Sustainability In Action: People, Planet and Prosperity

Metcalf Research Paper

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Introduction

"Any cultural movement will fail if it can't paint a picture of a world where people want to go to."

- Martin Luther King

The objective of this paper is to identify examples of sustainability principles in action and to gain a greater understanding of how initiatives that demonstrate sustainability principles come into being and continue to be successful overtime.

What are Sustainability Principles?

It's been 25 years since the Brundtland Commission defined sustainable development as "meeting the needs of the present without compromising the ability of future generations to meet their own needs." Over the intervening years the term sustainable development has become somewhat controversial as questions have arisen around how 'development', often used as a synonym for economic growth, can occur in a sustained way. The issue of how to sustain economic growth is particularly challenging when growth is based on the use of ultimately finite supplies of natural resources.

According to many ecological economists, a *viable* organization, business or regional economy *may* experience continuous growth, but growth is *not* necessary for prosperity. Thus, in discussing principles of economic sustainability, 'prosperity' may be a more useful concept than 'growth' or 'development'.

The term sustainable development was coined in response to on-going development decisions that traded off economic growth over the health and integrity of local, regional and global ecosystems. Today, sustainability principles include taking actions and making decisions that:

- Balance the potentially competing objectives of healthy ecosystems, a vibrant economy, thriving cultural life and equitable, cohesive communities.
- Take into account the needs of the world's population, now and into the near and long-term future.

Communities are made up of social, economic and environmental systems that must be kept in balance. To act sustainably is to balance the objectives of ecological health, social equity, and

economic prosperity so that all three systems endure in a viable state to enhance the quality of life for future generations.¹

The word 'sustainability' is now commonly used as shorthand for full spectrum environmental, economic and social sustainability.² By itself, 'sustainable' means simply, 'preserved in a continuous viable state'.

Sustainability is best understood in action, when designers, builders, companies and organizations demonstrate what they mean by good practice

Many citizens and politicians in North America still have concerns about the word 'sustainability', fearing that it requires costly regulatory constraints to individual and corporate freedom. After 25 years of "sustainable development", veteran environmentalists still refer to the "phobia of sustainability at City Hall".

While a theoretical discourse about sustainability flourishes in academia, many practitioners agree that consensus is built on the ground with words like productivity, efficiency, healthy, responsible, common sense, fair, appropriate, shared responsibility, and local control. Above all, sustainability is best understood in action, when designers, builders, companies and organizations demonstrate what they mean by good practice.

This paper identifies a small number of organizations that demonstrate sustainability principles in action. Some of these organizations would self-identify as coming from a sustainability perspective. Others demonstrate sustainability principles as outlined above but do not necessarily use the term sustainability to describe what they do.

¹ Focusing on ecological sustainability, 'permaculture' (ecological agriculture) activists propose more rigorous principles: sustainable activities must be integrated. We need to look at the whole, and not only individual parts, in evaluating sustainability. There are no degrees of sustainability. Either something is sustainable or not. However, there are degrees of unsustainability, which are measured by the rate at which activities exhaust their resource base. This is also referred to as diminishing 'natural capital'.

² Working from a transnational perspective back in 1987, Brundtland did not emphasize the importance of grassroots, local responsibility for stewardship on a regional scale. Economist Michael Shuman offers a useful re-framing of the Brundtland definition: "Sustainability requires that every community meet the needs of its members (including plants and animals) present and future, without compromising the needs of other communities to meet the needs of their members, present and future." (Shuman, The Smallmart Revolution)

Methodology

The environmental projects and organizations in this research paper were identified as strong examples of sustainability principles in action because they successfully integrate environmental, social and economic objectives. The range of projects and informants was selected to present diverse perspectives. As a group, they also have a strong reputation among peers, funders and the general public for integrating economic and sociocultural objectives with their environmental mission. The majority of examples are located in the Greater Toronto Area (GTA). Those that are not based in the GTA are included because their good practices have potential relevance for organizations working in the GTA.

Each of the groups surveyed demonstrate multiple benefits on all three axes of environmental, economic and social objectives. Each one has defined a mission and established a brand that has strong powers of attraction for beneficiaries, partners, public attention and funding.

In order to prepare the structured interview, a number of methodologies for identifying good practices were reviewed including the Most Significant Change technique developed by Davies and Dart for international development evaluations (www.mande.co.uk), the Outcome Mapping approach of Smutylo et. al. at IDRC (www.outcomemapping.ca/), and the Collective Impact work of Kania and Kramer to leverage cross-sectoral collaboration (www.ssireview.org).

Following a literature review of selected organizations and projects, the author conducted structured interviews with each of the interviewees listed. Interviews were in person, by phone or by internet video call. The interview included a questionnaire about important enabling conditions for organizational success. This data is presented in Appendix One. The structured interview questions are attached as Appendix Two.

Inventory of Sustainability Initiatives

BioRegional -- One Planet Communities, UK and North America

www.bioregional.com International Social Enterprise Enabling Sustainable Businesses Interview: Greg Searle, Executive Director BioRegional North America

BioRegional's impressive range of real market projects in the UK and other countries include the influential carbon neutral housing project, BedZed, a paper mill called MiniMill that uses waste straw chaff to make paper, and a local clothes recycling system called The Laundry. BioRegional staff are 'sustainability integration' consultants on large real estate developments, assisting interdisciplinary collaboration to achieve high sustainability objectives.

Bioregional's role in the BedZed (UK) project was to ensure deep sustainability in the construction materials, energy strategy, transportation plan, and the green lifestyles program. BedZed residents can reduce their ecological footprint by about half, and yet improve the quality of their lives at the same time. The model of the BedZed community has been used for advocacy and has led to UK legislation to make all new homes zero carbon capable by 2016.

Bioregional's One Planet Community approach is a sustainability master plan that integrates social harmony with food and other systems in the design of buildings and infrastructure. This rigorous Action Plan has been implemented internationally in several of communities including Sonoma Mountain Village (US), One Brighton (UK), and Mata de Sesimbra (Portugal). In the Sonoma project for example, existing buildings are retrofitted in combination with all new buildings to provide residents with a very attractive, low carbon quality of life. One Planet Communities aim to set the bar high enough that if everyone on the planet lived that way, we would all be living within the earth's true resource limits.

Durham Sustainability, Port Perry (Durham Region)

http://www.sustain-ability.ca/ Environmental NGO and Social Enterprise Interviews: Gail Lawlor, Co-Founder, Shawna Mutton, Executive Director

Showing leadership in recycling and green business both at the grassroots and at the international level, Durham Sustainability (DS) has gone through several incarnations in its 35-year history. Founder Jack McGinnis is credited with inventing the Blue Box in the 70s, founding the Recycling Council of Ontario, and pioneering the worldwide practice of recycling through his work setting up the world's first integrated large scale recycling system at the 1996 Olympics in Atlanta.

Over the years there has been a lack of clarity with respect to the business model in Durham Sustainability's pursuit of economic objectives along with social change and environmental benefits. Expressing a lifelong passion for the environmental mission, co-founder Gail Lawlor suggested that the organization has existed for 30 years with no economic base. Yet they won a range of consulting and environmental service contracts over the years, and ran the first retail Conservation Store in Toronto in the late 70s. On reflection, Lawlor agrees that there was economic and social intelligence behind everything McGinnis was involved in. The question was always, "What will make people buy in?"

DS now offers sustainability consulting, training and services to businesses, communities and municipalities in Durham region with an emphasis on practical solutions for waste management and energy efficiency.

8-80 Cities, Toronto/Copenhagen

http://www.8-80cities.org International NGO to Promote Walking, Bicycling and Public Spaces Interview: Gil Penalosa, Founder and Executive Director

8-80 Cities promotes the simple idea that if everything that we did in our planning and design was focused on making city streets and public spaces comfortable for 80 year-olds and 8 year-olds, we would have good communities for all. The founder, Gil Penalosa, focuses on advocacy through public speaking, teaching, media and consulting with municipal governments. He travels tirelessly to increase consensus about the need to plan and build cycling and pedestrian-friendly infrastructure for significant population increases expected in cities worldwide over the next few decades. The GTA, for example, will increase population by 50% in next 20 years, and Penalosa argues that we need to plan and invest for less car dependency.

8-80 projects often seek to influence policy by engaging communities to generate community action plans, as they did in Sudbury (Trails for Active Transportation) and Guadalajara (Re-Creating Guadalajara) in 2009, and in the Toronto neighborhoods of Flemingdon Park and Thornrcliffe Park in 2010 (Liveable Community Project). Penalosa also targets decision makers and stakeholder groups with transformative learning experiences such as study tours to promote policy change. The Study Tour on Open Streets in 2010 included representatives from Miami, Los Angeles, San Francisco, Portland, Atlanta, Mexico City, Saint Paul, and Roanoke.

Often working in association with the legendary firm of Jan Gehl Architects (Copenhagen), Penalosa and his team effectively combine common sense with good political consensus-building skills to achieve significant influence. "The only way to improve public spaces is through public engagement." (Gil Penalosa)

Equiterre, Montreal

http://www.equiterre.org/en/ Environmental and Social Justice NGO Interview: Sidney Ribaux, Co-Founder and Executive Director

Little known in English Canada, Equiterre stands out as a dynamic and effective NGO. Their mission is to build a social movement by encouraging individuals, organizations and governments to make ecological and equitable choices, in a spirit of solidarity. Founded in 1993 after the Rio Earth Summit, Equiterre offers concrete solutions to make sustainability and the social economy central to our society.

Their business model, which accounts for over 30% of their annual revenue, includes marketing sustainable agricultural produce across the province of Quebec through their Community Supported Agriculture program. In 2012 they completed development of a LEED Platinum building that embodies their values in downtown Montreal, the Centre for Sustainable Development.

They started with a focus on climate change and sustainable agriculture, long before these issues became popular. Since the beginning their passion and vision struck a chord with both the media and the public, enabling them to become the most influential environmental group in Quebec. Their messages and programs are marked by creativity and wit, and their ability to establish strong cross-sectoral partnerships through astute political sensitivity has been a key factor for their success.

Torontonians caught a glimpse of Equiterre's climate change advocacy strength during the G8/G20 summit in Toronto when they attracted media attention with a six-tonne polar bear sculpture whose ice body melted to reveal a bronze skeleton.

Green Roofs for Healthy Cities, Toronto

www.greenroofs.org North American Industry Association Interview: Steven Peck, Founder and Executive Director

Green Roofs for Healthy Cities started in 1996 as a coalition of 7 companies with the intention of building a green roof industry from scratch in North America. In 16 years they have overcome a range of challenges to build a \$250 million annual market in the US and Canada (now growing 15% a year). Founder Steven Peck's 2001 paper for CMHC, *Green Backs for Green Roofs*, established an economic rationale which has helped to propel the industry forward.

They have established a professional accreditation course with over 500 graduates working in the field, and they advocated successfully for the Green Roof Bylaw in Toronto, while working across the disciplines of research, design, construction and policy.

The organization delivers a range effective programming on behalf of its rapidly expanding international membership including a magazine called Living Architecture Monitor. For ten years they have produced an annual Green Roof and Wall conference, Cities Alive, (in Chicago in October 2012). With the Urban Agriculture Summit, which they are organizing in Toronto in August 2012, they are facilitating the convergence of the green building and food security movements.

Hammarby Sjöstad and Stockholm Royal Seaport, Stockholm

www.hammarbysjostad.se www.stockholmroyalseaport.com *Urban Renewal Project* Interview: Malin Olsson, Head of section, Stockholm City Planning

Originally conceived in 1996 as the Olympic Village in Stockholm's bid for the 2004 Olympics, Hammarby Sjöstad has served as Sweden's proving ground for sustainable design and state of the art green technologies. One of the largest green city renewal projects in Europe, incorporating 11,000 apartments and 10,000 work spaces around an urban lake, it has surpassed most its ambitious energy conservation, waste management, transportation and quality of life objectives. The success of Hammarby was a key reason that Stockholm was the first city to be awarded the "European Green Capital" title by the EU Commission in 2010.

The Hammarby model is well known among planners and designers, and the lessons learned from this project have been incorporated into the planning of Stockholm's visionary new urban brownfield renewal project, the Stockholm Royal Seaport, a 20-year project begun in 2010. "We put everything we learned from Hammarby into the Stockholm Royal Seaport." (Malin Olsson)

Stockholm is exemplary among European cities for its early adaptation of policies to integrate long-term climate change mitigation into planning. Hammarby and the Royal Seaport demonstrate alternatives to urban sprawl, increasing urban density without compromising quality of life, and increasing the city's capacity to generate renewable energy. They are part of an aggressive strategy to meet the city's bold objective to be fossil fuel free by 2050.

Not Far From the Tree, Toronto

http://www.notfarfromthetree.org/ Project-based Urban Agriculture Organization Interview: Laura Rainsborough, Founder and Executive Director

The discovery of neglected urban fruit trees ripe for picking in 2007 led to the creation of Not Far From The Tree (NFFTT). The founders were inspired by similar initiatives in other cities such as the Fallen Fruit art project in Los Angeles. NFFTT's own unique, volunteer-driven approach to harvesting and sharing Toronto's fruit has become a model for similar groups both in Canada and in other countries.

Homeowners simply register their trees, and at harvest time hundreds of NFFT volunteers pick the fruit. Providing 1/3 of the harvest to community agencies, 1/3 to the volunteers, and 1/3 to the property owner, NFFTT is equal parts social enterprise, cultural catalyst, and ecological

restoration project. Donations are delivered by bicycle to food banks, shelters and community kitchens around the city.

Among its multiple benefits, the initiative connects agriculture with urban culture and reveals the hidden ecology of cities, redistributes a valuable local food resource, and builds social capital among different Toronto communities.

Transition Network, Totnes, UK

www.transitionnetwork.org International Community-Based Movement Interview: Rob Hopkins, Founder

The Transition Network enables local regional economic self-reliance, food and energy security. It started as "Transition Towns" in the UK in 2005. Transition evolved into a worldwide movement of community groups and municipalities that seek to move from oil dependency to local resilience.³

The Transition Network delivers media, communications, training and tools such as *The Transition Handbook* to help self-organizing Transition groups to adapt project and program models to their local context. These resources are now used in Ontario by Transition groups in early stages of development in cities and towns such as Toronto and Peterborough.

While the work involves economic localization, local currencies, community owned energy production, ecological regeneration, local food production, etc. it can also be understood as cultural transformation work. "it becomes the story that the place tells about itself and how it's thinking about it's future." (Rob Hopkins)

West End Food Co-Op, Toronto

www.westendfood.coop Social Enterprise combining Local Food Security and Social Justice Interview: Sally Miller, Founding Coordinator

Giving priority to food from the Toronto region in a low-income neighborhood, the West End Food Co-op is an innovative new organization. It aims to be a community food hub including a co-operative retail store and a community kitchen at the Parkdale Community Health Centre.

In her role as coordinator for the development of the Co-op and its projects, Sally Miller was able to apply her knowledge and experience from almost 20 years in the alternative-food, agriculture, and co-op sectors as a manager, consultant, organizer, and researcher.

³ Economist Jeff Rubin explained the need for economic localization in a recent interview with the author. "I believe that people respond to prices. If prices don't make us change our way of life, then peak oil will lead to peak GDP, which gives us a permanent recession and a collapse of the mechanisms that sustain our affluence. However, that's not the way I think it's going to work. The reason that I think we are going to go back to a local or regional economy is precisely because those will be the only types of economies that will be sustainable in a world of peak oil." (Interview with Chris Lowry, 2010)

The co-op's food hub aims to be fully operational in 2012. Active programs include the Sorauren Farmers' Market and a pilot cannery. Financed in the neighborhood with Community Bonds, the multi-stakeholder co-operative has strong community and institutional support, and has already yielded useful strategic insights about sustainability in action. The co-op has taken on the challenge of a social mission in addition to its focus on local food. It has a social economy mission, to provide fair prices to producers and consumers, mentoring and training to stakeholders, and fair wages to workers. "The goal is actually to effect social change through action around food... but you can't just say, we are going to let poor people shop here, it just doesn't work. What you can do is figure out ways to create jobs." (Sally Miller)

Windfall Ecology Centre, Aurora

http://www.windfallcentre.ca/ Community Based Environmental Social Enterprise NGO Interview: Brent Kopperson, Founder and Executive Director

Windfall Ecology Centre built the idea of fully integrated economic, social and ecological sustainability into its founding mission. Established in 1998, their initial focus was on climate, energy and watershed work long before the issue of climate change was popularized.

They have a range of programs including community-owned renewable energy project management, energy efficiency and sustainable business consulting, an annual Ecology Festival, water protection education and leadership development.

Windfall maintains a balance among hands-on renewable energy infrastructure projects, education and training, and policy advocacy grounded in its engagement with client communities.

Windfall has piloted community-wide energy retrofit programs with First Nations communities which will soon be delivered across the province with government support. Founder Brent Kopperson places great emphasis on a community, bottom-up organizing approach in projects as well as advocacy, whether developing community power with First Nations or helping to create the Ontario Sustainable Energy Association (OSEA). "I really believe that the environmental sector needs to do a lot more local organizing than it does." (Brent Kopperson)

The Benefits of Integrated Sustainability Initiatives

This brief inventory of a handful of organizations based on integrated sustainability principles describes a wide diversity of social, economic and ecological benefits.

A key benefit of moving beyond a narrow environmental agenda to incorporate social and economic objectives is that it requires a wider socioeconomic view of positive and negative impacts. Whereas a traditional environmental campaign might consider job losses to be an acceptable risk of opposing a corporate polluter, or a traditional union or industry approach might pit workers' job security and economic growth against "environmental hysteria", organizations that work for systemic sustainability succeed in being transparent about the need to balance economic, social and ecological costs and benefits. The result is a balanced focus on solutions to generate prosperity along with ecological and social benefits.

Keys to Success: Why are Organizations Based on Sustainability Principles Effective?

A synthesis of the interview material yielded several common themes concerning why these sustainability organizations and their activities were effective and beneficial. The themes were also largely consistent with the author's experience working in the field of sustainable development since 1988.

- 1. Vision of a Hopeful Future
- 2. Careful Attention to Initial Conditions: Integrate Explicit Social and Economic Objectives
- 3. Blend Deep Sustainability Vision with Real Market Solutions
- 4. Build Social Capital at Grassroots Community Level
- 5. Psychosocial Benefits Yield Economic Dividends
- 6. Leverage Media Interest, Recruit Champions, Create Public Figures
- 7. Cultural Engagement Amplifies Local-Sustainable Identity
- 8. Policy Advocacy is Strongest From the Grassroots
- 9. Create Dynamic Models Adaptable to Unique Contexts
- 10. Use the Power of Inclusive, Positive, Humorous Communication
- 11. The Long View: Groundwork for Social Change
- 1. Vision of a Hopeful Future

People and organizations are motivated by hope, as well as by evidence that requires action. A vision of a hopeful future is essential for public engagement as well as for staff commitment to address the collective long-term challenges of sustainability.⁴

⁴ Uffe Elbeck, founder of the KaosPilots School for "change agents" in Denmark believes that we have to respond creatively to the challenges of sustainability. "This is a really interesting challenge for all of us, which will demand that we perform on the highest

The Transition Network emerged from a commitment to solutions and regeneration. Rob Hopkins explains: "In 2004 no one was articulating positive responses to peak oil, it was all gloom and doom. We were the first to say 'this could be fantastic... We could do all these things we've been talking about for years!' I think that just caught people's imaginations at the right time."

Many environmental NGOs (ENGOs) are founded out of a sense of urgency and indignation, but an emphasis on hopeful messages both in the organizational culture and external communications improves effectiveness.

> We were the first to say 'this could be fantastic. We could do all these things we've been talking about for years!'

Greg Searle describes the One Planet vision of BioRegional: "The one-planet world is a place where we have these really fantastic lifestyles within ecological limits. That helps to frame engagement with local economies. There are limits to growth, so we can't go on hyperconsuming forever." BioRegional grounds its bold challenge to conventional free market economics in its track record of building real market solutions to sustain quality of life in a resource-constrained future.

Gil Penalosa's mantra is that smart urban design increases quality of life, addresses the crisis of deteriorating cities, and enhances prosperity. "We have been building cities for a thousand years but it is only in the last 60 that we have been building them more for private car mobility than for people's happiness... increase quality of life, you will attract the best professionals. Quality of life is the most important tool for economic competitiveness."

For all of these successful ENGOs, language is determinant, not merely a matter of semantics. Equiterre is not a conservation and eco defense group, but rather a social economy agency. "What we talk about is, 'here are some smart economic alternatives'," says Ribaux. BioRegional, Green Roofs and 8-80 Cities do not talk about conservation, environmental defense or environmental responsibility; they focus on improving our *quality of life* as their core message.

2. Careful Attention to Initial Conditions: Integrate Explicit Social and Economic Objectives

All of these groups have achieved successful integration of economic and social objectives in their programming. For some it was intentional from the beginning and for others it was a discovery or manifestation of the work.

The case of somewhat unconscious though consistent engagement with economic sustainability described in the Durham Sustainability profile suggests that a narrow focus of

level. We have to make it cool, sexy, daring, exciting. It shouldn't be, 'OK, we are at the end of the world.' There is something really interesting on the other side of the crisis. We just have to figure out what that is, together." (Interview with Chris Lowry, 2010)

environmental sustainability can lead to a chronic lack of individual and institutional confidence and a sense of constantly fighting environmental battles in an indifferent commercial world. How we define economic success is also very important. We need to recognize that marketbased initiatives may not generate big revenue but may have a major impact which needs to be documented and measured as much as possible.

if you don't get it right at the beginning it's much harder to change later

Sally Miller insisted on a formal strategic planning process using popular education techniques in order to clarify the social, economic and environmental objectives of the group of neighbors who founded the West End Food Co-op. "One of the things that I've learned over the years is if you don't get it right at the beginning it's much harder to change it later."

Sidney Ribaux recalls that integrated sustainability was not the typical approach of NGOs founded in the 90s. "Environmental groups were less concerned about the economy, and international development groups were less concerned about the environment than they might be today.We really wanted to mix all those up together in local projects."

Initially the Transition Network was unclear about how to achieve economic impact. "It was very much about peak oil, climate change, local foods... It was about localization but we hadn't really thought through clearly, how you would actually make that happen. We assumed that if you did all the other stuff it would happen automatically... I think our focus recently has been much more around how to roll your sleeves up and actually get on with making the local economy, local energy companies, local finance, local currencies, local foods." (Rob Hopkins)

When the idea of integrated sustainability comes together successfully for the first time in a project, the effect is profound for all stakeholders. Brent Kopperson of Windfall describes it as a kind of 'aha!' moment. "I think the most seminal moment was when we did an energy efficiency retrofit with the Chippewa First Nations Community on Georgina Island [in 2006]. That was the first time that a whole community had been involved in a retrofit project in North America to my knowledge, and it really pulled everything together because it was the first time the cultural aspect really was driven home to me. It wasn't just about Windfall delivering the project. We worked with the community and invested in those relationships and made friends and got an entire community engaged in a project around the environment and energy which connected in various key ways with the community, because it was *action* that *they* were taking in their own community, which they were able to connect directly to their deep-seated archetypal cultural DNA around long term vision. It tied in both the cultural and economic aspects of the environmental work that we were doing."

3. Blend Sustainability Vision with Real Market Solutions

Integrated sustainability needs to deliver real market solutions. Producing goods or services is consistent with the principles of sustainability, but it can also help to fund the core operations of the organization. Being a social economy organization that engages with business, for example working with farmers, Equiterre has less need for outside funding.

Over the last 20 years NGOs in the fields of environment, arts and culture as well as social justice have experienced pressure from donors and governments to explain their work in terms of economic benefits. Whereas many ENGOs struggle to articulate their economic impacts, this has been a strength of Equiterre, Green Roofs, Windfall, 8-80, BioRegional and Transition since their inception.

You can't just say, we are going to let poor people shop here, it just doesn't work. But what you can do is figure out ways to create jobs

The leaders of all these organizations are motivated by a deep idealism, but as Greg Searle explains, "they have this underlying commitment to entrepreneurialism and to doing things that will work for ordinary people."

A wide spectrum of initiatives that inherently combine ecological sustainability with real market solutions are represented by the organizations in this inventory. In food co-op organizing, for example, "members gain economic skills they didn't have before, to read finance, sell bonds, know more about food, so it makes the local economy stronger and stronger." (Sally Miller)

If sustainability in action is to be a tide that raises all boats, it is important for social economy projects to target low-income beneficiaries. Brent Kopperson explains this imperative: "We recognize that low-income individuals and families around the world are going to be facing increasing issues around the availability and cost of energy as we move into a carbon-constrained 21st century. These people are going to be paying a much higher proportion of their available income on energy so we have had a focus on low income energy programs directed at low income individuals. We have not been alone in that, Green Communities Canada is one of the leaders in the country and we have worked very closely with them, particularly in the area of low income energy efficiency."

It is a common experience of social economy initiatives that economic opportunity is a powerful magnet for diverse participation. This was a big discovery for the Transition Movement. "Right when we started to shift the language... how do we create a new economy, how do we create new businesses and so on," says Rob Hopkins, "a whole load of new people started turning up and getting involved, who had been sitting on the fence for two years waiting for us to get it together. And that's very much changed how the whole thing works."

4. Build Social Capital at Grassroots Community Level

A key factor for success is to invest in building what Robert Putman calls *social capital*, cooperative relationships and social networks of mutual support. Extensive research in behavior change, going back to the work of Albert Bandura at Stanford in the 80's, demonstrates that peer approval is a powerful motivator for behavior change. Trusting relationships are needed to engage people to 'buy in' before they will change individual and collective behavior. Ninety-five percent of action in the sustainability movement is technology-centric, but the future or sustainability may depend on social factors.

Over the years BioRegional has deepened its commitment to building social capital as a precondition for sustainability. As a society, says Greg Searle, "we're addicted to creating technological solutions to what ultimately is a social problem. Bioregional really learned that lesson almost accidentally. At BedZed we hired somebody called a Sustainable Lifestyles Officer and when people first moved into the community she helped them make a transition to a more sustainable lifestyle. She gave them bike coupons and showed them the transit map and helped them set up a bicycle lane on the city street and set up a composting program and a brought a car sharing club on site, and gave the residents literature about how that worked. She was sort of a social marketer. Later when we did post-occupancy evaluations we were really surprised to find that 42% of our total carbon savings had come about through behaviour change, and it cost us *almost nothing*." They had focused on high-capital investments in technological solutions, yet almost half of the carbon reduction achieved by BedZed residents actually came from lifestyle changes motivated by positive social interactions.

High social capital becomes a system condition for spreading sustainability

Another discovery made in post-occupancy evaluations at BedZED was that residents knew 19 of their neighbours on average. "This is three or four times the norm in a comparable housing development, explains Searle. "People taking care of each other's kids and grocery shopping for each other, etc. It's also a very safe neighborhood because of that high social capital. This was perhaps the greatest accomplishment of the project. …It becomes a 'system condition'. High social capital becomes a system condition for spreading a sustainability epidemic."

Habits are profoundly difficult to change, and social relationships are a key factor influencing changes in lifestyle

These socially proactive agencies see the importance of integrating lifestyle choices into the discussion about what matters environmentally. It is not just solar panels and electric cars, it is also diet and personal living choices. Greg Searle argues that they matter *equally*. Shifts in household behavior "are at least as important as shifts in infrastructure and technology." Habits are profoundly difficult to change, and social relationships are a key factor influencing changes in lifestyle.

The importance of social capital is highlighted by the unexpected challenge encountered by the developers of the Hammarby project in Stockholm. Because they started with brownfield, they had to grow a community from scratch. Unlike BedZED however, they did not invest in a highly effective Sustainable Lifestyles Officer. Malin Olsson reflected that "the social dimension of involving the residents was more important than expected." In order to reach their sustainability objectives they needed to involve residents as actors rather than simply beneficiaries of sustainable housing. They built an information centre at Hammarby called the Glass House, but it served as a visitor centre for outsiders rather than as a community hub which could have accelerated the slow growth of social capital. Notably, this weakness in the project was not identified in the tech-focused evaluation study published by the Swedish Royal Institute of Technology. Learning from Hammarby, it will be important for the Stockholm Royal Seaport to invest more in enhancing social capital from the beginning.

What are some other examples of building social capital to support sustainability objectives? Equiterre builds *joie de vivre* through the mechanism of Community Supported Agriculture. BioRegional's BedZed model demonstrates how to design housing that increases pro-social interactions. Windfall achieves strong sociocultural impact with an annual Ecology Festival which is a vehicle for showcasing planet-friendly products and services. Gil Penalosa generates conviviality and peer-to-peer influence around difficult issues by inviting a group of Taxi Union members on a city walk or riding bike trails with City Councillors.

5. Psychosocial Benefits Yield Economic Dividends

Common sense as well as extensive data in the human resources field suggests that reduction of stress is good for individual and collective productivity. The positive psychosocial impacts of many sustainability initiatives focused on health and quality of life are well documented, from the joy of fruit picking and community kitchens to the increased security of community-owned renewable energy.

Human culture is not enough to sustain human wellness. We have a deep-seated need to affiliate with other forms of life

Laura Rainsborough describes the significant psychosocial benefits of urban fruit picking for hundreds of volunteers who participate. "[Climate change] can be so overwhelming if we don't have any way to deal with it. We just tune out. So there's something quite special about the opportunity to have this hands-on experience of picking the fruit, eating it, sharing it... it helps to shift perception and it also is quite inspiring about what else could be done... every time somebody else came along on a pick they were having this kind of wonderful epiphany about local food and about trees and about the world and community-building."

According to Steven Peck, *biophilia* provides a compelling argument in support of green roofs and green infrastructure. This is more than just saying that green roofs are good because people enjoy nature. E.O. Wilson's biophilia hypothesis asserts that human culture is not enough to sustain human wellness. We have an affinity and a deep-seated need, says Wilson, to affiliate with other forms of life in order to be mentally and physically well.

6. Leverage Media Interest, Recruit Champions, Create Public Figures

Effective media relations are a key factor for success, particularly in the early years. If your story resonates with the public, a single mainstream interview can have a huge impact, as it did for NFFTT. "I was on Metro Morning in the summer of 2008 and that was as a watershed moment for us. By the time I cycled home the website hits were just huge and there were so many more trees being registered. My voicemail was full with other media and fruit tree owners and volunteers." (Laura Rainsborough)

Sustainability objectives can be advanced beyond the reach of project staff by introducing media to telegenic citizens who are able to speak passionately

Sidney Ribaux suggests the powerful idea that NGOs can *create public figures*, as Equiterre does with organic farmers and other telegenic citizens who are able to speak passionately about the issues. Sustainability objectives can be advanced beyond the reach of project staff by leveraging stakeholder advocates to become go-to people for the media.

A corollary of this idea is Steven Peck's observation that if you want to go to scale and 'punch above your weight', having a voice regionally or internationally, *you've got to have champions* that can advance your mandate and adapt your model in other places.

7. Cultural Engagement Amplifies Local-Sustainable Identity

Some, particularly the food and farming groups, see culture as a distinct and complex aspect of what they do. Others, particularly those more involved with sustainable design and building, prefer to see it as an aspect of the social benefits that they aspire to produce.

A farmers market, food coop store, or community kitchen all serve to build a strong neighborhood culture

It can be argued that, from an anthropological perspective, social and cultural benefits are difficult to separate. A farmers market, food coop store, or community kitchen all serve to build a strong neighborhood culture around food, increasing conviviality and cooperation while generating positive aesthetic and gastronomic experiences. This can be understood as building the community's sense of identity with local-sustainable values. That is, our neighborhood is the place where the community buys bonds to fund the local food cooperative, we are the neighborhood with the car-free street, we are the community with the collective renewable energy project that our great-grandchildren will be happy to inherit. This identity, the sustainable story a place tells about itself, is generated or amplified by cultural engagement.

Where does social benefit end and cultural benefit begin? It is clearer if we are talking about the promotion of green roofs and walls. The cultural benefits involve aesthetic impacts of neighborhood beautification which may include public art that involves "painting with plants" or integrating mural and sculpture with permanent plantings on buildings. The social benefits include job creation, improved quality of life, and the mental health benefits of biophilic nourishment.

Many in the local food movement would argue that food is a cultural medium as well as a commodity, and as such it is a key to popular education for sustainability. NFFTT and the West End Co-op generate conviviality and cultural riches through the medium of food. "There is tremendous aesthetic pleasure from canning, it's beautiful." (Sally Miller)

"The culture and social stories quickly emerge when you start talking about fruit and food in general. [to do] agriculture in an urban location you have think vertically. You have to work with different spaces like this rooftop [401 Richmond], and it attracts a lot of artists and really creative thinkers because you have to think differently. That could also be a creative process that brings community together." (Laura Rainsbrough)

One of the reasons that economics students are drawn to the local food movement, says Professor Peter Victor, is because it brings a very wide range of issues together, such as the relationship of city dwellers to the land and other species, the regional resource base with respect to food security, and the corporate domination of food.

8. Policy Advocacy is Strongest From the Grassroots

Some of these socially engaged agencies emphasize the importance of working at the grassroots with individuals and neighborhoods, engaging local stakeholders as a basis from which to do policy advocacy. They are surprised at how centrally important this has been to their success in achieving impact at the intended depth and scale.

In their zeal to advocate on the burning issues of the day through mass media communications, environmentalists are sometimes out of touch with the person on the street

This is something that many in the environmental sector fail to do well. In their zeal to advocate on the burning issues of the day through mass media communications, environmentalists are sometimes out of touch with the person on the street. This is unfortunate, because local support is political gold for advocacy at provincial, national and international scales. "What I guess you realize in working at the local level is that we can't move every mountain locally and sometimes you have to work from the top down as well as the bottom up," says Brent Kopperson.

Kopperson suggests that many ENGOs have not built the capacity to do grassroots local organizing as the backbone of policy advocacy because it is very hard to fund advocacy in Canada. Advocacy funding tends to go to just the top three or four large ENGOs, arguably with disappointing results. "For some reason foundations cannot grant advocacy funding on a more diversified basis and I think that's a problem in the whole sector, I think it's systemic."

Sustainability in action is often aided by regulatory changes. When there is enabling policy change, such as Toronto's Green Roof Bylaw, it often comes into effect due to industry association educational efforts that inspire champions on City Council. The new Zero Carbon Homes by 2016 legislation in the UK came about due to campaigns run by large ENGOs such as WWF using BedZed as a model demonstration project with a 10-year track record.

The Hammarby project in Stockholm was initially enabled by a new city development plan that promoted sustainable building. It identified some old industrial and harbor areas that were part of a strategy to build the city inwards instead of doing greenfield development. It is also interesting to note that the city of Stockholm encourages its developers to allocate 1% of project budgets for public art and public space.

9. Create Dynamic Models Adaptable to Unique Contexts

Exemplary projects have great power of attraction. They tend to experience a high level of regional and international interest in their work as a model for others.

In international development there is a myth of replicability, and NGOs sometimes make unrealistic claims as a justification for investment. None of the sustainability leaders interviewed for this study would choose to be judged by the replicability of their initiatives. All of them emphasize the importance of local context and the individual characteristics of the founders as essential factors for success of a new initiative.

One of the ways of replicating something is to find people that are able to champion it in their own context

On the other hand, it is exciting to receive inquiries from far away. Green Roofs For Healthy Cities wants to see green roofs everywhere, so Steven Peck thinks a lot about replicability. "No organization can be in the 800+ cities in the United States and Canada. You've got to have champions. One of the ways of replicating something is to find people that are able to champion it in their own context."

With the right champions, the dream of seeding an adaptable model is possible, as in the case of NFFTT. "Now we've been able to help so many other groups get started. We have helped groups in Calgary, Edmonton, Winnipeg, Halifax, Montreal, Ottawa, Kitchener-Waterloo, Guelph, Mississauga, Oakville, Atlanta, in Eugene Oregon and Melbourne Australia. We have received requests for support from Scotland and Puerto Rico. Fruit trees exist all around the world, so this kind of a project is incredibly replicable. " (Laura Rainsborough)

10. Use the Power of Inclusive, Positive, Humorous Communication

All of these leaders emphasize the importance of positive messaging and humour, although it needs to be culture-specific whether we are in English Canada, Quebec, the US, the UK or other countries.

One of the notable features of the Transition Network in the UK has been the sense of humour, playfulness and celebration in its communications. This is very deliberate and it takes a lot of hard work. "When Transition US started up they said, 'there is lots of humour that runs through your stuff, and we're really struggling to translate it into the U.S. context, because peak oil just isn't very funny." (Rob Hopkins)

Transition isn't an environmental thing, it's a cultural thing

While social justice is a value that Transition groups pursue "almost instinctively", says Hopkins, they have tried not to emphasize it in a strident way. They have avoided declaring what they are against, or naming any enemies. "As soon as you do that, you start to isolate more and more people who don't agree with those things... We need to bring together people on the right, people on the left, young people, old people. For me it felt increasingly like Transition isn't an environmental thing, it's a cultural thing, so it's not about trying to convince everybody that climate change is happening. I couldn't care less if people I'm involved with here in Totnes agree that climate change is happening. Ideally, what we need is to design a process whereby people who believe in climate change get involved because of climate change, people who don't, but believe that the local economy here is important, get involved because of that. You know, it becomes bigger than that. It becomes the story that the place tells about itself and how it's thinking about it's future."

8-80 Cities and BioRegional also avoid taking a politically partial tone, preferring to let the work speak for itself while aiming to be as inclusive as possible.

In the Quebec context. independence is a necessity for Equiterre, as an agency that needs to stay on good working terms with governments as well as pro-Sovereinty labour partners. At the same time Equiterre is an outspoken advocate for social justice, and is the only environmental group in Canada that works on the fair trade issue promoting agroecology and farm workers' rights in the developing world. Cross-sectoral partnerships have been a key strength for achieving systemic impact. The extent and range of Equiterre's cross-sectoral reach has been remarkable, perhaps unique in Canada, although many ENGOs make efforts in this direction. "We've been able to bring together people from diverse economic and political backgrounds. I remember in 2002 during the debate on the ratification of Kyoto, we brought together a press conference with farmers, bankers, the industrial sector, artists, obviously the environmental groups, some business interest groups, some unions to all say in one voice we need Canada to ratify Kyoto." (Sidney Ribaux)

11. The Long View: Groundwork for Social Change

Penalosa, Ribaux, Searle and Kopperson, all of whom have been working for both local and international systemic change for over 10 years, expressed some impatience with the slowness of change. "We realized over the years that, although we have some policy wins, the actual impact of the work we're doing is long-term. We need to take a long-term view of the issues that we're working on." (Sidney Ribaux)

Humans have the optimism bias. 80% of us have it. We're incredibly optimistic. We may be pessimistic about society or about our countries but we're optimistic about ourselves

A common thread that runs through all these narratives is that they are laying the groundwork for future social change. Penalosa says that we already know what works for cities, but there is inertia. GTA politicians are risk averse and voters are not anticipating the oncoming waves that will bring 50% population growth in the next two decades. Hopkins says that Transition groups are doing the advance work for the rest of society to catch up when the time comes.

Greg Searle laments the fact that "We are in an awkward time between prosperity and emergency... From a psychological standpoint, humans have the *optimism bias*. 80% of us have it. We're incredibly optimistic. We may be pessimistic about society or about our countries but we're optimistic about ourselves. When it comes to climate change, we can't imagine ourselves suffering those consequences very well. So we're just going to need a lot more things like hurricane Katrina to light a fire under us, and then when that happens I think in many ways we are at our best in a crisis. The work that we do... is preparing a future society in 10 or 15 years for what will become a mass exodus towards doing things the right way."

Conclusion

In this paper, a selection of experienced sustainability leaders have provided insight about good practice and key factors for success. Analysis reveals a number of common themes in their work, and patterns of sustainability principles in action have emerged. These leaders have arrived at the same place by very different routes, with varying degrees of intentionality.

The axiom of chaos theory is 'careful attention to initial conditions'. You *may* achieve measurable and significant economic and sociocultural results from an environmentally focused project *without* designing the project to do that, but are you more likely to achieve those multi-axis results if you design and finance the project with those integrated sustainability outcomes in mind? The qualitative data described here indicates that the answer is yes.

The integration of sustainability principles in action over the last 20 years by leaders in the field is a significant evolution of good practice

A key benefit of integrating social, economic and ecological sustainability into the mission of environmental initiatives is that it encourages environmentalists to engage with communities and generate social capital in order to be effective. The data from this study suggests that the success of integrated sustainability initiatives often depends on substantial engagement with communities of interest, stakeholders, and beneficiaries as active participants rather than as passive subjects of narrow environmental, economic or social justice agendas.

The integration of sustainability principles in action over the last 20 years by leaders in the field is a significant evolution of good practice that can increase the effectiveness of environmental organizations and initiatives.

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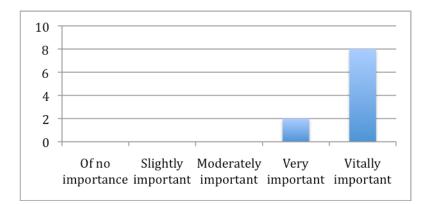
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Collective Impact work of Kania and Kramer, www.ssireview.org

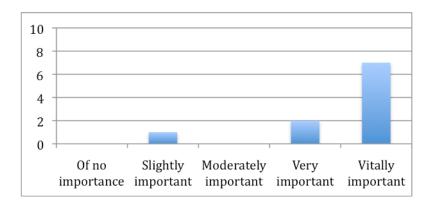
Appendix One: Important Enabling Conditions for These Ten Organizations

The interviewees were asked to rate the importance of the following factors.

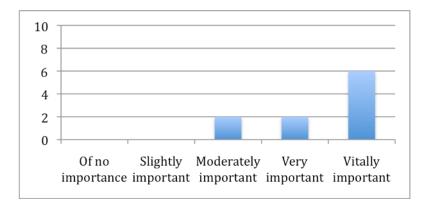
1. The personal characteristics of the founding individual or founding team



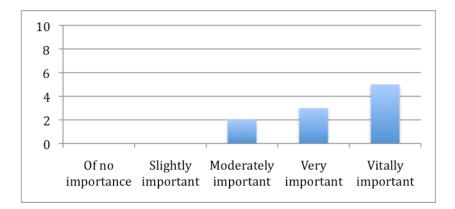
2. Benevolent funder in the first major growth phase



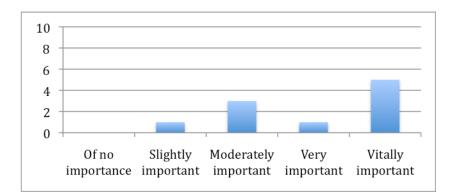
3. Community/public support and demand



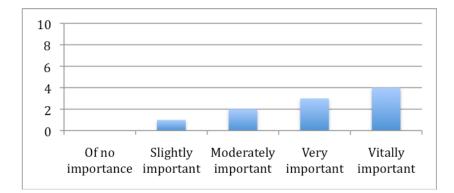
4. Being in the right place at the right time



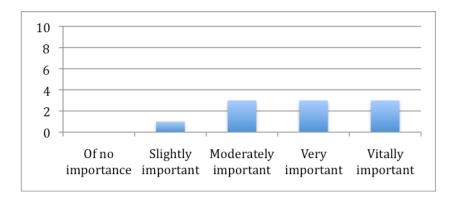
5. The founder(s) depth of prior knowledge of the problem



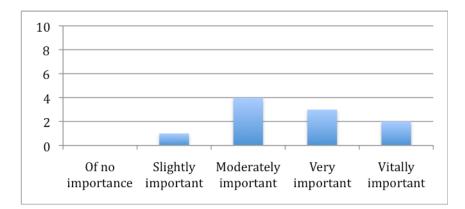
6. Benevolent funder in the startup phase



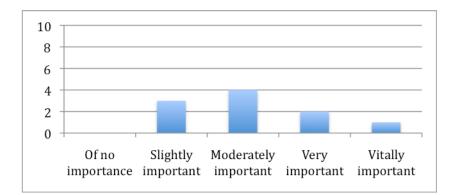
7. Geophysical context



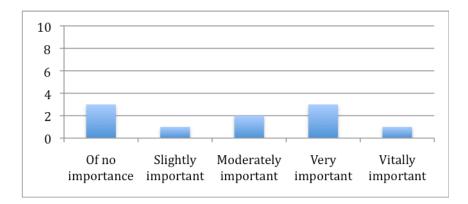
8. The founder(s) depth of prior knowledge and experience of the field of work



9. A specific environmental crisis



10. Favorable government policy change



Enabling Conditions Questionnaire

I am going to ask a few questions related to enabling conditions for your organization and I want you to tell me from 0 to 4 --

o of no importance 1 slightly important 2 moderately important 3 very important 4 vitally important

The personal characteristics of the founding individual or founding team	01234
The founder(s) depth of prior knowledge of the problem	01234
The founder(s) depth of prior knowledge and experience of the field of work	01234
Community/public support and demand	01234
Benevolent funder in the startup phase	01234
Benevolent funder in the first major growth phase	01234
Favourable government policy change	01234
Being in the right place at the right time	01234
Geophysical context	01234
A specific environmental crisis	01234

Appendix Two: Structured Interview Questions

- How would you describe your project?
- Tell me about how the project was conceived and when. (note: What problem and what opportunity were identified?) What motivated the founders?
- (possible prompt) How long did it take to get it up and running?
- (possible prompt) What made you think it might work when you were conceiving it?
- At what point in the development of the project did you know it was going to work? What happened? Was there an initial success that marked a watershed?
- Why did it work?
- Did the project emerge from a specific place-based context-focused problem and opportunity or was it a conceived as a response to a societal challenge that might be scalable and replicable in different contexts?
- Can you think of any factors specific to the context that have been advantages for the project? (context meaning geographic, socio-political, right time and place)
- Can you think of any factors specific to the context that have been challenges for the project?
- Can you think of any non-contextual factors that have been advantages for the project? (non-contextual meaning things like geopolitics, peak oil, climate change, scarcity, junk food)
- Can you think of any non-contextual factors that have been challenges for the project?
- Describe the economic benefits, if any, that have resulted from this initiative.
- Were economic outcomes part of the project design, goals and objectives from the beginning?
- Describe the cultural benefits, if any, that have resulted from this inititiative.
- Were cultural outcomes part of the project design, goals and objectives from the beginning?
- Describe the social benefits, if any, that have resulted from this initiative.
- Were social outcomes part of the project design, goals and objectives from the beginning?
- · How successful has it been compared to your initial objectives?
- What challenging factors didn't you know about initially that became important?
- What unforeseen assets emerged after you launched the project/organization? What ended up being important that you did not plan?

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