UNIVERSITY OF OTAGO

Transition Towns

An assessment of the success of Transition Initiatives in New Zealand and around the world

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1. Introduction

The aim of this project is to assess the activities of Transition initiatives around the world, focussing on New Zealand initiatives, and how successful they have been in engaging the community and making practical positive changes.

1.1 History

The Transition concept has its origins in Kinsale, Ireland, where Rob Hopkins had initiated a two-year permaculture course at the Kinsale College of Further Education - the first of its kind in the world (Hopkins, n.d.). Kinsale is a seaside resort area catering to the inhabitants of Cork in south eastern Ireland. In 2004, in response to the film *The End of Suburbia* and a talk on peak oil by Colin Campbell (a petroleum geologist and nominal head of the Peak Oil movement, who lives not far from Kinsale), the second year students in this course started a project to explore how Kinsale could make the transition to a lower energy future. Under Hopkins' guidance and after researching and consulting with the community, they drew up the Kinsale Energy Descent Action Plan (EDAP), which outlined the current situation for the local area, presented a vision of the future, and then suggested ways to get there. Although the Kinsale initiative has not taken off as well as some later Transition initiatives, it was in part the lessons learnt from Kinsale that allowed the subsequent initiatives to succeed. The original idea of Transition was born in Kinsale, and the experience gained there allowed it to develop into a refined working model.

The first official Transition town and the most celebrated is Totnes in Devon, England. Totnes is a town of about 8000 with a reputation of being an alternative or "hippy" town, home to environmental activists and artists, with a strong and eccentric local culture. Hopkins moved there from Kinsale and started the Transition movement in 2005 with Naresh Giangrande, another peak oil educator. The two of them held talks and film screenings and networked with the existing groups, and then in September 2006 held the "Great Unleashing" where they introduced the concept of energy descent and localisation, presented a vision for the future, and got people to discuss their own thoughts and feelings. More presentations and film screenings were held, and evening classes began. Soon sub-groups began to form, such as the Heart and Soul group, the Energy group and the Health and Medicine group. Over the next year the Transition idea took off with courses and workshops, seed exchanges, a local currency (the Totnes Pound), tree plantings, oil vulnerability auditing and more. People all around the world took an interest in what the inhabitants of Totnes were doing and the concept has since spread widely. Today there are 634 initiatives worldwide in the Transition Initiatives Directory[1] and several more that are not registered on the Transition network. There are 65 initiatives listed on the Transition Towns New Zealand website[2], of which 8 are

1 http://www.transitionnetwork.org/initiatives?themes=All&community_type=All&status_value=All&country=All&field_title_search=

2 http://transitiontowns.org.nz/groups

registered in the transition network as official initiatives (Brooklyn, Kapiti, Opotiki Coast, Orewa, Timaru, Waiheke Island, Whanganui and Nelson) and two are registered as "mullers," or towns "thinking it over" that have registered on the Transition Network but not got official status (Tauranga and Waitati).

1.2 Principles

1.2.1 Peak Oil and Climate Change

In his 2008 publication *The Transition Handbook,* Hopkins explores the twin challenges of peak oil and climate change as the motivation for an energy descent, resilience and localisation. He then introduces the Transition movement as a way for communities to address these issues from a positive perspective. The book presents a vision of a potential future and then a manual to guide people wanting to start Transition initiatives in their communities.

1.2.2 Differences from Conventional Environmentalism

The Transition Handbook distinguishes the Transition approach from conventional environmentalism. Key differences are that it takes a holistic, community –based approach rather than individual behaviour focusing on single issues, and is motivated by hope, optimism and proactivity rather than fear, guilt and shock.

Hopkins admitted in the 2008 Handbook that he doesn't know when we will reach peak oil, if or when we will exceed the 2 degrees Celsius threshold, or how things will unfold after either of these events. What he is sure of, however, is that a future with less energy is inevitable – whether we reduce our usage to live in a stable state, or disintegrate into a state of catastrophe. The motivation behind the Transition Town concept is to allow us to undergo a creative descent to a sustainable and prosperous future, rather than to "deprivation, misery and collapse." (Hopkins 2008, pg 53)

The Transition movement does not require communities to be self-sufficient, i.e. producing everything they use, but rather self-reliant, i.e. able to produce everything they need to get by in a crisis. Hopkins acknowledges that not everything can be produced locally, and there will always be items that make more sense to import, and benefits to exporting some products. He advocates producing locally what we can, so that were trade links to be cut, the community could survive in an isolated state. He uses the cake analogy – where the ingredients for the cake, or the essentials, are produced locally, and it is only the icing, or the luxuries, that are imported. This would be a reversal of the current situation, where a large percentage of our necessities are imported and it is often only a few specialty or luxury items that are sourced locally.

1.2.3 The Six Principles

Hopkins presents six principles in *The Transition Handbook* that underpin the Transition Model, which are outlined below:

1. Visioning – we can only move towards something if we can imagine what it will be like when we get there. Create a clear and enticing vision of our desired outcome.

2. Inclusion – We must network outside of our comfort zones, e.g. "green" people must talk to "business" people

3. Awareness-raising – The mainstream media gives mixed messages – we must assume no prior knowledge and set out the case clearly, accessibly, entertainingly and objectively.

4. Resilience – Central to the transition concept, discussed below

5. Psychological insights – Use positive visioning to inspire hope, create safe spaces for people to talk and get support, celebrate successes

6. Credible and appropriate solutions – Conventionally people can only imagine what they can do in their own home, such as turning off lights, or what the government can do on a national scale. The transition model allows people to explore real solutions on the in-between level of the community.

1.2.4 Resilience

The central theme of the Transition town movement is resilience. Hopkins distinguishes this from sustainability with the example of recycling plastics: Whereas collecting plastics to be sent away for centralised recycling is a sustainable practice, it does not actually put the community in a better position to face climate change and peak oil. In contrast, recycling plastics locally for functional purposes, such as compressing it into building blocks or an insulating product, does add resilience to the community (Hopkins 2008).

What is Resilience?

The concept of resilience is not clearly defined or easy to measure. People involved in the Transition movement use it frequently and cite it as the purpose of forming a Transition initiative, but there is no clear cut definition of what exactly resilience is.

Hopkins quotes a definition of resilience by Walker et.al (2004):

> "the capacity of a system to absorb disturbance and reorganize while undergoing change, so as to still retain essentially the same function, structure, identity, and feedbacks." (Hopkins 2008, pg 54).

He references English environmental writer and economist David Fleming (2007) as identifying the following features of a town with enhanced resilience:

> "-If one part is destroyed, the shock will not ripple through the whole system
>
> -There is wide diversity of character and solutions developed creatively in response to local circumstances
>
> -It can meet its needs despite the substantial absence of travel and transport
>
> -The other big infrastructures and bureaucracies of the intermediate economy are replaced by fit-for-purpose local alternatives at drastically reduced cost"

Other authors have interpreted the term "resilience" in different ways.

Magis (cited by Lapiere-Fortin 2011) defines resilience as:

> "the existence, development and engagement of community resources by community members to thrive in an environment characterised by change, uncertainty, unpredictability,

> and surprise. Resilient communities intentionally develop personal and collective capacity to respond to and influence change, to sustain and renew the community and to develop new trajectories for the community's future."

Community Solutions blogger Pat Murphy (2011) discusses several different views of resilience, including the ability of communities and individuals to help themselves in an emergency, the capacity to adapt in order to survive, and as an aspect of sustainability. He contrasts different views of resilience: how well a system can withstand shocks without leaving its current state versus how well a system can recover from shocks that knock it into another state; the physical interpretation that applies to systems versus the psychological interpretation that applies to people.

1.3 The Role of Government

Although the Transition initiative is itself a localised grassroots movement, Hopkins states in the Transition Handbook that it will function best in the context of a combination of top-down and bottom-up responses. He is of the view that it is essential to work with Government, but we do not need to wait for them and in fact must lead the way and provoke them to respond. Government policy alone cannot impose a sustainable energy descent – people must be actively involved on a community level.

According to Hopkins the Transition concept is by definition a grassroots movement and should initially operate independently of government input. It is important that it interacts with the local government, but on its own terms, so that the role of government is "not to lead or guide them but to support them" (Hopkins 2008, pg 145). Councillors and politicians may be part of the Transition group, but the idea is for the transition initiative to submit input and ideas to the government rather than the other way round.

In October 2010, Hopkins submitted a PhD entitled *Localisation and Resilience at the Local Level: The Case of Transition Town Totnes (Devon, UK)* to the School of Geography, Earth and Environmental Science at the University of Plymouth. In this he concluded that "in spite of its initial focus on catalysing small, grassroots, community-led projects ... the next phase of the Transition movement, and perhaps, by extension, the wider climate change/sustainability movement, is to shift the focus to governance and social enterprise." (Hopkins 2010a, pg 382)

He gives the example of Monteviglio in Italy as "perhaps the most striking example of Transition thinking adopted by a local authority" whose commitment to the transition movement is illustrated in their commitment to "inform the community on the limits of a concept of development based on unlimited resources, on the need to reconvert an economy based on the massive use of fossil fuels and other non-renewable resources and on the benefits of a more frugal and sustainable lifestyle." (Hopkins 2010a, pg 263)

1.4 Four Types of Transition Initiatives

In the *Transition Initiatives Primer* (2008), Brangwyn and Hopkins identifies four different types of Transition Initiatives that have come out of the Transition towns concept:

1. Local Transition Initiative – embedded in its own locale where the steering group inspires and organises the local community. The most frequent and simple initiative, where real change happens.

2. Local Transition Hub – based within a large congruent/contiguous area with its own identity (e.g. a city). Fire up initiatives in its locale – role of inspiring, encouraging, registering, supporting, networking, training.

3. Temporary Initiating Hub – a collection of acquainted individuals from separate locales working with each other to help set up local transition initiatives in their home communities. Handle inspirational work

4. Regional Coordinating Hub – a collection of existing transition initiatives that get together for mutual support and coordination around activities such as sharing resources and representing a united front to various government bodies.

1.5 Vision

Hopkins presents a vision of what communities may look like in 2030 in *The Transition Handbook* (2008):

Agriculture

Farms are highly diversified, producing not just food but also local-scale renewable energy, building materials, medicinal plants and more. The countryside is more populated and the average farm size is smaller. Backyards are utilised for keeping gardens and small livestock such as chickens. More horses and people work on farms, with the remaining machinery powered by biofuels. Nut trees are widespread, producing oils for biodiesel and also foods. Carbon sequestration is a key Government priority, with perennial trees serving this purpose as well as providing crops.

Health

There is a greater focus on promoting health and preventing rather than treating disease, and nutrition and herbalism are part of the school curriculum. Unconventional treatments take a bigger role, complementing conventional medicines. About half of all prescribed medicines are sourced locally, with plants grown on local farms processed in local laboratories and chemists making over half of the medicines they sell on the premises.

Education

Schools are smaller and more localised, with the curriculum including gardening, cooking, woodwork skills, construction, renewable energy systems, conflict resolution and leadership. Colleges of the Great Reskilling also offer courses in practical sustainability skills, and school grounds are turned into productive gardens.

Economy

A long recession has left the national currency in short supply and localities are forced to develop their own economic systems. Systems such as Time Banks and LETS (Local Exchange Trading Systems) flourish and government funding is invested in local currencies. There is a trend towards businesses being owned by local people.

Transport

Cheap air travel is a thing of the past and private car ownership is seen as “positively anti-social.” Access to cars is provided through car clubs, and streets prioritise pedestrians and cyclists, with a

well-integrated public transport system and a much smaller place for cars. With more entertainment venues locally, the need to travel for holidays and recreation is reduced.

Energy
The nation is nearly self-reliant for energy needs, with Tradeable Energy Quotas for each citizen and business (an annual carbon allowance, where a card is swiped with each purchase of energy or fuel and surplus quotas can be traded). Renewable energy is generated domestically, with localised mini-grids connected to the National Grid and to individual generators.

Building
Energy efficiency is a priority in new construction, and older buildings are retrofitted. Homes are smaller, with new living arrangements such as co-housing (private homes sharing common facilities). Environmentally friendly materials used for construction, of which 80+% are sourced locally. Houses produce more energy than they consume, require no space heating and are off-the-grid for water and sewage. The German originated PassivHaus model (which uses design principles such as insulation, passive solar and airtightness to meet heating and energy use standards) is the standard for new construction.

1.6 The Twelve Steps of Transition

The Transition Handbook (Hopkins 2008, pp 148-175) suggests twelve steps that people can take to begin their community's Transition, but emphasises the fact that they are only guidelines and do not have to be carried out strictly in this order.

1. Set up a steering group and design its demise from the outset
    - The steering group should get the Initiative through to stage 5 and disband when at least four sub-groups are formed
2. Awareness Raising
    - Identify key allies, build crucial networks and prepare the community with film screenings, talks and Q&A with experts, and media items.
3. Lay the foundations
    - Network with existing groups and activists – acknowledge and honour their work and stress that they have a vital role to play. Tell them how a Transition Initiative might be able to act as a catalyst for getting the community to explore solutions and to begin thinking about grassroots mitigation strategies
4. Organise a Great Unleashing
    - About 6 months to a year after first film screening, hold a large event to move the project right into the community at large, build momentum, celebrate a milestone and create a piece of history
5. Form working groups

- Groups to focus on specific aspects of the process with their own ways of working and own activities e.g. food, waste, energy, education, youth, economics, transport, water, local government

6. Use Open Space

   - A group of people coming together to explore a topic with no agenda, no timetable, no coordinator and no minute takers

7. Develop visible practical manifestations of the project

   - Avoid being perceived as a talking shop where people draw up wish-lists. Demonstrate visible progress without embarking on projects that will ultimately have no place on the EDAP

8. Facilitate the Great Reskilling

   - Give people a powerful realisation of their own ability to solve problems, achieve practical results and work cooperatively alongside others with courses such as cooking, cycle maintenance, natural building, home energy efficiency, food growing, herbal walks etc.

9. Build a Bridge to Local Government

   - Government are vital for planning issues, funding and providing connections and may be surprisingly supportive. Expose them to ideas and hope that they will begin to adopt them

10. Honour the elders

    - Engage with those who directly remember the transition to the age of Cheap Oil, learn how things were done, what the invisible connections between the different elements of society were and how daily life was supported

11. Let it go where it wants to go

    - Keep the focus on building community resilience and reducing the carbon footprint rather than specific details and let the collective genius of the community come up with a feasible, practicable and inventive solution. Don't hold onto a rigid vision or try to come up with all the answers

12. Create an Energy Descent Action Plan

    - Build a local resource picture, create a vision for the community, backcast from the vision to "today," take into account the local government's Local Community Plan and Partnership Strategy, envision Transition Tales, draft, review and finalise.

1.7 The Seven Buts

The Handbook also outlines the commonly perceived barriers, The Seven "Buts," and explains why they are not real obstacles to Transition (Hopkins 2008, pp 146-148).

But 1: No Funding
Solution: Enthusiasm is more important; funders can demand control and influence the direction of the initiative. The project can be self-funding and generate an adequate amount of income e.g. from film screening fundraisers.

But 2: They won't let us
Solution: Transition Towns operate "below the radar," neither seeking victims nor making enemies. They don't seem to be incurring the wrath of any existing institutions but on the contrary people in positions of power are enthused, inspired and supportive.

But 3: There are already green groups
Solution: Transition forms a common goal and sense of purpose for existing groups. Liaising and networking will enhance and focus their work, rather than replicate or supersede it.

But 4: No one in this town cares about the environment
Solution: Often surprising people are keen advocates of some key elements such as local food, crafts, history and culture.

But 5: It's too late
Solution: Maybe it is, but probably not. "The uncertainty of our times is no reason to be certain about hopelessness."

But 6: I don't have the right qualifications
Solution: What is important is that you care about where you live, see the need to act and are open to new ways of engaging people. Your role may just be to get the ball rolling for others

But 7: I don't have the energy
Solution: People will come forward to help. The Transition Initiative process generates an unstoppable energy – it will develop its own momentum.

2. Literature

2.1 Appraisals

2.1 1 Positive

One of the things that people find most attractive about the Transition movement is its positive outlook and visioning, using the carrot rather than the stick to motivate people to act. Like conventional environmentalism, it presents the doom and gloom scenario of where we will end up if we continue on with Business As Usual. Conventional environmentalism stops at this point, leaving some people feeling helpless and disheartened so that they "will not strive to change their behaviour but will avoid the topic altogether" (Kaplan 2009, cited by Höynälänmaa, 2010, pg 1). Reporters Jowit and McKie of British newspaper *The Observer* reported in 2007 that although "nine out of 10 UK citizens believe climate change is occurring and is being driven by human activities," they "are either baffled about how to stop it or are ignoring the issue," and are in fact increasing their car journeys, flights and electricity usage, while opposing green taxes and wind farms.

Transition thinking tackles this paralysis by presenting an attractive vision of a lower energy future as something actually more desirable than our current energy-intensive lifestyles and thus inspiring people to work towards this.

Whether Transition towns make a significant difference in the long run or not, perhaps they can be seen as something that improves people's quality of life in the meantime. Jessica Rae Rudningen, a Victoria University student, asserts that "community activities reduce feelings of isolation created by media negativity as well as the resultant fear and anger people harbour in response to peak oil and climate change"[3] and that "often people become paralysed with fear and are unable to change their unsustainable behaviour... instead of allowing behaviour paralysis, transition town concepts of learning how to grow food provides a feeling of control" (Rudningen 2009, pp 40-41). Similarly, British sustainable economics academic Paul Ekins reflects in his review of *The Transition Handbook* "if it makes people feel better when they contemplate the twin challenges of global warming and oil depletion; if it gives them a sense of purpose to their lives; if it spurs them to positive local actions in their communities that give them hope, exercise, fun and some contact with their natural environment; if it helps communities come together and builds social capital – and there is some evidence that Transition Towns initiatives do all these things – then on all these counts it can be welcomed" (Ekins 2009).

2.1.2 Grassroots

While government policy is thought to be an important part of the energy descent, it does not engage individuals or communities, who need to see direct personal benefits if they are to be motivated or inspired to take action. Michael Jefferson of the London Metropolitan Business School writes that the top-down approach "has failed to harness the sympathy, imagination, self-interest, or sound options of energy users" and "it is imperative that the involvement of people at the grassroots

3 Rudningen pg 43

level is harnessed." (Jefferson 2008, pg 4116). It is through that the Transition method can provide a basis from which grassroots involvement can grow and work alongside top-down strategies.

2.1.3 Holistic

One of the declared key strengths of Transition is that it is "a holistic model in which people concentrate where they are interested and skilled, leaving other areas to other people, whilst all coming under the Transition umbrella." (Balls 2010, pg 34). The idea is that individuals can get involved as much or as little in as many or as few projects as they want, and the power of the community as a whole will achieve great things. Transition acts as a way to bring different environmental groups and interest groups together so they can collaborate and help each other.

This view is reinforced by the opinions of those involved in the movement. 50% of Transition Norwich members felt that the main factor distinguishing it from other local environmental groups was the fact that it covers a broad range of issues. Gill Seyfang of the University of East Anglia conducted a 2009 survey of UK Transition initiative co-ordinators. Several of the respondents in her survey objected to ranking the priorities of the Transition movement, viewing this as "an artificial exercise when the impacts and implications of them were so intertwined" (Seyfang 2009a, pg 5).

2.1.4 Collectivist Practical Action

The problem of environmental concern and environmental inaction

2007 research by the European Commission found that although 96% of Europeans said that protecting the environment is important for them personally, they "rarely see their consumption habits as an environmental concern" and "are not likely to take actions that are directly related to their lifestyles and consumption habits such as using their cars less or purchasing green products." (European Commission 2008, pg 75). People often feel that their efforts as an individual cannot make a difference when no one else is doing the same, or don't know how to change their behaviour in a society that dictates the way we live.

Seyfang's 2008 book, *The New Economics of Sustainable Consumption: Seeds of Change,* outlined the problems surrounding individual action: The utilitarian approach of the 1990s assumed that people's unsustainable behaviour was attributable to them not being informed on the impacts of their behaviour – however subsequent awareness-raising campaigns turned out to achieve very little, raising interest in the value-action gap. The social and psychological approaches that Seyfang studied found that "people do not act as isolated individuals, but rather as people-in-society; we do not respond simply to our innate wants and desires, but also and sometimes overwhelmingly to the influences of our peers and fellow citizens, our unconscious habitual routines and to social norms." (Seyfang 2008b). Wilk (2002) suggested that "consumption is a social code and people consume to fit in or stand out" and Burgess (2003) that "it is asking too much of the consumer to adopt a green lifestyle unless there is a social context which gives green consumerism greater meaning" (cited by Seyfang 2008b). The systems in a consumer-capitalist society force individuals to follow certain patterns of consumption whether they are willing consumers or not. It is almost impossible to break out from this behaviour as a single person; it must be done collectively so that rather than having individuals going against the norms, the norms are changed. Seyfang (2008b) gives the following example:

> "A person might choose one brand of washing-machine over another because of its greater energy-efficiency, but what they cannot easily choose is to purchase collectively and share common laundry facilities among a local group of residents, or to redefine social conventions to reduce the socially-acceptable frequency of clothes-washing."

The advantage of Transition

The Transition movement provides a context in which a sub set of people can work collectively in the hope that societal norms may in fact be gradually changed. It allows people with similar interests to come together, share ideas and bring these ideas to fruition. In the case of the above example, perhaps it could start with someone placing an offer in the time bank to do laundry for others. As the idea spreads of the option of doing washing outside of your own home, people might stop replacing their old washing machines and instead approach their neighbours about sharing facilities. A redefinition of the socially-acceptable frequency of clothes-washing would be much more difficult but might begin simply by getting people to talk about it - it is quite possible that people have false impressions of how often others wash their clothes. One person who admits to wearing the same shirt two days in a row might give another who changes their shirt every day, but thinks it unnecessary, the assurance they need that it is okay to do the same. In this way the norms can be gradually shifted simply by getting people to open up to each other and challenge society.

2.2 CRITICISMS

Despite all the positive attributes of the Transition movement, there have been several criticisms which are discussed below.

2.2.1 Not Radical Enough

An Australian academic and writer, Ted Trainer, commends the Transition movement as being on the right path but feels that "unless the movement radically alters its vision and goals I do not think it will make a significant contribution to solving our problems" but rather will "do all sorts of good things, which will not turn out to have made much difference to the crucial issues" (Trainer, 2010). He argues that the Transition movement, if successful, can result in only a minor reform of consumer-capitalist society when what we really need is a total replacement of consumer-capitalism, at a completely different level to just initiating good green practices within it – and even if Transition advocates believe that they are working towards this, the things that they are doing are not likely to have that effect. He is critical of the fact that the goal seems to be to make the town safe from the coming storm but to go on living in it in a typical rich world affluent way and argues that transition initiatives can be easily accommodated within consumer-capitalist society as "lifestyle choices and hobby interests of a relatively few people" (ibid). What we need, according to Trainer, is not resilience, but a reversal of the obsession with affluent living standards and an Economy B, towards self-government of each town. He says "it is not oil that sets your greatest insecurity; it is the global economy" (ibid).

Trainer outlines his "Simpler Way," which is in many ways similar to Hopkins' vision, in his book *Renewable Energy Cannot Sustain A Consumer Society* (2007). A key difference is that while Hopkins advocates self-reliance and clearly distinguishes this from self-sufficiency, Trainer calls for self-sufficiency for "food, materials, leisure activity, artistic experience and community" (Trainer 2007 pg

140). Trainer also differs from Hopkins in his support of self-government, saying that as well as working on community projects and services suggested by Hopkins, voluntary committees and working bees would "also deal with many of the functions councils now carry out for us that would remain, such as maintaining our parks and streets, and in fact energy, water and "waste" systems," therefore reducing income tax rates. According to Trainer most decisions would be made by voluntary committees and community vote, although "there would still be some functions for state and national governments, and there would be a role for some international agencies and arrangements, but relatively few" (ibid pg 142). The new economic system that Trainer proposes would require "immense cultural change" which he admits "might be too difficult for us" (ibid pg 145). The key principle of the proposed new economy is that it is motivated by need, not by profit and market forces, so that people "come to see the economy not as the arena where all compete for as much wealth as possible, but as the system we maintain for routinely providing us with those relatively few goods and services we need in order to live," taking into account "all relevant moral, social and ecological considerations, not just dollar costs and benefits to those with capital or to purchasers" (ibid pg 144). There is no economic growth and less cash flow, with most people only working one or two days a week for money and spending the rest of their time "working-playing" around the community, and unemployment and poverty are eliminated. There is still a place for cash and for market forces, but they are only small sectors of the economy and no longer the driving forces behind it.

Jonathan Balls, a University of Cambridge geography student, presents a similar view to Trainer, saying that "while Transition theory proclaims a radical message, in practice initiatives are developing ideas and projects that can be characterised as 'mainstream' environmental work, including: community gardens, pushing funding for renewable energy projects, encouraging recycling and raising awareness. Such projects hardly indicate the radical aspects of Transition Theory" (Balls 2010, pg 28).

Rudningen interviewed a participant who expressed the view that "Transition towns doesn't want to change the world drastically" (Rudningen 2007, pg 47) and Hopkins himself declares that Transition is "publicly perceived as a relatively mainstream organisation, and it is little associated with the 'alternative' identity" (Hopkins 2010a pg 268).

Trainer is not the only one who believes that the mainstream image and appeal of the Transition movement will prevent it from making a real difference. Chatterton and Cutler of the TRAPESE (Taking Radical Action through Popular Education and Sustainable Everything) Collective express very similar views and emphasise the importance of a meaningful social change and challenging "the idea that everyone has the "right" to consume in our society" (Chatterton and Cutler 2008, pg 25). They criticise the Transition model for not wanting to "rock the boat" (ibid, pg 30) but aiming to "create a model that everyone can agree to" (ibid, pg 24) and argue that true change can only come from argument and debate. The American peak oil exponent and author, Richard Heinberg, meanwhile, is of the opinion that "for Transition to be based on the concept of a gradual 'energy descent' could leave it irrelevant in the context of fast-moving events." (cited by Hopkins 2010a, pg 286). Hopkins' response to this criticism was that "the building of resilience, and short-term emergency responses, are quite different things" (ibid, pg 287) and that emergency planning is likely to be handled by government agencies.

Hopkins says that, “from the perspective of the Transition movement there is a clearly stated belief that Transition is one of many responses that will be necessary, not a ‘silver bullet’ cure-all. Transition cannot achieve local and national-scale resilience alone, nor does it claim to be able to” (ibid, pg 288). He proposes a hierarchy of responses where local responses include Transition initiatives, Energy Descent Plans, climate friendly communities, community supported agriculture, land trusts, credit unions, locally owned energy supply companies (ESCOs) and localism. On a national level he suggests strong climate change legislation, tradeable energy quotas, a national food security strategy and devolution of powers to local communities; and on an international level strong international climate change protocols, contraction and convergence, a moratorium on biodiesel production, oil depletion protocol, rethinking economic growth and biodiversity protection (ibid, pp 288-289).

While this can to some extent counter Heinberg’s criticism, it does not address the issue of replacing the consumer-capitalist society and economy. A brief mention of “rethinking economic growth” hardly constitutes the kind of change that Trainer and others call for, and indeed the other responses within the hierarchy could be integrated into existing society.

A Canadian blogger known as Shaun criticises the depoliticised nature of the Transition movement for lacking “popular urgency” because its motivations do not hold enough direct and immediate consequence to people’s lives, and argues that it needs “a social and political relevance that connects to people's lives in the here and now.” He writes that the price of oil never quite gets high enough that people actually can’t afford to buy it or its products, and the really serious effects of climate change are too abstract, uncertain and far in the future. People get enthused until they find out that it will involve a great deal of money, time and work, and then lose interest. He feels that Transition already has the ability to reconnect people socially on a community level, and that the next step is to work towards “political solidarity and mobilization” to “establish a system that moves away from economic growth as a goal and towards the goal of social development, with adequate health care, education and shared cultural experiences.” He compares the Transition movement to the Black Panther movement of the 60s and 70s (a revolutionary socialist movement for African-American rights) and suggests that Transition needs to be a “Green Panther” movement.[4]

Connors and McDonald of Deakin University are of the opinion that “the apolitical nature of the TT movement is its allure as well as its problem, both strength and limitation” (Connors and McDonald 2010, pg 12). They argue that there are communities “split down the middle” (ibid, pg 9) by Transition-related issues such as adoption of wind farms and carbon trading, and that Transition’s pledge to be all-inclusive and to not take sides will render it irrelevant in the face of such issues.

2.2.2 Too Prescriptive

Emma Fergusson, a postgraduate planning student from the University of Auckland, criticised the Transition model too, saying that although it is claimed not to be prescriptive, “the criteria for formalisation do in effect constitute a prescription.” (Fergusson 2009, pg 40). She argued that Transition towns are, in a sense, governed by the Transition Network, causing tension to arise between insurgent, flaxroots planning and de facto governance structure. According to her case studies in New Zealand, Transition Towns are torn between the need to have a formal structure in

4 http://urbpharm.blogspot.com/2011/01/green-panther-movement.html

order to become registered with the Transition Network and to access funds from local government, and the way in which this threatens the organic quality of the movement. Connors and McDonald agreed, saying that the Transition Primer "equally makes clear what TTs should and should not do and what they must or must not do in order to be recognized as 'official'" (Connors and McDonald 2010, pg 10). Philosopher and environmentalist Isis Brook (2009) expressed similar concerns that "if this were to turn into some kind of top-down initiative it would undermine itself as the purpose is to build local resilience and help local community groups to shape their own way of making the transition from oil dependency to local resilience."

The Transition Initiatives Primer justifies the need for these criteria "to make sure that while we actively nurture embryonic projects, we only promote to "official" status those communities we feel are ready to move into the awareness raising stage" and identifies the benefits of official status as "additional levels of support such as speakers, trainings, wiki and forums that we're currently rolling out" (Brangwyn and Hopkins 2008, pg 13). The Transition network states that their purpose is to support the Transition Initiatives that are springing up around the UK and Ireland with materials, training courses, events, tools & techniques and resources. The advantages of becoming official are clearly much stronger in the UK and Ireland than they are in New Zealand or the rest of the world, where many of these things are not offered.

Hopkins emphasises that the criteria are constantly evolving and are not set in stone. Below are the criteria as laid out on pp 14-15 of the *Transition Initiatives Primer*:

1. An understanding of Peak Oil and Climate Change as twin drivers (to be written into your group's constitution or governing documents)
2. A group of 4-5 people willing to step into leadership roles (not just the boundless enthusiasm of a single person)
3. At least two people from the core team willing to attend an initial two day training course. (Currently only in the UK)
4. A potentially strong connection to the local council
5. An initial understanding of the 12 steps
6. A commitment to ask for help when needed
7. A commitment to regularly update your Transition Initiative web presence – either the wiki or your own website
8. A commitment to write up something on the Transition Towns blog once every couple of months (the world will be watching..)
9. A commitment, once you're into the Transition, for your group to give at least two presentations to other communities (in the vicinity) that are considering embarking on this journey – a sort of "here's what we did" or "here's how it was for us" talk
10. A commitment to network with other communities in Transition

11. Minimal conflicts of interests in the core team

12. A commitment to work with the Transition Network re grant applications for funding from national grant giving bodies. Your own local trusts are yours to deal with as appropriate

13. A commitment to strive for inclusivity across your entire initiative. (to avoid extreme political groups that have discrimination as a key value)

14. A recognition that although your entire country or district may need to go through transition, the first place for you to start is in your local community. In exceptional situations where a coordinating hub or initiating hub needs to be set up, that hub is responsible for making sure these criteria are applied to all the initiatives that start within their area.

15. Recommended that at least one person on the core team should have attended a permaculture design course

Similarly, Connors and McDonald claim that the Twelve Steps also constitute a prescription. The criteria for becoming an "official" Transition initiative, however, only require an understanding of the twelve steps, not a commitment to follow them, and Hopkins explicitly states in *The Transition Handbook*: "It is important to observe that they are not meant to be prescriptive; rather they are intended to suggest pieces of the puzzle you may choose to assemble. You do not have to follow them religiously, step-by-step: you can use the ones that feel useful, discard the ones that don't, and add in new ones that you come up with." (Hopkins 2008, pg 148).

Connors and McDonald also write that step twelve – creating an Energy Descent Action Plan – is "equally prescriptive and does not allow for a community to 'go where it wants to go'" (Connors and McDonald 2010, pg 5). Even ignoring the fact that Hopkins emphasises that not all the steps must be implemented, creating an Energy Descent Action Plan hardly seems like a rigid requirement – it does not specify anything about the plan other than that it should exist. With making the energy descent process a positive experience being the purpose of Transition, it hardly seems sensible to go into it without some sort of plan of attack – even if an Energy Descent Action Plan is created, it does not necessarily have to be followed but can at least provide a direction to start in.

2.2.3 Limited in reach

Research by Balls found that "participation of communities is a minority, usually 5-10%" (Balls 2010, pg 39) and Hopkins' interviews in Totnes raised concerns that "TTT was 'preaching to the converted,' appealing to 'the usual suspects'" and sparking little interest from those under the age of 30 (Hopkins 2010a, pg 365).

Seyfang's 2009 UK survey found that the main challenge faced by Transition initiatives was growing the movement, with 76.4% of respondents stating this as one of their top three challenges. The biggest single obstacles identified were a need for more active members (36.1%), reaching out to the wider community (30.6%) and a lack of time (29.2%). Similarly to Hopkins' research, several groups mentioned a need to reach "the unconverted," pointing out that it was mainly "the usual suspects" or "the green-belt" who were involved. (Seyfang 2009a, pp 11-12).

Richard O'Rourke of the London School of Economics & Political Science found that Transition members were mainly "the well-educated middle class that one expects to find in an environmental

movement," for whom "their value system, most likely well established by their teens has meant that they've been environmental activists for some time and Peak Oil is something which simply conforms with the 'limits to growth' paradigm that they've already accepted" (O'Rourke 2008, pg 29). He found that people drawn to the movement display post-materialist values which "do not reflect the continued hegemony of mainstream market values" and argues that "'converting' the public en-masse to a new faith of limits in advance of its reality arriving looks like it might take the Second Coming" (ibid, pg 32).

In a sample of Transition Norwich members (Seyfang 2009c), 83% had at least a Bachelor's degree or equivalent, and none had no formal qualifications. This displays an exceptionally high level of education compared to the population as a whole. Despite the high education levels, Transition members tended to come from lower income groups and were more likely to work part-time or be self-employed, and less likely to be in full-time employment. This reinforces O'Rourke's findings that the Transition movement is dominated by a post-materialist culture, where they are less concerned with making money to satisfy consumerist needs, and rather seek fulfilment in other ways.

A Stanford University survey of users of the *Transition In Action*[5] social networking site found respondents to be "politically active, educated, white adults, with women making up 58% of the sample" (Parigi and Gong, 2010). They are "dissatisfied with traditional means of political participation" (ibid) and prefer to take proactive, non-contentious collectivist action rather than liaise with government. As expected of users of a social networking site, they are web savvy and very active online. The survey found that initiators of Transition initiatives tended to have found out about the movement from friends or relatives, stay up to date via local meetings and spend more time with people involved in Transition than with people not involved. In contrast, joiners of existing Transition initiatives tend to have found out from the internet or flyers, keep up via the internet and spend more time with people not involved in Transition.

2.2.4 Limited in Practical Projects

Another problem identified by Balls is that "capacity and funding restraints limits the effectiveness of projects furthering the goals of Transition being implemented" and "while there has been some success in some initiatives in the areas of local food, local currencies, local shopping and awareness raising; this has been limited, and tied to funding, institutional support and having the right people with the necessary skills" (Balls 2010, pg 42). In Hopkins' analysis of Totnes, he disagrees with an absence of practical skills being an obstacle, contrary to what he had hypothesised. His findings showed that the main barriers were "issues of wider community governance, and the ability to create viable social enterprises" (Hopkins 2010a, pg 360) which supports Balls' claims of a lack of funding and institutional support being a factor in the limited success of initiatives.

Hopkins found there was a "value-action gap," in Transition Town Totnes, where there are "high levels of awareness and concern around climate change and energy security failing to translate into widespread action." Despite "a general enthusiasm for the relocalisation concept," he found that it "struggles to gain a foothold in a world where people work longer hours than historically, are more indebted, and where the pervasive cultural trend is still very much in the opposite direction to

5 http://transitioninaction.com/

localisation" (ibid, pg 325). When asked about the relocalisation of energy generation, people were supportive of the idea but no one stepped forward to lead a project, saying they "would like to see it happen but would have little time to do it themselves" (ibid, pg 201). He also found that there were misperceptions "that engagement in TTT means physical outdoor work, that involvement with TTT and taking practical steps to reduce energy use at home are distinctly separate things, and the tensions between those who think it is all about people who talk but don't do much, and those who think it is all about physical action and little else" (ibid, pg 325).

Seyfang's survey asked co-ordinators to identify their groups' top three achievements. This revealed a distinct lack of practical manifestations, with the top three achievements reported by Transition groups being awareness-raising and community engagement (68.5 %), group governance (52.1 %) and building links (46.6 %). The only practical activity commonly reported was food and gardening activities at 39.7 %. Waste activities, energy activities, transport activities and business/economy activities were small components, at 12.3 %, 11.0 %, 5.5 % and 5.5 % respectively (Seyfang 2009a, pp 8-9).

Trainer (2010) points out that local currencies are often useless if not used correctly. The main advantage is to get unemployed people involved and producing to meet some of their own needs, and if they are just used in the place of national currency for standard transactions – as is often the case - they will have little or no real effect.

2.2.5 Internally Conflicted

Community Solutions blogger Pat Murphy quotes Rob Hopkins as saying "we didn't want to create something that was purely a vision, something that was a long prose piece about car parks turned into allotments and how quiet everything was and everyone has a spring in their step, nor did we feel able to create something that was a hard and fast plan.. What we created in the end was neither, and yet both at the same time*. Although it is called a Plan, I think of the Totnes EDAP as being more like a story..* a vision that is sufficiently inspiring, enticing, yet also achievable, that it begins to inform the culture of the town as a way forward" (Murphy 2011b). He quotes Michelle Colussi of the Canadian Centre for Community Renewal as saying it seems to be a "remarkably explicit, exciting, and community-based vision that tells us exactly what is to come about, but not how or by whom. Ultimately, the document acts like more of an Energy Descent *Invitation*, than a Plan. It entices other communities to have a go at the process for themselves" (ibid). Indeed the Totnes EDAP does not seem to be much of a plan at all, but rather a story of the past, an account of what has been done so far and an identification of the need for a plan.

Murphy continues to write that there tend to be two types of Energy Descent Action Plans emerging worldwide: Firstly those which are aimed at the public and present a vision along with practical steps for getting there, and secondly "concrete and analytical" plans aimed at governments and businesses which are full of technical content and hold no emotional appeal.

There has been much debate on the internet, in which Hopkins has participated, about the very nature of Transition. Michael Brownlee, co-founder of Transition Colorado, wrote an article calling for a "Deep Transition," or a transition based on spirituality and with "the Sacred at the very core of our work and at the center of all our activities" (Brownlee 2010). Hopkins then wrote a reply in which he agreed that this is a factor in Transition and very important to some people, it is "one take on a small aspect of Transition developed by a small group of people" and that to make "the Sacred" a central

theme of the Transition approach "seems to be the perfect recipe to alienate, bewilder and sideline Transition in the US or anywhere else, to condemn it to the back pages of Kindred Spirit magazine and restrict it to a very narrow slice of society" (Hopkins 2010b). The American professor of history and psychology, Carolyn Baker has responded claiming that most of the people she has encountered in Transition contexts have expressed that they "crave a deeper sense of meaning and purpose and a rich relationship with the sacred and the entire earth community." (Baker 2010) One commenter on Hopkins' post, Colin, revealed: "our group's stance on "spiritual" matters was a running question and point of tension throughout our short-lived Transition effort. I have no doubt that spiritual ideas (new age, religious, eco-spiritual or otherwise) can be part of a productive dialogue with Transition, but they are not intrinsic to Transition, and to conflate them is no help to the Transition movement" (Hopkins 2010b).

Another point they disagree on is whether the USA should "declare independence" from the UK Transition leadership and in fact what declaring independence involves and means: whether this would be renouncing the spirit of collaboration or encouraging the organic and evolving nature of Transition and the recognition that it must be unique to each place. Further yet the Transition movement is somewhat unclear on whether it is all about positive vision, or if some negative thinking regarding the predicament we are in and where we may end up in the future may be desirable or even necessary to motivate people to take action (Baker 2010).

2.3 How to Succeed?

2.3.1 History of Environmental action/community cohesion

As could be expected, Balls (2010) found that communities with histories of social activity and 'alternative' action form a good base for Transition. Hopkins considers this in the case of Totnes, which is "a community with a long history of alternative culture, a high 'post-materialist' population, which ranks highly on wellbeing indicators, and suffers relatively low levels of crime and social deprivation" and "clearly has a demographic, cultural, economic and political identity at odds with many other parts of the world" (Hopkins 2010a, pg 366). He questions the applicability of lessons learnt in Totnes to transition in other places. Certainly University of Otago Research showed that Waitati has a community that "has been long active socially, running its own film society and neighbourhood support" (Stephenson et. al 2010) as well as an increasing amount of sustainability initiatives, and only became a Transition town when they realised that the activities they were already pursuing were closely aligned with the movement.

2.3.2 Cognitive Priming

The success of the Waitati Energy Project is attributed to the cognitive "priming" of the community – they held a year of events to develop "energy literacy," shifting the cognitive norms of the community towards awareness and concern around energy efficiency and sustainability as well as education of the community's own characteristics. This resulted in widespread community support for the wind turbine proposal, showing a significant shift in "energy culture" and making the government take the proposal seriously. It was found, however, that energy practices were not so well aligned with cognitive norms in some areas, such as the rideshare scheme which failed to take off (Stephenson et. al 2010).

Seyfang (2009b) illustrates the importance of societal factors with the following example: while the best way to target the elderly may be to appeal to their vales of 'thrift' and 'make-do-and-mend;' younger people are more likely to respond to examples set by celebrities.

2.3.3 Dedication and experience

As could be expected, Balls (2010) found that it is important to have motivated, energetic, experienced and skilled individuals in the core team, with strong personal networks and contacts and highlights the benefits of connection to local government, saying "the most successful initiatives have carved out authoritative spaces within local environmental governance, legitimised especially through their connection to grassroots community. Within these spaces of governance, there is the opportunity for policy decisions to be taken, and projects to be implemented" (Balls 2010, pg 36). He emphasises the importance of the Internet as an "indispensable tool" for both networking and research and argues that it is being underutilised by transition initiatives, proclaiming "it is the internet that is crucial in growing the Transition Network. The internet allows people to network cheaply; sharing information, expertise and best practice as well as building the capacity of Transitions as an organisation" (ibid, pg 41).

A Transition Network web project survey (Brangwyn and Mitchell 2009) found that 92% of respondents considered themselves to be technically competent or proficient – however, this also may be skewed as the survey was conducted online and was promoted through the internet. Just under 80% of respondents used web pages for their initiatives, just over 40% used pages for theme groups, and less than 30% used personal profiles. Around half of respondents used the internet for file and information storage or for an online calendar or diary.

The book *Worldchanging* (ed. Alex Steffen 2006) gives the example of Muhammad Yunus and the Grameen Bank, which started out making small loans to women in Bangladesh to give them the opportunity to make a living for themselves, for example by purchasing a cow and then selling its milk and offspring. Its success would not have been possible without all the staff, borrowers and donors, but it was the absolute dedication of Yunus that brought it all together. *Worldchanging* compares this to the qualities of business entrepreneurs, and ponders "if we could redirect even a fraction of the entrepreneurial capacity in every society toward the creation of social value rather than the creation of purely economic value, what would the world look like?" (Steffen 2006 pg 353)

2.3.4 Resources

Rudningen's New Zealand case studies of Nelson, Lower Hutt and Aro Valley found that time, money and capacity were important factors in a transition initiative's ability to raise awareness, provide a supportive social environment, and provide feedback. In Nelson, the coordinators "were able to employ all three intervention strategies because they were paid to employ them." In Upper Hutt, this "was at a lower level than Nelson due to participant limitations of time and money" and in Aro Valley the same restrictions "were more inhibiting because of the smaller number of core group members" (Rudningen 2009 pg 112).

2.3.5 Organisational Culture

Wendy Everingham of Project Lyttelton attributes Project Lyttelton's ability to attract people to their "honest, decent, kind, open and trustworthy" culture and the fact that people are "amazed that there are people who want to and can operate in that sort of fashion" (Hall 2009, pg 20). Project Lyttelton values everyone who contributes, no matter how small, and it is this culture of appreciation

that inspires and empowers people. They have a flat organisational structure, where there is no place for hierarchy and the leaders do not control but rather guide and support. The focus is not on working hard, but on "working with delight" (Hall 2009 pg 24). They go with the flow and trust that the right things will fall into place.

2.3.6 Focus on Practical Projects

Several of the New Zealand groups seem to have had little activity other than awareness-raising – mainly in the form of film screenings. Although Hopkins recommends raising awareness as one of the first steps of transition, he also emphasises the importance of creating practical manifestations.

Seyfang's research concluded that "there is a limit to how much support or interest can be gained using awareness-raising strategies as a starting point. Attracting people to join in practical projects might be a more effective way of building community engagement" (Seyfang 2009a, pg 13). Respondents expressed a concern that the idea of meetings put people off and that it was better to "attempt to get some projects up and running and let the word percolate out and gather support as we go" (ibid, pg 12).

It is possible that the most effective motivator to get people involved is not the issues of climate change and peak oil, but the prospect of saving money or having a better lifestyle. One of Seyfang's respondents said that they have "had to work at things from the other end, getting interest in gardening, cutting bills, saving money and having fun, and then moving towards organics/climate change/peak oil awareness" (ibid).

O'Rourke suggests that even though 'converting' the masses seems an unrealistic dream, if Transition groups continue to "work as they are on satisfying their intrinsic goals to be members of a community, they may cultivate a similar desire in mainstream society and pull it towards Transition" (O'Rourke 2008, pg 32).

2.3.7 Recognition and Competition

A contributing author in *Worldchanging* suggests that recognition and competition are strong ways of motivating people to put effort into something:

"If you give a kid a hundred dollars and ask him to paint your fence, he'll probably do a decent job, and you'll have a fresh coat of paint. But if you tell all the kids in the neighbourhood that you're offering a hundred-dollar prize to the kid with the best idea about how to paint the fence, chances are the competition will work in your favour and you'll end up with the most beautiful fence on the block. Because where there's fanfare, there's motivation. Who doesn't want to shine in the limelight?" (Steffen 2006, pg 358).

2.3.8 City Scale

Worldchanging editor Alex Steffen argues that the way to energy efficiency is population density. Living in a tightly packed city, houses are smaller, there is less need to drive or even take public transport as most things are walking distance, and there are more people sharing fewer public amenities. He quotes studies by John Holtzclaw of the Sierra Club and Jennifer Henry of the US Green Building Council, which found that "people who live in drafty old homes in compact neighbourhoods use less energy (and spew less pollution) than even those suburbanites with new green homes and efficient appliances" (Steffen 2006, pg 228).

David Owen of the New Yorker wrote in 2009 that New York City is "a paragon of ecological responsibility." Though a 2007 Forbes analysis found Vermont to be the greenest state based on attributes such as farms, backyard compost heaps, environmentally aware citizens, LEED[6] certified buildings and energy efficiency policies, it did not take into account the impact that the sprawl of the state has on the landscape (building in an existing city causes minimal damage compared to building in the country) and the high automobile-dependence that it causes – one of the highest in the country, with the typical Vermonter consuming nearly 100 gallons more gasoline per year than the national average. In contrast, New York City residents consume on average a quarter of the gasoline of Vermonters, and 54% of New York households and 77% of Manhattan households have no car whereas in Vermont this figure is close to zero. They also use significantly less energy – an annual average of 4,700 kWh compared to 7,100 in Vermont and 11,000 nationally, and the carbon footprint of New Yorkers is less than 30% of the national average (even less for Manhattanites.) If New York City were granted statehood (and it is more populous than all but 11 states) it would rank 51st in per capita energy use. What is amazing about this is that they do it unintentionally – without having to make any conscious changes to their lifestyles, feel like they are giving anything up or being forced to do anything.

The same applies to Europe, where the residents are not necessarily any more eco-conscious or making any sort of effort, but are simply accustomed to more energy efficient lifestyles (at least in certain aspects) in an environment which is "constructed in a way that it's pretty easy to live green." There are more high-density cities, and many of the streets are centuries old and not designed to accommodate cars – so people just avoid driving on them. It is the norm not to have a clothes dryer but to have an indoor clothes drying area, not to have air conditioning but to have insulation and shutters, to put on more clothes instead of turning up to heat, to have a small fridge and a smaller car and to have limited hot water. Space is constricted – landfills are limited and often far away, and garbage is collected infrequently – so people simply produce less waste. Environmental reporter Elisabeth Rosenthal (2009), observing a Swiss woman, notes that "a whole week of her life created the same amount as the detritus of one New York takeout Chinese meal." They do not have to consciously do this – it is just standard for products to come with less or no packaging.

A contributing author in *Worldchanging* (ed. Steffen 2006) gives the example of Vancouver as a city that has grown in population by over half in twenty years, while hardly changing in physical spread during the same period. New developments, instead of spreading outwards, were turned inwards – towards living in compact communities and dense multi-storey buildings. The Southeast False Creek precinct was built to be the Athletes' village for the 2010 Olympics, and designed to be later converted into a community of apartments to cater for a range of income levels, offices and shops. The streets are designed to put pedestrians at the top of the road user hierarchy, followed by cyclists, public transport and cars last. Parking is limited, buildings meet a minimum of a LEED silver rating and many have green roofs, and there are plentiful green public parks and community gardens. The city centre has well-integrated walkways, cycleways and public transport, including an elevated "Sky-Train." As a result, despite the downtown population increasing by tens of thousands, the number of cars on the road has decreased and the air quality has improved.

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6 Leadership in Energy and Environmental Design – an international certification system

Rudningen proposes that “due to the amount of volunteer hours needed to support the transition initiative, a smaller community would likely be easier to empower” (Rudningen 2009 pg 114) and Hopkins suggests that the ideal scale is a market town because they “have a clear hinterland, historically defined by the villages and rural areas whose inhabitants brought their produce to that town rather than to an adjoining one” (Hopkins 2008, pg 143) or an island, with its defined boundary. He concludes that the ideal scale is one over which you can relate to and become familiar with – in a city this would work at a neighbourhood scale.

2.3.9 Some Lessons From The Past

Author and environmentalist Andrew Simms writes that “the flowering of new social movements often has its seeds in the past,” (Simms 2009, pg 260) observing that the first Transition initiative began almost exactly a century after the first of Ebenezer Howard’s Garden Cities was begun in Letchworth, England. In his 1965 book, *Garden Cities of To-Morrow* (previously published under the title *To-morrow: a Peaceful Path To Real Reform*), Howard outlines the benefits and drawbacks of living both in the town and in the country, and proposes a plan for a self reliant “town-country” Garden City which will combine the best of both worlds while eliminating the downsides of each. He describes in detail the physical layout of the city, its economy, how it will operate and how it can financially support itself. While being quite a different concept to the Transition Town, the Garden City is based on the same values: decentralisation, localisation, sustainability, community and self-reliance.

Simms uses the example of World War II rationing in Britain to illustrate that “when governments really want to, they can do anything, including good things” (Simms 2009, pg 156). Food consumption was reduced by 11%, motor vehicle use dropped 95%, total goods and services consumption fell 16% and home electrical appliance use was cut by 82%. These lifestyle changes, rather than having any negative impacts, saw dramatic improvements in health, but when the war was over everyone went back to their old ways. John Young (Director of the Centre for Environmental Studies at the University of Adelaide) laments that “people can put up with almost anything under siege or during periods of wartime rationing because they look forward to the promise of peace, prosperity and plenty if they hold out. For the subjects of an ecological dictatorship there would be nothing in the future but more cold, austerity and hunger. Only with equality of sacrifice can self-denial be politically practicable” (Young 1990, pg 106). Perhaps the only way forward is not to see it as self-denial and sacrifice, but as the only road leading to a prosperous and happy future.

Not only have governments proved that they can completely turn around an economic system, but so too have communities. When the Soviet Union collapsed, Cuba lost its cheap supplies of oil and its main trade links, while at the same time suffering an economic embargo imposed by the United States. Cuba’s economy had previously been based on exporting sugar and tobacco to the Soviet in return for oil, and considerable amounts of its land were dedicated to growing these crops for export using oil-intensive farming practices.

With the collapse of the economy, the oil imports dropped by over half and the use of chemical pesticides and fertilisers dropped by 80%. Cuba was facing a serious food shortage – but they managed to pull through. Within five years they were no longer under threat of famine, and although the calorie intake fell by a third, this was accompanied by health benefits such as reduced obesity, diabetes, stroke and heart disease. This was achieved through a switch to biopesticides,

biofertilisers and manure and to farming practices like crop rotation, intercropping and using animal labour. Small farms, urban farms and gardens became the predominant mode of agriculture, with 60% of the vegetables consumed in Cuba grown in its urban gardens, and land on larger farms was made available to anyone who wanted to utilise it.

This transition would not have been possible without forward planning. Despite having been dependent on oil and international trade, Cuba had already experienced some oil shortages during the 1959 revolution so had been researching less fossil fuel dependent farming methods and had the ability to start putting these into practice. They had a rationing plan for surviving wartime which they were able to implement. Since the revolution they had achieved high standards of education and health, putting them in a good position to face the crisis. Despite going through some rough times including shortages of food, medicine, transport and more, destructive storms and regular blackouts, Cuba pulled through against the odds to an arguably better-off future of self-sustainability and frugality (Perez 1995).

The effectiveness of Cuba's preparation is displayed in its ability to handle natural disasters, with which they often have to contend and having planning in place for – when Hurricane Michelle hit Cuba, only five lives were lost despite 20,000 homes being damaged. Compare this to New Orleans in the supposedly superior "developed world" – Hurricane Katrina left the city devastated with over 1,000 lives lost – an embarrassing display of a lack of preparation.

A contributor to *Worldchanging* (ed Steffen, 2006) gives the example of the abolition of slavery to illustrate that seemingly entrenched beliefs can be changed. Slavery was universally accepted as a necessary practice, but a small group of activists managed to change the hearts of British citizens, to the extent that 300,000 stopped eating sugar (the major product of British slaves). This is an example of cultural norms being reversed from the grassroots level – could the same happen for overconsumption?

2.4 TOTNES

Hopkins' PhD research on Totnes found that although Transition Town Totnes (TTT) "has a high level of public profile, a good level of community support (albeit much of it aspirational rather than active engagement), and has evolved greatly as an organisation" (Hopkins 2010a pg 360), it is "clearly still a long way from being the low carbon, relocalised economy proposed by the Transition movement, embedded as it is within nested hierarchies of economic, political and geographical influence, in which the prevailing trend is generally in the opposite direction" (ibid, pg 155).

2.4.1 Community:

Thus, while Totnes appears to have a high level of awareness of the implications of peak oil and climate change, according to Hopkins a definite value-action gap exists. Referring to the "Energy Cultures" framework of Stephenson et al (2010), this suggests that the cognitive norms are at a higher level than the material culture (e.g. technologies, buildings), causing energy practices to lag. Research on resilient food systems by aLp Pir of the University of Oslo (2009) found that "while Totnesians have a high level of awareness of environmental and food-related issues, this is not matched by their patterns of behaviour. First, producers and consumers seem largely motivated or constrained by the costs involving the production or consumption of foods. Secondly, the convenience of food, i.e. shopping, cooking and consumption, seems to be a priority for most

consumers" (Pir 2009, pg 92). This reflects that not only is the material culture discouraging to changing behaviour, but convenience is still valued higher than sustainability.

People may have conflicting cognitive norms, including an awareness of the need to change behaviour but also a reluctance to change influenced by wider influences in their culture and beliefs. This is evident in the fact that although "Totnes town is relatively well served in terms of public transport, being on a main railway line, and being small enough that most places can be easily reached by foot" (Hopkins 2010a, pg 211), there was found to be "a high degree of actual or perceived car dependency within the community, with only 20% believing it to be 'possible' or 'straightforward' to live without a car" (ibid pg 219). Attitudes towards air travel seem to be similar – despite awareness of the high emissions, Hopkins found that "anecdotal experience indicates that this is the carbon-intensive activity many, even those involved with TTT, are most reluctant to let go of" (ibid pg 191).

It was unclear whether the Transition Initiative raised awareness in the community and encouraged people to get involved, or whether it just provided an umbrella under which the existing environmentalists in the town could work together. The Focus Group found that few people attributed their awareness of the issues of climate change, energy security and price volatility to TTT, but Hopkins speculated from his survey results that "the findings that 75% of respondents had heard of TTT, and that 62% felt that 'the work TTT is doing is relevant to your life and to your concerns' could indicate some relationship" (ibid pp 102-193).

Hopkins' survey "revealed that Totnes could be seen as being a happier and more optimistic community than many" although it was not clear whether this is an effect of its involvement with transition, or if its engagement with transition was a result of it already being a happier place (ibid, pg 358). He found that although "there is a moderate statistically significant correlation between feeling satisfied with one's life and feeling that the community would pull together and work together in the event of a crisis" (ibid, pg 310), in general his PhD research did not support the hypothesis "that engaging in political activism (a broad term taken to include many of the activities involved in Transition) is associated with higher levels of wellbeing" (ibid, pg 308).

2.4.2 Government:

Hopkins found that the Totnes Town Council were onboard with Transition ideas, but they had little influence in the bigger scheme. The rest of the South Hams District Council were mainly conservative and opinions indicated that they viewed Totnes as "a joke" (ibid, pg 211), "fairies" (ibid, pg 232), and "a rather troublesome community" (ibid, pg 233).

Regarding the South Hams District Council's Totnes Development Plan Documents, the initial predictions were that "the community's response would be largely ignored in the final plan," however this turned out in the contrary, with a district councillor commenting "the recommendations that have come from that are actually quite close to those made by the community, and as a result, SHDC's proposals have been radically rewritten and there's a great improvement" (ibid, pg 235).

Totnesians are on the whole very critical of SHDC, with the Totnes Strategy Group Representative saying that they are only motivated by taking the least difficult path and that "our success lay in putting so many boulders in their way, that they've actually now found the least difficult path" (ibid,

pg 236). SHDC are defensive, with a senior planner at SHDC objecting that they are unfairly seen as the bad guys when in fact their rejected initial plans were intended to deliver what the community said they wanted: more jobs and affordable housing.

Hopkins writes that "although TTT cannot claim to have influenced the policy-making of its local government, it has sought some degree of engagement," which includes having members of both TTC and SHDC active in the Transition group, key figures in both TTC and SHDC attending and making presentations at TTT events, a formal motion of support from TTC, partnering from SHDC on the 'Transition Streets" programme and two events co-hosted with Schumacher College (ibid, pg 261).

2.5 The Gaia University

The Gaia University, which was founded in the late 1980s with the intent of taking a systems approach to the needs of the living planet (Gaia University, n.d.), identifies strongly with the Transition community. The Gaia University is "a university without walls, a university across borders, an un-institution intent on fostering a zestful, purposeful, global community of thoughtful learners and unlearners focused on ecological regeneration and social justice" (Adler and Langford, n.d.). So far they have centres in Tennessee, California, the US Virgin Islands and Germany, with more in development in Chile, Western Australia, New York, Oregon and Maryland. There has been some talk on the Transition Aotearoa social networking site of the potential of starting one in New Zealand. Their courses allow people to work on real-life projects, often in their own communities, and provide mentoring and support while they do so. For example, one student's project was starting the first Transition town to be unleashed in the US at Sandpoint, Idaho. Another developed rooftop gardens on his family's restaurant (Adler and Langford 2010). Co-founder Andrew Langford says that all Gaia University projects are "seamlessly connected" and all related in a way that is impossible in conventional learning environments.

3. NZ POSITION

"Half of New Zealanders in a January 2007 survey had considered changing their behaviour because of climate change (Hannant, 2007)... Transition towns offer encouragement and social support which empowers people to take the necessary action" (Rudningen 2009).

3.1 General Attitudes

A Ministry for the Environment (MFE) 2008 Sustainability Survey showed that 97% of respondents believed that it is somewhat urgent or very urgent to take steps to protect the environment, 87% agreed that New Zealand households are producing too much waste, and 83% felt that all New Zealanders/everyone is responsible for caring for the environment.

A 2007 ShapeNZ poll by the New Zealand Business Council for Sustainable Development showed that 77% of New Zealanders thought that climate change and global warming are a problem now or an urgent and immediate problem, with only 8% considering them not really a problem at all. 89% thought that the management of New Zealand's waste and the amount of refuse that goes into landfills is a problem now or an urgent and immediate problem, and 86% thought that the management of New Zealand's energy needs and where we get our energy from is a problem now or an urgent and immediate problem.

A subsequent 2009 poll showed some similar results, with 76% of respondents believing that climate change is a problem. However only 53% indicated that they personally worry about it, 65% believed that its effects have already begun to happen and 64% agreed that the time has passed to doubt whether or not climate change is happening as a result of human activities.

On the other hand, a 2009 Employers and Manufacturers Association survey of New Zealand businesses had some worrying findings. The found that 57% felt that the seriousness of climate change is exaggerated in the media and 72% were opposed to increases in the price of energy to achieve emission targets. 88% did not support the government buying carbon credits overseas and of the 12% who did, when asked how much per year per person they thought was reasonable to spend on this, 59% answered $0. On the positive side, 74% indicated some degree of worry over the environment, and 38% would pay $21 or more extra for a 'green' television.

Manuel Schaefer (2010) of Otago University conducted a survey of Otago land owners. He found that 73% would support the introduction of a feed-in tariff for wind turbines in New Zealand, and 49% agree that a feed-in tariff would facilitate a wind turbine project on their land.

3.2 Policy Support

Over 80% of respondents in the 2007 ShapeNZ survey indicated that they would support each of the following: a programme to insulate homes not already insulated, cash incentives to buyers of fuel efficient low emission cars, development of wave and tidal power and development of biofuel from forestry waste wood. People tended to be more supportive of rewards for good behaviour than punishments for bad behaviour: while 86% would support decreasing annual registration fees for vehicles with smaller engines, only 56% would support an increase for vehicles with the largest engines; and while 68% agreed that those reducing emissions should be rewarded with tradeable carbon credits, only 56% thought that those making emissions should be required to pay for those by purchasing carbon credits. When asked if there should be a price on greenhouse gas emissions the results were divided, with 42% in support, 35% in opposition and 22% not sure. There were similar opinions on whether only renewable electricity energy developments should be permitted in future (it was pointed out that this may result in lower growth and national income) with 41% in support, 39% in opposition and 20% not sure.

The subsequent 2009 poll reflected the opinions in the previous one that people respond better to rewards for good behaviour than to punishment for bad behaviour. The following graph shows the levels of support and opposition for a variety of potential policies:

Figure : New Zealand policy support from 2009 ShapeNZ Poll

It can be seen that the most supported policies all involve incentives. The four most opposed policies – which have 27%, 21%, 19% and 18% opposition whereas none of the others got above 8% - are also the only ones which contain the words "mandatory" or "higher charges." This shows the importance of presenting things as an incentive rather than a punishment – for example, while 73% supported lower road user charges for vehicles using biofuels and only 8% opposed it, higher road user charges for vehicles not using biofuels received 19% opposition and only 53% support.

In general, the people who indicated the most support for climate change mitigation policies had voted for the Maori Party, the Green Party, Jim Anderton's Progressive Party, or other/can't remember/didn't vote. Those who had voted for the ACT Party showed exceptional levels of opposition to the idea of climate change and mitigation policies, and the NZ First Party and National Party also were notably unsupportive.

3.3 Actions

The MFE 2008 Sustainability Survey indicated that 15% of New Zealanders felt very informed about what they can do to help care for the environment, with 80% feeling somewhat informed and 5% not at all informed. 71% reported that they would like to do more to help the environment. Respondents in general were already, or were willing to begin, engaging in behaviour to save water, reduce waste, manage electrical waste and improve home energy efficiency. 62% reported that they take sustainability into account for purchasing decisions at least sometimes, and 85% of those who had built or renovated a house in the past two years had taken sustainability into account.

Results were different for transport where, while there was a high rate of people claiming to follow fuel-saving driving behaviours, there was a reluctance to give up driving in favour of public or active transport or even to carpool. Only 26% of people agreed that car users should pay higher taxes for the sake of the environment, and 45% indicated that they would travel by bus only if they had no other choice. Clearly there is a high level of car dependence and acceptance in New Zealand, and an aversion to giving up driving despite making positive changes in other areas.

3.4 New Zealand Transition Towns

Figure : Location of New Zealand Transition initiatives. Source: http://transitiontowns.org.nz/groups

There are 65 Transition towns listed on the New Zealand network but many of these do not have a strong internet presence and it is possible that others have more going on than they have listed on their websites. Several of them seem to still be in the awareness-raising stage and have held film screenings and workshops but have made little actual progress. Some are only one person or a small group of people who are looking for more members before they start anything (Kingsland, Laingholm, Piha), and a couple have admitted to running out of steam (Manukau) or "breathing" (Upper Hutt).

3.4.1 Official Transition Initiatives

The following descriptions of New Zealand Transition initiatives have been gathered mainly from the internet, with some additional information from my survey and from personal correspondence.

Transition Town Brooklyn

Brooklyn (Wellington) started in 2008 and are still active as an Incorporated Society, with Food & Gardening and Transport working groups. They have a market, have held several awareness-raising and educational events, established a community orchard and two share-gardens, have a seed swap and have had working bees and a frock swap.

Transition Town Kapiti

Transition Town Kapiti started in 2009 and are currently active, with their own website at ttk.org.nz. Their activities so far have included film screenings and courses/workshops, a monthly seed swap, stalls at local festivals, a food forest proposal, a bicycle fix-up, a gardening club, a local produce directory and the distribution of eco lightbulbs to every house in Kapiti. They have created a draft Transition Manual directed at the community that provides information, contacts and resources, suggests sustainable things people can do as individuals, households and businesses and encourages them to get involved in transition groups.

Transition Nelson

Transition Nelson formed in late 2007, becoming an official Transition Town in June 2008, and has been one of the more active groups. They work closely with the Nelson Environment Centre and through this have received funding from the Ministry for the Environment, the Canterbury Community Trust, Sustainability Limited and Nelson City Council. Personal correspondence with Ted Howard revealed that most of Transition Nelson have been in "sleep mode" since they recently lost funding for administration, oil dropped in price and the Nelson Environment Centre moved to a new location. Their candidate polled last in the local elections and the advisory group have not met since July, but Ted hopes that the situation changes as oil prices begin to rise again and people become more worried about the future.

There are still some groups meeting and events happening (such as the Nelson Growables Fair in November 2010) and Transition Nelson have already achieved a lot. They have held several events to raise awareness of the issues of peak oil and climate change and get people involved in the transition town movement, including film screenings, seminars and workshops. They have established several working groups: Bio-capacity, Business/Finance/Micro-finance, Community, Education, Energy, Food, Governance, Health, Housing, Transport and Waste. A Permaculture group also meets every month and the Seed Savers meet quarterly to share seeds and information. They established six open orchards in 2008, planted trees on twelve sites in 2009, created a Google map of fruit trees in public places and are currently researching tree varieties and suitable sites. Nelson has a farmers market

and Transition Nelson are also investigating running "community jam sessions" where people can share knowledge on utilising excess produce. They held a "Nelson Growables" garden fair in 2009 to encourage growing produce, which was repeated in 2010 and includes demonstrations and seminars, a seed swap, food, entertainment and children's activities.

The Bring Your Own Container campaign encourages people to use their own cups for coffees, use reusable shopping bags, take their own plates and cutlery to events and use their own containers for takeaway food, and is supported by several local businesses. All local businesses were provided with a sustainability checklist to prompt them to adopt more sustainable practices, along with links to more information.

The Energy Group have developed simple DIY kits for solar hot water heaters and solar dessicators, and the bio capacity group have submitted a project initiative to "re-establish useful, natural resources (materials and energy) for future generations and help restore biodiversity in the Nelson region through indigenous reforestation and other compatible afforestation projects.

The Sustainable Transport Futures group now has representatives on both councils' Regional Transport Committees, and the Governance group submitted their ideas to Nelson City Council's Annual Plan and Long Term Council Community Plan."

Transition Town Opotiki Coast

Transition Town Opotiki Coast are active as a Charitable Trust, with a Facebook page[7] and a food sub-group. As well as holding awareness-raising events and workshops, they have a weekly column in the Opotiki news. They established the Opotiki Community Marketplace, an organic co-operative and a tool library (currently supplied with donations but they intend to apply for funding to stock it fully). They have offered help to people who want to start growing their own vegetables and have found a site for a fruit tree nursery.

Transition Town Orewa

Transition Town Orewa started in 2008 and have not updated their web presence since talking about some initial meetings. One member of Transition Town Orewa responded to my survey, revealing that they have around 20-50 regularly active members but have not been meeting recently. Their activities have mainly been limited to awareness-raising events such as film screenings and presentations, but they also made a submission to the Rodney District Council's Long Term Council Community Plan on Sustainability and found the Council very receptive.

Transition Timaru

Transition Timaru started in 2009 and have a facebook page[8] where they state they have almost 500 members. Seven people from Transition Timaru responded to my survey – the most from any New Zealand initiative. When asked how many people are regularly active in their Transition group,

7 http://www.facebook.com/pages/Transition-Town-Opotiki-Coast/138008109562245

8 http://www.facebook.com/transitiontimaru

however, only two Timaru members selected 100+ and four said 20-50 (one did not answer this question). This indicates there may be some different interpretations as to what constitutes being "regularly active" and perhaps many members only participate in occasional activities. They have held several awareness-raising and educational events as well as a beach clean-up working bee for 10/10/10[9]. They have a food subgroup and their practical activities so far have been mainly food-related, including the establishment of a Farmers Market, a seed exchange, community gardens and a garden share.

Transition Waiheke

Transition Waiheke was started in 2007 and they use the Transition Towns New Zealand site extensively. As well as other awareness-raising events they show fortnightly documentaries at the community cinema and have held several courses and workshops. Some of their practical initiatives include Community Supported Agriculture (a partnership between farmers and consumers), the Fabulous Fruit Tree Initiative, a community garden with plans for two more, sharing backyards, seed savers, and a food exchange stall at the Ostend market. All schools are part of the enviroschools programme and waste vegetable oil is used in Clean Streams waste vehicles. The Betta Buses Campaign aims to improve public transport, Cycle Action Waiheke are working with council to plan the first cycle path, and they hope to develop a taxi-like "Smart Transport" service using small and medium sized vehicles. The Waiheke Does It Better waste initiative campaigned to keep the island's waste resources local, but was overruled by Auckland City Council. They foster a strong sense of community with their own radio station, a video blog site with locally made and based material, a digital media collective and a "Waihekepedia."

Transition Town Whanganui

Transition Town Whanganui started in 2008. They have held several film screenings and some seminars and workshops but do not have a strong web presence and have not listed any practical projects on the Transition Towns New Zealand website. One member of Sustainble Whanganui responded to my survey and indicated that they have over 100 regularly active members and have held awareness-raising events and courses, and planted fruit trees in schools as well as having a local currency and a Green Bikes scheme. Green Bikes restores donated bicycles to a safe and road-worthy state and then sells them for a token fee.

3.4.2 Mullers

Transition Tauranga

Transition Tauranga was launched in March 2009 and is registered as a "muller" on the Transition Network. They have held awareness-raising and educational events and have Transport and Food groups. Practical projects so far include community gardens, public fruit trees, a seed exchange and fruit collection and redistribution. Four people from Tauranga responded to my survey, with two estimating that they had less than 20 regularly active members, and the other two 20-50. They all stated that their groups meets monthly, and all agreed that the Transition initiative had improved the sense of community. One respondent mentioned that their suburb had held a treasure hunt.

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9 A global day of climate change action – see http://www.1010global.org/101010

Waitati

Waitati is listed on the transition website as a "muller," i.e. they are registered on the transition network but do not have "official" status. They formed the Blueskin Resilient Communities Trust to provide governance and work under three groups: Energy, Transport and Food.

They have a film society, an ecosanctuary, edible gardens with tours, workshops, co-operative gardening and allotments, and harvest markets to share surplus produce. They run a rideshare programme for commuters between Waitati and Dunedin, support Get The Train, have a Blueskin Low Oil Commuting Group which promotes cycling and biodiesels, and plan to create a walking-cycling network connecting East Otago communities. There is a Blueskin Youth Centre committed to establishing facilities and resources for youth, and the local school has an environmental code. Waitati Neighbourhood Support aims to foster local spirit, fight crime and address local issues, the Blueskin News keeps the community up to date on issues and the Blueskin Baywatch promotes appropriate land use and planning. Blueskin 10:10 supports the global movement to reduce carbon emissions by 10% over 2010, and the Waitati Energy Project investigates and promotes renewable energy. Their initiatives so far include a wind turbine feasibility study, investigation into micro hydro and dispersed generation, a retrofit rollout and other household energy efficiency initiatives, which were helped by grants and subsidies from EECA. In his talk at the 2010 OERC Energy Symposium, project co-ordinator Scott Willis said that they joined the Transition Town network first and foremost because it provided a place to have a web presence and network with other groups. He also expressed that despite a supportive and energy literate community, they are lacking in people who actually have the time to volunteer.

3.4.3 Place of Interest: Christchurch

There are several movements around the Christchurch area that were initiated before the transition movement and do not call themselves transition towns but have activities and interests closely aligned with transition principles. The Christchurch Harbour Wind Initiative in 2008 investigated the feasibility of a community-owned wind cluster in Banks Peninsula.

Project Lyttelton

Project Lyttelton do not have official status or use the Transition label at all, but they are listed on the New Zealand transition network. They are a community non-profit organisation, registered as an Incorporated Society with a board of trustees and members. Rather than just looking at environmental and sustainability issues, they take a much more holistic community-centred approach.

Project Port Lyttelton started in 1994 with a focus of honouring the past, and then in 2003 with Margaret Jefferies' election to the chair the direction shifted to a vision for the future. In 2003 they signposted historic walkways around the town and put out a map called Discover Lyttelton. This was created with extensive community consultation and a copy was delivered free to every household. In 2004, Project Lyttelton started providing a monthly supplement to the Akaroa Times called Lyttelton News, containing news, art, ideas, events and interviews. The Farmers Market was established in 2005 and not only gives people access to local produce, and producers an outlet for excess, but also brings more business to town and brings in some income for Project Lyttelton. In 2005 they held the first Summer Street Party in collaboration with Lyttelton Harbour Business Association, Lyttelton Harbour Information Centre and Banks Peninsula District Council Tourism and Economic

Development department and the 10-day winter Festival of Lights. The focus is on building community and drawing people to the township, with a strong stress on not competing with local businesses. The Festival of Walking was then held over Easter 2009, with a wide variety of organised walks for all ages.

There is a time bank which was launched after a lead-up promotion where a "community angel" did things for people for free. It is based online and Farmers Market volunteers, Lyttelton Times deliverers and volunteers for local not-for-profit organisations are also paid in time credits. Working bees for both individual and community projects developed from the Time Bank. There are regular pot luck gatherings, including a Gift Swap where people bring unwanted items for the taking.

The Community Garden, a social and educational place, is run on a sweat equity system (if you work there you can eat there) and surplus is sold at the Farmers Market or given to families in need. The Seven Oaks Garden runs a community supported agriculture scheme to produce quality produce and provide education on growing food. The Project Lyttelton "Portal" Community Building (furnished with recycled carpets and paint, retrofitted insulation and a heatpump through a grant) is next to the Community Gardens and provides offices, meeting spaces and work spaces. Prior to the implementation of the Council bin system, green waste was collected from restaurants and composted. The display garden "Dig This," designed to raise awareness on home food production, won bronze at the 2009 Ellerslie International Flower Show.

The Imagine Lyttelton Harbour Basin workshop was held in 2007 to promote community values, followed by an Open Space event in 2008 about what needs to happen for the harbour basin to become more resilient, resulting in a plan to build a biodigester and a proposal for an independent wind turbine. A survey on quantity and type of energy use resulted in a collective bulk buying scheme for wool insulation. The Lyttelton Development Project links local initiatives to tourism and visitor activities, and Project Lyttelton have a website to inform and promote their activities, with a link to the Time Bank. Newcomers to the town are welcomed with information and freebies and a Community Van makes weekly trips into town for those who have difficulty using other modes of transport

Lincoln Envirotown

Lincoln Envirotown is another movement in the Christchurch area that does not call themselves a Transition town, but are listed on the New Zealand Transition town website and follow Transition principles. It was initiated in 2005 and started out with a $125,000 grant from the Sustainable Management Fund. This allowed them to carry out several projects in their first year, including a State-of-the-Town Report, consultation sessions and the establishment of a sustainability centre.

The Lincoln Envirotown Caravan is open on Saturday mornings and Wednesday evenings to provide information and resources, and the community garden is open Tuesday, Thursday and Saturday for people to get together and share skills and knowledge. Organic growing plots are available at Lincoln University and Mahoe Reserve aims to maintain a healthy, indigenous ecosystem. There are regular sustainable living courses, composting workshops, energy efficiency workshops and tours of energy efficient homes. They run an Envirokids club, a car pooling programme and a mobile phone recycling service. They have a centameter (electricity usage meter) available to borrow, offer "no junk mail" stickers for a small donation and sell reusable shopping bags. They run community cleanup mornings and have a Responsible Business Award and Zero Waste Street Challenges. Regular water quality

testing is conducted and they are investigating alternative energy generation. A comprehensive website and a newsletter provide updates and information.

New World partnered with the Lincoln Envirotown Trust to build an environmentally sustainable supermarket, leading the way for New Zealand supermarkets. It has two wind turbines which generate 3.9 kW and reduce its usage of grid electricity, solar panels attached to all lights in the car park, is built from recycled, non-toxic and environmentally materials when possible, and has a system to collect rainwater from the roof for use in the garden. Waste heat from generators is used for water heating, lighting is reduced when there is sufficient daylight and concrete aggregate flooring acts as thermal mass to store and release heat, reducing heating. They have waste-reduction strategies, including using compostable produce trays and separating recyclable materials and organic scraps (which are taken to the local pig farmer) from landfill rubbish. The use of CO2 instead of CFCs in their refrigeration system not only prevents the release of toxins and the depletion of the ozone layer, but also reduced energy usage by up to 7% and the carbon footprint by 20%.

The New Brighton Project

The New Brighton Project was founded long before the Transition movement began, in 1994. They state a purpose "to foster Brighton as an inclusive, healthy, stimulating and co-operative community" and are not listed on the New Zealand transition towns website but have their own website and a community newsletter with over 900 subscribers. Some of the transition-like projects they have include a seed swap, a clothing swap, a time bank, community gardens, a well-established community market, a recently started eco market and festivals. They hold swap meets for produce, baking, wines and other foods at the community gardens each week, a monthly gardening group, a weekly movie group for seniors, a weekly music group for preschoolers and a fortnightly walking group for all ages.

Others

Other Transition groups listed on the Sustainable Christchurch website are Cashmere, Diamond Harbour, Leeston, Mt Pleasant, Prebbleton, Richmond, Roimata, Springston, St Albans, Sumner/Redcliffs and Waikuku Beach. These all have little or no internet presence.

3.4.4 More

Grey Lynn

Grey Lynn 2030 have over 800 supporters throughout central Auckland and are active as a Transition group with a website at http://www.greylynn2030.co.nz. They have eight sub-groups: Gardening, Urban Environment, Green Screen, Farmers Market, Local Government, Traffic Calming, Waste Away and Water. They do not have any funding but have received some small donations and mainly support themselves through kohas and fundraising. Some of their activities so far include film screenings, courses, bike fix ups and the establishment of a Farmers Market. They have three community gardens, including the Grey Lynn Community Garden which holds "growing together" Sunday afternoons, and the Wilton St Community Garden which has a community composting facility and holds a weekly working bee. The Local Government Group have made presentations and submissions to the Auckland City Council and the Water group are working on the restoration of Edgars Stream. The Traffic Calming group aim to allow the community to reclaim the street space from the traffic and have held street parties and workshops, promoted walking and cycling, conducted a survey and come up with several other creative ideas. The Waste Away group have held

a raffle and have stands selling worm farms and collecting used batteries for recycling at the Farmers Market.

Eco Villages

There are several ecovillages in New Zealand. Ecovillages have a lot in common with transition principles, and many of the New Zealand ecovillages are located in or near transition towns. They are motivated by "the choice and commitment to reverse the gradual disintegration of supportive social/cultural structures and the upsurge of destructive environmental practices on our planet" and their values include "ecological design, permaculture, ecological building, green production, alternative energy, community building practices, and much more" (Global Ecovillage Network, n.d.). Rob Hopkins was involved in the co-ordination of an eco-village near Kinsale in Cork – the first eco-village development in Ireland to be granted planning permission (Hopkins, n.d.).

Ecovillages differ from transition towns in that they are an Intentional Community, i.e. a group of people coming together with a common vision to create a community, usually from scratch. Jonathan Dawson, Executive Secretary of Global Ecovillage Network Europe, defines ecovillages as "private citizens' initiatives in which the communitarian impulse is of central importance, that are seeking to win back some measure of control over community resources, that have a strong shared values base (often referred to as 'spirituality') and that act as centres of research, demonstration and (in most cases) training" (Dawson 2006, pg 36). The last point is especially important for distinguishing ecovillages from transition towns – they are in service of a wider goal, rather than just improving their own resilience.

One example of an eco-village is Kohatu Toa in Kaiwaka. It is a community of about 20 people in seven households who are also involved in the Kaiwaka transition town group. They have an earthbrick community building and common land including two community gardens, woodlots and community orchards in the works, which everyone works on as required. They collectively own a herd of cattle and a flock of geese and there are a few businesses in the town. They keep independent finances and have a green dollars scheme which allows them to trade both within themselves and with the rest of Kaiwaka. The community grows around 21-50% of their own food and has one shared dinner per week, along with other social occasions such as music evenings and celebrations (Kohatu Toa n.d.).

Otamatea, the other eco-village in Kaiwaka, is very similar to Kohatu Toa. They have about 30 members in fifteen lots as well as common land including a community orchard and pasture for community cattle. Like Kohatu Toa, they are estimated to grow around 21-50% of their own food, share one dinner per week and keep independent finances. They operate under a community hours scheme, where each year residents are expected to contribute a set amount of hours towards community projects, currently 2 hours per week per section. (Otamatea Eco Village n.d.).

There are also several Intentional Communities who do not identify as "eco-villages" but follow environmental and sustainability principles, notably the Riverside Community in Nelson, a community of around 35 who are self-supporting on 500 acres. They share all income and are motivated by "humanitarian, pacifist, socialist principles." Other communities around the country all do things slightly differently, for example Wilderland in Whitianga grow over half their food and share nearly all meals, whereas Atamai Village in Motueka grow less than 5% of their own food and share only 1-3 dinners per month.

3.4.5 Comments

Although, as can be seen above, there are numerous groups in New Zealand who have attempted to start Transition town initiatives, few of them seem to have any significant practical projects underway. This lack of action could partially be attributed to the fact that they are still in the "awareness-raising" stage and cognitively priming the community to be ready for the Transition, but the most successful initiatives seemed to be those who start off with practical projects right from the start.

At this stage it looks like the Transition concept has worked best not when it is used to attempt to start a new movement, but rather when it is used to bring together the work of pre-existing environmental groups so that they can work together under the Transition umbrella and create a product that is greater than the sum of its parts. It is only when the community sees the work that these people are doing that more people from the wider community will become inspired to get involved. Hopkins explicitly states in Step 3 that there are almost certainly existing environmental and community groups in each area, and Transition initiatives should support and collaborate with these groups.

4. Results (Survey)

4.1 Methodology

A survey was conducted of both New Zealand and international Transition initiatives using specialist software provided by the University of Otago (ClassApps SelectSurvey).

A mixture of multiple-choice and open-answer questions were asked as detailed in Appendix A.

The analysis below is numerical/graphical for those questions with specific multiple choice answers and according to a set of characteristic answers for the open answer questions.

Questions represented by bar charts are open-answer questions, or multiple-choice questions with more than one answer allowed, showing frequencies of respondents who chose each option or mentioned each theme in their answer.

"Word clouds" were generated using wordle.net by using the text from comments or responses from each question. The clouds give greater prominence to words that appear more frequently.

4.2 Results

4.2.1 NZ

Location

A total of 44 people from New Zealand from 20 TT groups responded to my survey. Timaru provided the most respondents of any initiative, closely followed by Lower Hutt. Other significant contributors were Point Chevalier, Tauranga, North East Valley and Brooklyn as depicted in the graph below. All

other places had only one or two respondents. Responses were received from twenty of the 76 initiative listed on the Transition Towns New Zealand website. The error is approximately +/- 15%.

Figure : Pie chart of location of New Zealand respondents

When do you think peak oil will occur?

Figure : Pie chart of when New Zealanders think peak oil will occur

Do you believe peak oil can be alleviated by measures such as coal to liquid fuels and gas to liquid fuels?

Figure : Pie chart of New Zealand opinions on whether peak oil can be alleviated by coal and gas to liquid fuels

Do you think fossil fuels can be replaced by renewable energy?

Figure : Pie chart of New Zealand opinions on renewable energy

Do you believe that climate change is caused by people?

Figure : Pie chart of New Zealand opinions on anthropogenic climate change

What do you consider to be the "allowable" CO2 content in the atmosphere?

Figure : Pie chart of New Zealand opinions on allowable CO2 concentrations

Approximately how often does your Transition group meet?

Figure : Pie chart of frequency of New Zealand meetings

Approximately how many people are regularly active in your Transition group?

Figure : Pie chart of regularly active members in New Zealand initiatives

Group Activities

Figure : Bar chart of New Zealand group activities

Individual Activities

Figure : Bar chart of New Zealand individual activities

Has your group been involved with local government?

Figure : Pie chart of New Zealand local government involvement

If so, in what way?

Figure : Bar chart of types of New Zealand local government involvement

Figure : Word cloud of types of New Zealand local government involvement

Figure : Pie chart of New Zealand local government reception

Official Status

41% of respondents indicated that their town has official status on the Transition Network.

Figure : Bar chart of New Zealand reasons for official status

Did your town have a history of environmental action prior to beginning the Transition initiative?

Figure : Pie chart of New Zealand history of environmental action

Did your town have a strong sense of community prior to beginning the Transition initiative?

Figure : Pie chart of New Zealand sense of community

Do you think the Transition initiative has improved the sense of community?

Figure : Pie chart of New Zealand opinions on Transition improving sense of community

What do you believe is the main purpose of forming a Transition Town?

Figure : Bar chart of New Zealand opinions on the purpose of forming a Transition initiative

Note:
"Community" includes building community, bringing people together or connecting people
"Resilience" includes building resilience, survival of peak oil and climate change, localisation, self-sufficiency or self-reliance
"Sustainability" includes sustainability, the environment, mitigation of peak oil and climate change, lower energy, lower carbon, lower impact
"Awareness" includes informing and educating people and raising awareness

Figure : Word cloud of New Zealand opinions on the purpose of forming a Transition initiative

Are you satisfied with how your community's Transition initiative has progressed?

Figure : Pie chart of New Zealand satisfaction with progress

What do you consider the group's biggest achievement?

Figure : Bar chart of New Zealand achievements

What has been your group's largest obstacle?

Figure : Pie chart of New Zealand obstacles

Note: The 14% of respondents who did not answer this question are not included.

How would you best describe your political position?

Figure : Pie chart of New Zealand political position

Note: The 5% of respondents who did not answer this question are not included.

Personal Information

Figure : Pie chart of New Zealand gender

Figure : Bar chart of New Zealand age

Figure : Bar chart of New Zealand income

Note: The 9% of respondents who did not answer this question are not included.

Figure : Pie chart of New Zealand religion

Note: The 36% of respondents who did not answer this question are not included.

Figure : Word cloud of New Zealand religion

Comments

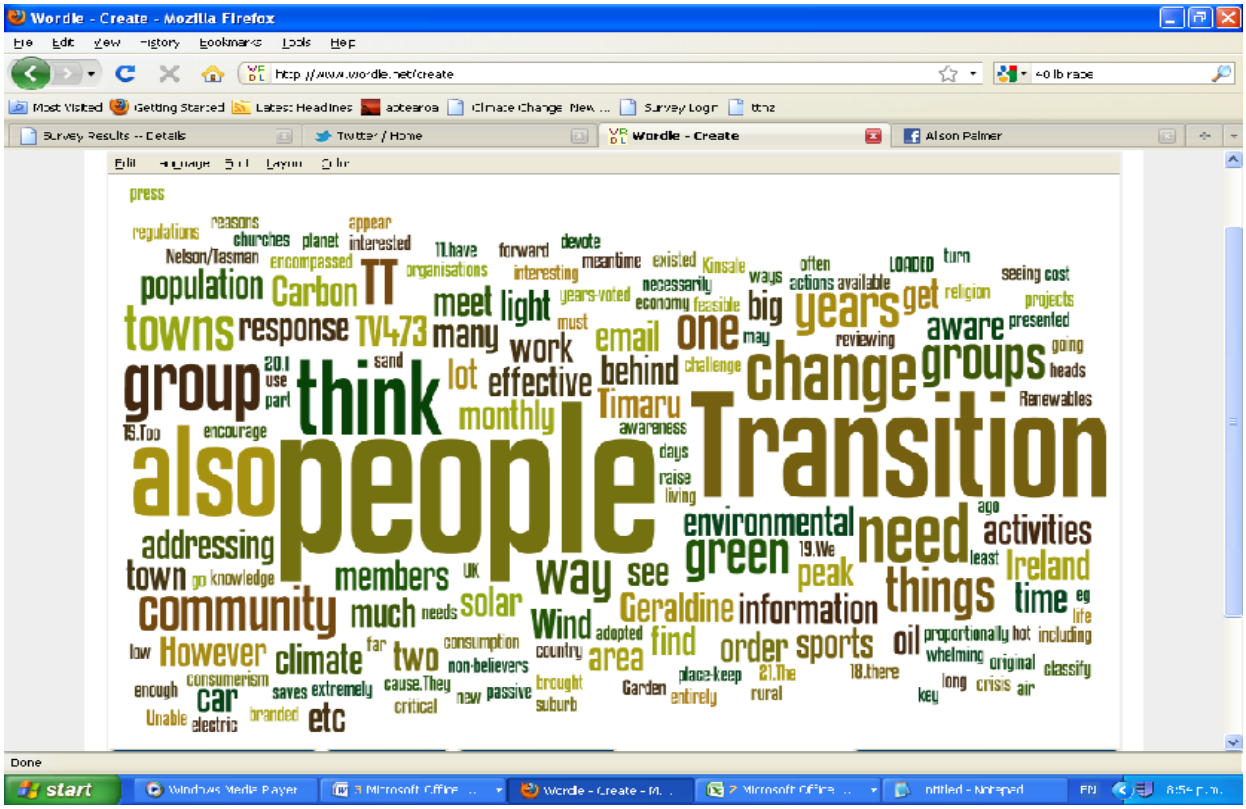

Figure : Word cloud of New Zealand comments

4.2.2 Rest of World

Location

A total of 283 people from the rest of the world responded to my survey. 39% of international respondents were from the UK/Ireland, 23% from Australia, 23% from the USA and 7% from Canada. The remainder were from a variety of European countries: Germany, Portugal, the Netherlands, Belgium, France, Norway, Italy, Latvia, Spain and Sweden. A disproportionate number of respondents (14%) were from Brisbane, Australia.

Figure : Pie chart of location of international respondents

When do you think peak oil will occur?

Figure : Pie chart of when internationals think peak oil will occur

Do you believe peak oil can be alleviated by measures such as coal to liquid fuels and gas to liquid fuels?

Figure : Pie chart of international opinions on whether peak oil can be alleviated by coal and gas to liquid fuels

Do you think fossil fuels can be replaced by renewable energy?

Figure : Pie chart of international opinions on renewable energy

Do you believe that climate change is caused by people?

Figure : Pie chart of international opinions on anthropogenic climate change

What do you consider to be the "allowable" CO2 content in the atmosphere?

Figure : Pie chart of international opinions on allowable CO2 concentrations

Approximately how often does your Transition group meet?

Figure : Pie chart of frequency of international meetings

Note: the 5% of respondents who did not answer this question are not included.

Approximately how many people are regularly active in your Transition group?

Figure : Pie chart of regularly active members in international initiatives

Note: The 3% of respondents who did not answer this question are not included.

Group Activities

Figure : Bar chart of international group activities

Individual Activities

Figure : Bar chart of international individual activities

Has your group been involved with local government?

Figure : Pie chart of international local government involvement

Figure : Bar chart of types of international local government involvement

Figure : Word cloud of types of international local government involvement

Figure : Pie chart of international local government reception

Official Status

54% of respondents indicated that their initiative has official status on the Transition Network.

Figure : Bar chart of international reasons for official status

Did your town have a history of environmental action prior to beginning the Transition initiative?

Figure : Pie chart of international history of environmental action

Did your town have a strong sense of community prior to beginning the Transition initiative?

Figure : Pie chart of international sense of community

Do you think the Transition initiative has improved the sense of community?

Figure : Pie chart of international opinions on Transition improving sense of community

What do you believe is the main purpose of forming a Transition Town?

Figure : Bar chart of international opinions on the purpose of forming a Transition initiative

Note:
"Community" includes building community, bringing people together or connecting people
"Resilience" includes building resilience, survival of peak oil and climate change, localisation, self-sufficiency or self-reliance
"Sustainability" includes sustainability, the environment, mitigation of peak oil and climate change, lower energy, lower carbon, lower impact
"Awareness" includes informing and educating people and raising awareness

Figure : Word cloud of international opinions on the purpose of forming a Transition initiative

Are you satisfied with how your community's Transition initiative has progressed?

Figure : Pie chart of international satisfaction with progress

What do you consider the group's biggest achievement?

Figure : Bar chart of international achievements

What has been your group's largest obstacle?

Figure : Pie chart of international obstacles

Note: The 7% of respondents who did not answer this question are not included.

How would you best describe your political position?

Figure : Pie chart of international political position

The 8% of respondents who did not answer this question are not included.

Personal Information

Figure : Pie chart of international gender

The 6% of respondents who did not answer this question are not included.

Figure : Bar chart of international age

Note: The 6% of respondents who did not answer this question are not included.

Religion

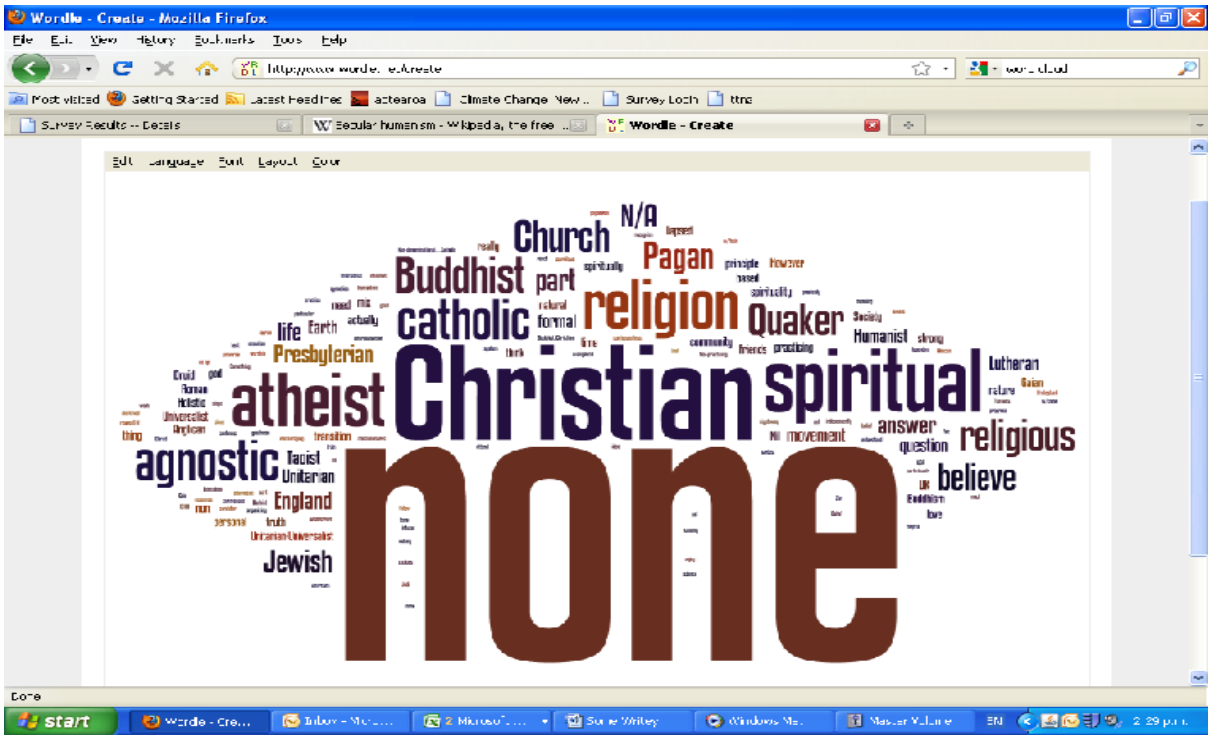

Figure : Word cloud of international religion

Note: The 26% of respondents who did not answer this question are not included.

Comments

Figure : Word cloud of international comments

4.3 Discussion

Peak Oil and Climate Change Awareness

Peak Oil

Respondents for the most part agreed that peak oil is upon us, with 94% of New Zealand respondents and 88% of international respondents thinking that it has already occurred or will occur within 5 years. International respondents, at 64%, were more likely to think that we have already passed peak oil than New Zealanders, at 55%. No respondents thought that peak oil will never occur.

86% of New Zealand respondents and 87% of international respondents agreed that peak oil cannot be alleviated by measures such as coal to liquid fuels and gas to liquid fuels. Of those who answered that it can be alleviated, several commented that this would only be a temporary alleviation and/or that although it is technically possible, the impact that it would have on the environment makes it an unacceptable or undesirable option.

Opinions on renewable energy were much more divided. Both in New Zealand and internationally, 55% of respondents answered that they believe that fossil fuels can be replaced by renewable energy. A few commented that this could only be done partially, or “once our appetites have shrunk to fit reality.” It is possible the division in answers was a result of a misunderstanding of the question and those who answered “yes” meant that renewable energy could replace fossil fuels, but only with a reduction in energy consumption.

Climate Change

93% of New Zealand respondents and 91% of international respondents answered that they believe climate change is caused by people. One New Zealand respondent did not answer but commented: "I think that there are a range of reasons why the earth is doing what it is doing and potentially climate change is one of those things. However there is also the natural warming of the planet and people need to start to think about the actions which release Carbon Dioxide into the air, with things we buy, use and create in society these days." Some international respondents who answered that climate change is not caused by people gave similar comments, one saying "climate change is a natural phenomenon and has more to do with planetary alignment than CO2 levels in the atmosphere. That being said, we need to stop killing the planet and get back to some level of sanity," and another, "I would like to see evidence that the small amount by volume of CO2 currently in the atmosphere can actually cause any measurable warming on the climate. And anyway, is not the next ice-age the big problem so is warming all bad anyway?"

Given that the pre-industrial CO2 content in the atmosphere was 260-270 ppm, 82% of New Zealand respondents and 69% of international respondents answered that the maximum "allowable" CO2 content is 350 ppm or less. New Zealanders were more likely to quote 350 ppm (66% of New Zealanders vs 44% of internationals), and international respondents were more likely to give higher or lower answers, to answer "I don't know" or to skip this question. This indicates that the 350 campaign may have had more of an impact in New Zealand than in the rest of the world. A few respondents answered that they were not interested in these numbers, with comments such as "I'm honestly not working on a target, just conservation and re-design."

The responses to this section of the survey indicate that the people involved in Transition initiatives tend to be well-informed of the science behind peak oil and climate change, but may not fully understand the limitations of renewable energy.

Activities

Meetings

Both New Zealand and international respondents most commonly reported meeting with their groups approximately once per month: 66% and 44% respectively. 39% of international respondents reported either meeting more than once per month, or having different groups meeting at different times (some or all of them more often than monthly), but only 11% of New Zealand respondents said that their groups met more often than monthly. New Zealand respondents, at 14%, were also more likely to answer that their group had not been meeting recently than international respondents, at 4%.

New Zealand groups seem to have been meeting less often than international groups.

People

91% of New Zealand respondents and 89% of international respondents reported having less than fifty regularly active people in their Transition groups. Of these, 65% of New Zealanders and 54% of internationals reported less than twenty.

Transition initiatives, especially in New Zealand but also across the rest of the world, really are struggling to grow. Although they may attract widespread interest and support they are failing to

attract substantial numbers of committed members who will contribute significantly to the group's activities.

Activities

Both New Zealand and international respondents most commonly reported having held awareness-raising events (talks, presentations and film screenings). New Zealand was doing better at community gardens/orchards/public fruit trees (84% NZ, 60% international), seed exchanges (45% NZ, 32% international), markets (39% NZ, 29% international) and working bees (55% NZ, 19% international). Overseas initiatives more commonly reported open space discussions (58% international, 41% NZ)

New Zealand groups have initiated more food and gardening related projects such as community gardens and farmers markets than international groups have done. This is not surprising given that New Zealand is a country heavy on agriculture and with a low population density, and these types of projects are an easy first step.

Government Involvement

82% of New Zealand respondents and 74% of international respondents indicated that their group had been in some way involved with local government bodies. When asked to specify, 91% of international respondents but only 26% of New Zealand respondents said that they had had input into government decisions (e.g. lobbying, making submissions, presentations, attending meetings, working on committees.) 71% of internationals and 33% of New Zealanders had received non-financial support (e.g. working on events together, moral support, promotion and resources such as land) and 29% of internationals and 17% of New Zealanders had received funding or grants. 25% of internationals and 21% of New Zealanders had members who were councillors, had run for positions as councillors, or were employed by the council, and 18% of internationals and 7% of New Zealanders had had councillors attend, and sometimes speak at, their events. 10% of international respondents had an official partnership with a government body, 3% were in groups that were initiated by councils, and 2% had carried out contract work for their council. 15% of international respondents and 5% of New Zealanders stated that they had connections with the council or relationships with councillors but gave vague answers such as "as part of local community network" and did not specify any activities.

Although New Zealand respondents were slightly more likely to claim to have been involved with local government, the results indicate that international groups have been more active in collaborating with and presenting ideas to government bodies.

Personal information

Political Position

81% of New Zealand respondents and 59% of international respondents identified with either a dark green or light green political position. Respectively New Zealanders and internationals were 5% and 8% left-wing, 2% and 11% centre, 0% and 2% right, and 12% and 20% other. Many of those who answered "other" indicated that they identified with both green and left-wing, and several also answered that they are non-political.

Gender

Those who disclosed their gender were fairly evenly split, but with slightly more males than females (52% males in New Zealand and 54% in the rest of the world).

It is noteworthy that this survey returned more male respondents, as previous studies have found that those who take part in Transition initiatives are more likely to be female.

Age

Of those who disclosed their ages, very few were over 70 (5% in New Zealand and 4% in the rest of the world) or under 30 (5% in New Zealand and 10% in the rest of the world) and none were under 20. 79% of New Zealand respondents and 67% of international respondents were between 30 and 59.

The results support the claims that the people who get involved in Transition initiatives tend to be middle-aged. The smaller number of older respondents could be in part attributed to the facts that there are less of them in the population and they are less likely to be web-savvy, but the distinct lack of under-30s and complete absence of under-20s (a well-represented group in the population and some of the most web-savvy) indicates that the movement is failing to attract or engage younger people.

Religion

Of those New Zealand respondents who disclosed their religion, 81% answered that they were non-religious or atheists (though several commented that they were spiritual), and the remaining 19% were religious - four out of five of them specifying that they were Christian.

International responses to this question were a lot more complex, but followed the same trend of most being non-religious. As well as many saying that they are not religious but spiritual, several said that the Earth, Transition, nature or similar was their religion. Several mentioned Buddhist principles or paganism and some commented that they were brought up Christian but were non-practising, or that they attended church only for the social aspect.

Responses to the question of religion indicate that those who participate in Transition towns tend to mainly be non-religious, or have alternative or weak religious beliefs.

Thoughts

Satisfaction

57% of New Zealand respondents were satisfied with their initiative's progress, 34% were not, and 9% were not sure or did not answer. Internationally, 46% were satisfied, 26% were dissatisfied and 28% were not sure or did not answer.

People are generally more satisfied with what their group has done so far than dissatisfied, but there is still a great deal of dissatisfaction and uncertainty. New Zealanders respondents displayed a slightly higher level of satisfaction than international respondents.

Achievements

When describing their group's greatest achievement/s, there was great contrast between New Zealand and the rest of the world. The most commonly stated theme in New Zealand was practical food and gardening projects (e.g. community gardens, farmers markets, fruit tree plantings), with

41% of respondents mentioning these. In contrast, only 20% of international respondents brought up practical food/gardening projects, and their most commonly mentioned theme at 22% was the existence/survival/growth of their group (brought up by 11% of New Zealanders.) 32% of New Zealand respondents but only 17% of international respondents mentioned informative/fun events (e.g. film screenings, courses, festivals, bus tours). International respondents put slightly greater weight on awareness, acceptance or public profile (17% of international, 11% of New Zealand) and on involvement with local government (12% international, 9% New Zealand). 14% of respondents both from New Zealand and the rest of the world mentioned building community or connecting people. 4% of international respondents (and none from New Zealand) answered that they had no achievements yet – a contrasting attitude to those who considered just beginning an initiative to be a great accomplishment.

These results suggest that New Zealanders put greater emphasis on achieving/recognising practical projects, whereas the rest of the world put more emphasis on growing the group and building its public profile. Practical projects other than food and gardening (such as renewable energy, time banks, local currencies), however, were rare both in New Zealand (7%) and the rest of the world (10%).

Government Reception

77% of New Zealand respondents and 71% of international respondents found their local government to be either somewhat receptive or very receptive to their group's ideas. 9% of each found them disinterested, and only 1% of international respondents and no New Zealand respondents had found them opposed. 20% of international respondents and 14% of New Zealand respondents answered that they had not approached local government, or did not answer this question.

Indications are that governments are on the whole open to the ideas of Transition groups and are prepared to support them and willing to take their ideas into account, with very few respondents reporting any opposition from their government.

Obstacles

77% of New Zealanders and 76% of international respondents indicated that either a lack of time, a lack of interest, or a combination of the two was their group's largest obstacle. These two factors seem to play off each other – people are interested in the Transition movement and are happy to be passive supporters, but not quite interested enough to commit much of their already scarce time to it. Other difficulties expressed were a lack of knowledge, lack of a champion with energy and time to drive it, lack of energy to keep it going in the face of an insane dominant culture, lack of people and the fact that peak oil and climate change have not yet affected the lifestyle of the majority of the community.

The main perceived obstacle to Transition initiatives is the inability to turn passive support into active support. While groups can attract great numbers of people to their mailing lists and events, they have trouble getting people to commit to time-consuming projects or to take on roles of responsibility.

Purpose

When asked what they thought was the main purpose of forming a Transition Town, the most commonly mentioned themes were resilience (including survival of peak oil/climate change, localisation, self-sufficiency/self-reliance) and building community (including bringing people together and connecting people). Resilience was mentioned by 75% of international respondents and 68% of New Zealand respondents, and building community was mentioned by 60% of international respondents and 68% of New Zealand respondents. Another common themes were sustainability (including protecting the environment, mitigation of peak oil and climate change, lower energy, lower carbon or lower impact), mentioned by 33% of international respondents and 39% of New Zealander respondents. Raising awareness (including education and informing people) was mentioned by 24% of international respondents and 30% of New Zealand respondents.

Numerous people gave answers such as “building resilient communities,” “community resilience” or similar – it is difficult to know whether they have a thorough understanding of what this means, or whether they were just quoting ideas they had got from the Transition Handbook or heard from others. Several respondents did give much more insightful and detailed answers, for example: “To address the impulse away from the values and ideologies of the globalised, corporatized, centralised and commodified world of consumer economics. To redefine what prosperity is; to seek happiness in the myriad non-consumerist ways available when communities still function, the environment is healthy, and the pressure to work at a job you like, to get the money to buy stuff that you don’t need, is greatly reduced. To explore methods of re-localisation, community building, living within ecological limits, and the quest for an outrageously happy and authentic life. To build resilience for our community so as to better weather the inevitable changes that are already beginning to happen.”

Within the Transition movement there seems to be a lot of confusion as to the actual purpose – whether it is to save the planet, to save ourselves, or both? To bring like-minded people together to support each other, or to convert everyone to their way of thinking? One international respondent even answered “Funny you should ask. We are just debating this,” indicating that within Transition groups there is uncertainty as to the direction of the movement. One particularly disillusioned respondent felt that the main purpose seems to be to provide “social support for those isolated by their perception of earth's predicament from the oblivious/ denialist multitudes” and later commented: “Insular. Glory seeking. Purposeless. No focus. Combative. Alienates the mainstream. No outreach to the masses.”

Official Status

36% of New Zealand respondents and 54% of international respondents answered that their initiatives have official status on the Transition Network. The most common motivations were publicity/awareness (chosen by 69% of New Zealanders and 65% of internationals) and networking (56% of New Zealanders and 65% of internationals.) 44% of New Zealanders and 29% of internationals indicated that their initiative pursued initial status for online resources, and 19% of New Zealanders and 18% of internationals for funding.

The main perceived benefits of having official Transition town status by those who have pursued it are having a recognised label, being part of a bigger movement and talking to and sharing experiences with others doing similar things.

History

Respondents both from New Zealand and the rest of the world were quite divided and uncertain on whether their town had a history of environmental action or a strong sense of community before starting their Transition initiatives, but tended to think they did more than didn't.

When asked whether they thought the Transition initiative had improved the sense of community, respondents were more positive, with 59% of New Zealanders and 48% of internationals agreeing that it had. Only 9% of New Zealanders and 14% of internationals answered that it hadn't, with the remainder unsure or not answering.

Denial

Several respondents expressed a concern that denial is a major obstacle to Transition initiatives, with too many people "still walking with their heads in the sand."

Some people attributed this to governments and/or the media, e.g.:

> "I think the most fundamental issue(s) are government and media censorship and undermining of scientific findings. They have led to ignorance and denial about the situation we are in"
>
> "I am very concerned that there is inadequate media cooperation or community awareness of the wholesale fundamental changes that are needed to address climate change/peak oil and the benefits it could bring society"
>
> "Climate change and resource depletion are already shaping global events. However, the western governments and media present these as having different causes (eg 'war on terror'). Our government is captured by forces which benefit hugely from the status quo, and our media ensure that we 'see' such events in the context of 'developed' democracy (largely white, Judaeo-Christian, largely western) against 'undemocratic' (mostly non-white, mostly Moslem, mostly South) forces."

Others attributed this to people not wanting to accept the inconvenient truth (to quote Al Gore) of the situation we are facing, e.g.:

> "People are afraid to realise they need to change on a personal level, and disassociated from the consequences of their everyday actions on a global scale."
>
> "The transition message – that we are addicted to fossil fuels which are running out, so getting scarcer and more expensive – is not welcome. People bearing unwelcome messages tend to get shot, which is what has happened, but we have developed bullet-proof vests."
>
> "The single most important thing for me is to feed positive messages. The negativity of 'doom and gloom' scenarios creates fear, which leads to inertia or a backlash, sending people into the hands of the deniers."

This, however, raises the issue of striking the balance between depressing people into denial and giving them too much optimism to motivate them to take action:

> "We have frequent discussions about how to communicate the message. Do we emphasise the positive aspects of what we're doing and risk others not getting the sense of urgency, and therefore happy to let us just get on with it, or do we tell them the details of peak oil and climate change and risk alienating people because of the doom laden message?"

Radical Change

Several authors, most notably Ted Trainer, have criticised the Transition movement for not being radical enough.

One respondent expressed a similar view to Trainer, that the Transition movement does not address the replacement of consumer-capitalism that is necessary:

> "Transition as a whole is very good on the Environmental problem and the Energy problem, but there is a third 'E', the Economy. We need to really think about our monetary system and create new ways of doing things because the debt-based money system is at the heart of our problems of social control, economic disparity, deprivation, depression, over-consumption, resource depletion and pollution."

Several people were concerned that Transition is not enough and that the situation needs to be addressed with more urgency, e.g.:

> "We have less time than we think to make a move towards sustainability"

> "I worry that the Transition movement is moving too slowly and may find itself irrelevant in the face of rapidly moving events. We needed to start this ten years ago and with more enthusiasm."

However, the first steps that Trainer suggests in *Renewable Energy Cannot Sustain A Consumer Society* (2007) are all things that work in the Transition context – talking, raising awareness and motivation, community gardens and workshops, baking bread, scavenging, repairing and selling things like furniture, bicycles, appliances and toys, cooperative house repair and maintenance, and so on. It is only later on that the more radical changes come, and as a result of these small initial steps.

From these comparisons it could be said that it is not that the Transition concept is not as radical as Trainer's Simpler Way, but rather that it is a detailed guide for the beginning steps – as Hopkins says himself in The Transition Handbook, the twelve steps of Transition are only the very beginning of the process and "don't take you from A-Z, rather from A-C, which is as far as we've got with this model so far" (Hopkins 2008, pg 148). Steps A-C are a good start, but peak oil and climate change are indeed moving faster than Transition initiatives, and much faster than the rest of society, and steps D-Z need to be found and implemented quickly.

Prescriptive

Despite criticisms that the criteria for official status are too prescriptive, they do not seem this way and do not stipulate that the community carry out any particular projects. Rather they expect a certain level of understanding of the reasons for the Transition movement and the principles behind the concept, as well as a level of commitment to the initiative and its basic values. The requirements to network with other communities, to keep some sort of a web presence and to contribute to the

blog are not there to influence how the community approaches the actual Transition process but rather to ensure that they share their progress and experiences with others, so that different groups can learn from each other's successes and mistakes. While the permaculture design course is recommended it is not mandatory, and the Transition training course exists only for guidance, not to instruct every step of the process, and in any case is not required in New Zealand. It may seem prescriptive or against the grassroots principles to ask for a connection to the local council, but it is highly important that, once established, the transition group can communicate with government bodies - although it is "not about waiting for the 'they' of politics to do something" (Brook, 2009) the 'they' of politics do need to be involved in the process, and the purpose of the transition movement is "creating an environment where currently unelectable policies become electable" (Balls 2010, pg 38)

When examined, it can be seen that these criteria really do not in any way threaten the organic quality of the movement, but rather are intended to strengthen it without instructing or restricting it.

Likewise, the twelve steps, which have also been criticised as being prescriptive, are not at all so. Hopkins explicitly stipulates that they are only suggestions, that they do not necessarily need to be carried out in the order that they are written, and that it is not compulsory to follow all of them. Each initiative is expected to forge their own path, and to implement the suggestions of the twelve steps when and where it suits them.

If anything, it could be said that the Transition movement is not prescriptive enough. It seems counter-productive to require that initiatives fulfil a list of criteria in order to become official, when the criteria themselves require hardly anything themselves. Likewise it is self-contradictory to list twelve steps to Transition, and then say that say that the list does not matter and is actually only a set of vague suggestions. Although letting each initiative find its own way is one of the basic principles of the Transition movement, perhaps a better balance could be struck between giving groups freedom versus clear guidance on how they might go about starting.

Practical Projects

Some respondents expressed the view that it is difficult to get practical projects going, e.g.:

> "We have gotten feedback that our group is too amorphous and theoretical resulting in people not knowing how to plug in. Not enough champions for specific projects"

> "Beyond the first steps of Transition Town which is building awareness by showing movies, the next steps to mobilize community members to get into action has been very difficult. Everyone wants someone else to do the work."

Other respondents felt that the practical projects that have been initiated tend to be only the easy, fun or food-related ones, with not enough real energy projects or political influence, e.g.:

> "It is not an easy feat to reconcile the spirit of festive folk lore typical of the transition ethos with information regarding energy density, power density, EROEI, discount rates and climate forcings. But this is our task, I guess, to rewrite these fables."

> "I feel like there is a tendency for transition towns to focus on the local food production first as it is the most accessible and visible to the general public. This may narrow the range of

> appeal and give the movement a more fluffy image than is necessarily useful when trying to kickstart large scale change. My area of interest is energy.. so I possibly have a bias toward numbers, but I think the movement in general could benefit from the broader appeal that being able to quantify benefits may offer."
>
> "I'd like to see Transition Towns influencing policy much more rather than focusing primarily on local food."

Some, however, felt the opposite way:

> "I have found that it is the actual activity that people are intrigued by, not so much the fact that they are following an initiative called Transition Town. The 'just do it' attitude is infectious!"

Mainstream Appeal

Previous studies found that Transition groups were only attracting a minority group of people – those who would be involved in conventional environmentalism anyway. These people tend to be the well-educated, middle-aged, middle-class. They tend to be female, have green or alternative political views and post-materialist values, and be proactive in getting involved in community groups.

My survey to some extent reinforced these findings. The majority of respondents had green or alternative political views, several left or centre, and even a few right-wing. The survey returned more male than female respondents, which contradicts the experiences of others. A great number of respondents were middle-aged, but there were still some under 30s and older people. No respondents were under 20, which shows that the movement is definitely failing to attract the attention of teenagers.

Whereas 64% of respondents to the 2009 ShapeNZ poll agreed that the time has passed to doubt whether or not climate change is happening as a result of human activities, a much greater 93% of respondents in my survey of New Zealand Transition initiative members believed that climate change is caused by humans, indicating that they tend to be more environmentally aware and active people.

Margaret Jefferies of Lyttelton expressed a concern that, despite Project Lyttelton's success, most people involved still tend to be Caucasian and aged over 30, with the exception of young children who are involved through their primary schools.

Some respondents were positive about the Transition movement's ability to attract the mainstream:

> " The positive, action-based approach of Transition Towns in addition to the aim of supporting the local economy have enabled us to engage with many people and groups who conventional environmental campaigns would not normally reach."

Perhaps the way to engage the mainstream is to involve them in the activities without all the talking and awareness-raising, as one respondent commented that their greatest achievement was "that without all those meetings, so many active groups are doing amazing things for our town. Many local residents are participating, without even being aware that they are part of a Transition movement. It is becoming part of their life."

More common, however, was a concern about a failure to reach the mainstream, e.g.:

> "Getting the message out to the people who aren't already "converted" is the difficult part, and that represents 95% or more of the population."

> "One issue with the Transition movement is that it is difficult to sell it as anything other than marginal"

> "It is difficult selling the green message – even the word green is enough to turn many people off"

> "After four years we are wondering why is it still the 'alternatives' who are actively engaged and few from the 'mainstream' are involved."

Governments

Some respondents commented that the image of Transition helps it to be accepted by government bodies:

> "There is a lot of resistance from government to conventional environmentalist groups. Less so to Transition Initiatives once they understand that our concerns include energy and economic issues."

Others commented that government bodies tend to deprioritise Transition ideas in favour of capitalism:

> "Past Qld Govt Ministers who have tried to highlight the issue of peak oil were not supported well by their peers."

> "Several years ago my neighbour made a proposal to access EU funding of several million pounds sterling designed to install a permanent eco-hub on the north bank of the Thames nearby, to include solar panels, wind farming and the training of sea cadets in sailing skills and in the benefits of an ecologically-aware way of life. Sadly this proposal was not selected by the Council, who have not undertaken any realistic environmental initiatives, preferring to deal with big business (and brown envelopes?) in building tower blocks where ex-offenders, drug addicts and dealers and under-age mothers are housed at public expense, turning the town into a modern day dystopia."

Time

Some respondents commented on the time poverty of working people:

> "Time is also a problem, personally. I wish I could do more."

> "TTs don't always consider short training sessions to accommodate working families (we can't give up 2 full days to be trained)."

> There were suggestions that Transition activities need to be turned into paying jobs, or jobs be made to work with Transition activities:

> "We are now looking at ways to make more local jobs so people can make a living from Transition activities, not just as volunteers."

> "I think governments should look at encouraging more flexible and part-time work so that members of the community can volunteer more and take the time needed to cycle, grow food, shop sustainably etc."

Demographics

Some respondents commented that they lived in already environmentally conscious towns:

> "We are a good size town with lots of active & greener/more radical than average people"

Others were concerned that the conservative nature of their town was hindering the movement:

> "We operated in a very wealthy suburban area, which made it difficult to gain traction - most people around here didn't seem to feel the need to change, and were completely unaware of peak oil, and some were even still doubtful of climate change."

> "This district is a wealthy, middle class right wing voting community. I think this is another reason why environment and community are not considered high priorities."

Motivation to Change

Several people expressed the opinion that it is nearly impossible to get people to change their ways:

> "I think there is a long way to go in order to change the vast majority of people's consumption habits, way of living etc. Transition Towns are a very positive starting point, but cannot be effective on their own."

> "the local challenge is to get people seeing past consumerism, eg big TVs etc, and also shopping for value not low cost or convenience."

> "We live in a state where for generations people have felt self-sufficient. In a way that helps our cause, in ways it hurts it. They are so self-sufficient the idea of community and sharing this knowledge has been tricky."

> "The current focus on growth and the addiction to consumerism in the 1st World is a recipe for self destruction. Until people wake up to the lunacy of this, we will be unable to halt our descent into the abyss."

> "I do not believe that our 'civilisation' will adopt any stance other than 'business as usual.' This failure to accept and act on the early indicators of catastrophe is a sad reflection on our intelligence at the species level. So I wonder what species will emerge as our successor/s!"

Some felt that people will only be motivated to act once they notice a direct impact on their own lives already starting to happen:

> "I think it is going to take a dive in the economy and a steep rise in fuel prices before any major change in thinking and response by the community?

> "We don't think people here will do much until there is more tangible disturbance to their routines and assumptions"

> "FEELS LIKE AN UPHILL STRUGGLE, POOLE IS CONSIDERED FAIRLY AFFLUENT AND PEOPLE ONLY SEEM TO RESPOND WHEN POCKETS ARE HIT"

> "In four years it is said that the Alaska Oil Pipeline won't be able to pump oil any longer. People won't really listen until there's a crisis. It will be interesting to see how many people leave the state and move to warmer climes."

> "Main obstacles to change are apathy, procrastination and peoples' tendency to deny that they need to change until the danger is an imminent threat to themselves."

Scale

Some respondents from cities found it very difficult to get Transition initiatives started there:

> "Setting up Transition groups is harder in a large city than a smaller village or town, and the "suburb" model that we adopted in Wellington has not been entirely effective and needs reviewing in light of the last two year's experience."

> "We are a district in a large city (500,000+) so we do not really fit the 'town' model. However, I do believe it is important to work out how to do 'transition city'."

5. Conclusions

5.1 Attracting The Mainstream

The relatively mainstream values of Transition aim to engage the interest of a wide range of people, but it still seems to only appeal to "the usual suspects." The people who are getting involved are mainly those who would still support it if it was more radical – it seems to have struck a middle ground that is too radical to attract the mainstream, but not radical enough to have a significant effect. If it is only these people who are going to participate, then Transition might as well take a more green political stance and adopt more radical values. As this would leave it as just another marginal environmental group, Transition needs to find a way to better engage with the mainstream.

The Transition movement aims to attract people first by raising awareness of peak oil and climate change, and then by motivating them to work towards a better future than the one we will end up with if we continue with business-as-usual. Although this is an effective way of engaging some people's attention, as Stephenson et. al. (2010) found, even those with concern around energy efficiency and sustainability do not always reflect these values in their actions. Perhaps another strategy needs to be implemented: dropping the peak oil/climate change focus and instead attracting people to projects by offering them personal and immediate benefits. Fear of a future of "deprivation, misery and collapse" is paralysing, and a positive vision of a future of self-reliant communities is nice, but not enough of a motivation to convince people to make changes to their ingrained habits. Most people will respond much better to something that will offer them visible, direct, immediate benefits than to something that might offer a better future.

> "I feel that there is a danger to use fear to get people to act on climate change... Far better to say: your rubbish is being burnt on your door step, (we have an incinerator 2 miles away from our highstreet) you and your children have to breathe in this dirty air. Reduce your waste, grow your own food, walk/cycle, get and create local employment, with a result that

> you locally have a more pleasant standard of living. At the same time, you will have reduced your carbon footprint."

Everyone is interested in saving money – Transition groups could focus on informing people of the economic benefits of some sustainable actions, for example not owning a car, installing solar panels, growing their own food or using energy-efficient products. Likewise the health benefits of things such as reducing pollution and waste, walking and cycling, insulating homes and eating home-grown or organic foods could be promoted. Activities such as food/gardening groups, craft groups, time banks and local currencies could be labelled not as Transition projects, which have strong green connotations and may put more conservative people off, but as fun social and community-focussed pursuits. In this way people can be involved in Transition activities without being aware that they are part of this movement, without ever having heard the term "resilience" and without believing that oil will ever be scarce or that anthropogenic CO2 emissions are causing the planet to warm unacceptably. One of the survey respondents said:

> "Without all those meetings, so many active groups are doing amazing and inspiring things for our town. Many local residents are participating, without even being aware that they are part of a Transition movement. It is becoming part of their life."

Many Transition initiatives started around 2008, when crude oil prices skyrocketed to a record high. It is possible that the economic impact of this attracted people's attention to peak oil and the Transition movement, and then as prices dropped, interest dwindled. With oil prices now on the rise again, Transition groups may find people regaining interest in living less oil-intensive lifestyles.

5.2 The Power of the Media

The popular media are currently a major obstacle to Transition initiatives. Despite what the scientists say, it is in the interest of big businesses and the culture industry to downplay peak oil and climate change, and encourage business as usual and culture as usual.

The popular media are extremely influential, and though they are currently obstructing the progress of the Transition movement, their power could be turned around for much good. Films commonly shown at Transition group film screenings such as *The Age of Stupid* and *The End of Suburbia* could be broadcast on commercial television stations. Teenagers often emulate their idols, who tend to be popular film/television stars, sports stars and musicians, so the example that these people set could have a great influence on young people's behaviour. News items could be presented from a different perspective – for example, admitting that the wars are over oil, which is in scarce supply, and that the natural disasters may be an effect of climate change caused by humans. On top of this, promotion of peak oil and climate change issues could be incorporated more into television commercials, and more sustainability-related television programs such as *River Cottage* could be given prime time slots.

When the crisis hits closer to home, it could be then that the media turn their attention to influencing the population towards more sustainable practices.

5.3 Dedicated People

Indications are that no matter how many people are supportive of the Transition movement and are keen to get involved in a few activities, it will not be able to keep together unless there is at least one

person who is willing to commit fully to the project and make it their entire life. Previous research found that one of the most important factors in the success of Transition initiatives is having experienced and motivated individuals in the core team. The example of the Grameen Bank in *Worldchanging* emphasised the fact that, despite the many willing helpers, it never could have succeeded without the total dedication of its founder, Yunus.

Several survey respondents said that they thought having dedicated and motivated leaders was an important factor in success, or that not having such leadership and commitment was a major obstacle for their initiative. Margaret Jefferies of Project Lyttelton expressed the view that it is vital to have passionate and dedicated people with strong networks in the team, and Wendy Everingham also from Lyttelton commented in the survey that "the key to success is having at least two people who can devote their life to the cause. They need to be prepared to work as volunteers. You need a critical mass to move things forward."

Ted Howard of Transition Nelson partially attributes the recent lack of activity in Nelson to their loss of funding, meaning that they could no longer afford to pay staff. Some initiatives have been lucky enough to have people who can afford to take the time to take on leadership roles and are willing to do so, or to have received funding to be able to pay a few full-time staff. Most people need to work full-time to support themselves, and have little time left over for other activities. As it is so very important for Transition initiatives to have at least one person who can give themselves completely to the project, it makes sense for initiatives to direct any funding they get to paying people to step into this role.

5.4 Role of Government

Hopkins emphasises the grassroots nature of Transition and states that "a Transition Initiative could not, by definition, be a project conceived and driven forward by a Council" (Hopkins 2008, pg 144). Some survey respondents, however, said that their group started at local government or was encouraged to start by local government. Since Transition tries so hard to be flexible and all-inclusive, it appears somewhat petty to say that initiatives cannot be started by councils. When one of the most important things for Transition groups to do is to connect with their local government bodies, it seems advantageous for an initiative to have begun at a council – where they can be guaranteed support in their activities, and are likely to also receive funding. As long as the council understands that they must not control the group, it makes sense for initiatives to start at council level and even have the council employ one or more staff to be full-time paid Transition co-ordinators.

5.5 Scale

Although a contributing author in Steffen's *Worldchanging* suggests that cities, with their high population density, are the ideal scale for sustainable living, many people seem to be struggling to make Transition initiatives work in cities.

A survey respondent from Wellington expressed the view that "setting up Transition groups is harder in a large city than a smaller village or town, and the "suburb" model that we adopted in Wellington has not been entirely effective and needs reviewing in light of the last two year's experience."

Randy Chatterjee, founder of the transition initiative Village Vancouver, points out that Vancouver (which has been taking positive sustainability and environmental action) still has a long way to go. He commented in my survey:

> “Vancouver may have spawned Greenpeace, and lays claim to be the "most livable city" and to be compliant with Kyoto, but we dump untreated sewage into our water and PCBs, are building glass towers in our downtown, are massively expanding our highway system, import 60% of our food from other countries, and otherwise do nothing to clean up our act. Everything here is monetized, and thus has a price. Only the environment has none.”

Small, physically clearly defined and relatively isolated communities such as Lyttelton and Waiheke Island seem to be the ideal places to start Transition initiatives. More work needs to be done on how to get Transition initiatives going in cities, where suburbs tend to merge into each other and people do not identify so much with a locality-based community. The role of the city-wide Transition hub could be an area of further investigation. The survey findings indicate that Brisbane, Australia has been quite successful as a city hub with several local groups operating under it.

5.6 New Zealand Position

New Zealand is in a reasonably good position regarding attitudes to peak oil and climate change. The results of various surveys of the public show that the majority of New Zealanders are concerned about the environment and see these issues as problems we need to tackle, and are for the most part supportive of potential sustainability-related policies.

The heavily agricultural way of life in New Zealand and its low population density and arable land makes it an ideal candidate for food and gardening projects. Were international trade links to be cut, New Zealand has the resources, and some of the capability, to be a self-reliant nation. The next step is towards localisation of supply, and more self-sustainable practices. Transition is, in effect, grassroots disaster planning, and New Zealand could learn a lot from how Cuba handled their trade embargo.

5.7 Concluding Statements

There is no doubt that the Transition movement is an excellent start and is inspiring individuals and communities to make positive changes all around the world. In its endeavour to be inclusive, flexible and appeal to the mainstream, however, Transition seems to have tried to be all things to all people, and in many cases ended up as little more than a label.

Even the central idea of Transition, “resilience,” is not clearly defined and is not a quality that can be easily measured or assessed, though Hopkins has attempted to identify some resilience indicators. Transition initiatives around the world are working towards a goal of resilience, but how will they know when they get there?

If it is to make a real difference, Transition needs to take a more explicit and unanimous direction, with clear goals and objectives. It could benefit from more solid values and expectations, while still striking a balance between this and allowing individual communities to forge their own paths specific to their needs.Appendix: Survey Questions

TRANSITION TOWNS IN NEW ZEALAND
INFORMATION SHEET FOR PARTICIPANTS

Thank you for showing an interest in this project. Please read this information sheet carefully before deciding whether or not to participate. If you decide to participate we thank you. If you decide not to take part there will be no disadvantage to you of any kind and we thank you for considering our request.

What is the Aim of the Project?
This survey is part of a summer project being carried out in the Physics department at the University of Otago under the Energy Management programme. The aim of this project is to assess the progress and success of Transition towns in New Zealand and the viability of the movement. An investigation will be undertaken into the effects that changes towards transition have on towns' resilience. This project has gained approval from the Ethics Committee with reference code D10/309.

What Type of Participants are being sought?
Relevant stakeholders are being sought to participate in a survey on transition towns.

What will Participants be Asked to Do?
Should you agree to take part in this project, you will be asked to fill out a short questionnaire which will take approximately 15-30 minutes. You are not required to answer any of the questions.

What Data or Information will be Collected and What Use will be Made of it?
You will be asked but not required to provide information on age, sex, income and political stance. You will be given the option of providing your name and contact details or answering anonymously.

If you choose not to be identified, the results of the project may be published and made available in the University of Otago Library (Dunedin, New Zealand) but every attempt will be made to preserve your anonymity.

The data is being collected strictly for the purposes of research and will be securely stored in such a way that only the researchers will be able to gain access to it.

At the end of the project any personal information will be destroyed immediately except that, as required by the University's research policy, any raw data on which the results of the project depend will be retained in secure storage for five years, after which it will be destroyed.

Participants who have supplied their name and/or contact details will have the opportunity to view the results of the study upon completion.

Can Participants Change their Mind and Withdraw from the Project?
You may withdraw from participation in the project at any time and without any disadvantage to yourself of any kind.

What if Participants have any Questions?
If you have any questions about our project, either now or in the future, please feel free to contact either:-

Sarah Williamson
Department of Physics
University Phone: (03) 479 7796

or

Assoc. Prof. Bob Lloyd
Department of Physics
University Phone: (03) 479 7987

1.
I have read the Information Sheet concerning this project and understand what it is about. All my questions have been answered to my satisfaction. I understand that I am free to request further information at any stage. I know that:- 1. My participation in the project is entirely voluntary; 2. I am free to withdraw from the project at any time without any disadvantage; 3. Personal identifying information will be destroyed at the conclusion of the project but any raw data on which the results

of the project depend will be retained in secure storage for at least five years; 4. The results of the project may be published and available in the University of Otago Library (Dunedin, New Zealand) but every attempt will be made to preserve my anonymity.*

- I agree to take part in this project and agree to be identified under the condition that I am able to review the final research document draft.
- I agree to take part in this project but do not wish to be identified.

2. When do you think peak oil will occur?

- It has already done so
- Within the next year
- Within 2-5 years
- Within 5-10 years
- Over 10 years from now
- Never

3. Do you think peak oil can be alleviated by such measures as coal to liquid fuels and gas to liquid fuels? i.e. by making petrol out of other fossil fuels.

- Yes
- No

4. Do you think fossil fuels can be replaced by renewable energy?

- Yes
- No

5. Do you believe that climate change is caused by people?

- Yes
- No

6. What do you consider to be the "allowable" CO2 content in the atmosphere?

7. With which Transition group do you identify?

8. Approximately how often does your Transition group currently meet?

- Weekly
- Fortnightly
- Monthly
- Less than once per month
- We have not been meeting recently
- Other (please specify)

9. What do you believe is the main purpose of forming a Transition Town?

10. Approximately how many people are regularly active in your Transition group?

- Less than 20
- 20-50
- 50-100
- 100+

11. Has your community initiated any of the following? Please check all that apply.

- ✓ Film screenings
- ✓ Talks/presentations
- ✓ Courses/workshops
- ✓ Open space discussions
- ✓ Community gardens/orchards/fruit trees in public places
- ✓ Time banking
- ✓ Local currency
- ✓ Seed exchange
- ✓ Working bees
- ✓ Festivals
- ✓ Markets
- ✓ Others (please specify)

12. Have you made any of the following changes to your own lifestyle? Please check all that apply.

- ✓ Buying products with less packaging or using reusable coffee cups or lunch boxes

- ✓ Selling, giving away or reusing items that you would normally throw out
- ✓ Using passive solar design principles or insulating your home
- ✓ Composting or keeping a worm farm
- ✓ Growing your own food
- ✓ Buying second-hand items or products made from recycled materials
- ✓ Installing a solar hot water system
- ✓ Using a power monitor or having your home energy audited
- ✓ Switching off appliances at the wall instead of leaving them on stand-by
- ✓ Using energy efficient products (e.g. lightbulbs, appliances)
- ✓ Walking, cycling, taking public transport or car pooling instead of driving alone
- ✓ Choosing a more energy efficient, hybrid or electric vehicle
- ✓ Saving fuel through your driving behaviour (e.g. keeping tyres pumped, driving slower, closing windows, reducing weight)
- ✓ Purchasing or making your own green personal or cleaning products
- ✓ Others (please specify)

13. Are you satisfied with how your community's Transition initiative has progressed?
    - o Yes
    - o No
    - o Not sure
14. What do you consider the group's greatest achievement?
15. What has been your group's largest obstacle?
    - o Not enough interest
    - o Not enough time
    - o Not enough money
    - o Not enough knowledge
    - o Community opposition
    - o Government opposition
    - o Other (please specify)

16. Has your group been involved with local government? If so, in what way?
    - o No
    - o Yes
17. How receptive have you found local government to your group's ideas?
    - o Very receptive
    - o Somewhat receptive
    - o Disinterested
    - o Opposed
    - o We have not approached local government
18. How would you best describe your political position?
    - o Deep green
    - o Light green
    - o Left-wing
    - o Centre
    - o Right-wing
    - o Other (please specify)
19. If your town has official Transition Town status (as described at http://www.transitionnetwork.org/support/becoming-official), why did you choose to pursue this? Please check all that apply.
    - ✓ Funding
    - ✓ Publicity/awareness
    - ✓ Networking
    - ✓ Online resources
    - ✓ Other/comments
20. Did your town have a history of environmental action prior to beginning the Transition initiative?
    - o Yes
    - o No
    - o Not sure

21. Did your town have a strong sense of community prior to beginning the Transition initiative?
    - Yes
    - No
    - Not sure
22. Do you think the Transition initiative has improved the sense of community?
    - Yes
    - No
    - Not sure
23. Do you have any other comments on peak oil, climate change, the Transition movement or your community that you would like to add?
24. Would you like to view the results of the study upon completion?
    - No
    - Yes, my email address is:
25. Would you be prepared to discuss these issues further by email?
    - No
    - Yes, my name and email address is:
26. Age:
    - Under 20
    - 20-29
    - 30-39
    - 40-49
    - 50-59
    - 60-69
    - 70 +
    - Prefer not to answer
27. Gender:
    - Male

- Female
- Prefer not to answer

28. Annual income:
    - Under $14,000
    - $14,001 - $40,000
    - $40,001 - $70,000
    - Over $70,000
    - Prefer not to answer
29. Religion:

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