Sustainable Procurement – Challenges For Construction Practice.

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ABSTRACT

The impetus for sustainable procurement in construction is growing in response to regulatory, societal and client demands. A strong impetus, however, needs to be translated into effective sustainable procurement strategies and practices. The evidence to date suggests that this translation has been patchy across the sector as a whole and, in many cases, within single construction companies. There are number of barriers embedded in traditional procurement and organisational structures and practices which are hampering the often deep changes required.

The aim of this paper is to draw on and critically reflect upon the general and construction specific sustainable procurement literatures. From this, a number of theoretical and empirical questions will be distilled which will inform the investigation of the sustainable procurement policies and practices within Morgan Sindall plc. and the design of action research interventions to bring about targeted change and innovation to enhance its sustainable procurement performance.

Keywords: Sustainable procurement, construction.

1. INTRODUCTION

Sustainability is an issue which is being given increasing attention by both government and industry and pressures are increasing on businesses to improve sustainability performance. Whilst many of the issues are nothing new, sustainability is being used to group together a variety of both new and more established issues. There are a number of differing definitions of sustainable development. One of the most widely used is that of the Brundtland Report (World Commission on Environment and Development 1987) which defines it as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. This definition however does not suggest criteria for putting sustainability ideas into practice. Nor does it suggest what principles sustainability contains. The ‘needs’ of the present are likely to differ between varying groups. For example the needs of a construction company, seeking to make a profit from construction of a building are likely to be significantly different to those of the end user, who desires a place to work or live. In the same way, the needs of future generations may not be the same as the needs of people today.
A widely used concept for describing sustainability is that of the triple bottom line (Norman and MacDonald 2004). This concept suggests that sustainability is made up of three main components of environmental, social and economical sustainability. Still, this does not give substance as to what is contained within each component. In 2005, the UK government released its Sustainable Development Strategy, which included five guiding principles of “living within environmental limits”, “ensuring a strong, healthy and just society”, “achieving a sustainable economy”, “promoting good governance” and “using sound science responsibly”. It then goes on to outline “Sustainable consumption and production”, “climate change and energy”, “natural resource protection and environmental enhancement” and “sustainable communities” as priority areas for immediate action. (Department for Environment Food and Rural Affairs 2005). In 2005 the European Union Council adopted “Guiding principles of sustainable development” in which four “key objectives” and ten “policy guiding principles” for sustainable development are outlined (Commission of the European Communities 2005). Here we see even two governmental bodies taking differing approaches to sustainability. For a business entity, the results would be significantly different again. It seems clear that the criteria of what constitutes sustainability is a much debated subject and it is often the case that what one body considers important sustainability factors may not match the opinions of another.

The construction industry in the UK is responsible for around 8% of GDP (Department for Business Enterprise & Regulatory Reform 2008). The sector is made up of companies from the very small, with a handful of employees, to very large national and multinational corporations employing thousands. Customers of construction projects are both public and private, with the public sector representing about one third of direct construction procurement

Procurement is the acquisition of goods and services. This could include anything from office supplies, to construction materials, to the services of contractors and sub-contractors. Procurement is one way in which companies interact with one another and it could be considered that the actions of a company are only as sustainable as those of its suppliers. There is an increasing amount of literature available on sustainable procurement (Seuring and Müller 2008). However, the work applying these principles to construction is much more limited.

This paper will first outline some general sustainable procurement influences and barriers from the literature on sustainable procurement. It will then look more specifically at the construction industry and how these ideas might be applied within the construction context. Finally, it will look to form some questions that will be used to develop an investigation of sustainable procurement practices within Morgan Sindall plc, a large UK construction firm, and how these practices can be enhanced.

2. SUSTAINABLE PROCUREMENT

The concept of sustainable procurement draws attention to the responsibility of a company for activities outside its own boundaries (Meehan and Bryde 2011). There are a number of influences for increased interest in sustainability and hence sustainable procurement practices. Some main examples are suggested below.
The first of these drivers is government policy. In 2005, the UK released its Sustainable Development Strategy where it pledged to “lead by example” in how it spends money (Department for Environment Food and Rural Affairs 2005). This was followed in 2007 by the UK’s Sustainable Procurement Action Plan which aimed to make the UK government EU leaders in sustainable procurement practice (Department for Environment Food and Rural Affairs 2007). It is uncertain whether the private sector should follow this example, as their needs may be significantly different to those of private companies. It could however have a significant influence on companies competing for contracts from the public sector. As government buyers look to companies with improved sustainability credentials, so companies might have to look to their supply chains to ensure they are able to meet the new demands. Indeed, in the Sustainable Procurement Action Plan, an intention is set out that government “will include appropriate requirements for suppliers and sub-contractors to provide products and services that comply with agreed mandatory standards and assist in the delivery of departmental sustainable operations targets” (Department for Environment Food and Rural Affairs 2007). In addition, legislation on product specification will directly influence the purchasing decisions that can be made by companies. Legislation, for example the RoHS directive in electronic equipment in the EU, could be introduced for a variety of reasons, such as to improve product safety, remove products that are harmful to the environment or remove products that use unethical production methods. In effect, this reduces the procurement options available to a company, before they can consider their own requirements.

Reputation has been suggested as another key factor that motivates companies to improve the sustainability of their supply chain. It has been suggested that focal companies (those that are seen as governing the supply chain, having the direct contact with customers and designing the product or service) may be held responsible for the impacts of their whole supply chain (Koplin, Seuring et al. 2007) (Seuring and Müller 2008). This is particularly true of companies based upon a strong brand. As such, companies use sustainable procurement as a method of ensuring that their supply chain meet environmental and ethical criteria in order to maintain their reputation.

Customer requirements may also form a key driver to adopt sustainable procurement methods. It has been suggested that consumer awareness is a significant driver in the adoption of more sustainable practices (Dobers and Wolff 2000). In addition, it is thought that corporate buyers are increasingly exerting pressure on their supply chain to improve sustainability performance, especially in the environmental arena (Morton, Green et al. 1996). This pressure may not just be exerted by the immediate customer, but from their customers further up the supply chain (Morton, Green et al. 1996). This need to meet customer requirements for sustainable products and services is likely to force companies to make more sustainable procurement decisions. Pressures from customers may again originate from the customers’ own set of pressures and needs. Thus, the purchasing decisions made by a company do not only reflect its own drivers, but those of others, adding a further set of constraints.

As well as the drivers of the implementation of sustainable procurement including those listed above, there are a number of barriers which discourage companies from sustainable procurement. Three major commonly cited examples of these barriers are increased cost, increased effort and insufficient supply chain communication (Seuring and Müller 2008). Further discussion of barriers and incentives to sustainable procurement will be discussed with more focus on construction later in the paper.
3. SUSTAINABLE PROCUREMENT IN CONSTRUCTION

3.1 Drivers

Recently, attempts to implement sustainable procurement ideas into the construction industry have started to appear. The UK government strategy for sustainable construction lists procurement as one of the ‘means’ to achieve the ‘ends’ of improved sustainability performance (Department for Business Enterprise & Regulatory Reform 2008).

In the development of the strategy, a number of drivers are listed that form the business case for sustainable procurement. These include value for money, reputation issues, market differentiation and regulation and legislation (Department of Trade and Industry n.d.). The influence of these factors on specific construction companies may vary greatly. Suggestion of some reasons for these variations for different factors appears below.

Value for money is suggested as a driver for sustainable procurement as the increased use of whole life costing methods reduces the overall expenditure throughout the life of the building. However, the value of whole life costing is unlikely to be realised by the construction company, or in many cases, the client. The benefit of, for example, reduced running costs of a building may not be seen by the constructor, as they are not the end user. Often, the end user is not the client, adding a further layer of disconnection between the constructor and the user. This could be exaggerated even further if considering end of life costs, as the users at the end of life may not be the same even as the intended users at the construction stage. This may point to a need for significant change to existing business models in order to take a more long-term approach.

Such a change to a long term approach however may not lie within the priorities of construction firms. The issues appear to lie more in the way that clients secure investment to fund construction projects. Changing the finance methods for construction clients is unlikely to be a priority of construction companies. The extent to which this driver influences those who are in the position to make changes in response to it is therefore in need of investigation.

Brand reputation has been discussed in general terms already. It is suggested that focal companies are held responsible for the environmental and social impacts of their whole supply chain, and that this is particularly true of companies with a strong brand, such as clothing companies (Koplin, Seuring et al. 2007; Seuring and Müller 2008). The impact of this will depend largely on the impact of brand image on the construction company. If consumers and clients are keen to use construction companies with a good record of sustainability, it is likely to be in the constructor’s interests to ensure they employ strong criteria throughout their supply chain and maintain a positive reputation. However, this will depend largely on the extent to which construction companies are held to account by clients, investors and shareholders and the extent to which companies are able to measure and publicise their achievements.

Market differentiation may have a large role to play in encouraging companies to adopt sustainable procurement practices. If a company sees an opportunity to market itself as having a completely sustainable supply chain, it may be able to attract business from customers who value this and are looking to do the same. As before, this advantage depends largely on the importance attached by clients to sustainability and their willingness to pay for
the perceived benefits. It has been suggested that adopting sustainable construction practices may provide a competitive advantage, but the extent to which this is realised is unknown (Tan, Shen et al. 2011). As the government has pledged to procure more sustainably in future through the sustainable procurement action plan, it would suggest that there is a market for this at least in government funded projects. Client requirements could play a major role here. It is suggested that clients are placing certain requirements into contracts for environmental performance, for example (Sterner 2002).

Government regulation and legislation can also play a key role. If companies are legally required to purchase sustainably, for example, this will force them to look at their supply chain at least to meet the requirements of legislation.

3.2 Barriers

Although there are a number of potential advantages for a company adopting sustainable procurement practices, they are not widely implemented. It has been estimated, for example, that uptake of whole life costing in the private sector lies at around 5% (Department of Trade and Industry n.d.). A number of barriers have been noted in the construction industry when trying to implement other procurement advances which may apply to sustainable procurement. Some of these are discussed here.

In research in which questionnaires were issued to commercial managers within a single contracting company, Wood and Ellis (2005) noted that with respect to partnering relationships in construction, there were instances where, whilst perceptions and even experiences were positive, relationships sometimes remained cost driven, even when there were perceived benefits in a change to the new approach. This experience seems contradictory, in that a methodology with perceived benefits is not taken up or the transition to the new methodology is slow. One reason for this could be ‘inertia’ within the company (Meehan and Bryde 2011). This develops from the institutionalisation of a routine within an organisation. As firms try to maintain a sense of reliability, processes become routine. This results in the implementation of change becoming more difficult, as it relies on an upheaval from the existing routine (Meehan and Bryde 2011).

A further reason could be that the staff involved feel that other pressures placed upon them force them to make decisions that do not align with a sustainable procurement strategy. This could indicate that there is conflict between pressures on staff and they find the greater of these to be driving them towards maintaining the more traditional approach. Such conflicts of incentives may be another barrier to sustainable procurement. This can be despite the fact that many companies are documenting sustainable procurement strategies in their annual reports (eg. Morgan Sindall 2010). It would be interesting to find out to what extent these policies actually influence the procurement decisions within a company. The actual business decisions are likely to be based upon a number of differing pressures, and the way in which such pressures overlap will be key to the final decisions made.

Another barrier could be that the benefits of making sustainable procurement decisions may not be received by those that incur the extra cost. An example is that previously mentioned of whole life costing (Department of Trade and Industry n.d.). Whilst the end user may benefit from, for example, lower energy demand or the final owner may benefit from a design that
allows for easy recycling after demolition, the constructor and possibly even the client may not gain any benefit from this. If costs are increased, there may be little motivation in this respect for a company to adopt new practices, moving away from a capital cost based approach.

Further, it has been suggested that, in government procurement for example, one department may incur extra cost that could reduce costs for another department, resulting in an overall cost reduction (Department for Environment Food and Rural Affairs 2007). If a similar principle were applied to a business, one department may be dissuaded from choosing a more sustainable procurement option, despite the overall benefits to the company, in order to keep within departmental budgets. The impact of this will be very much dependent on the organisational structure of the company in question.

Finally, another possible barrier is the motivation of individual staff members to improve sustainability performance. Resistance from employees could work to undermine efforts of the company at a higher level. This resistance could come as a result, for example, of staff feeling that they are being given extra work or having extra pressures put on them. In this case, they may be reluctant to change their practices if they do not see significant reward for their efforts.

These two points indicate that the organisational structure can have significant impacts on the ability and motivation of a company to implement sustainable procurement practices. It would be useful to find out how the organisational structure within companies affects their procurement decisions. This information on the practices within the companies should be useful in identifying structural changes that may be needed in order for new practices to be accepted and successfully implemented.

It is clear that a number of different factors affect procurement decisions, acting as both drivers and barriers to procuring sustainably. It is important for any company to decide what represents sustainable development within its own context. This may well be influenced by what is of value to important stakeholders, the opinions of whom may compel the company to change practices. The investigation of where these influences for sustainability originate, and how these are balanced with other needs within in procurement strategy is an important area for investigation. It may be the case that current procurement and sustainability strategy do not have the same aims, and the ‘hierarchy’ of these influences will be the deciding factor in which strategy actual decisions reflect. As such, understanding not only what drives or restricts sustainable procurement, but relative importance attributed to each factor is very important in order to understand how decisions are actually made.

4. CONCLUSIONS

The discussion in this paper suggests that it will be necessary to understand a number of aspects of the company in order to develop an effective and robust sustainable procurement policy. Whilst the list of issues discussed is by no means exhaustive, it indicates the wide range of factors affecting sustainable procurement. Following the discussion of these presented above, three questions are presented below for use in research within a large construction company, namely Morgan Sindall plc. of sustainable procurement within construction.
• What factors provide the current motivation for sustainable procurement? Where do these originate?
• What organisational culture features in construction companies and how does this affect the decisions they make?
• How do strategies of sustainability and procurement interact and are there areas of conflict which prevent the objectives of one strategy being achieved by the need to meet those of the other?

It is believed that by using these questions as a starting point for further research, a better understanding of the practices in and influences on the construction industry can be developed through the research to take place in Morgan Sindall plc. Having acquired this information, it will enable a clearer view of where improvements need to be made within current practices in order to make procurement within the industry more sustainable.

REFERENCES


