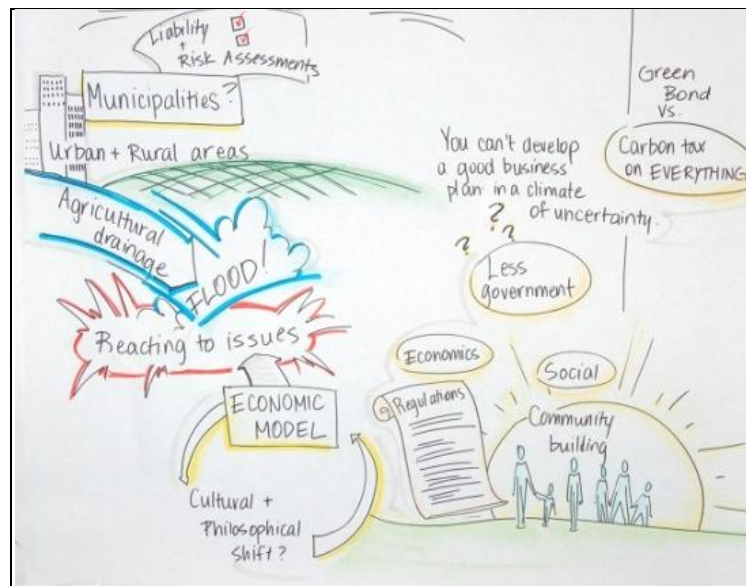


Midwestern Ontario Regional Green Jobs Strategy 2010

Green Communities Case Studies – Year One

9/30/10



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List of Acronyms

| | |
|----------|--|
| CED | Community Economic Development |
| CFDC | Community Futures Development Corporation |
| FIT | Feed in Tariff |
| GJS | Midwestern Ontario Regional Green Jobs Strategy |
| microFIT | Government financial incentive programs for ground installations < 10KWh |
| NFP | Not for Profit |
| NGO | Non-Government Organization |
| OSEA | Ontario Sustainable Energy Association |
| SME | Small to Medium Enterprise |
| TREC | Toronto Renewable Energy Co-operative |
| UNEP | United Nations Environment Programme |

Case Study 1 - Community Solar Project

Organizations do not necessarily go through a full process to come to decisions on what projects they will work on. They went from “technologies are good” to “let’s focus on one technology and move forward.” They had awareness that renewable energy and energy efficiency were good things. Awareness prompted them to move forward with the community solar project. If you are part of an organization trying to move things forward then you need to investigate fully all possible solutions that meet the criteria of your project.

Project Partners:

Perth County Green Works, Festival Hydro, Elora Environment Centre, The Gentle Rain (health food store), Stratford Gazette, the Co-operators Insurance, Stratford and Perth County Community Foundation, Lions International, Midwestern Ontario Regional Green Jobs Strategy and community volunteers.

Partner Groups:

Environmental Organization, Power Distribution Company, Energy Audit Company, Health Food Store, Newspaper, Insurance Agency, Community Foundation, Service Club.

Project Aim:

The Perth County Greenworks set out to fundraise and foster the installation of a solar water heating system at Optimism Place, a women’s shelter in Stratford, Ontario. The project’s aim is to promote efficient sustainable resource use, improvements to the natural environment and cultivate association of economic benefits within the community. (King, 2010)

Project Background (aka “The Tipping Point”):

Dan Predojevic of Festival Hydro gave a presentation at the steering committee meeting in January 2010 highlighting energy efficiency and the company’s current initiative to recognize and intervene in improving energy efficiency among businesses and public facilities. After seeing the presentation, the steering committee felt that the women’s shelter could reduce their water heating costs via solar power. (King, 2010)

Role in Project:

At the point the Midwestern Ontario Regional Green Jobs Strategy (GJS) became involved, Perth County Greenworks (PCGW) had already obtained quotes from multiple suppliers and was looking for base knowledge regarding understanding of how the technology works and how to identify reputable dealers. GJS identified that some of the quotes would need redoing because they were for a four person

household which would not have enough capacity for the volume of tenants of a women's shelter. (King, 2010)

The GJS provided networking to organizations with similar goals and aims including connecting PCGW with the ELORA Environment Centre in Elora, Ontario. An in-kind energy audit was offered to the environmental organization to explore all options that were available to the steering committee.

As a result of assistance, information specific to the technology and project was provided by an unbiased organization and referrals to local, credible providers were supplied.

Result:

The environmental organization selected solar powered water heating as a way to achieve the project's aims. (King, 2010) On June 21, 2010, a fundraising event was held. The fundraising event was billed as "an evening that is dedicated to all the sun has made possible with food, music, art and much more." Proceeds were intended to support the installation of a solar water heating system at the women's shelter, as well as the continued effort of the environmental organization to provide services that result in more efficient and sustainable resource use, improvements to the natural environment and associated economic benefits within the community.

At the time of printing, there is \$2,000 left to fundraise. The total project cost is \$19,000. (Treasurer, 2010)

This project highlights how nonprofit organizations are interacting with public facilities and public services. (King, 2010)

At the time of completing this report, the last update from the environmental organization received indicated that smaller fundraising opportunities are being pursued to begin installation of the solar water heating system.

Needs and Barriers:

1. There is a notable lack of awareness and information of renewable technologies. (King, 2010)
2. Consumers are looking for information about suppliers. (King, 2010)
3. Credibility and trust are issues associated with finding reliable information. There is a need for access to reliable, neutral information from an unbiased organization about renewable technologies. (King, 2010)
4. Organizations seeking new projects have a need for a resource centre with potential partners and contact information. (Treasurer, 2010)
5. There is currently no repository of current projects with contact information. (Treasurer, 2010)

6. There is a need for reliable information that addresses concerns of consumers regarding: (Executive at Large for Perth County Greenworks, 2010)
 - a. What areas of a work or domestic dwelling should be assessed?
 - b. What type of equipment is used to measure energy waste and how reliable are the results?
 - c. What equipment is recommended to reduce energy use?
 - d. What solutions are recommended?
 - e. What potential is there for local businesses to manufacture some of the various components that go into monitoring and reducing energy waste?
 - f. ISO is an industry standard in many sectors, but is it appropriate here?
7. The community needs someone to recognize the need to make change and assist the communities and institutions to move forward in a positive way whether it is by adopting renewable technologies or looking for environmental issues within the community and then tackling them one by one. Community organizations cannot do it on their own. They need an organization to 'champion' the issue or cause to help it move forward. (King, 2010)

Opportunities:

1. This project has the opportunity to be duplicated once showcased. There are women's shelters and facilities throughout our region. Highlighting the interaction between community partners in an effort to move forward with a green initiative would set an example of what is possible. (King, 2010)
2. There is an opportunity to generate awareness and provide information to meet the needs of consumers, and organizations who are interested in projects.

Impact on Green Sector:

The fact that the women's shelter is going to install renewable energy technology is an opportunity for visibility in the community that these technologies are available and can be of benefit. If the women's shelter can develop the funds to do this project then other organizations may be able to do the same. Adopting renewable energy in a public space influences the community towards that technology and generates awareness. (King, 2010)

Impact on Community:

The community gained exposure, and in some cases awareness and understanding of renewable technology. The fundraising event brought the community together through collaboration on a common goal. (King, 2010)

Green Job Implications:

Green jobs resulting from this type of project include solar installers, solar maintenance personnel, and consultants. There is also a consulting opportunity to provide services for research, networking and fundraising initiatives that are typically required to achieve completion of the project.

Observations:

1. Organizations tend to jump into fundraising mode because it is what they know. They skip some of the fundamental research steps due to lack of availability or comfort in finding information that is pertinent to appropriate technology adoption.
2. Even though an organization may be environmental, we cannot assume that they know everything about all things 'green.'
3. There are many communities that can benefit from renewable technologies and if they are pointed in the right, direction will embrace the renewable technologies. (King, 2010)

Recommendations:

1. A system of web resources must be developed and made available to the public. The content should be reliable and neutral on topics such as information about renewable technologies, supplier and business information, a database of current and past projects with contact information, case studies of green projects, and articles and reports from credible sources regarding areas of concern that are highlighted in this case study.
2. When approaching a project such as this one, begin with an energy audit and then go from there. Once a clear picture has been painted exploring all options that are available, then the organization can assess the practicality and prioritizations of the recommendations.

Case Study 2 - Municipal Renewable Energy Project

It is challenging to work with different municipalities who have different motivational factors. The municipalities are very guarded and require someone that can be discreet with the information that they provide. There is a fine line between research and implementation from the view of constituents.

Project Partners:

Huron County, Maitland Valley Conservation Authority, Municipality of Huron East, Township of North Huron, Municipality of Morris Turnberry, Huron Manufacturing Association Renewable Energy Networking Group, KW PowerLogic, MV Power Systems, Huron Business Development Corporation and Midwestern Ontario Regional Green Job Strategy.

Partner Groups:

County, Conservation Authority, Municipality, Manufacturing Association, Wind Turbine Manufacturer, Solar Panel Installer, Community Futures Development Corporation

Project Aim:

To create an opportunity for community partners to demonstrate forward thinking, generate green power, create jobs and spur on an industry with great potential through adoption of renewable energy technologies on publicly owned properties. (Midwestern Ontario Regional Green Jobs Strategy, 2009)

Project Background (aka “The Tipping Point”):

Communities want to reduce dependency on traditional fossil fuel energy sources such as coal and natural gas, which emit pollutants that threaten human and environmental health. Renewable energies such as wind energy or solar power offer clean, emissions free alternatives to coal and natural gas.

The Township of North Huron introduced an Energy and Environment Action Plan “To reduce [their] impact on the environment by decreasing the energy consumption of operating the Township, by 5% within 5 years, and by introducing environmental education programs and implementing other “green” initiatives.” (Township of North Huron, 2009)

A natural strategy to move towards renewable energy requires a champion to take on the challenge to approach implementation as a multi phase process. Phases include developing demonstration sites and encouraging public uptake of renewable technologies. The champion is encouraged by financial incentives, in this case the microFIT program through the Ontario Power Authority. Through this approach, a sustainable energy supply develops through a philosophy of ‘one building at a time’. As the approach gains momentum, green companies receive a kick-start in consumption, which stimulates new employment in the green economy. (Midwestern Ontario Regional Green Jobs Strategy, 2009)

Role in Project:

The Midwestern Ontario Regional Green Jobs Strategy provided awareness and information to support the exploration of renewable energy at the municipal government level through a targeted information session at a Clerks and Treasurers Association meeting. The session included information on the renewable energy options available, incentive programs, cost, rate of return on investment, purchasing options, installation requirements and the overall footprint of the technology. “We were a large part in facilitating the funding proposal for the initial investment in capital.” (King, 2010)

Handouts were available for specific models available, incentive programs, space requirements, and return on investment.

Result:

The clerks and treasurers are the people within municipal governments who are responsible for capital investment recommendations to Council. By bringing together resources through an information meeting to the clerks and treasurers we were able to provide them with information central to their decision making processes. As a collective body we did the central research for all resources; we were able to bring the key decision makers information on suppliers and providers.

Networking has occurred between the suppliers and consumers (municipalities). A greater network and partnership building exercise has increased the capacity through the microFIT program and suppliers.

As of the report going to printing, a solar installer has set up an arrangement with the municipalities that will enable them to have alternative energy generation on their municipal property to generate income.

Needs and Barriers:

1. There is a need to increase knowledge of renewable energy technologies. Key decision makers for municipalities did not have information on renewable technologies and suppliers. (Administrator Clerk-Treasurer for Municipality of Morris-Turnberry, 2009)

“The Midwestern Ontario Regional green Jobs Strategy provides a tremendous knowledge base to everyone interested in renewable energy, which increasingly is everyone in society.” (Administrator Clerk-Treasurer for Municipality of Morris-Turnberry, 2009)

2. The amount of work involved that leads up to final decision making when considering renewable energy can act as a barrier for Clerks and Treasurers. The adoption of renewable energy becomes more work than opportunity since key decision makers are short on time and there is no other person designated to research these types of options. (King, 2010)

3. There are limited and inadequate financial resources at the municipal level for capital projects. (CAO/Clerk for the Township of North Huron, undated)

Without the funding assistance provided by the Southern Ontario Development Program, the Township of North Huron would not be able to participate in renewable energy projects at this time.” (CAO/Clerk for the Township of North Huron, undated)

“In 2009, Huron County completed a study entitled County of Huron Net Metering Wind Generator Feasible Study. While the study confirmed viable wind resources on the subject county property, it also demonstrated that small scale wind-energy facilities are not financially feasible without funding assistance for capital.”¹ (Director of Planning and Development of Huron County, 2009)

4. There is a need for capacity building to find alternative solutions to barriers with the help of project partners. (Midwestern Ontario Regional Green Jobs Strategy, 2009)
5. Complex application processes highlight the need for assistance in applying for government incentive programs and funding opportunities. (King, 2010)
6. There is limited documentation outlining renewable energy projects from selection of technology through to implementation. (Chair of the Huron Manufacturing Association, 2009)

“The HMA looks forward to hearing from the participants about their experiences adopting renewable energy technology. This information will help the association members learn ways they could enter the market to manufacture install and maintain these future installations.” (Chair of the Huron Manufacturing Association, 2009)

Opportunities:

1. There is an opportunity to provide assistance to municipalities with acquisition and administrative processes involved in adopting renewable energy technologies through consulting services. Consulting services may include technology education, site assessment, technology selection and funding application preparation. A transfer of knowledge and expertise will help build communities’ capabilities so that they may take charge of their own development and influence additional neighbouring communities in the transition to the new green economy. (Midwestern Ontario Regional Green Jobs Strategy, 2009)
2. Installations on Municipal sites become demonstration sites that will encourage public uptake of renewable energy technologies while helping to kick-start companies in the renewable sector. (Midwestern Ontario Regional Green Jobs Strategy, 2009)

¹ Small-scale turbines (100 kW or 250 kW) were not found to be financially feasible due to the extended payback period. Payback is generally more favourable as the capacity of the turbine increases.

3. There is room for Small and Medium Enterprises (SMEs) to move into the green sector. They can create new products, processes or services (or improve existing ones) and commercialize green innovations. SMEs have the capacity to innovate, help communities to adopt leading-edge technologies or processes and develop markets. Their co-operative effort can take the form in various steps including acquisition of leading-edge technologies for R&D, design and commercialization activities; planning the development of new products, processes or services; market testing these technologies; and conducting of market studies and strategic plans relating to the new renewable energy-manufacturing segment. (Midwestern Ontario Regional Green Jobs Strategy, 2009)
4. Suppliers have the opportunity to assist with applications for financial incentives or make alternative funding arrangements. (King, 2010)
5. Other municipalities are interested in this project. The project could be as simple as a wind turbine at a sewage plant, or a solar panel at a pool, to a solar panel powering an entire community centre. Size and application are scalable, the learning experience and process can be duplicated throughout other communities in the region. (King, 2010)
6. Engaging one area prompts interest in nearby areas. Bruce County and Saugeen County expressed interest in similar education sessions for their municipality decision makers. (King, 2010)
7. Municipal renewable energy offers a means of powering facilities in an efficient way, avoiding costs resulting from power generation or new revenue streams through FIT programs. (King, 2010)
8. Adoption of renewable energy by municipalities would spearhead green economy growth in this region. (King, 2010)

Impact on Green Sector:

The green sector is impacted through the consumption of renewable energy technologies and energy efficiency projects. The sector can be an employer for consultants and installers within the green sector. (King, 2010)

This project leads to positive changes in many areas including: Employment and Business Development; Local Economic Benefits and Environmental Benefits (reduced greenhouse gas emissions). (Midwestern Ontario Regional Green Jobs Strategy, 2009)

In a 2008 report released by the United Nations Environment Program (UNEP), it was forecast that as the move toward a low-carbon and more sustainable economy gathers momentum growing numbers of green jobs would be created. The report also states that companies and regions that become leaders in green innovation, design and technology development are more likely to retain and create new green jobs.

Impact on Community:

Supporting local production of renewable energy technology encourages local economic benefits. Small-scale projects are primarily done by local suppliers. Most local suppliers access local resources for their needs. Income generated is used primarily in the local area. (Midwestern Ontario Regional Green Jobs Strategy, 2009)

The municipality benefits through income generated as the feed-in-tariff rules provide a significant return on capital while acting as a generator. The environmental and community benefits include greenhouse gas reductions, energy security and local resilience.

Green Job Implications:

“Renewable energy is the way of the 21st century. It touches a wide variety of professions and presents tremendous opportunities for entrepreneurs, local employees in small, mid and large scale companies directly and indirectly in construction, project management, manufacturing, engineering, financial services, and more.” (Administrator Clerk-Treasurer for Municipality of Morris-Turnberry, 2009)

Many opportunities for expanding the green economy have been discovered through this project’s findings. There is room for a consultant, possibly suppliers, to act as a guide through the process from beginning to end including education, site assessment, technology selection and funding application preparation. This project highlighted the need for a renewable energy expert, perhaps a county employee to consult and administer renewable energy projects throughout the area.

In addition to consulting and management positions, there are also the potential jobs from regional production of turbines and solar power generation facilities.

Each turbine takes about 400 hours to produce, assemble, and test in the factory. Some of the machining is out-sourced to local machine shops, which adds another 25 hours to each turbine. Local contractors supply electrical work. Some of the electrical work is done in the factory before shipping. The rest of the work is done on site. Electrical work totals to 60 hours. Excavation and base installations are about 16 hours labour at the job site. The precast, manufactured in Seaforth takes about 6 hours labour. An estimate of approximately 1000 hours of labour is put into each turbine from start to completed installation. Additionally, each turbine receives a yearly inspection and these labour figures have not been added. (MV Power Systems, 2009)

A solar panel will soon² have 60% Ontario content in order to be eligible for the Feed in Tariff contract. Currently, a sample Solar PV Tracker system utilizes 325 person-hours per tracker for installation and commissioning of the unit. (KW Power Logic, 2009) This includes:

- 25 hours for marketing, advertising and sales;
- 50 hours for solar panel;

² January 1, 2011.

- 25 hours for wiring, assembly and testing of the inverters;
- 50 hours for the mounting system including rebar, steel mast galvanized, frame galvanized, aluminum, supports, and fasteners;
- 75 hours for electrical work including DC wiring, AC wiring, transformers, switch gear, monitoring equipment and grid connection; and
- 100 hours for labour including tracker installation, system commissioning and inspection.

Direct job implications include on-site jobs and income created as the result of the initial investment. Indirect job implications include additional jobs and economic activity involved in supplying goods and services related to the primary activity. This includes people such as the banker who provides loans to the project, and the workers who supply parts and materials. The induced effect of these job implications are the employment and other economic activity generated by the re-spending of wages earned by those directly and indirectly employed in the industry.

Skills assessments relating to this project include education in renewable energy and engineering (for feasibility assessments) and funding application knowledge.

Recommendations:

1. A system of web resources must be developed and made available to the public. The content should be reliable and neutral on topics such as information on renewable technologies, supplier and business information, a database of current and past projects with contact information, case studies of green projects, and articles and reports from credible sources regarding areas of concern that are highlighted in this case study.
2. Increase access to incentive and funding programs by offering enhanced services including development of program applications and funding proposals.
3. Develop and deliver targeted awareness sessions to provide information to municipalities regarding technology education, site assessment, technology selection and funding application preparation.
4. Facilitate capacity building among municipal governments, community organizations, and businesses to promote creative arrangements to find solutions to break through barriers in the adoption of renewable energy.

Case Study 3 - Green Career Events and Energy Trade Shows

Employment counsellors are interested in being part of the green sector – they just want more information. They were just happy being part of the initial stages of the research project and having a little information. In the end, the organizer felt that we had surpassed their expectations.

Project AIM:

Green Career Events and Energy Trade Shows provide a vehicle to increase awareness and access to information surrounding green jobs and renewable energy. The category includes presentations, trade show booths, festivals, and energy trade shows.

Project Activities:

1. Green Jobs Presentation

Activity Partners:

Job Connect at Conestoga College and Midwestern Ontario Regional Green Jobs Strategy.

Activity Partner Groups:

Employment Service Provider

Activity Aim:

Provide Employment Service Provider staff and the public with information pertaining to the jobs that will be available in the emerging green jobs sector and the skills required.

Activity Background (aka “The Tipping Point”):

An Employment Service Provider approached the Midwestern Ontario Regional Green Jobs Strategy to provide an information session on the emerging green jobs market.

Role in Activity:

Midwestern Ontario Regional Green Jobs Strategy presented initial findings including labour market information regarding the jobs, skills and programs within the green sector.

Result:

The presentation was well received by attendees including people from learning networks, case managers from HRDC and the public.

2. Trade Show Booths

Activity Partners:

Huron Manufacturing Association, Waves of Opportunity Career Fair and Midwestern Ontario Regional Green Jobs Strategy.

Activity Partner Groups:

Manufacturing Associations, Environmental Career Fairs, Local Fairs

Activity Aim:

To provide information to targeted audiences on the Midwestern Ontario Regional Green Jobs Strategy Labour Market Research Project by:

- Networking with businesses, communities and stakeholders to form networks on potential projects;
- Introducing students from the region to Green Jobs; and
- Increasing access of the public to information pertaining to green jobs.

Activity Background (aka “The Tipping Point”):

The GJS was invited to set up a trade show booths at a manufacturing association’s awards night and a water career fair to provide information to participants of the each event on green jobs and the green economy.

Role in Activity:

A trade show booth including information on the project, and green job websites was set up.

Result:

Participation at the manufacturing association trade show connected us with future project partners and provided visibility to the project. As a design of the floor layout there was only one pathway through all of the booths to get to the dinner tables, ensuring that all participants passed our booth.

3. Trade Show Organization (Farm and Rural Energy Expo)

Activity Partners:

Midwestern Ontario Regional Green Jobs Strategy, Huron Business Development Corporation, Huron Small Business Enterprise Centre, Huron-Perth Farm to Table, Ontario Federation of Agriculture (Huron-Perth Area Office), Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) and The Regional Equine & Agricultural Centre of Huron Inc. (REACH Huron).

Partner Group:

Community Futures Development Corporations, Small Business Centres, Farm and Rural Organizations.

Project Aim:

The forthcoming Farm and Rural energy Expo will display renewable energy technologies and efficient energy practices. There will also be film screenings and seminars.

Role in Project:

Team members bring experience from past trade show (It's Easy Being Green, 2009) and assist with planning during this project. Current work has involved developing list of marketing materials, creating registration form and sending out registration form to participants from previous show.

Trade show Dates: November 6, 2010 from 11 am to 5 pm and November 7, 2010 from 11 am to 4 pm

Needs and Barriers:

1. There is a hunger for information relating to green jobs and the green economy from Human Resource professionals, the public and the media.
2. There is a need to measure the effectiveness of awareness and outreach activities. While it is possible to quantify the time and money put into an event, it is difficult to acquire feedback due to privacy issues, shortage of time, and lack of funding to measure the result and infrastructure surrounding event organization.

Opportunity and Strategy:

1. The opportunity is to provide information through a multitude of approaches to increase the impact of the level of public awareness. It is difficult to attribute any one single event to the cause in the change of one's attitude. Awareness is central to any strategic initiative. The central motivator can break through perceived barriers.
2. Targeted information sessions to government, students, adults, and other identified groups can lead to information that is tailored to the audience to maximize the benefits of the effort involved.

Impact on Green Sector:

Green careers and energy shows allow an opportunity for education and awareness, which is a key ingredient to the development of the green economy.

Impact on Community:

Trade shows promote local initiatives by providing awareness and access to local businesses, their products and services. New and leading ideas are also discovered by consumers and strengthen the community by adding to its resiliency.

Green Job Implications:

There is an opportunity for an organization that can provide information sessions and seminars relating to jobs in the green sector, related education and training opportunities.

Recommendations:

1. Develop information sessions targeted to municipal governments, community organizations, students, adults, and consumers to increase awareness surrounding green initiatives and projects related to renewable energy.
2. Develop a toolkit for career day targeted at students to increase access and awareness of green jobs.

Case Study 4 -Community Resiliency and Climate Change Adaptation

Delivering presentations to the High Schools on Community Resiliency requires mastery of the art of engagement. In the first attempt, most students did not seem to be interested in the topics being presented. We only began to see the students were participating, and interacting with us after modifying the presentation to draw the relationship between cause, what students were doing, and effect, how students' influence and actions can really affect society. To engage someone fully in change, they must understand how their actions are contributing to a specific cause. Only then, can a positive outcome be envisioned and realized.

Project AIM:

Community resiliency and climate change adaptation are two of the driving forces behind the green economy. Three models were reviewed during the course of the project: Community Resiliency Manual, Earth Charter, and Transition Town.

Project Activities:

1. Perth County and Area High School Presentations

Project Partners:

Listowel District Secondary School, St. Mary's District Collegiate and Vocational Institute, Stratford Northwestern Secondary School, Mitchell District Secondary School, Stratford Central Secondary School, St. Anne's Catholic Secondary School, Perth Community Futures Development Corporation and Midwestern Ontario Regional Green Jobs Strategy.

Project Partner Groups:

High School Teachers, Community Futures Development Corporations

Project Aim:

1. Present the library/resource centre with materials relating to grass-roots strategies that lower the community's "carbon footprint."
2. Provide necessary background information to the students in a 60 to 75 minute long presentation to prompt keen interest and positive attitude towards "greening" the community.

Project Background (aka “The Tipping Point”):

Funding was provided to purchase resource materials relating to climate change adaptation and community resiliency. We provided presentations with background information to raise awareness with students about issues surrounding climate change.

Role in Project:

Our role in this project involved developing presentation content, scheduling and delivering the presentations. Content included the impact that our choices as consumers have on our community resiliency. The presentation also included an opportunity for students to discuss the role that they can play through the decisions they make that can affect community resiliency.

Result:

The presentations were well received by a variety of grades and classes:

- Grade 9 science
- Grade 10 science, foods, civics
- Grade 12 biology, chemistry, workplace English

348 students were reached through eleven presentations at six different high schools. All high schools were reached within Perth County and one high school in Huron County was reached.

Needs and Barriers:

1. Budget is not always available to host guest speakers.
2. Requests were received for presentations focusing solely on green jobs content for the grade 10 career studies class.
2. Amish & Mennonite Tour

Project Partners:

Midwestern Ontario Regional Green Jobs Strategy

Project Aim:

1. Understand the level of resiliency within the Amish and Mennonite businesses through a tour to highlight the inner workings of their businesses.
2. Review jobs and training requirements within the community.
3. Provide information on how organizations can work together while utilizing innovative and sustainable skills.

Project Background (aka “The Tipping Point”):

At Training for Transition, a few participants believed that Mennonites and Amish communities were not dependent upon oil, and that they would prevail when fossil fuels become scarce.

This project was chosen to highlight the Amish and Mennonites as a case study for resiliency.

Role in Project:

Working with a liaison between the community and our organization, we developed an outline for businesses to tour, and conducted research regarding business practices and skills development. A tour was then organized to highlight our findings to participants.

Result:

15 participants attended the day-long tour. Participants toured the saw mill, a produce farm, and a wheel maker. Other businesses that were discussed but not featured included a blacksmith, horse drawn machinery, and goat dairy. Although they are resilient in many ways, they are still dependent upon oil.

3. Transition Network Training and Talks

Project Partners:

Transition Guelph, Harcourt Justice and Outreach Committee, Kairos Guelph, Canadian Centre for Community Renewal, Transition Victoria, Transition Network and Midwestern Ontario Regional Green Jobs Strategy.

Project Aim:

Through a series of activities, the goal was to provide information and awareness to the community about the role of community engagement in responding and adapting to the threats of climate change and fossil fuel dependence.

Project Background (aka “The Tipping Point”):

Midwestern Ontario Regional Green Jobs Strategy has been studying various models for community resiliency and had an opportunity to engage with participants of the Transition Initiative model by hosting and facilitating community talks and training sessions for various levels of the movement.

Role in Project:

We were able to engage with the transition initiative participants by supporting, hosting, and facilitating a community talk and two training sessions for various levels of the transition initiative.

Result:

The talk by Tina Clark entitled “Community Resilience and Social Equity in Changing Times” drew a crowd of 35 from Midwestern Ontario including Cambridge, Dundas, Guelph, Kimberly, North Bay, Seaforth, Stratford, Walkerton, Windsor and Wingham. The talk highlighted that a group of intelligent individuals who come together with a common purpose is key to ensuring energy security.

Clark commented that there were four possible options to solve the potential energy uncertainty:

1. Techno-fantasy – that we can save ourselves with creative technology and keep growing;
2. Green technology – if we all buy a Prius and eat organic then we will be okay;
3. Earth-stewardship – we can transition into a more efficient society and redesign for stability; or
4. We can end up with a Mad Max scenario where we will fight over the last drop of oil.

She also noted that the key to solving energy uncertainty requires 4 key recognitions:

1. Life with less is inevitable;
2. Resiliency is key to cope with shocks;
3. We have to act now; and
4. We need to unleash a collective genius to design a solution.

Principles of the transition model include: vision of a positive future; awareness raising; inclusion – everyone is needed; resiliency – build a strong local community; decentralization – to solve the problem in the most local way; inner and outer transition; and the solution must be easy to replicate. Clark also stated that permaculture principles are central to the design of a system for sustainability including caring about the people, the earth, and fair shares.

The Transition Initiative process includes brainstorming, discussing, initiating, raising awareness, and working groups to address specific areas including transportation, energy, food, heart and soul, building, arts, health, and economics.

The first training session, Transition Network – Level 1 training had 38 participants and covered the foundational principles of the Transition Initiative. Participants were primarily from Ontario: Baden, Erin, Toronto, Lion’s Head, Guelph, Dundas, Varna, Germanville, Guelph, Durham, Kincardine, Milford, Hawkesbury, Waterloo, Aylmer, Seaforth, Holland Landing, Chatham, Dundalk, Wiarton, Chesley, North Bay, Walkerton, Cambridge, Orillia, Elora, Picton, Wingham, and Windsor. There was also one participant from Montreal, Quebec.

The second training session, Transition Network – Train the Trainer course had 17 participants including people from across Canada and diverse backgrounds including participants from Ontario, Alberta, and Quebec and three French-speaking participants.

The Train the Trainer course includes:

- An in depth examination of the main underlying principles of transition including systems approach, vision, resilience, why transition is both inner and outer – and viral, and the importance of inclusion and awareness raising
- The early transition process in depth - from initiation to working groups
- Structuring a Training for Transition course including facilitation styles, aims and outcomes
- Background material: peak oil, climate change, organizational structure, change models
- Joining the Network pool of trainers - structure, agreements, support etc..

Needs and Barriers:

A host organization to organize and facilitate training sessions and activities.

Resilient Community Characteristics:

Three models were reviewed during research for this case study. They include the Transition Initiative Model, the EarthCat Guide to Community Resiliency (Earth Charter) and the Community Resiliency Manual. Common characteristics between the three models include:

- Leadership involves governance working at different scales and across sectors involving multiple actors that are representative of age, gender and cultural composition of the community.
- Common vision and responsibility of projects and objectives are shared among all segments of the population.
- Community members are self-reliant and self-organizing.
- Community members have pride and a sense of attachment to their community.
- Contributions by community members are targeted to areas of skill and interest.
- The community looks outside itself and its own resources to address major issues, and to seek and secure resources.
- The community is aware of its competitive position in the broader economy.
- People, their skills and abilities are the greatest asset.

- Take a multi-functional approach to create a sustainable development system within the community.
- Sustainability and resiliency is fostered through economic, ecological, political and social factors.
- Successful actions require funding, institutional support, and the right people with the right skills.
- Ideology and theory of localism is a key condition to people's initial and continued participation.

All three models use traditional community development processes of inclusion to develop a plan. The variances between the models are based upon the type of goal and the specifics of the plan. The transition initiative focuses on an energy descent plan (a plan towards using less energy) with projects that focus on achieving that target. The Earth Charter and the Community Resilience Manual refer to a broader plan focused on Community Economic Development.

Needs and Barriers:

1. There is limited awareness of available funding to promote activities that will build community resiliency and localization efforts.
2. High school teachers work with limited funds to supplement course content. Presentations from external sources typically have a fee for service.
3. Communities balance limited resources for strategic and community economic development planning resources in community building processes.
4. Awareness and access is limited among all sectors of society to develop a mutually agreeable vision for the future to work towards.
5. Community resiliency approaches need to address the differences between urban and rural living.

Opportunity:

1. Business and entrepreneurs have an opportunity to lead the way by finding alternative ways of earning a living and creating economic activity.
2. Facilitation of meetings between all sectors of society to develop a mutually agreeable vision for the future to work towards.
3. There is an opportunity for development of small educational sessions about how to improve quality of life and adjust lifestyles to be more friendly to the environment.

Impact on Green Sector:

Community resiliency leads to stronger communities and therefore promotes ways of living that reduce ones “carbon footprint.” As a community becomes stronger, it supports all segments and works together to find solutions. These solutions can lead to innovations and new methods to reduce green house gas emissions, reduce energy consumption and find cleaner energy sources.

Impact on Community:

Resiliency allows a community to tolerate disturbance without collapsing, to withstand shocks, to rebuild itself when necessary, and to improve itself when possible.

Green Job Implications:

The green economy has an opportunity to expand as organizations in the community develop partnerships and collaborative working relationships through the local economy. Employment must be diversified beyond a single, large employer and major employers in the community must be locally owned to promote community resiliency. Alternatively, openness to alternative ways of earning a living and economic activity can also contribute to green jobs.

Recommendations:

1. Create awareness of available funding to build community resiliency and localization efforts.
2. Develop partnerships among community and environmental organizations to subsidize or sponsor green job information sessions to increase awareness and access to training and careers in a developing sector.
3. Increase awareness of available funding for community economic development planning and strategic planning.
4. Facilitate meetings between all sectors of society to provide a space for development of a mutually agreeable vision for the future.
5. Provide research opportunities to study the differences between urban and rural living to determine how their approaches to develop community resiliency will differ.

Notes from Amish and Mennonite Tour

Education:

The Amish attend school from grades 1 through 8, whereas the Mennonites attend school up to grade 10. The community can receive a farm exemption allowing children to finish school earlier than the general population. Reading, writing and arithmetic are the topics that are studied and follow the Ontario core curriculum.

All schools are inspected by the Ministry of Education. The school year is 180 days long, begins the first day after Labour Day in September, and runs until the latter part of May. Students do not receive an extended Christmas or Easter break and do without March break.

German (Pennsylvania Dutch) is the main core language of the home. When the children arrive at school, they know very little English. They begin to learn English and by grade two are bilingual in German and English. Depending on the teacher, the students may also learn some French.

After the completion of schooling, the boys move on to apprenticeships in tin shops, lumber mills, repair shops (for small motor mechanics), harness shops, carpentry crews, etc. Apprenticeships last until the job has been successfully completed.

The girls often work in stores, homemaking situations, as schoolteachers or in homes as hired girls. Hired girls are women who assist married women with children in housekeeping, cooking and childcare.

All remuneration is paid to the parental home until the age of 21.

Blacksmiths:

Blacksmiths are trained at Blacksmith schools. There are a few of these schools throughout Ontario. This blacksmith performs solely horseshoe work. Coal is used to heat the metal so that it can be hammered to create the horseshoe. Coal has different properties than using gas. For example, the horseshoe may be inserted between coals to heat it slightly. Blacksmiths travel to their customers.

Horse Drawn Machinery:

Ploughs, cultivators, cultipackers, planters and fore carts are available for sale. A diesel-powered machine shop enables the machinist to manufacture some of the machinery on-site.

Goat Dairy:

The vacuum in the milking machine is powered using diesel. Diesel is also used for cooling and refrigeration of the milk.

Saw mill

Of the seven saw mills in the community only three are running part time. The remaining four are currently shut down due to the shortage of work in the lumber industry. Prior to the recent economic downturn, all seven were running full time.

The average sawmill employs 7 to 8 full-time employees including sawyer, sawyer's helper, slab saw operator, edger, cutoff saw operator, piler and grader. Sawmills always hire a non-Amish loader operator to load logs into the slipway and to load the finished products onto trucks.

Emerald Ash Borer is complicating how wood and wastes are handled and shipped. Local farmers buy the sawdust for bedding and if ash has been banned in their area, they are unable to use it.

Wood used in the sawmill includes ash, maple, walnut, pine, hickory, beech and poplar.

Modern Mennonites/non Mennonites typically supply the communities with the types and quantities of wood that have been ordered.

In the past, the sawmills were belt driven and run on steam. This would use cutoff ends of logs to fuel the steam engine and would require an engineer to operate the steam engine.

Produce Farm:

On site this vegetable farmer has a diesel fueled cold storage as well as a propane powered puffer machine, which is used for puffing grain. One hour is required to heat up the puffing machine. After heated, the machine takes 15-20 minutes per batch (approximately \$20 retail value). After puffing, the grains expand approximately seven times in volume. Brown and white rice, kamut, spelt, millet, and hard red spring wheat are the grains typically being puffed.

Wheel maker:

The wheel maker produces steel tire wheels for wagons and farm machinery. Sheet metal is placed into a die to form a circle. The join is welded before placing the circle into a second machine to form the grooves on the tire. The tire is then fitted and welded to the spokes. The spokes are then welded to the hub of the wheel. The die is belt driven by a diesel-powered tractor, which consumes approximately 1.5 ℓ/hr of fuel. One wheel takes approximately 35 minutes to make.

Community Resilience Manual Model

Source: *The Community Resilience Manual: A Resource for Rural Renewal and Recovery*

Five Key Functions of a Local Economy:

Successful communities maximize the use of their limited time and resources in those areas that will yield the greatest strategic benefits.

1. Access to equity

The extent to which re-investment of capital is influenced or controlled by a community affects its ability to influence economic development. Its absence, or the flow of capital from a community, is a major factor in the decline of a community economy. In resource dependent communities, this can also be influenced by securing greater control over the local resource base.

2. Access to credit

Without access to credit, enterprise development is impossible. In communities under stress, traditionally risk-averse, conventional sources of credit tend to dry up. The more severe the decline the harder it is to access credit, thus reinforcing the downward spiral. Creating sources of credit that are locally owned and controlled, or which the community can come to influence, is critical to long term community survival.

3. Building Human Resources

Local people who are ready, willing and able to participate in the local economy are critical to a community's adaptive capability. This is true of both leaders and local citizens. It is also critical to the creation of new initiatives, whether they are focused on social, economic or entrepreneurial development. Capacity for intentional action depends on vision, participation and skills of local people.

4. Research, planning and advocacy

If you do not know what is going on in your community and region, and if you are not aware of the linkages between your home area and the larger society, your decisions, related to the use of local and outside resources, are likely to be less effective than they could be. Active, ongoing research and information gathering ensures that planning is informed and that local interests can be represented to necessary decision-makers (outside the community).

5. Infrastructure

It is important to link the planning around infrastructure to the vision and goals for the future of the community.

Community Resiliency Manual Process:

1. Getting ready to use the resilience process.
 - Determining if the process is right for you.
 - Introducing the project
 - Form a Project Steering Committee
2. Assessing Community Resilience
 - Develop a community portrait
 - Collect Information about your community
 - Analyze and understand your information
 - Present your community portrait
3. Decision making: setting community priorities
 - What are you trying to decide
 - Who needs to be involved and why
 - How should they be involved
4. Planning
 - Who is leading the process?
 - A statement of goal.
 - Rationale for the goal that is founded in local strengths, weaknesses and best practice knowledge.
 - Desired outcomes.
 - Summary of best practice approaches and principles that others have successfully used.
 - Feasibility or assessment work
 - Operational plan with timeline, budgets, etc.

Earth Charter Model

Source: *Taking Action for Sustainability: The Earth CAT Guide to Community Development*

Three Key Points of Sustainability:

1. Interdependence – You cannot achieve environmental health without also working towards social and economic justice – and doing it democratically, without violence. We need to understand our communities as whole systems.
2. A democratic process – Shared ethics, a shared vision and collective action all demand that we use democratic and inclusive leadership skills in forming groups that will work together to achieve common goals.
3. Respect for the Community of Life – Developing the caring capacity of the community is a key strategy for sustainability and peace, and bringing respectful practice to community processes is a practical way that this ethic translates to local action.

Basic needs of a sustainable community:

1. **Social Well-Being** (Social needs, for culture, values, care, and education)

This results from the community's caring capacity – its ability to care for its members, form and pass on values, educate its youth, support creative endeavors, offer recreational opportunities, and provide safe and friendly neighborhoods.

2. **Good Governance** (Governance needs, for order, justice, security, and collective decision-making)

This refers to more than just the workings of the local government. It encompasses a community's capacity to exercise self-determination, resolve conflict, and ensure that everyone has an equitable voice in decision-making, resulting in equitable access to facilities, services and resources.

3. **A Vibrant Local Economy** (Economic needs, for monetary income and productive employment)

This relates directly to a fundamental capacity of the community – to create meaningful work and provide income for its members. The wealth of a community is dependent on this capacity, and many of our economic development efforts are designed to enhance it.

4. **Efficient Services and Infrastructure** (Services and infrastructure, for material goods and services, and access to them)

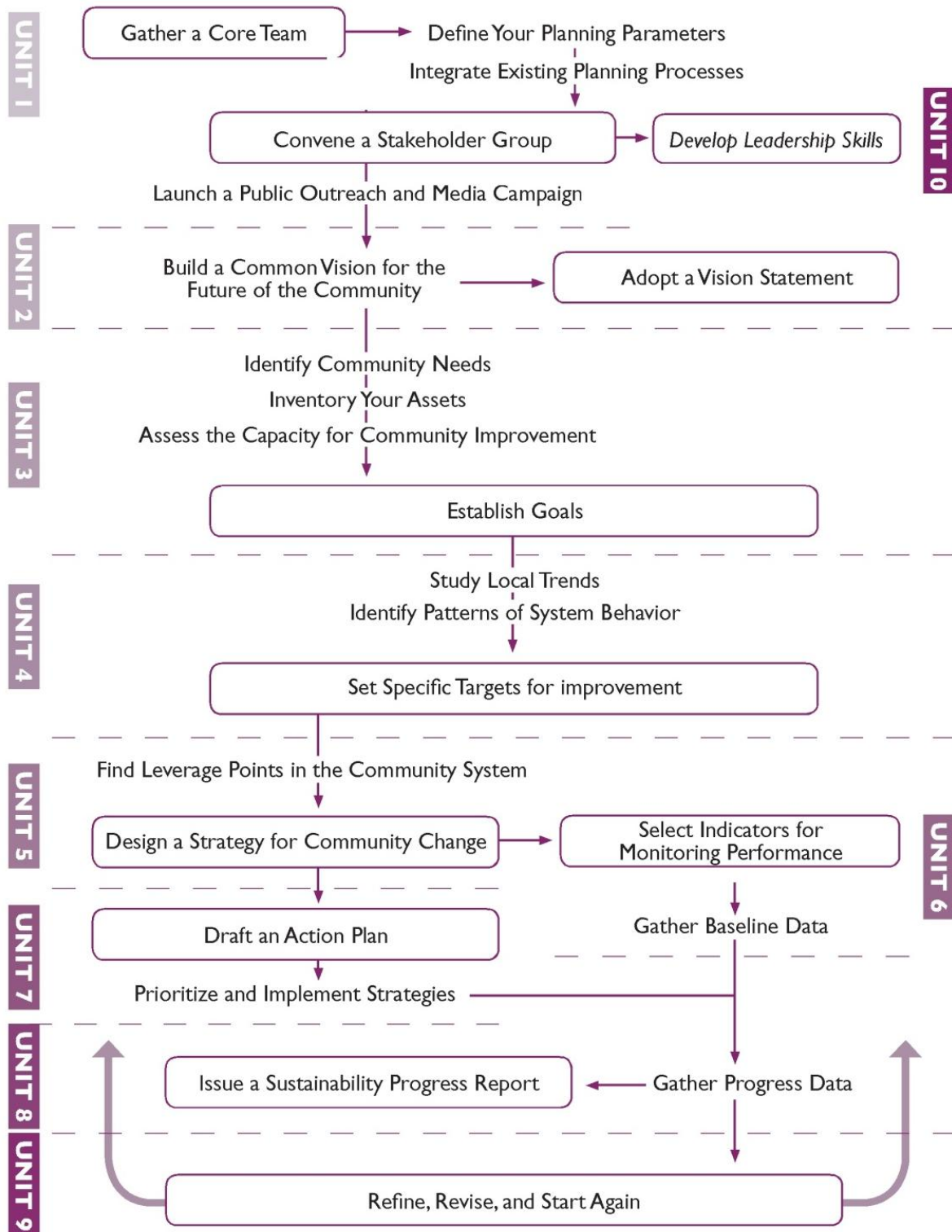
The physical and material needs we have are met directly through the community infrastructure we develop, and the products and services it can deliver – the housing construction, transportation networks, waste disposal facilities, energy generators, utilities, etc.

5. **A Healthy Natural Environment** (Environmental needs, for healthy ecosystems and natural spaces)

The natural environment is the fundamental basis of any community's ability to exist. If a human community – with all of its aspirations, institutions, organizations, systems, and subsystems, no matter how complex – is to be sustainable, it must be able to maintain the health and integrity of the environment on which it depends. This basic fact is often overlooked (or, which is just as unfortunate, taken for granted) in community planning efforts. We will not be making that mistake. As our aim here is to work toward a truly sustainable community, the needs of our environment will be taken into account at every stage of the process.

Process:

Taking Action for Sustainability *EarthCAT at a Glance*



Earth Charter Process:

1. Laying the foundation for Change

- a. How to get people involved
- b. What kind of structure is needed for decision making
- c. Conducting public information and outreach campaigns

2. Building a Common Vision

- a. Thinking in the long term is key
- b. Small strategic differences evaporate when people work together to think about what they want twenty years from now
- c. Focus on the strengths you have as a community – the assets you have that meet your needs (a positive place to start)

3. Establishing Goals

- a. Select goals that can be met by capitalizing on your community's assets, with the whole community system in mind.

4. Understand Trends and Setting Targets

- a. Within each goal there are more specific targets – interim steps you can achieve that bring you closer to the goal
- b. Understand the trends behind the existing data before you establish specific targets

5. Planning Strategies for Taking Action

- a. Take the whole community system into account
- b. Use the understanding you've developed of how your community works to design strategies that take advantage of the existing dynamics in the system

6. Indicators of Community Performance

- a. Indicators are measurable data points that can be used to track the progress of your community action plan in reaching these targets
- b. Identify the right indicators for your purposes.

7. The Community Action Plan

- a. Create an action agenda to pull together an action plan based on the strategy.

8. Tracking and Reporting Progress

- a. Communicate results to the public, stakeholders and anyone else involved in making it a success.

9. Revise, Refine, and Start Again

- a. Every step of the way demands revisions, changes in direction and new beginnings.

Transition Initiative Model

Source: *Transition Towns: Local Networking for Global Sustainability* an undergraduate dissertation

Process – The 12 Steps of Transition (Hopkins, 2009):

1. Set up a steering group and design its demise from the outset.
2. Raise awareness: Assume people are not informed on environmental issues, climate change or peak oil. Prepare the ground.
3. Lay the foundations.
4. Organize a ‘Great Unleashing’: Now you have a groundswell of people ideally: generate a momentum to propel your initiative forward. Celebration of the community’s desire to act. Stress it is an historic meeting. Invite local councilors, planners, movers and shakers.
5. Form Groups: Need to tap into the collective genius of the town. Set up a number of smaller groups to focus on specific aspects of the process. Need a core of people to focus on specific aspects of the process. Need a core of people to steer each group; yet also open.
6. Use Open Space: Simple way to run productive meetings. Focusing question. Generate numerous ideas.
7. Develop visible practical manifestations of the project: Ideas are easy, practical things happening harder. Need to create practical manifestations early to ensure initiative not a talking shop.
8. Facilitate the Great Re-skilling: We have lost many of our basic skills. Need to look at what is useful. Learning new skills builds networks.
9. Build a Bridge to local government: Need a positive and productive relationship to progress.
10. Honour the elders: Learn from those who experienced the transition to cheap oil.
11. Let it go where it wants to go: Open attitude to direction. Follow the direction of people’s energy. Your role: act as a catalyst.
12. Create an Energy Descent Action Plan: An EDAP sets out a vision of a powered-down, resilient, relocalised future, and then back casts, in a series of practical steps, creating a map for getting from here to there. Every settlement will be different. Cover all areas of life: energy, food, transport, education, tourism, etc. Should be a work in progress.

Needs:

1. How will Transition maintain a coherent set of principles and a stable 'brand' as its network grows? (Balls, 2010)
2. How will we prevent self-organizing initiatives from losing momentum and dying out through time especially where capacity and funding restraints limit the effectiveness of projects? (Balls, 2010)
3. Funding, institutional support, and the right people with the right skills (Balls, 2010)

Case Study 5 - Community Garden Project

The Community Garden Project is a prime example that community can accelerate change. The project was first formally conceptualized in late 2009 and the garden was operational by spring 2010. This is an on the ground example of how community can accelerate change and accomplish tasks.

Project Partners:

Goderich Rotary Club, County of Huron – Huron County Health Unit (Community Food Advisor), Huron Business Development Corporation, Goderich Municipal Day Care, Salvation Army Food Bank, Midwestern Ontario Regional Green Jobs Strategy

Partner Groups:

Service Club, Health Unit, Day Care, Food Bank, Community Futures Development Corporation

Project Aim:

1. Teach children how to plant seeds and plants, tend to requirements of plants and watch them grow until they are ready to be harvested. (Midwestern Ontario Regional Green Jobs Strategy, 2009)
2. Vegetables grown in the garden will be donated to the food bank in Goderich run by the Salvation Army church. Provision of vegetables will provide some additional healthy & fresh food options for clients accessing the food bank (low-income population) and provide food to the organization at no cost for distribution to clients. (Midwestern Ontario Regional Green Jobs Strategy, 2009)
3. Any surplus vegetables will be used to supply 2 workshops provided by Community Food Advisors. Again, these workshops will be open but hosted specifically for clients serviced by the foodbank. (Midwestern Ontario Regional Green Jobs Strategy, 2009)
4. Rotary club members, their families and community members will have an opportunity to access a garden where they may not otherwise i.e. due to space limitations at their own household. (Midwestern Ontario Regional Green Jobs Strategy, 2009)
5. Gardeners will benefit from being outdoors and having access to the physical activity that is involved in maintaining the garden and individuals age 55 and older will benefit from a fitness program delivered at the garden site, that promotes getting fit while gardening safely. (Midwestern Ontario Regional Green Jobs Strategy, 2009)

Project Background (aka “The Tipping Point”):

The Rotary Club of Goderich Environment Committee wanted to sponsor a garden to give the members of the community a place to learn how to garden, grow their own food, give a hand up not a hand out, and provide an opportunity for people from all walks of life and diverse economic backgrounds to mingle. (Rotary Club of Goderich Environment Committee, 2009)

Role in Project:

The Midwestern Ontario Regional Green Jobs Strategy provided administrative and process support. The team offered project planning, meeting co-ordination, speaker co-ordination and funds development. Project planning included compilation of contacts at organizations and not for profit groups that would be interested in working with the community garden. (King, 2010)

Result:

A 1.5 acre site was prospected which was near a municipal shed. The property owners, Erika and Dennis Schilthuis agreed to plow a strip down the east side of their property about 24 feet wide and 100 feet long. The strip would provide space for 20 plots measuring 10' x 10'. Water was available from the property owners, and there was a prospect of catching rainwater from the community shed for irrigation. The site was centrally located to a retirement condominium property with wealthier tenants as well as some lower income rental apartments. The property is also close to a day care. (Secretary of Rotary Club of Goderich, 2009)

The Planning Department for the Town of Goderich indicated that there are no locations in the town that are correctly zoned for a community garden. Early on the Rotary Club was informed that if there were complaints, the municipal council would be forced to close it down. (Rotary Club of Goderich Environment Committee, 2010)

Garden plots were marketed to those who were interested in sharing their knowledge of gardening or those interested in learning how to garden. Participants were targeted through a mailbox notice campaign to local residents within walking distance to the garden plot. A signup sheet was circulated at the Member organizational meeting in February to identify the individuals who were interested in participating. Those interested were invited to return to a gardening seminar and planning meeting. At the follow-up meeting they would become acquainted with fellow gardeners and organize what they would like to grow in their plot. Information sessions were organized by experienced gardeners to provide information and inspiration. In April, another planning meeting was held to finalize participants, collect the membership agreement and payments. No one was turned away if they could not afford the payment. (Rotary Club of Goderich, 2010) The membership fee was arranged to ensure that participants were showing some financial commitment and to pay the landowner something for their inconvenience of having people on their property. The property owners turned around and spent the money they received on tools and equipment for the gardeners to use. (Secretary of Rotary Club of Goderich, 2010)

Membership agreements covered topics including (Rotary Club of Goderich, 2010):

- Agreement to pay a membership fee for the project (\$25)
- Releasing the property owners and Rotary Club from responsibility for their action or inaction relative to the use of property or food produced there
- Agreement not to use chemicals or fertilizers
- Agreement not to bring any materials onto the property without consent of property owner
- Agreement to use water and other resources sparingly and cooperatively
- Ensure the plot is maintained in a tidy and safe state at all times
- Give up use and access to the plot at any time at the sole discretion of the property owner
- Respect the privacy of the property owner and not enter other property that is not part of the community garden but owned by the property owner
- Accept new rules and conditions created by the property owner or the Rotary Club of Goderich

The garden was initially launched May 2010 and was available to its participants for planting. The Town of Goderich Council approved the request to put eavestrough on the community shed to capture rainwater for irrigating the community garden. (Secretary of Rotary Club of Goderich, 2010)

An unsuccessful funding proposal was submitted to cover the costs of a garden coordinator to facilitate programming surrounding the garden. Without the funding resources, certain components of the initial project aim have not been implemented including programming for the neighbouring daycare and the fitness classes for individuals age 55 and older. However, several secondary school students along with their teacher are developing two plots within the garden. (Secretary of Rotary Club of Goderich, 2010)

A surplus of garden produce has been offered to residents local to the garden. A community dinner is planned for September 11, 2010 where the gardeners are hosting the community with food from the garden. The service club is supplying the meat for the dinner in order to promote and thank those who have contributed to the success of the garden. The event is hoped to generate participation from other people living close to the garden next year.

The project will continue without funding, but it is unlikely to spread to new locations as quickly without funding to support the promotion and marketing for expansion.

Benefits to community:

- Improving awareness of community resources
- Fostering a sense of community involvement/ownership in a project
- Increasing level of physical activity
- Gardeners have access to fresh produce, and that encourages healthy eating habits
- Provides real work experience and employability skills for volunteers wanting to enhance resume
- Increases knowledge of gardening
- Increases knowledge of preserving, baking and cooking (if linked with a local community kitchen)
- Provides individuals the opportunity to work with a team
- Provides opportunity for individuals to network
- Provides community based learning opportunities

Needs and Barriers:

1. Resources that provide networking between existing and developing community gardens to share the advantages and disadvantages of the structures and methods of the community gardens are required for new community garden ventures.
2. Municipalities and towns lack the zoning by-law definition for community garden space. (King, 2010)
3. There are limited funding sources that will provide for a community garden coordinator with teaching, programming and gardening experience. (King, 2010)

Opportunity:

1. Mingling of people from all walks of life and from diverse economic backgrounds can provide understanding and cooperation of social groups that might otherwise never meet. Networking in a relaxed atmosphere can increase access to hidden job markets (Rotary Club of Goderich Environment Committee, 2009)
2. The community garden could be run as a social enterprise to cover costs and increase feasibility of the project. (King, 2010)
3. Opportunity for service clubs to use their money towards a living project that requires support from year to year.

Impact on Green Sector:

There are only unpaid jobs currently due to lack of funding for a coordinator. (King, 2010) By operating the garden as a social enterprise, jobs would include the work force in plowing, planting, maintaining, harvesting and selling of produce from the garden. The social enterprise would provide produce to the community through a marketplace. The enterprise would have social aims including job creation and training, local capacity building, and accountability to the community for environmental impact.

Impact on Community:

Local organic food reduces the community's carbon footprint by reducing the use of petroleum-based fertilizers, pesticides and transportation. The production of local healthy food provides an opportunity for community members to have accessible local, fresh, pesticide free and nutritious food. An added benefit is the health benefits associated with the exercise provided through the actions of tending to the garden. Economically, the community members are able to grow their own food and maximize their dollar to feed themselves and provide a hand up rather than a handout to lower income residents. (Rotary Club of Goderich, 2010)

The opportunity for individuals to enjoy access to physical activity that gardening provides and providing healthy organic vegetables for project participants and the local food bank enriches the community, its members and their quality of life.

Open garden space is available for creation of garden and development of programs around the garden. Programming centered on the garden enriches the participants' lives. The children centered programming included a 'pizza garden' that offers an opportunity for our children to learn about planning and weeding, and spending time outdoors. (Director of Goderich Municipal Childcare Centre, 2010)

For individuals aged 55+, programming is offered that promotes outdoor exercise in combination with a gardening program. This structure offers an opportunity for exposure to the outdoors as well as physical benefits of exercise.

Community awareness of supports and groups fostered through partnerships formed around this initiative provide exposure to the support system provided by the Salvation Army, the Health Unit and the Goderich daycare to 40 families participating in the programming.

All participants develop a positive association with healthy foods through workshops offered that encourage participants to enjoy making healthy food choices, benefit from a community based workshop, and create simple meals on a budget.

Green Job Implications:

Community garden coordinator, Speakers, community kitchen programs, daycare programs, senior residence programming, liaising with activity coordinators. (King, 2010)

Recommendations:

1. Development of a resource highlighting the advantages and disadvantages of the structures and methods of community gardens, contact information of existing and developing community gardens, and knowledge and experience of co-ordination of a garden for collaboration and experience sharing. (King, 2010)
2. Municipalities and towns should acknowledge the growing interest of community development and green initiatives and provide zoning by-law definition for community garden space. (King, 2010)

Develop resources for community projects to summarize available funding opportunities and improve access to these programs.

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