

Chapter 3

GREEN PROCUREMENT IN THE PUBLIC SECTOR: PURCHASING DEPARTMENTS AS PROCUREMENT ENTREPRENEURS

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INTRODUCTION

Procurement professionals have generally had a very clear goal: procure needed resources while achieving the best quality for the best price. This would appear to be true in both the private sector as well as the public sector; the private sector wants the best value in order to maximize profits to shareholders while the public sector seeks the best value because of increasingly limited dollars available to them. Evaluation criteria such as price, performance, and durability have long been factors used to determine what exactly the best value is for a given product or service (Drumwright, 1994).

With the momentum of the environmental movement, however, consumers are demanding greener alternatives both in their personal consumption as well as from the private and public sectors. With this demand comes the addition of new, socially responsible evaluation criteria in procurement, such as the impacts of resource extraction when manufacturing a product, the harmful effects of using a product, and the ability of a product to be recycled or repurposed rather than discarded after its use. Using these guidelines in procurement decisions conforms to the principles of environmentally preferable purchasing (EPP), which, according to the United States Environmental Protection Agency (EPA), means “selecting products or services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose” (EPA, 2000a). Green procurement often involves procuring the following: products certified to meet

environmental or energy efficiency standards (referred to as “eco-labeled”); in-house product/service evaluations; third-party product/service evaluation; and supply chain initiatives (CEC, 2003). Green products that initially included janitorial supplies and recycled paper have expanded to include safer paints, hybrid cars, and alternate energy sources.

While the literature related to green procurement is steadily growing and the literature about policy entrepreneurship is fairly developed, only a limited number of studies have combined the two literatures to illustrate how green procurement gets introduced into an organization. A handful of studies have shown that the private sector has, through the presence of policy entrepreneurs, been able to demonstrate social responsibility in its procurement practices (Drumwright, 1994; Zsidisin & Siferd, 2001; Raines & Prakash, 2005). Despite these scholarly studies of private sector adoption of green procurement through policy entrepreneurs, little research has been focused on the role purchasing agents in public organizations play in institutionalizing environmentally conscious purchasing practices. Given the considerable purchasing power of governments (New et al., 2002) and its ability to affect the marketplace, it becomes relevant to examine the behavior of procurement professionals in public organizations with regard to green procurement.

This study is intended to address the question of whether purchasing departments in public organizations have been engaging in green procurement activities and, if so, if their activities could be considered entrepreneurial according to criteria from the entrepreneurship literature. Procurement professionals from five local governments in Florida were interviewed about their behavior and their responses were then applied to the identified entrepreneurship criteria. The Background section of the paper discusses the entrepreneurship literature and establishes the criteria that were used, followed by a Method section describing the method and local governments that were included in this study. Following the Methods section are the Results and Discussion sections where the interview responses are explained. The Conclusion section of the paper provides summary remarks as well as directions for future research.

Background

Procurement professionals in both the private and public sectors have similar responsibilities at the most basic level: to purchase goods and services for their organizations. The criteria that are used by these professionals may emphasize price, quality, a combination of both, or other aspects such as longevity of use and ease of replacement. These are generally economic criteria and are considered to be pretty standard in evaluating an organization's procurement options. However, with the environmental movement's success in expanding awareness of the impact of production and the use and disposal of products, environmental concern has emerged as a new, noneconomic criterion that is being adopted by procurement specialists and impacting purchasing decisions (Drumwright, 1994).

Green procurement, or EPP, has been gaining in popularity as both a personal and organizational consumption choice. Surveys have shown that 75 percent of consumers are influenced by the environmental-friendliness of companies (Drumwright, 1994) and Webb, Mohr and Harris (2007) developed a scale of Socially Responsible Purchase and Disposal (SRPD) factors, revealing that consumers are likely to change their purchasing behavior based on factors such as a firm's corporate social responsibility performance. Likewise, private and public organizations are beginning to critically evaluate the benefits of EPP because of the growing demand by their clients that they do so. New, Green, and Morton (2002) noted that the increasing use of environmental criteria in supplier selection and evaluation is driven primarily by consumer pressure. This consumer pressure is also believed to be one of the catalysts for the adoption of Environmental Management Systems (EMS), such as ISO 14000 series standards or the European Union's Eco-Management and Audit Scheme (EMAS), many of which include green purchasing components (Coggburn, 2004).

Green Public Procurement (GPP) has been a focus of the European Union for quite some time. The Commission adopted in 2001 an environmental action programme designed to move green criteria into the procurement process (Business Europe, 2001). Since the introduction of this initiative, the Commission has carried out multiple studies, one of which sought to identify the prevalence of GPP in EU member states. Bouwer et al. (2006) explained that the survey responses indicate that seven of the twenty-five EU member

states (Austria, Denmark, Finland, Germany, the Netherlands, Sweden, and the United Kingdom) are more proactive about instituting GPP in their procurement activities and have similar characteristics: strong advocates and national guidelines; readily available information accessible through websites; implementation of life-cycle costing and green components in contracting procedures; and adoption of an EMS. The barriers discovered by the Commission were not unexpected: cost, lack of specific knowledge, lack of top-level buy-in, and lack of training (Bouwer et al., 2006). The recommendations of this study included better access to information, training and communication plans, top-level support, and development of a national implementation plan. In addition to studies, the EU has also set targets such as the 2008 communication “Public Procurement for a Better Environment,” wherein a target of 50 percent of public procurements should be done in accordance with GPP criteria (European Commission website). A subsequent study indicated that only about 26 percent of the 50 percent goal had been met but that there was an upward tick in the use of green criteria.

While Coggburn (2004) and others are quick to point out that Europe is far more proactive than the United States in adopting EPP practices, examples of green purchasing in the United States abound, from the national level to the local governments. At the national level, Presidents Jimmy Carter in 1976 passed the Resource Conservation and Recovery Act (RCRA) requiring all federal agencies to develop an affirmative procurement program (APP) to ensure that paper purchases contained at least 30 percent recycled content (Coggburn & Rahm, 2005), and President Clinton, beginning in 1993, issued a series of Executive Orders to expand environmentally preferable purchasing practices in the federal government (Clinton 1993, 1998, 1999, 2000a-c). At the state level, Massachusetts, under the leadership of Governor William Weld in 1993, established an EPP program that focused on the procurement of recycled products, including recycled paper and office supplies as well as plastic lumber benches and tables, recycled motor oil, and recycled traffic cones (Coggburn & Rahm, 2005), and California in 2006 undertook a major initiative to stop using environmentally harmful (in its manufacture, use, and disposal) carpeting and only purchase carpeting that meets California’s environmentally preferable carpet standard, which establishes environmental requirements related to indoor air quality,

hazardous-materials content, recycled- and bio-based content, among other criteria (Case, 2007). At the local level, the City of San Jose in 2007 undertook a 15-year plan to make San Jose greener by ensuring that 100 percent of the public fleet vehicles are hybrids that run on alternative fuels, and the City of Chicago's Department of Fleet Management has entered into an \$8.75 million contract for hybrid Priuses, Camrys, and Highlanders from Toyota (Green News, 2007). While these examples indicate that the appeal of green procurement has gained ground in public organizations in the United States, they do not provide any insights as to *how* green procurement came to be a priority for the organizations. One way is through the procurement department and specifically the procurement specialist.

Procurement specialists and the purchasing function in general are instrumental in bringing about a solution to environmental issues (Zsidisin & Siferd, 2001; Case, 2004b). Despite the void of academic literature about public organizations' adoption of EPP, some practical examples of EPP adoption in the public sector showcase how some governments have been able to implement green purchasing practices, including strategies such as establishing price flexibility, adopting best value principles, modifying specifications in solicitations, and referencing environmental labeling and certification in solicitations (Case, 2004a). The question remains, however, of *how the organization decided to engage in green procurement*; the strategies listed above are only relevant if the decision has already been made to pursue green procurement. In this light, it becomes important to identify the person to whom the introduction and adoption of EPP can be traced. One possibility is that of the entrepreneur.

The entrepreneur and entrepreneurship has been widely studied across multiple academic fields; it has been the focus of research in the economics, political science, and public administration literatures. Within the economics literature, the entrepreneur is generally recognized as an individual that works for himself rather than for someone else (Wagner, 2003) or who is responsible for creating a business (Praag & Versloot, 2007; Lazear, 2005). The economics literature examines questions related to factors that make an individual more likely to become a successful entrepreneur, such as ability to raise capital (Blanchflower & Oswald, 1998); the particular skill-sets or cognitive capabilities of entrepreneurs

compared to employees (Wagner, 2003; Lazear, 2005; Hartog et al., 2010); and what value an entrepreneur actually provides (Praag & Versloot, 2007). Some of the more interesting findings in this literature indicate that individuals who have a more varied skill-set and who have experienced a change or multiple changes in profession are more likely to be or become entrepreneurs (Wagner, 2003; Lazear, 2005; Hartog et al., 2010). To this end, Lazear (2005) suggests that more generalized skills are advantageous over specialized skills, allowing an individual to perform more roles, while Hartog et al. (2010) proposed that scientific, technical, and social abilities benefit entrepreneurs more so than verbal or clerical skills.

Two additional findings of the economic entrepreneurship literature are related to innovation and risk, which are aspects of this study. Praag and Versloot (2007) examined the value or utility of entrepreneurship in different areas, including innovation. Their results are a mixed bag: entrepreneurial firms were shown to be less likely to adopt innovations, but they were more likely to produce and commercialize innovations (Praag & Versloot, 2007). This may prove to be an interesting finding in the context of green procurement adoption, which can be viewed as an innovation. In addition to the innovation findings, Lazear (2005) cited risk tolerance as a characteristic of entrepreneurs. This attribute of entrepreneurs reappears in the public administration entrepreneurship literature as well.

In some contrast to the economic view of an entrepreneur as an individual business owner or one who will start businesses, there is another oft-studied version of the entrepreneur: the policy entrepreneur within an organization. The entrepreneur can be instrumental in effecting policy changes and introducing innovative solutions to environmental problems (Zald, 2004). Policy entrepreneurship in conjunction with the environmental movement and purchasing, while not widely studied, has been examined by some researchers. The majority of this research is set in the private sector (cf. King & Roberts, 1992; Zegan, 1992). Raines and Prakash (2005) focused their research on the influence of policy entrepreneurs (referred to as corporate environmental entrepreneurs) in facilitating firm adoption of voluntary codes, such as ISO 14000 standards, a series of standards with guidelines on environmental labeling, environmental performance, and life cycle assessment that

guarantee adherence to environmental principles in purchasing. In addition to the adoption of voluntary codes, private sector policy entrepreneurs have institutionalized the principles of EPP and related policy changes by adopting the use of noneconomic, socially responsible buying criteria in their procurement processes. Drumwright (1994) described how policy entrepreneurs in private sector organizations have begun using criteria other than price, or the balance between price and quality, to enhance socially responsible purchasing in their organizations. These entrepreneurs have expanded purchasing criteria beyond just pricing and quality to include factors such as negative environmental impact and adverse effects on human health.

But policy entrepreneurship is not strictly the domain of the private sector. Scholars in the fields of political science and public administration have also studied public organizations to examine the role of policy entrepreneurs in affecting policy change (Mintrom, 1997a, 1997b; Mintrom & Vergari, 1996; Teske & Schneider, 1994; Schneider & Teske, 1992; King & Roberts, 1992; Roberts & King, 1991). Much of the literature on entrepreneurship in the public sector describes the policy entrepreneur as a person who seeks to initiate dynamic change (Mintrom, 1997a), as individuals who change the direction and flow of politics or whose actions produce policy changes that are innovative and unexpected (Schneider & Teske, 1992). Mintrom (1997a, 1997b) found that policy entrepreneurs were highly successful in bringing about the adoption of school choice policies, an innovative and contentious policy change. He also identified the attributes that are common among successful policy entrepreneurs: they are well-placed to influence politicians; they are able to show examples of where the innovative policy was previously successful; and they know the arguments for and against the policy innovation (Mintrom, 1997b). Membership in professional organizations and associations has also been found to be conducive to entrepreneurial activities (Schneider & Teske, 1992). Additionally, successful public policy entrepreneurs are able to build coalitions and are willing to take risks (Mintrom, 1997a), have leadership skills and strategic ability (Mintrom & Vergari, 1996), and are driven by a combination of goals: goal achievement, problem solving, and by a desire for public service (Teske & Schneider, 1994). Bernier and Hafsi (2007) also identified five dimensions that facilitate entrepreneurship: autonomy, innovation, risk-taking, proactiveness, and competitive aggression.

With regard to innovation (Praag & Versloot, 2007) and attitudes toward risk (Lazear, 2005), there is some overlap with the economics literature.

It also seems important for the purposes of this study to note that entrepreneurs are identifiable by the actions they take and not necessarily the position they hold (Mintrom & Vergari, 1996; Teske & Schneider, 1994; Schneider & Teske, 1992). To this end, Schneider and Teske (1992) suggested that entrepreneurs in local government can be high-level unelected leaders, such as city managers, or elected politicians like mayors or commission members. Teske and Schneider (1994) examined the bureaucrat as an entrepreneur by focusing on city managers and found that while a fifth of the entrepreneurs identified in their study were city managers, only about 1 in 11 city managers was an entrepreneur. Similar to Schneider and Teske, Bernier and Hafsi (2007) look beyond individual characteristics such as position in the organization or psychological attributes and highlight cases of entrepreneurship in the public sector via the behavior and activities of the person or, in some cases, a whole division or department of people. They suggested that the risk-taking behavior mattered more than the personal characteristics and that individual psychological characteristics don't necessarily differentiate the entrepreneur from his peers. It is not the ability to lead or take risks that makes an entrepreneur but rather the individual's decision to actually lead and take personal and reputational risks that make him an entrepreneur. Neither of these studies is examined in the context of green procurement, leaving a void with regard to the question of whether or not procurement can be entrepreneurial in facilitating the adoption of innovative policies.

At least two studies of public procurement have attempted to address this question: Coggburn (2004) examined green procurement as a policy tool, and Snider (2006) discussed procurement professionals as having legitimate leadership roles in determining organizational ends. Coggburn's (2004) work suggested that green procurement in the public sector can be successful as long as the widely held values of effectiveness, efficiency, and economy are not compromised. He proposed that procurement officials who are able to demonstrate that green products perform as effectively, are procured as easily and fall in the same general price range as their "brown" counterparts will be successful in implementing green

procurement policies. His conclusion is that by adopting and implementing green procurement practices, the organization as a whole will begin to shift its mission toward one that is more environmentally-conscience (Coggburn, 2004). While no explicit mention of an entrepreneur is made, I think the activities described in implementing green procurement mirror the types of activities in which an entrepreneur would be expected to engage: using leadership skills and strategic ability to overcome prejudices against green procurement, showing examples of successes in green procurement, building networks with other procurement officials through professional organizations and associations, and taking risks when necessary to spread the innovation.

Snider (2006) did not discuss green procurement but rather spoke to the leadership role, similar to the entrepreneur's leadership skills, of the procurement professional in shaping organizational ends. The main argument in his study revolved around whether the field of procurement is merely a clerical/tactical function, beginning only once a need has been identified, or one in which procurement officials play an active leadership role in establishing organizational goals, promoting vision, and setting strategies (Snider, 2006). While the study is skeptical of the practicality of entrepreneurial leadership models in public organizations due to a perceived limit on how entrepreneurial procurement officials can be without abandoning basic aspects of the purchasing function, I think the study is supportive of moving the procurement function out of the background and into the foreground for setting organizational goals. My suggestion is that a public procurement entrepreneur could impact organizational goals through green procurement without neglecting his main objective of procuring goods and services.

Despite the various studies touting the advantages or benefits of entrepreneurs, some opponents suggest that public sector entrepreneurs are actually dangerous to their organizations. Scholars such as Moe (1994) are of the opinion that entrepreneurship conflicts with due process, accountability and equal treatment, while Terry (1998) explained that critics have also accused entrepreneurs of being obsessed with "self-promotion, rule-breaking, power politics, risk-taking and radical change." Another criticism of public sector entrepreneurs is that government innovations have a high failure rate, meaning the scarce resources that were spent on the risk-taking

behaviors associated with entrepreneurs could be perceived as going against the public good (Winnick, 1993). In order to address some of the alleged darker aspects of entrepreneurship in the public sector, scholars such as King and Roberts (1992) and Bernier and Hafsi (2007) have examined the role of the public sector entrepreneur. King and Roberts (1992) conducted a study comparing the psychological profiles of policy entrepreneurs and executive entrepreneurs in an effort to look at the potentially negative outcomes of policy entrepreneurs and identify a way of addressing those concerns. Executive entrepreneurs could be shown to promote self-interest and behave in unethical ways while policy entrepreneurs, in contrast, were likely to use ethical means and relied more heavily on collective power and relationships to persuade others to accept their way of thinking (King & Roberts, 1992). Characteristics of the policy entrepreneur, as outlined by King and Roberts (1992), include the following: well-integrated personalities, demonstrated leadership potential, demonstrated managerial potential, and the use of ethical methods.

In addition to King and Roberts (1992), Bernier and Hafsi (2007) also suggested that public sector entrepreneurs act within the law, though not always, and that they are instrumental in bringing about organizational change. Though their work acknowledges instances where entrepreneurs acted outside of the rules or even law, such as the case of William Ruckelshaus in making the Environmental Protection Agency a viable body and not just a shell, they also suggest that the work that the individual was doing and change that he was creating legitimized this behavior. This is not to put forward that it is or should be acceptable for these individuals to act outside of the rules or laws that govern their activities but more to intimate that not all acts of deviant behavior carry negative consequences or are counter to organizational goals. In addition to addressing some of the ills associated with entrepreneurship, they also described two levels or types of entrepreneurship: the individual "heroic" level and the systemic level where many individuals within the organization were involved in creating the change. According to Bernier and Hafsi (2007), both types are necessary for an organization to achieve and sustain change: individual entrepreneurship provides the bursts of innovation and energy that are needed for change while systemic entrepreneurship causes the changes to endure and become institutionalized.

For the purposes of this study of procurement entrepreneurs, it is my suggestion that while there may have been an entrepreneur in the purchasing departments, the purchasing departments themselves are institutionalizing the move to EPP through systemic entrepreneurship. Evidence exists both for and against the use of policy entrepreneurs, perhaps because it is difficult to evaluate the outcome until there is an outcome; how can the value of an entrepreneur be judged until he has done something worthy of judgment? This study adopts Schumpeter's (1934) view, that entrepreneurship leads to innovation and that innovation is, good or bad, "creatively destructive;" the old rules and methods must be torn down to make way for change and innovation.

Environmental purchasing and the role of the private organization policy entrepreneur is an emerging field of study. However, it is not appropriate to view public procurement through a lens developed by private procurement research. Public procurement differs from private procurement in at least ten ways, including coping with obstacles such as legal restrictions, compliance with regulations, and diffusion of authority (Heinritz et al., 1991). Because of the different organizational environments in which the private and public procurement professionals operate, it becomes necessary to recognize public green procurement as distinct from private green procurement and develop insights that are uniquely suited for public organizations. Additionally, the policy entrepreneurship literature does not speak to the innovative activities of employees below the city manager level. The lack of exploration into the workings of EPP in public organizations as well as the procurement professional and their departments as entrepreneurial necessitates this study of public organizations and their procurement departments.

METHODS

A qualitative study of local governments in the State of Florida was undertaken in order to explore the activities of procurement departments in public organizations. Florida is an appropriate setting for this study for a couple of reasons, the first of which being the state's population. Florida is the fourth most populous state in the country with a population of over 18 million people, or consumers, who have the ability to create a demand for more environmentally friendly products. Additionally, Florida has more than 400 municipal

governments and 67 county governments, all of which must procure goods and services to appropriately govern their communities. In addition to the population-driven purchasing power of the state, Florida's state government spends more than \$1 billion annually on procurement (per the DMS website). Florida has tremendous purchasing power, making it a relevant location for this study.

Florida was also selected because of its growing commitment to investment in clean and renewable energy. The Florida Energy Office, prior to becoming the Florida Energy & Climate Commission in 2008, administered incentive and rebate programs, such as those authorized by Governor Jeb Bush in the 2006 Florida Energy Act (Florida Energy & Climate Commission website, n.d.). While many of the goals of this act were related to the production of alternate fuels, components of the act provided incentives for home and business owners who installed energy efficient technologies like solar panels. In addition to Governor Bush's efforts to bring EPP to Florida residents and business owners, Governor Charlie Crist also showed his commitment to energy efficiency and sustainability through the Florida Energy & Climate Commission by providing rebate programs for energy efficient appliances and Energy Star residential HVAC (heating, ventilating, and air conditioning) systems (Florida Energy & Climate Commission website, n.d.). Florida's Governors Bush and Crist have demonstrated a commitment to green procurement through rebate and incentive programs, making it interesting to see what the local governments around the state are doing in comparison.

Qualitative methods were employed since these methods are most appropriate for studying topics that are relatively new or for which well-established theories and variables are not available (Brower, Abolafia, & Carr, 2000). The process was guided by Strauss & Corbin (1998).

Gathering Data

This study's qualitative approach uses small cases studies and interviews. In selecting the organizations to include in this study, local government websites were used for soliciting interviews. Because interviews (please see Appendix A for the interview instrument) would be an important part of this analysis, any local government that did not respond to or accept a request for an interview was removed from

the list of organizations for inclusion. This method of contact resulted in three organizations agreeing to participate and be interviewed for the study. Two additional organizations were added through the use of a contact list provided by Mr. Scot Case, the founder of Responsible Sourcing Solutions and a well-known advocate of green procurement in public organizations.

Five local governments were selected for this study: two larger, proactive (described below) counties with green programs firmly in place; one city and one county that are in the beginning phases of greening their governments; and one county that falls somewhere in the middle. In the spirit of anonymity, the organizations are referred to as Gov1, Gov2, Gov3, Gov4, and Gov5. Govs 1 and 2 are the more proactive counties (described below); Gov3 is the county that falls in the middle; Gov 4 is the only city in the study and is in the beginning phase of its green procurement activities; and Gov5 is the county that is in its beginning phase. The following sections provide a brief description of each of the governments using demographic data from 2008, the most recent year that comparable information could be found for each of the organizations (EDR website). Additional data were gathered from the organizations' websites, purchasing manuals (when available on-line), and conversations with procurement representatives for each organization. The interviews for Gov1, Gov2, and Gov3 were by phone; - the interviews for Gov4 and Gov5 were in person. All of the interviews took about 1 hour.

The Organizations

Gov1 – The first government in the study is the largest with about 3.3 percent of Florida's population. The personal income per capita was approximately \$48,000 and about 20 percent of the population had a bachelor's degree or higher. For this study, SJ, the Purchasing Director for the county, was interviewed. Gov1 is considered to be the most proactive government with regard to green procurement for the following reasons: the organization's purchasing manual is available on-line and has a section entitled Environmentally Preferable Purchasing, which was adopted in 2002; the EPP section contains the statement that "(deleted) County Manager's Office and Purchasing strongly supports and will aggressively implement this policy;" the policies stipulate department staff shall use and require their vendors to use environmentally preferable products; and the policies assign responsibilities to staff related to updating EPP product lists, verifying

that minimum content standards are being met, and requiring an annual report detailing the purchase of environmentally preferable and recycled/non-recycled materials by department. This county has also been discussed in EPA publications as an example to other communities looking to green their procurement practices (EPA, 2000b).

Gov2 – The second government in the study was also a large county with about 2.1 percent of Florida’s population. The personal income per capita was approximately \$56,000 and about 27 percent of the population had a bachelor’s degree or higher. Representing this organization was EG, a procurement specialist in the county’s procurement department. Gov2 is also considered as proactive because of the stated commitment within the county code that is repeated in the Purchasing Manual: “The County is committed to the procurement of products and services that minimize negative environmental and social impacts and emphasize long-term values. Preference shall be given to products or services that have a lesser or reduced effect on human health and the environment when compared to other products and services that serve the same purpose.” Additionally, this county adopted a Green Housekeeping Policy in 2005 that requires that green janitorial products be used.

Gov3 – The third government in this study is the county that falls in the middle: it had a green purchasing program in place but was not considered as committed as Gov1 and Gov2. Gov3 had approximately 1.6 percent of Florida’s population. The personal income per capita was approximately \$32,000 and 16.6 percent of the population had a bachelor’s degree or higher. SB, the county’s Procurement Services Director, was interviewed for this organization. The purchasing manual for Gov3 is available on-line and contains requirements that greener products be researched and also encourages that full life costs be considered when procuring a good , including end of life costs, landfill avoidance cost benefits, and electricity needs over the life of the product. The reason Gov3 is considered to be less committed than Gov1 and Gov2 is because there is no requirement, other than to conduct research, that green products be given preference. The manual suggests that environmental factors should be considered but it is difficult to determine how much weight a green product carries over a traditional, non-green product.

Gov4 – The fourth government in this study is the only city in this study and is one of the organizations in its founding stages of building a sustainability program, including green procurement. The city had a population of 177,852 in 2008. The personal income per capita was approximately \$32,000 and roughly 45 percent of the population had a bachelor's degree or higher. MT, a purchasing agent with the city, was interviewed. This organization is considered to have a less-developed green procurement plan for a couple of reasons: the city's purchasing manual is not available on-line, and what information or guidance is provided for vendors does not include a preference for environmentally preferable products. While the city is a Certified Green City and offers green programs to citizens, there does not seem to be a commitment to green procurement within the organization itself; there were no indications from the city's website that EPP is a priority. MT confirmed in conversations that the city had only just begun to consider EPP guidelines.

Gov5 – The final government in this study is the county that is in its founding stages of developing a green procurement program. The county had 1.5 percent of the population. The personal income per capita was almost \$36,000 and about 41.7 percent of the county had a bachelor's degree or higher. For this study, RK, the Purchasing Director for the county, was interviewed. This organization is considered to be less committed than Gov1, Gov2, or Gov3 because it was not clear from the county's purchasing manual that EPP is a priority or even a consideration when developing solicitations or evaluating bids. The county's website does contain the purchasing manual and there are no explicit requirements to engage in EPP. RK confirmed that the county was in the beginning phases of developing a green procurement protocol, though the county has participated in vendor buy-back programs in their motor pool.

The organizations and interviewees are all supportive of green procurement, which may or may not be representative of the majority of local governments in Florida. No cities or counties that do not advocate green procurement are represented because the basic selection criterion for this study requires that an organization engage in green procurement. The sample size is small and the results may not be generalizable, though generalizability to a population of other local governments was not necessarily a primary goal of the research; the primary goal is to determine whether green procurement in a

public organization is or can be the result of entrepreneurial behavior on the part of a procurement department. In order to counteract the potential for interviewees to exaggerate the extent of their green procurement activities, their responses were reconciled with the purchasing manuals and other related purchasing policies obtained from their websites.

Analyzing the Data

All of the organizations' official websites were reviewed for evidence of engagement in green procurement within the organization. The most salient form of evidence was the purchasing manuals and/or guidelines and information for vendors seeking business with the organization. A Review of the manuals and guidelines indicated whether green procurement was explicit in the purchasing policies; whether purchasing departments were required, encouraged, or given no guidance as to when to include green in their specs; and the level of commitment to environmentally preferable purchasing in general. Two counties, Gov1 and Gov2 both had explicit requirements in their purchasing manuals, while Gov5 made no specific mention of environmental considerations when structuring a solicitation.

Once the review of the purchasing materials and websites was completed, interviews were conducted which were then transcribed and reviewed to look for indications that the organizations or purchasing officials who participated in the interviews were in fact entrepreneurial in their activities. This determination of entrepreneurial or not-entrepreneurial was based on criteria from the entrepreneurship literature and the respondents were evaluated thusly: (1) Did they (the respondent/organization's purchasing department) display leadership skills and/or strategic ability? (2) Did they build coalitions to promote the adoption of green procurement? (3) Did they take any risks in promoting green procurement? and (4) Did they belong to any professional associations? The demographic information was collected for informational purposes, though some of the previous entrepreneurship literature does mention education, size and budgetary slack as conditions likely to produce entrepreneurs (Schneider & Teske, 1992).

RESULTS

After reviewing the governments' websites and reviewing the interviews of the five procurement officers while considering the four criteria outlined above, it became clear that not all of the organizations were going green in the same way or from the same point of origin. While all of the organizations were supportive of green procurement and either engaging or beginning to engage in EPP practices, some organizations were clearly more entrepreneurial than others.

Leadership and Strategic Ability

The first criterion to which all of the organizations were compared is that of leadership and strategic ability: Did they show leadership and/or strategic skills? The intent with this criterion is to determine where from the idea to go green originated: the procurement department or an outside source. Did the procurement department take the concept of green procurement and run with it, or was it more reactive in implementing a green policy handed down from outside the department? While the idea perhaps originated outside the department, did the department develop a strategy for getting green purchasing institutionalized or take a wait-and-see approach? For a purchasing department to be entrepreneurial, it must have taken on some leadership role either by establishing the policy, expanding the practice, or building support. Each of the governments has taken some action to this end, but some have been more proactive than others:

Gov1/SJ: We consider what's in the Florida Statutes as far as recycled product and paper...The county is committed to buying green products - if they (departments) needed to deviate from that, then they would have to come to the purchasing office for permission...Whatever we take to the board, I think the board make-up today is very receptive of green. And I've got one board member, he's our tree hugger!

Gov1/SJ provides a good example of procurement department leadership by taking a state-wide policy as a starting point and expanding upon it to develop a county purchasing policy. By requiring departments to seek permission for going outside of the EPP policy, the purchasing department asserted its leadership in institutionalizing green purchasing. Similarly, Gov2/GE demonstrated

leadership on the part of the purchasing department. As mentioned earlier, Gov2 has a county-wide ordinance documenting its commitment to sustainability and green procurement; this ordinance has been incorporated into the county's purchasing policies and manual. Conversations with GE revealed that he was actually selected to work on the committee that drafted this ordinance while he was working as the chemical purchasing officer. This also serves as a good example of purchasing personnel showing leadership, or perhaps being selected for previously demonstrated leadership, with regard to the promotion of EPP.

In addition to Gov1 and Gov2, Gov3 also provides a strong leadership example by explaining that, while EPP may have been introduced to the organization by commissioners, his staff of procurement officers shows initiative in adopting innovations:

Gov3/SB: *Long before I got here, there were commissioners who had a personal involvement and interest in this and they directed that something be done. So a lot of it came top-down but a lot of it these days is actually bottom-driven...now most of our initiatives and ideas are coming from the grassroots levels...I have five contracting officers, all of whom are incredibly excellent and can do their jobs just fine. They're very proactive in a lot of ways, so a lot of the initiatives are generated by them.*

While Gov1, Gov2, and Gov3 have provided examples of leadership in promoting green procurement in their organizations, Gov4 and Gov5 have been more reactive than proactive. They are both in the building phase of defining their green purchasing policies, and they both seem to be taking direction from the organization rather than providing it to the organization.

Gov4/MT: *In 2007, our city manager put out a resolution of things we need to be doing in the course of the year; now we have a Greening the Government Team and Green Team. It (EPP) hasn't been set as a city-wide policy yet, and that's what the department (outside the purchasing department) that was newly formed is doing.*

Like Gov4, Gov5 does not have a green purchasing policy. However, unlike Gov4, KR, the Purchasing Director, is taking a leadership role in the development of his county's policy by chairing a

taskforce created to review the county's procurement policies. While this may appear to be more in line with the organizations identified as showing leadership, Gov5 still seems a bit more reluctant to fully commit to EPP:

Gov5/RK: *We do have some flexibility but you have to look at what's happening with budgets... There's no teeth to them (the green policies/guidelines), they're encouraging statements.*

In order for Gov5 to be considered entrepreneurial, the commitment to EPP would need to be more stringent as in the case of Gov1, Gov2, and Gov3 where there are no or very few opportunities to purchase outside of the green policy.

Coalition Building

Coalition building is part of selling an innovative policy change (Mintrom, 1997a). The procurement professionals in this study work with their staffs, their departments, and their leadership to develop new strategies to introduce and promote greener alternatives in their purchasing practices. All of the respondents in this study acknowledged having groups of green advocates in their organizations as well as top-level buy-in for the implementation of their green procurement practices. Commissioners, county administrators, a city manager and a mayor were all recognized as belonging to these green advocacy groups and participating in the development of procedures and /or programs that encourage the use of EPP practices. Achieving buy-in from top-level people in the organizations is critical for creating and maintaining entrepreneurial, systemic change (Bernier & Hafsi, 2007). Not all of the organizations have followed the same route in building their coalitions or partnerships with other organizations. Gov1, for example, uses outreach and education:

Gov1/SJ: *I just keep sending them (resistant departments) literature and then sometimes you have to let them think they're doing it on their own, that it's their idea. And then it works...And some of the old die-hards in the field don't want to change. I think we just have to do a little more training and education.*

In contrast to Gov1's initiative to provide education and expand awareness, many of the purchasing departments have opted to participate in green teams made up of members from various departments:

Gov3/SB: *We have established a Green Team... One of the primary, well one of the major focuses of the Green Team is green procurement.*

Gov4/MT: *We have a Greening the Government Team and we have a separate Green Team. And that's where we started. It wasn't one person, it was a team. The Green Team was more so dealing with the marketing side of what the city was doing and the Greening the Government Team was actually doing the foot-work. We are part of the Greening the Government Team.*

While the Green Teams and similar committees or departments are encouraging, they are not indicative of entrepreneurial activity on the part of the purchasing departments and appear to be more the result of an organization-level initiative with purchasing representing only a small part. It is difficult to assess the level of entrepreneurial activity on the part of the purchasing departments with regard to building the green procurement coalitions in their organizations. The constant efforts of Gov1 to educate her organization and win support from departments and/or individuals who are resistant to EPP are entrepreneurial; however, the mere belonging to a team is not entrepreneurial but rather participative.

Risk Taking

Taking risks, as explained previously, is one of the characteristics of entrepreneurs. Entrepreneurs have to be willing to absorb personal, reputational and sometimes financial risks in order to advance innovative policy changes (Mintrom, 1997a). Given the high failure rate of government innovations (Winnick, 1993) and the highly regulated and constrained environment in public organizations (Heinritz et al., 1991), it is a wonder that any public employee would be willing to take risks at all. Despite the strong negative consequences of public scrutiny and fear of wasted tax dollars, a number of the organizations in this study have taken risks, both individually and departmentally. Of the respondents in this study, one government in particular seemed to be more open to taking risks

than the others. Gov3/SB provided the following example of a risk he personally was willing to make to promote a new, innovative green policy:

Gov3/SB: *We are looking at bio-diesel big time. I put together what I thought was going to be a huge and important program for the county as a whole. There's a certain seed plant that you can grow and literally produces diesel on its own. I had this grand idea that all these orange fields that are lying idle here, we could grow it here in those groves and become a major bio-diesel producer. Another guy that I was working with brought it up and then I did a lot of the research on it. We were about to announce the program and start lining up enrollees in our co-op and then we found out no, that stuff won't grow here. I had the charts, I had the logo - I was sooo far gone on this thing; I was so excited with it. And it was a really good concept, and it can work someplace else. But not here. Bummer, huh?*

While he was unsuccessful in making the program work, he was willing to take the risk. Additional examples of personal risk were not found among the organizations in this study, though the purchasing department of Gov1 does appear willing to try new products without much reservation:

Gov1/SJ: *We're trying lots of different things. We've gone to trying to spec some of the waterless urinals and different things like that, too, that they're putting in the restrooms...I don't think in all cases it's still up to snuff...But we're never afraid to try something new. We've (the purchasing department) never resisted change. We change our manual and keep it updated always, I mean always.*

To be entrepreneurial, an organization cannot resist change and has to be willing to fail once in a while. RK from Gov5 put it best:

Gov5/RK: *I think it's just a comprehensive thing and there's going to be small steps, there's going to be some big steps. There's going to be some back-steps.*

Risk-taking entrepreneurs know they will not always succeed in their efforts but that it is sometimes worth the risk. Gov1 and Gov3 have both engaged in risky endeavors and/or products, neither has enjoyed a great deal of success. Despite their mixed records, they are

both still looking for the next best product or process, thereby setting them apart as entrepreneurs.

Professional Membership

All of the interviewees are involved in networking with other organizations to promote and institutionalize environmentally preferable purchasing. They cited memberships in Green Teams, on task-forces, in voluntary certification programs; they attend conferences and green summits and host green vendor shows. The organizations all belong to professional associations like NIGP (National Institute of Government Purchasers) and FAPPO (Florida Association of Public Purchasing Officers) that hold classes and provide guidance in procurement areas, including green procurement. RK from Gov5 noted that he chaired one of the panels at a recent NIGP meeting, that his organization hosted a Green Summit in 2008, and that his county is in step 4 of the ICLEI (International Council for Local Environmental Initiatives) program. That all of the organizations belong to professional organizations and associations suggests that they may already be or at least have the potential to be entrepreneurial by way of the diffusion of innovations through these organizations (Schneider & Teske, 1992; Mintrom, 1997a). In addition to membership in purchasing and local government environmental organizations, Gov2 requires that their contractors be LEED or Green Seal certified or that they have met the relevant ISO Standards.

DISCUSSION

This study has attempted to use the green procurement and entrepreneurship literatures to build the case for a procurement entrepreneur. After analyzing five public organizations and applying four characteristics of public entrepreneurs to procurement professionals in these organizations, there is evidence of entrepreneurial public purchasing departments.

The organizations and interviewees can all be considered advocates of green procurement: they all have recycling programs in place, requirements for no-VOC paints and green janitorial products and office supplies. Some are even moving beyond that, exploring bio-diesel buses, evaluating the potential of electric cars, and procuring waterless urinals. They use buy-back programs and are

looking at new ways to make a positive environmental impact through their purchasing decisions. The interviews revealed that these organizations have all faced challenges in advancing green initiatives, whether it was internal resistance from department heads or elected officials outside of the procurement code's purview, or because of the market and budgetary constraints. Some have even (seemingly correctly) placed blame on the public's need to re-examine its values. Despite obstacles, these purchasing officers are working to overcome resistance by providing education and outreach. One common attribute that cannot be disregarded is the level of commitment and enthusiasm that these individuals have shown toward institutionalizing EPP in their organizations. But are these efforts enough and do they make the organizations entrepreneurial?

According to the review of the organizations' purchasing policies and interviews, and considering the entrepreneurship literature and criteria, the purchasing departments of Gov1 and Gov3 are entrepreneurial. This conclusion is based on their purchasing policies, as well as on information gathered from interviews with their procurement directors. Gov1 demonstrates leadership, works tirelessly to educate other departments in order to build the organization's coalition, embraces change and the risks involved with change, and participates in professional organizations and conferences in order to stay abreast of new developments in green procurement. Gov3 portrays leadership through proactive behavior of purchasing personnel, the building of an organization-wide coalition by membership in a green team, the willingness of the purchasing director to take personal/reputational risks, and membership in professional organizations and conferences.

Gov2 demonstrated some entrepreneurial behavior with regard to leadership: the purchasing professional interviewed for this study was part of the group that developed his organization's sustainability ordinance, but the purchasing department did not show much leadership, did not really present as willing to take risks, and did not engage in any coalition-building behaviors other than belonging to a green team. Likewise, Gov4 and Gov5 were determined to be supportive but not entrepreneurial. This conclusion is based on the absence of EPP in Gov5's purchasing manual, the inability to access green purchasing information for Gov4 online, and both organizations' lack of leadership/strategic ability or risk taking. Only

Gov1 and Gov3 have demonstrated that purchasing departments can engage in entrepreneurial activities in order to facilitate the institutionalization of green procurement in public organizations. The following table summarizes these findings.

TABLE 1
Summary of Findings

Criterion	Gov 1	Gov 2	Gov 3	Gov 4	Gov 5
Leadership/ Strategic Ability	Yes	Yes	Yes	No	No
Coalition Building	Yes	No	Yes	No	No
Risk Taking	Yes	No	Yes	No	No
Professional Membership	Yes	Yes	Yes	Yes	Yes

CONCLUSION

This study has attempted to fill a gap in the literature between environmental purchasing and policy entrepreneurship in the public sector. While there have been studies of how the policy entrepreneur in public organizations can affect agenda setting and how the high-level bureaucrat is entrepreneurial, relatively little work has been done that marries green procurement literature with entrepreneurship literature. Further, no scholarly attention has been paid to the role of the procurement officer as policy entrepreneur in institutionalizing environmentally preferred purchasing practices. This study uses case histories of public organizations and their procurement officials in conjunction with entrepreneurship criteria to conclude that there is some evidence of the public procurement entrepreneur. While these conclusions may not be firm, the study demonstrates that there are entrepreneurial public procurement departments interested in introducing and institutionalizing EPP in their organizations.

This study involved only five cases, and it would be valuable to expand the study to include not only more organizations but more of the characteristics associated with entrepreneurs. The interview instrument limited the ability to address additional criteria, which is a shortcoming of this study. Subsequent interviews with the respondents in this study might reveal even more entrepreneurial behavior on the part of the organizations' purchasing departments. It

would be interesting to use the demographic information to draw inferences about whether the internal conditions of the organizations were more or less conducive to entrepreneurial activities. For example, with regard to budgetary slack proposed by Schneirder and Teske (1992) as a possible condition for entrepreneurship, only Gov4 had a budget that spent less than it collected, yet it was perceived to be a supportive organization but not entrepreneurial. Additionally, a future direction of this work could be to further develop the concept of a procurement entrepreneur in contexts outside EPP, such as e-procurement and other purchasing-related innovations.

While this study cannot definitively show that EPP in public organizations is the result of entrepreneurial behavior of procurement departments, it does demonstrate the possibility that purchasing departments/specialists can play an entrepreneurial role in the adoption and implementation of EPP. In this way, the study makes two contributions: it expands procurement literature by examining green procurement in public organizations; and it expands entrepreneurship literature by suggesting that entrepreneurs don't have to be the highest level officials, that they can be found in the purchasing department. Though further research needs to be done, this study fills a void and will hopefully spur a closer examination of the role of procurement departments in bringing innovative changes to their organizations.

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APPENDIX A
Interview Instrument

- Please describe a recent procurement of a green product or service and your role in the process.

- Please provide information regarding how green procurement practices were introduced in your organization.
- How did you get into green procurement?
- What factors do you consider when making a green procurement? How is that different from a traditional procurement?
- How does your organization procure these green products or services?
- Tell me about the vendors you use when purchasing green products/services. Describe the marketplace involving green vendors with whom you work.
- How does the quality of the green products/services which your organization has procured measure up with traditional products?
- Describe your organization's policy regarding green purchasing.
- If your organization has established any green benchmarks or goals, please describe them.
- How did environmentally preferable purchasing get introduced into your organization? (similar to #2, could be skipped in some cases)
- What are some of the biggest obstacles you have faced in incorporating green purchasing practices into your organization's procurement process? (conditional/optional – similar to following resistance question).
- What are some resolutions to these obstacles?
- What could help facilitate improved environmental purchasing in your organization?
- What kind of resistance have you encountered in your green procurement efforts and from where did this resistance come? (conditional/optional).
- Who have been the greatest advocates for green procurement? Describe the nature of the relationships of the people involved in promoting and implementing green purchasing policy.
- Please provide any additional information that would be helpful in understanding your organization's procurement process and how it has implemented environmentally preferable purchasing practices.

- Any additional contacts in the green procurement community would be greatly appreciated. If you know of any other green procurement advocates with whom I should speak, please provide their contact information.