

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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- **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

Introduction

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

Resilience

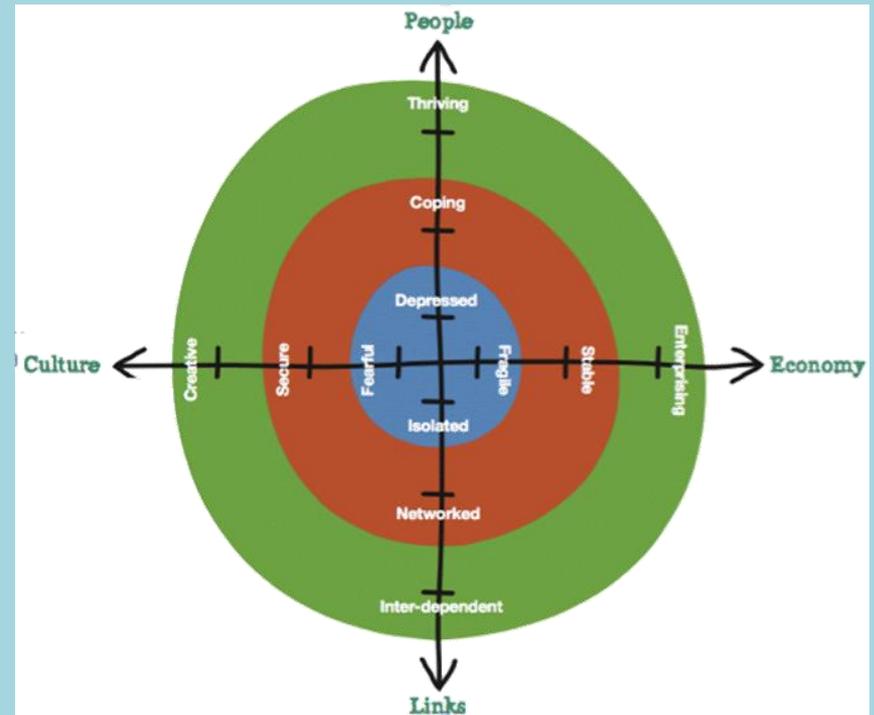
- A community's resilience determines the way in which it responds to short-term shocks and long-term change
- Communities are complex systems, resilience can not be measured precisely

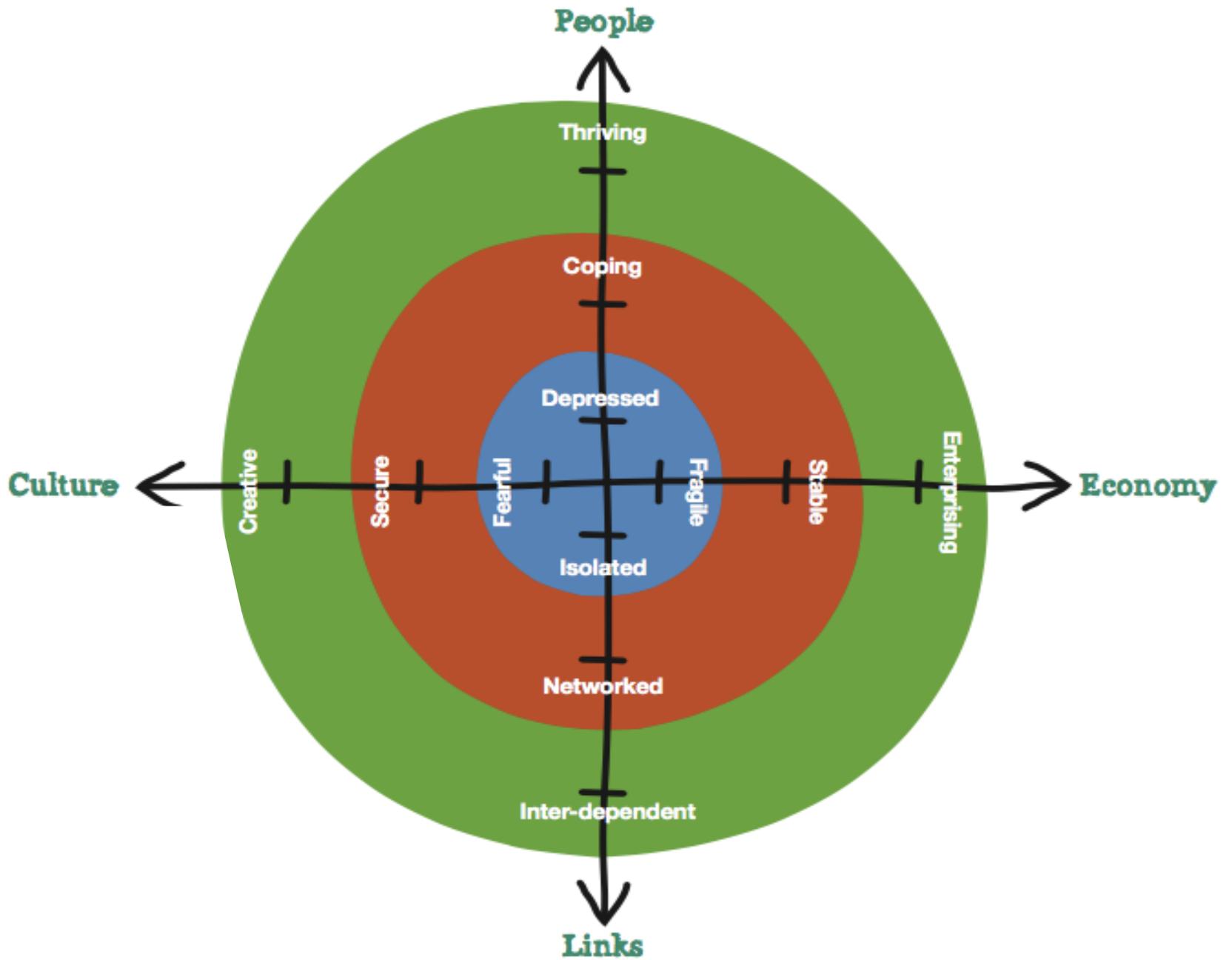
Let's consider a simple framework for thinking about community resilience

Resilience

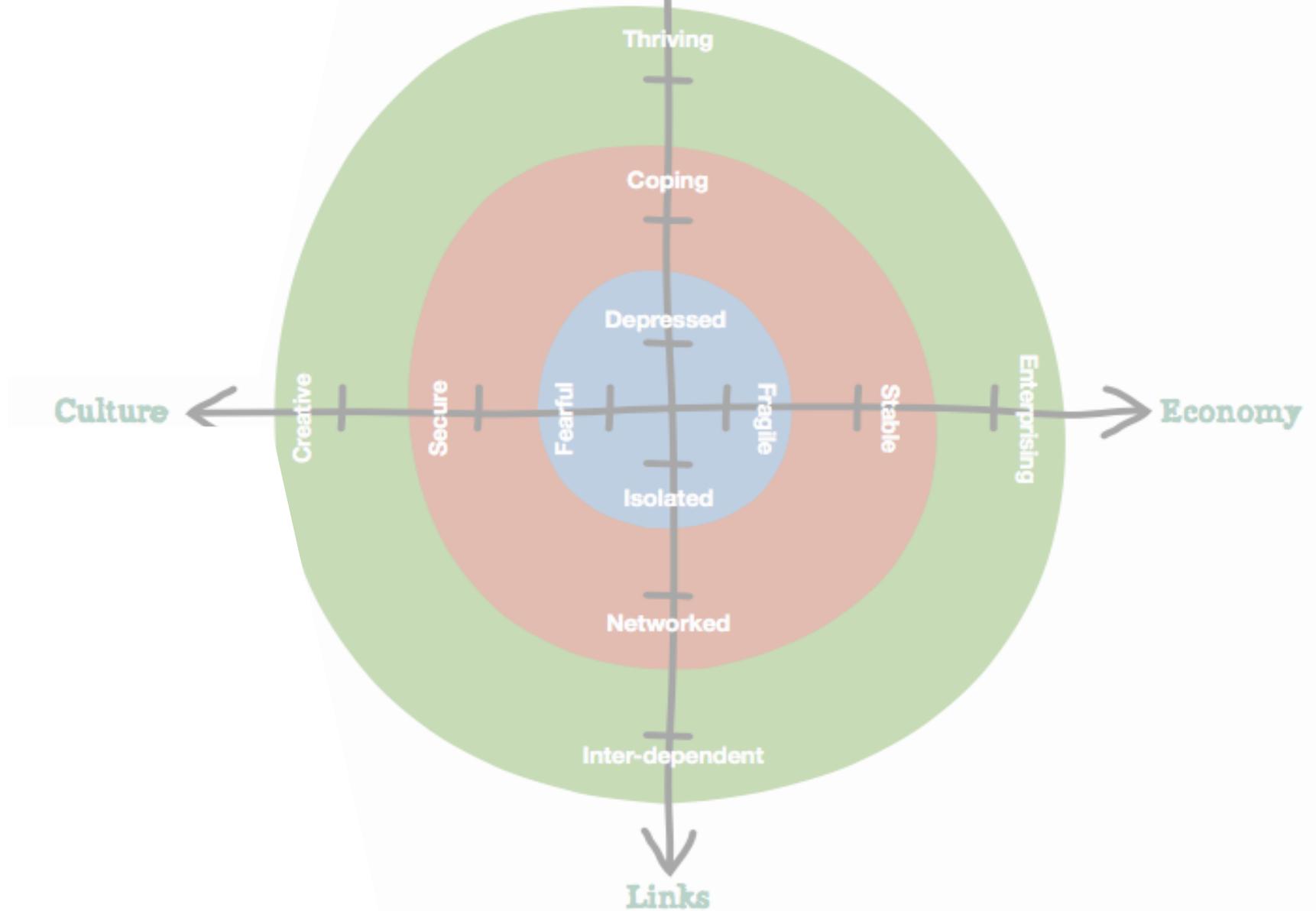
(1) The 4 dimensions contributing to making a community resilient

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

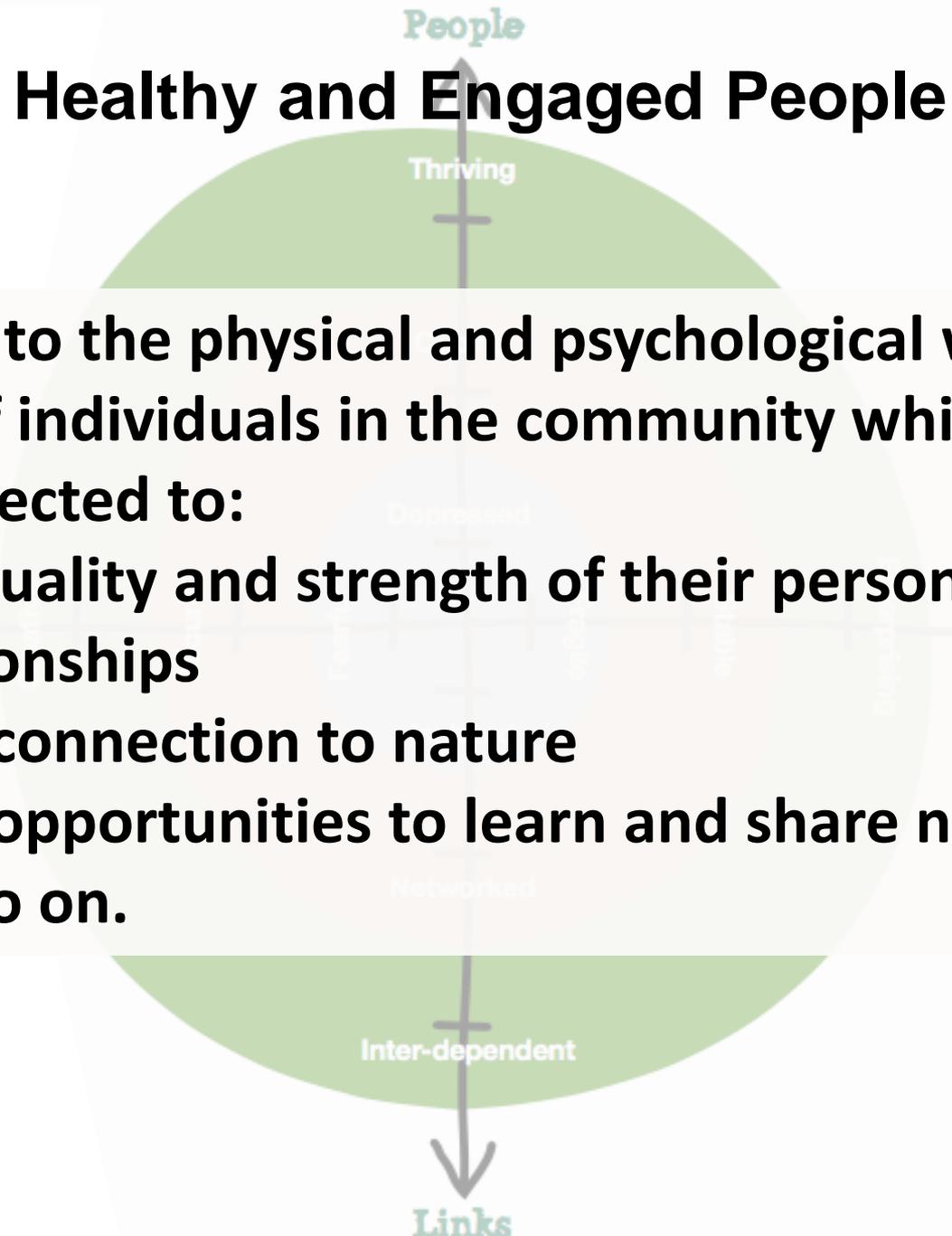




Healthy and Engaged People



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.

People

Thriving

Coping

Depressed

Fearful

Isolated

Networked

Inter-dependent

Links

Culture

Creative

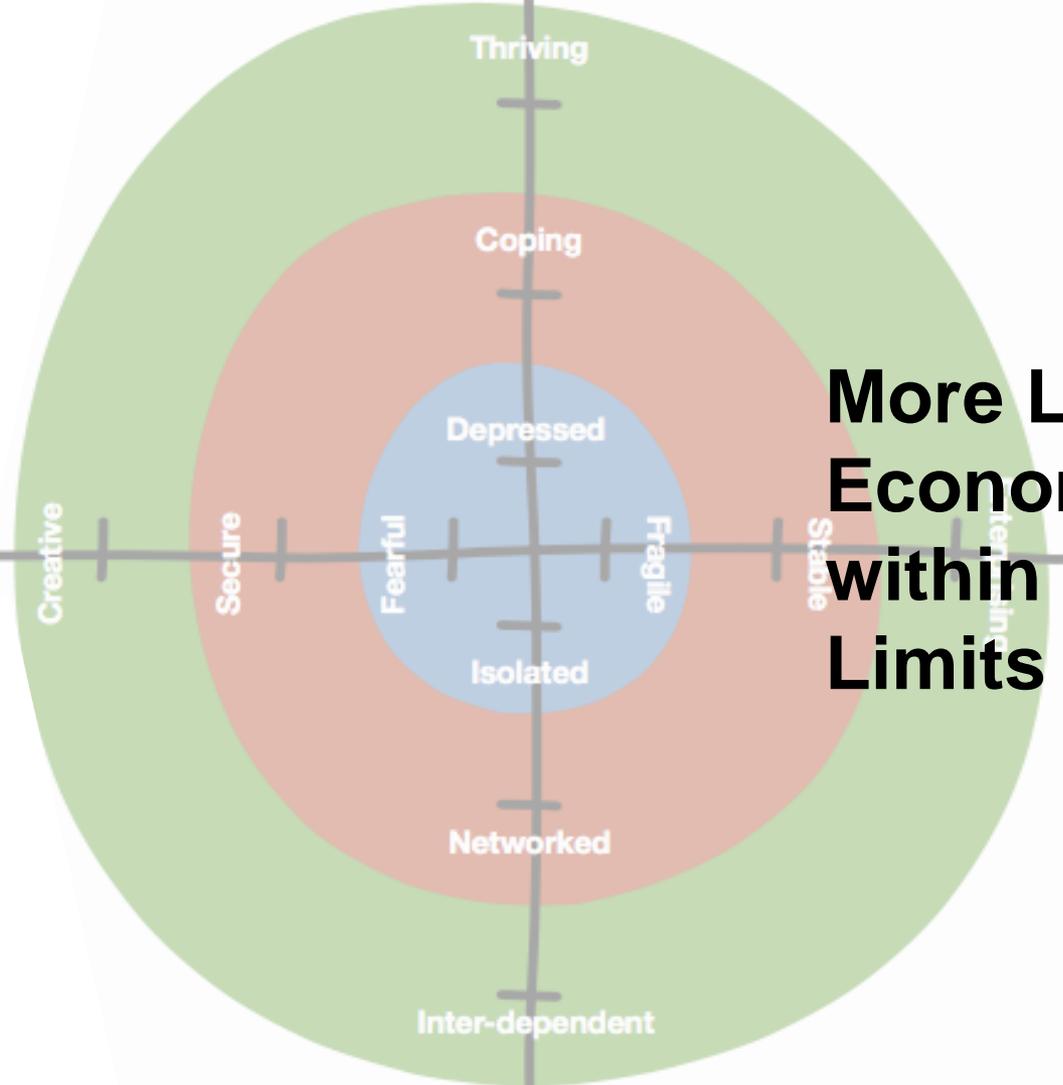
Secure

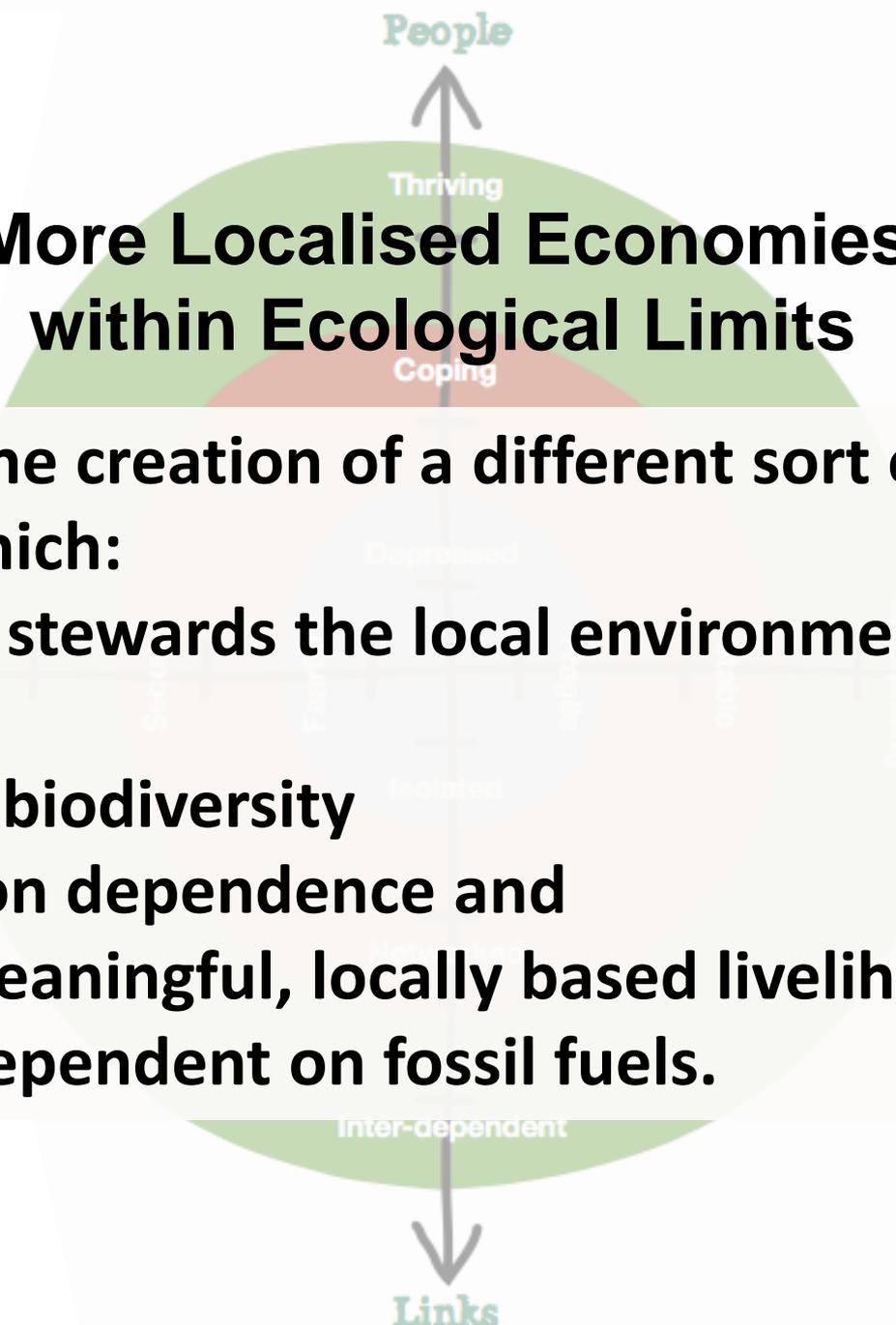
Fragile

Stable

More Localised Economies within Ecological Limits

Economy

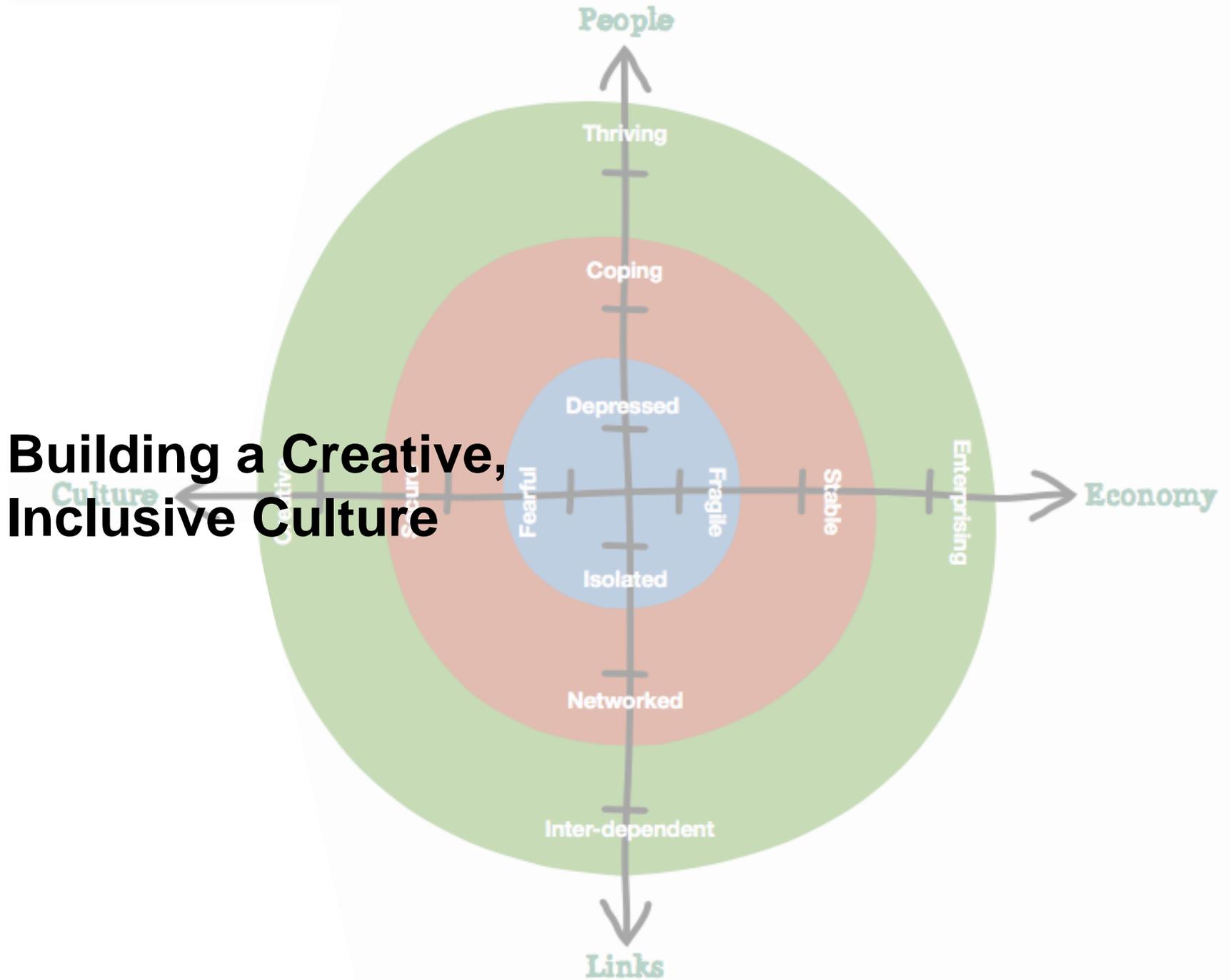




More Localised Economies within Ecological Limits

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

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

People



Thriv

Coping

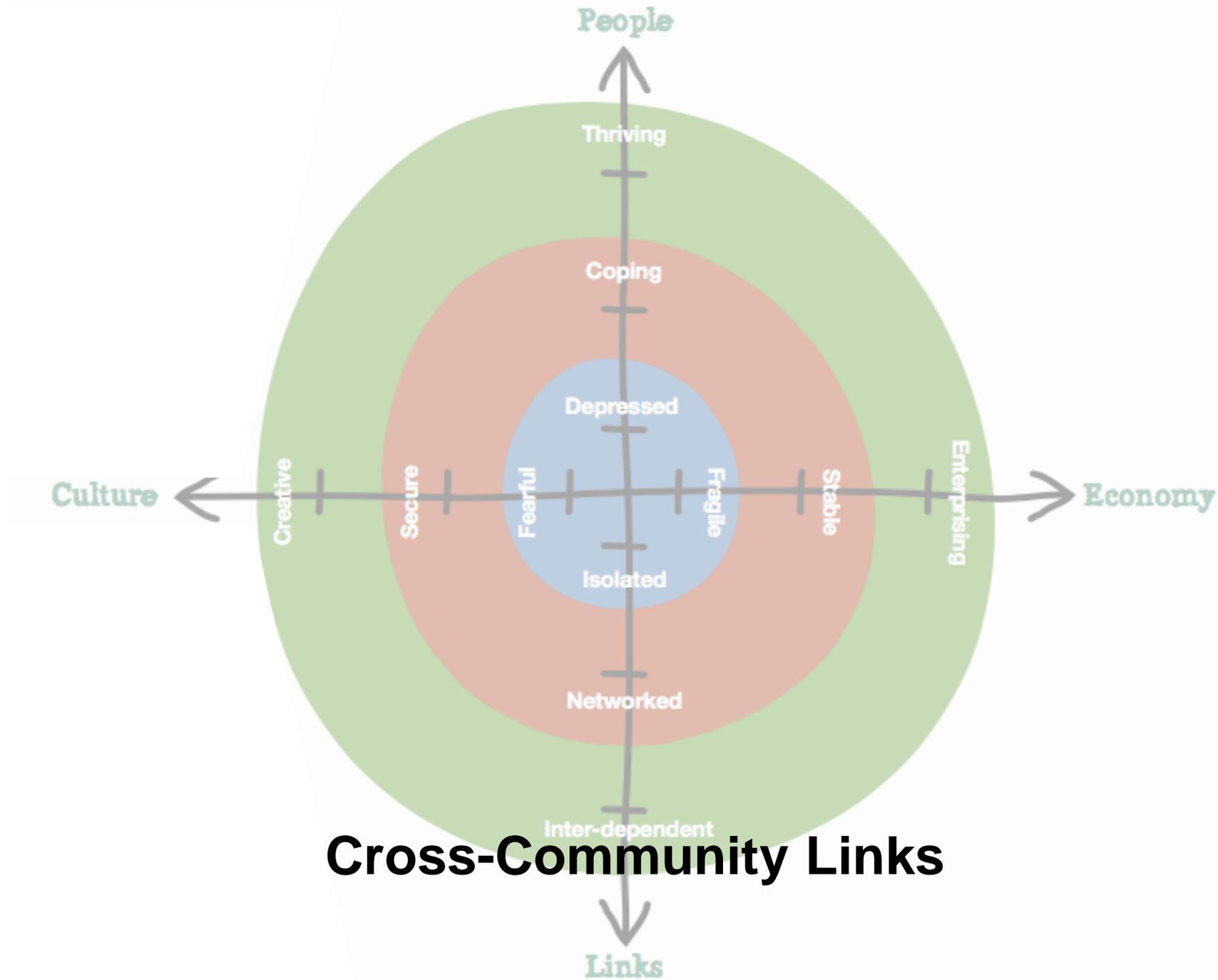
Depressed

Networked

Inter-dependent



Links



People



Thriving

Coping

relating to the strength of connections links and partnerships to:

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

Cul

Networked

Inter-dependent

Cross-Community Links



Links

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

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

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

Baseline scenario

Example: GHG emissions caused from the production of typical food sold in supermarkets



Initiative

Example: GHG emissions caused from the production of locally grown organic vegetables



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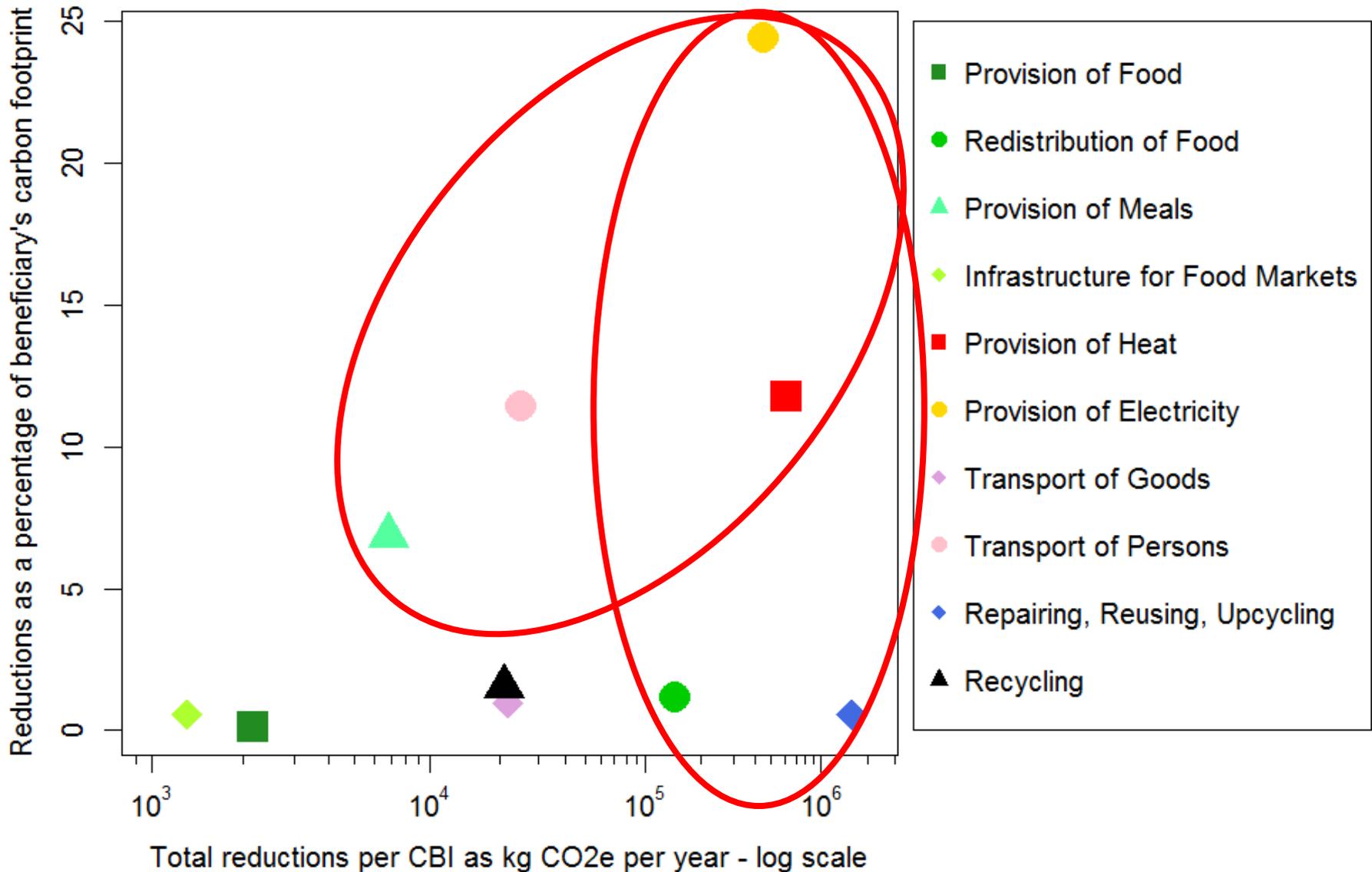
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GHG emissions avoided by the initiative

Track-It!

Domain	Activity	Examples	Data required
 <p>Waste</p>  <p>Food</p>  <p>Energy</p>	Transporting goods	Bicycle or electric vehicle couriers	Distance travelled per mode of transport
	Personal travel	Cycling promotion groups	
	Recycling	Community-based recycling schemes	Quantities recycled and transport distance
	Growing or selling organic food	Community gardens, food cooperatives	Quantities grown by type of product and transport distance
	Avoiding food waste	Redistributing still edible food, avoiding domestic food waste	Quantities saved by type of product, transport distance and number of fridges
	Preparing meals	Providing vegetarian or vegan meals	Number and type of meals
	Generating heat	Geothermal or biomass projects	Number of kWh and type of energy source
Generating electricity	Solar, wind or hydro projects		

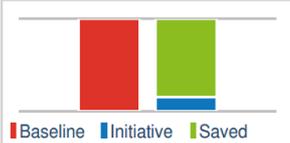
Track-It!



Track-it! Your result

In the year 2014 your initiative **my_initiative** has avoided **96932.6 kg CO_{2e}**. 

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

Domain	Activity	Avoided emissions	Compared to baseline scenario
 Transport	Transportation of Goods	94925.0 kg CO _{2e} 84.9 % CO _{2e}	 The goods are transported by an average-sized car driven with conventional fuel. 
 Food	Preparing meals	2007.6 kg CO _{2e} 22.4 % CO _{2e}	 People eat a meal of similar calories corresponding to a typical diet including meat. 

The avoided greenhouse gas emissions are equivalent ...



to the emissions **11.0** Europeans cause on average per year ...

... or to driving by car for **416377** 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

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

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

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

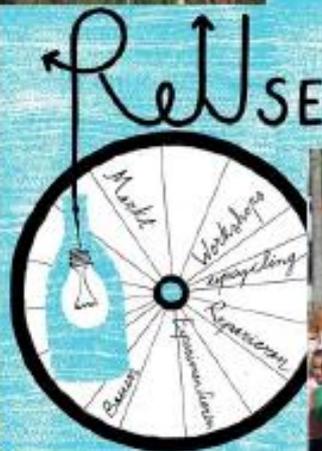
Success factors



Energy



Transport



Waste



Food



SANT MARTI DE PROVENÇALS
LA VERNEDA
LA PAU



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

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 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](#)

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"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)

