

Sustainable Balanced Scorecard and Innovation in Public Procurement

Odysseas Manoliadis¹,

¹Associate Professor, Civil Engineering Department, Democritus University of Thrace, Xanthi 67100, Country

Abstract: Public needs have been a long-term driver of innovation in many areas, such as telecommunications, energy, health, transport, security and defense. Where the needs of public bodies can not be covered by products / services already on the market then they are trying to meet the needs either through innovative products / services placed on the market in limited quantities as they are in the process of being Public Procurement in Innovation (PPI) either by designing products or services for R & D procedures or more specifically called pre-commercial procurement (PCP). Procurers can compare competing solutions and get the best price for an innovative solution that is fit-for-purpose, avoiding the cost of unnecessary features or supplier lock-ins, and taking into account longer term public sector requirements. In this research an assessment of sustainability issues *during the procurement process can be obtained through the use of Sustainable Balance Scorecard. The Balanced Scorecard (BSC) as developed by Kaplan and Norton, is introduced with an emphasis on conceptual elements such as the four basic perspectives, the role of leading and lagging indicators as well as the development of strategy maps based on cause-and-effect-chains in and across the BSC perspectives. Due to its openness to modifications of perspectives and indicators and the different kinds of information that can be handled, the BSC was further developed to support an integrated corporate sustainability management as an innovation of public procurement projects. The Sustainability Balanced Scorecard (SBSC) helps to address different environmental and social aspects of public procurement. Moreover, it can be used as a tool of sustainability accounting and reporting. In this paper this methodology is used to diagnose, evaluate and improve the procurement process is based on the Balanced Scorecard (BSC) and applied The results derived from selected projects are reported.*

Keywords: Sustainability, Balanced Scorecard, Sustainable Indicators,

1. INTRODUCTION

Institutional frameworks set the basic conditions for the way the sustainable procurement may be undertaken procedurally, the results that can be expected, and the potential efficiency gains that can be achieved. The professionalism of public purchasers in managing the procurement process and taking advantage of new trends towards green products is

therefore decisive. Since sustainable procurement ensures best value for money through an open and non-discriminatory procurement regime,

In 2014 new procurement directives are coming into effect, replacing the 2004 directives and covering the award of concessions. The new directives open up a number of opportunities for PPI, while maintaining the basic requirements of competition, transparency and equal treatment. Two new procedures are likely to be particularly relevant for authorities who wish to purchase innovative goods, services or works: the innovation partnership and the competitive procedure with negotiation.

By allowing buyers to focus on criteria beyond the initial purchase costs, environmental and social criteria and life-cycle costing can promote innovative solutions. Similarly the use of functional or performance-based specifications can allow more scope for innovative proposals. A number of changes to selection procedures and documentation requirements are also aimed at ensuring SMEs – many of which are highly innovative – have better access to competitions. New rules on joint procurement are intended to facilitate cooperation between contracting authorities, which can encourage risk and benefit-sharing for innovative projects and the pooling of demand.

1.1 Sustainable Procurement

The definition of Sustainability most frequently used to define this concept is the one suggested by the World Commission on Environment and Development; according to this definition sustainability meets human needs while preserving the environment so that these needs can be met not only in the present, but also for future generations. [1] In terms of sustainable procurement, it is very important in achieving a high quality and high performance of through sustainable procurement.

There is no single definition of sustainable procurement – not least because sustainability is a contested concept – and applications vary across organisational hierarchy and sector. Sustainable procurement is a spending and investment process typically associated with public policy, although it is equally applicable to the private sector. [2]

The role of procurement achieving sustainability is fundamental given that the industry's basic function is the manufacture, relocation, and assembly of materials

into structures. BSC is used as a tool for monitoring, measuring and evaluating performance through a set of indicators [3],[4] or by employing the Balanced Scorecard (BSC) framework to Construction Industry [5],[6].

BSC establishes a set of strategic performance metrics to support the organization, provides management with a detailed view of the procurement performance over a period of time, reviewing these metrics on a regular basis, allows identifying areas that may need improvement, and identifies the accomplishments of the organization towards procurement. The four perspectives used in this study are inspired by [5] BSC namely the customer perspective, the learning and growth perspective the internal-business processes perspective and the sustainability perspective

2. THE PROPOSED MODEL

In order to study the status and potential of the application of sustainable procurement we develop a tool based on BSC and sustainability principles to effectively monitor and control project activities for the purpose of improving project results by adding a sustainability perspective.

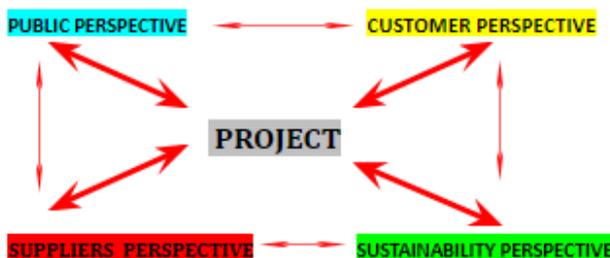


Figure 1 Sustainability Balanced scorecard

2.1 The Public authority Perspective

This perspective looks at the contribution of the project to the core competencies of the organization and to the organization's mission and strategic objectives. Candidate factors could be Solutions to the identified needs or challenges Introduction to new suppliers and service providers

- Cost savings in the short, medium or long-term
- Higher levels of staff and user satisfaction
- Development of knowledge, skills and techniques which can be applied in other projects
- Opportunities to access local, national or EU funds linked to innovation
- Contribution to environmental and social policy targets
- Positive publicity and reputational gains
- Commercial benefits from licensing or joint ventures

2.2 The customer perspective

The customer perspective of our SBSC for construction projects looks at the project deliverables as well as stakeholder satisfaction with the final outcomes Candidate factors could be

- Access to valuable public sector clients
- The opportunity to apply research and commercialise ideas
- Understanding of public sector challenges and priorities
- Exposure to pre-procurement and procurement procedures
- Development of expertise and practical skills
- Opportunities to access local, national or EU funds linked to innovation
- Positive publicity and reputational gains Increased chance of winning future contracts
- benefits from licensing or joint ventures

2.3 The suppliers perspective

Candidate factors could be Access to valuable public sector clients

- The opportunity to apply research and commercialise ideas
- Understanding of public sector challenges and priorities
- Exposure to pre-procurement and procurement procedures
- Development of expertise and practical skills
- Opportunities to access local, national or EU funds linked to innovation
- Positive publicity and reputational gains
- Increased chance of winning future contracts
- Commercial benefits from licensing or joint ventures

2.4 The sustainability perspective

The sustainability perspective may include candidate factors social such as :

- customer satisfaction,
- supplier satisfaction,
- community satisfaction,
- community contributions / and environmental impacts measures such key material usage per production unit, energy usage per production unit,
- water usage per production unit, emissions,
- effluent and waste per production unit, and industry specific factors such as lost time or injuries.
- Better public services and infrastructure Creation of skilled jobs and investment

- Tackling environmental and social challenges (e.g. climate change, energy efficiency, resource use, ageing populations, social exclusion) Smarter use of taxpayer money
- Support for small and medium-sized enterprises Transfer of ideas to other sectors and industries
- Enhanced international competitiveness Opportunity to develop new industries Improvements in quality of life

3. CASE STUDY

For illustration purposes the case of Cleaning and Catering Services division of City of Ghent, Belgium *Innovation in Cleaning: Putting people and the environment first* [7].

3.1 Background and Procurement Objectives

The Cleaning and Catering Services division of City of Ghent, Belgium employs 700 people and has an annual budget of €25 million. One of the division's functions is to clean the City's 340 premises. This encompasses nurseries, police, fire service, school and government administration buildings. 450 people are employed for 1600 hours of cleaning per working day. Ghent wanted to boost the market's capacity to deliver environmentally-friendly and socially responsible cleaning services within a new contract. Tamara Bruning, head of the division, sees innovative procurement as a way to improve quality of life for her people and to deliver better value for money.

3.2 Project Development

The City's cleaning contracts go beyond service provision and are based on a collaborative relationship with cleaning enterprises. Every new tender process in 2013 makes it possible to re-evaluate the contract and to develop new requirements. The City was interested in the introduction of probiotic cleaning products, which were understood to have a lower impact on the environment and human health than traditional cleaning products. Due to the lack of studies objectively establishing the effectiveness and benefits of these products, the need for a trial period was identified. A market analysis was carried out in order to identify companies interested in participating in such a trial.

The aim of the trial was to compare probiotic cleaning products with traditional cleaning products. The City tried to engage as many enterprises as possible to join the trial. This was of importance as a control factor, large discrepancies in results between different participants would signify a need for further research. An external cleaning quality control organisation was engaged to test the products in different trial locations based on a check list. Four different probiotic cleaning products were selected to test. The products had to meet certain criteria, e.g.: The combination of bacteria in the product needed to be defined as "qualified Presumption of Safety" by EFSA (European Food Safety

Association). Social economy cleaners sweep the pavement in front of the city hall. 36 Probiotic cleaning was evaluated on the following criteria: Odour Visual cleaning performance Hygienic cleaning results The products were tested on their performance in four different locations: Public toilets School environment Public administration Nurseries Four enterprises participated in the trial project, which ran for a period of two months. Lab tests were carried out to measure levels of mould and bacteria against the baseline measurements in each location.

3.3 The SBSC framework

The SBSC framework is derived as follows:

3.3.1 The Public authority Perspective

- user-friendliness of the products tested
- collaborative relationship with cleaning enterprises

3.3.2 The customer perspective

- better value for money
- improve quality of life
- safe microbiological environment
- The users of the cleaning products were actively involved in the project

3.3.3 The suppliers perspective

- to deliver environmentally-friendly service
- to deliver socially responsible cleaning
- client satisfaction of the products
- Visual cleaning performance

3.3.4 The sustainability perspective

- Social economy enterprises are defined as those in which at least 80% of the employees were inactive or unemployed for at least 12 months
- reduce the number of bacteria
- elimination of odors
- life-cycle impact of products

4. CONCLUSIONS

As indicated above, there are numerous opportunities to enter the market for sustainable procurement and technology. On the ground experience has demonstrated that the local market readily adapts to sustainable solutions that can demonstrate return on investment

The application of SBSC is not simply a data gathering exercise. It is an integral part of strategic policy development and implementation towards the improvement of the performance of the industry. This study systematically developed a set of indicators to measure the performance of sustainable procurement, with the future aim of setting benchmarks. The

development and testing of a SBSC framework is important because corresponding indicators pave the way for benchmarking.

This study has contributed to knowledge by developing and testing a SBSC framework for public procurement. Indicators have been developed under the four perspectives: The Public authority Perspective, The customer perspective, The suppliers perspective and the The sustainability perspective.

This methodology can utilized in many cases and organizations By adopting this methodology it's possible to achieve business success while operating in a socially and environmentally responsible way by achieving balance of financial, social and environmental objectives, supporting key stakeholders and motivation

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The authors can acknowledge any person/authorities in this section. This is not mandatory.

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Odysseas Manoliadis is Associate Professor in the Civil Engineering Department of Democritus University of Thrace He teaches the Subject of Management of Projects and Enterprises and he is in the Editorial Board of the Journal of Public Procurement