

WHAT ARE THE CHALLENGES TO SUSTAINABLE PROCUREMENT IN COMMERCIAL SEMI-STATE BODIES IN IRELAND?

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ABSTRACT. It is unclear as to what extent sustainable procurement is being practised in Ireland and what barriers there are to implementing it in organisations. This study provides the first complete insight into the use of sustainable procurement in Irish commercial semi-state bodies. It explores the extent and type of use of sustainable procurement plus identifies and examines the challenges to its use. A deductive approach is utilised to determine the barriers. Eleven participants, nine from the commercial semi-state bodies and two experts with knowledge of this subject, are interviewed using semi-structured questions. The research findings show that sustainable procurement is being practised in the majority of the commercial semi-state bodies. Definition of sustainable procurement, the absence of mandatory guidelines, cost, time and a dearth of sustainable procurement knowledge by suppliers are some of the main barriers put forward by participants.

INTRODUCTION

The United Nation's commissioned report in 1987 entitled "Our Common Future" chaired by the Norwegian Prime Minister, Gro Harlem Brundtland advocated that long term strategies must be put in place to protect the environment and allow for sustainable development. This report, the third independent world commission of its kind, also highlighted the importance of food security, the danger of increasing population and the threat to species and our ecosystems (World Commission on Environment and Development, 1987). Over two decades later, in March 2010, the European Commission issued its 10 year strategy entitled Europe 2020, with

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five targets; employment, research and development, climate change and sustainability, education and fighting poverty and social exclusion. There are common themes between the UN and EU reports.

Public Procurement, by way of Sustainable Procurement (SP) or Green Procurement (GP), has been identified by the EU as one conduit which can greatly assist in attaining these targets (<http://ec.europa.eu/europe2020>). This is due to the influence that public procurers can have over the market as a result of the annual public expenditure of over two trillion Euros. The use of sustainable and green procurement criteria, in the procurement of goods, services and works, can assist in attaining these goals. Therefore the EU has decreed that SP should be utilised to achieve these targets (Buying Green 2011). Member states have reacted differently to the Europe2020 objective so in order to stimulate action in this area each member state has been encouraged by the EU to “adopt National Action Plans (NAPs) for greening their public procurement, outlining the priority objectives at national level and setting out the environmental criteria for some priority product categories” (Tarantini, Loprieno & Porta 2011, p.2473) in order to align its strategy with Europe 2020 targets.

It has been demonstrated that the rates of adoption of NAPs by EU member states vary however. According to a report entitled *The Uptake of Green Public Procurement (GPP)* published in 2012 the EU27 this rate of adoption may account for the high rate of uptake in GPP in some countries (e.g. Denmark over 80% uptake – NAP introduced in 1994 and revised in 2008) and the low rate of uptake in others (e.g. Ireland less than 20% uptake – though there was no NAP in place at the time of study).

The Irish Government’s own NAP, entitled “Green Tenders,” was launched in January 2012. It is apparent from this publication that there is a national agenda to utilise SP however it is still without real legislative obligation. As a result it is unclear as to whether it is actually being implemented by public and semi-state bodies and what, if any, barriers exist in preventing its use. Little research has been conducted in the use of SP in an Irish context, particularly from a commercial semi-state perspective. In light of this, a first qualitative insight into how SP is being practised in Irish commercial semi-state bodies will be conducted by exploring its use in these organisations.

Secondly the research will attempt to ascertain what the barriers are to using SP and will then examine these barriers.

LITERATURE REVIEW

It is widely acknowledged that public procurement is a key actor in stimulating economic activity throughout the EU. The role of procurement in organisations has increased in recent years particularly in public authorities as a result of the worldwide economic recession and the resultant decrease in funds for government expenditure. A greater emphasis, especially in Ireland, has been placed on the need for the reduction of costs and obtaining better value for money. By procurement it is understood that it includes; all activities required in order to get the product from the supplier to its final destination...based on total cost of ownership (TCO), rather than price. (Van Weele 2010, p.407)

Procurement according to McCrudden (2004) can assist in delivering government objectives like encouraging innovation in domestic supply markets, through the use of public money in supporting social and environmental aims. It is also noted by Thai (2001) as one of the key economic activities of government. Sustainability and sustainable development has also gained more importance of late. The use of the term sustainable development, "development which meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development 1987) was propagated by the Brundtland Report. Sustainability, as Shrivastava (1995, p. 955) puts it, can be viewed as "the potential for reducing long-term risks associated with resource depletion, fluctuations in energy costs, product liabilities, and pollution and waste management."

There is an abundance of definitions of sustainable development and sustainability but it is generally accepted that it refers to the consideration of the social, economic and environmental aspects of an organisation's business and its interaction with these elements. However Carter and Rogers (2008) argue that a review of existing literature demonstrates that sustainability has not been defined and applied consistently in research. Elkington (1998, 2004) conceptualises it as the "triple bottom line;" the balancing of

environmental, economic and social goals from a microeconomic viewpoint.

Carter and Rogers (2008) deign that sustainability is now featuring in management and operations literature. It is not certain however if the application of the ideals of sustainability adds value to businesses and thereby increasing the chances of economic success as it appears that little grounded research has been carried out in this area. Such data would be of benefit to any organisation which has implemented sustainability measures recently and is looking to establish what, if any, added value was achieved. Equally an organisation looking to push through sustainable actions would gain from such research. The relationship between sustainability and procurement is one that also requires further exploration and will be discussed later in the literature review.

The Social, the Environment and the Economic

The development of the social, economic and environmental aspects of businesses has been evident for some years now. For instance ideas of social responsibility have been debated for decades. Davis (1960 cited in Carroll 1979, p.497), Eels and Walton (1961 cited in Carroll 1979, p.497) and Milton Friedman (1962 cited in Carroll 1979, p.497) all give their arguments concerning what they believed the social responsibilities of businesses to be. Inter alia McGuire (1963 cited in Carroll 1979, p.497) put forward the opinion that "the idea of social responsibilities supposes that the corporation has not only economic and legal obligations, but also certain responsibilities to society which extend beyond these obligations". Manne (1972) believed that any act of CSR (Corporate Social Responsibility) on the part of an organisation should be purely voluntary.

Archie Carroll's (1979) corporate social performance model looked at, among others, the legal, ethical, economic and environmental responsibilities that come with CSR both from a management and business perspective. His model was intended to assist management in understanding that social responsibility and economic performance of businesses were not separate entities but a whole one. Consideration of social, economic and environmental factors by businesses is difficult as Hawkins (2006, p.12) states that

“It is a complex task to factor sustainable, economic, environmental and social objectives into business decision making”.

Sustainability in Business

Organisations are increasingly adopting the concept of sustainability to assist in their quest for greater market share. Media, academic literature and company practices trends show that there has been an increase in concern in relation to sustainable development and also the affect that businesses can have on the environment and society (Boykoff & Boykoff, 2007). However is it possible for companies that engage in sustainable practices to achieve greater economic performances than companies who simply focus on economic performance alone? Hoffman and Bazerman (2005, p.16) encapsulate and diagnose this question succinctly:

The key to resolving this debate is the recognition that (social and environmental) behaviours are sometimes profit-compatible and sometimes not. When parties acknowledge this simple fact, it becomes easier to convince corporations to adopt (environmental and social initiatives) that are mutually beneficial. In terms of procurement an assumption can be made to this effect also. However when compliance with EU public procurement directives is required it becomes a much more complex task.

Sustainable Procurement

SP incorporates three elements; social, environmental and economic. There are many definitions of SP. One such definition from The UK Sustainable Procurement Task Force states that it is; a process whereby organisations meet their needs for goods, services, works and utilities in a way that achieves value for money on a whole life basis in terms of generating benefits not only to the organisation, but also to society and the economy, whilst minimising damage to the environment. (DEFRA 2006)

In simpler terms SP can be viewed as a method by which an organisation can improve the procurement of products or services by environmental, economic and social means (Oruezabala & Rico 2012, p.574). Sustainable purchasing, as Van Weele (2010) labels it, is more often referred to as Corporate Social Responsibility (CSR). Related terms include environmental purchasing (Morton 2002), socially responsible public procurement (SRPP) (EU Buying Social

2010), green supply chain management (Lamming & Hampson 1996), sustainable public procurement (Preuss 2009), purchasing social responsibility (Carter and Jennings 2002; Carter 2005) and environmentally preferable purchasing and green procurement (Tripathi & Petro 2010).

The use and awareness of SP is on the increase and in some organisations has moved to a strategic level. Nonetheless some confusion still subsists in the relationship between SP with its three fundamentals and GPP. Can GPP be labelled as a true subset of SP and is the integration seamless? Or is GPP a silo of its own? Either way discourse is vital to clarify their meanings and roles in order that they are understood and implementable by front line public procurers and relevant stakeholders.

Guidance

Guidance in the form of legislation and policies can support public procurers in engaging in SP. Lamming and Hampson (1996, p.45) claim that in relation to decreasing the risks that businesses face from environmental issues, there is a small level of guidance available for them to do so in a constructive manner. The EU have published numerous guidance documents in this respect; *Buying Social – A guide to Taking Account of Social Considerations in Public Procurement* (2010), *Buying Green – A Handbook on Environment Public Procurement* (2011), *Public Procurement for a Better Environment* (2008a), *Pre-Commercial Procurement* (2007), *Integrating Social Considerations into Public Procurement* (2001) and *Green Public Procurement – A Collection of Good Practices* among others. Despite the development of these policies, guidelines and frameworks relatively little research has looked at the use of SP in the public sector (Preuss, 2009; Walker & Brammer, 2009, 2011; Oruezabala & Rico, 2012).

In Ireland specific legislation and guidance can be found in the previously referred to *Green Tenders* (2012), the *Strategy for Renewable Energy 2012-2020* by the Dept. of Communications, Energy & Nat Resources (DCENR 2012), *Circular 10/2010* by the Dept. of Finance (2010), *Using Public Procurement to Stimulate Innovation and SME Access to Public Procurement* (DETE 2009), the *Energy Efficient Public Procurement Regulations* (2011) and the SEAI's (Sustainable Energy Authority of Ireland) *National Action Plan*.

For example in the SEAI's Plan 2010-2015, the same EU objective of a 20% energy saving by 2020 is outlined. They also highlight "Green Procurement Practices employed by the Public Sector and all significant businesses" (www.seai.ie) as a means to accomplish this aim. However if publicly funded bodies are not using SP then Ireland may find it difficult to fulfil its 2020 EU energy mandate and also there still exists the problem of gauging what, if any, SP is being practised in Ireland.

Commercial Semi-States in Ireland

It is important that when researching within the terms of reference that is the Irish commercial semi-states, that their meaning and the difference between it and the public sector is understood. Lee (2007) posits that:

Semi-state bodies are established by government, completely or partly with public funds, to undertake a specific commercial, promotional, regulatory or semi-judicial function in the public interest. A minister appoints a board of directors but the directors are obliged to implement government strategic policies and are accountable to government and the Oireachtas for their actions". The commercial semi-state bodies were expected to combine enterprise with public accountability. They were to have the flexibility and initiative of private enterprises but to observe a public interest mandate (Lee, 2007, p.4).

Johnson and Scholes (2001) explain the differences between the public sector, semi-state and private sector in relation to their consideration of forces in the market. They state that organisations in the public sector are normally politically driven thereby meeting political demands whilst the semi-states are positioned in the middle between the polar opposites of the public sector and private sector. The major difference structurally between these organisational types is that a board of directors is appointed to a semi-state organization so that semblance of public control can be maintained by it and the appropriate government Minister (Johnson & Scholes, 2001).

In terms of procurement some Irish commercial semi-states fall under the Utilities Directive 2004/17/EC (as opposed to the Public Procurement Directives 2004/18/EC) which is for entities operating activities in the utility sectors of transport, water, energy and postal

services. However both directives allow for the use of SP the use of which will now be explored from existing literature.

Exploring the Use of Sustainable Procurement

Although SP's profile and influence is increasing in policy circles around the world, very little is known about the extent to which SP policies and practices are embedded within the practice of public procurement professionals globally (Walker & Brammer 2009, p.2). According to Srivastava (2007) and Vachon and Klassen (2008) existing literature on sustainable supply chain management has primarily focused on manufacturing in the private sector of which there is a considerable amount. A substantial amount of research has also examined features of SP in private sector organisations, often with an emphasis on manufacturing industries and the environmental dimension of sustainability (Simpson & Power, 2005; Srivastava, 2007; Svensson, 2007).

Comparatively few articles have studied sustainable supply chain issues in a public sector context (Mitra and Webster 2008). Walker, Di Sisto and McBain (2008) ruminates as to whether this is due to a lack of environmental supply practice within the public sector or that it is just under-researched. A study which has been conducted in the public sector is Walker and Brammer's (2009) study of the use of SP in the UK public sector. Oruezabala and Rico (2012) assess the effect of sustainable public procurement on the management of suppliers in the setting of public hospitals in France. Walker and Phillips (2006) and Brammer and Walker (2011) also conduct research into SP in the public sector but from an international perspective.

Research, in both public and private sector, has tended to focus on issues such as SMEs (Greer, 1999; Loader, 2005, 2007; Glover, 2008), sectors such as local government (Thomson & Jackson, 2007; Preuss, 2007, 2009) specific geographical locations such as Northern Ireland (Erridge & Murray, 1998; Murray, 2000; Fee, Erridge & Hennigan, 2002), California (Swanson et al., 2005), The Netherlands (Deboer & Telgen, 1998) UK (Quayle, 1998; Quayle & Quayle, 2000; Walker & Brammer, 2009; Pickernell et al., 2011).

Research into Sustainable Procurement in Ireland

It can be argued that very little research has been conducted into the use of SP in Ireland. A recent quantitative research was conducted in March 2012 by the National Procurement Service (NPS) entitled "Opportunities in Public Sector Procurement." The report gave a comprehensive view of the public procurement market in this country, from both the procurer and the supplier perspective and the findings in relation to SP were been interesting.

For example only 60% of public procurers stated that sustainability in the environment was an important/highly important concern. With regard to the sustainability of the local economy just over half of public procurement practitioners considered this to be an important/highly important concern while 37% indicated that it was neither important nor unimportant. Also nearly two-thirds of public procurers specified that access for SMEs to public procurement was important/highly important. So in these three areas related to SP a large tranche of public procurers did not view sustainability of the environment and the local economy or SME access as important/highly important. Survey results did not take into account participants from the commercial semi-state separately so it cannot be determined whether the percentages are higher or lower for these entities alone.

A related study undertaken by Sweeney (2007), of CSR in Irish businesses, found that it is a relatively new development in Ireland as opposed to other parts of the world. Among the other findings was that both large and small companies had difficulties in defining CSR. In terms of barriers, larger firms believed SMEs may lack resources such as finances, HR or time however the SMEs stated that only cost was a barrier.

Other notable research carried out in an Irish context was a report by Ryan, Dunphy and Henry (2008) into the knowledge and training required of SP. The main outcomes were that knowledge and comprehension of green/sustainable procurement was very small and also a requirement for training was identified. Apart from the hereto mentioned cases it appears that little other research has been conducted of SP in Ireland particularly in commercial semi-state bodies. Therefore this research will attempt to follow on from these studies and also address a gap by exploring the use of SP in a commercial semi-state context.

Barriers to Sustainable Procurement

New ideas and concepts often face challenges to their introduction and use. Surmounting these challenges will determine whether they are successful or not. SP is no different. Existing literature shows several investigations into the barriers that are preventing the use of SP. Preuss and Walker (2011) examine the different psychological barriers that slow the use of sustainable development in public procurement. Some studies have looked at both the barriers and drivers of SP. Walker and Brammer's (2009) study of SP in the UK public sector provided twenty-one barriers and twenty-one facilitators to SP. Walker, Di Sisto and McBain (2008) explore factors that drive and prevent organisations from implementing environmental supply chain practices in the private and public sectors. Walker and Brammer (2012) examine the relationship between e-procurement and SP, identifying factors that assist in this relationship but also factors that hinder it. Detecting the key sustainability performance drivers of corporate social performance is the subject of Epstein and Roy's (2001) work whilst Walker and Phillips (2006) exploration of emerging issues with regard to SP discover issues, restrictions and suggestions to assist in the furthering of its use.

Barriers to Sustainable Procurement in Ireland

Implementing SP practices is a challenge facing all businesses in Ireland particularly public sector and semi-state bodies and this requires further investigation as a potential barrier to sustainable procurement. This research hopes to identify the barriers preventing the use of SP in Irish Commercial Semi-States. It is important to compartmentalise the possible barriers to SP in order to evaluate them appropriately. So, similar to Walker, Di Sisto and McBain (2008), Sharma et al. (2010) and Preuss and Walker (2011), the literature was examined from an internal and external perspective in order to identify barriers.

Internal Barriers to Sustainable Procurement

The barriers within organisations can often inhibit change, as a result of strict adherence to certain practices, punitive perspectives and/or the organisational culture (Gough & Scott 2001). It is

important that the internal barriers can be identified in order that strategies can then be put in place to surmount them.

Management

There is often no strategic role for procurement, sustainable or otherwise, at a high level of some organisations. Tripathi & Petro (2010) argue that functions within an organisation must be aligned in order to implement practises effectively. Hence to incorporate SP, a company must have an objective (from senior management) to improve their environmental and sustainability performance (Oruezabala and Rico 2012). Sweeney's (2007, p. 519) study found that "All firms agreed strongly that the interest and involvement of senior management is crucial to the successful implementation of CSR." To draw parallels with a similar study, Quinn (1997) established that the existence of a positive relationship between the outlooks and interests of the managing directors and the level of CSR carried out by these organisations in the Irish sector.

Organisations today have competing objectives each vying for the most influence and is reflected by senior management's commitment in encouraging and enabling these objectives to be implemented and practiced. As a result management needs to nurture core values (such as SP) and integrate these into the culture of the organisation (Trevino et al., 2000; Joyner et al., 2002; Hammer, 2004). Equally, if there is no management commitment then objectives, like SP, will not work (Min and Galle 1997; New et al. 2000). Similarly Walker et al.'s (2009, p.359) research recognises that a lack of organisational commitment is an impediment to SP. Hawkins (2006) speculates as to the reason why sustainability factors are not a priority for management.

In terms of leadership Menon and Menon (1997), Banerjee et al. (2003) and Hammer (2004), accentuate the importance of the role of management, proposing that leadership is vital in adopting green marketing strategy. Egri and Herman (2000) found that leadership styles and the personal values that leaders' have, such as an openness to change, can have a positive influence of a company's environmental strategy. If leaders are not open to change then this can negatively affect the strategy of a company. Walker et al.'s (2009, p.359) research recognises that barriers to SP experienced by practitioners include a lack of organizational commitment short-term thinking.

Cost

Purchasing and procurement in general is growing in importance in companies and is also assuming a more strategic role. In tandem with this growth, a greater understanding, appreciation and concern has developed of the environment. Together purchasing and supply chain management can exert more influence on the market place. One issue or perceived problem with sustainable procurement is the cost element. Does environmental or greener purchasing negate achieving savings or imply a reduction in quality standards? This is certainly a challenge for companies (Morton, 2002; Sharma et al., 2010; Oruezabala & Rico, 2012).

Bowen et al. (2001) put forward the argument that financial incentive is the main reason for implementing a green supply chain in organisations. This is confirmed by Rao and Holt (2005) who state that a positive relationship occurs between green supply chain management practices and organisations' competitiveness and economic performance. The limited resources of small companies and government pressure to aggregate contracts to extract financial savings are combining to have an effect on the use of SP (Walker & Preuss, 2008). SP is often viewed as opposing the main goal of procurement which is to reduce costs and attempts to implement SP can falter as a result of the cost, or perceived cost, implications (Walker et al., 2009). These costs are often a significant obstacle when trying to integrate environmental practices into standard supply practices (Min & Galle, 2001, 2007). That performance measurement can focus mainly on savings and other economic aspects of an organisation, procurement managers will therefore be less motivated to introduce or implement sustainable practices (Preuss, 2005).

Time

Due to the current economic recession and the requirement for cost savings, short term needs are being prioritised over long term considerations such as the environment. So focusing on the traditional aspects of quality, delivery and cost exposes companies to short termism and also may restrict the supplier or manufacturer in utilising more sustainable processes (Hawkins 2006). Short-term thinking (Walker et al. 2009) and short-termism (Walker & Phillips 2006) are also identified as barriers in the research carried out. Can

the length of time required to research and incorporate SP into procurement whilst ensuring it is related to subject matter be a barrier?

Further Training

Gelderman et al.'s (2006) findings show that in terms of increasing compliance with public procurement directives, educating and training purchasers will be of significant assistance. The lack of training has been found to be a barrier to SP. Further training is therefore a requirement to overcome these barriers (Bowen et al., 2001; Walker & Phillips, 2006). Preuss and Walker (2011) note that individual training for procurers should emphasise the importance of SP along with the financial targets. Hayes and Allison (1998) state that learning at all levels of an organisation is of vital importance in order for them to adjust to changes in the internal and external environments. However as the role of SP increases in importance, especially from a political perspective, training has been recommended to help procurers implement SP (Helm et al., 2005; DEFRA, 2006).

Conflict with e-Procurement

It is possible that there may be conflict between the advantages that e-procurement can provide and SP particularly in relation to small and/or local suppliers. For example Walker and Brammer's (2009) research found that a large part of SP practiced in the UK centred on purchasing from small and local suppliers (Walker and Brammer 2009). However later research conducted by the same researchers discovered that e-procurement policy and SP policy are conflicting policy objectives. This can occur for instance where local or small suppliers do not have or cannot afford the technology to use e-procurement and as a result cannot reduce the amount paper used in invoicing as opposed to e-invoicing (Walker & Brammer, 2012, p. 11).

Individual versus Organisational

Though organizations develop recognized procedures and strategies which workers should follow as much as possible, these workers are also human beings and therefore have "their own individual strategies, based on their abilities, needs and goals. Resulting tensions lead to a series of internal and external adaptation processes within and beyond the organization" (Preuss & Walker

2011, p. 495). This may be a barrier for organisations wishing to implement SP but do not have the support of some individuals.

The Individual

A relationship has been found to exist between motivation and sustainability which emphasises the importance of “environmental values” (Egri & Herman, 2000) and for the championing of environmental issues (Anderson & Bateman, 2000). If individuals consider compliance with environmental regulations as important, then these individuals will achieve greater success in instigating green practices (Sharma, 2000; Min & Galle, 2001). On the other hand, these factors may decrease the motivation of an individual to assume the task of introducing sustainable development practices thereby creating a barrier (Preuss & Walker, 2011).

Sutinen and Kuperan (1999) contend that individuals’ own personal values influence their behaviour in terms of compliance. Compliance will decrease with regulations if moral responsibility is weakened and will influence others to imitate non-compliance thus creating further barriers. Therefore is actual enforcement the only way of changing this behaviour?

Organisational Culture

Organisation behaviour is moulded by its norms, routines and cultures according to Douglas (1987 cited in Preuss & Walker, 2011, p. 497). Therefore an effective working organisation needs its culture and structure to be aligned (Handy, 1993 cited in Burnes, 2004, p. 897). Some participants in Walker et al.’s (2009) study suggest that it is necessary for the culture of procurement to change so that SP can be used.

Reluctance to Change

Altering how procurement staff work can be fraught with a pervasiveness of inertia and risk aversion (Preuss and Walker 2011, p.506). This reluctance to change is common with change, whether organisational or departmental. Their research also found that “intraorganisational adaptation processes within public sector organizations can create psychological barriers for sustainable procurement initiatives too” (Preuss & Walker, 2011, p. 507).

External Barriers to Sustainable Procurement

Legislation and Compliance

Compliance with legislation and regulations can have a bearing on whether certain activities are carried out. Compliance can have a negative or positive influence. An example of a positive influence can be seen in reverse logistics (Chan et al., 2012) and also the recycling and remanufacturing of products. These activities are usually carried out as a result of regulation (Maxwell & van der Horst, 2003). However when regulations or legislation are unclear they can become an impediment to SP according to Morgan (2008, p. 1246).

In terms of compliance, Tyler (1990) comments that public choice theory puts forward the idea that compliance is determined by whether a procedure is deemed fair and legitimate (cited in Sutinen & Kuperan, 1999, p. 179). From a psychology perspective it is commonly believed that a person's own values influence their compliance behaviour (Sutinen & Kuperan, 1999). Kelman (1958 cited in Gelderman, 2006, p. 5) advises that compliance can have an adverse influence in situations where an individual complies as a result of a reward or to avoid punishment instead of its actual content. Therefore if SP was to be made mandatory by the EU would this have a negative influence on procurers who comply for the sake of complying? On the other hand should, as Gelderman (2006, p. 5) points out, "compliance with the directives... be considered as a necessary condition not as a sufficient condition for the effectiveness of the public procurement regime." If yes then should this perhaps apply to SP in the EU also.

Policy Entrepreneurs/Converts

An early study of the integration of environmental criteria into organizational buying processes by Drumwright (1994) found that two groups of employees play a special role. "Policy entrepreneurs" are middle managers with a personal interest in greener approaches to purchasing, whose commitment arose from moral reasoning and not primarily from economic benefits. The other group are "converts," who initially resist the policy but later became convinced of its merits. Notably, purchasing managers were not represented in either of the two groups.

Cultural Relativism

Is SP predominantly a European or First World concern and therefore an Irish concern? A finding from Walker and Phillips (2006, p. 574) relates to the idea of cultural relativism and that SP can be practised in a developed country whereas procurement in a developing country may be more concerned with the basics of procuring food instead of the consideration of sustainable or ethical issues of SP. Lodge (1990 in Maignan, 2001, p. 59) looks at the effect that national ideologies have on corporate social responsibilities in France, Germany and the U.S. He differentiated between the U.S. whom he believed were individualistic, focusing on the short term advancement of the individual. This contrasts with France and Germany whom he classified as having communitarianism ideologies which emphasised the requirements of the community. Maignan (2001) in her consumer survey on this topic found the above to be valid.

Obligation

Similar to compliance, is obligation a barrier or a facilitator to SP? Levin and McDowell's (1983 in MacNeil, 1985, p.501) definition of obligation "supposes that one engages voluntarily in an act that objectively imposes an obligation". As the government, and the EU for that matter, have not compelled organisations to use SP, is the fact that some organisations will not use SP mean they have not voluntarily engaged themselves in an obligation to use SP?

Protectionism

Nielsen and Hansen (2001, p. 258), write about buying behaviour in public procurement in the EU and state that "the preference of local public authorities for local suppliers will be evidence of protectionism". Conversely however SP advocates the social benefit of buying locally. Can a balance be found by public procurement practitioners? The study also highlights the challenge of ensuring that public buyers provide full transparency to the market in order to limit the preference for buying nationally. An international study on SP practices by Brammer and Walker (2011) found a somewhat strong focus on buying from small and local businesses which though good socially may also suggest an element of favouritism in procurement. It

is conceivable that this could be viewed as a form of protectionism also.

Supplier Knowledge

Another barrier found was that supplier expertise was poor in the implementation of aspects of SP (Oruezabala & Rico, 2012). Research by Vachon and Klassen (2008) and Walker and Brammer (2012) shows that the greater the communication and collaboration with suppliers the better the sustainability and SP measures that can be introduced. If no real buyer-supplier relationship exists it is possible that this can restrict or even prevent the use of SP. If suppliers do not possess the requisite knowledge to provide information for a life cycle assessment (LCA) of a particular product (Tarantini, Loprieno, & Porta, 2011) a buyer will not be able to utilise this aspect of SP.

Overview of Barriers

Nine internal barriers and six external barriers were found. It is evident though that little research has focused on barriers in an Irish context and in particular a commercial semi-state context which this research will attempt to address

METHODS

An exploratory research approach utilising all strands of data was employed. Procurement managers and procurement executives were the intended interviewees. The broad idea of conducting research into SP was narrowed down from initially looking at the use of SP in a Irish public sector procurement setting to the more focused and unexplored context of Irish commercial semi-state bodies. It was important to ensure that clear research questions and objectives were set. Myers (2003, p.21) advises that "These questions should be framed in such a way that they are answerable empirically, i.e. by obtaining qualitative data...The questions should be designed to answer a research problem". The research question should be able to provide clear conclusions, in line with expected standards and not overly descriptive (Clough & Nutbrown 2012).

The extant literature was reviewed next. A deductive approach was taken in this research and theories were assessed in relation to the data obtained. The researcher quickly acknowledged that

literature concerning the use of SP in the private sector, green supply chain management and CSR, though not as relevant, was applicable. A gap in research was soon identified (the lack of research in Ireland especially in the commercial semi-states) which the proposed research aimed to fill (Wallace & Wray, 2006, p.6).

A case study approach, defined as “a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources of evidence” (Robson 2002, p.178) was used for this study. The goal of the case study was to utilise the empirical evidence gained from people in real organisations in order to provide a unique contribution to existing knowledge (Myers, 2009, p.73).

The research began with identifying the industry within which the organisation being interviewed operated in and its role within that industry. It was important to ascertain this early as the organisations operated in vastly different market areas from public transport, ports, broadcasting and energy to name but a few. Also many of the commercial semi-states are small in size and as a result do not have designated procurement departments; this was essential to establish early too. The research then focused on the following areas of each of the participants’ organisations; the role of procurement, Government/EU policy in SP, their knowledge of SP, the amount and type of SP practiced and the external and internal challenges to using SP. The importance of the Europe 2020 targets and the government publication of its NAP 2012 provided the background to the proposed research.

The primary data collection method utilised in this case study was interview based and a qualitative approach will be necessary to analyse the information collated. Theory plays a central role in the formation of a basis of understanding of a subject in question. There is a vast amount of theory surrounding the subject of interviews and the process as a whole (Myers, 2009; Saunders, Lewis & Thornhill, 2003; Bryman & Burgess, 2002) and these helped shape the design and structure of the interview questions as well as assisting with the analysis of the interviews. Non standardised semi-structured exploratory interviews were used in this instance. A potential problem with interviews as a method of data collection is that some interviewees may have certain beliefs about the response the interviewer expects and may therefore give what they consider to be a

correct or expected response (Collis & Hussey, 2003). To mitigate against this occurring Lee (1993) suggests that these problems can be overcome by increasing the depth of the interview.

In selecting interviewees a non-probability sampling technique was used as the majority of interviewees will be from a homogenous group; procurement managers, procurement executives or the people responsible for procurement in their organisations. There are twenty-eight such commercial semi-states. Six of these organisations are the same entity or procure on behalf of another entity which is under its remit; e.g. the RPA and Luas. When this is factored in it can be taken that there are 25 commercial semi-state bodies that procure goods and services.

Each organisation was contacted to ascertain who the procurement manager was (different titles were used e.g. Head of Procurement, Chief Procurement Officer). As referred to earlier some semi-state bodies did not have procurement departments and so, depending on the internal structure of the organisations, this role fell under the remit of finance, operations administration and even in some cases the CEO (Chief Operating Officer). Then a letter of invite to participate in the study was sent to the relevant contact person of these 25 organisations. Out of the 25 letters sent 8 of these replied; 6 agreeing to participate in the study, one agreeing to pass it on to their board for them to make a decision (of which no further communication was received) and one declining on the basis of staff resources. Follow up requests were sent via email to 5 of the contacts on the basis that they were more likely to acquiesce to the invite to participate; a further 4 replied with 3 more agreeing to the interview, one declining on the basis of work commitments and there was no response from the other contact.

Before commencing the interviews it was decided that the views of “experts” would be of benefit to the research study something Walker and Brammer (2012) and Oruezabala and Rico (2012) employed also. Two individuals working in organisations with a significant interaction with and influence on public procurement agreed and were interviewed first before conducting the other nine interviews.

Once the data has been collected it must be turned into results to be useful (LeCompte, 2000). This is done through analysis. Analysis is akin to the taking apart and reassembly of puzzles

(LeCompte & Preissle, 2003 in LeCompte, 2000, p. 146) and is “invariably described as voluminous, unstructured and unwieldy” (Bryman & Burgess, 2002, p. 216).

RESULTS

Nine commercial semi-state bodies participated in this research representing one-third of all commercial semi-state bodies in Ireland and an even higher figure of 37.5% when procurement on behalf of other bodies is taken into account. Of the nine commercial semi-state bodies that participated in this study two of them do not have designated procurement functions. These two organisations also were the smallest of the participants both in terms of turnover and numbers of staff. These organisations acknowledged the importance of procurement but were constrained by financial and human resources in having a nominated resource for it.

The number of procurement personnel differed between organisations and so too did the level of procurement/purchasing/supply chain qualifications of staff in the organisations of which only two did not possess any. With regard to if the organisation possessed a sustainability or green policy; five organisations had such a policy, two had policy statements and one had no policy at all. Table 1 offers some of the above basic background information of each participant organisation.

TABLE 1
Background Data on Participant Organisations

| P = Participant | P1 | P2 | P3 | P4 | P5 | P6 | P7 | P8 | P9 |
|--|-----|-----|-----|-----|----------|-----|-----|--------------------------|-----|
| Procurement department present | Yes | No | Yes | Yes | Yes | Yes | Yes | Yes | No |
| Procurement more imp in org. in recent years | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Procurement more strategic in org. in recent years | Yes | Yes | Yes | Yes | Not sure | Yes | Yes | Down the path towards it | Yes |

TABLE 1 (Continued)

| | | | | | | | | | |
|--|-----|---------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------|---------------|---------------------------------------|------|
| Procurement qualifications in department/organisation | Yes | No | Yes | Yes | Yes | Yes | Yes | Yes | No |
| Organisation sustainability / green policy in place | Yes | Yes | State ment only | Yes | Yes | Yes | Yes | State- ment only | No |
| Sustainable Procurement policy in place | Yes | No | Part of Procure- ment Policy | Part of Procure- ment Policy | Part of Procure- ment Policy | Yes | No | Part of Procure- ment Policy | No |
| Approx. tender processes including SP in last 3 years | 100 | Don't know | 24 | 100 | 80 | Nearly all | Nearly all | Unsure as new to role | None |

An understanding of the role that procurement had in each organisation was ascertained before moving to the main research topic of SP. For that reason participants were asked whether procurement had “assumed more importance in your company recently?” and if procurement had “assumed more of a strategic role within your organisation?” In relation to the first question all nine stated that procurement had become more important for reasons such as cost reduction, the economy, value for money, newly centralised department and legislation inter alia. While not as forceful as the previous, the responses to the latter were generally positive that procurement had taken on a more strategic role in their respective organisations although two participants noted that a lot of the procurement practised was still reactive with another declaring that procurement was “down the path towards having a more strategic role.”

The Europe 2020 targets on reduction of greenhouse gas emissions increase in energy efficiency and increase in energy from renewable resources is a significant driver of SP in public procurement within the EU member states. As these are the EU's stated objectives the researcher attempted to gauge the amount of knowledge that each participant's had of these. Four organisations

knew of these targets, four had some awareness “vaguely” and “broadly” being two of the particular responses while one company had no knowledge.

Understanding of Sustainable Procurement

The researcher put a question to the participants regarding their understanding of SP. This followed on from the previous context of the Europe 2020 targets and the preamble included that the EU has identified SP as one of the methods to assist in meeting these targets. The definitions provided were varied and interesting. Only two responses included what can be considered a true definition of SP stating the three elements of social, environmental and economic.

Overall two common themes were apparent from the interviewees’ responses. Firstly there was the view of sustainability from an economic or cost perspective. Though economic, as per above, was only explicitly stated by two interviewees, the majority regarded sustainability in terms of better value for money in the long term. Some of the items referenced were TCO, LCC and long term viable solutions. One participant questioned the cost, to an organisation, of sustainability also. This awareness of the impact of cost is not surprising given the current economic condition of Ireland and is one of the main reasons why procurement has assumed more importance in organisations.

Secondly there was the acknowledgment of SP in terms of doing the right thing in relation to the environment and people. As one participant put it “From a philosophical level it’s trying to use more products that are sourced in a more sustainable manner....supply chain with more sustainable principles”. On a similar note an interviewee stated that sustainability was “only taking what we need and making sure there is something left”. One of the nine participants had not heard of the concept previously and therefore could not define it.

In order to explore the use of SP in Irish commercial semi-state bodies, it was interesting to discover what each participant thought the level (small, medium or large) of SP knowledge they and their department possessed. Only one interviewee stated that their knowledge was large and at the opposite end two did not have any knowledge. The common consensus was small, small to medium or

medium with the majority conceding that more had to be done in this area.

Participants were next questioned as to their awareness of the government's NAP "Green Tenders" which had been launched just over a year ago. The data here were not in line with the trend of previous questions in relation to SP. Only three participants could definitively say that they were aware of it with three advising that they had no knowledge of it. However another interesting finding was that the participant who deemed their knowledge to be large and provided several examples of their use of SP to back up this contention, was only vaguely aware of the NAP. Similarly both participants that provided the academic definition of SP, were only broadly aware of it but not in great detail. This suggests that the government's guidelines concerning green procurement, which includes elements of SP, is not reaching a significant number of procurers.

Use of Sustainable Procurement

In order to meet the first research objective in exploring the use of SP in commercial semi-state bodies in Ireland a simple yes/no question was asked of participants with regard to their use of it. The overwhelming response here was a positive affirmation. Two of the participants responded with no but it is supposed from other responses in the interview that they are actually engaging in SP, but are not aware that they are.

The depth of the use of SP was then explored. Some proffered examples of their use such as the following inter alia; tyre mileage contract, recycling uniforms and shoes, office supplies, green cement, green electricity, catering, chemicals, low sulphur diesel, recycling, use of insects instead of chemicals and recycled concrete. Also several responses indicated that there was a designated sustainability/environmental section in the majority (and in some cases all) of all tender processes undertaken. One participant stated that in his organisation a sustainability award criterion, with a weighting of 5% or 10%, was predominantly utilised and "while not every procurement would have sustainability it would now be a conscious decision to take it out of the evaluation criteria whereas previously it would have been something that people may or may not have considered at all". A further two stated that sustainability is evaluated in the selection process where environmental policies and certifications of tenderers are requested as part of the evaluation. It

was interesting to note that organisations are categorising sustainability differently; some use it at selection stage while others use it at award stage.

In order to gain a better understanding of the use of SP the participants were asked what aspects of SP do they use most frequently when tendering; specification, selection stage, award criteria and/or contract performance clauses/SLAs? Four confirmed that they used SP in all areas and two acknowledged that they did not in fact use it as they did not, to their knowledge, engage in SP. Only one participant specifically avowed that SP was utilised in the contract clauses which the researcher found unusual due to the need to enforce SP throughout the life of the contract. Those who answered “all” were then probed deeper in order to ascertain in what areas it was applied in most. Overall there was a predilection to use SP in the award stage and the specification though one participant did profess that “we struggled with putting it into award and around how we’d articulate that.” Problems with evaluation, regardless of the tender stage, were a constant theme in the research particularly in relation to barriers.

When the expert was questioned as to whether he thought that SP was being used in commercial semi-state bodies he stated that he did not know but opined that there was a “danger” that in a commercial setting that there may be a short term view taken of SP. He added that “for anybody in a commercial semi-state who was flying the flag very high for green or sustainable I would imagine that they would have a tough enough battle.”

This researcher felt that it was important for this case study that some idea was garnered regarding the quantifiable use of SP in public procurement processes. Consequently the question was put to the participants as to approximately how many tender processes had SP been used in over the last 3 years. One participant gave a figure of 24 adding “and its growing all the time as we revisit recurring tenders that come up for renewal such as our supply of for the we’ll be looking again now at revising the award criteria to take in the sustainability piece which wouldn’t have been at the forefront when it was last done”. This figure palliates in significance against participants who gave numbers of 100, 80 and approximately 100.

Two participants could not provide a quantity but mentioned again that they inserted an environmental section for nearly every tender. One procurement manager was new to his role and therefore could not specify the number of processes that SP was applied in. Though several examples were given of SP in this organisation it is still hard to ascertain the real extent of the use of SP. Another two participants could not affirm if its organisation were engaging in SP.

Findings: Barriers

In order to move into answering the second research question, a simple yes/no question was asked of participants concerning SP; was it a good tool for purchasing sustainably. Six answered positively while the other three declared that they either did not know or did not use it enough to give a judgement.

A funnel approach was utilised in the questioning technique by narrowing the focus of the next questions in order to address the research question in more detail. In that regard the researcher then questioned why/how SP was a good tool for purchasing sustainably. One response was that if SP was used the market would follow. Another said that it was a good tool but “you have to turn it into something that’s measurable” while one more said that there was not enough understanding of SP “and potentially means different things to different people.” It is noted that already some potential barriers have been put forward.

Why Sustainable Procurement Is Not Being Practised in Commercial Semi-States

The participants did not know if SP was being used in the other commercial semi-state bodies however this was followed by a hypothetical and deductive question; “why are some semi-states using SP and others not?”. By framing the question in this manner it was hoped that more honest and opinionated answers would be forthcoming as it was not directly related to the participant’s own organisation. Some of the responses included laziness, time, resources, lack of knowledge at senior level and laziness. Other notable reasons were that organisations may be waiting for an official guidance on it and buy in from a management level. On a more positive note one of the participants opined that nobody would disagree with SP as it was common sense but there was a cost factor and therefore you have the balance the two.

A recurring sentiment with some of the participants was one of potential risk and fear particularly in the current climate where more suppliers are challenging procurement decisions and sometimes getting legal opinion. As SP can involve more subjectivity than other criteria, this can leave an organisation more open to a challenge from an unsuccessful tenderer. One interviewee warns that there is a “potential fear factor about getting into sustainability debates with suppliers on the relative characteristics and strengths” of their tender proposal.

The subject of fear continues when participants are questioned regarding the challenges to implementing SP in general, though on this occasion it is the fear of a perceived cost which isn't necessarily there which is seen as a barrier. On the same matter of cost another participant states that there is a cynicism regarding the whole green agenda and the cost will be more. The same participant then bemoans the fact that though there may be justification to go for the sustainable option “the money is just not there and that's a hard win. When money gets tight it is hard to go for the sustainable option”. There is a general discourse of cost versus sustainable throughout the interviews with participants arguing both sides. For example a later response asserts that growth in the market is a barrier but “demand will create supply which will create economies of scale and reduction in costs.”

A commonality of responses can be identified by the fact the majority specify internal barriers to this general question. Education of people was put forward as a barrier in one response and similarly another said that a lack of expertise was a barrier. This particular organisation has no procurement department and views “procurement as being an overhead that's now been foisted upon us so we have just absorbed it”. . One participant however is clear about the role of procurement and argues that organisations who just see procurement as an add-on will struggle with SP and assisting in meeting the Europe 2020 targets. He continues that it is hard to determine what SP is legally allowable under the procurement directives while another adds to this cogently arguing that “There probably should be more directives from the govt. like maybe mandating a little bit more on what we do here”. One expert referred to the legal complexity of it warning that “procurement as it exists, sustainable or not, is a complex enough issue as is,.... and any further

complexity that's layered in, is in my experience is resisted or avoided". The other expert acknowledges the complexities of trying to implement SP and adds that the "fear of litigation is quite real".

A recurrent theme of defining SP as a challenge emerges through the interview stage. An expert worries that the issue of adding the actual specifications of eco-labels and equivalents to tender documents is becoming counter-intuitive and also questions how to measure the greenness of something. Another participant outlines his organisation's SP definition barrier as follows;

Does anyone know exactly what it is? Is it buying more environmentally or energy efficient products? Is it buying off companies that have a better environmental ethos? Is it buying off a co. that provides employment in Ireland relative to the one in the UK or Europe?

Getting business users on board and buy in from senior management are further barriers put forward by two participants. The latter noted that "an alignment of the procurement strategy with the overall corporate strategy" was of utmost importance but also cautioned that the right environmental factors are necessary and "it's probably easier to do this in better times rather than recessionary times because there is such a focus on costs." One external barrier mentioned was the fact that suppliers are often not particularly good at selling the return on investment (ROI) on green or energy efficient products. The participant concedes that "I think that's a barrier where they are selling a perceived benefit but they can't validate the figures."

Internal Barriers

The deductive approach this research utilises has already established that there are barriers to using SP in Irish commercial semi-state bodies. Next the researcher probed specifically for exact internal and external barriers. In some interviews participants were prompted where necessary in order to gain a deeper understanding of the barrier types present in their organisations.

In terms of internal barriers some participants repeat their answer or elaborate on it, from the previous question relating to the challenges, in general, of implementing SP. For example one participant noted the difficulty in getting business users on board originally and that there is a reluctance to change on behalf of the

business users. When questioned was this reluctance coming from senior management it was revealing that the participant replied that “No, it’s very much supported by senior management. It tends to be the users in the business who might not be inclined to embrace it”. Fear or unwillingness to change was another response. However two other participants when prompted if there was an organisational reluctance to change both responded positively; one said that tough change isn’t easy that the Irish adapt well to it while the other admitted that change is constant in his organisation and that there was no reluctance to change.

One participant adds weight to the argument that senior management support is not always a barrier due to the fact that in this particular organisation senior management have seen the savings made from sustainable initiatives. No “specifically identifiable internal barriers other than the Champion, to take the lead, identify the benefits accruing to the organisation” was put forward by another participant. When the issue of time is suggested by the researcher as a possible barrier the participant agrees and further adds that “More real barriers I suspect would be understanding and ensuring that there is a common agreement on what SP is”. Four other participants similarly note that time is a factor preventing the use of SP however paradoxically one participation refutes this argument, stating that the implementation of SP has been a progression over the last of couple of years and that these things take time.

The question of value is omnipresent in participants’ thinking and is the reality that most organisations in Ireland face in the current recession. One participant points out that there is a challenge in “turning sustainable proposals into understandings of clear competitive advantage – in other words something that delivers value”. Various other internal barriers put forward included cynicism again, criteria and scoring, resources and more guidelines.

External Barriers

Similar to the internal barriers, participants were questioned specifically as to what barriers, outside of their organisation, they perceived were restricting the use of SP. Again interviewees were prompted to elicit further information on external barriers. Also some re-emphasised previous points made earlier in the interview such as

the right tools, the right measures, defining SP and validation of a perceived benefit.

Suppliers and the environment/market is mentioned by five of the participants as barriers; “the lack of understanding in the marketplace, at all levels small, medium and large of SP and how it affects the public, semi-state and utility sector;” the costs of some sustainable products were prohibitive (30-40% higher) and “that sustainability on the supplier side is probably not currently where it should be in terms of modernisation, to be sustainable requires an investment”. One of the experts on the other hand details the costs to suppliers of certification and life cycle costs as an added burden for suppliers trying to sell into the public and semi-state sectors.

Restrictions and the bureaucracy involved in semi-states as opposed to the private sector is a new barrier identified by one of the participants and also the procurement guidelines work for the bigger organisation but don't fit for the smaller ones. Thoughts on guidelines, directives and legislation are repeated in this research process in relation to SP and the issue of the lack of obligation or mandatory requirement to use it is mentioned by four participants. One participant states that the “whole carrot and stick approach” would work because semi-state bodies would have to comply with it but suggests that “the market and people will drive it (SP); that would be a better approach than obligation”.

One expert is concerned about the challenges that lobby groups bring externally and the different advocates for and against green. The importance of having a vibrant, competitive marketplace is stressed and that by using SP one is aware of the danger of possibly limiting the market to one or two players. The other expert believes that “a lack of clarity in the directives in the national action plans is going to be a mine-field” and believes that the absence of harmonisation in implementing SP both at an EU level in terms of NAPs and across organisations within member states is an external barrier.

DISCUSSION

This paper provides the first systematic study of the use of SP in Irish commercial semi-state bodies. The findings confirm that SP is being practised in these organisations and that there are challenges furthering its use. This section will now address each research

question and objective separately, by linking the research findings with the literature review to highlight new findings.

Use of Sustainable Procurement

Knowledge of Sustainable Procurement

In order to practice SP procurers must possess, at least, some basic knowledge of SP and how to apply it. Ryan, Dunphy and Henry's (2008) case study looks at the awareness and knowledge of SP among procurers in Ireland. Its main outcomes were that knowledge and comprehension of green/sustainable procurement were very small. Though defining SP does not necessarily lead to comprehension, the majority of participants did demonstrate throughout this research that they had a reasonably high knowledge of SP. Only one out of nine participations, whom had never heard of the concept, could not define it. However there is no real correlation between participants' knowledge of SP and participants' awareness of Green Tenders, the government's NAP. Three did not know of it and four were only vaguely familiar with it. There is a possible lack of communication and support on behalf of the government in this respect.

Communication is also deemed a barrier to using SP by one participant who in relation to a charter recalled "ringing up whatever dept. it came from and saying is this legislation, is this mandatory or guidelines? Guidelines mean very little because you know you can adhere to guidelines but you don't have to stick to the letter of the law". If the EU, and by extension the government, want procurement to be a key economic activity (Thai, 2001) and to support environmental and social goals (McCrudden, 2004), then greater support is necessary.

Is Sustainable Procurement of Value to an Organisation?

Hoffman and Bazerman (2005) consider that social and environmental practices are sometimes of benefit to a business and sometimes are not. This is an on-going debate which involves not only SP but all sustainable practices whether environmental, economic or social. It is an issue that a number of the participants struggled with in this research along with assessing the actual value that SP can bring. As one participant put it "if it is something that's good you

should be able to put a value on it whether that value is an economic or a social or an environmental or an efficiency value.” Business case, business benefit, added value, success measures and maximise value are the various terms used by the participants to convey the economic importance of SP. This proves that the majority of the interviewees will not practice SP unless there is a real, demonstrable value to be gained from it. It also highlights the difficulty of taking account of economic, social and environmental factors in the decision making of business (Hawkins, 2006).

Type of Sustainable Procurement Practised

The research shows that seven out of the nine organisations are practising SP and that the remaining two organisations it seems are practising it without realising it. Contrary to previous findings (Brammer & Walker, 2011) relating to SP in the public sector internationally, this study does not demonstrate social considerations (buying from small and local businesses) as the main type of SP used. Environmental aspects, as discovered in Oruezabala and Rico’s (2012) study, such as green vehicles, green cement, recycling and economic considerations including the use of TCO/LCA/LCC and adding value are much more prominent. In fact there was very little discourse regarding the social aspects intrinsic to SP. It does raise the issue of whether the social element of SP is being considered as much as (or at all) the environmental or economic elements of SP in Irish commercial semi-state bodies. Should social procurement therefore continue to be included under the term SP? Or should it be considered in isolation? (McCrudden, 2004).

Application of Sustainable Procurement

The researcher wanted to explore where SP was applied within the tender process; i.e. the specification, selection criteria, award criteria or contract clause performance. Little if any research has been carried out on this facet of SP. The findings revealed that the majority of participants were predisposed to incorporating SP considerations in the specification and award criteria. The latter finding is surprising in that there is more of an inherent risk of using it at award stage rather than at selection stage particularly, as one participant admitted, that trying to articulate SP at this stage can be difficult. This also bears little relationship to the risk of a challenge that some interviewees noted as a barrier to SP. This may suggest

that the procurers are experienced professionals, adept at applying SP thus nullifying any potential risk or fear that internal stakeholders may have of incorporating SP into a tender process. Another finding of note was the use of SP in pre-sourcing.

Use of Sustainable Procurement

The European Commission report regarding the uptake of GPP in member states in 2012 represented Ireland's use at less than 20%. If one was to measure this figure against commercial semi-states alone it would show that the European Commission figure bears no relationship to the findings that seven of the nine participants, at least, practice SP. Akin to the findings by Walker and Brammer (2009) of SP in the UK, ample evidence is found of nascent SP practices that are in place. It is also conceded by most of the participants that more knowledge needs to be accumulated in this area. As one participant, who had given himself a small to medium SP knowledge rating, put it "we're doing a huge amount more work now in sustainable issues around procurement than we would have been doing 2/3 years ago....but there's a huge amount to learn in it".

That an improvement of SP knowledge is necessary is supported by another participant who vowed to increase his knowledge in light of partaking in the case study because "your questions have caused me to question myself and I said no to a couple of them (questions) and I thought I was up to speed on it." Though it was hard for interviewees to quantify during the interview the number of tender processes which contained SP over the previous three years, indicative figures provided are largely positive. With four of the participants stating that a sustainability/environmental section is included in all tender processes (unless irrelevant) and another participant whose organisation has applied SP in approximately 80 tenders, the data shows that the use of SP is high.

Internal and External Barriers

It is known that there are barriers to using SP in Irish commercial semi-state bodies. The research data has proved this theory and found numerous internal and external barriers. This section will look at each barrier identified in the literature to see if it is germane to the

context of the commercial semi-state bodies in Ireland too. Care is also taken to ensure any new barrier found is disclosed.

Internal Barriers to Sustainable Procurement

Nine barriers in total were discovered in a review of the extant literature. The researcher will examine each one individually to determine whether evidence is found to corroborate existence of this in an Irish commercial semi-state setting.

Management

Support from management for SP was put forward by a small number of participants as a barrier. One participant agrees with Tripathi and Petro's (2010) argument that an alignment to organisational strategy is necessary. The experts interviewed both concurred that the role of senior management was important with one expert emphasising the role of policy makers too. The policy makers' roles are important and Brammer and Walker (2011, p. 472) state that they "need to be mindful of the emphasis they place on the various aspects of SP, as different interpretations are apparent in different countries, and there is no right way to approach SP."

An unanticipated research finding is that senior management in some organisations are supportive of SP. However some participants found the real difficulty to be in convincing business users of the merits of SP. This contrasts with Quinn (1997) and Sweeney's (2007) assertions that senior management involvement is critical to SP/CSR initiatives. Nonetheless it does suggest that senior management may need to encourage SP more in order for it to be integrated into the operations and culture of an organisation (Trevino et al., 2000; Joyner et al., 2002; Hammer, 2004).

Cost

Throughout the case study the balance between cost and the value of a product/service is considered. The current economic climate means that financial savings and a reduction of expenditure are being prioritised in all organisations. The perceived cost of SP is noted by several participants as a barrier (Walker et al. 2009). Justification for paying extra for a more sustainable product/service is as one participant declares "a hard win." Participants urge caution with regard to extra payment for more sustainable products/services

(Min & Galle, 2001; Brammer & Walker, 2011) without added value (Morton, 2002; Sharma et al., 2010; Oruezabala & Rico, 2012). Cost will continue to be a factor, rightly or wrongly, for the foreseeable future as one participant theorises; “I do think deep down the whole sustainability thing is very much aligned or associated with the recessionary times and I think when it does come out on a global scale I think the knock on effect will be SP, sustainable thinking”.

Time

Four participants agree that time is a barrier to implementing SP (Hawkins, 2006). It is observed that though the time taken to use SP is a barrier no participant explicitly stated that SP was being neglected as a result of short termism (Walker & Phillips, 2006; Walker et al., 2009). On the contrary the necessity of long term, sustainable thinking was at the forefront of many participant responses. One participant contradicts this consensus by deeming that laziness on behalf of the procurer is one reason why SP is not practised more as “the amount of effort between a sustainable and non-sustainable tender is minimal”. Perhaps the use of templates for recurring contracts should be advocated to reduce the time involved in using SP.

Further Training

The need for training and education is identified in the research data and agrees with existing findings on this topic (Bowen et al. 2001; Walker and Phillips 2006). This correlates with an Irish study (Ryan, Dunphy and Henry 2008) which identifies a requirement for training due to SP knowledge gap. When asked if they would undertake SP training all answered yes (except one who wants benchmarking with peers). The earlier study (Ryan, Dunphy & Henry, 2008) also indicates that no demand exists for green or sustainable procurement education. The research data contradicts their 2008 finding and is maybe representative of a change in outlook by procurers since. This is possibly as a result of EU/government guidelines or of a more professional and knowledgeable number of procurement professionals. Significantly two participants noted that there does not seem to be specific SP training or courses available, a gap that the government needs to address. If training does not exist, one option to overcome this as recommended by one of the

participants and from international research (Brammer & Walker, 2011; Preuss & Walker, 2011) is to share learning across organisations/countries for the benefit of all.

Conflict with E-Procurement

No interviewee raised SP as a possible conflict with e-procurement (Walker & Brammer, 2012). In fact surprisingly there is no mention of technology/ICT by participants in this study. It should be added that e-procurement seems to be in its infancy in Ireland and therefore may become a barrier in the future.

Individual vs Organisational

Preuss and Walker (2011) remark that individuals have their own goals, needs and strategies which may not be in alignment with that of their organisation. Some participants state that getting the business users to implement SP practices or to see the potential value of sustainable products/services is a barrier. It is arguable that this is an example of an individual's strategies or decision making taking precedence over those of the organisation. One interviewee stressed that "people tend to only see where the business benefit is and it is harder to sell a business benefit if it's conceptual."

The Individual

The importance of the individual in an organisation and how he or she responds to organisational strategy is addressed in the previous section. There is evidence that an individual can influence other individuals within an organisation in terms of the environment (Anderson & Bateman, 2000; Egri & Herman, 2000). The lack of a champion "to take the lead, identify the benefits accruing to the organisation" is put forward by one participant as a barrier. Without champions or leaders in an organisation it is possible that SP will not develop even with senior management backing. The findings do not indicate whether compliance (Sutinen & Kuperan, 1999) would be successful or not, on an individual basis alone, in increasing the use of SP.

Organisational Culture

There was little reference to organisational behaviour or culture in the interviews. One participant when questioned as to whether the

culture of his organisation may be a barrier stated that though change is not easy the Irish were good at adapting. This links with the theme of reluctance to change as discussed in the next section. The research data demonstrates that it is certain individualistic (the business users) values rather than the organisation's as a whole that requires changing. Cynicism was put forward as a barrier by one participant in relation to the "whole green agenda" and so it can be contended that cynicism, as an aspect of organisational culture, is found to be a barrier to SP use.

Reluctance to Change

Some examples of reluctance, unwillingness and fear of change are found in the research data. In one case this reluctance to change is attributed to the fear of something new. Similar to the section on cost one participant asserts that a "big challenge is the fear of a perceived cost which isn't necessarily there." Organisational change and all that it entails can be difficult (Preuss & Walker, 2011) but as one participant said that his organisation had gone through so much change since the recession that everybody is used to change and there is no reluctance. This may be characteristic of many organisations today and resistance to the introduction of new practices, such as SP, may be significantly less as a result. It may therefore be the best time to introduce SP practices into organisations.

New Internal Barriers Found

- *Right Tools*: Two participants identified the need to have the right tools to apply SP. One participant maintained that "making sure that we have the right tools to implement it" was a barrier. The other participant bemoaned the fact that a toolkit was not given to procurers to assist in implementing SP practices.
- *Applying SP Criteria*: Two interviewees spoke about the difficulty in the application of sustainable criteria. One had difficulty in evaluating the environmental section while another had trouble in structuring the criteria and the weighting to include SP.
- *Defining SP*: The majority of participants struggle with the concept of SP and by extension how to measure it. Frustration was evident in these instances and as one participant suggests "maybe there

is some guru in government that has the answer, what does SP mean and how does it add value?" Sweeney's (2007) research also found defining CSR difficult while some interviewees wished that a formal definition could be provided.

External Barriers to Sustainable Procurement

Six external barriers were found in the literature by this researcher. These six will be analysed in order to determine their validity in the context of Irish commercial semi-state bodies. As before, any new external barrier identified will be included.

Legislation and Compliance

The research findings agree with Morgan's (2008) assertions that unclear regulations or legislation can be a barrier to SP. The definition, and as a result, the understanding of SP is somewhat muddled by the directives/NAP thus preventing further use of SP in some organisations. Brammer and Walker (2011) observe that where SP is legislated for it seems to be applied but if voluntary directives are in situ then other priorities (e.g. cost) take precedence. One participant admitted that guidelines "mean very little" and argued that mandatory guidelines could assist the advancement of SP both internally to stakeholders and also to organisations.

Another opined that compliance would work but would not be the best option. As Tyler (1990) comments it may not be deemed fair or legitimate and its success may still depend on the individual (Sutinen & Kuperan, 1999). If the government intends to meet its Europe 2020 targets then compliance with using SP should be mandated as a necessary condition (Gelderman, 2006).

Policy Entrepreneurs/Converts

External policy that is not compulsory, for example SP, often requires what Drumwright (1994) refers to as "policy entrepreneurs" in order to integrate them into an organisation. A policy entrepreneur or champion was identified as an internal barrier to SP but could conceivably remain here also. As one of the experts interviewed noted "the main players I would argue is however the middle-management people who are the doers and have a responsibility morally and otherwise to consider these issues, but to consider them in a balanced way."

Cultural Relativism

It is not clear if cultural relativism was singled out as a barrier to SP. Ireland as a nation has gradually increased in its awareness of environmental and social issues and though some participants stated a fear of change or cynicism as internal barriers no common theme was evident in this regard. It is believed that cultural relativism is therefore not an impediment to SP in Irish commercial semi-state bodies.

Obligation

Many participants note a lack of obligation to using SP as a barrier to implementing, furthering its use or pushing for a more sustainable product/service option. McDowell's (1983; in MacNeil 1985, p. 501) assertion that voluntary engagement automatically enforces obligation is not found to be valid from the research data collated. One participation states that if SP is made obligatory then it will be implemented "as a semi-state has to comply". Sufficient evidence from the interviews suggests that discourse should take place, both at a national and EU level, on this issue.

Protectionism

No discernible data was found from the interviews in relation to element of protectionism. Overall there was little reference to social aspects of procurement let alone buying from small or local suppliers.

Supplier Knowledge

Five participants commented on the lack of understanding of suppliers of SP as a barrier (Oruezabala & Rico, 2012). When asked if SP requires a better buyer-supplier relationship six of the participants agreed (Vachon & Klassen, 2008; Walker & Brammer, 2012) with one positing that "a lot of supplier awareness in public environment comes from what they learn from buyer".

On this theme of developing buyer-supplier relationships in relation to SP, a participant asserted that "it needs to reach a level of sophistication where you can evaluate and take on board what the supplier is offering." The lack of validation of data by suppliers on sustainable products and services was a challenge that one participant found difficult to overcome. Two other responses noted

the importance of taking the TCO of a product or service into account (Gardner, 1987; Ellram & Siferd, 1998; Carter & Jennings, 2002; Lapašinskaitė & Boguslauskas, 2005; Lysons & Farrington, 2006; Tarantini, Loprieno & Porta, 2011). The findings suggest that more needs to be done both by the government, industry groups, procurers and suppliers themselves to ensure that suppliers possess sufficient knowledge to meet the market demands that SP will create.

CONCLUSIONS

According to the Environmental Protection Agency (EPA) report published in April 2013 there is a significant risk that Ireland will not meet its Europe 2020 targets. Public procurers through engagement with SP have a responsibility to assist the country to achieve these targets (Murray, 2001; Preuss, 2007, 2009; Walker et al., 2009). As the findings highlighted earlier show, the level of awareness of these targets by the participants is not as high as one would expect. The research does indicate that in general there is a large amount of SP being practised by participant organisations with some well ahead of others. Knowledge and understanding of SP by the participants is high which is a vital foundation for the implementation of this practice. This use is illustrated by the numerous and varied examples given by the interviewees of SP in the findings section.

The research data overall provides a good insight into the use of SP in Irish commercial semi-states; and one of the main themes occurring throughout is the importance of achieving value when using SP. The participants are adamant that a “competitive advantage” must be obtained when using SP. The accountability entrusted upon the participants as a result of being responsible for procurement in their organisations means that the financial aspects of every tender process is most salient. Therefore VFM still seems to be a priority over sustainable objectives however seven out of nine participants insist that a balance can be achieved between reducing costs and purchasing sustainably whilst maintaining quality.

Economic and environmental are the aspects of SP predominantly applied by the participants however the lack of discourse and examples in relation to social considerations is potentially worrying. It is not evident from this case study if social aspects of SP are or are not being considered by commercial semi-state bodies. Nevertheless further research is required to identify if

social aspects of SP is being applied and if not, are there specific challenges preventing its use. Seminal data in an Irish context is obtained on the actual application of SP in tender processes where little research has been conducted heretofore. The overriding use is in the specification and award criteria while many participants comment on how difficult SP is to evaluate as it is often intangible and subjective as opposed to other criteria.

The data confirms the presence of barriers within organisations to implementing SP practices. The literature review revealed more internal barriers than external barriers and the research findings corroborate this. Eleven internal barriers in total were found including three not identified in the review of the literature. Cost, senior management buy in, time, fear of risk/cost, the requirement for further training and the role of the individual are some of the internal barriers found which have been observed in previous research findings. This demonstrates that an amount of work still needs to be done on educating, training and empowering both procurers and stakeholders alike in order to increase the use of SP. A positive view though can be taken of these internal barriers, as Walker et al (2008) accentuate, in so far as they are within the realm of influence of the participants plus senior management and it is therefore possible to overcome.

New internal barriers such as defining SP, applying SP criteria and having the right tools to implement SP are identified. The definition of SP is a main concern for several of the participants and one of the experts. This is an issue that needs to be addressed at EU or government level. It is hoped that these three findings will contribute to a deeper understanding of the topic of SP outside of what is available from existing literature. The lack of understanding by suppliers and the marketplace of SP was one of the main external barriers put forward by interviewees. In addition there was a considerable amount of discourse on legislation and directives. Also discussed was whether SP should be made mandatory or not, on which there was general agreement that this would work as semi-state bodies would therefore have to comply however some believed this was not the best process.

Overall of the six external barriers identified in the literature review evidence of four was found in this research setting. The research findings show that SP is being practised in some

commercial semi-state bodies and existing and new barriers to using SP are identified.

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REFERENCES

- Albano, G., Snider, K., & Thai, K.V. (2012). *Charting a Course in Public Procurement Innovation and Knowledge Sharing*. Boca Raton, FL: PrAcademic Press.
- Anderson, L.M. & Bateman, T.S. (2000). "Individual Environmental Initiative: Championing Natural Environmental Issues in U.S. Business Organizations." *Academy of Management Journal*, 43(4): 548-570.
- Banerjee, B., Iyer, E.S., & Kashyap, R. K. (2003). "Corporate Environmentalism: Antecedents and Influence of Industry Type." *Journal of Marketing*, 67 (2): 106-122.
- Boykoff, M.T. & Boykoff, J.M. (2007). "Climate Change and Journalistic Norms: A Case Study of U.S. Mass-Media Coverage." *Geoforum in Press*, 38 (6): 1190-1204.
- Bowen, F.E., Cousins, P.D., Lamming, R.C., & Faruk, A.C. (2001). "The Role of Supply Management Capabilities in Green Supply." *Production and Operation Management*, 10 (2): 174-189.
- Brammer, S. & Walker, H. (2011). "Sustainable Procurement in the Public Sector: An International Comparative Study." *International Journal of Operations & Production Management*, 31 (4): 452-476.
- Bryman, A. & Burgess, R.G. (2002). *Analyzing Qualitative Data* (2nd ed.). London, UK: Routledge Group.
- Burnes, B. (2004). "Emergent change and planned change – competitors or allies? The case of XYZ construction." *International Journal of Operations & Production Management*, 24 (9): 886-902.

- Carroll, A.B. (1979). "A Three-Dimensional Conceptual Model of Corporate Performance." *Academy of Management*, 4 (4): 497-505.
- Carter, C. & Jennings, M. (2002). "Social Responsibility and Supply Chain Relationships." *Transportation Research Part E: Logistics and Transportation Review*, 38 (1): 37-52.
- Carter, C. (2005). "Purchasing Social Responsibility and Firm Performance: The Key Mediating Roles of Organizational Learning and Supplier Performance." *International Journal of Physical Distribution & Logistics Management*, 35 (3): 177-194.
- Centre for European Policy Studies and College of Europe, (2012). "The Uptake of Green Public Procurement in the EU27." Brussels, Belgium: Centre for European Policy Studies and College of Europe.
- Clough, P. & Nutbrown, C. (2012). *A Student's Guide to Methodology*. (3rd ed.). London, UK: Sage Publications.
- Collis, J. & Hussey, H. (2003). *Business Research* (2nd ed.). London, UK: Palgrave MacMillan.
- DeBoer, L. & Telgen, J. (1998). "Purchasing Practice in Dutch Municipalities." *International Journal of Purchasing and Materials Management*, 34 (2): 31-41.
- Department of Communications, Energy and Natural Resources (2012). *Strategy for Renewable Energy: (2012-2020)*. [Online]. Available at www.dcenr.gov.ie. [Retrieved February 7, 2013].
- Department of Communications, Energy and Natural Resources (2012a). *Ireland's Second National Energy Efficiency Action Plan to 2020*. [Online]. Available at www.seai.ie. [Retrieved April 4, 2013].
- Department of Enterprise, Trade and Employment (2009). *Using Public Procurement to Stimulate Innovation and SME Access to Public Procurement*. [Online]. Available at [http://www.djei.ie/publications/trade/\(2009/procurementinnovationgroup.pdf](http://www.djei.ie/publications/trade/(2009/procurementinnovationgroup.pdf). [Retrieved February 22, 2013].
- Department for Environment, Food and Rural Affairs (2006). *Procuring the Future—The Sustainable Procurement Task Force National Action Plan*. [Online]. Available at <http://www>.

sustainabledevelopment.gov.uk/publications/procurement-action-plan/documents/full-document.pdf. [Retrieved February 1, 2013].

Department for Environment, Food and Rural Affairs (2007). "Securing the future: UK Government Sustainable Procurement Action Plan Incorporating the Government Response to the Report of the Sustainable Procurement Task Force." London, UK: Author.

Department of the Environment, Community and Local Government (2012). *Green Tenders – An Action Plan on Green Public Procurement*. [Online]. Available at [http://www.environ.ie/en/Environment/SustainableDevelopment/GreenPublicProcurement/News/MainBody,29\(206,en.htm](http://www.environ.ie/en/Environment/SustainableDevelopment/GreenPublicProcurement/News/MainBody,29(206,en.htm). [Retrieved February 22, 2013].

Department of Finance (2010). Department of Finance Circular 10/2010: *Facilitating SME Access to Public Procurement*. [Online]. Available at <http://www.procurement.ie/publications/circular-1010-facilitating-sme-participation-public-procurement>. [Retrieved May 1, 2013].

Drumwright, M. (1994). "Socially Responsible Organisational Buying: Environmental Concern as a Non-Economic Buying Criteria." *Journal of Marketing*, 58: 1-19.

Dublin City University Procurement Research Group (2012). *Opportunities in Public Sector Procurement: The National Procurement Service Annual Survey 2012*. Dublin, Ireland: Author.

Egri, C.P. & Herman, S. (2000). "Leadership in the North American Environmental Sector: Values, Leadership Styles, and Contexts of Environmental Leaders and Their Organizations." *The Academy of Management Journal*, 43 (4): 571-604.

Ellram, L.M. & Siferd, S.P. (1998). "Total Cost of Ownership: A Key Concept in Strategic Cost Management Decisions." *Journal of Business Logistics*, 19 (1): 55-84.

Environmental Protection Agency (2013). "Ireland's Greenhouse Gas Emission Projections 2012-2030." Wexford, UK: Environmental Protection Agency.

Erridge, A. & Murray, G. (1998). "The Application of Lean Supply in Local Government: The Belfast Experiments." *European Journal of Purchasing and Supply Management*, 4: 207-221.

- Erridge, A. & Henningan, S. (2007). "Public Procurement And Social Policy In Northern Ireland: The Unemployment Pilot Project." In P. Piga & K. V. Thai (Eds.), *Advancing Public Procurement: Practices, Innovation and Knowledge-sharing*. Boca Raton, FL: PrAcademics Press.
- European Commission (2007). *Pre-commercial Procurement: Driving Innovation to Ensure Sustainable High Quality Innovation in Europe* [Online]. Available at http://ec.europa.eu/internal_market/publicprocurement/other_aspects/index_en.htm#europe2020. [Retrieved March 11, 2013].
- European Commission (2008). *Think Small First: A "Small Business Act" for Europe*. [Online]. Available at <http://ec.europa.eu/enterprise/policies/sme/small-business-act/>. [Retrieved February 15, 2013].
- European Commission (2008a). *Public Procurement for a Better Environment* [Online]. Available at http://ec.europa.eu/internal_market/publicprocurement/other_aspects/index_en.htm#europe2020. [Retrieved December 11, 2012].
- European Commission (2001). *Integrating Social Considerations into Public Procurement* [Online]. Available at http://ec.europa.eu/internal_market/publicprocurement/other_aspects/index_en.htm#europe2020. [Retrieved February 21, 2013].
- European Union (2013). *Europe 2020*. [Online]. Available at www.ec.europa.eu/europe2020. [Retrieved January 12, 2013].
- Fee, R., Erridge, A., & Hennigan, S. (2002). "SMEs and Government Purchasing in Northern Ireland." *European Business Review*, 14 (5): 326-334.
- Gardner, D.M. (1987). "The Product Life Cycle – A Critical Look at the Literature" (BEBR Faculty Working Paper, No. 1336). Chicago, IL: University of Illinois.
- Gelderman, C.J., Ghiljzen, P.W.T., & Brugman, M.J. (2006). "Public Procurement and EU Tendering Directives-Explaining Non-Compliance." *International Journal of Public Sector Management*, 19 (7): 702-14.

- Glover, A. (2008). *Accelerating the SME Economic Engine through Transparent, Simple and Strategic Procurement*. London, UK: HM Treasury.
- Gough, S. & Scott, W.A.H. (2001). "Curriculum Development and Sustainable Development: Practices, Institutions and Literacies." *Educational Philosophy and Theory*, 33 (2): 137-152.
- Greer, H. (1999). *Small Firms and Public Procurement in Ireland: A Study for the Department of Enterprise, Trade and Employment*. London, United Kingdom, Network Resources Limited.
- Hammer, M. (2004). "Deep Change: How Operational Innovation Can Transform your Company." *Harvard Business Review*, 82 (4): 84-93.
- Hayes, J., & Allison, C. (1998). "Cognitive Style and the Theory and Practice of Individual and Collective Learning in Organisations" *Human Relations*, 51 (7): 847-871.
- Hawkins, E. (2006). *Corporate Social Responsibility: Balancing Tomorrow's Sustainability and Today's Profitability*. Hampshire, UK: Palgrave MacMillan.
- Helm, L., Billiald, S., Harrison, K., & Cavanagh, J. (2005). *Sustainable Procurement in Central Government*. London, UK: National Audit Office.
- Hoffman, A.J. & Bazerman, M.H. (2005). *Changing Environmental Practice: Understanding and Overcoming the Organizational and Psychological Barriers*. (Working Paper, No. 05-043). Cambridge, MA: Harvard Business School.
- Janckowicz, A.D. (2000). *Business Research Projects*. (3rd ed.). London, UK: Thomson Learning.
- Johnson, G. & Scholes, K. (2010). *Exploring Public Sector Strategy*. Dorchester UK: Pearson Education.
- Joyner, B., Payne, D., & Raiborn, C. (2002). "Building Values, Business Ethics and Corporate Social Responsibility into the Developing Organisation." *Journal of Developmental Entrepreneurship*, 7 (1): 113-131.
- Kahn, R. & Cannell, C. (1957). *The Dynamics of Interviewing*. New York and Chichester: Wiley.

- Lamming, R. & Hampson, J. (1996). "The Environment as a Supply Chain Management Issue." *British Journal of Management*, 7 (1): 45-62.
- Lamming, R. (2002). "Purchasing and Organizational Design." In M. G. Day (Ed.), *Handbook of Purchasing Management* (3rd ed. pp 9-22) Aldershot, UK: Gower Publishing Ltd.
- Lapašinskaitė, R. & Boguslauskas, V. (2005). "The Maintenance Cost Allocation in Product Life Cycle." *Engineering Economics*, 4(44): 7-23.
- LeCompte, M.D. (2000). "Analyzing Qualitative Data." *College of Education*, 39 (3): 146-154.
- Lee, F. (2007). "Ireland's Semi-State Bodies in a Time of Change." (Working Paper Series, No. 4). Cork, UK: University College Cork.
- Lee, R.M. (1993). *Doing Research on Sensitive Topics*. London, UK: Sage Publications.
- Loader, K. (2005). "Supporting SMEs through Government Purchasing Activity." *The International Journal of Entrepreneurship and Innovation*, 6 (1): 17-26.
- Loader, K. (2007). "The Challenge of Competitive Procurement: Value for Money versus Small Business Support." *Public Money and Management*, 27 (5): 307-314.
- Lysons, K. & Farrington, B. (2006). *Purchasing and Supply Chain Management*. (7th ed.). London, UK: Financial Times/Prentice Hall.
- Maignan, I. (2001). "Consumer's Perceptions of Corporate Social Responsibilities: A Cross-Cultural Comparison." *Journal of Business Ethics*, 30: 57-72.
- Manne, H. & Wallich, H.C. (1972). "The Modern Corporation and Social Responsibility." Washington, DC: American Institute for Public Policy Research.
- Maxwell, D. & Van der Horst, R. (2003). "Developing Sustainable Products and Services." *Journal of Cleaner Production*, 11 (8): pp.883-895.
- McCrudden, C. (2004). "Using Public Procurement to Achieve Social Outcomes." *Natural Resources Forum*, 28 (4): 257-267.

- Menon, A. & Menon, A. (1997). "Enviropreneurial Marketing Strategy: The Emergence of Corporate Environmentalism as Market Strategy." *Journal of Marketing*, 61 (1): 51-67.
- Min, H. & Galle, W.P. (1997). Green Purchasing Strategies: Trends and Implications. *International Journal of Purchasing and Materials Management*, 33 (3): 10-17.
- Min, H. & Galle, W.P. (2001). "Green Purchasing Practices of US firms." *International Journal of Operations & Production Management*, 21 (9): 1222-1238.
- Morgan, K. (2008). "Greening the Realm: Sustainable Food Chains and the Public Plate." *Regional Studies*, 42 (9): 1237-1250.
- Morton, B. (2002). "Purchasing and 'Green' Issues." In M. Day (Ed.), *Handbook of Purchasing Management* (3rd ed.; pp. 207-222) Aldershot, UK: Gower Publishing Ltd.
- Murray, G. (2000). "Effects of a Green Purchasing Strategy: The Case of Belfast City Council." *Supply Chain Management: An International Journal*, 5 (1): 37-44.
- Mitra, S. & Webster, S. (2008). "Competition in Remanufacturing and the Effects of Government Subsidies." *International Journal of Production Economics*, 111: 287-298.
- My Market Research Methods [Online]. The Market Research Process Methods. [Online]. Available at [http://www.mymarketresearchmethods.com/wp-content/uploads/\(2011/10/The-Market-Research-Process.jpg](http://www.mymarketresearchmethods.com/wp-content/uploads/(2011/10/The-Market-Research-Process.jpg). [Retrieved February 1, 2013].
- Myers, M.D. (2009). *Qualitative Research in Business & Management*. London, UK: Sage Publications.
- New, S., Green, K., & Morton, B. (2000). "Buying the Environment: The Multiple Meanings of Green Supply." In S. Fineman (Ed.), *The Business of Greening* (pp. 35-53). London, UK: Routledge.
- Nielsen, U-M. & Hansen, L.G. (2001). "The EU Public Procurement Regime - Does It Work?" *Intereconomics: Review of International Trade and Development* 36 (5): 255-263.
- Office of the Attorney General. (2011). *European Union (Energy Efficient Public Procurement) Regulations*. [Online]. Available at [www.irishstatutebook.ie/\(2011/en/si/0151.html](http://www.irishstatutebook.ie/(2011/en/si/0151.html). [Retrieved February 23, 2013].

- Pickernell, A., Kay, G., Packham, G., & Miller, C. (2011). "Competing Agendas in Public Procurement: An Empirical Analysis of Opportunities and Limits in the UK for SMEs." *Environment & Planning C: Government and Policy*, 29 (4): 641-58.
- Preuss, L. (2005). *The Green Multiplier: A Study of Environmental Protection and the Supply Chain*. Basingstoke, UK: Palgrave Macmillan.
- Preuss, L. (2007). "Buying into our Future: Sustainability Initiatives in Local Government Procurement." *Business Strategy and the Environment*, 16: 354-365.
- Preuss, L. (2009). "Addressing Sustainable Development through Local Government: The Case of Local Government." *Supply Chain Management: An International Journal*, 14 (3): 213-223.
- Quayle, M. (1998). "The Impact of Strategic Procurement in the UK Government Sector." *International Journal of Public Sector Management*, 11 (5): 397-413.
- Quayle, M. & Quayle, S. (2000). "The Impact of Strategic Procurement in the UK Further and Higher Education Sectors." *International Journal of Public Sector Management*, 13 (3): 260-284.
- Quinn, J. (1997). "Personal Ethics and Business Ethics: The Ethical Attitudes of Owner/Managers of Small Business." *Journal of Business Ethics*, 16 (2): 119-127.
- Rao, P. & Holt, D. (2005). "Do Green Supply Chains Lead to Competitive and Economic Performance?" *Journal of Operations and Production Management*, 25 (9): 898-916.
- Robson, C. (2002). *Real World Research: A Resource for Social Scientists and Practitioner-Researchers*. Oxford, UK: Blackwell Publishing.
- Ryan, N., Dunphy, A., & Henry, A. (2008). *Study of Awareness & Knowledge of Sustainable Procurement among Procurement Professionals & Identification of Education & Training Needs*. Add name of city and country: University College Cork, Cleaner Production Promotion Unit.
- Saunders, M., Lewis, P., & Thornhill, A. (2003). *Research methods for business students*. (5th ed.). New York: Prentice Hall.

- Sharma, S. (2000). "Managerial Interpretations and Organizational Context as Predictors of Corporate Choice of *Environmental Strategy*." *Academy of Management Journal*, 43(4): 81-97.
- Sharma, G.R., Iyer, A., Mehrota, A., & Krishnan, R. (2010). "Sustainability and Business-to-Business Marketing: A Framework and Implications." *Industrial Marketing Management*, 39 (2): 330-341.
- Shrivastava, P. (1995). "The Role of Corporations in Achieving Ecological Sustainability." *Academy of Management Review*, 20 (4): 936-960.
- Simpson, D.F. & Power, D.J. (2005). "Use the Supply Relationship to Develop Lean and Green Suppliers." *Supply Chain Management: An International Journal*, 10 (1): 60-8.
- Srivastava, S. K. (2007). "Green Supply-Chain Management: A State-of-the-Art Literature Review." *International Journal of Management Reviews*, 9 (1): 53-80.
- Sutinen, J.G. & Kuperan, K. (1999). "A Socio-Economic Theory of Regulatory Compliance." *International Journal of Social Economics*, 26(1/2/3): 174-193.
- Svensson, G. (2007). "Aspects of Sustainable Supply Chain Management (SSCM): Conceptual Framework and Empirical Example." *Supply Chain Management: An International Journal*, 12 (4): 262-266.
- Swanson, M., Weissman, A., Davis, G., Socolof, M.L., & Davis, K. (2005). "Developing Priorities for Greener State Government Purchasing: A California Case Study." *Journal of Cleaner Production*, 13 (7): 669-677.
- Tarantini, M., Loprieno, D.A., & Porta, P.L. (2011). "A Life Cycle Approach to Green Public Procurement of Building Materials and Elements: A Case Study on Windows." *Energy*, 36: 2473-2482.
- Thai, K.V. (2001). "Public Procurement Re-examined." *Journal of Public Procurement*, 1 (1): 9-50.
- Thomson, J., & Jackson, T. (2007). "Sustainable Procurement in Practice: Lessons from Local Government." *Journal of Environmental Planning and Management*, 50 (3): 421-444.

- Trevino, L.K., Hartman, L.P., & Brown, M. (2000). "Moral Person and Moral Manager: How Executives Develop a Reputation for Ethical Leadership." *California Management Review*, 42 (4): 128-142.
- Tripathi, S. & Petro, G. (2010). "Evolving Green Procurement and Sustainable Supply Chain Practices in the Organizations: A Framework to Align Functional Strategy Implementation to Organization's Corporate Social Responsibility (CSR)." *Objectives in Management Convergence*, 1 (1): 24-32.
- Tyler, T.R. (1990). *Why People Obey the Law*. New Haven, NJ: Yale University Press.
- Vachon, S. & Klassen, R.D. (2008). "Environmental Management and Manufacturing Performance: The Role of Collaboration in the Supply Chain." *International Production of Economy*, 111: 299-315.
- Van Weele, A.J. (2010). *Purchasing and Supply Chain Management*. (5th ed.). Hampshire, UK: Cengage Learning EMEA.
- Varadarajan, P.R. (1992). "Marketing's Contribution to Strategy: The View from a Different Looking Glass." *Journal of the Academy of Marketing Science*, 20 (3): 323-343.
- Walker, H. & Brammer, V. (2009). "Sustainable Procurement in the United Kingdom Public Sector." *Supply Chain Management: An International Journal*, 14 (2): 128-137.
- Walker, H. & Brammer, V. (2012). "The Relationship between Sustainable Procurement and E-Procurement in the Public Sector." *International Journal of Production Economics*, 140 (1): 1-13
- Walker, H. & Preuss, L. (2008). "Fostering Sustainability through Sourcing from Small Businesses: Public Sector Perspectives." *Journal of Cleaner Production*, 16: 1600-1609.
- Walker, H., Di Sisto, L., & McBain, D. (2008). "Drivers and Barriers to Environmental Supply Chain Management Practices: Lessons from the Public and Private Sector." *Journal of Purchasing & Supply Management*, 14: 69-85.
- Walker, H., Spencer, R., Miemczyk, J., & Johnsen, T. (2012). "Sustainable Procurement: Past, Present and Future." *Journal of Purchasing & Supply Management*, 18: 201-206.

Walker, H., Gough, S., Bakker, E.F., Knight, L.A., & McBain, D. (2009). "Greening Operations Management: An Online Sustainable Procurement Course for Practitioners." *Journal of Management Education*, 33: 348-369.

Wallace, M. & Wray, A. (2006). *Critical Reading and Writing for Postgraduates*. London, UK: Sage Publications Ltd.

World Commission on Environment and Development. (1987). "Report of the World Commission on Environment and Development: Our Common Future." New York: The United Nations.