Social Enterprises and Sustainable Waste And Resource Management: Evaluating Impacts, Capacities and Opportunities

Final Project Report for WR0502:

January 2008

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This research was commissioned and funded by Defra. The views expressed reflect the research findings and the authors’ interpretation. The inclusion of or reference to any particular policy in this report should not be taken to imply that it has, or will be, endorsed by Defra
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<thead>
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<th>Acronym</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>CCN</td>
<td>Community Composting Network</td>
</tr>
<tr>
<td>CIC</td>
<td>Community Interest Company</td>
</tr>
<tr>
<td>CRN</td>
<td>Community Recycling Network</td>
</tr>
<tr>
<td>DEFRA</td>
<td>Department of Environment, Food &amp; Rural Affairs</td>
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<tr>
<td>EBS</td>
<td>Environmental Business Support</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>EWC</td>
<td>European Waste Catalogue</td>
</tr>
<tr>
<td>FRN</td>
<td>Furniture Recycling Network</td>
</tr>
<tr>
<td>GIS</td>
<td>Geographical Information System</td>
</tr>
<tr>
<td>LA</td>
<td>Local Authority</td>
</tr>
<tr>
<td>LCRN</td>
<td>London Community Recycling Network</td>
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<tr>
<td>LM3</td>
<td>Local Multiplier 3</td>
</tr>
<tr>
<td>MSW</td>
<td>Municipal Solid Waste</td>
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<tr>
<td>SME</td>
<td>Small to Medium Enterprise</td>
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<tr>
<td>OFT</td>
<td>Office of Fair Trading</td>
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<tr>
<td>OTS</td>
<td>Office of the Third Sector</td>
</tr>
<tr>
<td>RDA</td>
<td>Regional Development Agency</td>
</tr>
<tr>
<td>UO</td>
<td>Umbrella Organisation</td>
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<tr>
<td>WEEE</td>
<td>Waste Electrical and Electronic Equipment</td>
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</table>
Executive Summary

This report presents an analysis of the capability of social enterprises (SE) dealing in waste to become more effectively integrated into the waste management infrastructure in England and Wales. Using a variety of research methods, the report addresses some of the key developmental problems for the sector, including issues of data collection, sector mapping, funding provision, knowledge transfer and key institutional relationships. The analysis concludes by identifying a series of key opportunities and barriers for the sector as a whole. This document is accompanied by an annex document that provides supplementary detailed analysis of the constituent elements of this research project.

Our analysis is based on three distinct but complementary approaches to empirical analysis. Firstly, we provide an analysis of existing data records for the sector held by Umbrella Organisations (UO) who provide services to their members including policy representation. This data is primarily analysed in relation to its robustness as a reference source for policy based intervention. Secondly, we report on an interview based consultation with experts involved in the sector including representatives from individual SEs, UOs, policy makers and waste management companies. This provides a detailed snapshot of existing views and attitudes regarding the potential for a more integrated waste SE sector. Finally, analysis is drawn from two in-depth and four ‘second-tier’ case studies developed in order to provide a context rich account of how such firms operate at the grass roots level and their impact on economic, environmental and social elements of sustainability.

The foundations of this research were built on a detailed review of academic literature on issues surrounding SE and waste. This provided grounding for the development of an initial typology of waste SEs which was employed to aid the selection of case studies. The development of the case studies along with the other empirical elements enabled the typology to be tested. It then formed the basis for the development of a reflexive analysis tool designed to assess individual waste SEs according to two key relational dimensions: mission versus market focus and environmental versus social focus.

The main findings of this research report are summarised as follows:

The Waste SE Sector is Highly Diverse

Our research highlights the diversity of the sector in terms of materials collected, organisational operation and development trajectories. This is reflected in the typology which captures this heterogeneity by defining individual businesses according to a series of defining criteria. As the typology tool highlights, to aid conceptual clarity, much of this diversity can be reduced to two dimensions: Social versus Environmental Focus & Mission versus Market Focus. Whilst this approach provides some clarity to analysis, it also removes much of the complexity that otherwise defines both individual organisations and the sector as a whole. The diversity inherent in the sector has strong implications both for support provision and its potential as an integrated component of UK waste management and suggests that desires for rigid overarching support structures may be flawed.

Existing Data Collection Restricts Opportunities for Development

Our analysis concludes that data collection processes for the sector significantly limit our ability to understand its activities and value its contribution to waste management. We present an analysis of the effectiveness of data to meet specified needs, including capacity development, compatibility with current waste infrastructure data collections and its potential as a tool for organisational development. The report identifies a series of recommendations which highlight that data collection by UOs needs to be consistent both across and within the UOs. This particularly applies in relation to data collection methods. UOs currently play the key role in this regard and we recommended that they take a lead on improving the current quality and standard of data collection and management. It is fundamental that UOs promote the need for consistent, accurate and complete data across their members and act as champions in delivering these requirements. Current gaps in data have to be addressed and it is recommended that a ‘road map’ approach is applied to drive improvements in data collection that promote collaboration across UOs, and engage other stakeholders. The sector as a whole would benefit from accurate data collection as it would help service providers and policymakers to appreciate their contribution. A clear message from this research is that the sector cannot achieve its

1 The case study reports are not publically available in order to preserve organisational anonymity. For more information please contact the Authors.
full potential, particularly through an integrated system of waste management, unless these data problems are resolved.

The Case for Greater Integration is Not Always Clear

Our research finds that whilst a number of opportunities exist for further integration of SEs in the UK waste management, existing barriers can and do influence the extent of this integration. Although an accurate analysis of the sector’s actual and potential capacity was not possible due to a lack of consistency in data gathering on waste quantities and waste types, it is clear from the data that only a small minority of SEs handle large tonnages of waste. The vast majority of waste SEs handle only small quantities, particularly when contrasted with the mainstream waste management sector. When this is combined with a diversity of growth objectives among SEs, it would appear that only a small percentage of existing Waste SEs have both the capacity and desire to be more fully integrated into the waste management infrastructure. Moreover, we suggest that integration within the mainstream waste framework may not be the best source of future development for many SEs. We conclude that in many cases, improved integration within other agencies in their localities such as social services would be more appropriate.

The potential role of waste SEs should also be assessed in the context of current waste management infrastructure in the UK. The location of reprocessing facilities or the low density of these facilities in certain areas appears to act as a barrier to improved integration, particularly in an era of high fuel costs. Greater proximity to reprocessing facilities could allow SEs to increase not only the volumes but also the types of waste they collect.

Opportunities Exist for Integration Outside of Mainstream Waste Management

With increased policy support for the greater involvement of SEs within the waste sector (DEFRA Waste Strategy for England 2007), opportunities exist to build capacity through a number of identified avenues. A key component of enhanced integration lies in improved partnerships and networks, including working agreements with other organisations/enterprises acting in a referral role. The report highlights the role of different agencies, in particular local authorities (LAs), the environmental business support sector, social services and regional development agencies, which can potentially provide either supply or demand services. However, due to the complexity and variability of the sector there is no single solution to who SEs should work with or how partnerships or networks should operate.

Further opportunities also exist for the sector within certain waste material markets, in particular through focusing on electronic and bulky waste. However, many stakeholders within the sector recognise that the Waste Electrical and Electronic Equipment (WEEE) directive can be both an opportunity and potentially a threat due to the attraction of commercial interests to the area.

Along with the UOs, local authorities represent the key institutional relationship for the majority of SEs and the nexus between SEs and LAs needs to be recognised as a priority point. In particular, the report shows that Local Authorities could benefit from more robust assistance to understand the importance of SEs and to understand and accommodate for the complexities inherent within the SE waste sector. The report recommends a drive towards a better understanding and greater consistency of approaches between local authorities and the local SEs involved in waste.

Funding Provision Must be More Strategic

Additionally, the report highlights the need for a strategic perspective on funding provision for the sector. Any strategic approach should cross traditional policy areas and take account of the multitude of sources that SEs use for support funding. Funding arrangements should be designed so as to promote other policy goals in the sector as well as financial objectives. Lack of clarity of funding sources is highlighted in the report as a key barrier for many SEs. This can largely be attributed to the fact that SEs frequently straddle social, environmental and economic policy domains and therefore can 'slip between' funding support provision as agencies focus on their own core priorities. Although such agencies have a responsibility to prevent SEs becoming needlessly grant dependent, this report suggests that some of the vitality of the sector is currently being lost due to inappropriate funding provision and, more broadly, inappropriate income mechanisms.

More generally, many income-related problems in the sector could be resolved by public sector organisations and Local Authorities in particular, adopting a more joined up approach to Waste SEs. This includes more effective referral systems to link SEs with individuals in need of their services, and more sympathetic procurement structures to provide opportunities for SEs who want to be better integrated.
1. Introduction

1.1 The Need for Research

The recent Waste Strategy for England 2007 identifies the role of social enterprises (SEs) in waste management and the importance of integrating waste orientated SEs into a more effective and integrated waste management infrastructure. To quote the strategy ‘the government wants third sector organisations to win an even bigger share of the waste management market’.

This research aims to assist both policymakers and practitioners to achieve this goal by focusing on the role of SEs involved in waste management in England and Wales. Using a variety of research methods, we attempt to address some of the key developmental problems for the sector, including issues of data collection, sector mapping and the identification of opportunities and barriers for the sector as a whole.

This report aims to provide a clearer understanding of the capability of SEs to deal with existing and future waste streams. We also provide evidence of existing barriers that need to be addressed in order to facilitate the increased involvement of SEs in sustainable waste management in England and Wales.

The study also aims to respond to policy interests in knowledge transfer and capacity building by providing a database of evidence, using mixed research methods, on the role of SEs in sustainable waste management.

This report employs the UK government definition of Social Enterprises, as quoted in the Social Enterprise Action Plan ‘Scaling New Heights’ as “a business with primarily social objectives whose surpluses are principally reinvested for that purpose in the business or in the community, rather than being driven by the need to maximise profit for shareholders and owners”. As such, waste SEs encompass community groups, charities and businesses driven by social or environmental aims (such as Community Interest Companies (CICs)).

1.2 Objectives of Project

The primary aim of this research is to evaluate the potential capacity of the SE sector to deal with wastes and resources, to assess the ways in which the SE sector can be more effectively included into an integrated and more sustainable waste infrastructure in the UK, and to develop the skills and knowledge capacity of the SE sector through a range of research and communication actions carried out both during the lifetime of the project and following its completion. The specific objectives required to achieve this are as follows:

- To conduct a literature review of academic work related to SEs and their relationships with the waste management sector.
- To identify and assess existing data sources and use these to map the current pattern of SEs involved in dealing with the management of resources and wastes in England and Wales.
- To consult with a range of expert stakeholders in the sector about current issues surrounding waste SEs.
- To conduct two detailed and four second tier case studies to measure and evaluate the impact of SE activities on economic, environmental and social sustainability on local, regional and ultimately UK-level communities.
- To conduct final analysis work and to synthesise the gathered data to provide a range of targeted recommendations to encourage, if appropriate, the more effective development and integration of SEs into the resource and waste management infrastructure in England and Wales.

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1.3 Scope of Report

The report is divided into 8 sections. Section 2 outlines the methodology used in the project to obtain the relevant information to assess, where practicable, the ability of the sector to be more integrated into the waste management infrastructure. In Section 3 an analysis of current data held by Umbrella Organisation (UO) is undertaken and this highlights the inherent difficulties in mapping the sector across England & Wales. Section 4 provides an overview of the significance of the sector and looks at the role of the sector in terms of waste quantities, waste types and the specific contribution it currently makes to diverting waste from landfill. Sections 5 and 6 consider the opportunities available for social enterprises to expand and the barriers that they face to playing a greater role in sustainable waste management. Section 7 considers the implications arising from the difficulty in characterising the sector and how mapping the sector may assist in better targeting of advice and assistance. The final section (8) provides a number of recommendations that may assist the sector to become better integrated into a more effective waste management infrastructure and suggests priorities for further research. All the Annexes referred to in this report are available in an accompanying document⁴.

2. Methodology

Initial work on this project was directed at producing an exhaustive literature review on the contribution of SEs to sustainable waste management and recycling in England and Wales. While there is relevant academic literature on the UK SE sector, most of the available publications and data emanate from government reports, material from non-profit organisations and press articles. The literature review is available in the Annex document and it is envisaged that it will generate further discourse on the role of SEs in sustainable development.

To obtain a deeper understanding of the sector’s role in contributing to landfill diversion, recycling and reuse targets and any potential for greater integration within the waste management infrastructure, three core methodological steps were identified, the first of which was mapping the sector. The issue of defining what is a SE permeates throughout discourses on the sector. Because of this extensive definitional debate, a typology to aid identification was developed as part of the methodology (the typology is discussed at Section 2.2 and Annexes 4 and 5). This typology was used to identify different types of organisations and to complete the second methodological step; on-site research supported by second tier case studies reflecting the differences in problems, barriers and issues confronted by these types of organisations. As the mapping and case studies provided the internal perspective the final and third step was a series of interviews to elicit external views and opinions on the role of the sector and its potential to be, where appropriate, more effectively integrated into the waste management infrastructure.

To guide the direction of the project a steering group of experienced stakeholders was established, providing valuable insight into the sector. This was supported by a series of seminars throughout the life of the project with practitioners, academics and policy makers, in order to achieve feedback on the project development, direction and on the preliminary findings.

2.1 Mapping UK SEs and Data Collection

The six main SE umbrella organisations⁵ across England and Wales provided copies of their current member datasets. These individual datasets were collated to produce a single dataset of SE organisations (‘Database’). A cross referencing of the data was conducted to identify any duplicate members (that is members who were registered with many UOs; see Figure 1), members outside the research jurisdiction and members that would not fall within the characterisation of an SE (local authorities, commercial waste management organisations and NGOs). This reduced the dataset from a list of 1043 to 613 organisations. As this compiled dataset represents only registered members of the UOs, it is acknowledged that the sector is larger than these 613 organisations. For example, membership does not necessarily include all of the operating sites, outlets or all regional subsidiaries of individual members. The limitations to the figures provided in this report are outlined in Figure 2. This edited dataset provided the basis to map the locations of SEs across England and Wales on a Geographical Information System (GIS) map (see Section 4.1).

⁴ See “Annexes for WR0502 - Social Enterprises and Sustainable Waste and Resource Management: Evaluating Impacts, Capacities and Opportunities” published alongside this report

⁵ CyH, CRN, FRN, CCN, LCRN and Community Re-Paint
DATA LIMITATIONS

The figures presented in this report are drawn from the datasets provided by 6 Umbrella Organisations and as such are dependent solely on the information requested by or sent to these organisations. Consequently, the figures do not represent the SE sector dealing in waste as a whole but merely provide a snapshot of current, existing and available data. Additionally, the figures may not represent the information held by each of the member organisations but merely that which that member has submitted to the various Umbrella Organisations.

One of the aims of the project was to assess the current and potential capacity of the sector; therefore access to available data played a vital role in accomplishing this aim. To assess the quality of current data held by the UOs a set of assessment criteria was developed. These criteria provided in Table 1 were partly based on Defra’s own assessment criteria provided in the Waste Data Strategy, with some changes reflecting the specific nature of the SE sector. Subjecting the data to rigorous analysis provided an understanding of areas of confidence and areas of doubt in terms of the data coverage, accuracy and quality. The full analysis of the data using these criteria is located in Annex 1.

Table 1: Data Assessment Criteria

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Ability to provide accurate data to assess contribution to diversion from landfill targets</td>
</tr>
<tr>
<td>2</td>
<td>Ability to produce consistent data across all Umbrella Organisations</td>
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<td>3</td>
<td>Ability to provide the quality of data to inform planning and policy making and decisions on infrastructure</td>
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<tr>
<td>4</td>
<td>Ability to provide a complete data set without the need for surveys</td>
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<tr>
<td>5</td>
<td>Ability to allow GIS mapping and flow modelling</td>
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<tr>
<td>6</td>
<td>Ability to provide accurate data to meet reporting requirement</td>
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<td>7</td>
<td>Ability to ensure consistent classification of waste</td>
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<tr>
<td>8</td>
<td>Ability to provide data across different contractors without other data sources</td>
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<tr>
<td>9</td>
<td>Resource demands placed on the sector by data collection system</td>
</tr>
</tbody>
</table>

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2.2 Typology and Case Studies

2.2.1 Typology

An initial typology of SEs was developed to support the identification of organisations to participate as case studies; a first tier of two participant observation studies and a second tier of four illustrative case studies that demonstrate the extensive range of organisations within the sector. The typology model (Figure 3) employs a number of criteria that can be represented on a continuum of activities in which changes can be identified and plotted to establish the typological make up of each organisation as it goes through its stages of existence. The criteria focus on funding sources, the degree of commercialisation or otherwise, the level of consumer or public body interaction, size, quantities and types of waste. A comprehensive methodology for the typology used in the project is located at Annex 4.

As SEs exhibit a broad spectrum of different characteristics, they are likely to be affected by external and internal pressures in different ways. In order to assist better identification of appropriate types of advice and assistance to enable a SE to develop or to respond to these pressures, the above typology was developed into a tool. The tool enables individual SEs to be characterised according to two clear dimensions: the extent of their market versus their mission focus and the extent of their social versus their environmental focus. The development of this model and its application is described in more detail in Section 7. Within the sector, definitions play a vital role as an initial identification of an organisation as a SE can determine the access that organisation has to support services, grant funding, loans contracts and a variety of other resources that determine how successful and sustainable the business is and can be.

2.2.2 Case Studies

The first tier case studies involved on-site participant observation requiring a researcher to be based at a designated SE; one in Wales, the other in England. Through a series of meetings and interviews the researchers, using semi-structured questionnaires, were able to elicit information on the strengths and weaknesses of the organisations and the opportunities, barriers and issues they face. A broad range of subject areas relevant to the organisation’s operations were covered. Table 2 outlines the key subject areas addressed.

<table>
<thead>
<tr>
<th></th>
<th>First Tier Case Study Questionnaire Themes</th>
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<tbody>
<tr>
<td>1</td>
<td>Profile of Organisation</td>
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<td>2</td>
<td>Structure of Organisation</td>
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<tr>
<td>3</td>
<td>Processing Costs</td>
</tr>
<tr>
<td>4</td>
<td>Waste Sourcing</td>
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<td>5</td>
<td>Waste Stream Collection Costs</td>
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<tr>
<td>6</td>
<td>Waste Stream Destination and Income</td>
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<td>7</td>
<td>Waste Stream Sources</td>
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<tr>
<td>8</td>
<td>Funding and Finance</td>
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<td>9</td>
<td>Service Contracts</td>
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<td>10</td>
<td>Procurement Activity</td>
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<tr>
<td>11</td>
<td>Physical Capacity</td>
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<tr>
<td>12</td>
<td>Resources Capacity</td>
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<tr>
<td>13</td>
<td>Technical Capacity</td>
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<tr>
<td>14</td>
<td>Knowledge and Information Gathering</td>
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<tr>
<td>15</td>
<td>Membership of Organisations</td>
</tr>
<tr>
<td>16</td>
<td>Partnership Activity</td>
</tr>
<tr>
<td>17</td>
<td>Management Systems, Processes and Procedures</td>
</tr>
<tr>
<td>18</td>
<td>Management Issues - Social</td>
</tr>
<tr>
<td>19</td>
<td>Sustainability Impacts – Economic</td>
</tr>
<tr>
<td>20</td>
<td>Sustainability Impacts – Environmental</td>
</tr>
<tr>
<td>21</td>
<td>Sustainability Impacts - Social</td>
</tr>
<tr>
<td>22</td>
<td>Competition and Market Entry</td>
</tr>
<tr>
<td>23</td>
<td>Education and Awareness</td>
</tr>
</tbody>
</table>
Interviews with the four second tier case studies were conducted using an edited list of semi-structured questionnaires following a similar pattern to the first tier, although less in-depth. The subject areas covered during the interviews mirrored closely the themes used during the first tier case studies. This provided a consistency of analysis and encouraged the ability to draw cross case analysis.
All second tier interviews were conducted face to face with a person of lead responsibility in the organisation. Interviews were digitally recorded and transcribed. The data compiled from all of the organisations was presented in a case study format and the results are used as illustrations throughout the report.

2.2.3 Stakeholder Interviews

A consultation with experts within the waste and social enterprise sectors provided a vital part of this research process. The aim was to develop a snapshot of the sector, its current developments, priorities, barriers and opportunities. The interviews were also designed to inform the other parts of the research process, particularly the case study development. The interviews were often fairly unstructured in nature, allowing for issues and priorities to emerge that reflected the views of the interviewee. Care was taken however, to ensure that all the relevant topic areas were covered during each interview (see Figure 4 for key topics).

Figure 4: Stakeholder Interview Themes

- Organisational Background
- Personal Background
- Current Sector Patterns
- Significance of SE Involvement in the Sector
- Pros and Cons of Further Integration
- The Role of Funding
- Other Forms of Support
- Strengths and Weaknesses of SEs
- Current Opportunities for the Sector

During a two month period (March – April 2007) a total of 27 individuals were identified and interviewed on a one to one basis. 20 interviews were conducted in person with the remainder done by telephone. All interviews were digitally recorded and transcribed. The interviews were conducted in a semi-structured format using a common set of core questions (see Annex 3). In addition, a number of questions were added depending on the background of the interviewee.

Figure 5: Number of Interviews by Stakeholder Type

<table>
<thead>
<tr>
<th>Stakeholder Type</th>
<th>Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEs</td>
<td>3</td>
</tr>
<tr>
<td>UOs</td>
<td>7</td>
</tr>
<tr>
<td>Other Support Agencies</td>
<td>4</td>
</tr>
<tr>
<td>Mainstream Waste Management Companies</td>
<td>3</td>
</tr>
<tr>
<td>Government (National, Regional &amp; Local)</td>
<td>6</td>
</tr>
<tr>
<td>Academics</td>
<td>3</td>
</tr>
</tbody>
</table>

Where experts were sought as representatives of organisations, the most senior person available was interviewed wherever possible.

3. Mapping the UK SE Sector: Impacts of Data Gaps

3.1 Introduction

The data was analysed using the 9 appraisal criteria outlined in Table 1 of the methodology (Section 2.1). The aim of the project was to map the entire SE sector involved in waste related activities. To achieve this requires data of a relevant standard, accuracy and consistency, but unfortunately the collated data did not meet these criteria. There are a
number of potential reasons for this: firstly there is no standardised collection procedure across all of the umbrella organisations; and secondly, different umbrella organisations work to different timeframes therefore resulting in submitted data from different years. The third reason is the driver behind the need for data collection. Whilst many of the umbrella organisations have highlighted the importance of the role of data, the full potential value may still need to be elucidated. Data can be a powerful internal and external management tool. To maximise the benefits of data, one must link the types of data collected with the purpose of the data, for example in order to highlight the organisation’s social contribution as a positive criterion for funding organisations, data needs to be collected on the positive social impacts.

With no standardised collection procedure, there is no consistency in the quality or type of data provided therefore, whilst some members supplied information on annual waste tonnages, others did not. However, this does not mean that this data does not exist or is not recorded by the individual members. As it is legally binding for any organisation registered as a waste carrier or waste operator and not exempt under the relevant regulations’ to record information on waste types and quantities, the required data is available and held by individual members. However, because a survey of member organisations was considered to be over burdensome by the project’s advisory group, reliance on existing data was critical to the evaluation of the sector’s capacity both in terms of current and future ability. Consequently, due to the numerous data issues outlined in Figure 2, the quality of available data became a major contributing factor in assessing the ability of the sector to either increase its capacity in terms of waste quantity and/or be more integrated into the waste management infrastructure.

3.2 Data Analysis

Numerous questions were raised in relation to the quality of the data in the Database, for example the inconsistency between each of the UOs’ collection methods resulted in the recording of different data for an organisation that was a member of more than one UO including the number of employees and the quantity of waste handled. This raises questions relating to the accuracy and consistency of the data and duplication can prevent a false image of the actual size of the sector. As Figure 2 and Annex 1 highlight, there are a number of data gaps in the existing available data provided by the UOs. The impacts of these gaps will be discussed in Section 6 of this report.

Whilst some of the UOs have attempted to collect more consistent tonnage data this has not proven wholly successful. For example, a survey in 2003 was sent out to 211 Community Recycling Network UK (CRN) members with a high response rate of 66%, of the 139 returned questionnaires only 97 included tonnage data. Similarly, London Community Recycling Network’s (LCRN) annual data survey had a response rate of about 30% in 2007, of which only approximately half (15%) provided new capacity data.

Table 3: Summary of Data Analysis (complete analysis in Annex 1)

<table>
<thead>
<tr>
<th>Data Content</th>
<th>Findings</th>
<th>Benefits/Risks</th>
</tr>
</thead>
</table>
| **Tonnage Figures**              | 1. Whilst some UOs provided tonnage figures in their datasets, others did not.  
2. Whilst some provided figures in tonnage values, others provided data in number of items. There was no supporting metadata to provide information on the conversion factors used to convert items to a tonnage value.  
3. Some datasets recorded tonnage as an approximate. | 1. There is no complete dataset of the total tonnage of waste collected by the sector and therefore of the sector’s contribution to the diversion of waste from landfill.  
2. This raises doubts as to the accuracy of the data due to the lack of transparency in relation to how tonnage figures are derived.  
3. Impacts on the robustness of the data and raises questions on the accuracy of the data. |
| **Classifications:** Waste & Management Options | 1. There was no consistent classification of wastes recorded as there was no common codes (EWC codes) used to record the data.  
2. There was no consistent data across the UOs relating to the handling of waste. | 1. For individual members or UOs this may not be a major problem but for collated data one needs to make assumptions on what wastes should be grouped together.  
2. There can be no accurate snapshot of waste data. |

| **Quality** | 1. An inventory of the datasets using 7 criteria (name, address, postcode, employment figures, turnover, tonnage and services) showed that only the name of the organisation returned a 100% completion rate.  
2. Each UO appears to collect and update data from members at different timeframes.  
3. Members of multiple UOs were often recorded under different variations of the name and with different postcode. | 1. With an incomplete list of data, an accurate GIS map of the sector across England and Wales was not possible. Members may provide different types of information if they belong to more than 1 UO. May be indicative of an attitude relating to a perception that data is not important.  
2. It is therefore not possible to say in any given year the total contributions of the sector to waste management or waste diversion from landfill.  
3. Raises issues relating to accuracy and robustness of the data. |
| **Data Gaps** | 1. Incomplete information on the quantity of waste collected by each member organisation involved in waste collection due to some UOs not recording or providing the relevant data or due to approximates being supplied.  
2. Incomplete information on the quantity of waste types (e.g. plastic, paper, metal, etc) collected by each member organisation involved in waste collection.  
3. Incomplete data on postcodes of many of the SEs therefore impacting on any mapping exercise.  
4. Incomplete data on employment figures with no information for 81 organisations on the Database  
5. Incomplete data on turnover.  
6. Incomplete data on services provided (e.g. training, awareness raising, etc).  
7. No data provided on capacity (actual).  
8. No data provided on reprocessors, including distances travelled.  
9. No source data provided (e.g. whether waste arising from municipal or commercial sources).  
10. No data on the source location.  
11. No data provided on whether waste is hazardous.  
12. No consistent handling data (e.g. whether re-use, recycling, etc). | 1. This may indicate that there is no evidence base for any forecasting of potential  
2. Current information does not provide sufficient evidence to assess capacity planning and any planning would be based on incomplete or inaccurate data.  
3. This would provide valuable information on the distances travelled and the cost of the transport – it would also assist in the better planning of facilities and whether there is a sufficient demand for local facilities. |
| **Capacity & Infrastructure** | 1. The data collected does not contain any information on the actual or potential capacity of the member organisations.  
2. No data provided on the source identification of the waste, e.g. whether municipal, commercial or mixed.  
3. No data provided on reprocessing facilities, e.g. distances travelled  
4. No data provided on rejected materials. | 1. This may indicate that there is no evidence base for any forecasting of potential  
2. Current information does not provide sufficient evidence to assess capacity planning and any planning would be based on incomplete or inaccurate data.  
3. This would provide valuable information on the distances travelled and the cost of the transport – it would also assist in the better planning of facilities and whether there is a sufficient demand for local facilities. |

waste materials, e.g. whether the material was re-used, recycled or composted.  
3. No data provided on whether the wastes handled were hazardous or contained hazardous components.
4. Sector Significance

4.1 GIS Mapping of SE Locations in England and Wales

*Map 1* provides an overview of the distribution of SE organisations across England and Wales. Of the 613 organisations, 542 are based in England and 72 in Wales.

Map 1: Location of SE Organisation in England & Wales

The Map illustrates that SEs are dispersed across the two regions, with some areas appearing to have less representation, for example mid Wales; however, this is merely representative of this area, which has in general a low population and lack of commercial enterprises. The North of England also seems to be less well represented, whilst

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8 Map 1 is based on the collated Database, which had a total of 613 entries.
the greater London area has the densest population of SEs. Map 1 is not definitive as it only includes those organisations registered with an UO and therefore is missing all SEs that have no such affiliations. Various research projects into the size of the sector have estimated that there are between 850 to 1200 organisations in England alone (see a survey by Luckin & Sharp (2002)\(^9\) and a review by Williams et al. (2005)\(^10\). Consequently, it can be assumed on the basis of this research that the sector is greater than that represented on Map 1.

4.2 Waste Types and Tonnage

4.2.1 Waste Tonnage

“There are no reliable figures for the total tonnage of waste...”
- The Review of the Voluntary and Community Waste Sector in England\(^11\)

The task of estimating the total tonnage of waste handled by SEs in England and Wales over a specified period was seriously affected by the data problems outlined in Section 3.2. One of the main problems was that data submitted by the UOs was spread across different time periods and therefore the figures provided below represent the tonnage figures provided by individual organisations to member organisations but do not necessarily represent a tonnage figure handled during the same time period. As a consequence of this, it was not possible to run standard statistical analysis or to estimate any confidence levels in the data.

Of the 613 organisations only 154 provided tonnage data, which covered both Municipal Solid Waste (MSW) and commercial and industrial waste, were applicable. However, due to the quality of data, it was not possible to segregate the quantities accurately between these two broad types. Consequently, the tonnage figure recorded in the Database of 427,108 tonnes must be viewed with caution. Firstly, and most significantly, the data are severely influenced by the near 300,000 tonnes collected by one SE. This one large organisation, which has numerous sites around the country, cannot be considered to be representative of the sector and therefore holds a unique position within the sample of organisations. It is therefore an outlier within the dataset and must be treated separately from all other SEs.

Without this one organisation, the tonnage returned by the remaining 153 SEs is 127,108 tonnes. However, numerous factors must be taken into consideration in determining whether this can be used as the basis for calculating even a crude tonnage estimate for the sector. For instance, some of the organisations not providing tonnage data may not collect or handle waste but instead concentrate on other waste activities such as education or consultancy. Of those that do, however, this data was not available from the UO datasets, or if available was not in any consistent manner, with figures often recorded either as items (e.g. tyres) or in other weight formats. As no supporting metadata is provided it was not possible to conduct the necessary tonnage calculations for these waste streams. Nonetheless, the calculated mean is 825.4 tonnes and the median is 105.55 tonnes. The difference in the two figures highlights that the majority of the organisations collect only small quantities of waste with only 15 organisations collecting over 1,000 tonnes. However, without a fully complete dataset any comment on the data is limited.

Figure 6: Statistical Note on Data Analysis

<table>
<thead>
<tr>
<th>STATISTICAL EXPLANATORY NOTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>The median value is the midpoint of the ranked series of tonnage figures provided in the dataset, it does not include the 300,000 tonnes recorded by one organisation. The mean value was calculated by taking the total tonnage recorded and dividing by the 153 organisations providing this data.</td>
</tr>
</tbody>
</table>


\(^11\) Ibid.
England. The difference between the estimates from the Review and the estimates found here could be attributed to the methodologies used and assumptions made in each of the reports. However, exploring these is beyond the scope of this report. In general however, when calculating estimates, any assumptions about the sector should not be applied generally, due to the sheer diversity of objectives, activities, materials handled and whether there is a direct or indirect focus on waste management (see Typology Annex 5). Consequently it is difficult to estimate the quantity of waste handled on the basis of employees or turnover. If employees were used as a variable for calculating average estimates for SEs, one would also need the relevant information on the number of volunteers employed by the sector. Of the 153 records providing tonnage data, the quantities moved along a spectrum from 0.25 to 45,000 tonnes. The organisation recording 0.25 tonnes employed nine staff; the organisation recording 45,000 tonnes employed on average seven and a half staff. Consequently, estimates based on the tonnage against staff ratio could be misleading. Even estimates based on ratio of income to tonnage cannot provide further elucidation. For example there is only £90,000 of a difference in income between the two organisations above.

The consequence of this vacuum of data is that the calculation of accurate total tonnage of waste diverted from landfill, recycled or re-used was not possible from current available data. Tonnage estimates based on ratios of staff or income to tonnage could be severely flawed. Subsequently, it is not possible to accurately estimate the total contribution of the sector to waste management, whether its strengths lie in recycling, re-use or composting, or the total quantities of specific waste materials handled by the sector.

4.2.2 Waste Types

The main source of waste from SEs is household waste (as evidenced in the case studies by the types of waste collected and by the type of main client), although many also collect or handle certain commercial and industrial wastes, particularly paper, cardboard or IT wastes. Figure 7 illustrates the percentage, from the organisations providing information, on the types of materials handled by the sector. Of the 613 companies, data on waste materials (electrical, furniture, glass, metal, paper, plastics and textiles) was available for 262. As the Graph demonstrates, furniture is the most common waste stream with 25% of the SEs handling this type of waste.

Figure 7: Percentage of SEs handling specific type of waste material

The above chart does not highlight the significance of the sector in collecting niche wastes for example toner cartridges, Christmas cards, Christmas trees, etc, which are dealt with primarily by charities (Table 4). Electrical goods in the form of white or brown goods and computers are also handled by the sector (19% of the database organisations stated collecting this type of waste) and with the impact of the European Commission Waste Electrical and Electronic Equipment Directive (WEEE), this is a definite potential area of growth for the sector (see Section 5.4.1), particularly in relation to refurbishment of the goods and the subsequent sale to disadvantaged groups. However, the existing data is incomplete and there is no robust data on the tonnage values relating to the more esoteric wastes.

Table 4: Range of Niche Waste Streams included in SE Database

- Spectacles
- Mobile Phones
- Nappies
- Hand Tools
- Shoes
- Batteries
- Oils
- Carpets
- Printer & Toner Cartridges
- Bicycles

The main significance is that SEs tend to engage in waste streams that have a capacity for recycling or reuse, therefore allowing these items to be used to help fulfil the social aims of the organisation.

4.3 Behaviour Change

Experts consulted in this research recognised the ability of community groups and SEs to influence both household and more general consumer behaviour beyond what is normally possible by profit-oriented business or public institutions. Although this perception appears virtually unanimous, little hard evidence can be given that demonstrates why this is the case. This positive aspect of SE activity in the waste sector is typically attributed to closer ties between community-based enterprises and communities themselves. Both households and businesses to a lesser extent, seem more receptive to influence from organisations and individuals whom they perceive to be motivated by environmental or social benefits – in other words for the public good of the community. Another possible factor would appear to be the fact that SEs do more educational activity rather than are actually better at it – although this research did not specifically find (or set out to find) evidence of this.

Re-use groups were also seen as often being able to extract goods from households and businesses that would otherwise remain in storage. This, of course, could be seen as creating ‘additional’ waste flows, although this activity does increase the social impact of the sector as many of these goods will be diverted to needy households and charities, thus further influencing behavioural change.

4.4 Innovation

The innovative nature of waste SEs has long been held up as one of their key attributes (Table 5). Perhaps the clearest example of innovation by the sector was the pioneering introduction of kerb-side recycling. During the expert interview process, however, there was some feeling that outside of this development, the innovative nature of waste SEs can be overplayed. Others, however, identified the sector’s innovative nature in a broader sense as being a key contribution from the sector. If innovation is viewed in the sense of doing things that have not previously been done within the UK waste sector then SEs would appear to be innovative, particularly when compared to mainstream waste industry, which tends to change through incremental advances focused on economic gain and legislative compliance.

Table 5: Innovative Nature of SE Waste Sector

<table>
<thead>
<tr>
<th>Dimensions of Waste SE Innovativeness</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Waste Streams</td>
<td>Have consistently collected certain waste types before the mainstream waste sector</td>
</tr>
<tr>
<td>New Waste Locations</td>
<td>Have pioneered collections from flats</td>
</tr>
<tr>
<td>Risk Taking</td>
<td>Through developing new waste activities</td>
</tr>
<tr>
<td>Flexibility</td>
<td>More likely to evolve their business strategies</td>
</tr>
<tr>
<td>Employment</td>
<td>Appear to employ more females in a traditionally male dominated sector</td>
</tr>
<tr>
<td>Creativity</td>
<td>Thinking outside the box by using waste materials for creative means / teaching materials.</td>
</tr>
</tbody>
</table>

In this sense the sector has played a major role in both broadening and deepening the market for sustainable waste and resource management in the UK.

The question of why the sector displays this innovative element is harder to resolve. Among the experts consulted there were notions of the organisations being better connected to their localities and therefore better understanding the opportunities than their mainstream counterparts. There are undoubtedly factors associated with typically being small organisations, many of which they would share with the commercial Small and Medium Enterprises (SMEs). An additional key factor would be the motivations of those involved with waste SEs which tend to be driven by environmental and/or social gains rather than purely economic factors. The fact that the sector has three sets of core drivers – environmental, social and economic – compared to the solely economic rationale of the commercial sector would appear to provide the overriding basis for the difference in innovative activity.

4.5 Social and Economic

A major significance of the sector is the number of opportunities it provides for people previously viewed negatively in terms of employability and by so doing it meets both social and economic goals via social inclusion. SEs are seen as a key stepping stone in getting people with the worst job prospects into permanent employment. The case studies illustrate that many SEs rely on a number of volunteers, part-time labour and labour from outside the general market source (e.g. prisons). Social inclusion therefore plays a major part in the operations and working practices of many SEs.

From the information provided in the database nearly 3,000 people were employed by the sector, Figure 8 illustrates that the sector is in the main populated by organisations that employ between 1 to 9 employees; they are therefore micro companies and this could be an influencing factor on future integration within the current infrastructure. The size of the organisation could impact on whether there is the physical, knowledge and skills capacity within the organisation to expand current tonnage capacity or handling of additional waste types.

The difference between the estimates from the Review and the estimates found here could be attributed to the methodologies used and assumptions made in each of the reports. However, exploring these is beyond the scope of this report.

Figure 8: Employment Size of Organisations in Dataset

15 Many organisations did not provide any information on employee numbers as shown by Figure 8.
It should be noted that Figure 8 does not include volunteers as the data was not available.

Additionally, SEs involved in waste activities do not tend to carry out these activities in isolation but also participate in waste awareness and educational services. Case Study A, whilst operating a kerb-side collection for their local City Council also operates an extensive educational programme involving schools in the local area. Unlike many of their commercial counterparts they seek to change behaviour, increasing awareness of recycling and waste minimisation, which in turn can lead to increased demands for recycling in the future. SEs, based in the local community, are more likely to have a long term interest in the waste behaviour of the local population. Many are therefore offering a more holistic waste management service and by so doing can be differentiated from other service providers\textsuperscript{16}.

It is this holistic approach which often makes SEs attractive partners for local authorities. Waste focused SEs can give an added value above previous or existing waste collection and recycling provision. By providing training and employment opportunities they reduce the burden of the State as a social benefit provider and support the development of skills and the acquisition of knowledge and economic benefits directly to the individual and hence to the local economy.

Table 6 provides an overview of the benefits offered by SEs across the sustainability spectrum.

Table 6: Summary of Sustainability Benefits

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Description</th>
</tr>
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</table>
| Environmental | 1. Reducing the quantities of bio-degradable waste to landfill, which in turn reduces the production of methane, (the main greenhouse gas emitted from landfill sites), subsequently reducing the impacts on climate change.  
2. Reducing the need to use virgin materials due to the increase in re-use and recycling of valuable materials.  
3. Helping to deliver recycling, re-use and composting targets.  
4. Long-term sustainability through education programmes to children raising awareness of the importance of reducing, re-using and recycling waste. |
| Economic   | 1. New products made with fewer natural resources therefore saving money.  
2. Reducing cost of waste treatment and disposal.  
3. Offer new opportunities for economic growth (new businesses).  
4. Job creation and skills transfer to new employees.  
5. Due to above (3 & 4) helping the local economy and community. |
| Social     | 1. Jobs for disadvantaged groups (e.g. long term unemployed).  
2. Helping to alleviate poverty through provision of cheap goods and services.  
3. Social inclusion and Investors in People.  
4. Education, awareness raising and training programmes. |

5. Opportunities

5.1. New Policies and Strategies

Over the last few years at the EU, national and local level, new policies and strategies have been published that could impact on the role of the sector offering new opportunities as a result of increased demand from both domestic and commercial sources seeking alternatives to landfill disposal. The Landfill Directive and the requirement for Local Authorities in the UK to increase their recycling rates of MSW has meant that SEs operating landfill diversion schemes (e.g. by kerb-side collection of dry recyclables) have received a substantial boost. Other environmental legislation is also likely to exert such pressures and demands. Table 7 provides a description and summarises the impact of some of the key documents.

<table>
<thead>
<tr>
<th>Source</th>
<th>Description</th>
<th>Impact on Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EU Thematic Strategy on the Prevention and Recycling of Waste</strong></td>
<td>Key element of the strategy is for behavioural change to treat waste as a resource. Consumers to have a range of alternatives on how to dispose of consumables.</td>
<td>Play a key role in behaviour change mainly through their education and awareness raising programmes. Many also offer alternative disposal routes e.g. via refurbishment and chain of use continuation.</td>
</tr>
<tr>
<td><strong>Waste Strategy England 2007</strong></td>
<td>1. LAs to provide convenient recycling services 2. Increased recycling &amp; composting targets 3. Targeted action on specific materials (paper, food and green wastes, plastics and aluminium). 4. Integrated approach – closer working relationships between all parties involved in waste management infrastructure.</td>
<td>1. Opportunity to offer convenient local recycling services to LAs not only for household waste but also for small commercial organisations. 2. SEs contribute to the current targets and to new targets either through extended capacity or the creation of new organisations. Their innovative nature could provide some solutions on how to collect wastes for recycling or composting. 3. Materials very familiar to the sector, however, current lack of facilities to deal with certain of the wastes (plastics and aluminium) require strategies and funding from the government level.</td>
</tr>
<tr>
<td><strong>Waste Strategy Wales</strong></td>
<td>Targets for Local Authorities: a.25% combined recycling and composting by 2006/2007 with a minimum of 10% each of recycling and composting. b.40% combined recycling and composting by 2009/2010 with a minimum of 15% each of recycling and composting.</td>
<td>May encourage LAs to seek alternative methods than conventional waste management companies to meet the necessary targets, for example entering into contracts like that between Case Study A and a local County Council, a partnership which has seen recycling in the area increase and waste to landfill reduce.</td>
</tr>
<tr>
<td><strong>Clean Neighbourhood Act</strong></td>
<td>Greater emphasis on fines and penalties for anyone responsible for fly tipping.</td>
<td>Furniture and white goods contribute substantially to fly tipping figures. Increased awareness of the existence of SEs could offer an alternative to current illegal practices, where the illegality arises out of illegal inexpensive operators. Promotion of SE services by Local Authorities would offer the public a cheap legal alternative.</td>
</tr>
<tr>
<td><strong>Batteries Directive</strong></td>
<td>Affects everyone in the chain of utilisation including end users and aims to prevent the disposal of spent batteries to landfill or incinerators.</td>
<td>A number of the case study SEs expressed an interest in collecting batteries. SEs can offer deposit points or collections for domestic and commercial sources.</td>
</tr>
<tr>
<td><strong>WEEE Directive</strong></td>
<td>Introduction of take back schemes for electrical and electronic goods under producer responsibility regulations.</td>
<td>May create opportunities for the sector to engage with goods manufacturers and Local Authorities in the establishment of accredited re-use centres.</td>
</tr>
<tr>
<td><strong>Waste &amp; Resources Evidence Strategy 2007-2011</strong></td>
<td>Q: Is there a need to raise awareness of the third sector among potential customers and to address barriers to its greater involvement in delivering waste services? Are further measures needed to facilitate access to local authority waste work by third sector organisations? What more do we need to do to promote change/uptake/engagement in the third</td>
<td>Identifies that the third sector (includes SEs) may have a role to play in meeting the Waste Strategy and that research and evidence will play a role in possible future policies.</td>
</tr>
</tbody>
</table>

17 Higher national targets than in 2000 have been set for recycling and composting of household waste – at least 40% by 2010, 45% by 2015 and 50% by 2020.
Social Enterprise Action Plan 2006 (Office of the Third Sector)
The Action Plan reiterates the Government’s commitment to social enterprise, the ongoing development of its approach to support the sector and the ways in which government can provide an enabling environment for social enterprises.

1. The Action will provide opportunities for SEs by way of additional funding to Regional Development Agencies (RDAs) to improve Business Link’s capacity to broker business support for social enterprises.
2. Improvements to the information and guidance available to SEs via the national business link website.
3. Capacity builders will fully integrate support for SE infrastructure into its new strategic plan.
4. OTS will work with partners to identify national, regional, sub-regional, local and sectoral SE networks and take steps to address gaps in provision.
5. A review to understand the specific skills needs of SEs and whether these are being met by mainstream business education and training networks and organisations.

These general policy drivers for SEs provide opportunities by raising the profile of the sector as well as supporting the development of more robust support structures (including demand side measures). They are relevant particularly for SEs and service procurers at the more social end of the waste management spectrum.

5.2 Capacity

It cannot be assumed that all SEs will want to increase their current capacity or even desire to be more integrated into mainstream waste management infrastructure. In fact, it is likely that only a small number of SEs have both the desire and the capacity to be further integrated. To be able to increase capacity, a SE will not only need the physical and technical capacity but also the ability within the organisation to bid for mainstream recycling and waste management contracts with either the public or private sector. The need for this kind of knowledge and skills capacity was frequently raised during the interview process.

As Table 7 highlights new legislation coming from Europe may offer SEs the opportunities to be involved in the collection and handling of new waste streams and it is likely that in the future, as the EU turns its attention to more individual waste types, the list will expand. In the stakeholder interviews, it was highlighted that some SEs currently dealing with WEEE would be capable of further expansion and that others dealing with bulky wastes could also expand into the markets created by the WEEE Directive. An additional area mentioned in the interviews was in relation to the collection of bulky waste and the growing awareness amongst local authorities that re-use can contribute to landfill diversion targets, thereby encouraging increased demand for some SEs.

Capacity growth must be viewed from both supply and demand perspectives. Figure 9 schematically represents sources of supply and demand for waste SEs. Both sides of this system need to be balanced for the capacity of both individual organisations and the sector as a whole to grow. For example, SEs dealing in bulky wastes not only require new sources of either waste types or customers they also require an equivalent demand from people/departments/organisations requiring these materials for re-use. Every increase in the supply of furniture must be met with an increased demand, therefore whilst local authorities could direct householders to SEs to collect furniture, other departments in the local authority, for example social services, would need to be directing new clients to the SE to provide them with this service. This leads onto questions of whether these potential clients will be able to afford the products, as many SEs now need to charge clients for reuse products in order to operate. This may, therefore, limit the demand for their services.
The issue of capacity growth highlights the importance of understanding SE growth models, both internally by the organisations themselves and also from a policy perspective. As conventional business growth theories demonstrate, an organisation requires a balance of supply, demand and internal capabilities and capacities. Evidence through both the case studies and expert interview process suggest that many businesses meet developmental problems in this respect.

From a sector perspective, capacity aims need to address both supply – i.e. the stimulation of demand from municipal waste procurers and private businesses – and demand – i.e. commercial reprocessing capacity and outlets for re-use such as needy households, charities etc. In terms of re-use, developing demand requires cross-sectoral activity, particularly engaging with social services departments.

5.3 Partnerships and Networks

A key factor to increased integration is improved and extended partnership working and networks. However, due to the complexity and variability of the sector there is no single solution to who SEs should work with or how partnerships or networks should operate. For many SEs waste is an indirect consideration and not central to their main aims and objectives, waste materials may merely provide a means for them to achieve their goals or fulfil their mission. As a consequence, advice, funding and network support may not lie within the waste or environmental departments of government at the local, regional and national level. The development of the typology tool provides a graphical illustration of SEs with or without a waste focus and aids identification of potential sources of advice, funding or partnerships.

Where waste is central to an organisation, the following potential partner or network opportunities have been identified in this research.

5.3.1 Environmental Business Support (EBS)

The EBS sector could play a significant role in integrating waste SEs into the current infrastructure particularly as a referral agency. However, a recent research into the EBS sector in Wales has highlighted that the sector is fragmented both internally and externally reducing in some instances the level of service available to businesses seeking advice and assistance. In addition, businesses claimed that they were dissatisfied with the support and advice

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they received on recycling opportunities\textsuperscript{19}, claiming that is was too generic and the disposal options recommended were unsuitable. Some businesses claimed that they would be happy to receive more links to recycling companies. EBS organisations can act as a conduit between the commercial sector and SEs, providing the commercial sector with links to services for both problematic wastes (i.e. materials for which few market opportunities exist for reprocessing, e.g. plastics) and those wastes either not or rarely collected by commercial organisations for disposal options other than to landfill (e.g. furniture).

The EBS report recommends a one-stop shop with a centralised computer system containing access to all relevant organisations and sources of advice, assistance and services. It is recommended that suitable SE organisations are linked into this system, enabling them to be integrated into the infrastructure providing benefits to SEs, EBS providers and the commercial organisations needing solutions to their waste problems. The UOs could act as the coordinator of SEs and the link with EBS providers, something Cylch aim to do in Wales.

5.3.2 Local Authorities

Local Authorities play a key role in the extended integration of SEs into the waste infrastructure and many at present have close working relationships or partnerships with a number of SEs. There is no standardised model available on these partnerships as due to the variety of SEs, the partnership may be based on different goals, aims and objectives. Potential opportunities include:

- SEs could work with local authorities and businesses in dealing with hazardous wastes, which other waste management companies are not able to – or chose not to – handle. This would obviously require SEs to be registered with the Environment Agency as hazardous waste carriers. Monitors and computers could be diverted to re-use centres, where SEs would be able to refurbish and re-use, where possible.
- Both the public and businesses contact their local authority for advice and assistance on sources of waste disposal. The authority can therefore act as a referral agent to those SEs which meet any necessary criteria required.
- Different departments within the LA working collaboratively to assist SEs across the typology spectrum. For example social services can provide clients who are in need of goods such as furniture therefore creating a demand for re-use of such goods, whilst the waste management department could provide the SEs with the supply side via a need for domestic collection of household items. There is however a need for joined up decision and policy making due to the intrinsic link between the actions in one department affecting the activities of another. Examples of this can be found in the case studies. Case Study E, for example, demonstrates how the loss of support from social services can result in an increase in waste being diverted to landfill due to a decline in turnover of furniture by the SE.
- Schools offer a potential source of waste for many SEs as well as potential partners in achieving their social aims. For example, many of the case study SEs worked with schools offering not only educational programmes but also waste collection services. Case Study E operates a multi agency educational project with a corporate sponsor, supported by the Environment Agency, and hosted by local schools and colleges.

5.3.3 Regional Development Agencies (RDA)

Like local authorities, RDAs can act as both a referral agency and also a driver for SE services. Construction is a major waste\textsuperscript{20} producing sector particularly of wastes suitable for both re-use and recycling (wood, aggregate). RDAs play a central role in construction development and could via contracts require construction companies to utilise the services of SEs where appropriate. For example Case Study C handles wood waste from the construction industry and after some preparation distributes the collected timber into the community via its low cost reclaimed timber outlet, producing worktops, desks, firewood, kindling and many other items. This highlights the advantage of this sector, it not only collects waste but can identify its economic value whilst at the same time achieving social aims by selling the items cheaply to those in need. Another example is Case Study F, where a local building company was only awarded a contract to refurbish houses if the company worked in partnership with a charity. Case Study F handled any metal


\textsuperscript{20} 44 million tonnes of waste were recorded in 2003 from construction and demolition activities. Source: Environment Agency http://www.environment-agency.gov.uk/subjects/waste/1031954/315439/923299/995831/?version=1&lang=_e
waste arising from the contract, which they were able to turn into income. This type of contractual requirement could also apply to local authorities.

5.3.4 Private Companies/Sub-Contractors

As manufacturers take on board the producer liability obligations synonymous with EU legislation (e.g. WEEE Directive), there may be opportunities for SEs to offer these businesses accredited re-use centres. There are other opportunities for SEs to work with the commercial and industrial sector and some of these include:

- Expansion of collection services to public houses and nightclubs;
- Referrals from Environmental Business Support organisations (see section 5.3.1);
- Extension of green waste collections from residential to commercial – many organisations own large green spaces and produce green waste, current domestic programmes could be extended to include commercial green waste;
- Conditions included in contracts from LAs and RDAs relating to the construction industry as outlined in section 5.3.3.

There may in fact be a growing correlation between increased commercial demands for more socially orientated waste solutions and the increasing pressures for corporate social responsibility. This view was supported through the stakeholder interviews.

In addition, there could be the potential to work with commercial waste operators. To fulfil the social aims and objectives of some of the commercial companies; items they collect that may be suitable for re-use could be passed to those SEs with a more direct social rather than waste focus, that is those organisations that use waste items to achieve their social aims. Therefore items such as furniture and white goods could be passed onto these SEs for re-use, whereas the commercial operator would have no other option than to dispose these items to landfill.

However, a number of barriers were identified in the stakeholder interviews regarding this form of integrated relationship. Firstly, the difficulty for waste companies in subcontracting to SEs is that SEs tend to be significantly more expensive than the companies’ standard service. This makes it more difficult to pass on that cost to the local authority / commercial customer, particularly with a margin required on top. Secondly is that the potential for direct co-operation in terms of bulky good collection for re-use appears to be limited by the aggregated method that mainstream businesses use to collect goods. Finally, there are potential problems associated with the perception that SEs can be in direct competition. As suggested above, however, relationships developed with socially oriented SEs reduce this competition as these SEs focus more on the onward use of the waste material (e.g. furniture) rather than collection per se.

5.3.5 With-in Sector

Groups of SEs may also have the potential to work together to provide a more consolidated service. For example, for those SEs dealing in the refurbishment or resale of goods, the items need to be of a certain quality therefore batch collections can often cause problems because the SE may only want to cherry pick those that are suitable for their purposes. This may not be acceptable for the client who may not want to have to deal with numerous contracts for the same waste stream. Many individual SEs cannot provide this ‘collect all’ service because it could result in a negative economic impact when the income from the reusable items would be lower than the cost of the disposal of the unusable items. Therefore, there may be opportunities for SEs to work together where another SE may be able to utilise the residual waste items.

An example of an integrated approach came from Case Study E, the organisation collects green waste and delivers it to another SE which processes it to produce high quality, Soil Association certified compost, woodchip and mulch, and these are then sold in the organisation’s shop. It is an example of a holistic and closed circle approach to waste management.
5.3.6 Local Solutions

SEs can play an important role in contributing to pressures for alternatives to landfill disposal, for more socially responsible commercial organisations, and for more sustainable local communities. During the stakeholder interviews, it was suggested that SEs could run small scale on-site schemes, for example in dealing with food waste, within large organisations such as schools and hospitals. This could be extended to provide similar services within industrial or retail estates, particularly where the demand is from SMEs with whom many SEs will have an ‘institutional fit’ due to size and turnover and similar economic and regulatory pressures.

5.4 Sub-sector Opportunities

Based on the expert interview process, the following sub-sectors can be identified as currently having strong potential in terms of providing growth opportunities for SEs and community groups.

5.4.1 Waste Electrical and Electronic Equipment

The potential for SEs to take advantage of the recent EC Directive on Waste Electrical and Electronic Equipment (WEEE) was frequently mentioned by respondents. There is already a number of SEs dealing with such materials that are thought to have the capacity to expand. In addition, it was suggested that organisations dealing with other bulky goods such as furniture would often have the organisational capacity to expand into the area. In terms of refurbishment and reuse, it was considered that the greatest potential would be from equipment sourced from the commercial and public sectors, rather than household items, in particular through agreements with existing compliance schemes. There are also opportunities in terms of manual disassembly. Many stakeholders within the sector recognise the WEEE directive as both an opportunity and potentially a threat due to the attraction of commercial interests to the area. The SE and community waste sector is, of course, already reacting to this potential and has been doing so for some time.

5.4.2 Bulky Waste

Various elements of bulky waste collection for reuse and recycling were identified as both current and future growth areas for the sector. Local Authority engagement in this area appears to be increasing. This is thought to be partially due to an increasing awareness among Local Authorities about the potential role of reuse in meeting landfill targets. One leading SE provider of this service stated that they have had more interest from Local Authorities in the past 6 months than they have had in the past 6 years. Interest from the private sector, although less developed outside of London, was also regarded as growing. The Furniture Re-use Network (FRN), for instance, state that their membership has increased by over 100% in 18 months.

5.4.3 Engagement with the private sector

Greater engagement with both the SME sector and larger corporate business was widely regarded as a key opportunity for the social sector. The general perception was that many corporate businesses are becoming increasingly interested in engaging with the waste social economy due to ever growing Corporate Social Responsibility opportunities. As a result, large private sector businesses appear to be increasingly open to furniture and IT reuse schemes, for example.

The potential for increasing engagement with the SME sector appears to revolve around their relatively small size which means that they are often overlooked by the commercial waste sector. Some respondents also suggested that the similarities in sizes of many SMEs and SEs means that they may have advantages of ‘institutional fit’. Within this area, food waste was identified as a waste stream with strong potential (see section 5.4.4).

There was, however, a perception that the community sector needs to professionalise itself more to engage with the private sector. In return, however, it was felt that the private sector should be made more aware of the opportunities and benefits of engaging with SEs and voluntary groups. Many stakeholders also spoke of notions of mistrust regarding social sector perceptions of commercial interests. These tended to be based around ideas of unsympathetic trading relationships, short term-ism and insincerity.
5.4.4 Food Waste

A number of experts put forward the potential for SEs and community groups to move into food waste collection and processing. The currently high levels of regulation associated with food waste products however (implemented to prevent the spread of diseases such as foot and mouth) was identified as a barrier for development in this area. Processing on a large scale would also present more common barriers in the form of high investment requirements for machinery. Opportunities may also exist to run small scale on-site schemes within large organisations such as schools and hospitals, although this is an area that appears to need further research.


6.1 Funding

Financial security is a key issue for SEs in all sectors. As the case studies demonstrate, waste SEs vary considerably in the degree to which they rely on grant funding. As was made clear during the stakeholder interview process however, virtually all the leading waste SEs in the UK have benefited from grant funding at some stage in their development. It would appear, therefore, that grant funding plays a vital role in encouraging and/or sustaining a healthy waste SE sector. What is less clear, however, is the precise role of funding.

A distinction can be made between the provision of grants for infrastructure and capacity building, which were seen as necessary by virtually all stakeholders interviewed, and grants for service delivery, about which there is a less clear view. There is an apparent desire from service procurers for movement towards paying for identifiable services. However, the common issue associated with this kind of argument is how the broad benefits associated with these kinds of services can be demonstrated and therefore made accountable to value for money considerations. Another key aspect of grant funding is the issue of who should provide it.

Applying a principle of ‘those who benefit should pay’ appears difficult to carry out in many circumstances as the activities of SEs often straddle environmental and social, as well as economic benefits. Furniture schemes, for example, which are run by a number of the case study organisations, provide demonstrable benefits to local authorities in both environmental terms (through diverting furniture from landfill) and social terms (through providing furniture to low income households). Having two distinct sets of beneficiaries within local authorities dictates that the fairest (and therefore most sustainable) solution requires a degree of ‘joined-up’ thinking in the local authority that in practice is sometimes difficult to achieve.

Both the case studies and the stakeholder interviews indicate that fund availability is particularly poor at the moment. As a result of loss of certain funding opportunities, like the landfill tax credit scheme for example, the existence of some funding-dependent SEs is under threat. This development has also eliminated one of the few direct sources of interaction between the mainstream waste industry and SEs.

The case studies present a number of examples of the consequences removing funding sources can have on SE impacts. One of the clearest is the case of Case Study F whose furniture reuse activities fell by over 80% when they lost a grant funding scheme and had to introduce charges. Case Study B provides an example of a SE that is almost totally dependent on grant funding and, therefore, whose existence is almost constantly under threat.

The disadvantages of funding dependency have been well rehearsed. These included the risks of grant dependency, the buffering effect of not being exposed to market situations and the lack of resource accumulation that allows for experimentation and ‘thinking space’. It appears however, that desires by SEs to move away from grant funding are in most cases centred on the unreliability of funding rather than broader business model reasons per se.
An additional consequence of current funding regimes and a scarcity of potential income sources in general, appears to be a breadth in activities. As is evident in both the mapping data and more clearly in the case studies, many waste SEs undertake a range of activities such as kerb-side collection, furniture schemes and paint reuse. This indicates a desire to avoid over reliance on one income stream. In many cases, some aspects of the operations may actually subsidise others for which income sources are harder to locate. A consequence of this kind of strategy is that SEs are less likely to specialise in specific areas which may provide a stronger basis for expansion and / or greater integration.

Alternative financing solutions for waste SEs were often brought up during the expert stakeholder interview process. SEs in general and particularly community-based groups have problems accessing the current provision of commercially available secured loans. A major barrier could therefore be overcome if financing solutions with servicing commitments sensitive to the needs and circumstances of SEs were made available. A lack of access to finance is particularly seen as having implications regarding the ability of social organisations to understand significant expansions in response to market opportunities or innovations.

6.2 Waste Management Infrastructure

Whilst not all SEs will require access to reprocessing facilities, those that collect waste for recycling are dependent on the availability of facilities capable of dealing with the waste materials collected by the sector. A number of factors will impact on the sector becoming more effectively integrated within the waste management infrastructure:

- **Extent of facilities available:** Map 2 highlights a number of potential issues; the first is the location of the SE and the location of the reprocessing facilities. For example, Case Study A need to send plastic waste a distance of 202 miles to Lancashire. Map 2 shows that in some areas of England and Wales, there is a lack of glass reprocessing facilities. A similar situation exists with other materials, for example in the case studies, one SE had access to only one company that dealt with aluminium waste therefore reducing any ability to select a company that was proximate (company based 200 miles from SE) or was compatible with the SE’s procurement processes that include environment and social selection criteria.

- **Problem Materials:** Plastic can be classed as a difficult material as it exists in so many different forms and types and often reprocessing facilities deal with only one or a few types but rarely handle all forms of plastic waste. Consequently, SEs handling plastic waste, need to secure contracts with numerous facilities and therefore need to travel. Glass is commonly accepted as a difficult material to recycle, primarily due to the amount of coloured glass now in domestic waste, which cannot be used as a replacement for virgin material in the UK due to the UK only producing clear glass bottles.

- **Local v National:** SEs dealing in waste for reprocessing are not affected any more than commercial organisations seeking facilities to reprocess recyclable materials. SEs may seek to choose organisations on a number of different criteria to commercial companies (e.g. social aims, part of local community) but both sectors are affected by the general lack of recycling facilities. Although from a national perspective Map 2 may appear to present a satisfactory level of available facilities, in practice there are many counties without facilities. A successfully integrated waste management system may need better integration with the planning system. Consideration of waste management requirements could be made a prerequisite for large new developments. In other words, any new initiatives should be required to provide details of how they will manage waste production\(^\text{21}\).

Further maps, located at Annex 2, provide a visual representation of the coverage of both SEs and reprocessing facilities handling specific waste materials. The maps indicate that Wales has a general lack of reprocessing facilities, an observation supported by the Commercial and Industrial Waste Survey 2003.

6.3 Knowledge Capacity

Allied to the issues already discussed above is the relative lack of skills and knowledge about the collection, processing, analysis and management of data. This is by no means universal, and there are organisations of high skills and knowledge and well developed capacity, especially amongst the larger SEs, and within the sector representative bodies. However, it is without doubt a problem that some people employed by SEs and community waste groups, while having many other skills relating to the collection and management of actual wastes, often have limited knowledge of how to collect data and interpret such data about the wastes that they deal with. Moreover, collection of data is expensive; sometimes resources are not available to carry out data collection across as wide a spectrum of waste streams.

Furthermore, the data is provided by the SEs on a voluntary basis and is not a legal requirement. As a result such disclosures are not monitored for accuracy by any regulatory authority. Therefore, any data from this sector must be interpreted with caution as it is easy to misrepresent information.

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In addition to limited skills linked to data collection and analysis, a key message that came from both the stakeholder interviews and case studies was that those involved in the sector also require high level skills and a need for business acumen to understand the waste markets, the demand side related to waste generating organisations and authorities, the impact of substantial environmental regulations and the pressure of working in a highly competitive arena. The breadth of this knowledge base is significant for most organisations but for those that are reliant on volunteers and/or a disadvantaged labour market, the demands could be detrimental. The consequences are that many of the organisations rely on only a few key personnel to provide all of the relevant skills, knowledge and technical expertise and therefore the success or growth of the organisations is intrinsically linked to the extent of knowledge and continued involvement of those individuals.

With the increased pressures and demands to divert waste from landfill (see section 5.1) many waste focused SEs could face continued pressure from the commercial sector forced to move into recycling as a means of preserving market share in waste management\(^23\). The consequence is that many SEs may need to compete on a comparative knowledge base to secure or retain contracts. The likelihood is that SEs may need to operate in an ever increasingly cutthroat market requiring them to rapidly develop more businesslike practices if they are to stay operational.

6.4 Local Authority Procurement

Productive relationships with Local Authorities are a vital factor for most successful waste SEs, as demonstrated by Case Studies C & A. As Case Studies C & A demonstrate, local authorities (and other public bodies) can foster mutually beneficial relationships with SEs. Stakeholders also gave examples of local authorities who have specifically designed their procurement processes in order to provide opportunities for local SEs, particularly in the area of furniture and composting.

The partnership between Case Study A and their City Council in particular appears to demonstrate the added value of Local Authorities and innovative SEs working together. The council have benefited from positive PR along with the provision of an efficient service with high landfill diversion rates. The SE, on the other hand, has gained from access to expertise and resources along with their own positive PR in terms of helping them build a ‘professional’ reputation.

Case Study C provides an additional example of a SE which appears to have been able to base their business strategy around partnerships with large public institutions. A formal waste management contract allows them to provide green waste services to around 48,000 households while the organisation also has agreements with the Wales Council for Voluntary Action for the provision of intermediary labour services. In addition, the organisation is in negotiations with two local authorities to develop a commercial composting facility in a three way partnership.

The relationship between Case Study E and their Local Council, on the other hand, illustrates the potential complexities of local authority / SE relationships. The organisation is essentially in competition with their local authority in many areas where households have a choice between using the ‘free’ local authority kerb-side collection or the SE’s more comprehensive service which carries a charge. Indeed, it appears that Case Study E have had to react to evolve over recent years as the council has developed its own recycling services in response to landfill legislation and best practice drivers. On the other hand, however, the SE also collects local business waste on behalf of the council and receives landfill tax credits for the waste it diverts.

One key aspect of local authority good practice towards the SE sector is ensuring that procurement processes for council services are open to SE involvement. With regards to waste, an evolution towards larger and more integrated waste management contracts is widely regarded as contributing to a reduction in opportunities for new entrants and expansions in the sector and even sometimes the failure of existing SEs. Among the stakeholders interviewed, examples were given of established community organisations and SEs who have folded as a result of local authorities reorganising their waste management activities. A number of sector experts felt that it was no longer possible for new groups with little or no track record in waste to establish themselves and win authority wide contracts in kerb-side collection. Indeed, an observed trend towards partnering and franchising among larger SEs in this sector appears partially due to the increasing challenges for groups wishing to win local authority contracts.

Although the recent Waste Strategy for England 2007 acknowledges the issue of contract aggregation and states that Government now discourages integrated contracts ‘which bundle together collection, treatment and sometimes other

services unnecessarily’, resource scarcity in local government often encourages ‘easy’ solutions such as contract aggregation that bring immediate and demonstrable cost savings. Moreover, it is not clear from this advice that the bundling of collection activities may not be the best option for service providers or similarly, that ‘de-bundling’ should also be considered. As the 2006 Office of Fair Trading report into the municipal waste sector states, in economic terms alone ‘small firms are likely to be able to deliver waste collection contracts as efficiently as larger firms’24. It is recommended that a forthcoming implementation plan for the 2007 waste strategy includes clear guidance on this issue for local authorities.

When discussing the range of models through which SEs may be integrated into local authority waste management, the expert interviewees were clear that some are more appropriate than others. Integrated Public Finance Initiative models were regarded as the most exclusionary in terms of third sector engagement with little opportunity for SEs and community groups to engage in the kinds of highly integrated arrangements common to existing initiatives in the sector. In general, service level agreements with local authorities were viewed as most suited to SEs and community group needs, not least because they are easier to set up compared to contractual processes.

It has been evident throughout this research project however that attitudes and competencies of local authorities towards waste SEs vary considerably. Of course, the issue of greater formal integration through procurement is in many ways also dependent on the ability of SEs to demonstrate their added value benefits. It is likely that waste SEs will be more willing to work towards measuring their broader benefits if they can see a direct and immediate return for the investment of time and effort. Clearer indications from Defra, local government and other agencies would help persuade these organisations in this respect. Put simply, if a SE is aware that their local authority is going to include social clauses in an upcoming waste management contract, they are far more likely to develop or adopt procedures to be able to measure their own social added value.

7. Positioning SEs to Maximise their Benefits

A clear message to come out of this piece of research is about the sheer diversity of the sector. Individual enterprises vary considerably in terms of their size, objectives, skills and even philosophical underpinning. Whilst this inherent complexity appears to be present in all sectors in which SE or other organisations work i.e. housing, child care and others, in the waste management sector it is brought to the fore especially when organisations find themselves in collision with the commercial sector, or environmental and social objectives get tangled up in the drive to achieve greater integration of the social economy into the waste management infrastructure in the UK.

From a waste perspective, a key aspect of this issue is the question of which SE types are appropriate for integration into mainstream waste management systems and which models may actually be more appropriate on the periphery or even conceptually placed in other systems (such as social service provision). This is, of course, much of the underpinning behind the development of the typology tool which was used to inform case study selection.

The trialling of the original typology combined with evidence gained from other elements of the research has allowed the development of a diagnostic model which aims to characterise a waste SE and provide a series of support recommendations. Figure 10 shows example outputs for the case study organisations. These are gained from inputting data based on the original typology for the organisation in question into a computer model. This graphic output places each enterprise on a chart whose axis represent the two key dimensions for characterising a SE in the waste sector: the Environmental versus Social focus and the Mission versus Market focus. The size of each enterprise point represents the volume of waste that they handle.

As Figure 10 demonstrates, for the case study businesses there are two clear groups (or ‘types’) of enterprise: Case Studies A, C & E are diagnosed as environmentally (or Waste) focused enterprises with a strong market emphasis, while Case Studies B, D & F are all identified as socially oriented businesses with a stronger mission focus. By placing organisations on this two dimensional continuum, the model allows the user to better understand both the key characteristics of the enterprise and its key support needs (if required). A fundamental diagnostic aspect of this model is that organisations which appear towards the bottom left of the chart are more socially based (in both market and

ideology) and therefore appear to be more attuned to support from social service providers. The majority of furniture reuse companies would appear in this part of the model for example. In contrast, organisations handling municipal waste contracts or dealing with business waste are likely to appear towards the top right indicating that their support needs are more directly placed within the waste sector and therefore likely to be under the direct remit of Defra.

Figure 10: Example Diagnostic Model Output for Case Study Organisations
Defining SEs along these criteria also has implications regarding the appropriateness of strategies to integrate them into the mainstream waste management sector. It would appear that organisations in the top right hand area of the output (or organisations wishing to move to this area) are most appropriate for integration.

Developing and employing any model needs the accompaniment of provisos as they are essentially a tool to simplify and transform information into a more demonstrable form. In this case it is clear that a lot of complexity is lost by relying on the chart output.

As is evident through the case studies, many SEs appear to be involved in activities that would place them at different places in the model. This portfolio business model would appear to be a strategy for building sustainability through avoiding over reliance on a small number of income streams. The case studies also highlight that this kind of model allows some aspects of the organisation to subsidise other activities. In addition, the view that there was an element of funding led organisational development was expressed during the stakeholder interview process.

Again this demonstrates the complexity within the system and the importance of joined up thinking across traditional policy areas in order to identify and maximise the sector’s potential, both on an individual organisation basis and the sector as a whole.

8. Recommendations from the Research

8.1 Improved Data Collection

Improved data collection could make a substantial difference to the sector both internally and externally. Table 8 provides a list of the key elements to fill the current gaps and their internal and external advantages. Whilst it is acknowledged that at present a number of the UOs have recognised that better data collection is required, the full benefits of improved data collection and the importance of the role played by UOs may still need to be fully appreciated. Not only do UOs act as the conduit for collecting data but in many ways they act as the link for many SEs to external stakeholders and decision makers. We would recommend a ‘road map’ approach to drive the improvements of data collection that promotes collaboration across UOs, and engages other stakeholders.

8.2 Role of Local Authorities

Along with the UOs, Local Authorities represent the key relationship for SEs. As the case studies highlight, the success and failure of SEs is often highly dependent on the actions of Local Authorities. Consequently, the nexus between SEs and LAs needs to be recognised as a priority point. In particular, our research has shown that Local Authorities could benefit from more robust assistance to understand their importance and to understand and accommodate for the complexities inherent within the SE Waste sector. We recommend a drive towards a better understanding and greater consistency of approaches between local authorities and their local SEs.

8.3 Procurement

Our research has shown that the adoption of public procurement policies and procedures sensitive to the needs of SEs are vital to further integrating SEs into mainstream waste management. This applies both in terms of a tool for providing opportunities for SEs to become contract providers and as a method for promoting subcontracting relationships. The spread of good practice and other steps to ensure procurers are able to develop the confidence and expertise to develop procurement solutions appropriate to their local needs and circumstances should be a priority.
Our research has indicated a need for a strategic perspective to be taken on funding provision for the sector. Any strategic approach should cross traditional policy areas and take account of the multitude of sources that SEs use for support funding. There is clear scope for funding arrangements to be designed so as to enhance other policy goals for the sector as well as to provide necessary financial relief. Funding programmes could be designed to promote certain key relationships within the sector, for example between SEs and mainstream waste management companies (though Landfill Tax Credits for example), or between SEs themselves. Above all, genuine financial support needs must not be allowed to slip between traditional sector based providers such as the waste sector and social services.

Table 8: Recommendation on Filling the Data Gaps

<table>
<thead>
<tr>
<th>Data Type</th>
<th>Description</th>
<th>Internal or External Data Needs (I or E)</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organisational Details</td>
<td>Full name, address and postcode details</td>
<td>E</td>
<td>Full details of the organisations would enable a comprehensive mapping of the sector, identifying gaps and where potential needs may require to be addressed.</td>
</tr>
</tbody>
</table>
| Organisational Description| Type of organisations, aims and objectives, employment, turnover            | I & E                                    | I = Would provide umbrella organisations with detailed information on the different types of organisations and therefore better enable them to target any advice and assistance. Would provide the umbrella organisation with baseline data to secure funding for the sector by better targeting funding needs.  
E = Better targeting of resources, advice, assistance and funding, as relevant government bodies at the national, regional and local level better aware of the types of services on offer and where they may fit into existing or proposed programmes. |
| Total Tonnage of Waste| a. All organisations that collect or handle waste to provide tonnage data.  
b. Figures provided for a set time period  
c. Where information has been converted from other weights or volumes or quantity of items metadata should be provided on the conversion procedures | I & E                                    | I = Will allow the sector as a whole to be able to provide data to relevant stakeholders, government bodies, etc on the sector’s contribution to waste management.  
Will assist individual organisations to be able to predict/forecast ability to expand upon current capacity. Allowing organisations to undertake some form of strategic direction.  
E = Stakeholders, funding bodies, policy and decision makers better informed on the sector’s contribution to meeting targets. This will allow relevant policy and decision makers to make informed decisions relating or affecting the sector in terms of integration within the waste management infrastructure. |
| Material Tonnages     | Figures to be provided on the different types of waste materials using consistent classifications of waste across all UOs | I & E                                    | I = Building on from total tonnage figures, consistent, accurate data on material tonnages will provide organisations with valuable tools to:  
✓ Include in funding applications  
✓ Use for publicity/marketing purposes  
✓ Forecast potential expansion of capacity and therefore strategic development, where desired.  
E = Information can be fed into data systems by stakeholders, policy and decision makers – therefore contributing to infrastructure knowledge and awareness. Will provide policy and decision makers |
| **Waste Management Tonnages** | Figures to be provided on the different types of waste management methods used e.g. re-use, recycling, composting, etc. | **I & E** | **I** = Can be used by sector to inform stakeholders, partners how much they contribute to local, regional and national targets. Can provide sector with information on own targets and whether there are opportunities to expand. Will provide sector with more transparency and accountability.  
**E** = Will provide funding bodies, stakeholders, policy and decision makers with improved information on the sector’s contribution to targets and the role it plays. Can provide policy and decision makers with necessary information to assist in targeting advice and assistance and possible funding and resources. Provide accurate snapshot of sector. |
|---|---|---|---|
| **Reprocessing Facilities – Locations** | Information on distances travelled to reprocessing facilities. | **I & E** | **I** = Will provide the sector with better information on the cost of waste disposal and environmental impacts.  
**E** = Will provide policy and decision makers at all levels with information on infrastructure and where improvements may need to be made, thereby allowing for targeting of resources. |
| **Waste Source** | Information on whether the waste is from residential, commercial, industrial or construction and demolition sources. | **I & E** | **I** = Will allow the sector to identify opportunities in particular sectors which are underrepresented, will allow sector to identify its strengths and to promote its strengths to stakeholders. Better targeting of services.  
**E** = Will provide information for future policies and strategies on sector identification, better target advice and assistance to specific sectors. |
| **Waste Source Location** | Information on the location of the source of the waste arising to provide information on distances travelled. | **I & E** | **I** = Coupled with reprocessing facility location will provide sector with information on cost of collection and onward disposal. Will provide information on environmental impacts via carbon footprint. Will provide information on scope of services, which can be utilised to obtain contracts with LAs via identifying needs in particular areas. Will provide sector with better forecasting information on where services may be needed.  
**E** = May provide information on whether there is a surplus or scarcity of demand for service and whether services are required. |
| **Meta Data** | Information on the conversion factors used to calculate the tonnage figure, information on the weights assigned to items and how weights were obtained, etc. | **I & E** | **I** = Will improve transparency of data and therefore reliability, thereby increasing reputation of the sector.  
**E** = Information can be used due to increased reliability, accountability and accuracy of data. |
| **Existing Capacity** | Information on how much capacity the organisation is handling and can handle. | **I & E** | **I** = Will allow the sector to forecast for expansion where desired, to assess the ability to expand, what requirements may be needed to succeed in expansion, thereby applying a more strategic approach.  
**E** = Will provide policy and decision makers with improved information on the sector and whether with additional funding and/or advice or assistance existing capacities could be increased. |
| **Consistent Classification and** | Utilisation of consistent terminology across UOs and classification of waste types | **I & E** | **I** = Within sector improved ability to present findings and to utilise data in campaign awareness raising of the role of the sector as data will be compatible and fit |
### Terminology

| e.g. EWC codes. |

into the language and terminology utilised by stakeholders. Better communication across the sector on waste types and methods due to compatibility and common terminology. Better quality of data arising out of less assumptions being made. Improve investment decisions.

\( E = \) Better communication with the sector, better understanding of its contribution and how it fits into the waste management infrastructure due to common terminology being used.

### Consistent Data Collection Methods

| Utilisation of consistent methods of collecting data – using standardised templates to ensure the compatible data collection. |

\( \text{I} \& \text{E} \)

\( I = \) Will allow combination of datasets, will improve robustness and reliability of the data, thereby improving the image of the sector as more professional. Will allow for analysis of the sector in order to identify strengths and weaknesses, opportunities and threats and allow for better forecasting and strategic development. Can assist in reducing duplication of data, therefore providing a more accurate picture of the sector. Reduces need to submit different types of data to multiple UOs, therefore saving time and money on data submissions.

\( E = \) Will allow for the sector to be accurately mapped, will allow stakeholders to have more confidence in the data provided. Decisions made on up to date data.

### Services

| Information on the additional services provided e.g. education, shop, awareness raising, training, etc |

\( \text{I} \& \text{E} \)

\( I = \) Will allow the sector to provide a more holistic picture of the contribution it makes to reducing waste going to landfill, raising its image as a social and environmental contributor, allowing it to include information in funding applications and in tender bids. Used to demonstrate a track record of achievement.

\( E = \) Will provide stakeholders with a more coherent understanding of the sector’s contribution, the services on offer and the ability to better target resources, advice and assistance.

### 8.5 The Role of Referral Agencies

“…encouraging the Regional Development Agencies and other regional bodies to coordinate business waste and resource management in partnership with local authorities and third sector organisations…”

**Waste Strategy for England 2007**

A key component of enhanced integration lies in improved partnerships and networks including working agreements with other organisations/enterprises acting in a referral role. The report has highlighted the role of different agencies, in particular, local authorities, the environmental business support system, social services and Regional Development Agencies. All of these agencies/organisations can either provide supply or demand services. EBS organisation when advising businesses (generally SMEs) could include SEs as service providers. Often SEs will offer the services required by SMEs particularly where waste items include furniture and IT equipment. In Wales a one-stop advisory system has been proposed, which should include all SEs in Wales involved in handling waste. RDAs in contrast could emphasise the role of SEs within their Regional Economic Strategy. LAs can act and some do act as referral agencies for both supply and demand that is informing households and business of SEs as waste handlers and collectors but also to refer those inexpensive goods and services. It is therefore recommended that further research may need to be instigated to assess best practices within LAs in their relationships with SEs, the problems and hurdles to improved integration and the potential solutions using good practice examples.

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8.6 Role of Umbrella Organisations

UOs play the key role in data collection and it is therefore recommended that they lead on improving the current quality and standard of data collection and management. It is fundamental that UOs raise the need for consistent, accurate and complete data across the sector and act as champions in delivering these requirements. The role of improved data will not only raise the image of the sector as being better managed but improve opportunities for better understanding of the sector not only amongst themselves but to the external community as well, which includes policy makers, funding bodies and potential partners. Improved data will also allow companies to strategically develop based on forecasts utilising an improved evidential base. More broadly, evidence suggests that the waste SE sector would benefit from closer cooperation between UOs particularly in terms of representation at central policy levels.

8.7 Knowledge Capacity and Knowledge Transfer

Throughout the project issues of knowledge capacity within many of the organisations were raised, primarily due to the increasing demands on senior staff to be constantly up to date on not only the technical aspects of dealing with waste but also on the increased demands from legislation, funding bodies and general management demands including contract negotiation and communication and marketing. It is therefore recommended that knowledge transfer be promoted both within the sector and from external sources. For instance, the Business in the Arts programme partners arts managers/administrators with senior executives from business as mentors providing advice and assistance in the preparation of project proposals, contract negotiations, and undertaking investment appraisals. There is the potential for a similar scheme to operate for SEs either linking new SEs with existing SEs (a role that UOs could provide) or looking to businesses to act as mentors. This would increase the knowledge base within the sector and encourage knowledge transfer.

8.8 Priorities for Research I: Sustainability Indicators

It is recommended that appropriate sustainability indicator methodologies be developed for the sector to aid the understanding and communication of the broad contributions SEs make to sustainability goals. Research elsewhere has demonstrated value of such measures for benefits which can not be quantified easily using traditional methods. In addition, with changes to funding mechanisms and a general move in recent years to ‘professionalise’ the sector through demonstrating their effectiveness, the use of indicators will make the sector more transparent about their operations.

8.9 Priorities for Research II: SE Turnover and Waste

It is recommended that future research looks at the turnover of waste SEs, in terms of the numbers of new organisations and the number of failures in any given period. Experiences in this project suggest that this turnover is relatively high and a contributing factor toward sector instability. SE turnover also has an impact on the flow of human resources into and out of the sector.

8.10 Priorities for Research III: SE Growth Models

There is a strong need to do more research into growth models for SEs both within the waste sector and more generally. One of the key lessons from this project is the degree of complexity within a sector that can appear to be fairly homogenous from the outside. Mainstream business models fail to take into account the primacy of non economic goals within waste SEs. In addition the reliance on funding and the presence of often one or two very large public sector customers differentiates this sector from others that have been used to develop growth model based understanding.