below).

One coordinator was assigned (to rework) each section (or evolutionary stage), and the distribution of tasks goes as follows:

1. **Key drivers of emergence (Annabel)**
2. **Survival and institutionalization (Stephanie)**
3. **Replication and growth (while minimizing green paradox and rebound effects) (Federico)**
4. **Constraints to survival, institutionalization, replication and growth (Alexandra)**
5. **Factors contributing to new technologies, spill-over effects and (positive) rebound effects (Philip)**
6. **Success in terms of environmental justice (Lucia)**
7. **Overall success (Filka)**

Coordinators might ask for help other members' of the group (in Oulu) if needed.

How to go about our work - Instructions to coordinators:

1. When rewriting your section (for instance, "survival and institutionalization" or "constraints to survival") **first try to organize it** so that contributions are in same categories and follow a **'logical' order**
2. Try to think of (or add) **missing points**, or whether something interesting, but marginal has not been dropped, (**avoiding too generalistic findings**)
3. Repetition – if there is a repetition of factors (public funding, for example), try to provide **a more nuanced presentation of the type of factor rather than deleting it, try to be more specific, on how this factor applies to each specific section/stage**. At this point we are not afraid of repetition – but rather – of omission or overgeneralization.
4. While reading and remaking the document, please note down whether any information on **innovative solutions in energy and transportation as well as on new business models** may emerge.

Length of sections 1-7: We expect each section to be 5 pages single-space or so (but hopefully not less), so that the main body of our deliverable is around 35-40 pages. Try to structure your write-up as a narrative organized around bullet points/sub-sections for sections 1-7. If you'd like to add any figure or table, feel free to do so. A combination of narrative form and some figures will make the reading easier and more "appealing" to the deliverable reviewers.

Please submit your revised version by February 15th – in the drive WP3 - > Interviews - > Data analysis - > Success factors for D 3.3