Sustainability transitions towards low carbon societies: the role of community-based organizations

Fourth National Conference on Community Management of Living Resources
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Outline

• **Introduction** to TESS
• What is **resilience** within a Community-based Initiative (CBI) perspective?
• What is the impact of CBIs in terms of **economic** impact and **carbon reduction** potential?
• What **institutional** structures support these initiatives to spread their desired impacts?
• Two **tools** for CBIs: the Resilience Compass & Track-It!
• What can TESS tell us about the role of CBIs in sustainability transitions?
Introduction

1) What is the impact of CBIs in terms of carbon reduction potential and economic effects?

2) What institutional structures support CBIs in persisting beyond the initial phase and moving into an acceleration phase, to spread their desired impacts?
Introduction

650 identified CBIs in 6 countries
62 case studies
14 key partners
~500 hours of interviews
8 research partners
Key Findings:

- success means many things to community-based groups
- many have diverse activities (Scotland and Rome)
- can create impact through partnerships (Finland and Romania)
- can up-scale through replication (Berlin and Spain)

How the examples were collected:

- questionnaires and semi-structured interviews with members of 63 CBIs in 6 regions across Europe
- objective to understand factors leading to success in CBIs, challenges facing community groups and perceived impacts on wider society
A community’s resilience determines the way in which it responds to short-term shocks and long-term change.

Communities are complex systems, resilience cannot be measured precisely.

Let’s consider a simple framework for thinking about community resilience.

Resilience

(1) The 4 dimensions contributing to making a community resilient

- Healthy and Engaged *People*
- Creating a More Localised *Economy* within Ecological Limits
- Cross-Community *Links*
- Building a Creative, Inclusive *Culture*
Healthy and Engaged People
Healthy and Engaged People

relating to the physical and psychological well-being of individuals in the community which will be connected to:

• the quality and strength of their personal relationships
• their connection to nature
• their opportunities to learn and share new skills and so on.
More Localised Economies within Ecological Limits
More Localised Economies within Ecological Limits

relating to the creation of a different sort of local economy which:

• positively stewards the local environment and resources
• enhances biodiversity
• cuts carbon dependence and
• creates meaningful, locally based livelihoods that are less dependent on fossil fuels.
Building a Creative, Inclusive Culture
Building a Creative, Inclusive Culture

relating to how a community addresses:

• social inclusion
• social justice/equity
• support for social and technical innovation and
• openness to creating/exploring different/novel ways of working
Cross-Community Links
relating to the strength of connections links and partnerships to:

- other communities and
- across sectors (including public sector/government and business)
Resilience

(2) A community may be in 1 of 3 distinct states of resilience

- **Breakdown**: fragile and at risk of collapse without outside help
- **Breakeven**: able to cope with disruptions, absorb shocks and bounce back to something approximating ‘normal’
- **Breakthrough**: able to thrive on change and to use outside shocks as a stimulus to create a better future

<table>
<thead>
<tr>
<th>People</th>
<th>Breakdown</th>
<th>Breakeven</th>
<th>Breakthrough</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Feel isolated and cautious</td>
<td>Feel in control and able to plan ahead</td>
<td>Feel excited by change, take risks, active learning</td>
</tr>
<tr>
<td>Economy</td>
<td>Too many eggs in one basket, lack of local control</td>
<td>Diverse enterprises and organisations</td>
<td>More localised economy creating virtuous economic cycles</td>
</tr>
<tr>
<td>Links</td>
<td>Inward looking, each for themselves</td>
<td>Networking with like-minded folk</td>
<td>Pro-active cross-community collaboration</td>
</tr>
<tr>
<td>Culture</td>
<td>Passive consumption of mass culture</td>
<td>Celebrate sense of place and belonging</td>
<td>Creative, embracing diversity, open to change</td>
</tr>
</tbody>
</table>
Resilience compass

Resilience Score

<table>
<thead>
<tr>
<th>Breakdown</th>
<th>Breakeven</th>
<th>Breakthrough</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>4</td>
<td>5</td>
<td>6</td>
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<tr>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>

Healthy Engaged People

- Many active, engaged people
- Sometimes burn out or leave.

A more localised economy

- Some local shops, dying out.
- Re. tourist-driven, student economy

Cross-community links

- Many links to external networks
- I develop links to other comm. orgs

Creative inclusive culture

- Different types of events & people
- Need more "family appeal"

Action points

Annual festival with other community organisations, with a focus on families' needs and local businesses.

www.sustainable-communities.eu
Economic impact

- CBIs cultivate both social and market-based forms of innovation but rely heavily on volunteer labour.
- Most active in domains of food and energy.
- Use a variety of income generation approaches and deliver tangible economic benefits, create direct or indirect new jobs and sustain local economic revitalization and wealth retention.
- Provide opportunities to local communities to improve the quality and/or quantity of accessible goods or services, and intangible benefits (training, skills, human capital).
German initiatives using the internet to replicate and reduce food waste

Key Findings:

• IT can be a powerful enabler for practical action

• Developing a scalable model allows growth and replication in new locations
# Carbon reduction potential

<table>
<thead>
<tr>
<th>Baseline scenario</th>
<th>Initiative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example: GHG emissions caused from the production of typical food sold in supermarkets</td>
<td>Example: GHG emissions caused from the production of locally grown organic vegetables</td>
</tr>
</tbody>
</table>

D. Landholm, A. Holsten, F. Martelozzo, J.Kropp, 2017
<table>
<thead>
<tr>
<th>Domain</th>
<th>Activity</th>
<th>Examples</th>
<th>Data required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste</td>
<td>Transporting goods</td>
<td>Bicycle or electric vehicle couriers</td>
<td>Distance travelled per mode of transport</td>
</tr>
<tr>
<td></td>
<td>Personal travel</td>
<td>Cycling promotion groups</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Recycling</td>
<td>Community-based recycling schemes</td>
<td>Quantities recycled and transport distance</td>
</tr>
<tr>
<td></td>
<td>Growing or selling organic food</td>
<td>Community gardens, food cooperatives</td>
<td>Quantities grown by type of product and transport distance</td>
</tr>
<tr>
<td>Food</td>
<td>Avoiding food waste</td>
<td>Redistributing still edible food, avoiding domestic food waste</td>
<td>Quantities saved by type of product, transport distance and number of fridges</td>
</tr>
<tr>
<td></td>
<td>Preparing meals</td>
<td>Providing vegetarian or vegan meals</td>
<td>Number and type of meals</td>
</tr>
<tr>
<td>Energy</td>
<td>Generating heat</td>
<td>Geothermal or biomass projects</td>
<td>Number of kWh and type of energy source</td>
</tr>
<tr>
<td></td>
<td>Generating electricity</td>
<td>Solar, wind or hydro projects</td>
<td></td>
</tr>
</tbody>
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D. Landholm, A. Holsten, F. Martelozzo, J.Kropp
Track-It!
In the year 2014 your initiative *my_initiative* has avoided **96932.6 kg CO₂e**.

This refers to your activities, which are compared to a 'baseline scenario':

<table>
<thead>
<tr>
<th>Domain</th>
<th>Activity</th>
<th>Avoided emissions</th>
<th>Compared to baseline scenario</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport</td>
<td>Transportation of Goods</td>
<td>94925.0 kg CO₂e</td>
<td>The goods are transported by an average-sized car driven with conventional fuel.</td>
</tr>
<tr>
<td>Food</td>
<td>Preparing meals</td>
<td>2007.6 kg CO₂e</td>
<td>People eat a meal of similar calories corresponding to a typical diet including meat.</td>
</tr>
</tbody>
</table>

The avoided greenhouse gas emissions are equivalent...

- to the emissions **11.0 Europeans cause on average per year**...
- ... or to driving by car for **41637 km**.

Carbon reduction potential

highest GHG mitigation potential for initiatives engaged in:

• heat and electricity generation
• personal transport
• provision of vegetarian or vegan meals
• energy domain varies by heat and electricity mix
• large overall reductions observed across all of the initiatives engaged in activities
Case study

Developing enterprise through community-owned renewables in Scotland Huntly and District

Key Findings:

• Income from renewable energy can support community initiatives

• Community initiatives can effectively manage local assets for the common good
Case study

Promoting people power in Spanish renewable energy co-operative

Key Findings:

• Developing a scalable model allows growth and replication in new locations

• Integrating professionals and volunteers is key to initiatives’ survival and character

• Allowing people to change the practical reality of their lives can lead to cultural change and innovation
Policy environment

- dialogue between CBIs and public agencies is scarce, with great regional variation
- members’ opinions about collaboration with public institutions mixed
- almost 2/3rds not involved in political action although they see their activities as political in nature
- public funding key for emergence and performance of CBIs, but less than general policy environment
Policy environment

- most important to ensure interest, understanding and openness of policy-makers and public institutions for different and diverse types of socio-economic organizations

- emergence and performance benefit from:
  - Transparency and accountability
  - coherence among different political and institutional bodies, laws and regulations
  - simplified procedures and bureaucracy
Case study

Working together towards an oil-free energy region in Finland

Key Findings:

• Community-based initiatives can work with public authorities to reduce energy usage

• Community initiatives can effectively manage local assets for the common good; Integrating professional and volunteer work can contribute to ongoing success
Success factors

Energy

Transport

Waste

Food
Case study: Creating space for community activism in Rome

Key Findings:

• Opposing unwanted change can foster changes that people do want

• Allowing people to change the practical reality of their lives can lead to cultural change and innovation; Integrating professional and volunteer work is key to ongoing success
Case study: Putting the spotlight on cycling in Romania

Key Findings:

• CBIs can lobby political authorities for societal change; represent needs of local people to the local authority

• Groups can support people in living active, healthy lifestyles

• CBIs can function as important leisure communities
Conclusion

Towards European Societal Sustainability (TESS)

TESS
TESS (Towards European Societal Sustainability) is a European research project which aims to illustrate the role of community based initiatives in creating a sustainable, low-carbon Europe. It is supporting policy makers by contributing to a better understanding of how initiatives can become more successful.

TESS is also helping initiatives to monitor and report on their environmental impact, including carbon reduction. It aims to develop a measurement method, which is comparable across Europe. Read more

Subscribe to our newsletter

www.tess-transition.eu  www.sustainable-communities.eu

“Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it is the only thing that ever has.” – Margaret Mead (1901-1978)
Useful links and resources

2 videos:
- Introduction to TESS
- Key results from TESS

4 policy briefs:
- CBIs and ...
- Success factors
- Innovation
- Environmental impacts
- Key lessons learned

TESS booklet
“Community Climate Action across Europe: 62 Portraits from six countries”