



***Building a Sustainability
Culture in the Social
Economy***

***Lessons from energy
management in
environmental and social
service organizations
by
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Abstract

Many social economy organizations highlight their vision and value statements as drivers of their activities for social and environmental goals. This study examines the importance of organizational culture and values to the development and implementation of internal energy management programs in North American social economy organizations. An electronic survey was used to compare 50 social service organizations (SSO) that take at least one environmental action (e.g., voluntarily purchase green electricity) to 10 environmental service organizations (ESO) that do not purchase green electricity, but do deliver external energy-management programs that reduce the environmental footprint of communities. Comparisons are made to equivalent-sized private businesses ($n = 84$) that purchase green electricity to more thoroughly examine the relationship between profit/non-profit motives and organizational culture/values in environmental decision-making. Organizational culture and environmental champions were more important than either internal structures or external factors in the decision to adopt energy-management programs. However, external pressure from customers, the community and partnerships was more important in ESOs than in both SSOs and equivalent-sized private businesses, suggesting the organizations that deliver external environmental services are more receptive to community views on environmental performance. These findings lead to a discussion on the importance of social norms and organizational learning to create a sustainability culture for environmental action.

Keywords: social economy, social responsibility, green electricity, energy management, sustainability culture, social norms.

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Introduction

Social economy organizations can purchase green electricity or take other energy-management actions that include energy efficiency, conservation and on-site generation of renewable energy, toward voluntary climate change mitigation, strategic planning, or social responsibility initiatives. Social responsibility includes internal actions to improve employee relations, fairness, working conditions, or actions to reduce environmental impacts (Cornelius, Todres, Janjuha-Jivraj, Woods, and Wallace, 2008). Although it is generally assumed that social economy organizations place a higher value on social and environmental responsibility relative to equivalent-sized businesses, few papers, however, have examined their social responsibility initiatives. There are two notable exceptions: Firstly, Cornelius *et al.*, (2008) examined the internal social-responsibility initiatives in social enterprises, organizations naturally suited to focus on economic, social and environmental returns (Corriveau, 2010). Secondly, Gliedt and Parker (2007) studied external social responsibility initiatives of environmental non-profit organizations. This paper examines the energy-management programs, as a social-responsibility initiative, employed by a broad range of social-economy organizations in North America, and compares them to equivalent-sized private businesses that are of a similar size but are motivated by profit.

Factors that influence for-profit businesses to take energy-management actions include internal environmental structures (e.g., committees, departments, environmental certification programs, and publically reported metrics), green organizational cultures/values, and environmental champions (Wiser, Fowlie, and Holt, 2000; Berkhout and Rowlands, 2007; Gliedt, Berkhout, Parker, and Doucet, forthcoming). But consider non-profit organizations, which are guided by different internal environmental values and decision-making processes, and are influenced by

distinct external stakeholders? Many social-economy organizations take energy-management actions that include religious institutions, community health centres, co-operatives, environmental societies, youth and low-income development agencies and shelters.

Following a brief description of internal energy-management programs, including voluntary green-electricity purchasing in North America, organizational theories of social responsibility, social norms and sustainability culture are drawn upon to posit whether one could expect different factors to influence energy-management initiatives in social-economy organizations versus those of equivalent-sized private businesses. Social norms are introduced as potential institutional mechanisms that could be activated by community-based social marketing techniques to spread successful energy-management initiatives throughout the social economy (e.g., McKenzie-Mohr, 2008; Steg and Vlek, 2009; CBSM, 2010).

Energy Management in the Social Economy

The Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC 2007) builds the case for organizations to use energy-management strategies to reduce greenhouse gas emissions. Voluntary green-electricity purchasing is becoming a popular energy-management option for organizations due to its increasing availability, cost-competitive position, and verifiable environmental benefits (Gliedt *et al.*, forthcoming). In North America, there are two dominant methods of green-electricity purchasing. The Canadian example involves organizations that voluntarily pay a premium for green electricity from Bullfrog Power. Bullfrog Power is a business that creates new, renewable energy capacity to ensure that its customers purchase energy generated by wind and low-impact hydro. Organizations keep their electricity provider, but pay Bullfrog Power the premium difference calculated as a cost per kWh. Organizations can choose to purchase enough green electricity to offset 100% of their total electricity use, or can

choose to purchase smaller amounts to offset computer usage (Bullfrog Power, 2009). On the other hand, the U.S. Environmental Protection Agency Green Power Partnership program is a voluntary partnership program that does not sell green electricity, but does provide expertise and resources to help organizations locate and purchase green electricity from third-party suppliers (EPA, 2009).

Voluntary green-electricity purchasing allows organizations to ‘offset’ the negative environmental impacts associated with the use of fossil-fuel based energy. Green power is defined by the US Environmental Protection Agency (EPA) as those sources that “produce electricity with an environmental profile superior to conventional power technologies and produce no (direct) anthropogenic greenhouse gas emissions” (EPA, 2009). Green electricity sources include solar photovoltaic, wind, and low-impact hydro installations. Other energy-management initiatives, including efficiency and conservation programs, can reduce energy bills in a relatively short economic pay-back period and generate environmental benefits. Organizations could also choose to use solar thermal systems for water heating, geothermal systems to provide space heating and cooling, or solar photovoltaic systems to generate electricity on-site; all of which lower an organization’s environmental footprint. Both environmental service organizations (ESOs) and social service organizations (SSOs) are taking energy-management actions in the social economy. Table 1 profiles the ESOs and SSOs in this study.

Energy-management options can be viewed as social responsibility initiatives because they generate environmental benefits. Voluntarily purchasing premium-priced green electricity is a conscious organizational decision to pay more for an operational input because of the benefits to current and future generations. Energy efficiency and conservation measures are also social-responsibility actions. They often have high, up-front costs for the organization but can generate measurable environmental benefits. This paper then, looks at two components of energy-

management decisions when viewed as social-responsibility initiatives: (1) what energy management action(s) are taken by organizations, and, (2) what are the motivating factors that influenced organizations to take those actions?

The motivating factors of social-responsibility initiatives can be separated into three categories: (1) a performance objective based on either return on investment or, reduction in operating cost, (2) a negative-duty approach where organizations respond to external stakeholder pressures and norms, and (3) a positive-duty approach where organizations make environmentally-responsible decisions due to internal organizational culture and values (Cornelius *et al.*, 2008). Voluntary environmental initiatives, such as energy management, are likely to be successful within proactive organizations that are driven by environmental objectives. These organizations are characterized by the environmental values of top management, and seek a strategic advantage from environmental actions (Parker, Redmond, and Simpson, 2009). The following section discusses these motivations for social-responsibility initiatives and their potential influence on the environmental-management decisions of organizations in the social economy.

Table 1: Profile of Environmental Service Organizations (ESOs) and Social Service Organizations (SSOs)

Social Service Organizations (SSO)	
% of organizations with ≤ 20 employees = 40%; Interviewees = 52% Male; 48% Female	
Film festival	Immigrant support services
Emergency youth shelter	Community conservation association
Municipal association	Community learning centre
Real estate association	Post-secondary education institutions
Religious institutions and churches	Children's museum
Community health centre	Professional societies
Health research society	Non-profit training centre
Community garden association	Organic farmer
Environmental Service Organizations (ESO)	
% of organizations with ≤ 20 employees = 70%; Interviewees = 60% Male; 40% Female	
Description of ESOs	
Who are ESOs? Network of non-profit organizations that operate from British Columbia to Nova Scotia; Southern Ontario to the Northwest Territories	What do ESOs do? Deliver environmental programs / services with measurable results for sustainable resource use; clean air, water, soil; healthy ecosystems
How do ESOs succeed? By building partnerships with: municipalities, utilities, community organizations, businesses, media, foundations, federal, provincial, territorial governments, faith groups, schools, and First Nations	Why do ESOs exist? To help communities reduce energy and water use; to lower the environmental impacts of transportation; to reduce waste and preserve biological diversity and ecological integrity
Four Core Programs that ESOs Deliver (GCC, 2008)	
(1) Pesticide Free Naturally	(2) ecoENERGY an ecoACTION energy efficiency initiatives
Educates communities about health and environmental impacts of pesticide use; provide citizens with information about non-toxic alternatives; make reducing pesticide use a symbol of community pride	Partnered with federal / provincial governments to help citizens reduce greenhouse gas emissions, energy use, and air pollution in residential / transportation sectors, businesses, remote first nations communities
Website: http://greencommunitiescanada.org/pages/PesticideFreeNaturally.php	Website: http://www.ecoaction.gc.ca/ECOENERGY-ECOENERGIE/index-eng.cfm
(3) Active and Safe Routes to School	(4) Well Aware
Helps communities facilitate safe, walkable neighbourhoods; promotes active, safe and efficient transportation to school	Encourages Ontario's residential well owners to protect their wells and our common groundwater supplies
Website: http://www.saferoutestoschool.ca/	Website: http://www.wellaware.ca/

Performance Objective: Strategic Management

Organizations can measure the success of energy-management initiatives using environmental metrics, and publically display that information for comparison to the environmental performance of successful 'benchmark' organizations. These environmental structures can help turn environmental benefits accrued from energy-management initiatives into strategic benefits for the organization (Gliedt and Parker, forthcoming). Conversely, Tudor, Barr, and Gilg (2008) discovered that both formal (e.g., policies) and informal structures (e.g., group dynamics, norms, and routines) strengthened the existing organizational culture, already resistant to environmental-sustainability improvements, because of its central focus on 'health care targets'. Personal environmental beliefs and employee attitudes were able to partially overcome structural impediments and generate positive sustainability behavioural changes within the organization. Higher levels of environmental awareness also led to stronger sustainability behaviour and decisions (Tudor *et al.*, 2008).

Primarily, many organizations take energy-management actions because they achieve clear and immediate economic and strategic benefits (Moss, 2009). This is consistent with Whitmarsh (2009) who found that many individual energy conservation actions are taken to save money, rather than to save the environment. Korhonen and Seager (2008) caution, however, that environmental management based on 'eco-efficiency' alone can decrease organizational sustainability by reducing resilience. Organizations can broaden their conception of green management to provide for spare resource capacity and to diversify services/programs to enhance resilience (Korhonen and Seager, 2008). Pane Haden, Oyler, and Humphreys (2009) embrace this line of thinking and define green management as:

the organization-wide process of applying innovation to achieve sustainability, waste reduction, social responsibility, and a competitive advantage via continuous learning and development and by embracing environmental goals and strategies that are fully integrated with the goals and strategies of the organization (p. 1052).

Continuous learning for green management in the social economy must go beyond simply accumulating environmental knowledge, to a focus on changing the way executive directors think (Waddock and McIntosh, 2009). Executive directors can achieve a competitive advantage with green management through the continuous development of *intellectual capital*, a combination of human, relational and structural capital (Kong and Prior, 2008). Learning processes help transform knowledge acquired from external relationships into successful internal initiatives (Liu, Ghauri, and Sinkovics, forthcoming), and can also moderate the influence of external institutional pressures on internal environmental actions (Sarkis, Gonzalez-Torre, and Adenso-Diaz, forthcoming). Therefore, it is important to examine the role of external factors, including perceived pressure from the community and other stakeholders, in the decision to adopt energy-management programs.

Negative Duty: Social Responsibility and External Social Norms

This section discusses the potential for a perceived sense of ‘ethical’ responsibility, or pressure from external social norms, to influence energy-management actions in organizations. Within the social economy, the term ‘responsibility’ is universally understood and incorporated, as it drives many operating and strategic decisions. Svensson, Wood, and Callaghan’s (forthcoming) model of ‘sustainable business practice’ suggests that organizations have an ethical duty to external stakeholders, as well as to employees, to act responsibly above and beyond economic performance. Svensson *et al.*, (forthcoming) argue that by instilling a ‘code of ethics’ into organizational structures, processes, and external reporting, employees are influenced to make long-term sustainability decisions, rather than short-term economic decisions. The model relies on the premise of cascading social norms, where employees continuously learn to take sustainability actions because they believe other employees in the organization are doing so, or because they perceive that external stakeholders think it is the ‘ethical’ thing to do.

Evidence suggests that perceived pressure from other organizations, (i.e., social networks and norms, and community cultural factors) could influence organizations to take environmental actions (Marquis and Battilana, 2009). Geltz (2008) argues that peer pressure is a highly effective way to encourage organizations to participate in energy-management programs. Participating organizations become “avid proponents, confirming their own decisions by recommending the programs to others in their social system” (p. 96). Additionally, the specific local context can determine the ethical and cultural factors that organizations are most influenced by. For example, social economy organizations in the United Kingdom were motivated by the desire to meet the ‘rights, values, and perceptions’ of their clients, while organizations in Japan were more concerned with upholding a perceived ‘personal responsibility’ to all stakeholders in the broader community (Laratta, 2009).

Borck and Coglianese (2009) argue that the success of voluntary environmental initiatives “is a function of the number of participants in the program, the average impact of the program on each participant, and any spillover effects that the program has on nonparticipants” (p. 320). To achieve spillover effects, social norms must play an important role in convincing organizations to engage in energy-management strategies. If an organization and its executive director perceive that similar organizations receive benefits by taking energy- management actions, then they may be more likely to engage in the same actions. Therefore, the perceived influence of external stakeholders (e.g., community, customers, and partnerships) on the decision to implement energy-management programs will be evaluated.

The next section discusses organizational values, environmental champions, and internal social norms as internal motivating factors.

Organizational Values

Sustainability values of top management influence organizational culture and can have a positive effect on social-responsibility initiatives (Maccarrone, 2009). Employees that take strong environmental actions at home are more likely to do so at work (Tudor *et al.*, 2008). Within the social economy, environmental-service organizations are driven by managers who generally have stronger environmental values than their counterparts in the private sector (Egri and Herman, 2000). Environmental-service organizations guided by the environmental values of top management purport that the current generation has a moral and ethical responsibility to address climate change. They express a higher duty of responsibility to the community compared to businesses, because without the profit requirement, executive directors do not have to choose between return on investment and social responsibility. For social economy organizations, the 'primary filtering value' through which organizational strategies are decided is ideal social or environmental sustainability (Alexander, 2007). In most businesses, however, a major shift in decision-making and benchmarks of 'successful business practice' would be required. Therefore, both the environmental champions and internal social norms are likely to be important drivers of energy-management actions in the social economy.

Environmental Champions

Environmental champions are individual employees within organizations that use a variety of tools to gain organizational acceptance and adoption of environmental initiatives. Techniques of successful champions include networking

skills, building of internal, strategic coalitions, and legitimacy seeking (Juravle and Lewis, 2009). Environmental champions are able to gain organizational commitment by appealing to the personal values of key decision-makers', encouraging decision-maker input through consultation, and with the use of logical, scientific and fact-based selling techniques (Gattiker and Carter, 2010). Although organizations that lack sustainability cultures are less likely to foster the development of champions, champions in these organizations can still be successful if the initiative is framed as having a reasonable chance of generating strategic benefits (Juravle and Lewis, 2009).

Quinn and Dalton (2009) compared the characteristics and techniques of upper managers who introduced new environmental actions and programs, to effective leaders who introduced other forms of organizational change. They discovered three common traits: (1) effective framing of the desired outcome, (2) integration of the change initiative into organizational strategy, and (3) continual engagement of employees and other relevant stakeholders. Only one major difference was identified: leaders that successfully facilitated environmental sustainability initiatives thoroughly understood the relationship between economy, environment and society. Therefore, the managers' level of environmental knowledge and environmental values is important to social-responsibility initiatives that require environmental changes. This is supported by the finding that some Alberta businesses were influenced to voluntarily purchase green electricity by environmental champions with strong environmental values (Gliedt *et al.*, forthcoming). Champions can also use social norms to encourage other employees in the organization to support energy-management initiatives.

Internal Social Norms

The overall energy-management behaviour of an organization is influenced by the 'personal environmental norms' of individual employees that guide employees' perceptions about their 'responsibility' to take sustainability actions (Scherbaum, Popovich, and Finlinson, 2008). Norms have been shown to be more important than "any of the standard appeals that are often used to stimulate energy conservation, such as protecting the environment, being socially responsible, or even saving money" (Nolan, Schultz, Cialdini, Goldstein, and Griskevicius, 2008, p. 921). Göckeritz, Schultz, Rendón, Cialdini, Goldstein, and Griskevicius (2009) argue that 'descriptive normative beliefs', or the conservation behaviour an individual thinks others engage in, indirectly influences individual conservation behaviour. This relationship was moderated by the level of 'personal involvement' in conservation actions. In other words, individuals who were not personally involved in conservation initiatives were more influenced by descriptive norms to change their conservation behaviour.

Göckeritz *et al.*, (2009) also found that 'injunctive normative beliefs', or 'what an individual thinks others approve or disapprove of', enhanced the impact of descriptive normative beliefs on personal conservation behaviour. Essentially, if employee 'A' thinks that employee 'B' in the organization, or acquaintance 'C' within a social network, use a certain conservation behaviour that is 'highly approved' by others within the organization or network, then employee 'A' is more likely to use that behaviour. Furthermore, Goldstein, Cialdini, and Griskevicius (2008) discovered that 'provincial' descriptive norms, or the norms of an individual's local context (e.g., other employees who work in the same cubical take a certain action), were even more powerful than general, descriptive normative messages (e.g., employees in the same organization take a certain action) to change conservation behaviour.

Therefore, environmental champions can use their techniques, as well as social norms, to garner support for energy-management initiatives.

The motivations for energy management in organizations are found in table 2. Three groups of variables are used to compare each motivation category: (1) the importance of metrics that organizations use to measure the success of energy-management strategies, (2) the importance of criteria that organizations use when making energy-management choices, and (3) the factors that influence the decision to take energy-management actions.

The performance objective includes the importance given to the size of reduced operating costs and to the size of increased revenues as measures of success for energy-management strategies. Energy-management strategies used primarily as a marketing device were considered an indirect performance objective because selling the organization as ‘green’ or ‘environmentally friendly’ could be considered as a means to increase future revenues. Finally, publically-reported environmental metrics and benchmarking, and environmental certification programs such as Leadership in Energy and Environmental Design, or LEED¹, are considered to be influencing factors that could generate a strategic advantage.

Negative duty categories include competition from other organizations in the same sector, government regulations, and pressure from external stakeholders. The importance that purchased green electricity be generated locally also represents a negative duty because it demonstrates the value an organization places on local employment, local stakeholder views, and local environmental benefits.

¹ Leadership in Energy and Environmental Design is a “third party certification system that encourages and accelerates adoption of sustainable green building and development practices through the creation and implementation of universally understood and accepted tools and performance criteria” (CaGBC, 2010).

Positive duty variables include organizational culture, environmental champions, and internal environmental structures (i.e., departments, committees). Additionally, the importance given to the reduction amount of greenhouse gas emissions and for the requirement that the purchased green electricity be certified by a third party verification system (e.g., EcoLogoTM or Green-e^{® 2}) were also considered to be positive duty categories because they demonstrate a high level of internal value placed upon ‘actual environmental benefits’, rather than ‘green image’ benefits.

The following sections discuss the methodology, results of the electronic surveys, and recommendations for spreading successful energy-management experience throughout the social economy.

² EcoLogoTM is an environmental standard and certification system that ensures the environmental benefits customers pay for are actually generated (EcoLogo, 2010).

Table 2: Motivations for Energy Management and Variables of Interest

Motivations	Definition	Variables of Interest	Type of Variable
Performance Objective '1'	decisions focus on return on investment, revenue, operating cost reduction	size of operating cost reduction	Metric
		size of revenue increase	Metric
		green electricity purchased primarily as a marketing strategy	Purchase Criteria
		tax incentives	Influencing Factor
		environmental metrics and benchmarking	Influencing Factor
		environmental certification (LEED)	Influencing Factor
Negative Duty '2'	organizations respond to external stakeholder norms and pressures	public recognition	Metric
		compare to industry best practices	Metric
		meet government regulations	Metric
		generated locally	Purchase Criteria
		pressure from external stakeholders (community, partnerships)	Influencing Factor
		government regulations	Influencing Factor
		competition from other organizations	Influencing Factor
Positive Duty '3'	responsible behaviour taken because it is the right thing to do based on internal motivations	size of greenhouse gas emission reduction	Metric
		EcoLogo™ / Green-e® certification of the green electricity	Purchase Criteria
		organizational culture	Influencing Factor
		environmental champions	Influencing Factor
		internal environmental structures (committee, department)	Influencing Factor

Source: Motivations from Cornelius *et al.*, 2008

Methodology

An electronic survey was sent to 200 social service organizations (SSO) that purchase green electricity in Canada and the United States, and 50 responded with fully-completed surveys for a response rate of 25%. A modified version of the survey was electronically distributed to 30 green community organizations in Canada, and 10 fully-completed surveys were returned. Additionally, 84 fully-completed surveys from a comparison study of equivalent-sized private businesses were also included in the analysis³. All surveys were distributed by email to the person in each SSO and equivalent-sized private business identified as the key green electricity contact, and to the executive director of each environmental service organization (ESO).

Survey questions were designed to gather organizational information regarding the size, the types of energy-management strategies and environmental structures, the decision-making process for energy-management, and the techniques of environmental champions. Respondents were asked to rank the level of importance for: (1) the metrics used to measure the success of internal energy-management strategies, (2) the criteria used in the green-electricity purchase decision (SSOs and equivalent-sized private businesses) or, the decision-making process of internal energy-management (ESOs only), and (3) the factors that influenced the green- electricity purchase decision (SSOs and equivalent-sized private businesses) or, the internal energy-management decision (ESOs only). A five-point scale was used that ranged from 'not-important' (1) to 'most important' (5). Average responses are compared below.

³ The comparison survey was sent to businesses of all sizes that purchase green electricity in Canada and the US. The respondents self-reported the size of their organizations. Therefore, the exact response rate for small businesses with 20 or less employees cannot be calculated precisely, but is estimated at 15%.

Results

Social-economy organizations had longer-term experience with energy conservation and efficiency programs than did equivalent-sized private business. SSOs averaged four years of energy-efficiency experience and ESOs had more than four years conservation experience (table 3). A more detailed look at the type of initiatives employed by ESOs reveals that most organizations take low-cost actions (e.g., use of power bars), while only a few organizations opt for higher-cost, higher environmental-benefit options (e.g., heating-system retrofits) (table 4). Additionally, 60% of ESOs took “other” actions described in open-ended responses. These included switching from T12 to T8 or T5 lights; low and dual-flush toilet replacements; replacing fridges with Energy Star models; purchasing local, organic and fair trade food for the staff; purchasing post-consumer recycled paper and office supplies; instituting conservation policies on air conditioning and thermostat use; implementing ‘paperless’ policies; and, installing a shower to encourage cycling to work.

Table 3: Experience with Internal Energy Management Strategies

Total Sample <i>n</i> = 144	ESO	SSO	Small Business (≤ 20 employees)
<i>n</i>	10	50	84
Average # of Years Experience with Internal Energy Management Strategies			
Energy Efficiency	3.7	4.0	3.3
Energy Conservation	4.2	3.9	3.4

Table 4: Internal Energy Efficiency and Conservation Actions by ESOs (*n* = 10): % of ESOs Employing Each

Action	%	Rank
more efficient computer purchase	100	1
use of power bars	90	2
CFL replacement	80	3
water efficiency improvement	60	4
"other"	60	4
motion sensor/programmed lighting	30	5
heating, ventilation, air conditioning retrofit	20	6
added insulation	10	7
window replacement	0	8

ESOs were asked to rate the importance of various criteria to the decision-making process for energy management (table 5). Executive directors indicated that energy-management programs and services must reduce greenhouse gas emissions. Programs must also contribute to ecological integrity, engage funding and local partners, and be cost effective. Therefore, although energy management must create environmental benefits, it is clear that executive directors are also concerned that initiatives improve the strategic position of the organization by attracting funding and improving financial performance. Energy-management programs used primarily as a marketing strategy received the lowest response.

Table 5: Importance of Various Criteria to Energy Management Decision - ESOs only (n = 10)

Criteria	Average Response 1-5	Rank
contribute to GHG emission reduction	4.3	1
contribute to ecological integrity	4.0	2
engage funders, governments and local partners	4.0	2
be cost-effective	4.0	2
generate local economic development benefits	3.9	5
be diversified to include multiple options (e.g., energy efficiency, conservation, on-site generation, purchasing green electricity)	3.7	6
contribute to climate change adaptation	3.6	7
contribute to sustainable livelihoods	3.6	7
contribute to the sustainable use of non-renewable energy resources	3.4	9
be primarily a marketing strategy	2.0	10

SSOs and equivalent-sized private businesses were asked to rate the importance of a different set of criteria specific to the green-electricity purchase decision (table 6). Both types of organizations ranked EcoLogo™ or Green-e® certification as the most important criteria, suggesting that a high value is placed on ensuring that the environmental benefits paid for in the green-electricity contract are actually achieved. Although SSOs preferred a diversified energy-management approach where green-electricity purchasing should only be one in a basket of energy-management strategies, equivalent-sized private businesses showed no

preference however, between a diversified strategy or green-electricity purchasing as the primary energy-management strategy. Similar to energy management in ESOs (table 5), SSOs and equivalent-sized private businesses strongly believe that green-electricity purchasing is not employed as primarily a marketing strategy.

Table 6: Importance of Various Criteria to the Green Electricity Purchase Decision - SSOs and Equivalent-sized Private Businesses

Criteria	SSO		Small Business	
	Average Response 1-5	Rank	Average Response 1-5	Rank
EcoLogo™/Green-e® certified	3.4	1	3.7	1
one in a basket of energy management strategies	3.4	1	3.1	2
generated locally	2.7	3	3.0	4
the primary energy management strategy	2.5	4	3.1	2
primarily a marketing strategy	1.9	5	2.3	5

Consistent with their environmental values, ESOs placed a premium on environmental benefits (table 5). Therefore, the factors that influenced energy-management decision-making in ESOs are compared to both SSOs and similarly-sized small businesses, but that are not as strongly driven by an environmental objective (table 7). Culture and champions were clearly the most important influencing factors in all organizations. However, ESOs were most influenced by environmental champions while SSOs were most influenced by organizational culture (table 7). One difference of note is that pressure from external stakeholders was the third most important factor in ESOs, tied for fourth in importance in SSOs and ranked fifth in equivalent-sized private businesses. Internal environmental structures and environmental metrics and benchmarking tools were of a secondary, or indirect, importance to all organizations, but ranked highest in SSOs. These findings suggest that environmental champions can be important in organizations driven by an environmental objective (ESOs), social objective (SSOs), or profit motive (small businesses). Therefore, the importance of individuals within organizations at

creating, gathering support for, and ensuring the success of energy management initiatives is discussed below.

Table 7: Factors that Influenced Internal Energy Management Decision – Average Response 1-5

Total Sample <i>n</i> = 144	ESO	SSO	Small Business (≤ 20 employees)
<i>n</i>	10	50	84
environmental champion(s) within your organization	4.3	3.7	3.9
organizational culture	3.8	4.0	3.6
internal environmental structures (departments, committees)	1.8	2.9	1.9
pressure from external stakeholders (customers, community, partnerships)	2.4	2.3	1.5
use of environmental metrics and benchmarking tools	2.0	2.3	1.8
competition from other organizations	2.3	1.8	1.6
tax incentives	2.3	1.3	1.4
government regulation	2.0	1.3	1.4
environmental certification programs (LEED)	1.4	2.0	1.2

Note: ESOs were asked to rate the importance of these factors to the 'internal energy-management decision' while SSOs and equivalent-sized private businesses were asked to rate the same factors to the 'decision to purchase green electricity'.

When comparing the importance of different measures of internal energy-management success, not surprisingly, ESOs rated the amount of greenhouse gas-emission reduction as most important (table 8). However, 'compare to industry best practices' ranked second for ESOs but only ranked fourth for SSOs. Therefore, ESOs are aware of what other organizations are doing and want to stay ahead with their environmental performance. Another interesting finding is that ESOs rated all metrics for external energy-management initiatives higher than internal energy-management initiatives, signifying that ESOs place a higher value on the performance of external energy services than on internal energy-management programs.

Table 8: Metrics or Benchmarks to Measure Success of Energy Management Initiatives

Total Sample <i>n</i> = 144	ESOs	SSOs	Small Business (≤ 20 employees)	ESOs
<i>n</i>	10	50	84	10
	Internal Energy Management Initiatives			External Energy Management Initiatives
size of GHG emission reduction	3.9	3.7	3.9	4.0
public recognition	2.6	3.4	3.1	3.4
size of operating cost reduction	2.6	3.3	3.1	3.4
size of profit/revenue increase	2.3	1.7	2.5	3.2
compare to our competition - industry best practices	2.8	3.0	3.1	3.0
meet government regulations	2.3	2.3	2.1	2.7

It is evident that environmental champions were very important to energy-management decision making in most organizations. Within small businesses, the environmental champion was almost exclusively the owner, while in ESOs and SSOs the only champion was the executive director 40% of the time. In the social economy, the champion was often a lower-level employee, a member of the board of directors, or it was a collective championship process with contributions by more than one person. In contrast to small businesses, energy-management decision making in ESOs and SSOs is clearly a collective process. This is further highlighted by the high level of importance attributed to the championing technique of garnering support for the energy-management initiative from other employees in the organization. Framing the energy management idea as ‘urgent’ received the lowest rating in SSOs and ESOs, perhaps because champions did not feel this was necessary given the strong and supportive organizational culture that characterizes these organizations (table 9).

Table 9: Environmental Champions: Position and Techniques vs. Energy Management Decision-Maker

Total Sample <i>n</i> = 144	ESO	SSO	Small Business (≤ 20 employees)
<i>n</i>	10	50	84
Position of Champion (%) (f)			
Executive Director/Owner	41	40	89
Environmental manager	12	16	3
Senior Management	12	13	1
Operations Manager	18	13	1
Other	18 (c)	18 (d)	6 (e)
Techniques of Champion - Average Importance (1-5) (f)			
scanned media, literature, competitors for energy management ideas	3.3	3.2	3.4
framed energy management idea as 'urgent'	3.0	3.0	3.4
sold idea to decision-makers in organization	3.3	3.1	3.1
garnered support for the idea from other employees in the organization	3.6	3.5	1.9
Who Makes Internal Energy Management Decision (%) (g)			
Owner/CEO/Executive Director	53	34	90
Board of Directors	21	7	0
Senior Management	0	30	10
Environmental Department/Committee	5	12	0
Environmental Manager	5	5	0
Other	16 (b)	12 (a)	0

Note: (a) leadership team in consultation with all members, property manager, “all of us... we operate on consensus”; (b) all staff input; (c) staff; (d) board of directors, “each of us on membership team believes this is important”, participative decision with wide-spread input and support, a church congregation member, environmental committee members, lower-level staff member; (e) lower-level employee, entire management team, business partner; (f) for ESOs the question refers to the championing of internal energy-management initiatives, while for SSOs and equivalent-sized private businesses it refers to championing of GE purchase; (g) for ESOs this question was 'who makes internal energy-management decision?', while for SSOs and equivalent-sized private businesses the question was 'who makes GE purchase decision?'

Discussion

Social-economy organizations are more strongly influenced by positive duty factor-management initiatives. ESOs did suggest, however, that energy management initiatives should engage funders and be cost effective. This lends support to the theory of green management, which suggests that organizations can achieve strategic benefits from energy management initiatives (Pane Haden *et al.*, 2009).

Overall, social norms were the third most important factor in the decision to implement energy-management programs in ESOs (after environmental champions and organizational culture). Within SSOs and equivalent-sized private businesses, organizational culture was most important, followed by environmental champions and internal environmental structures. Two potential explanations are suggested: (1) it is possible that many executive directors do not realize the importance of social norms because participants are often unable to detect that social norms were the primary reason for their conservation behaviour (Nolan *et al.*, 2008); or (2) perhaps social norms will become an increasingly important factor over time as the number of innovator and early adopter organizations demonstrating energy management success stories grows and becomes better publicized.

It is clear that environmental and social-service organizations are influenced by an internal environmental-sustainability culture and personal environmental values. This sample of organizations all employ at least one internal energy-management strategy, and in most cases, a diversity of options. However, in order to sustain this level of environmental action, environmental knowledge must be engrained in the organizational fabric (Boiral, 2002). Organizational environmental culture and values can be institutionalized in the structural capital, or in the 'knowledge capital' of organizations such as databases, process manuals, strategies, routines, and publications (Kong and Prior, 2008).

Social-service organizations using structures to encourage sustainable energy behaviour must use them properly. Some structures can impede sustainability improvements in organizations. While structures and individual factors can influence or inhibit sustainability behaviour independent of each other, it is more likely that the interaction between structural and individual factors determines sustainability behaviour in organizations (Tudor *et al.*, 2008). Additionally, changing individual employee behaviour is necessary to support internal structural changes designed to improve the sustainability of organizations (Scherbaum *et al.*, 2008). Finally, innovative environmental structures such as ‘three-year rolling performance metrics’ to discourage employees from only pursuing projects with short-term return on investment can support further environmental championing activities (Juravle and Lewis, 2009). Rewards can also be used to motivate energy conservation behaviour in organizations; however, ‘sustaining’ such behaviour requires strategies that focus on influencing environmental norms which directly influence environmental conservation decisions (Scherbaum *et al.*, 2008).

Conclusion

Green-electricity purchasing has attributes that may compel other social-economy organizations to adopt it as a social-responsibility initiative. There are no up-front installation costs for expensive technology (as is the case with some energy efficiency and solar photovoltaic technologies), thus avoiding a major barrier for organizations that have small and uncertain budgets. Social-economy organizations simply pay a stable monthly premium in addition to their existing electricity rate. Executive directors can feel assured by the third-party certification system that their investment in new green energy capacity is actually being developed, and that the environmental benefits are actually being achieved.

This paper provides an understanding of the decision-making process for choosing internal energy-management options (e.g., energy efficiency, conservation, on-site generation, or green-electricity purchasing) in social-economy organizations. Our findings suggest that SSOs and ESOs are taking internal energy-management actions because of environmental champions and organizational culture and values. ESOs reported a higher level of pressure from external stakeholders than SSOs and equivalent-sized private businesses, and are therefore more influenced by external social norms.

Social-economy organizations make internal energy-management decisions based on consensus building and collective input. Environmental champions in social-economy organizations were significantly more likely to garner support from other employees in the organization than they were in equivalent-sized private businesses. This form of participative environment provides a fertile landscape for champions to not only frame energy-management initiatives as urgent, but also to sell these initiatives to executive directors and boards of directors. Executive directors who wish to foster a sustainability culture with the development of energy-management programs should take advantage of the role of champions within a participative environment to implement learning and behaviour-change techniques, green teams or a sustainability rewards system.

These findings are important for executive directors who wish to encourage energy-conservation behaviours in organizations. Although employees within ESOs may respond to traditional environmental messages, workers within social-service organizations however, may be more likely to engage in energy-conservation behaviours if they believe others within their immediate organization, or the organization's social network, are already doing so (Griskevicius, Cialdini, and Goldstein, 2008). Once successful energy-management programs are developed, they can be replicated across the broader social economy. External social norms can

foster a sustainability culture with the help of social capital networks (Gliedt and Parker, 2007), strategic partnerships (Parker and Rowlands, 2007) and relational capital (Liu *et al.*, forthcoming).

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