

Evaluation of the ENWORKS NW Minimisation Project

A Final Report to NWDA

June 2008

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Contact:	Joe Duggett	Tel:	0161 475 2109	email:	jduget@sqw.co.uk
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Approved by:	Malcolm Williams	Date:	11 June 2008
	Associate Director		

1: Introduction

- 1.1 In February 2008, SQW Consulting (SQW) was commissioned by the NWDA to evaluate the ENWORKS NW Waste Minimisation Project (the Project). This Final Report presents the findings of the evaluation, undertaken between February and June 2008.

Introduction to the Project

- 1.2 In October 2003, ENWORKS was appointed to manage and deliver the NW Waste Minimisation Project (the Project), an initiative with the aim of improving the performance of SMEs across the region through waste minimisation, resource management and reducing environmental risk. Over time the Project became known as the ‘Resource Efficiency Project’.
- 1.3 The Project was initially intended to complete in March 2007. However, a Contract Extension extended the Project to the end of March 2008. This was to enable the Project to work towards the government’s commitment to deliver 1,000 business resource efficiency assists for companies in the North West. The extension was also to ensure continuation of the service whilst a new ‘Resource Efficiency Project’ led by ENWORKS and funded by NWDA, but financially separate, was in its early stages.
- 1.4 The Project was key to delivering against Action 23 ‘Business Resource Efficiency and Waste Minimisation’ of the North West Regional Economic Strategy. Activity involved a broad set of local delivery partners across the region with strategic leadership, monitoring and management being delivered by ENWORKS – a partnership based organisation for which Groundwork UK is the ‘Accountable Body’.

Scope of the evaluation

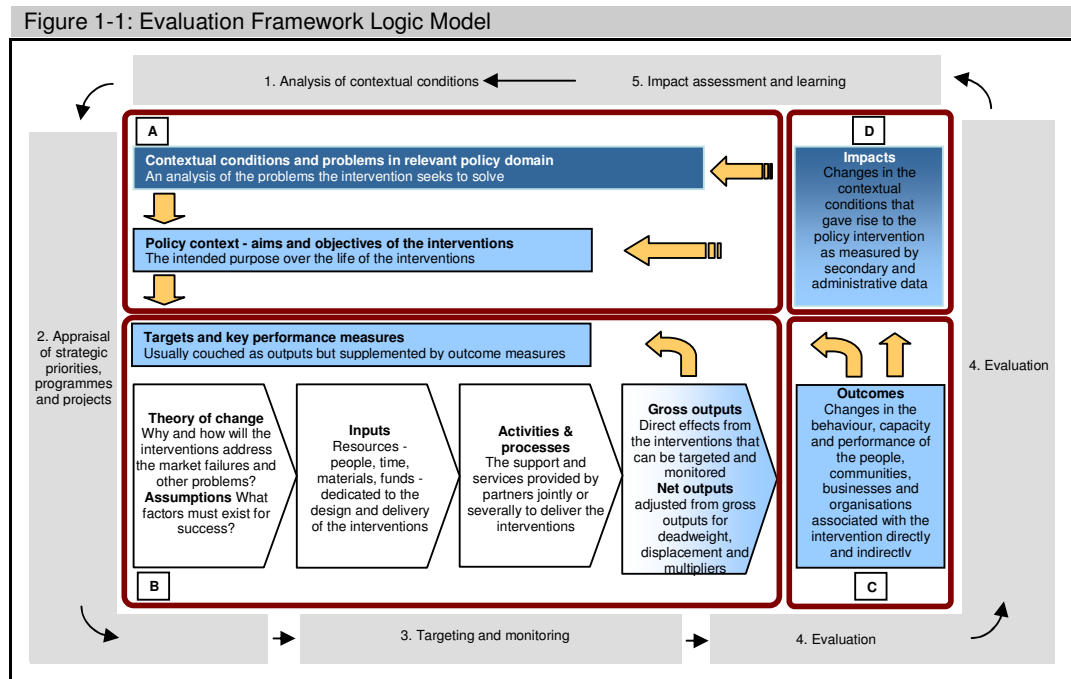
- 1.5 The focus of this evaluation is the full period of Project delivery, from 2003/04 to 2007/08, including the Contract Extension. The primary objectives of the evaluation, were as follows:
- to provide robust evidence on the impact of the intervention (both direct and strategic activities), assessing how they contributed to key target outcomes that would not otherwise have been achieved
 - to determine how far the Project achieved its objectives
 - to identify the lessons and good practice for wider dissemination.
- 1.6 Further, the evaluation was to understand what continued need – as identified by market failures and other arguments – there is for similar publicly funded interventions in the evolving regional business support environment led by Business Link Northwest.

Approach and methodology

- 1.7 Figure 1-1 illustrates the conceptual approach used in the evaluation. This approach has been utilised in a wide range of evaluation studies by SQW and is fully compliant with BERR’s

Impact Evaluation Framework (IEF) and the Treasury’s Green Book. It is also consistent with the evaluation framework recently approved by the NWDA.

- 1.8 The framework places an emphasis on the need for a clear logic chain throughout the evaluation process, and makes an assessment of (and linkages between) the rationale for intervention, targets and key performance measures (including aims and objectives, inputs, activities and outputs), outcomes and impacts. Crucially, it completes the process through a feedback loop to inform the future development of policy and programmes.



- 1.9 This approach is particularly useful in making an assessment of the value for money offered by the Project. Here, the following three considerations are important:

- Economy - did the Project deliver activities at the lowest practicable cost? Were the inputs appropriate (in scale and nature) to the activities that NWDA ‘bought’?
- Efficiency - were the outputs delivered at a reasonable cost per unit? An assessment of additionality is particularly important when considering efficiency
- Effectiveness - has the Project had the desired impact and has activity and related outputs been translated into outcomes?

- 1.10 SQW applied this framework approach to the design of the methodology for this study. There were four complementary workstreams:

- consultations with a range of strategic stakeholders, funders, delivery partners and programme delivery staff
- desk-based analysis of the spend and output monitoring data of the Project
- a review of strategic documentation, condition data and wider research into resource efficiency interventions and the identification of relevant benchmarks

- a detailed survey of over 100 Project beneficiaries.

1.11 The findings from these workstreams are brought together in this Final Report.

Structure of report

1.12 The report has the following six additional sections:

- Section 2 sets out the context within which the Project was developed and operated
- Section 3 examines the development of the Project and includes an assessment of its rationale, objectives and activities
- Section 4 discusses Project delivery, management and governance issues. This draws on a review of Project and ENWORKS documentation and partner consultations
- Section 5 provides an analysis of Project spend and output performance, including an assessment of economy and efficiency
- Section 6 considers the outcomes of the Project and its impact on beneficiaries and the wider economy
- Finally, in Section 7, we present the conclusions of the evaluation and key messages going forward.

1.13 Further, two Annexes are also provided:

- Annex A provides a detailed analysis of data from the ENWORKS Toolkit
- Annex B provides a detailed analysis of changing contextual conditions in the region relevant to the Project.

Acknowledgements

1.14 SQW would like to thank all those individuals who have assisted us with our work. We have had considerable help from busy people for which we are grateful.

1.15 The findings and views expressed in this evaluation are those of SQW study team, and the report does not necessarily reflect those of NWDA or ENWORKS.

2: Project context

- 2.1 This Section sets out the key context impacting on the Project. First, we set the scene by looking at ENWORKS as an organisation in the round. Second, we discuss the initial and evolving policy and strategic context in which the Project itself has operated.

ENWORKS as an organisation

- 2.2 ENWORKS was established in 2001 to create, manage and coordinate a network of existing local delivery organisations providing environmental advice and training to companies across the North West. The ENWORKS vision is *‘An improved environment and economy for the North West achieved through the engagement of business in environmentally sustainable business practice.’*
- 2.3 ENWORKS is a non-incorporated partnership with a steering Partnership Board and Groundwork UK as its ‘Accountable Body’. The Board contains a cross-section of representatives from across the public, voluntary and, to a lesser degree, private sector. This governance and legal structure was in place prior to the implementation of the Project evaluated here. The Board was praised by the stakeholders consulted in this evaluation. In particular, the three Chairs since 2001 were judged to have provided strong leadership. The Board as a whole was regarded as facilitating effective delivery on the ground of the various programmes and projects led by ENWORKS. The role of Board in relation to the Project specifically is discussed in greater detail in Section 3.
- 2.4 Consistent with the vision set out above, key activities delivered and co-ordinated by ENWORKS have included:
- environmental support and advice to regional businesses through the Resource Efficiency and wider BREW programmes
 - provision of the ENWORKS Toolkit to quantify and monitor resource and costs savings to regional businesses through environmental action. Originally designed for the North West, it has been adopted in other regions for a range of initiatives
 - co-ordination of business support as the managing body for Environment Connect, a service providing a single point of contact for environment related queries. This is now part of the business support infrastructure in the region led by Business Link
 - completing in March 2008, Health and Safety advice through the Workplace Health Connect Programme in the North West.
- 2.5 The work of ENWORKS has been widely recognised with a number of awards and a high-profile status for the organisation in the region and nationally. For example:
- in September 2007 the Project evaluated here was named as ‘Economic Development Project of the Year’ by Regeneration and Renewal, a leading trade publication for the UK’s regeneration sector and received the Ashden Award for Energy Efficiency
 - the organisation was given ‘Exemplar Status’ by RENEW Northwest in their Regeneration Good Practice (2005) for its Environmental Programmes

- winner of the SustainIT e-Well-Being Awards – Climate Change and Environmental Efficiency Award (2006) for the ENWORKS Online Toolkit.

2.6 Further, a 2007 survey on resource efficiency completed by 250 companies supported by ENWORKS showed positive responses. 89% of the businesses said they would use the ENWORKS network again in the future and only 3% that they would not. Encouragingly, 94% found the support simple and straightforward to access and 90% believed that environmental issues would become more important to their businesses in the future.

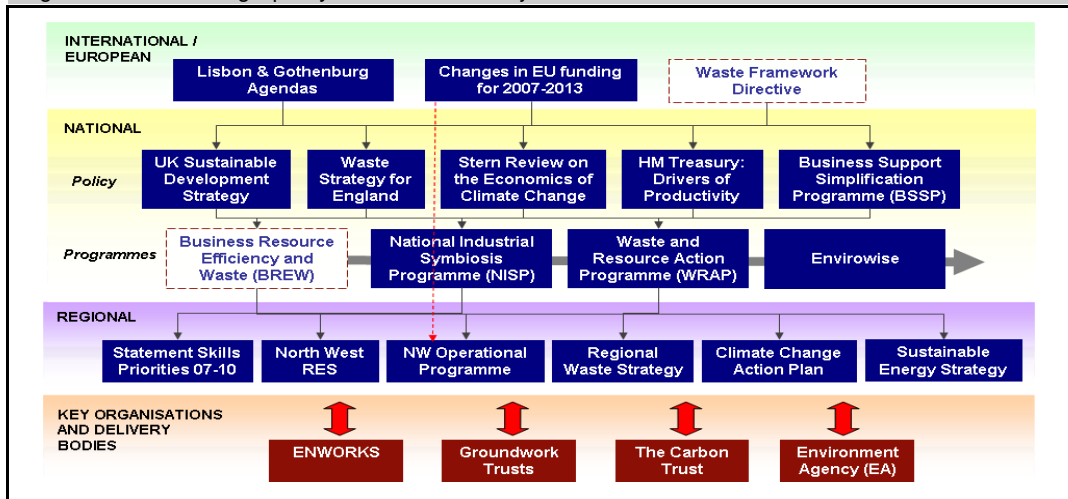
Evaluation message

ENWORKS as an organisation has a strong track-record in delivering business support and environmental advice to businesses in the region and is well regarded by these businesses and partners alike. The organisation has an established governance structure with a Board that has provided sound overall leadership. The Project has therefore been sited in an appropriate and successful delivery vehicle. The Project is one of a number of initiatives delivered by ENWORKS, though an important one.

The strategic and policy context

2.7 The Project has operated within a complex strategic and policy environment overlapping economic, social and environmental agendas. With activity commencing in October 2003 and running for approaching five years to March 2008, this context has evolved substantially. In the paragraphs below we discuss the key strategies, policies and changes to this context from 2003 to the present day. The discussion moves from the international to the national and regional level. Demonstrating this complexity, in Figure 2-1 is set out the policy and strategic context in 2008 as delivery closes.

Figure 2-1: The strategic policy context for the Project in 2008



Source: SQW Consulting

International Context

2.8 Improving resource efficiency and minimising waste are recognised as crucial components of achieving a more sustainable future for our environment. The issues are of central importance to the wider agenda on tackling climate change; a task global in scope, as recognised by the adoption of the Kyoto Protocol entering into force in February 2005.

- 2.9 Further, in its Fourth Assessment Report published in 2007¹, the Intergovernmental Panel on Climate Change found that evidence of climate change is now unequivocal. Human action was recognised as a key part of this. This is of critical importance to NWDA and its support to ENWORKS. In recent years there has been an increasing awareness that steps need to be taken to reduce the environmental impact of human activity, both domestic and industrial.
- 2.10 Within, though pre-empting this context, an environmental pillar (the Gothenburg Agenda) was added to the Lisbon Agenda in 2001 – the key strategic agreement seeking to increase the competitiveness of the EU. This pillar draws attention to the fact that economic growth must be decoupled from the use of natural resources to ensure a more sustainable pattern of development. The stated aim is to decouple environmental degradation and resource consumption from economic and social development by 2010.
- 2.11 The EU policy context has moved forwards significantly since. Its Sixth Environment Action Programme², adopted in 2002, called for the development of seven Thematic Strategies, including (importantly) strategies on the sustainable use of natural resources and waste prevention and recycling. These Thematic Strategies were put forward by the European Commission in December 2005. It proposed revising the 1975 Waste Framework Directive as a first step in reducing waste, including setting recycling standards and placing an obligation upon Member States to develop national waste prevention programmes.

National context

Resource efficiency and sustainable development

- 2.12 The Government introduced its first Waste Strategy for England in 2000, setting out the agenda for a fundamental shift in waste management practice. Its key objective was reducing the environmental and health impacts of waste, including substantially reducing the role of landfill in line with the requirements of the EU landfill directive.
- 2.13 In 2005, the strategy was reviewed. It recognised that the underlying rationale had not changed and that aims set out in 2000, such as the prioritisation of waste prevention, remained valid. However, the review recognised the need to revise the strategy in light of the growing awareness of the economic and environmental gains to be made through sustainable waste management and the sustainability agenda. Further, despite significant progress, the UK still lagged behind many EU members. The new Waste Strategy was released in May 2007; one of its key objectives is the decoupling of waste growth (in all sectors) from economic growth and placing more emphasis on the reduction and re-use of waste.
- 2.14 Also since the beginning of the Project in 2003, a new Sustainable Development Strategy for the UK was introduced in March 2005. This built upon the previous 1999 strategy, putting a more explicit focus on environmental limits. One of its four priority areas for immediate action was promoting sustainable consumption and production, through lowering the environmental impacts of new products and services across their life cycle, while at the same time boosting competitiveness.
- 2.15 The key programme driving forward these proposed improvements in resource efficiency was the Business Resource Efficiency and Waste (BREW) programme. Commencing in April

¹ See http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr.pdf

² See <http://ec.europa.eu/environment/newprg/intro.htm>

2005, this used receipts generated from the 'landfill tax escalator' to fund incentives for businesses to reduce the amount of waste they send to landfill and assistance in developing ways to achieve this. The funding from BREW was split amongst various agencies and programmes, each with a clear remit to drive forward the aims of the programme. The NWDA was allocated BREW funding and since 2006, ENWORKS was in receipt of BREW funding for the Waste Minimisation Project through the NWDA.

- 2.16 Nationally, delivery arms of BREW included: The National Industrial Symbiosis Programme (NISP), Envirowise, The Waste and Resource Action Programme (WRAP), The Carbon Trust and The Environment Agency.
- 2.17 The 2007 Pre-Budget Report announced a continuation of a business support programme targeted on resource efficiency and sustainable waste management. However, the BREW Programme itself ceased to exist. In April 2008 the Environmental Transformation Fund (ETF) came into effect with the UK element of the Fund totalling some £400 million during the period 2008/09 to 2010/11 for resource efficiency.
- 2.18 Further, one of the most transformational shifts in the national policy context was the publication of the Stern Review on the Economics of Climate Change in October 2006. This highlighted the urgency of addressing the global threat of climate change, estimating that the cost of inaction would be equivalent to losing at least 5% of global GDP each year, now and forever. Identified elements of policy for an effective global response included removing the barriers to energy efficiency, and informing, educating and persuading individuals about what they can do to respond to climate change. This agenda forms a key element of the argument for publicly supported interventions.

Business support

- 2.19 The national policy context for business support and enterprise development is currently in a state of considerable flux. Government research demonstrated that there were over 3,000 business support products in the UK creating considerable confusion and duplication. The Budget 2006 therefore established a target for reducing the range of business support schemes to no more than 100 by 2010 – the 'Business Support Simplification Programme' (BSSP).
- 2.20 To facilitate this process, the Government has established a 'portfolio of products' from which business support will be provided in the future. These are currently indicative and will be confirmed in 2008. Importantly for potential future NWDA funding of resource efficiency activity, the products include 'Resource Efficiency and Sustainable Waste Management' and 'Protecting the natural environment'.

Regional context

- 2.21 The Project life-span covers both the current and previous iterations of the North West Regional Economic Strategy (RES). The RES that was the key guiding document at the start of the Project in 2003 recognised that tackling waste management and resource efficiency was one of the key challenges for the region. This responded to the evolving international and national context set out above. Indeed, the Project had a strong fit with a number of the Key Activities contained in the business section of the RES. More detail of this strategic fit is set out in Section 3.

- 2.22 The current RES remains committed to improving the competitiveness of the region through resource efficiency. Key to this is RES Action 23 – ‘Improve Business Resource Efficiency and Waste Minimisation’ support to business – which the Project directly delivered against. This is to be achieved through: sustainable procurement, overcoming barriers to new energy and waste technologies, and reuse and recycling of materials.
- 2.23 Closely aligned with this objective is RES Action 24 – ‘Develop and implement a Regional Climate Change Action Plan’. This was introduced in November 2006 and aims to help realise the vision of a *‘low-carbon region that has adapted well to the impacts of climate change by 2020’*. Importantly, ENWORKS is the lead body for one of the twelve priority actions: to realise a ‘step change’ in the effectiveness of regional and national business support organisations to deliver clear, co-ordinated advice and support to business on resource and energy efficiency, sustainable transport planning and climate change risks and opportunities. This clearly places ENWORKS, and the Project (and successor interventions) at the heart of regional policy.
- 2.24 Closely related to the agenda set out in the current RES, funding obtained through the latest round of the ERDF 2007-2013 should contribute towards RES Actions 23 and 24. The North West Operational Programme (NWOP) has developed a series of Investment Frameworks to guide the funding. Most significantly, this includes ‘Action Area 1-3’, supporting interventions that will help reduce the carbon and environmental impact of all SMEs, including preparing them for future environmental legislation and policies and improving their resource efficiency and waste treatment.
- 2.25 More widely, the policy agenda in the region is strongly focused on addressing the £17.8 billion GVA gap in the North West to England³. Some £14.3 billion of this gap is accounted for by the lower productivity of those in work in the region and addressing this deficit is the clear strategic focus for the region.
- 2.26 Finally, the Regional Waste Strategy, published in September 2004, placed emphasis on breaking the link between waste growth and economic development through a more efficient use of resources and improved waste management. The objectives are to ensure that waste management systems are in accordance with the principles of sustainable development and integrated waste management by:
- reducing waste produced in the region and maximising the reuse of waste products
 - recycling and composting waste and recovering value (in the form of energy) from waste that is not recycled
 - maintaining sufficient landfill capacity for the disposal of final residues.

Evaluation message

The Project has operated within a shifting and complex policy context. Since 2003 the waste minimisation, resource efficiency and environmental sustainability agendas have grown in prominence regionally, nationally and internationally. In the North West, the Project has operated under two RES’ and demonstrates strong strategic alignment with both. Further, the clear focus on closing the GVA gap as the core driver of the current RES ensures that any successor interventions to the Project must contribute to this agenda to remain aligned with the prevailing regional context. Strategic alignment is crucial to strengthen the rationale for NWDA funding to future interventions.

³ Baseline Update Report 2007: Progress One Year On, www.nwda.co.uk/pdf/RESBaselineUpdate2007.pdf

3: Rationale, objectives and activities

- 3.1 This Section first discusses the original and ongoing rationale for the Project. It then moves on to assess the suitability of objectives and the activities delivered.

The original rationale

- 3.2 As stated in the Green Book, *‘Before any possible action by government [or its agencies] is contemplated, it is important to identify a clear need which it is in the national interest for government [or its agencies] to address.’*⁴ This should constitute a sound evidence base and identify specific failures, either economic or distributional that justify public sector intervention. This Project is tested against these measures in the paragraphs below.
- 3.3 The Project was based in 2003 on a robust, if unspecific evidence base that demonstrated the potential impact of, and need for, the intervention. No specific market demand assessment was undertaken. However, key elements of the evidence base included:
- experience of similar programmes in the North West (such as the Rochdale and Oldham Wasteworks Programme) by Project deliverers and the existing ENWORKS SRB Programme that included a resource efficiency aspect
 - discussions with GONW, NWDA, Groundwork UK and the delivery partnerships providing support across the region as part of the ENWORKS initiative. Discussions were also held with partners including the Clean Merseyside Centre and Envirolink
 - previous surveys by the Environment Agency and Envirowise demonstrating the need for improved support to business on resource efficiency and waste minimisation.
- 3.4 Consultations undertaken for this evaluation suggest that a ‘demand assessment’ may not have been appropriate. As discussed below, businesses in the region were unaware of the potential for cost savings through resource efficiency and waste minimisation. They were therefore unlikely to have actively demanded it.
- 3.5 Consistent with this, a number of key arguments justifying public sector (and NWDA) funding for the Project are evident. These were not all explicitly set out in the original Detailed Proposal Form application to NWDA, yet are central to the Project’s rationale:
- **Co-ordination failures** on the supply-side, where business support in the region from the public sector, especially in the waste minimisation and environmental sphere, was (and would have continued be) un-coordinated, and not tailored to address specific issues experienced by regional businesses, especially SMEs. There were a number of small localised projects delivering such services, however, there was little co-ordination and guarantee of consistent quality across the region. For businesses inexperienced and lacking confidence in dealing with external support providers, such a situation presented a complex, confusing and discouraging picture, in particular for SMEs without the staffing and expertise needed to access support. A ‘regional response’ was required that could build on existing projects in the waste

⁴ The Green Book, The Treasury. See <http://greenbook.treasury.gov.uk/>

minimisation, resource efficiency and wider environmental sustainability arena but provide a coherent and consistent offer.

- **Information failures** on the part of regional businesses who did not know the benefits that would accrue to them (and the environment) if they engaged in activity to reduce waste and improve resource efficiency. As set out in the Detailed Proposal Form the failure was *‘the majority of businesses simply being unaware of the ... benefits of resource efficiency and as such will not pay for support which they perceive as not being relevant to them.’* Further, as businesses were unaware of the potential benefits they were not prepared to invest time and money as this may have led to a perceived reduced competitiveness against rivals investing in staff, equipment, products etc. The findings of our beneficiary survey presented in Section 6 provide clear evidence of these failures.
- **Negative environmental externalities**, referring to the benefits that the region and society as a whole might enjoy from improved environmental outcomes. However, firms and individuals will make decisions in their own interests rather than in the interests of society as a whole, which mean that these outcomes are not delivered. Therefore businesses do not engage in resource efficiency/waste minimisation either because they were unaware, unwilling, or more importantly in the case of SMEs do not have the capacity to do so even though doing so is beneficial for the environment and their business. This lack of capacity both in financial or other constraints, such as time and staffing levels, is crucial.
- **Public good arguments** as the private sector is reluctant to invest in resource efficiency activity to the necessary extent as they fear that they will not capture all of the gains from their investment. However, it will have a beneficial impact on the regional economy, environment, health, and general well-being of residents and as such is an appropriate initiative for the public sector to support.

3.6 These issues were confirmed by strategic stakeholders. The primary argument emerging from the consultations was that the Project was needed primarily to address a combination of information failures and environmental externalities. Essentially, businesses in the region did not know what resource efficiency could do for their competitiveness and were unable/unwilling to take action even if they were, as a result of a lack of financial capacity. Providing public sector support in this area was therefore responding to a clear failure.

3.7 Further, as trailed in Section 2, the Project responded to the regional and national policy agenda. In particular, the North West RES at the time included tackling waste management as one of the region’s key challenges. It also stated that there was a need to encourage businesses to access high quality advice and support in this area. RES Key Activities with direct applicability to the Project included:

- **2.8** - Ensure businesses have access to environmental advice and support linked to reducing business overheads, e.g. through waste minimisation and recycling measures
- **2.2** - Promote and provide effective and relevant business support to all businesses, including start ups

- 2.7 - Encourage manufacturing businesses to adopt continuing improvement measures, access regional and national sources of expertise and good practice to improve product development and productivity.
- 3.8 Closely related to an assessment of the rationale is an understanding of the Reference Case, or ‘do nothing’ option, that considers what might be delivered by the market without any intervention by the public sector. Understanding the Reference Case is key to the additionality brought about by the Project, be it in terms of bringing about change quicker, or to a higher quality than would otherwise have been achieved.
- 3.9 Across the board, had the Project not come forward, stakeholders believed there would have been a significant gap in support provision and no other provider had the capacity to plug that gap in a co-ordinated and efficient way. Importantly, it was felt that the cost savings made by the businesses generated by the Project would not have occurred. Delivery partners stated that without the Project the activity would not have been delivered. Crucially, consultees also stressed that without NWDA support the Project would not have gone ahead.
- 3.10 Stakeholders considered ENWORKS to be the most appropriate vehicle to coordinate the support at the time because of the experience and expertise of delivery staff and its ‘partnership’ nature. Importantly, the evaluation has found that the intervention was not duplicating services offered by the private sector. Though there was clearly an existing and growing private sector delivering environmental advice and services to businesses this was not felt to be open to SMEs in the region. Larger firms had the time and financial resource to access this support, yet they were not the focus of the Project.

Evaluation message

The Project was based on a sound, if unspecific evidence base. No bespoke market assessment of demand by businesses was undertaken, however, owing to the information failures evident such assessment would have been unlikely to provide greatly more evidence of need. Nevertheless, greater consultation with businesses may have improved the design of the Project and ensured it responded to the issues identified by SMEs as important to them.

There was a strong rationale for public sector intervention in 2003. Most notably information failures, co-ordination failures and environmental externalities justified NWDA support. The Project also responded to the regional and national policy agenda. Without the Project the support provided to businesses, and in particular SMEs, would not have been provided by the private sector or the public sector. Further, without NWDA funding the Project would not have been delivered.

The rationale today

- 3.11 Moving to the present day, the failures identified above are broadly still apparent, justifying continued intervention by NWDA in supporting interventions of this type. Indeed, this rationale is perhaps stronger today than it was in 2003. There are three major aspects to this:
- First, the rise of climate change and environmental sustainability as a major policy driver has moved activity of this nature up the agenda. Stern in particular has bolstered the argument for public sector interventions to drive environmentally sustainable business practices. Yet there is a continued need to support small businesses as despite the policy attention they remain unable to pay full market prices for resource efficiency support.
 - Second, the success to date of the Project and the learning developed by ENWORKS, NWDA and local delivery partners provides a crucial opportunity to further act as a

catalyst to move resource efficiency for businesses up the public policy and business agenda.

- Third, businesses in the North West continue to lag behind their rivals in other regions in terms of competitiveness and productivity. As resource efficiency may potentially improve the productivity of a business, for example allowing it to invest savings on investment, skills training, extra staff etc. the Project remains strongly aligned to the prevailing regional agenda.

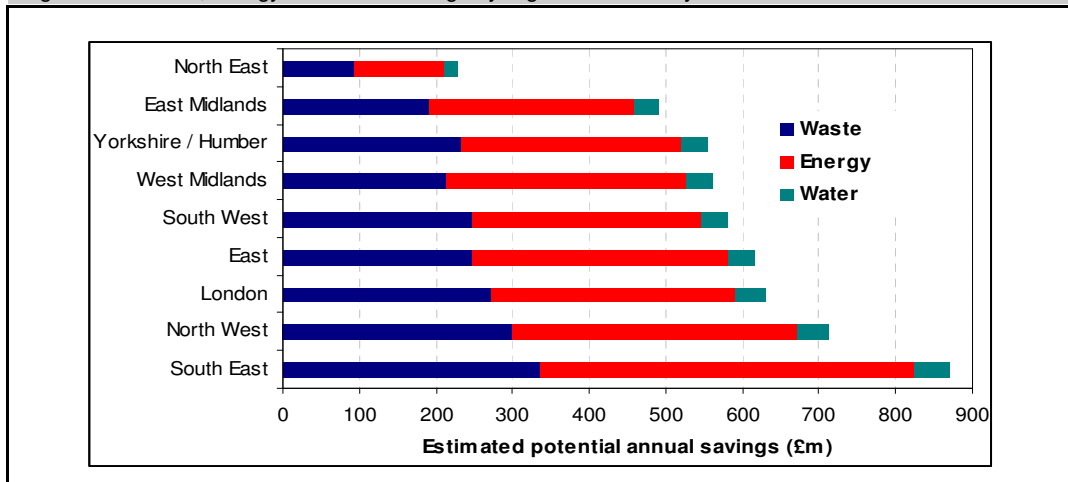
3.12 Findings from the 2006 Membership Survey of the Federation of Small Businesses⁵ provide further evidence to support an ongoing rationale. It found that very few businesses in the region were aware of business-focused environmental initiatives. Indeed, just 13% were aware of the Carbon Trust, a higher proportion than any other initiative identified. Less than 1% were aware of the BREW programme.

3.13 The survey highlighted a number of factors that would encourage more businesses to improve their environmental performance. Most important were clear information about government requirements for small businesses, having a general concern for the environment, and crucially information on cost savings and financial charges and incentives.

3.14 Finally, in identifying an ongoing rationale it is useful to consider a major study commissioned by DEFRA and delivered by Oakdene Hollins and Grant Thornton reviewing the business benefits of resource efficiency⁶.

3.15 The study identified the total value of low-cost/no-cost annual resource efficiency savings within the UK business economy to range from £5.6 billion to £7.4 billion, with a mean estimate of £6.4 billion. The North West was the region with the second greatest level of resource efficiency opportunities. Potential annual resource efficiency savings of some £713 million were identified (Figure 3-1). Just over half of this - £373 million - was in energy efficiencies, £299 million in waste efficiency and £41 million in water efficiency.

Figure 3-1: Waste, energy and water savings by region identified by Oakdene Hollins/Grant Thornton



Source: SQW Consulting based on Quantification of the business benefits of resource efficiency

⁵ 'Lifting the Barriers to Growth in UK Small Businesses'. See <http://www.fsb.org.uk/documentstore/filedetails.asp?id=342>

⁶ Quantification of the business benefits of resource efficiency', research study for DEFRA by Oakdene Hollins and Grant Thornton, October 2007

- 3.16 The study did not quantify the environmental benefits of these savings. However, the findings emphasises the potential economic contribution that well targeted public sector initiatives in this area can have. The opportunities need to be generated in large part by the private sector, yet as evidenced by this evaluation, there is an important role for the public sector to act in a catalytic manner to drive this agenda. In particular, cost savings have the potential to substantially contribute to GVA growth through reduced costs of production to regional businesses. The Project aligns strongly with this clear economic rationale for intervention in this area. It is useful to note that data from ENWORKS was one of the key sources of data used in the Oakdene Hollins and Grant Thornton report.

Evaluation message

The rationale for public sector (and in particular NWDA) support for similar interventions to the Project remains sound. Indeed, the evolution of the policy agenda around the environmental impact of business and potential for savings through resource efficiency has strengthened the rationale. Any successors to the Project evaluated here have a key role to play as demonstrators and catalysts for wider resource efficiency activity. Further, the economic imperative as established by the current RES remains well aligned to the rationale.

The research by Oakdene Hollins and Grant Thornton sets out a strong economic argument for resource efficiency with significant potential for improved efficiency to drive sustainable GVA growth in the North West. A continued justification for NWDA intervention in this area therefore remains apparent.

Project objectives

- 3.17 The Project at its inception had five principal objectives:
- Objective 1 - To improve the competitiveness of SMEs across the North West
 - Objective 2 - The development of a coherent, region wide, integrated resource management scheme affording equal access to all SMEs operating in the North West, regardless of location or sector
 - Objective 3 - The development of an experienced, competent workforce trained in the principles of resource management
 - Objective 4 - The development of sector specific resource management clusters
 - Objective 5 - The reduction of the resource consumption footprint of those firms participating within the initiative, and subsequently the North West region as a whole.
- 3.18 These objectives were well-aligned with the rationale for intervention in 2003. In particular, they demonstrate well the inter-relationship central to the Project of the economic and environmental agendas. Consultations carried out for the evaluation found that partners and deliverers generally felt these elements to be ‘two sides of the same coin’ and the objectives adequately capture this relationship. The Project (and ENWORKS more widely) is aimed at ‘making environmental practice profitable’ and has always had a strong economic focus.
- 3.19 The objectives were broadly SMART - Specific, Measurable, Achievable, Realistic and Time-bound. However, this must be qualified with respect of Objective 1 and 3. Most notably the extent to which they are measureable and realistic:
- owing to difficulties in attributing the results of the Project to complex issues and high-level economic factors

- as the definitions within key aspects of the objective are unclear. The ‘competitiveness’ of businesses and an ‘experienced and competent’ workforce are concepts hard to measure and capture in conditions indicators and wider sources.
- 3.20 This lack of clarity is an issue as SMART objectives are important as they allow down the line for accurate evaluation of the impact of the Project. In Section 5 of this report, performance against these objectives will be assessed to provide an indication of the effectiveness of the Project.
- 3.21 As part of Objective 5, the Project also set out a number of targets for supported businesses:
- Reduce the unit rate of waste produced amongst the participant firms by 5%
 - Reduce the unit rate of waste to landfill amongst the participant firms by 7%
 - Increase the amount of waste recycled amongst the participant firms by 15%
 - Reduce the unit rate of energy related CO₂ produced amongst the participant firms by 10%.
- 3.22 These are clearly SMART targets. However, no baseline position was established with beneficiary firms that enabled their monitoring over time. Therefore, it is not possible to assess in the evaluation the extent to which these targets were met.
- 3.23 An important change in the Objectives of the Project came with a Contract Extension from July 2007 to March 2008. The Extension set out an extended number of Objectives that included:
- contributing to the Chancellor of the Exchequer’s commitment in the 2007 Budget to deliver 1,000 business assists for companies in England’s North West on energy efficiency
 - transferring the management of Environment Connect Service from ENWORKS to Business Link and the Environment Connect web presence and content onto the Business Link Northwest knowledge platform
 - supporting continuation of Environment Resource Information Centre.
- 3.24 The Contract Extension was intended to ensure that the Project formed a bridge to the new ENWORKS Resource Efficiency Programme that commenced in October 2007 and contributed to the development of Business Link Northwest as the primary gateway for all business support in the region. This Extension included bringing in aspects of ENWORKS activity that had until this time been outside of the Waste Minimisation Project such as the Environment Connect Service and the Environment Resource Information Centre (ERIC). A detailed Monitoring and Evaluation Plan was agreed between NWDA and ENWORKS setting out the milestones in delivery. Performance against the objectives set out for the Contract Extension is discussed in Section 5.
- 3.25 Looking forward, the rationale for interventions of this nature has evolved since 2003. Therefore future interventions in this area would benefit from updated objectives. Most notably, in the light of changed strategic imperatives, objectives would need to be focused more specifically towards raising productivity and contributing to GVA growth and reducing CO₂ emissions. Further, interventions must ensure that sufficient baseline evidence and

monitoring procedures are in place to adequately track project performance over time. This will ensure that targets can be accurately evaluated.

Evaluation message

The Project had a set of well aligned and broadly SMART objectives at its outset that effectively encapsulated the economic and environmental aspect of the activity. However, a number of the objectives were not sufficiently clear in their description to allow for accurate evaluation of their achievement (or not) down the line.

The objectives remain broadly appropriate to the current climate, though any future intervention would benefit from a greater focus on the productivity agenda and on carbon emissions more specifically in line with the wider regional and national policy context.

Project activities

- 3.26 The range of activity delivered by the Project is, for its financial size, broad and wide-ranging. Activity is delivered across the region by a range of local delivery partners and is appropriate to address the identified failures and contribute towards achieving the Project's stated objectives. The local delivery partners are Groundwork Trusts across the region: Groundwork Cheshire, Groundwork Oldham and Rochdale, Groundwork Merseyside, Groundwork Pennine Lancashire, Groundwork Manchester/Salford/Tameside/Trafford and in Cumbria, the Cumbria Rural Enterprise Agency.
- 3.27 The activity of the Project includes at its core on-site support to businesses by local delivery partners. Actual activity on the ground will therefore vary from beneficiary to beneficiary, responding to the specific needs of the business. Essentially, however, there are three main activities in the Project:
- **Recruiting and engaging with businesses** through, for example, holding seminar programmes, events and speeches on issues regarding waste and resource efficiency, and releasing newsletters, press releases and case-studies to highlight the business opportunities of activity in this area.
 - **Identification of savings** through on-site support to businesses from local delivery partners undertaking diagnostic reviews, providing onsite mentoring and training, producing detailed resource management action plans and a scoping audit report identifying efficiency savings and potentially bringing in specialist support from outside (e.g. Carbon Trust) and providing continuous follow up support to help ensure action plan implementation. Following the scoping audit, delivery partners would seek a financial input from the businesses though this would not necessarily be significant. In part it is to secure buy-in and continued engagement and interest in the Project and its agenda.
 - **Ongoing support** to businesses including the provision of newsletters, follow-up advice on resource efficiency by the relevant advisor and use of the Online Toolkit developed as part of the Project to track and progress resource efficiency savings.
- 3.28 The process of translating support and advice provided to businesses to cost savings and resource efficiencies is the key element of Project activity and potential impact. Therefore, it is important to understand the nature of changes/activities implemented following advice. As noted this will vary, however, most crucially involves supporting behavioural change amongst staff to generate low cost/no cost savings to the business. It may also include the installation

of new/replaced equipment to improve efficiency and save costs and the adoption of alternative business practices/processes. The examples below demonstrate the variety in terms of scale and type of activity delivered:

- a company identified savings, following advice, through the installation of a new air compressor that used only 85% of the electricity of the existing compressor. Further, a survey by advisors identified air leaks in business facilities that were fixed to save on energy costs. Similarly, one company following advice installing flush controls in on-site lavatories saving 20 metres³ of water per week
- a business started recycling paper, cans, cardboard and plastic, saving on waste costs and installed thermoplastic valves on all radiators
- following recommendation by an advisor, one company fitted dust extraction lines with the technology to ensure that when operating machines in the business are not operating they are switched off and reduce their energy consumptions when no material is being extracted
- following a scoping review, a manufacturing company installed a more energy efficient boiler and had it turned on for one fewer hour per day to lead to cost savings
- a further manufacturing firm through improved monitoring of water consumption following advice from the Project managed to save around 130,000 m³ of water, for example, by using smaller nozzles on hoses limiting the water released and improving the monitoring of leaks.

3.29 The activity is primarily focused at assisting SMEs across the region in line with the stated rationale and objectives of the Project. Consultations undertaken with selected delivery business partners for this evaluation identified that local partners on a day-to-day basis have discretion in the way the Project is delivered. However, as discussed in Section 3 in more detail, procedures and systems are in place to ensure that the activity delivered is of a requisite standard. Importantly, ENWORKS plays a key role in setting the strategic direction for the Project and providing parameters for on-the-ground delivery.

Evaluation message

The activity delivered by the Project is appropriate to respond to the issues identified in the rationale and contribute to the achievement of objectives.

Activity will vary from business to business, however, and is based on providing support to businesses at their location and the delivery of advice and expertise on reducing resource inefficiency and promoting sustainable business practices.

4: Project management and governance

- 4.1 In this Section the Project delivery model, management and governance processes are discussed to examine their quality and effectiveness. The discussion also identified how processes may be open to improvements going forward.

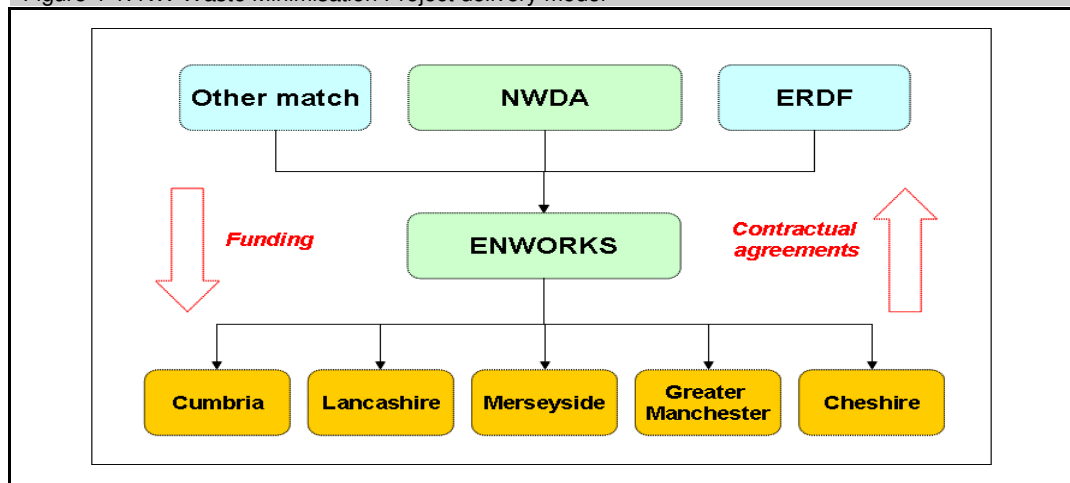
Project model

Structures and processes

Project delivery model

- 4.2 The Project delivery model is set out in Figure 4-1. Essentially, funding is first provided to ENWORKS by NWDA and other funders such as ERDF. These monies (minus central management costs) are then distributed to local delivery partners (see 3.26) across the five sub-regions of the North West to deliver the activity of the Project on the ground to businesses.

Figure 4-1: NW Waste Minimisation Project delivery model



Source: SQW Consulting

- 4.3 This delivery model is consistent with the wider operating model of ENWORKS – it is essentially a partnership organisation geared towards co-ordination as opposed to direct delivery. However, ENWORKS plays a key role in the strategic co-ordination of the Project and provides the central management and monitoring function.
- 4.4 It is important to note that staff at ENWORKS leading and administering the Project have been funded through a range of programmes and funding streams. Funding for this Project therefore contributes to salaries and other administrative costs, but, the Project has not had staff working on solely this initiative.
- 4.5 Groundwork UK were appointed as the Accountable Body and are the primary delivery partners of the Project across the region (through local Trusts).

Service level agreements

- 4.6 The project funding and management is structured through ‘Service Level Agreements’ agreed by the ENWORKS Board and delivery team, ensuring that delivery on the ground is delivered to a sufficient standard and targets are met. Following guidance from ENWORKS, the lead delivery partners submitted a business plan. This includes information on:
- the services and support that will be offered to businesses to help them to improve their resource efficiency
 - how the quality of programme management, monitoring and reporting will be assured including evidence to support the outputs claimed and demonstrating the causal link between funding and outputs
 - details of the staff to be used to deliver the Project including direct delivery and support staff.
- 4.7 The business plan is then reviewed by ENWORKS and forms the basis of ‘Service Level Agreements’ incorporating an official legal contract, any special conditions relevant to the sub-region and a detailed Monitoring and Evaluation Plan that details the agreed outputs and expenditure for the Project in the sub-region.
- 4.8 This model ensures that ENWORKS transfers the obligation for meeting targets from funders (including NWDA) to delivery partners based on agreed legal contracts and that deliverers across the region are working to the same requirements and metrics. Importantly, delivery partners agree to ensure that all expenditure, income, outputs and outcomes are supported by adequate auditable evidence and that these records may be subject to independent financial audit and review by ENWORKS and individual funding bodies.
- 4.9 The legally binding agreements provide an important lever through which delivery targets set by funders such as NWDA can be monitored and effective delivery promoted. Consultations with delivery partners, NWDA and ENWORKS, and the wider evidence suggest that this model has worked well.

Key issues

- 4.10 A central question for the evaluation is the extent of any added value generated by this delivery model. Effectively, funding could be provided to local delivery partners directly by NWDA with legal contracts and agreements on a bilateral basis. However, there are a number of advantages:
- for NWDA the model provided one, as opposed to five or more projects, with reductions in associated management and administrative costs in monitoring. The model also provided NWDA with one regional accountable organisation for the Project
 - with ENWORKS as the initial recipient of NWDA and other monies, delivery partners need devote less time to applying for funding and more on active delivery
 - ENWORKS has a track-record in dealing with the NWDA and is recognised by the Agency and others as a key delivery partner. This provides important strategic leverage for the Project and ensures that it is well respected in the region

- the partnership nature of ENWORKS ensures that no one organisation and delivery partner is necessarily regarded as the lead driving force behind the intervention promoting stakeholder buy-in and engagement.
- 4.11 There are, however, a number of issues related to the delivery structure that should be considered going forward. First, the role of Groundwork UK as both ‘Accountable Body’ and primary delivery partner (through local Trusts) potentially limited the scope of the intervention to openly engage with a wider range of organisations. A number of consultations identified that there is a danger that the Project (and its successor) may become regarded in the region as insufficiently open to a more diverse range of organisations and partners.
- 4.12 Second, under this operating model beneficiary businesses may not be aware that the support received has any association with ENWORKS as opposed to the local delivery partner. To an extent this may not be vital - it is the quality of the support that matters and the evidence suggests that NWDA and ENWORKS are satisfied with the current situation. However, despite the evolving role of Business Link as the primary gateway for business support in the region, a higher profile for ENWORKS as a body explicitly focused on sustainable development and providing environmental advice and training to businesses may be important in playing a catalytic role in promoting this agenda. An increasingly high profile is therefore potentially important.
- 4.13 Third, despite the Service Level Agreements, the model, with a range of local delivery partners undertaking activity on the ground, may lead to differences in the quality or scope of the service offered across the region. Owing to the nature of the intervention this varied nature of delivery is problematic to avoid. However, going forward, NWDA funding must be seen to provide a truly equal offer across the region and processes should be further developed to ensure that monitoring of delivery on the ground is robust. To date, the consultations and data suggest that although ENWORKS provides an important strategic and monitoring role, some variation across the region in the quality of the service offered has been evident.

Evaluation message

The Project delivery model ensures that ENWORKS plays a key role in the strategic co-ordination of the Project and provides the central management and monitoring function. Legal agreements with partners to deliver activity across the five sub-regions of the North West have been used to ensure delivery against targets and funding requirements. The model has worked well in practice. Notably for the NWDA, it reduced the administrative burden compared to a number of sub-regional projects and provided a single point of accountability for delivery and contact.

Going forward, a wider range of delivery partners and higher profile for ENWORKS should be considered. Further, the processes for ensuring that the service across the region is consistent may be open to improvement and should be made more robust and consistent to ensure optimal and equitable delivery across the North West.

Project governance and management

Governance

- 4.14 Project governance is provided by the ENWORKS Board and central delivery team. Documents reviewed for the evaluation such as Board papers and minutes demonstrate that the Board takes a keen interest in the delivery and performance of the Project, with specific reports of the Project provided for quarterly Board meetings. Further, consultations with

Board members identified that although it is recognised that it plays an advisory role it does seek to provide leadership. Importantly, the consultations suggested that the Board is prepared to ‘ask the tough questions’ and challenge ENWORKS delivery staff to ensure that the Project operates as effectively as possible.

- 4.15 However, the influence of the board on the Project may be more limited than suggested by current and former members. Leadership of the Project is effectively exercised by the core team at ENWORKS with Board discussions providing a useful sounding board but unable, as it is a non-incorporated body, to determine delivery and strategy. This is not to neglect the importance of the Board, rather to recognise the role of the delivery team.
- 4.16 Further, the Board plays a key ‘added value’ role in engaging stakeholders to the Project and ENWORKS more widely. Effective partnership working is central to the Project and key to its ability to fulfil successfully its objectives. It is clear from the governance and management procedures that partnership is at the core of the Project. Indeed, representatives from NWDA, the Environment Agency and Northwest Universities Association are on the Board among others. The list of latest Board members is set out in Table 4-1 below.

Table 4-1: Confirmed ENWORKS Board members as at July 2007

Named Board Members	Organisation
Clive Memmott (Chair) - Ex North West Business Link	Steve Barwick – NWRA
Tony Dean - Environment Agency	Paul Henly – Federation of Small Businesses
Mark Atherton – NWDA	Alexis Holden - Northwest Universities Association
Bob Clark - Cumbria Rural Enterprise Agency	Ian MacArthur - Groundwork NW (Accountable Body)
Michael Damms - NW Chamber of Commerce Ltd.	Paul Stowers – GONW
Katrina Delargy - Institute of Directors	

Source: ENWORKS

Management

Overall performance

- 4.17 The overall management of the Project provided by ENWORKS has been of a high standard and is valued by delivery partners and wider stakeholders. In particular, the skills and commitment of the ENWORKS team was highly regarded. Consultees identified the experience in resource efficiency and sustainable development in the team to be of great importance to the success of the Project.
- 4.18 Indeed, though this evaluation is focused on the Waste Minimisation Project specifically rather than ENWORKS in the round, a number of consultees suggested that the organisation as a whole may need to grow in the future in order to meet increased demand by businesses and partners. There is a sense that to date ENWORKS has grown organically and has now reached a ‘tipping-point’ in terms of staff numbers and capacity.
- 4.19 Returning to the Project, however, the essential day-to-day project management by ENWORKS appears to have been broadly fit-for-purpose. Quarterly monitoring reports on output delivery and financial performance were provided by partners to ENWORKS and this system appeared to operate effectively. Delivery partners consulted for the evaluation

suggested that a genuinely bilateral and partnership-based relationship existed between ENWORKS and the delivery partner ensuring that any issues could be resolved and risks to delivery discussed.

- 4.20 Further, monitoring returns to NWDA suggest that the central management systems are broadly effective. Forms detail effectively activity undertaken, delivery against outputs targets and key elements of the Project in the relevant quarters. The forms also suggest that ENWORKS relatively effectively identified and dealt with risks and issues that became apparent throughout the delivery of the Project. However, as discussed below, going forward a greater flexibility in managing evolving objectives and delivery issues would be beneficial.
- 4.21 One issue was that the Project originally intended to monitor the ethnicity of businesses participating. Deliverers on the ground have internally monitored this. However, this has not been actively reported as the Project aims to deliver a service to all SMEs across the region. Owing to the nature of the intervention this is appropriate, though, this information should continue to be collected for successor interventions.

Some key issues

- 4.22 Notwithstanding the broad conclusions above, the business processes adopted by ENWORKS for the Project appear to be open to improvement. SQW is grateful for the time provided by ENWORKS in the supply of monitoring and financial data to us, and we benefited from a number of useful discussions with ENWORKS staff. However, the data and discussions highlighted the significant levels of complexity in monitoring systems.
- 4.23 In particular, output and financial monitoring systems had undergone a number of changes and modifications over the Project's lifetime that made consistent tracking and analysis problematic. There were also issues around Single Programme spend and its relationship with other NWDA funding, the relationship between the Project and other ENWORKS initiatives, output attribution methods, and delivery and performance against targets. For an intervention of its size the complexity in the data appeared to be unsustainable and its collation and reporting resource intensive.
- 4.24 This is inevitably a difficult process, as the range of funding provided to the Project and its sub-regional delivery structure is inherently multi-faceted. However, improved business monitoring is necessary for future interventions. In particular, the deployment of a bespoke management information system that reduces the extent to which monitoring activity is resource-intensive and promotes consistency would be beneficial.
- 4.25 More widely, it would be useful for NWDA and ENWORKS to consider the following issues to improve the monitoring and management of the Project:
- Monitoring more closely the time with each client to provide information on how much it costs to provide advice to different types of business. Importantly, this would provide information to test consistency across the region.
 - Monitoring with beneficiary businesses what the savings in costs generated by the Project are invested in, if at all. For example, are they contributing to further employment, investment in equipment, innovation, work-force training or increased profit/GVA?

- Greater clarity in the apportioning of outputs to funding streams that are applied consistently across the life-time of the Project.
- Formalising if possible the monitoring process once beneficiaries have finished receiving support and deciding when such tracking of outcomes and savings will end. The persistence of outcomes and the length of time that environmental and cost savings are recorded is a major issue for all environmental support initiatives. However, further research by ENWORKS in this area provides a useful opportunity to influence national thinking and policy on this issue.
- Modifying procedures for choosing which clients are to be taken forward. Successor interventions may want to be more selective. Issues should include: which businesses are strategically best aligned with objectives; which are going to provide optimum Value for Money; which will deliver greatest impact against condition indicators; and which need the support the most owing to financial or other constraints? There is a reasonably good balance between economic and environmental outcomes when set against the rationale and objectives of the Project. However, for the future, ENWORKS and local delivery partners could be more assertive in prioritising providing support to strategically significant businesses.
- Ensuring that the monitoring of delivery on the ground by delivery partners is increasingly rigorous and a stronger evidence base is developed to ensure that the offer is truly equal and consistent across the region. This may involve greater oversight by ENWORKS of the work of partners and also setting a tighter framework for delivery to businesses.
- Greater flexibility in the delivery structure to allow for modifications to objectives and targets to ensure that performance is tracked realistically, cognisant of changing contextual conditions. This is also an issue for NWDA and greater flexibility in reporting and monitoring arrangements should be considered to ensure that risks to delivery and issues encountered are dealt with as swiftly as possible e.g. monthly reporting and regular (official and diaried) meeting between NWDA and ENWORKS.

NWDA management

- 4.26 Related to this final point, it is important to consider the management of the Project by NWDA. As far as can be reliably assessed from the evaluation, the relationship between NWDA and ENWORKS in the delivery of the Project has been effective and the Project well managed by NWDA. In particular, there appeared to be a notable level of transparency between the two organisations and effective relationships between key players.
- 4.27 Though a greater level of dialogue may have been beneficial to discuss issues and progress, broadly the channels of discussion and reporting seems to have worked well. Further, the success of ENWORKS in gaining NWDA investment for the successor intervention suggests that the relationship is a positive one. Importantly, a senior officer from NWDA is on the ENWORKS Board and this has allowed for a constructive relationship between core funder and ENWORKS through both formal and informal structures and processes.

Evaluation message

Overall, the Project was managed effectively by ENWORKS with a fit-for-purpose governance structure based on an advisory Board. Importantly, consultations with a number of delivery partners suggested that the relationship between ENWORKS and on-the-ground partners is a good one and effective strategic leadership is provided whilst allowing the necessary level of operational freedom in delivery. Staff at ENWORKS were well regarded by consultees with their experience in the business support and resource efficiency sphere of particular importance.

There are a number of areas in which monitoring and management systems could be modified to further improve the ability of ENWORKS to track performance and a greater degree of robustness may be needed going forward.

The relationship between NWDA – as the principal funder of the Project – and ENWORKS was effective and conducive to effective delivery. However, going forward greater flexibility and dialogue would be beneficial.

5: Spend and outputs

- 5.1 This Section initially sets out the Project financial profile. The primary focus of this is NWDA Single Programme monies. It then discusses the outputs generated and makes an initial assessment of Project value for money. The Section concludes with an assessment of the ENWORKS Toolkit.

Financial profile

- 5.2 The financial profile below includes data from October 2003 up to the end of March 2008 – the full life-time of the Project. This therefore includes the funding provided to ENWORKS to deliver against the elements of the Contract Extension as described in Section 2.

The headline numbers

NWDA Single Programme

- 5.3 The NWDA through Single Programme funding has contributed approaching £1.4 million to the Project (£1.38 million). The Single Programme funding target was originally £1.2m but increased to £1.4m to ensure *inter alia* the integration of Environment Connect into Business Link and the continuation of the Project to the end of March 2008.
- 5.4 The annual and cumulative NWDA Single Programme contribution to the Project is set out in Table 5-1 below.

Table 5-1: NWDA Single programme funding to the Project

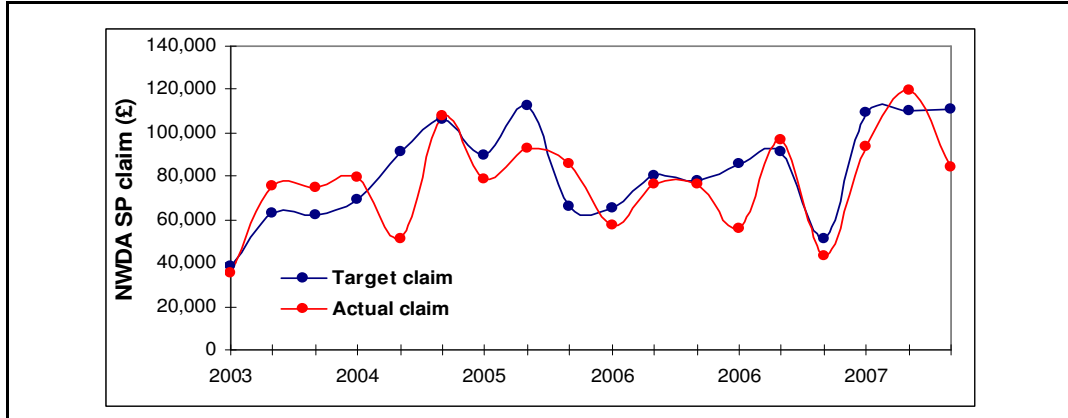
	2003	2004	2005	2006	2007	2008	Total
Annual funding (£k)	35.5	281	364.5	265	349	84	1,379.5
Cumulative total (£k)	35.5	316.5	681.5	946.5	1,295.5	1,379.5	1,379.5

Source: ENWORKS monitoring data

- 5.5 With targeted NWDA Single Programme funding of £1.38 million, performance against expected expenditure was therefore essentially met. However, it is important to analyse performance over time and so actual against target claims of Single Programme per quarter are set out in Figure 5-1. As demonstrated in the Figure, with a number of isolated examples⁷, performance against claim targets for NWDA funding was consistent across the life-time of the Project.

⁷ The most notable differential was in the final quarter of 2004. This was explained in monitoring returns to NWDA owing to an adjustment claimed by delivery partners in Lancashire and ERDF eligibility criteria.

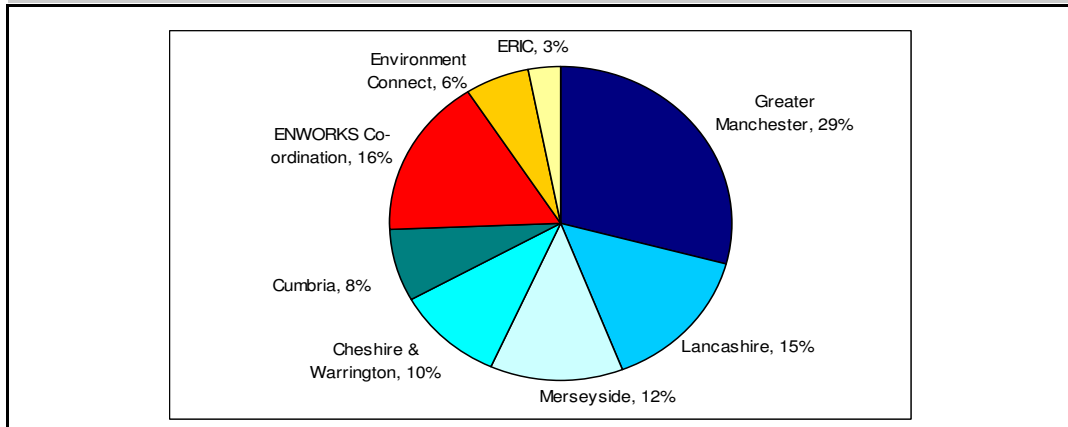
Figure 5-1: Actual and target NWDA Single Programme claims



Source: ENWORKS monitoring data

- 5.6 75% of this Single Programme funding (just over £1 million) was used to finance direct delivery to businesses through funding allocated to local delivery partners as set out in Figure 5-2. Support in Greater Manchester alone accounted for 29% of Single Programme expenditure.
- 5.7 Co-ordination costs for the Project funded by Single Programme stood at around £225,000, 16% of Single Programme investment. As the principal funder, support for the central function is expected. Further, given the range of activity supported by these co-ordination costs they seem appropriate and commensurate with the intervention model. The Environment Connect and ERIC funding in the Figure below are applicable to Contract Extension costs.

Figure 5-2: The distribution of NWDA funding by sub-region and other Project elements



Source: ENWORKS monitoring data

The total funding package

- 5.8 Including match funding, the total Project expenditure was £3.4 million, set out in more detail in Figure 5-2. Following NWDA Single Programme, the major source of public sector funding was ERDF, totalling around £1 million. Other sources of funding included local match, BREW from the post-2005 period and income from the private sector. Single Programme therefore accounted for 41% of total funding to the Project and 44% of the public funding.

Table 5-2: Total funding picture of the Project

	2003-05 (£k)	2006-08 (£k)	Total (£k)	Proportion of total funding
NWDA Single Programme	681	698	1,379.5	41%
ERDF	602	409	1,011	30%
Other public	217	321	538	16%
Private/income generation	99	143	242	7%
BREW	-	220	220	6%
Total	1,600	1,791	3,391	100%

Source: ENWORKS monitoring data

- 5.9 Consultations during the evaluation with key staff at ENWORKS suggested that without NWDA Single Programme funding there would have been no Project. The other funding was therefore essentially levered by NWDA's involvement. So it is acceptable to conclude that *for every £1 of Single Programme monies invested a further £1.46 was generated.*
- 5.10 This ratio is positive for NWDA, though with apparent scope for improvement. Levels of levered funding vary considerably across policy interventions and therefore definitive judgements are not helpful. However, given the information failures, co-ordination failures and lack of knowledge of resource efficiency potential at the start of the Project the level of match funding from the public sector is positive. The figures suggest that partner agencies across the region have 'bought-in' – both literally and strategically – to the Project providing significant opportunities for NWDA going forward.
- 5.11 Nevertheless though private sector contributions improved over time, there is further potential to increase this in the future and therefore improve the value for money. As seen in Section 6, the survey evidence suggests that beneficiary businesses may have been prepared to contribute greater financially to the Project. Increased private funding in the future would be important as it not only reduces the burden on the public purse, but demonstrates that the private sector is increasingly responsive to the resource efficiency agenda.

Evaluation message

NWDA Single Programme contributed £1.38 million to the Project. This represented 41% of the total funding and 44% of public funding. The Project has performed well against expenditure targets throughout its lifetime. This suggests that the Project is well managed by ENWORKS and NWDA. Without NWDA Single Programme the Project would not have occurred – for £1 of Single Programme investment therefore a further £1.46 was generated.

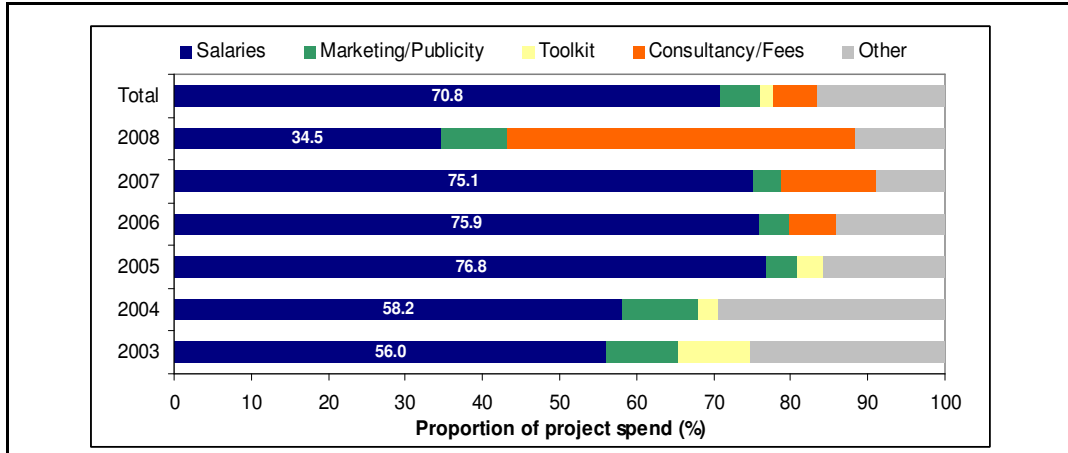
The other major single funding source is ERDF, and the public sector accounted for well over 90% of the total funding to the Project. However, over time and positively, the funding generated from private sources has increased, though successor initiatives should seek to maximise this where possible.

Expenditure breakdown

- 5.12 The total Project cost of £3.4 million has contributed to a wide range of activities (as discussed in Section 3). Breaking this down, the primary outlay – some £2.2 million – as appropriate to the nature of activity was on salaries. This included ENWORKS staff leading

and monitoring the Project and delivery partners across the region providing on-site advice to businesses. Figure 5-3 below sets out the broad categories of Project expenditure⁸.

Figure 5-3: Project expenditure by broad category



Source: ENWORKS monitoring data Note: The marketing and publicity category changed over time – see below

- 5.13 Marketing and publicity expenditure totalled around £170,000 over the lifetime of the Project, with a general reduction in the proportion of total expenditure accounted for by this over time. Higher marketing and publicity costs during the early period of the Project are to be expected. However, consultations suggested that increased marketing and publicity may be necessary going forward to capitalise on the profile of the Project and reach even greater numbers of businesses. This is an issue that should be considered by successor interventions.
- 5.14 As suggested by the categories of expenditure monitored by ENWORKS and reported in monitoring data changed significantly over the course of Project delivery. This made consistent tracking of spend problematic. There were two sets of categories as set out below over the 2003-05 and 2006-08 periods respectively. With the exception of Salaries and Overheads (in itself a loose description of spend) all categories changed.

Figure 5-4: Spend categories monitored by ENWORKS

2003-05		2006-07
Salaries		Salaries
Overheads	➔	Overheads
Marketing / ICT		Premises
Travel / Recruitment		Consumables
Envirowise	➔	Equipment
Regional Management / Quality		Marketing/Publicity
Toolkit		Travel/Subsistence
	➔	Staff Training
		Consultancy/Fees
		Audit

⁸ This data excludes the £240,000 additional Single Programme funding provided for the Contract Extension.

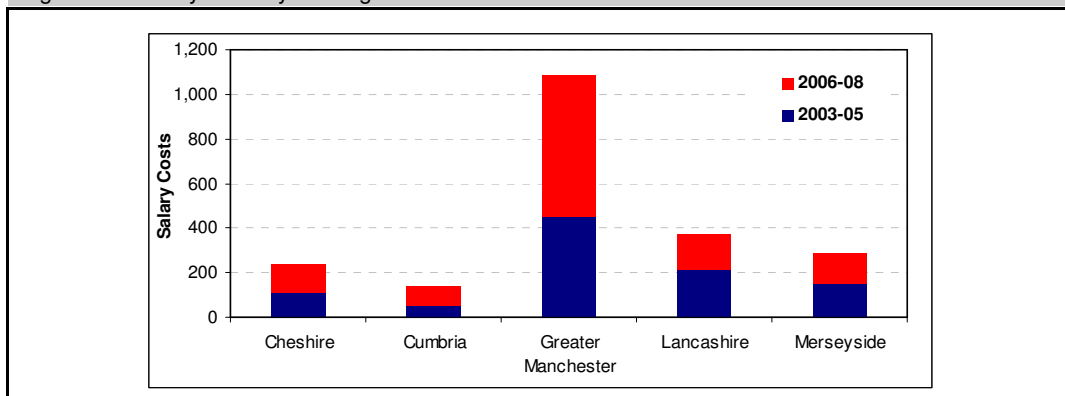
5.15 A number of these changes are to be expected, for example, the development of the Toolkit over 2003-05 and SQW understand that this modification in financial monitoring was owing to changes imposed to comply with ERDF reporting and financial management procedures. However, going forward it is important that records on expenditure are as consistent as possible. Indeed, ENWORKS must ensure that it is able to accurately compare costs over time to assess ongoing value for money and in order to allocate resources effectively.

Project delivery salary costs

5.16 As salary costs are the largest proportion of expenditure it is important they are reviewed in more detail. Total expenditure on salaries for local delivery partners totalled £2.1 million – over 60% of total project expenditure. The remaining salary costs are accounted for by ENWORKS staff costs. It is important to note, however, that this is not a clear cut focus on ‘delivery’ as salary costs to delivery partners include contributions to administrative functions in facilitating Project activity.

5.17 The distribution of salary costs across the North West is set out in Figure 5-5. Expenditure was significantly highest in Greater Manchester amounting to over £1 million. By contrast, Cheshire & Warrington and Cumbria collectively totalled under half a million pounds. As discussed in Section 6, this distribution of spend is matched by the resource efficiency and cost savings generated by beneficiary businesses.

Figure 5-5: Salary costs by sub-region



Source: ENWORKS monitoring data

Evaluation message

Project expenditure has been heavily focused on salary costs – this is consistent with Project activity and objectives. Greater consistency in financial monitoring would be beneficial, though we are aware that changes were determined by funders.

More broadly, financial monitoring data systems are complex for an intervention of the size of the Project. Notwithstanding the inherent nature of the intervention with five sub-regional areas, multiple funding streams and changing monitoring regimes demanded by funders, there would appear to be significant opportunity for a refinement of current systems. Crucially, the system is open to human error and places considerable weight on the knowledge of current staff. This is not conducive to effective knowledge management as ENWORKS goes forward.

Gross output performance

- 5.18 The paragraphs below present performance in the generation of *gross* outputs i.e. direct outputs prior to taking into account issues such as deadweight, leakage, displacement and multiplier effects. The Project experienced changes in the outputs monitored and delivered over its lifetime and the picture is relatively complex. This includes the transition from Tier 3 to Tasking Framework, and ‘Strive Targets’ introduced following the Contract Extension.

NWDA Tier 3 and Tasking Framework outputs

- 5.19 Single Programme funding commencing in October 2003 included Tier 3 output targets. However, outputs had to be revised from 2006 owing to the transition from Tier 3 to Tasking Framework outputs. There is good read across for a number of the outputs, however, not all. Monitoring against the delivery of these latter targets ceased post-2005. Table 5-3 sets out output categories that have consistent read across (shaded in green) and those that ceased.
- 5.20 As demonstrated by the Table, the change in output regimes quite seriously reduced the number of key outputs delivered by the Project to NWDA. This is most particularly the case with regards the wider skills development angle as outputs recording workshops, training weeks and student placements ceased to be applicable under the Tasking Framework. Further, the wider economic impact, as measured through indirect jobs created/safeguarded was lost. This was unavoidable given the new output regime. Nevertheless, the change in the key outputs to be delivered against and reported to NWDA potentially helped to streamline and target the Project to its core elements – business support, work-based training and cost-savings.

Table 5-3: NWDA Tier 3 and Tasking Framework output categories monitored by the Project

Original NWDA Outputs		Final Outputs as revised by NWDA
Direct Jobs Created or Safeguarded - 15	→	Direct Jobs Created or Safeguarded - 15 ⁹
Individuals Given Learning Opportunities - 910	→	Adults Undertaking Work Based Training ¹⁰ - 635
Businesses Receiving Specialist Advice - 473	→	Businesses Receiving Resource Efficiency ¹¹ - 473 + 300 (Strive Target)
Cost Savings through Improved Resource Efficiency - £10m ¹²	→	Cost Savings through Improved Resource Efficiency - £10m
Indirect Jobs Created/Safeguarded - 300	→	Ceased
Businesses Accessing Support/Info - 10,000	→	Ceased
Student Placements - 32	→	Ceased
Waste Minimisation Workshops - 42	→	Ceased
Training Weeks - 25	→	Ceased
		Turning CSR Businesses Assists into Resource Efficiency ¹³ - 70 (Strive)

⁹ Although the output is consistent, the Project did not target jobs created over the second period of delivery.

¹⁰ The output is different from individuals given learning opportunities. However, ENWORKS have been able to measure this output from 2005 Q2 onwards so there is read across

¹¹ The additional 300 outputs were introduced when the Contract was extended

¹² The cost savings target was originally £3 million. However, the Project Monitoring and Evaluation Plan include the target as £10 million and this is the target subsequently reported against in claim forms and monitoring returns.

- 5.21 Table 5-4 presents the key Tier 3/Tasking Framework gross outputs generated by the Project. The figures are significant with over 1,200 businesses assisted with resource efficiency and around 690 adults undertaking work-based training. 19 jobs were created/safeguarded. These were not recorded after 2005. They are nevertheless important outputs to NWDA under both Tier 3 and the current Tasking Framework and should be included in any assessment of the outputs generated. The Table also includes the Strive Targets introduced for the Contract Extension. These were business assisted outputs and can, with the Businesses Assisted with Resource Efficiency outputs, be aggregated to gain a total of the number of business assisted.
- 5.22 The Table also sets out the *gross attributable* outputs to Single Programme funding. Other public funding sources do not claim NWDA outputs, therefore, it would be possible to count all outputs delivered against NWDA categories as attributable to the Agency. However, it is vital to identify those outputs that have been generated by Single Programme funding alone. An attribution ratio of 44% is therefore used as the proportion of *public* funding accounted for by Single Programme monies for adults undertaking work-based training and jobs created.
- 5.23 Owing to complex issues around the matching of ERDF with BREW funding, a simple attribution based on the Single Programme proportion of the total Project funding is not applicable for businesses assisted. Therefore, the data presented follows a methodology developed by ENWORKS and agreed with NWDA. Going forward, it is important that the attribution ratios used by ENWORKS are clear and as consistent across the lifetime of any interventions as possible. This is important both in establishing the outputs applicable to NWDA funding and in assessing the value for money of this investment.

Table 5-4: Key gross outputs generated by the Project

Output (specify relevant measures)	Target	Achieved	NWDA attributable
<i>Businesses Assisted – Resource Efficiency</i>	750 (473 NWDA)	959	473
<i>Businesses Assisted with Resource Efficiency – Strive Target</i>	300 (NWDA)	280	280
<i>Turning CSR Businesses Assists into RE – Strive Target</i>	70	0	0
Businesses assisted with Resource Efficiency	1,120	1,239	753
Adults Undertaking Work-based Training	635	687	301
Jobs created / safeguarded	14	19	8

Source: NWDA Progress Monitoring Reports

- 5.24 As presented in Table 5-4, the Project performed well against targets. Most notably, the target number of businesses assisted by the Project (including the Strive Targets) was surpassed. Further, excluding the Strive Target, the initial target for businesses assisted with resource efficiency was met and significantly exceeded - 128% of the targeted 750 met. Importantly the total number of adults undertaking work-based training was 108% of the target, indicating

¹³ This output was introduced when the Contract was extended

the contribution of the Project to skills development. However, no outputs were generated in Turning CSR Businesses Assists into Resource Efficiency assists, despite a target of 70.¹⁴

- 5.25 In Table 5-5 are set out the outputs generated by the Project from October 2003-December 2005 i.e. prior to changes in output regimes. Over this period the Project indirectly created or safeguarded over 170 jobs and delivered 86 training weeks. In addition, approaching 17,000 businesses accessed support or information. However, this output is focused on engagement rather than delivery and therefore should be treated with some caution.

Table 5-5: NWDA Outputs achieved Oct 2003-Dec 2005

	Total gross outputs 2003-05	NWDA attributable gross outputs 2003-05
Indirect Jobs Created or Safeguarded	171	76
Number of Businesses Accessing Support/Information	16,760	7,391
Student placements	23	10
Waste Minimisation Workshops	40	18
Number of Training Weeks	86	38

Source: NWDA Progress Monitoring Reports

Evaluation message

The Project has generated significant gross outputs. 1,200 businesses have received resource efficiency support and approaching 700 adults have benefited from skills development. At an aggregate level performance against targets has been good.

NWDA Single Programme generated over 750 businesses assisted. It also created eight jobs and around 300 adults undertaking work-based training. For an investment of around £1.4 million these are significant metrics.

Other outputs

- 5.26 A range of non-Tasking Framework outputs have also been generated by the Project and reported to NWDA. Presented in Table 5-6 they demonstrate the wider contribution of the Project to regional sustainable economic development. This is notably the case in the role of the Project in providing access to partner programmes such as Envirowise and the Carbon Trust.
- 5.27 The Table also presents the reported cost savings to businesses generated by the Project with identified savings of some £23.5 million. This is essentially an ‘outcome’ rather than output of the Project and Toolkit data will be discussed in greater detail in Section 6. However, it is worth noting that the scale of this saving is very impressive. Indicatively, using the attribution ratio of 44% of public funding, for an investment of £1.4 million, NWDA funding generated cost savings of £10.3 million alone (a ratio of 1:7.5). Further, as the Project would not have gone ahead without NWDA investment, the total cost savings of £23.5 million were in effect levered by NWDA.

¹⁴ Discussion with ENWORKS regarding this output suggested that this output, once activity was underway for the Contract Extension was found not to be applicable as the businesses assisted with CSR did not in practice require further resource efficiency support.

Table 5-6: Other outputs monitored by ENWORKS

Output	Achieved	NWDA attributable
Annual Cost Savings through Improved Resource Efficiency	£23.5 m	£10.3 m
Number of Company Enquiries to Environment Connect	611	268
Referrals from Environment Connect to Advisors	464	203
Number of Search & Send Articles	154	67
Number of NW ERIC Newsletters	12	5
Weekly Press Releases	36	16
ENWORKS website updates	36	16
Assisted accesses to Envirowise FastTrack Visits from ENWORKS delivery partners	296	130
Assisted accesses to Envirowise DesignTrack Visits from ENWORKS delivery partners	17	7
Assisted accesses to Envirowise Counselling Visits from ENWORKS delivery partners	4	2
Assisted accesses to Carbon Trust Visits from ENWORKS delivery partners	99	43

Source: NWDA Progress Monitoring Reports

Evaluation message

The Project has generated a wide range of outputs, with referrals to other delivery partners and cost savings delivering significant contributions to regional development. The referrals are important and represent key Strategic Added Value over and above the delivery of Tasking Framework outputs through increasing awareness of partner agencies and programmes.

Assessment of Economy ...

- 5.28 Economy is one of three elements of value for money, and looks at the cost of inputs to the Project to assess whether the necessary inputs are being secured at minimum necessary cost. In making this assessment it is evident that the Project delivered a wide range of activity for a total cost of £3.4 million and Single Programme funding of £1.4 million. The Project is delivered across the North West and has, as set out in the output data, engaged significant numbers of businesses in activity. Therefore economy at this broad level appears to be good.
- 5.29 However, an important element of the economy of the Project is the extent to which activities delivered by the local delivery partners are at a reasonable cost. Essentially, does the public sector funding for the intervention to the Project offer better value for money than potentially subsidising private sector consultancy services, for example?
- 5.30 As discussed above, a key element of this is the salary costs of delivery partners. The total cost to local delivery partners was shown to be £2.1 million and this allows for an assessment of the economy of these services. Identifying costs across the lifetime of the Project for delivery partners on a day-rate basis would be extremely resource intensive. However, as a cross-section, ENWORKS provided SQW with quarterly financial claim forms provided by local delivery partners for the July to September 2007 period.

- 5.31 Data was analysed for delivery for to businesses in each sub-region (as opposed to EDRF eligible areas only). As set out in Table 5-7 a total of 2,600 hours of Project time were bought for £43,400. This provides a cost per hour of £17 and an average day rate (assuming a 7.5 hour day) of £125.
- 5.32 Though caution must be taken in definitive judgements flowing from a cross-section of data, this demonstrates good economy and value for money. Further, the data is very consistent across the sub-regions in terms of costs per hour and day. This suggests that the Service Level Agreement and contractual system with delivery partners discussed in Section 4 have operated well on a financial basis. This therefore ensures equal value for money across the region which is an important consideration for NWDA.

Table 5-7: Hourly and day rates for local delivery partners, July – September 2007

	Total hours	Salary cost	Cost per hour (£)	Cost per day (£)
Cumbria	497	8,220	17	124
Lancashire	552	9,260	17	126
Greater Manchester	349	5,680	16	122
Cheshire and Warrington	731	11,920	16	122
Merseyside	469	8,310	18	133
Total	2,598	43,390	17	125

Source: ENWORKS Note: Salary costs rounded to the nearest 10

- 5.33 Nevertheless, the beneficiary survey of over 100 businesses suggested that greater financial contributions may have been possible from the beneficiary businesses themselves. Of the respondents to the survey the vast majority (82) had definitely not paid for services. When asked if they would have been willing to, 40 of the 82 said they would. As discussed in greater detail in Section 6 this data must be treated with some caution. Nevertheless, it suggests that greater income may have been generated from businesses. This would have reduced the necessary investment from the public sector and have improved economy.
- 5.34 Importantly, however, for those businesses that said they would not have been prepared to pay, by far the most common explanation was that financial resources would not have been made available for resource efficiency by the beneficiary. Essentially, the activity would not have been a priority given other financial constraints and drivers. This is an important message regarding the ongoing rationale for public sector interventions in this area. Indeed, it strengthens the message set out in Section 4 that it is crucial that going forward interventions effectively target those businesses that most need the publicly funded support.

Evaluation message

Broadly the economy of the Project is good. The total cost for the range and scale of the activity provided is low and the data on day rates suggests that delivery on the ground has been of good indicative value and even across the region.

Findings from the beneficiary survey suggest that greater income may have been generated through contributions by beneficiary businesses. Greater financial contributions from beneficiaries should therefore be considered going forward by ENWORKS. It is essential that businesses are not put off by costs and the inability of SMEs to pay for environmental support is a key failure that the Project responds to. However, the survey suggests that half of the businesses that did not contribute to the costs would have been prepared to.

... and Efficiency

- 5.35 Efficiency is the second element of a value for money assessment. This relates to the cost per unit of outputs achieved. First, in the discussion below, we present the cost per *gross* output and compare this to relevant benchmarks from elsewhere. However, in undertaking an assessment of efficiency, it is important that additionality (including leakage, displacement and multiplier effects) is accounted for and costs per *net* output created are also assessed.

Gross output cost efficiency

- 5.36 In identifying the gross cost per unit we will focus on those outputs that have been delivered across the lifetime of the Project as it is also important that we are able to compare unit costs to relevant benchmarks. Therefore, in Table 5-8 are set out the gross cost per unit for adults undertaking work-based training, businesses receiving specialist advice and jobs created.
- 5.37 To understand the cost to the public purse alone, this calculation excludes the income in this period sourced from the private sector. Each cost per unit is therefore derived from total public spend, amounting to £3.15 million. The cost per unit will be consistent for the total and Single Programme funding for adults undertaking work-based training and jobs created/safeguarded. The businesses-assisted cost will be lower for NWDA as the ENWORKS attribution ratio has been used.

Table 5-8: Cost per gross unit of consistent outputs

	Total	Cost per gross unit (£)	NWDA cost per gross unit (£)
Businesses assisted total	1,239	2,550	1,830
Adults Undertaking Work-based Training	687	4,600	-
Jobs created / safeguarded	19	165,750	-

Source: ENWORKS monitoring data Note: Cost per unit data rounded to the nearest 50

- 5.38 Comparing these outputs against benchmarks for gross cost per unit the Project performs well. This assessment draws on wide ranging research undertaken by SQW on evaluation evidence¹⁵:
- around £2,500 per gross business receiving specialist support compares favourably to a mean of £15,500 for businesses assisted information and signposting, or awareness raising identified by SQW and also falls below the median value of £5,570. More specifically, an evaluation of the Business Resource Efficiency West Midlands

¹⁵ A comprehensive exercise reviewing evaluation evidence authored by PA/SQW in 2006, "Ready-reckoners for adjusting gross to net outputs". This was a background report supporting the implementation of the RDA IEF undertaken for DTI/BERR and drew on a wide range of studies including: SQW (2002), "Methodology for Calculating Net Tier 3 Milestones", Report to the RDAs and DTI; SQW (2003), "Identification of Performance Benchmarks", Report to AWM; EKOS (1998), Baselines and Quantification in the UK Objective 2 Programmes; PACEC (1995), Review of Scottish Enterprise Initiatives; ADAS and SQW (2003), "The Mid-term Evaluation of the England Rural Development Programme", Report to Defra and the European Commission; SQW (2002), "Productivity Contribution of Major DTI Programmes and their Value for Money", Report to DTI; SQW (2005), "Review of Evaluation Evidence on Trade Promotion", Report to DTI, SQW (2001), "DTI Industrial Support Policies: Contract A Mapping and Assessing the Patterns of DTI Industry Support and its Impacts", Report to DTI.

(BREW) Project undertaken by GES and ECOTEC in 2006¹⁶ recorded a cost per business assist of around £6,100.

- around £4,600 for per adult undertaking work based training is well below the mean of £5,300 for individuals trained and learning opportunities outputs identified by SQW from our review of evaluations. It is, however, above the median value of £2,800 for this output.
- against relevant benchmarks efficiency per gross job created does not appear to offer good value for money, with a median value identified by SQW of some £7,700 per gross job created. However, direct job creation is not a core objective of the Project and has not been monitored since 2005.

Net output cost efficiency

5.39 To establish the *net* outputs, an assessment of additionality, leakage, displacement and multiplier effects has been made, based on consultations with stakeholders and partners, the survey of beneficiaries, and the use of relevant benchmark information and wider learning.

Gross to net ratio

5.40 As a starting point for establishing an appropriate gross to net translation ratio for the Project, wide ranging research by SQW¹⁷ found that the coefficients for business assistance programmes were generally between 0.65 and 0.8 for business guidance, advice, mentoring, and product/process development i.e. between 65% and 80% of outputs were additional, and would not have taken place without the intervention. This provides a broad outline in establishing the specific metrics for the Project.

5.41 Building on these figures, we have made an assessment of each component of additionality for the Project based on our primary sources of information (survey and consultations). The key definitions and evidence on which these assessments are based are set out below.

Table 5-9: Evidence for the gross to net translation ratios

Survey findings	Consultations and wider evidence
Deadweight - <i>The extent to which outputs would have occurred anyway, without the intervention (i.e. are additional)</i>	
<ul style="list-style-type: none"> • Full additionality was apparent for 11% of beneficiaries i.e. 11% stated that without the Project 'No changes would have been made to business practices'. • Most common was scale additionality, where the Project produced results increased the scale of these results – this was the case for 23% of beneficiaries. • Most important was speed additionality – 56 of 104 respondents to the survey stated that changes would have been made but have taken longer to implement. 	<ul style="list-style-type: none"> • Stakeholders consulted believed that the Project had high additionality and that the results it brought about for businesses would not have occurred without it. • Significant information and market failures were apparent at Project commencement. • Very likely that the activity would not have been provided by the local delivery partners without the funding provided by the Project.
Leakage - <i>The proportion of outputs which benefit those outside the intervention's target area or group</i>	
<ul style="list-style-type: none"> • All respondents to the survey were based in the North 	<ul style="list-style-type: none"> • Direct leakage is likely to be very low as businesses must be within the region to

¹⁶ Interim Evaluation of the Business Resource Efficiency West Midlands (BREW) Project, A report to Groundwork West Midlands Environmental Business Services by GES Ltd (Research and Consultancy) and ECOTEC Research and Consulting August 2006

¹⁷ As above in footnote 15

Survey findings	Consultations and wider evidence
<p>West.</p> <ul style="list-style-type: none"> However, over 50 of the respondents stated that more than half of their turnover was generated outside of the region. Therefore, potential benefits (e.g. improved services, lower costs, indirect wage and prices multipliers) may be felt outside of the region. 	<p>benefit. However, some of the outputs generated will benefit those outside the region.</p> <ul style="list-style-type: none"> The SQW research in the development of the IEF found that leakage could be up to 10% at the regional level, though is likely to be somewhat lower for this intervention.
<p>Displacement - Where the Project reduced outputs elsewhere in the target area e.g. assisted and non-assisted business competing in the same market</p>	
<ul style="list-style-type: none"> The survey responses suggest that displacement is low. Although respondents to the survey were primarily competing in regional markets, the perceived impact of the Project on competitive advantage and increasing business turnover was felt to be limited. It is therefore unlikely that the Project has resulted in non-assisted businesses experiencing significant displacement. 	<ul style="list-style-type: none"> Displacement was found to be low from research undertaken by SQW on business support interventions. Work for the development of the IEF suggested that displacement for business assistance interventions was around 10-15%.
<p>Substitution - Where a beneficiary substitutes one activity for a similar one to take advantage of public sector assistance i.e. within firm displacement</p>	
<ul style="list-style-type: none"> 19 respondents stated that the Project diverted attention from other business practices. However, no businesses reported that this resulted in reduced overall competitiveness. 16 of the 19 stated that this diversion had no effect on competitiveness. Interestingly, the remaining three stated that the diversion actively improved their competitiveness. No evidence was found for (negative) substitution. 	<ul style="list-style-type: none"> It is possible that the focus on resource efficiency or waste minimisation by the beneficiary firm resulted in a diversion of attention from other business activity that reduced overall competitiveness. Research by SQW for the IEF suggested that substitution is not a major factor in business support initiatives and no evidence was found for substitution in the consultations.
<p>Multiplier effects - The second-round effects on the level of economic activity (output, income or employment) associated with an intervention</p>	
<ul style="list-style-type: none"> The survey suggests that the Project has a knock-on effect on beneficiary businesses once they have completed their relationship with the intervention with 77 of the 104 respondents planning to further improve their resource efficiency over the next 12-36 months with potential for further savings and competitiveness implications. 16 respondents to the survey stated that the Project had a high impact on increasing/safeguarding employment with potential for income multipliers. 	<ul style="list-style-type: none"> The Project has potentially significant multiplier effects, including incomes generated through the direct and indirect jobs created/safeguarded, and the cost savings, efficiencies, improved business practices and higher work-based skills generating increased business turnover, wealth creation and greater investment in local supply chains and services in the region. SQW research identified multiplier values of between 1.25 and 1.4 at a regional level. However, multipliers should be used conservatively and the upper range only in areas of significant under utilisation of resources and labour markets.

Source: SQW Consulting

5.42 The messages above suggest that the overall additionality of the Project is relatively high. Based on these findings, the following ratios have derived for the translation from gross to net outputs. No evidence was found for substitution.

Table 5-10: Ratio for the translation of gross to net outputs

	Additionality	Leakage	Displacement	Resulting Gross to Net Ratio	Multipliers	Final Gross to Net Coefficient
Coefficient	0.71	0.95	0.87	0.59	1.25	0.73

Net outputs

- 5.43 Applying this ratio of 73% additionality the key *net* outputs of the Project are set out in Table 5-11 below. The headline net outputs are just over 900 businesses assisted and around 500 adults undertaking work-based training. Importantly, taking into account additionality displacement, leakage and multipliers, the net outputs generated by Single Programme funding of around £1.4 million are over 550 businesses assisted and 220 adults undertaking work-based training.

Table 5-11: Headline net Tier 3/Tasking Framework outputs generated by the Project

	Net outputs	Net NWDA attributable	Cost per net output (£)	Cost per net NWDA output (£)
Number of Businesses Receiving Specialist Advice/Resource Efficiency	909	552	3,450	2,500
Adults undertaking work based training	504	221	6,250	-
Direct Jobs Created or Safeguarded	14	6	225,900	-

Source: ENWORKS monitoring data and SQW Note: Cost per unit data rounded to the nearest 50

- 5.44 As the overall additionality of the Project is high, the net unit costs ensure that the Project continues to offer good value for money. The cost per net business assist and adult undertaking work-based training remain well within the boundaries of accepted *gross* benchmarks as identified by SQW.
- 5.45 On top therefore of a wide range of other outputs, the NWDA Single Programme cost per net business assisted with specialist advice and resource efficiency from the Project is around £2,500 and £6,250 per adult undertaking work-based training.

Evaluation message

Gross-to-net changes reduce efficiency to a degree. However, the Project has relatively high additionality, low displacement and leakage, and reasonably good multiplier effects.

The data suggest that the Project has been broadly efficient with acceptable costs per net output to NWDA. Indeed, the high additionality ratio means that the primary net outputs of the Project offer good value for money when compared to relevant benchmarks.

The ENWORKS Toolkit

Background and operation

- 5.46 The development of the ENWORKS online Toolkit was a key output of the Project. Indeed, consultations with stakeholders suggested that the Toolkit was a key element of good practice and key to the added value generated. Encouragingly, use of the Toolkit as a means for tracking carbon and resource efficiency savings is recognised in the NWOP 'Action Area 1-3: Increasing Sustainable Production and Consumption'. The Toolkit, enables users to 'log, manage, quantify and report in real-time the economic and environmental outcomes of the support they provide to businesses on resource efficiency and waste management improvements.'
- 5.47 Data collected can include: cost savings, CO₂ savings, water savings and material savings, waste diversions from landfill (from 2007 onwards), material substitutions for

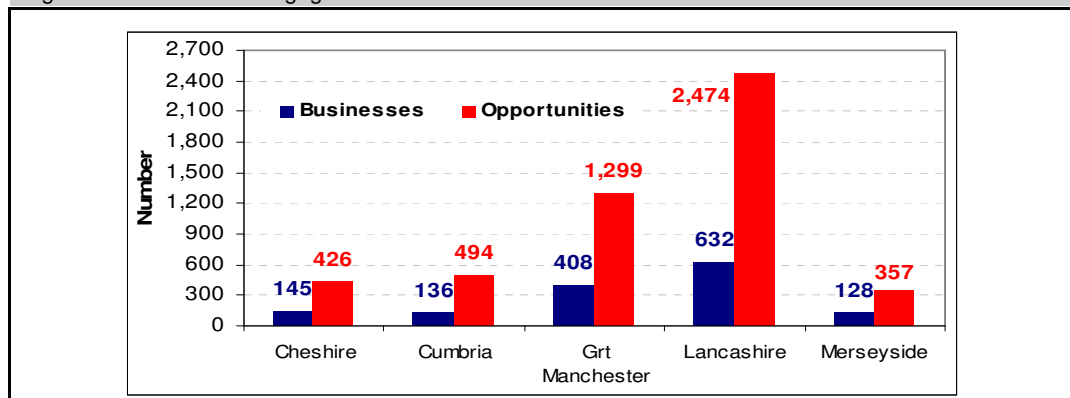
biodegradable/recycled materials (from 2007 onwards), take-up of renewable energy supplies (from 2007 onwards). These factors can be reported by project/programme, by delivery partner, by business sector, by resource type, by opportunity type, by opportunity status or by ‘groups’ of data created specifically within a region, cumulatively to date, or for a particular time period.

- 5.48 The Toolkit is primarily used by business advisors rather than businesses themselves. However, this varies and beneficiaries are able to access and update the information. All savings and achieved resource efficiencies are agreed and signed off by businesses to ensure that the data captured on the Toolkit is accurate and represents actual rather than theoretical savings. The Toolkit uses conversion factors to move from resource savings to cost savings and as any opportunity develops the figures become progressively more specific and robust.
- 5.49 SQW was provided with over 30 randomly selected monitoring reports recording the cost savings and efficiency data of individual businesses – each with a number of opportunities. These were drawn from across all five sub-regions. Each report had been dated and signed off by the client at the beneficiary business. The business agreed the identified savings and other outcomes generated by the intervention. Given wider auditing and verification work undertaken by ENWORKS and funders and the findings of our survey that verify at a broad scale the scale and type of findings identified, SQW is satisfied that the figures contained within the Toolkit are accurate and genuine at the point of entry.

Output Toolkit data

- 5.50 Data from the Toolkit captures the geographical spread of the support provided under the Project. As set out in Figure 5-6, a total of 1,449 businesses are logged on the Toolkit spread relatively evenly across the region, though with an emphasis on Lancashire and Greater Manchester. Collectively these two sub-regions account for over 70% of all businesses captured on the Toolkit. Each company may have a number of ‘opportunities’ categorised as *‘an improvement to an element of a business’s operations that can be specifically defined and that can be broken down into its component parts’* and this total is also presented.

Figure 5-6: Businesses engaged with the Toolkit from across the North West



Source: ENWORKS Toolkit to 19 February 2008

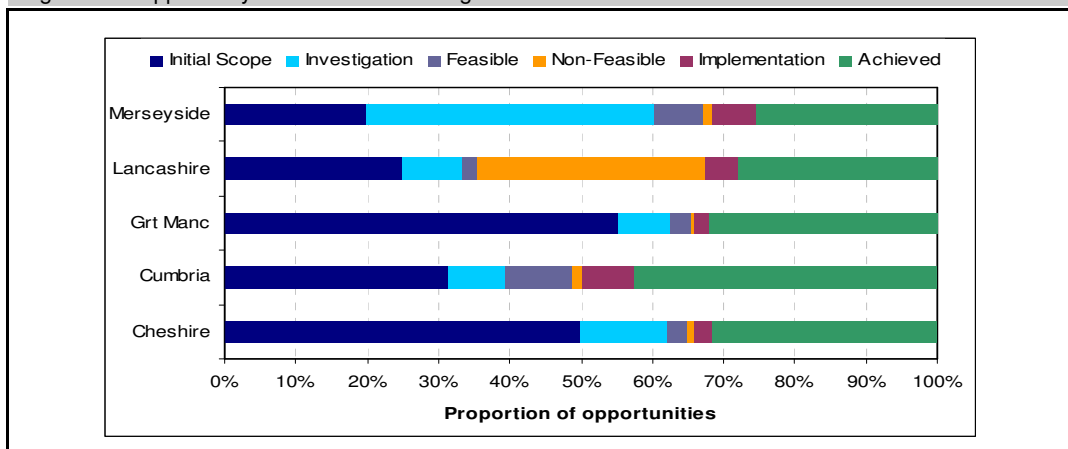
- 5.51 The Toolkit includes a number of ‘Opportunity’ categories as follows:
- Initial Scope – the Opportunity has been identified, although accurate and complete details and data may not yet have been gathered

- Investigation – data is being gathered and an assessment of whether the Opportunity is feasible is underway
- Feasible – the Opportunity is feasible
- Not Feasible – the Opportunity is not feasible at this time
- Implementation – the Opportunity is being implemented; some Opportunities may take several weeks or months to implement
- Achieved – the Opportunity has been successfully achieved and all details and data have been confirmed as accurate.

5.52 Figure 5-7 presents the split of opportunities for each of the sub-regions. The range of ‘opportunity status’ across the sub-regions is very varied. Most notable is the high number of ‘non feasible’ opportunities in Lancashire. Ostensibly this implies that the wrong opportunities may be identified at an early stage in the Project by advisors. However, discussion with ENWORKS suggests that the opposite is the case. Rather, it is only in Lancashire where service delivery partners have actively used the ‘Non-Feasible’ category.

5.53 This is concerning for as far as is practical all delivery partners should adopt the same approach to the use of the Toolkit. Further, opportunities identified as ‘non-feasible’ are contained within the pipeline ‘Annual Cost Savings’ data in the Toolkit. The Toolkit data identifies around £575,000 as annual savings for non-feasible opportunities. There is a possibility that these will never be translated into real cost savings.

Figure 5-7: Opportunity Status across the region



Source: ENWORKS Toolkit to 19 February 2008

Evaluation message

The development of the Toolkit is a key example of best practice and added value generated by the Project. It offers beneficiaries, deliverers and funders the opportunity to track and monitor performance and is a key tool in demonstrating the outcomes of an intervention. The Toolkit has been adopted by a wide range of programmes across the UK and plays a key role in raising the profile of ENWORKS as an organisation and the region more widely. The Toolkit also offers the opportunity for businesses to maintain the knowledge capital developed through the Project should individuals move on to different positions or places of employment.

6: Outcomes and impacts

- 6.1 In this Section we explore the outcomes and impacts that the Project has had on beneficiaries and the wider economy and environment. This draws on the outcome data stored in the Toolkit for the Project, findings from the beneficiary survey and a review of secondary data to provide an assessment of the impact on conditions that gave rise to the intervention.
- 6.2 Following this, an assessment of the third value for money indicator, effectiveness, which looks at the extent to which objectives were met is presented.

ENWORKS Toolkit outcomes

- 6.3 Data was supplied to SQW by ENWORKS from the Toolkit for savings generated by the Project. The data covers the period from 1 April 2004 to February 19 2008. A detailed analysis is presented in Annex A including analysis at a sub-regional and sectoral level.

Cost savings

- 6.4 The total cost savings to date to businesses generated by the Project reported in the Toolkit by 19 February were £23.4 million. These savings are generated through reduced business costs for resources such as waste, energy, materials, and water. The total has increased steadily over the lifetime of the Project as set out in Table 6-1 below.

Table 6-1: Aggregated achieved cost savings generated by the Project

Period	Total achieved savings (£m)
1st April 2004 up to March 31st 2005	4.8
To March 31st 2006	11.7
To March 31st 2007	20.5
To February 19th 2008	23.4

Source: ENWORKS Toolkit to 19 February 2008

- 6.5 The cost savings per opportunity (see 5.50) were £15,300 and per business some £32,300. These are impressive figures. These savings must be counterbalanced by the capital costs to the businesses in instigating and facilitating these changes. The Toolkit indicates that capital costs to date of some £7.6 million to date equating to around £10,700 per business. However, these are one-off investments whereas cost savings, once implemented are projected to continue.
- 6.6 Table 6-2 identifies how the cost savings have been translated into reduced business expenditure for the four primary types of resource: energy, materials, waste and water. The greatest absolute cost savings generated were in materials (just over £8 million), equating to savings of 1% of annual business expenditure on this resource. Further, the data demonstrate that for each business with savings of this nature, materials savings equated to £15,800. Waste is the resource where the annual cost savings have accounted for the greatest proportion (54%) of annual expenditure on the resource.

Table 6-2: Annual cost savings to businesses by resource type

Resource Type	Number Of Businesses	Baseline Spend (£m)	Annual Cost Savings (£m)	Savings as proportion of total spend	Savings per business (£)
Energy	582	59.3	6.5	11%	11,200
Materials	509	617.4	8.0	1%	15,800
Waste	537	7.9	4.2	54%	7,900
Water	532	7.0	0.7	11%	1,400

Source: ENWORKS Toolkit to 19 February 2008

- 6.7 The potential future cost savings from opportunities at the initial scope stage and in the pipeline are also important. These may change as each opportunity develops, nevertheless, pipeline savings identified to date could contribute an additional £16.7 million in cost savings per annum.
- 6.8 Encouragingly, as discussed in more detail in Annex A anticipated savings are significantly more evenly spread across the region than savings achieved to date, the latter having been primarily focused on Greater Manchester and Lancashire. This is important as it ensures that the Project is indeed serving a regional market and delivering outcomes for businesses across the North West in line with its objectives.

Evaluation message

The cost savings to businesses generated by the Project are very significant at £23.4 million. Savings are highest in Greater Manchester yet have been significant across the region and pipeline savings are significantly more evenly spread.

On average, the data suggest that each business engaged in the Project could save around £32,000 on their resource costs. Given the objective of the Project to work with SMEs this has the potential for very real competitiveness benefits. The savings can also directly contribute to raising regional GVA through reduced business costs.

Environmental savings

- 6.9 The environmental outcomes generated by the Project are wide ranging. They include resource reduction, CO₂ savings and waste diverted from landfill. It is important that these outcomes are sufficiently taken into account. As discussed in Section 2, the Project has as one of its core objectives the reduction of the resource consumption footprint of firms participating in the initiative and the region more widely.
- 6.10 Detailed data are provided in Annex A, and notable figures include:
- achieved reductions of around 40,000 tonnes of CO₂ emissions with a further 72,000 annual savings in the pipeline
 - to date over 83,500 fewer kWh of natural gas used by businesses and over 50 million fewer kWh of electricity used
 - 12,600 litres of petrol saved with a pipeline annual saving of some 66,700 litres
 - around 99,000 tones of solid raw material saved and over 350,000 m³ of mains water saved

- 20,500 tonnes of waste diverted from landfill since the Summer of 2007 and 12,300 annual savings in the pipeline
- 35,000 labour hours saved to divert to other business areas.

6.11 The Toolkit also records data on Substitution activity by businesses. This is substituting a resource such as diesel to bio-fuel or from hazardous to non-hazardous materials. However, the data records comparatively few Substitution opportunities and limited outcomes. This saving type was only incorporated into the Toolkit in 2007 and therefore a low number is expected. However, going forward it is important that this option is accurately recorded. A neglect of substitutive outcomes may lead overestimating the impact of the resource and cost savings of the Project as a saving in one resource may be recognised, but not the associated increase use in another.

Evaluation message

The environmental outcomes of the Project are significant. Encouragingly, and consistent with the emerging policy agenda at the national and regional level, resource efficiency has led to significant actual and future CO₂ savings.

The data demonstrates that the project has clearly contributed to its objective of reducing the resource consumption footprint of beneficiary businesses. Further, as NWDA moves to take responsibility for waste and sustainable development following the Sub-National Review (SNR), interventions of this nature are well aligned to the emerging role and responsibility of the RDA if they contribute effectively to sustainable development.

Net outcomes

6.12 As discussed in Section 5 the additionality of the project is high. However, as with the outputs produced by the Project, some outcomes would have been generated without the intervention. It is therefore, for the headline outcomes, appropriate to apply the gross to net ratio of 73% to understand the added value to the region generated by the Project in cost savings and environmental outcomes that are truly additional (Table 6-3).

Table 6-3: Net outcomes of the Project as recoded in the Toolkit

Headline outcome	Gross outcomes	Net outcomes
Cost savings to date	£23,391,700	17,160,200
Waste diverted from landfill (tonnes)	20,500	15,000
CO ₂ savings (tonnes)	40,300	29,500

Source: ENWORKS Toolkit to 19 February 2008 and SQW

6.13 Therefore, for public investment of around £3.15 million, around £17.2 million of net cost savings have been generated by the Project at a headline saving:cost ratio of over 5:1. Further, the Project has saved 29,500 net tonnes of CO₂ and diverted 15,000 net tonnes of waste to landfill.

Evaluation message

The net outcomes of the Project have the potential to make a significant impact on the regional economy and environment with net savings to businesses of around £17.2 million to date and 29,500 tonnes of CO₂ saved.

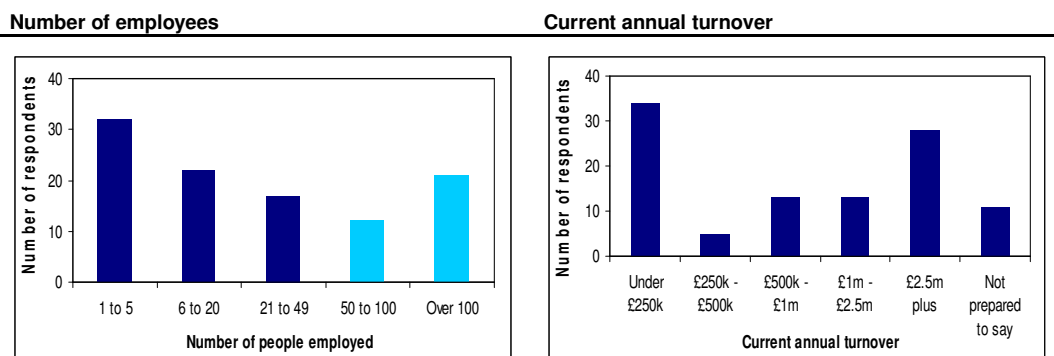
Impacts on beneficiaries

- 6.14 As a key element of the evaluation, an online survey was undertaken of beneficiary businesses. Delivery partners across the region provided an initial request to beneficiaries to complete the survey drawing from their database of beneficiary businesses. Follow-up e-mails and telephone calls were carried out by delivery partners and SQW.
- 6.15 In total 104 beneficiaries completed the online survey. Statistically, this provides a confidence interval of +/- 9 at a 95% confidence level for the results.¹⁸ Given time and resource constraints of the evaluation, this is a positive number of respondents. The study team are confident that the respondents provide as representative a sample of beneficiaries available within these constraints. Further, in the main the quality of responses to the survey was high. As such the survey provides an important evidence base for the impact of the Project.

Profile of respondents

- 6.16 The characteristics of the survey respondents are broadly reflective of the Project beneficiaries as a whole. In particular, a large proportion of respondents were from businesses which are classified as small businesses – the main target beneficiary. Of the businesses surveyed, over two thirds employed fewer than 50 people¹⁹ and a third have a current annual turnover of less than £250k. However, the range of survey respondents is also important and reflects that the Project has delivered to a diverse market. Our survey sample includes firms with over 100 employees and annual turnover in excess of £2.5 million.

Figure 6-1: Size of businesses surveyed, by employees and turnover



Source: SQW Consulting Beneficiary Survey

- 6.17 It was intended that the Project should benefit businesses across the Northwest region. Bearing this in mind, our survey was sent out to businesses across the whole region through sub-regional delivery partners. The resulting cross-section of respondents contained businesses from within each sub-region and in both urban and rural areas.
- 6.18 It is also important that the profile of respondents covers the whole period of delivery and is not heavily biased towards one particular year. The survey results show that the time that

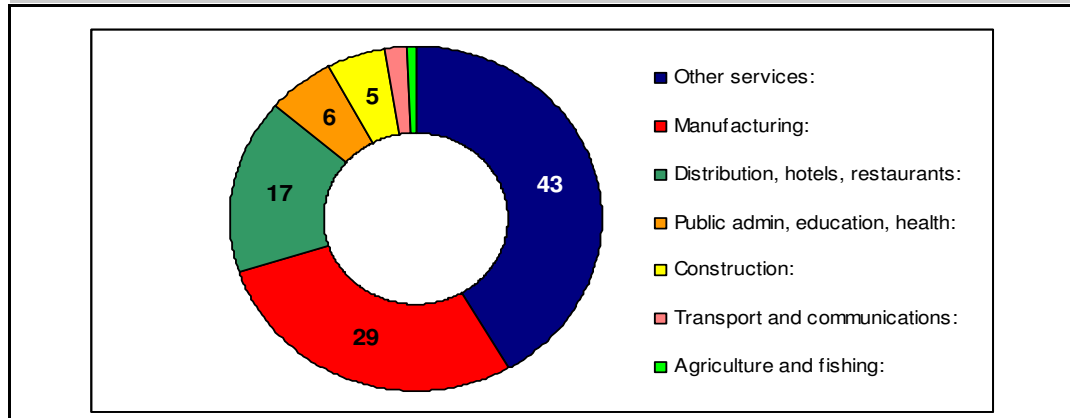
¹⁸ Specifically +/- 9.2. This is derived from using the total gross businesses supported with resource efficiency (1,239)

¹⁹ Businesses employing less than 50 people are identified as being either small or micro by BERR. See <http://www.berr.gov.uk/bbf/enterprise-smes/research-and-statistics/statistics/page38573.html>

businesses first received support covers 2004 until 2008 though there is a slight bias toward the two latest years as may be expected in a final evaluation survey.

- 6.19 The sectoral composition of respondents is also reflective of wider beneficiaries of the Project, as shown below. In particular, 43 respondents identified themselves as being in the manufacturing sector – an industry with significant potential for resource efficiency gains.

Figure 6-2: Sectoral composition of survey respondents



Source: SQW Consulting Beneficiary Survey

- 6.20 60% of businesses do not identify themselves as being within one of the NWDA’s priority sectors, suggesting that there may be a case for targeting beneficiaries more tightly based upon the region’s policy priorities. However, 23% of respondents said that they were within the food and drink sector and 9% in financial and business and professional services. Within the other NWDA’s priority sectors, there were less than 5% of respondents.
- 6.21 The respondents to the survey primarily serve a regional and national market. Of the 96 respondents who provided robust information, 43 generated over half of their turnover within the region – indeed, 10 of these generated 100% of their turnover just in the North West.

Evaluation message

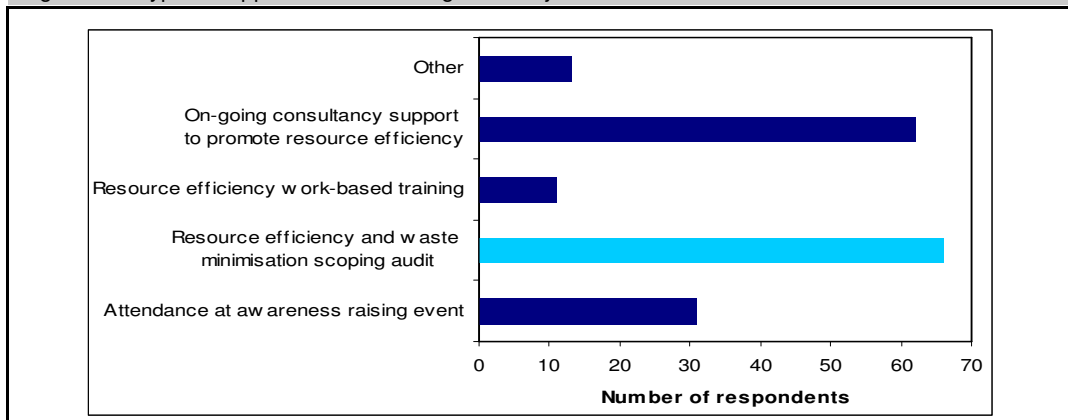
The profile of survey respondents is broadly reflective of the Project beneficiaries. Allied with the sample size of 8%, this ensures that we can be confident in the key messages and additionality figures drawn out from the survey findings. Further, it identified the type of businesses that the project has supported. They are primarily SMEs with under 50 workers, across a broad range of sectors but in particular located in manufacturing and broadly serving local and regional markets.

Process & Support received

- 6.22 The survey sought to understand the main issues facing businesses that prompted interest in the Project. The desire to reduce the amount of waste and energy produced by their business figured prominently among the answers. However, behind this desire two major factors which align closely with the rationale of the Project itself were identified in the survey:
- the need to reduce the operating costs of the business and save money, particularly in the face of rising energy bills
 - wider concerns about the impact of business activities upon the natural environment and the subsequent need to become more ‘environmentally friendly’.

- 6.23 Beyond this, there were very few alternative reasons given for seeking support.
- 6.24 A large number of respondents (44) were referred to the Project from an adviser, reflecting the proactive approach taken to getting businesses on board. However, the results suggest that more could be done to engage businesses through alternative means. Only 22 of the 104 respondents (just over 20%) heard about the Project through advertising/promotional material.
- 6.25 Exemplifying the information failures noted in Section 2 and the market gap relevant to the Project, 67% of the survey respondents who provided an answer stated that they were not aware of any other initiatives offering a similar service when they first sought support from the Project. 24% could not remember, however, just 10% were aware of other initiatives (the Carbon Trust was identified by four respondents). This also suggests that the intervention was not displacing existing activity provided in the free market.
- 6.26 The Project delivers a range of support services to businesses. Paramount among these is the initial scoping audit and ongoing consultancy support to promote resource efficiency – this reflects the core focus of the Project’s support. However, few businesses responding to the survey have received work-based training.

Figure 6-3: Type of support received through the Project



Source: SQW Consulting Beneficiary Survey

- 6.27 Positively, the survey provides evidence that the suggestions promoted by the Project were implemented. 96 out of the 101 respondents who provided an answer stated that they had implemented the changes as suggested by the Project either fully or in part (37 and 59 respectively).

Evaluation message

The desire to reduce waste and energy costs is at the forefront of the reasons why businesses sought support from the Project – inherent within this was a desire to make their business more competitive as well as environmental concerns.

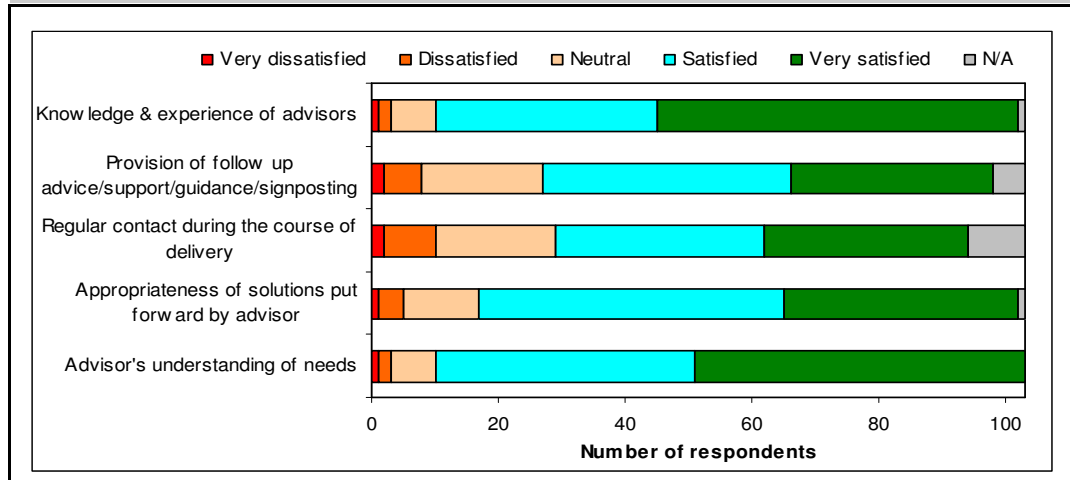
Advisers have been very proactive in engaging businesses with the Project; however, a more determined advertising and promotional effort could ‘reach out’ to even more businesses across the region and achieve even greater returns. Indeed, the survey results suggest that there is a significant market gap in the provision of similar support – part of the task going forwards will be to determine to what extent this gap remains in the evolving economic climate.

Experience with the Project

General experiences

- 6.28 Survey respondents were very positive regarding the support provided to their business. Satisfaction was particularly high with the knowledge and experience of advisors, their understanding of the client's needs and the appropriateness of solutions provided. This is a very positive message suggesting both that appropriate delivery partners have been contracted and that the right services are being delivered to businesses.

Figure 6-4: Satisfaction with support provided through the Project



Source: SQW Consulting Beneficiary Survey

- 6.29 Reflective of this, 94 out of the 104 respondents to the survey stated that they would recommend the Project to other businesses - just two would not.
- 6.30 Importantly, some respondents were able to give practical suggestions as to how interventions in this area could be improved in the future. The key messages provided were around three main areas:

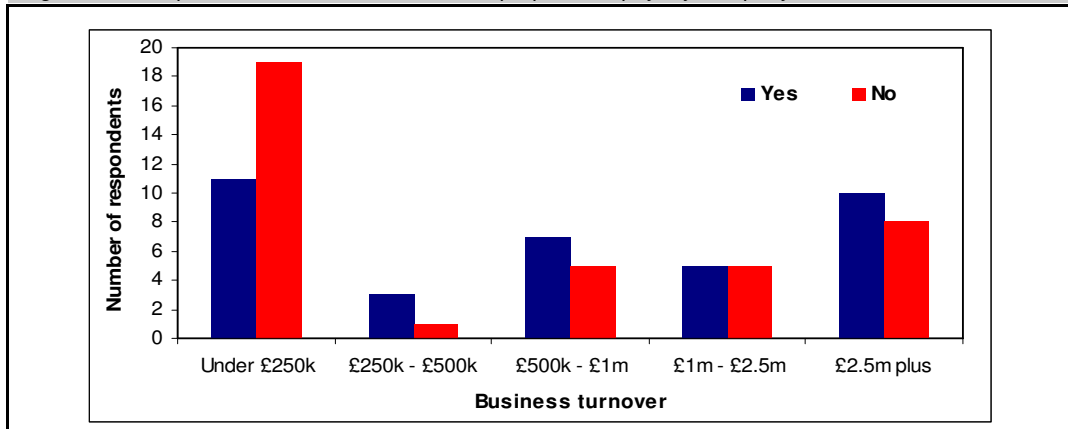
- more follow-up support and closer involvement from the advisers would be helpful
- levels of bureaucracy and paperwork could be reduced in order to ensure that the time spent was focused on actual delivery and results
- a more tailored approach to support would be beneficial, suited to the specific needs of businesses – i.e. the smallest businesses to receive support which is more tightly focused and streamlined.

Financial contributions

- 6.31 Respondents were asked if they had made a financial contribution to the Project. 82 of the 104 respondents had not. Just seven stated that they had (the balance did not know or did not provide an answer). This is notable, for as noted in Section 3 delivery partners do seek to secure some financial contribution from the beneficiary business. Interestingly, however, around half (40 out of the 82) of the respondents who did not contribute financially to the Project stated that they would have been prepared to do so.

- 6.32 This suggests that going forward, greater financial contributions *may* be generated from beneficiaries. However, these data must be treated with some caution as the question is naturally ‘after the event’. Firms that have made savings, may be more willing to say they would contribute. Further, some firms more able to do so than others.
- 6.33 To unpick this data further, it is helpful to analyse the types of firms who said they would, and importantly would not have been willing to contribute costs. As may be expected, it is the firms with the lower annual turnover (under £250k) who are least likely to be prepared to pay for the support received. However, even a good proportion of businesses with high turnover would still not be prepared to pay.

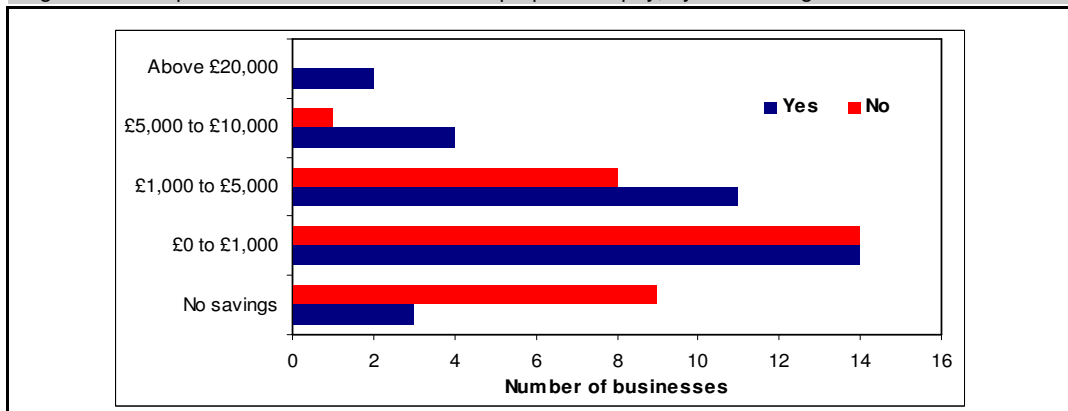
Figure 6-5: Respondents who would have been prepared to pay, by company turnover



Source: SQW Consulting Beneficiary Survey

- 6.34 The results may also be a reflection of the actual benefits accrued to each business. The Figure below shows the respondents who would and would not have been prepared to pay by the cost savings their business made from the Project. Again, as expected, we can see a positive correlation between the scale of savings and willingness to pay. However, the fact that a greater proportion (54% of those who provided an answer) of those businesses receiving relatively small cost savings (above £0 to £5,000) would still be willing to pay for the services suggests that a greater paid element for services should be considered.

Figure 6-6: Respondents who would have been prepared to pay, by cost savings



Source: SQW Consulting Beneficiary Survey

- 6.35 The level of financial contribution by beneficiary businesses is an issue that should be considered in some depth by NWDA and ENWORKS going forward. However, care should

be taken. In particular, for our survey, respondents who did not make a contribution and would not have been willing to were asked why this was the case. Essentially two main reasons were evident:

- first, that financial restraints mean that the activity would not have been taken forward as a result of other priorities or lack of funds.
- second, that given the environmental externalities at play, resource efficiency is the type of activity that should be provided by the public sector.

6.36 Both of these are important and go to the centre of the rationale of the Project.

Evaluation message

Overall, respondents have expressed very positive sentiment towards the support received through the Project. This is reflected in the fact that a large proportion of businesses would be willing to recommend the Project to others. It is also reflected in the willingness of many businesses to make a financial contribution towards the support received.

The level of financial contribution made by the beneficiary business – if any – is a key issue as the successor intervention goes forward. NWDA and ENWORKS should consider carefully the potential for generating greater revenue to offset public sector contributions. A number of options are considered in the final section of this report.

Going forward, respondents have indicated a number of possible improvements to be made to the Project – these include a greater element of practical support and advice from advisers; making the process less bureaucratic; and making the advice less technical or, at least, easier for staff to understand. These are issues which could be considered in the future, whilst ensuring that the Project still delivers to the high standard to date.

Project impacts

6.37 An important output of the survey was to gauge the level of additionality from the Project, i.e. the extent to which outputs would have occurred anyway, without the intervention. Table 6-4 shows that for 11% of businesses, no relevant changes to business practices would have been made without the support – this represents ‘full additionality’.

6.38 For many businesses, there is a belief that the changes would have taken place anyway but, importantly, not to the same extent. Most prevalent was a belief that the changes would have been made but would have taken longer to implement. Such time considerations are crucial for business competitiveness given the fast-moving nature of the global economy.

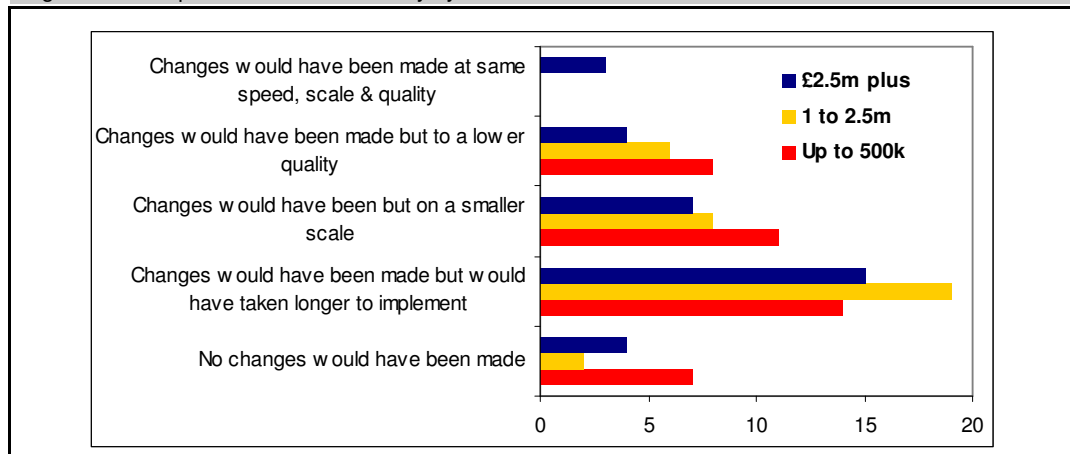
Table 6-4: Responses to the question ‘In the absence of receiving support from the project, what would most likely have happened?’

Level of additionality	Number of respondents	Proportion of respondents
No changes would have been made to business practices	14	11%
Changes would have been made but would have taken longer to implement	56	45%
Changes would have been but on a smaller scale	28	23%
Changes would have been made but to a lower quality	20	16%
Changes would have been made at same speed, scale and quality	3	2%
Don't know	3	2%

Source: Beneficiary Survey Note: Respondents were able to provide more than one answer as additionality factors are not mutually exclusive i.e. changes could have taken longer to implement **and** have been to a lower quality

6.39 The Figure below shows how these answers varied by company size (measured by turnover). It is evident that, for the smallest businesses (with an annual turnover <£500k), there is a greater chance that no changes would have been made in the absence of support. As with the question on financial contributions, this is likely to be a reflection of a lack of resources. Indeed, the smallest businesses were also more likely to say that changes would have been made but on a smaller scale. These findings support the rationale for focusing support in particular on SMEs.

Figure 6-7: Respondents on additionality by turnover



Source: Beneficiary Survey Note

6.40 Respondents were also asked what impact the support on their business. These are shown in the Table below with the most popular response highlighted.

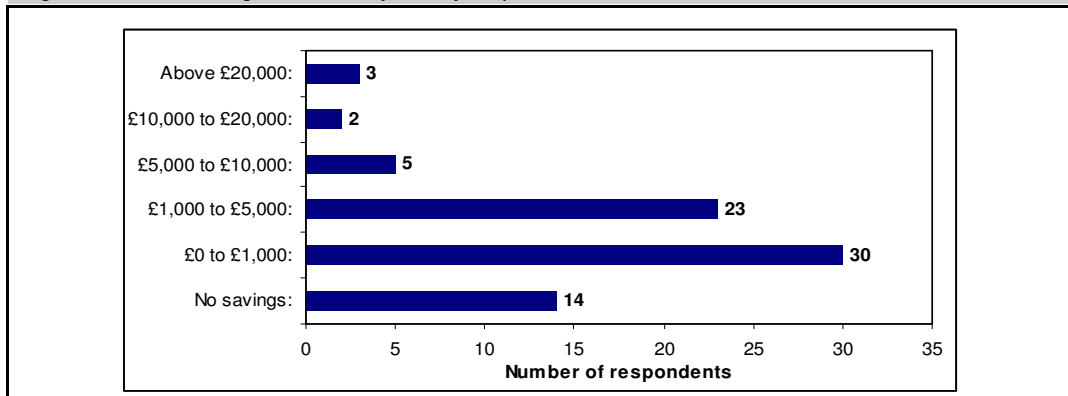
Table 6-5: Responses to the question 'What overall impact would you say the support has had on ...'

	No/low impact	Medium impact	High/extensive impact	N/A
Raising awareness of resource efficiency & environmental sustainability	12%	23%	63%	2%
Improving Resource Efficiency & reducing waste/water/energy costs	16%	34%	50%	1%
Improving the environmental sustainability of your business	15%	36%	46%	4%
Increasing business turnover	56%	21%	7%	16%
Adopting alternative/new business practices/services	26%	35%	34%	6%
Improving competitive advantage	52%	23%	12%	13%
Improving future growth prospects	50%	29%	9%	13%
Increasing business confidence	42%	26%	23%	10%
Improving resource management skills of your workforce	29%	30%	33%	9%
Increasing & safeguarding employment	52%	19%	16%	13%

Source: Beneficiary Survey Note: The number of respondents for all categories was 101 except Increasing and safeguarding employment where it was 100

- 6.41 It is apparent that the Project had a very large or extensive impact on the resource efficiency and environmental aspect of the Project. 63% of respondents said that the Project had a high or extensive impact on raising awareness of resource efficiency and environmental sustainability. 46% said the same for the impact on improving the business' environmental sustainability. In contrast, a low impact was attributed to improving business performance and competitiveness – the other major objective of the Project. This is reflected in the responses given to the impact on increasing business turnover, improving competitive advantage, improving future growth prospects and increasing business confidence.
- 6.42 This is an imbalance that needs to be addressed in the future. The findings are particularly interesting as the Toolkit demonstrated major efficiency savings. However, the survey suggests that businesses do not see these savings translated into improved competitiveness or turnover, i.e. there is no perceived correlation between improved environmental performance and business performance. This is despite the savings identified by respondents to the survey. As set out in Figure 6-8, 23 of the 104 respondents (23%) stated that the Project had generated savings of up to £5,000, and 5 up to £10,000. Demonstrating the very significant potential of the project to generate major savings, 3 of the respondents to the survey stated that the Project generated savings of over £20,000.

Figure 6-8: Cost savings identified by survey respondents



Source: Beneficiary Survey

- 6.43 Encouragingly, and consistent with the data above, a significant majority of respondents are now committed to the wider agenda of the Project and ENWORKS. 77 out of the 104 respondents have plans to improve their resource efficiency over the next 12-36 months. This is an important potential multiplier effects of the Project as going forward, there may be significant on-going gains generated as a result of the support.

Evaluation message

The additionality of the Project is positive. Most important, and reflective of the role of the Project as a catalyst for sustainable economic development, it played a key role in bringing about changes more quickly than would have otherwise been apparent. More generally the Project has had a significant impact on businesses, though this is perceived to be greater with regards awareness and environmental issues than economic development and progress for beneficiary businesses. This is an issue that should be considered as NWDA and ENWORKS move forward.

Essentially, there is a need to further promote the agenda that environmental action can have a demonstrable impact on the bottom line for the region's businesses.

Wider impacts on the regional economy and environment

- 6.44 The outputs and outcomes generated by the Project will have an impact on economic and environmental conditions in the region. However, the North West economy was worth £110 billion of GVA in 2006 and contains 250,000 businesses and 3 million employees. Discerning changes in secondary data at this level directly attributable to the Project is therefore extremely problematic. Further, there are limitations in the availability of time-series data.
- 6.45 Nevertheless, it is crucial that condition indicators are assessed over the lifetime of the Project to understand whether the activities are contributing to addressing the issues that gave rise to the intervention in the first place. A fuller baseline analysis is presented in Annex B. However, the key messages through the prisms of the Headline Economy, Business Competitiveness and Resource Efficiency and Waste Reduction are presented below.
- 6.46 Direct attribution of the Project to changes in the headline economic statistics of the North West must be indicative only. However, condition indicators are helpful in setting out the key trends in the region that the Project has operated within.

Headline Economy condition indicators

- Overall GVA in the North West has been strong in recent years - growing by 32% between 2000 and 2006. By 2006 it stood at £111,252 million
- Yet the region has not kept pace with England in terms of GVA growth. Further, growth has varied markedly across the region with particular hot-spots in Greater Manchester and Cheshire, yet ongoing challenges in Cumbria and areas of Merseyside and Lancashire
- GVA per worker in the North West grew by c.3.7% per annum over 2000-2006 (£37,100 in 2006). This was lower than the comparable growth rate in England (4.7%) with the gap in GVA per worker widening since 2000
- Research estimated that there remains a £17.8 billion GVA gap to England – lower productivity and fewer people in work are the two chief deficits that need to be addressed
- From 1999-2006 the total number of business data units (essentially workplaces) in the region increased by around 13% with 247,000 workplaces in the region in 2006. The c.1,200 (gross) businesses supported with resource efficiency represent round 0.5% of the total business stock.

- 6.47 The business environment in the North West has improved significantly in recent years. The business base has grown, progress has been made in the productivity and competitiveness of regional businesses and business failure has reduced. However, significant challenges remain as set out below.

Business Competitiveness condition indicators

- Business de-registrations in the North West have reduced consistently since 2003 – the year the Project was introduced
- Consistent with this, one-year business survival rates in the North West in 2004 stood at 92.1%, the same level as in the UK i.e. 92.1% of businesses registered in 2004 were still in operation one year later. This is a significant improvement in closing the gap with the national rate
- Employment in the North West grew by 6.3% between 2000 and 2006, much larger than the increase nationally (England) of 4%
- In 2006, just over two million people in the North West were employed in workplaces with less than 200 employees, accounting for 68.5% of all employees in the region
- Regional employment growth has been significantly above the England average for micro (1-10) workplaces and

Business Competitiveness condition indicators

medium-size (50-199) workplaces - experiencing a 2.6% increase and a 6.5% increase respectively since 2000

- The average turnover per employee in the region increased significantly in recent years, from £65,000 in 2000 to £80,000 in 2005. However, this lags significant behind England, with turnover per employee at £94,000 in 2005.

- 6.48 Incorporating the headline economy and business competitiveness, it is possible to derive from the Toolkit outcomes data and our survey an estimation of the wider contribution of the Project to the regional economy. The Toolkit identified annual cost savings generated by the project by 2008 to be in the order of £16.7 million gross and using the ratio derived from the evaluation some £12.2 million net – with 724 businesses identified as ‘Achieved’ for this data. The results of the survey suggest that the average turnover of beneficiary businesses is some £1.2 million per annum²⁰. *Indicatively therefore, the annual cost savings to businesses represents around 1.4% of annual turnover.* This has significant potential to contribute to improved competitiveness, efficiency and productivity (through for example work-based training of staff) and GVA growth.

Resource efficiency and waste reduction condition indicators

- Total energy consumption by the industrial and commercial sector in 2005 was 84,344 GWh – slightly lower than the levels of consumption in 2003 and 2004
- Total carbon dioxide (CO₂) emissions in the North West was approximately 51 million tonnes in 2005 – 46% of this was accounted for by industrial and commercial usage
- Environment Agency data shows that just over 9.5 million tonnes of waste was disposed to landfill in 2006 in the North West. Waste disposed to landfill decreased by 12% between 2005 and 2006 in the region, this is in line with a national downward trend
- A 2007 survey estimated that the commercial and industrial waste arisings in the North West totalled some 7.5 million tonnes, with retail, wholesale and other services generating the most waste per sector. The manufacturing sector producing the most waste was identified as textiles, paper and pulp.

- 6.49 Detailed time-series data on environmental conditions is limited. However, with improved resource efficiency and sustainable business development at the heart of the Project, it is important to review available environmental data. The CO₂ savings and waste and materials reductions will have contributed significantly to these metrics:

- the Project has led to actual annual savings of approximately 42 GWh of electricity and 52 GWh of natural gas usage. Using 2005 as a baseline, this translates into 0.18% of electricity consumption and 0.14% of natural gas consumption with the potential in the pipeline to become more significant.
- the Project now achieves annual savings of 34,200 tonnes of CO₂ emissions, with the potential to achieve a further 72,200 tonnes per annum. Using 2005 as a baseline, this translates into 0.15% of total industrial and commercial emissions in the region, with the potential to rise to 0.45%.

²⁰ This data is broadly equivalent to average turnover per business in the region. Data supplied to SQW by NWDA for our work with the Agency in developing a manufacturing strategy and action plan from IDBR gave an annual turnover per business in 2006 of just over £1.1 million.

- the Project now contributes an annual saving of 27,200 tonnes of waste diverted from landfill. This equates to around 0.3% of the regional total in 2006. Further, the reduction on waste going to landfill from 2005 to 2006 was some 1.275 million tonnes. Indicatively, the annual savings (as of today) would have represented around 2.1% of this total.

Evaluation message

An analysis of contextual data suggests that the Project may have contributed to changes in conditions in the region. Given the size of the regional economy compared to the Project, discernible changes are not possible, however:

- Business deregistrations in the region have reduced in recent years and the cost savings to the over 1,000 businesses supported by the Project plausibly contributed to this trend
- Productivity per worker in the region has also grown in recent years, again the reduction in costs on waste and resources and ability to invest these in business practices may have contributed to this
- The annual CO₂ savings generated by the Project have contributed to a reduction in the total emissions in the region by industrial and commercial businesses. However, the savings represent under 1% of the total emissions in the region.

Contribution to PSA targets

6.50 The 2007 Comprehensive Spending Review announced a set of 30 new PSAs setting a vision for continuous and accelerated improvement in the Government's priority outcomes over the CSR07 period (2008-11). BERR, as parent department of the RDAs, is responsible for leading on three PSAs:

- Raise the productivity of the UK economy
- Deliver the conditions for business success in the UK
- Improve the economic performance of all English regions and reduce the gap in economic growth rates between regions.

6.51 Further, it is identified as a key delivery partner in delivery against:

- Lead the global effort to avoid dangerous climate change (led by Defra)
- Maximise employment opportunity for all (led by DWP)
- Improve the skills of the population, on the way to ensuring a world-class skills base by 2020 (led by DIUS).

6.52 Importantly, the Project has contributed to delivery against all of the PSAs set out above. However, a direct attribution and quantification against national targets and trends is not helpful owing to the respective sizes of the Project and the national economic and environmental context. However, this contribution to PSAs ensures a strong strategic alignment with the national policy agenda.

Evaluation message

The Project has contributed to a number of the key PSA indicators led by the RDAs and other government departments.

The Strategic Added Value of the Project

- 6.53 The RDA Impact Evaluation Framework²¹ highlighted the importance of assessing the Strategic Added Value (SAV) of RDA activity and RDA funded interventions. SAV is the wider regional and strategic benefit accruing from a project over and above its direct output and outcome performance related to: Strategic and/or Catalytic Activity, Increasing Co-ordination, Alignment & Partnership, Improving Intelligence, Influencing & Awareness Raising. The Table below sets out the SAV generated by the Project on these measures.

Table 6-6: The Strategic Added Value of the Project

Strategic and/or Catalytic Activity - *Increase the profile of the region, leading to increased confidence and investment in activities that have a ripple or multiplier effect on the economy in support of targeted strategic objectives*

- The Project has been recognised nationally with a number of high-profile awards as set out in Section 2. Through this role as an exemplar intervention it has a significant potential to increase the profile of the North West as a leader in the delivery of support to businesses to improve their environmental sustainability and the benefits of 'green business'. Consultations from within and outside the region stressed that the Project has indeed put the North West and resource efficiency 'on the map'.
- The Project has played a key role in catalysing business benefits through resource efficiency – the survey suggests that many of those businesses who have received support will implement further changes in the future and that the issue of resource efficiency and waste minimisation is now firmly on their agenda.
- Significant financial and strategic buy-in from other partners in the public and private sector was generated by the Project – this generates significant potential for future investment to be levered for resource efficiency and environmental business support.
- The ENWORKS Board is made up of a broad cross-section of public and private sector organisations, giving both added input into the project, and increased outreach, acting as a catalyst and disseminator.

Increasing Co-ordination, Alignment & Partnership - *Create awareness and interest for regional partners and stakeholders to either work together where they previously may not have done or to work together in a more effective way that builds capacity*

- The Project has played an important role in facilitating partnership working in the region on resource efficiency. Previously, the service offer to businesses was varied and disjointed across the region. The Project developed a truly regional response, albeit delivered on the ground by local partners.
- Strong support from stakeholders for the success of ENWORKS in bringing stakeholders and delivery partners together in formal and informal working environments, for example, through the Board. This is primarily SAV generated at an ENWORKS level - i.e. not specific to the Project alone – yet the delivery model of the Project has contributed to this and further facilitated partnership working and co-ordination.
- The facilitation by the Project of the transfer of Enviro-Connect to Business Link demonstrates its value in strengthening the regional business support capacity for environmental resource management, and in participating in and delivering a co-ordinated response to market demand.
- The use of a network of delivery agencies has promoted both successful network development and increased functional alignment between NWDA and the Groundwork network

Improving Intelligence, Influencing & Awareness Raising - *Provide an evidence base or lead to an increased knowledge and awareness about the issues being addressed and stimulating action to tackle them*

- Development of the Online Toolkit, adopted by other partners across the UK is a crucial addition to the development of a robust evidence base for the provision of environmental business support. This is true for:
 - businesses themselves
 - delivery bodies and funders
 - central, regional and local government.
- Going forward, this provides the opportunity for good practice identification and dissemination leading to greater financial and environmental savings.
- The Project and ENWORKS are very highly regarded and have played an important role in raising the profile of resource efficiency and the business case for such activity in the region and indeed nationally.

²¹ <http://www.berr.gov.uk/files/file21900.pdf>

Assessment of effectiveness

- 6.54 Drawing on this discussion of outputs, outcomes and impacts of the Project it is possible to make an assessment of the effectiveness of the intervention. An appropriate starting point is a set of value for money metrics recently produced by Defra for BREW outcomes. The gross outcomes data has been compared to outcomes from BREW for 2005/06 for CO₂ savings and cost savings – the two headline outcomes of the Project that can be consistently compared to BREW metrics.²²

Table 6-7: Headline value for money metrics (gross Project outcomes)

Results delivered per £ spent		
	ENWORKS Resource Efficiency Project	BREW Programme
CO ₂ savings	0.013t/CO ₂	0.0213t/CO ₂
Cost savings	£7.43	£5.87

Source: ENWORKS Toolkit to 19 February 2008 and Defra

- 6.55 It is important that these comparisons are treated with some caution. The ratios from BREW are based on some £15 million of spend in one year only. There is therefore the capacity for significant ‘economies of scale’ and momentum to be generated by such a major intervention. However, the Project performs well against the BREW outcomes in particular on cost savings. Further, although direct attribution to conditions in the region is problematic, the data analysis above suggests that the Project has the potential to contribute to CO₂ savings representing close to half of one percent of the regional total emissions. For an investment of £3 million this is a positive performance.

Performance against objectives

- 6.56 In assessing effectiveness it is necessary to tie Project outcomes back to the original objectives i.e. has the Project had the desired impact and has activity and related outputs been translated into outcomes? This has been touched upon in the analysis above and in the paragraphs below we address each of the five original objectives specifically and those of the Contract Extension.

Objective 1 - To improve the competitiveness of SMEs across the North West

- 6.57 As noted in Section 2 this Objective was unspecific with regards to the definition of competitiveness. A direct analysis of performance is therefore problematic. However, despite this, the Project has performed well as far as can be reasonably assessed. Most notably, the Project to date has generated net resource efficiencies of £17.2 million to businesses benefiting from the initiative. This has very real potential for increasing the competitiveness of firms through higher profits, with greater funds to reinvest in equipment, skills or employees.
- 6.58 Interestingly, however, as noted in the analysis of the survey above, despite this clear potential for competitiveness improvements, beneficiary businesses may not have fully appreciated the improvements generated. In terms of improved competitive advantage over rivals, turnover and future growth prospects, at an aggregate level respondents felt that the

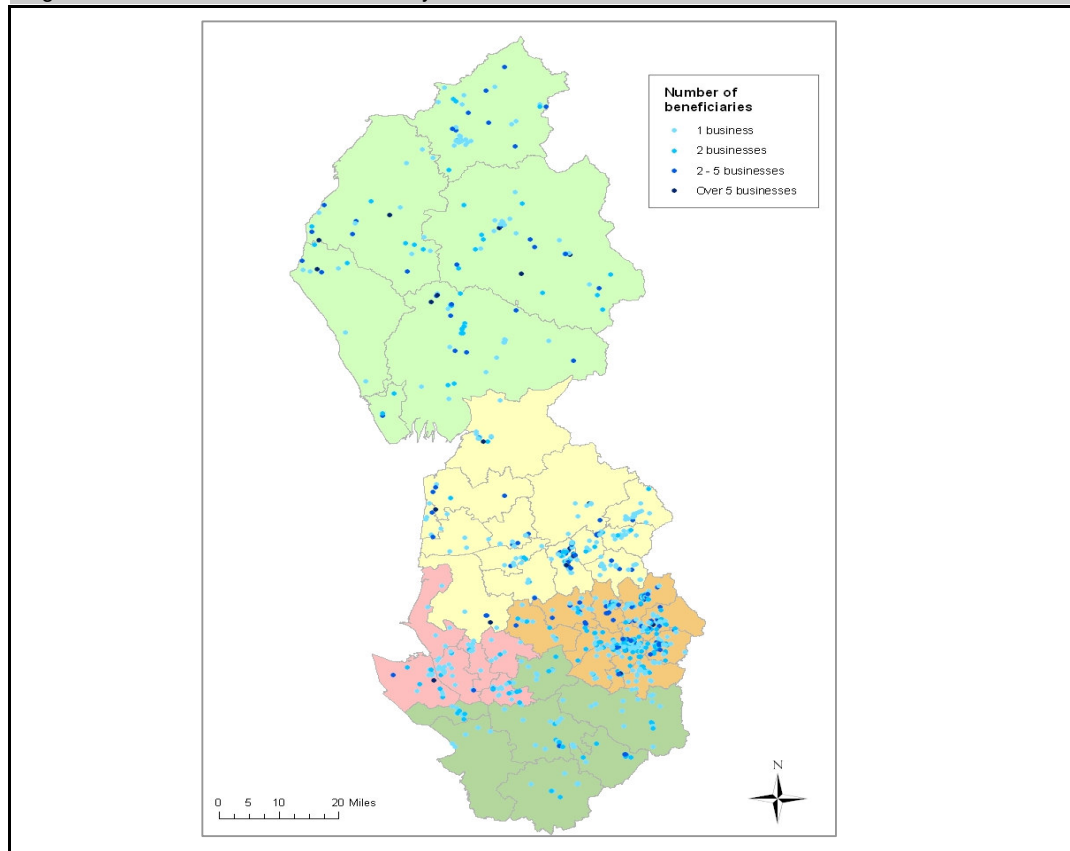
²² Business Resource Efficiency and Waste (BREW) Programme, Metrics Results for 2005/06, March 2008. See <http://www.defra.gov.uk/Environment/waste/brew/pdf/0506-metrics-results-paper.pdf>

impact of the Project was at best moderate. This is an issue that needs to be addressed going forward to ensure that the full cumulative economic contribution of resource efficiency activity is adequately demonstrated to funders and the business community.

Objective 2 - The development of a coherent, region wide, integrated resource management scheme affording equal access to all SMEs operating in the North West, regardless of location or sector

- 6.59 The evaluation suggests that this objective was achieved. The Project delivered a region wide resource open to businesses across all sectors and all areas. As illustrated in the map below, the Project has indeed afforded access to support across the region. There have been concentrations of beneficiaries, most notably in Greater Manchester, yet these follow patterns of economic activity and business density. Encouragingly across all sub-regions there has been an even spread of beneficiary businesses

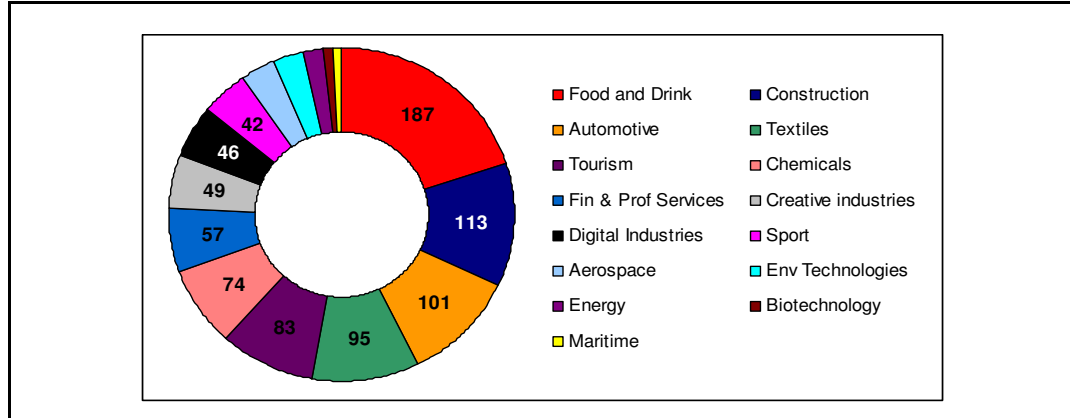
Figure 6-9: The distribution of beneficiary businesses across the North West



Source: SQW Consulting based on information supplied by ENWORKS and delivery bodies

- 6.60 Sectorally, as set out in more detail in Annex A, engaged businesses have been varied. There was an emphasis on manufacturing and resource-traditional industries, but knowledge-based industries such as creative industries and financial and professional services were also engaged. This diversity was also demonstrated in our beneficiary survey.

Figure 6-10: Businesses recorded on the Toolkit by sector



Source: ENWORKS Toolkit to 19 February 2008

Objective 3 - The development of an experienced, competent workforce trained in the principles of resource management

- 6.61 The Project supported over 500 (net) adults to undertake work-based training on resource efficiency. Further the beneficiary survey suggested that businesses valued highly the improvements to their work-force supported through the Project with a third of respondents stating that the Project had a significant or extensive impact on improving the resource-management skills of their workforce. Further, around three quarters (77 out of 104) of respondents to the survey stated that their businesses had further plans to improve their resource efficiency over the next 12-36 months. This suggests a regional workforce increasingly aware of the importance of, and benefits from, resource management.
- 6.62 As noted in Section 3, the definition of this objective needed to be more specific to allow for a definitive conclusion, and for an investment of around £3.4 million changes to the overall workforce skills of the region was not possible. However, as far as is practical given the scale of the intervention, this objective has been met.

Objective 4 - The development of sector-specific resource management clusters

- 6.63 This Objective was not achieved. Discussion with ENWORKS and stakeholders suggest that following the Project commencing efforts were made to engage cluster partners at NWDA. However, this did not prove successful and therefore a decision was made to not focus on a sector/cluster approach to delivery. As such this Objective was not delivered against.

Objective 5 - The reduction of the resource consumption footprint of those firms participating within the initiative, and subsequently the North West region as a whole

- 6.64 This data from the Toolkit, outputs and our evaluation survey suggests that this Objective was met with significant cost and resource savings generated, as discussed above.

Contract extension objectives

- 6.65 Discussions with Business Link and monitoring reports to NWDA indicate that essentially all deliverables under the Contract Extension were delivered. Notably, management of Environment Connect has been successfully transferred to Business Link and Business Link staff have been trained in order to be able to deliver the service. However, other areas of the Contract Extension were, once delivery was under way, found to not be realistic/necessary

such as the use of the ENWORKS toolkit to monitor referrals to regional and national service providers.

Pulling it all together

- 6.66 Reviewing the above discussion in the round, the effectiveness of the Project has been strong. The performance against objectives was positive - and though limitations of up-to-date secondary data and difficulties in attributing regional changes to this single Project make a definitive assessment problematic, the Project can realistically be regarded as impacting positively on regional economic development.
- 6.67 Finally, it is useful to relate back to the work by Oakdene Hollins/Grant Thornton. This identified potential annual savings through resource efficiency of £713 million for the North West. The total gross annual savings of the Project currently stand at £16.8 million. This equates to 2.4% of the potential savings identified by Oakdene Hollins/Grant Thornton. Net annual savings of £12.3 million (applying the 73% additionality ratio) represent 1.7% of potential regional savings.
- 6.68 These are important potential contributions to a complex and major agenda. However, the scale of the challenge is considerable and whilst the Project has clearly contributed important outcomes, it must be simply one part of a much wider effort to facilitate these savings.

Evaluation message

Output and outcome data suggest that for the investment by the public sector, and in particular NWDA, significant returns have been generated and the effectiveness of the Project is high. The cost savings are to date worth £17.2m net. It would be beneficial to track what these savings contribute to businesses. However, cost savings offer significant potential for the improved competitiveness of the regional business base. Further, the environmental outcomes of the Project are significant and it has generated important SAV. Collectively, for an investment of £3.4 million these outcomes and impacts are impressive and demonstrate effective delivery.

Importantly, the key objectives of the Project were achieved, though, given the scale of the issues delivered against, there remains a strong rationale for further investment.

7: Evaluation conclusions

- 7.1 In this final Section of the report the conclusions of the evaluation are set out. To complete the evaluation feedback loop, the key issues going forward for NWDA and ENWORKS to consider, drawing on lessons learned from the delivery of the Project are set out.

Rationale

- 7.2 The Project had a sound rationale at its outset. There were clear arguments in play, justifying public sector intervention, including co-ordination failures, environmental externalities and information asymmetries. The Project filled a key gap in the market for provision of resource efficiency and waste minimisation support to SMEs across the region. Further, the Project was well aligned with the policy context at the time and responsive to the strategic agenda at the regional level.
- 7.3 The policy context has moved on significantly since 2003. However, changes at the regional, national and indeed international level have strengthened the argument for public sector intervention in promoting resource efficiency and 'green business'. Essentially, therefore, there remains a strong argument for NWDA and public sector support. Importantly, going forward, resource efficiency has significant potential to contribute to GVA growth in the region and to wider sustainable economic development.
- 7.4 Further, the Project remains strongly aligned to the prevailing regional agenda as set out in the current North West RES. The learning developed to date is also important in further promoting this agenda and contributing to the very significant potential cost savings identified for the region by Oakdene Hollins and Grant Thornton.

Objectives and activities

- 7.5 In 2003, the Project had a set of well-aligned and generally SMART objectives that effectively combined the economic and environmental aspects of the Project.
- 7.6 The objectives remain broadly appropriate to the current climate. However, going forward they would benefit from a greater focus on the productivity agenda and addressing the regional GVA gap. Further, a focus on carbon emissions more specifically in line with the wider regional and national policy context may be considered. Similarly, NWDA and ENWORKS must ensure that sufficient baseline data and monitoring procedures are in place to allow for consistent tracking of performance and effective evaluation downstream.
- 7.7 The activity delivered by the Project was appropriate to respond to the issues identified in the rationale and contribute to the achievement of objectives. Activity varied from business to business and was based on providing support to businesses at their location and the delivery of advice and expertise on reducing resource inefficiency and promoting sustainable business practices. Key was the promotion of behavioural change within firms. In the future, this should continue to be the primary focus of delivery, as it stands the greatest chance of sustainably impacting on business resource use and management.

- 7.8 The key synergy of the Project was the translation of advice and support to cost and resource efficiency savings for businesses. The data reviewed and the consultations undertaken suggest that the use of expert and well respected deliverers – who know their sub-region well – was important. Further, businesses actually implemented most, if not all of the opportunities identified. This is a key element of good practice as too often in business support interventions, identified action is not followed through by the beneficiary business.

Project management and governance

- 7.9 The Project delivery model is consistent with the operating model of ENWORKS and has in general worked well. Key were the Service Level Agreements that constitute legal contracts between ENWORKS and delivery partners. These Agreements have allowed for consistency across the region and provided an important control mechanism for ENWORKS to ensure that delivery targets have been met.
- 7.10 The use of local delivery partners was vital in enabling ENWORKS to reach the significant number of businesses necessary for the Project to achieve critical mass. Indeed, the model developed by ENWORKS may be regarded as an exemplar for similar initiatives, assuming that monitoring and management processes can be improved to allow for targeted and consistent tracking of performance. Further, where possible, streamlined project management and monitoring systems should be put in place to allow for greater flexibility and responsiveness to the prevailing regional economic and social agenda.
- 7.11 Importantly, for NWDA the delivery model ensured that the Agency had one point of contact for the delivery of a regional response and for all partners involved ensured that the funding could concentrate time and resources on direct delivery.
- 7.12 Going forward, however, a wider range of delivery partners and higher profile for ENWORKS should be considered, though it is important that all activity is further aligned with the role of Business Link as the primary gateway for business support in the region. The role of Groundwork UK as the Accountable Body would need to be considered carefully in any extension of delivery partners. The transfer of management of Environment Connect to Business Link – delivered as part of the Contract Extension – is an important element of this alignment and thought should be given to how ENWORKS can increasingly work through this structure.
- 7.13 The Project has been managed effectively with a fit-for-purpose governance structure based on an advisory Board and central management team providing strategic leadership and oversight. The relationship between ENWORKS and on-the-ground partners is a broadly positive one and effective leadership is provided whilst allowing the necessary level of operational freedom in delivery.
- 7.14 The skills and experience of the ENWORKS team delivering the Project are highly valued and have added significant value to the potential of the Project to be successful. However, systems could in future be modified to further improve the ability of ENWORKS to track performance and offer clear and consistent financial management.

Spend and Outputs

- 7.15 Total NWDA Single Programme investment accounted for around 44% of all public funding to the Project - £1.4 million out of a total of £3.4 million. Positively, Single Programme financial targets were achieved. Around 16% of Single Programme funding was allocated to central management of the Project. However, the significant majority of Single Programme funding was provided to direct delivery across the region.
- 7.16 For a total investment of £3.4 million, the Project delivered significant and wide-ranging outputs. Key outputs included over 1,200 businesses assisted with resource efficiency support and over 680 adults undertaking work-based training. Gross costs per unit are well within acceptable costs for public sector interventions.
- 7.17 Single Programme funding – based on an attribution of Single Programme funding to the total public sector investment – generated over 750 businesses assisted, eight jobs created/safeguarded and supported around 300 adults undertaking work-based training. For an investment of around £1.4 million these are significant metrics. Importantly, performance against NWDA output targets was good.
- 7.18 The evaluation suggested that the additionality of the Project was high, with leakage and displacement low. The cost savings are also likely to have generated significant multiplier effects. Therefore, the net outputs also offered good value for money against relevant benchmarks. More widely, the value for money of the Project was positive with day rates of delivery partners demonstrating the value in using primarily third sector delivery organisations.
- 7.19 Findings from the beneficiary survey suggest that greater income may have been generated through contributions by beneficiary businesses, thereby improving value for money. Greater financial contributions from beneficiaries should be considered going forward by ENWORKS. It is essential, however, that businesses are not put off by costs and the inability of SMEs to pay for environmental support is a key failure that the Project responds to. Potentially, greater flexibility in the financial contribution sought should be considered to ensure that those businesses which can pay more, do so. These issues are discussed below.

Outcomes and impacts

- 7.20 The outputs have been translated into significant outcomes, as captured in the ENWORKS Toolkit. Gross identified cost savings are £23.4 million to date, 40,000 gross tonnes of CO₂ have been saved and 20,500 gross tonnes of waste diverted from landfill. For an investment of around £3.4 million these are significant outcomes and compare positively to relevant BREW comparison data. The environmental outcomes of the Project demonstrate the added value of the intervention to the regional and national carbon reduction and sustainable economic development agenda.
- 7.21 From the evidence provided to the study-team and discussions with delivery partners and ENWORKS staff, the savings identified in the Toolkit once achieved are genuine with all savings and efficiencies signed off by the client. This data is progressively improved over the course of the delivery of the Project from initial scoping and identification of savings based on assumptions and estimates to a more specific and accurate analysis of savings. The Toolkit is an important element of the added value of the Project and provides a key tool for

knowledge transfer and development for businesses engaged in the Project. It is also an effective management and monitoring tool that has facilitated a clear identification of the outcomes of the Project.

- 7.22 The survey demonstrated that the Project is well regarded by beneficiary businesses. The desire to reduce waste and energy costs is at the forefront of the reasons why businesses sought support from the Project, and the responses to the survey suggested that this was indeed felt by businesses. Further, the Project had a significant impact on raising awareness of resource efficiency and environmental sustainability.
- 7.23 The survey suggested, consistent with stakeholder views, that a more determined advertising and promotional effort could ‘reach out’ to even more businesses across the region and achieve even greater returns. Importantly, the survey results suggested that there remains a significant market gap in the provision of similar support.
- 7.24 Although direct evidence of the impact of the Project on regional conditions can be indicative only given the size of the intervention and the scale of the factors it seeks to impact on, it is plausible that it has contributed to positive trends in the economic and environmental performance of the region over recent years. The cost savings to businesses may have improved the competitiveness of those firms that benefited directly and potentially through demonstrator effects on other businesses across the region. Further, the environmental outcomes will have contributed to reductions in landfill and CO₂ emissions in the region with wide knock-on effects for the quality of life and health in the region.
- 7.25 However, greater targeting of businesses and those that would benefit most from the intervention and contribute to regional development should be considered. In particular, the Project must respond to the prevailing productivity agenda in the region and therefore work with those businesses that have the greatest potential to raise GVA per head and contribute to sustainable economic development. This may involve a greater role for ENWORKS in driving the Project in a more ‘hands-on’ manner by way of the delivery on the ground and selection of beneficiaries.

Project effectiveness

- 7.26 Performance against the objectives of the Project was good. Output and outcome data suggest that for the investment by the public sector, and in particular NWDA, significant returns have been generated and the effectiveness of the Project is high.
- 7.27 The cost savings to date are worth £17.2m net. Going forward, it would be beneficial to track what these savings contribute to businesses. However, cost savings offer significant potential for the improved competitiveness of the regional business base. Further, the environmental outcomes of the Project are significant and it has generated important SAV through raising the profile of resource efficiency in the region and nationally, and particularly in the development of the Online Toolkit. The Toolkit is a key element of good practice delivered by the Project – it translates a monitoring tool into an active and dynamic mechanism to measure the cost and environmental savings generated through resource efficiency.
- 7.28 Collectively, for an investment of £3.4 million these outcomes and impacts are impressive and demonstrate effective delivery. Importantly, the key objectives of the Project were achieved. However, owing to the scale of the issues delivered against there remains a strong

rationale for future investment. Further, going forward, in order for NWDA and ENWORKS to fully demonstrate delivery against the RES and wider regional objectives, it will be important to accurately develop a methodology to allow for the accurate transition from cost savings and resource efficiencies to contributions to regional GVA growth and business competitiveness.

Facing Forwards

7.29 Finally, to complete the feedback loop of the evaluation framework it is useful to set out a number of findings and opportunities that building on the solid and positive outputs and successes of the Project so far. Future priorities will need to reflect:

- The continuing need for interventions of this type – and in particular the successor to this Project – to ensure that **behavioural change remains the key focus of delivery**. Further work clearly needs to be done to convince businesses of the benefits resource efficiency will have for their competitiveness. Knowing and understanding how businesses invest savings from waste minimisation would demonstrate how the project has impacted on behaviour.
- Within that context, there is the opportunity to widen the number of delivery partners engaged, bringing potential benefits of building a **higher profile for the Project, reaching out to a wider audience**. The Project evaluated here has delivered significant outcomes and impacts for an intervention of its size, yet there remains a major untapped market of businesses across the region.
- Key to this potential growth, however, successor programmes must **realise the opportunities to raise revenue from beneficiaries where appropriate**. A key failure that remains to be addressed is the lack of financial resources in small businesses to pay for these services. However, the learning developed to date presents an opportunity to develop over time a financially sustainable programme drawing on contributions from beneficiaries and no, or at least limited, public sector support. This provides a realistic ‘exit strategy’ for public sector resource efficiency support to businesses and in overcoming the prevailing market failures is to change perceptions and attitudes.
- Such a move, however, would rely on **developing ways to better target businesses** that would either benefit most, or whose participation would make the greatest impact on regional development. This would not be to neglect those smaller businesses that have been a core beneficiary group to date, yet in order to maximise effectiveness and impact on regional conditions, a more targeted approach is necessary. Larger businesses are not necessarily being supported by current government programmes and opportunities to draw them into a wider waste minimisation programme can be explored.

7.30 However, there are two key issues that must be addressed for these options set out above to be realistically taken forward:

- Effort must be made by ENWORKS, potentially in collaboration with NWDA, to promote ways of developing systems to **ensure performance and financial**

management is increasingly efficient, transparent and fit-for-purpose. This is key to ensuring that NWDA and other funding partners are confident in offering on-going financial support should it be necessary and encourage sound monitoring and management processes. Knowing how businesses have spent or invested savings from waste minimisation would give a clearer picture of how sustainable investment is.

- Responding to government thinking on sub-national economic development and regeneration, there is the **need for the development of a robust methodology to allow for transition from cost savings and resource efficiencies to GVA and business competitiveness.** The evidence base contained in the Online Toolkit on cost and environmental savings are important. Demonstrating the hard economic impacts of resource efficiency, at both an individual business and collective regional level is the next key step going forward. Importantly, this Project provides the North West with a unique opportunity to take the lead in developing such a methodology and influence national policy thinking.

Annex A: Toolkit data

- A.1 Headline data was supplied to SQW by ENWORKS from the online Toolkit for the Project. The data runs from 1 April 2004 to February 19 2008 and represents the outcomes of the Project to date.
- A.2 The data is presented in this Annex. For the purposes of the analysis, the ‘economic’ and ‘environmental’ outcomes are reviewed separately, though of course the two are mutually reinforcing and symbiotic. Data was provided at an aggregate level, by sub-region and by sector.

Economic outcomes

Achieved savings

- A.3 The total cost savings to businesses generated by the Project from 1 April 2004 to February 19 2008 are reported in the Toolkit to be of the order of £23.4 million. These savings are generated through reduced business costs for resources such as waste, energy, materials, and water. The total has increased steadily over the lifetime of the Project as set out in the Table below.

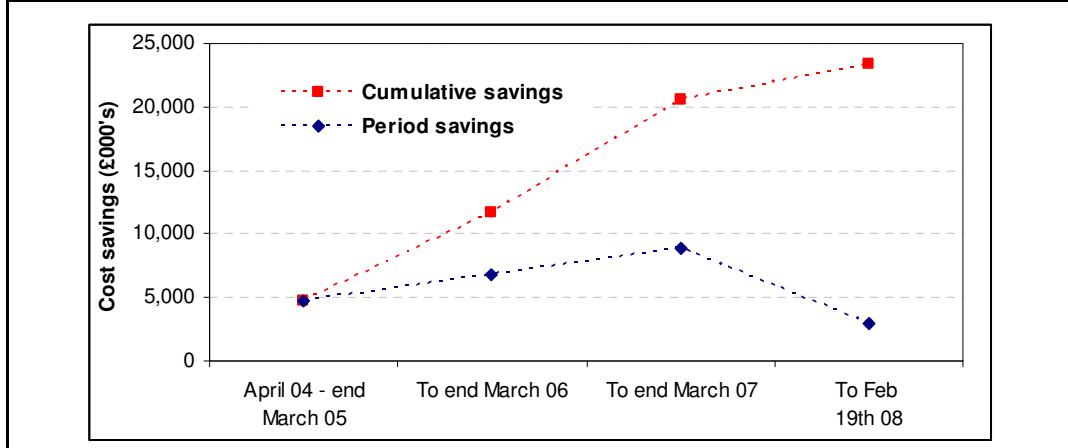
Table A-1: Aggregated achieved cost savings generated by the Project

Period	Total achieved savings (£m)
1st April 2004 up to March 31st 2005	4.8
To March 31st 2006	11.7
To March 31st 2007	20,5
To February 19th 2008	23.4

Source: ENWORKS Toolkit to 19 February 2008

- A.4 This data is presented graphically in Figure A-1 with cost savings achieved each year abstracted from the total data. The figures suggest a downturn in the savings generated in the final year (March 2007-February 2008). However, this data does not represent a full year. Further, in this final period of Project delivery, work with businesses has been ‘wound down’ in line with the new resource Efficiency Project delivered by ENWORKS. Broadly, the savings represent a positive year-on-year increase in the savings generated by the Project.

Figure A-1: Cumulative and periodic cost savings generated by the Project



Source: ENWORKS Toolkit to 19 February 2008

A.5 However, these cost savings are by no means spread evenly across the region. As set out below the Greater Manchester sub-region is by a clear margin the area with the most significant cost savings to date²³. Nevertheless, significant cost savings have been generated across the North West with all sub-regions generating savings of over £1 million.

Table A-2: Achieved cost savings by sub-region

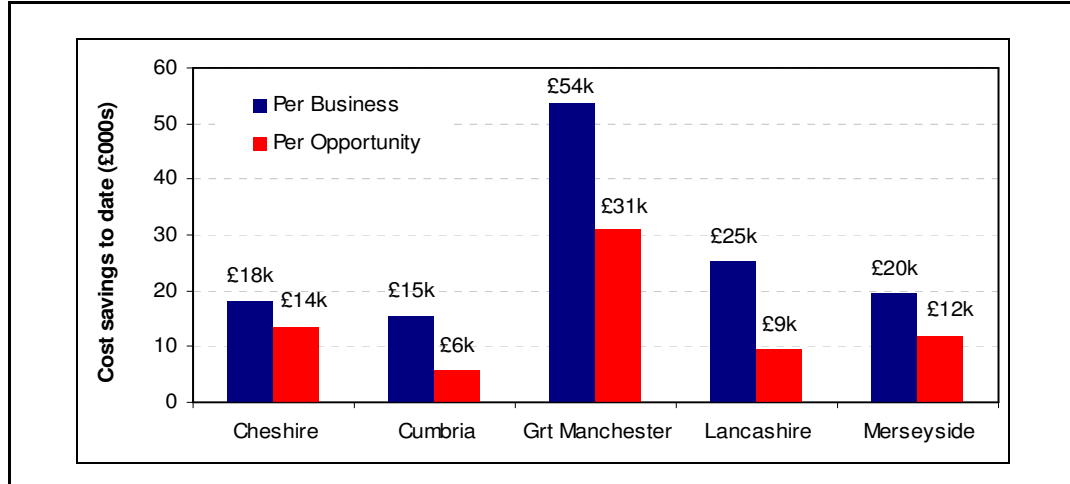
	Achieved cost savings (£k)	Proportion of regional total
Greater Manchester	12,800	55
Lancashire	6,600	28
Cheshire	1,700	7
Cumbria	1,200	5
Merseyside	1,100	5

Source: ENWORKS Toolkit to 19 February 2008

A.6 This logic is taken one step further in Figure A-2 identifying the cost savings achieved per opportunity achieved and per each business that has achieved one or more opportunities. The cost savings per opportunity is £15,300 and the cost saving per business engaged in the Project and recorded on the Toolkit £32,300. For both of these, Greater Manchester has a significantly higher ratio than elsewhere in the region.

²³ This includes one business that generated savings of some £2 million.

Figure A-2: Cost savings to date per business and opportunity across the North West



Source: ENWORKS Toolkit to 19 February 2008

- A.7 These benefits must be counterbalanced by the capital costs to the businesses in instigating and facilitating these changes. The Toolkit indicates that capital costs are £7.6 million to date equating to around £10,700 per business. However these costs are by their nature generally one-off investments and the savings will continue in future years.
- A.8 The cost savings over the period 1 April 2004 to 19 February 2008 were most significant in the food and drink sector accounting for savings of some £5.5 million. This sector also accounted for the highest number of supported businesses and opportunities. However, significant savings have been generated across a wide range of sectors. For example, over £175,000 in the financial and professional services sector. Individual data for those sectors with achieved cost savings over £100,000 are presented in the Table below.

Table A-3: Cost savings by sector

	Total savings to date	Number of achieved businesses
Food and Drink	£5,521,000	88
Chemicals	£2,212,000	48
Construction	£2,071,000	53
Textiles	£1,882,000	47
Environmental Technology	£1,728,000	14
Automotive	£725,000	66
Aerospace	£460,000	14
Digital Industries	£342,000	27
Financial and Professional Services	£179,000	26
Tourism	£156,000	41
All other sectors ²⁴	£8,416,000	321

Source: ENWORKS Toolkit to 19 February 2008 Note: data rounded to the nearest 1000

²⁴ This includes data from Other, Sport, Creative Industries, Maritime, Biotechnology, Energy

- A.9 The number of opportunities and average achieved saving per opportunity by these sectors is also presented in the table below. The data suggest that savings are greatest for food and drink and environmental technologies technology. Broadly speaking, the higher the number of opportunities achieved savings by sector, the higher the average saving. Positively, this suggests the businesses being supported by ENWORKS have been those with the greatest potential for significant savings.

Table A-4: Number of opportunities and associated metrics by sector

Sector	Number of opportunities	Saving per opportunity	Opportunities per business
Food and Drink	172	£32,000	2.0
Chemicals	123	£18,000	2.6
Construction	131	£16,000	2.5
Textiles	133	£14,000	2.8
Environmental Technology	38	£45,000	2.7
Automotive	147	£5,000	2.2
Aerospace	50	£9,000	3.6
Digital Industries	66	£5,000	2.4
Financial/Prof Services	35	£5,000	1.3
Tourism	67	£2,000	1.6
All other sectors	597	£21,000	1.9

Source: ENWORKS Toolkit to 19 February 2008

- A.10 The table below shows what these cost savings mean to companies in terms of their current resource expenditure for the four primary types of resource: energy, materials, waste and water. Interestingly, although the greatest absolute cost savings generated are in materials (just over £8 million), this equates to just 1% of annual business expenditure on this resource as spend on materials (over £600 million) is by far and away the largest resource expenditure for businesses involved in the Project. Waste is the resource where the annual cost savings account for the greatest proportion (54%) of annual expenditure on the resource.

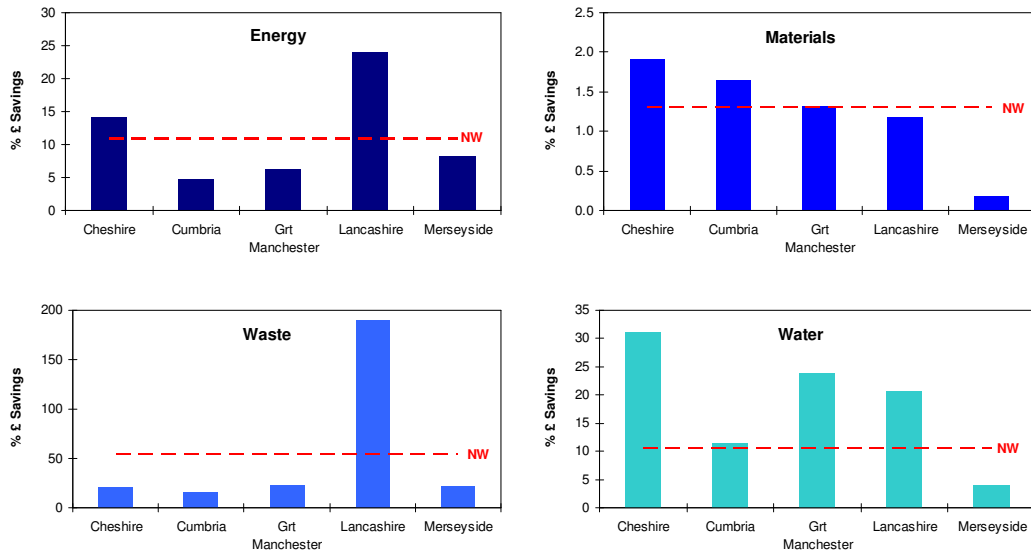
Table A-5: Annual cost savings to businesses by resource type

Resource Type	Number Of Businesses	Baseline Spend (£m)	Annual Cost Savings (£m)	Savings as proportion of total spend	Savings per business (£)
Energy	582	59.3	6.5	11%	11,200
Materials	509	617.4	8.0	1%	15,800
Waste	537	7.9	4.2	54%	7,900
Water	532	7.0	0.7	11%	1,400

Source: ENWORKS Toolkit to 19 February 2008

- A.11 The graphs below show how savings as a proportion of expenditure vary for the sub-regions of the North West. It is noticeable that in Lancashire savings in energy and waste have been substantially higher than elsewhere, when weighted to expenditure.

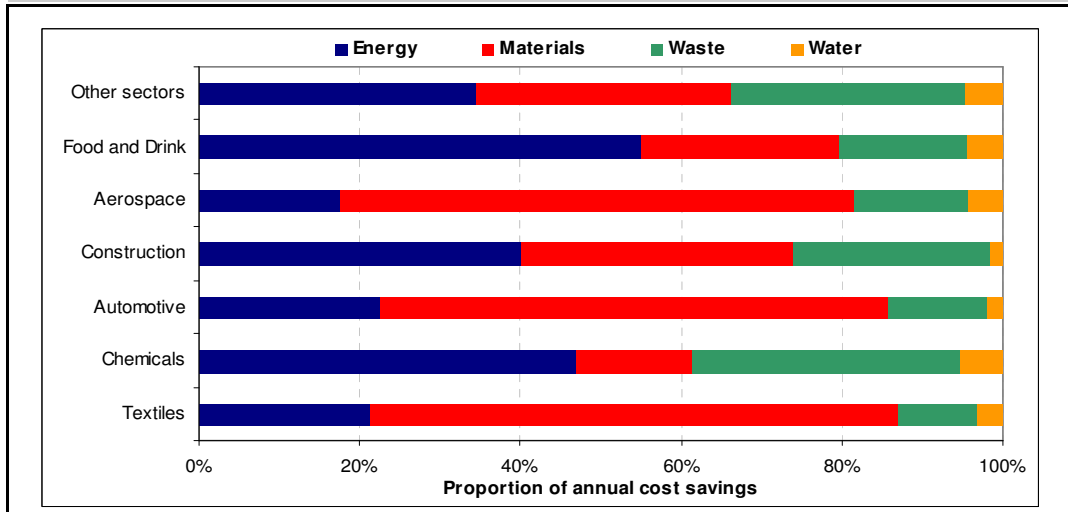
Figure A-3: Cost savings as a proportion of expenditure resource categories across the region



Source: ENWORKS Toolkit to 19 February 2008

A.12 At a sectoral level annual cost savings broadly follow the pattern of the total data with materials accounting for the greatest proportion of savings across many sectors. However, food and drink savings have been most concentrated in energy savings.

Figure A-4: Proportion of annual cost savings by sector and resource type



Source: ENWORKS Toolkit to 19 February 2008 Note: In this graph 'Other sector' include: Energy, Digital Industries, Tourism, Environmental Technologies, Creative Industries, Financial and Professional Services, Biotechnology, Sport, Maritime and Other

A.13 Indeed, viewing this data in aggregate terms demonstrates the differences across sectors in the nature of savings by resource type.

Table A-6: Total of annual cost savings by sector and resource type

	Energy	Materials	Waste	Water
Textiles	£741,000	£2,289,000	£339,000	£108,000
Chemicals	£1,516,000	£466,000	£1,071,000	£175,000
Automotive	£530,000	£1,492,000	£290,000	£45,000
Construction	£751,000	£632,000	£458,000	£29,000
Aerospace	£245,000	£895,000	£197,000	£60,000
Food and Drink	£734,000	£330,000	£212,000	£60,000
Other sectors	£2,059,000	£1,921,000	£1,743,000	£281,000

Source: ENWORKS Toolkit to 19 February 2008 Note: In this graph 'Other sector' include: Energy, Digital Industries, Tourism, Environmental Technologies, Creative Industries, Financial and Professional Services, Biotechnology, Sport, Maritime and Other. All data rounded to 1000

Potential savings

- A.14 The potential future cost savings from opportunities in the pipeline are also important. These may change as each opportunity develops as they are only estimates. Nevertheless, the table below shows that the value of these for the whole project could add an additional £16.7 million in cost savings per annum.²⁵ Encouragingly, anticipated savings are significantly more evenly spread across the region than savings achieved to date. This is important as it ensures that the Project is indeed serving a regional market and delivering outcomes for businesses across the North West in line with its objectives.

Table A-7: Anticipated future annual cost savings (according to status of each opportunity)

	Total pipeline savings	Proportion of total
Cheshire	£4,007,000	24%
Cumbria	£1,742,000	10%
Greater Manchester	£4,779,000	29%
Lancashire	£3,581,000	22%
Merseyside	£2,541,000	15%
Total	£16,651,000	100%

Source: ENWORKS Toolkit to 19 February 2008

Environmental outcomes

- A.15 The environmental outcomes generated by the Project captured on the Toolkit are wide ranging. They include resource reduction, CO₂ savings and data on waste diverted from landfill. It is important that these outcomes are adequately assessed. As discussed in Section 2 the Project has as one of its core objectives the reduction of the resource consumption footprint of firms participating in the initiative and the region more widely. The discussion below is organised along the lines of the three 'Opportunity types' identified by the Toolkit:

- resource reduction

²⁵ Note that there is a slight discrepancy in the Toolkit data supplied to SQW of around £100,000 in the different cuts of the data. Further, this data includes the 'non-feasible' opportunities discussed in the previous Section.

- waste diverted from landfill
- substitution.

Opportunity Type 1 - Resource reduction

A.16 The Toolkit provides detailed information on the reductions in the use of natural (and other) resources by businesses engaged with the Project. The aggregate total reductions to date and achieved and pipeline annual reductions are set out below. Notable figures include:

- to date, over 83,500 fewer kWh of natural gas used by businesses and over 50 million fewer kWh of electricity used
- 35,000 labour hours saved to divert to other business areas
- significant reductions in the use of water by firms.

Table A-8: Resource reduction outcomes of the Project

Resource Type	Actual to date	Annual - achieved	Annual - Pipeline
Diesel (Litres)	515,300	400,100	420,300
Electricity (kWh)	50,653,100	41,665,100	122,404,500
Fuel Oil (Litres)	99,100	134,200	1,477,900
Gaseous - Raw Material (Tonnes)	300	100	0
Labour (Hrs)	35,000	17,900	22,800
Liquid - Ancillary (Tonnes)	27	10	0
Liquid - Other (Tonnes)	9,448,200	2,315,000	402,500
Liquid - Raw Material (Tonnes)	2,500	2,700	1,400
LPG (Kgs)	4,800	3,800	88,100
Natural Gas (kWh)	83,519,000	51,891,600	74,119,100
Other (Units)	6,295,700	2,574,900	1,904,800
Petrol (Litres)	12,600	6,200	66,700
Solid - Ancillary (Tonnes)	300	400	11,200
Solid - Other (Tonnes)	28,600	12,000	1,900
Solid - Packaging (Tonnes)	5,200	2,400	4,600
Solid - Raw Material (Tonnes)	98,900	76,300	25,300
Water - Borehole (m3)	194,100	259,000	31,400
Water - Grey (m3)	4,900	2,800	58,900
Water - Mains (m3)	355,900	324,300	605,300
Gaseous – other (Tonnes)	-	0	600

Source: ENWORKS Toolkit to 19 February 2008 All data except Liquid - Ancillary (Tonnes) rounded to 100

A.17 Collectively these data account for very significant reductions in resource usage by participating firms. They also translate into savings of 39,800 tonnes of CO₂, with savings most pronounced in electricity and natural gas usage.

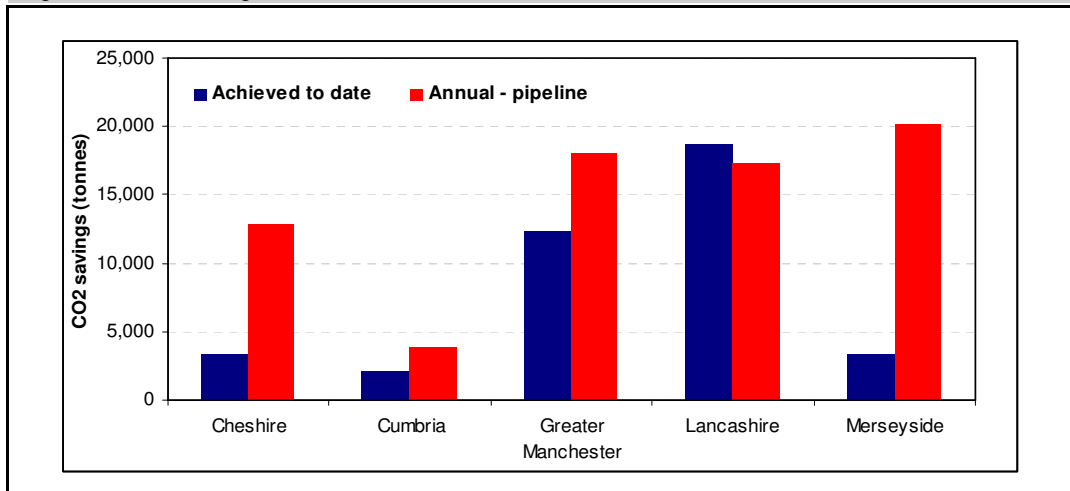
Table A-9: CO₂ savings generated by the Project

Resource type	Actual to date	Annual - achieved	Annual - Pipeline
Diesel	1,400	1,100	1,100
Electricity	22,100	22,200	52,600
Fuel Oil	300	400	4,000
LPG	14	11	300
Natural Gas	16,000	10,500	14,100
Petrol	29	14	200
Total	39,800	34,200	72,200

Source: ENWORKS Toolkit to 19 February 2008 All data except LPG and Petrol rounded to 100

A.18 The geographical spread of these CO₂ savings across the region are set out in the graph below. As expected, the majority of the savings to date have been generated in Lancashire and Greater Manchester; indeed, to date savings across the other three sub-regions have been low. This is, however, anticipated to change with pipeline savings more evenly spread.

Figure A-5: CO₂ savings across the North West



Source: ENWORKS Toolkit to 19 February 2008

Opportunity Type 2 - Waste diverted from landfill

A.19 The Project has also diverted some 20,500 tonnes of waste from landfill. Interestingly, and in sharp contrast to the CO₂ savings identified above, the greatest single proportion of this waste has been diverted in Cumbria. This demonstrates the varied nature of the activity of the project. However, it also to an extent emphasises the needs for improved targeting of beneficiary businesses. Outcomes across different sub-regions should not vary so widely if the intervention is truly a regionally coherent Project as intended.

Table A-10: Waste diverted from landfill

Sub-region	Total to date (tonnes)	Proportion of regional total	Number of opportunities	Savings per opportunity (tonnes)
Cheshire	254	1%	2	127
Cumbria	11,764	57%	32	368
Greater Manchester	2,961	14%	30	99
Lancashire	4,701	23%	77	61
Merseyside	788	4%	11	72
Total	20,469	100%	152	135

Source: ENWORKS Toolkit to 19 February 2008

Opportunity Type 3 - Substitution

- A.20 The Toolkit also records data on Substitution activity by businesses. This is substituting a resource such as diesel to bio-fuel or from hazardous to non-hazardous materials. However, the data records comparatively few Substitution opportunities – only 6 with achieved outcomes and 12 with pipeline outcomes. As a result the outcomes are relatively small, with around 475 tonnes of CO2 saved and 975,000 fewer kWh of electricity used.
- A.21 This may be owing to user error where a saving in one resource is recognised, but not the associated increase use in another. A neglect of these substitutive outcomes will lead to overestimations of the impact of the resource and cost savings of the Project and it is important that this does not occur.

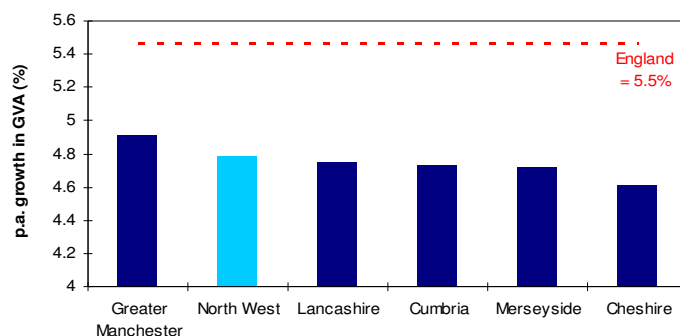
Annex B: Contextual data analysis

Headline economy indicators

Indicator

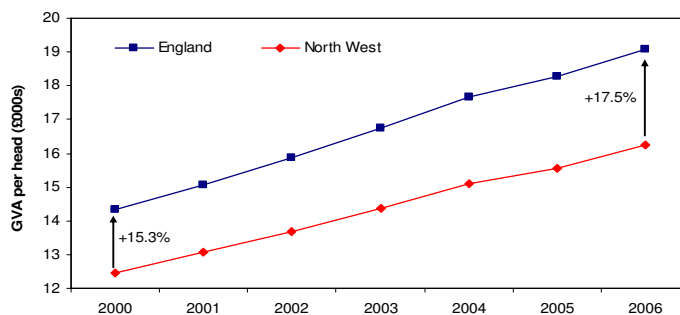
Commentary

Annual GVA growth, 2000-2005



Source: ONS

GVA per head, 2000-2006



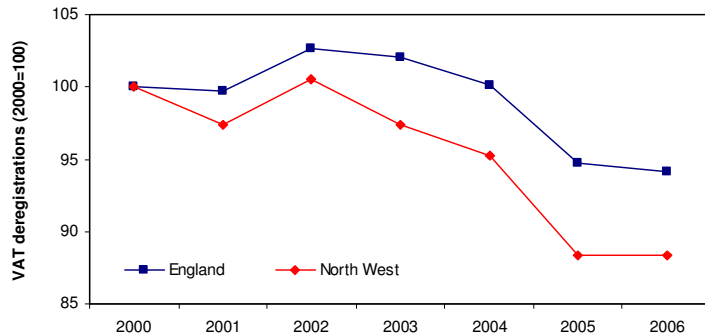
Source: ONS

- In the North West, overall GVA has grown from £84,308 million in 2000 to £111,252 million in 2006, a 32% rise. There are many underlying factors behind this rise but the growth is driven by a combination of increases in employment, population and productivity. However, across the sub-regions of the North West, annual GVA growth between 2000 and 2005 has been significantly lower than the national (England) average (see chart opposite). Further, growth rates slowed very slightly post-2003.
- The contribution of the North West region to the national economy in terms of GVA has fallen slightly since 2000 from 11.9% to 11.5% by 2006. Overall, the evidence suggests that the North West region is not keeping pace with England in terms of GVA growth (although the difference is not significant).
- GVA in the North West manufacturing sector (SIC D) has been stagnant between 2000 and 2004 – in fact, it declined slightly over the period by 1.1%. However, this is not as large as the decline experienced nationally (2.2%) suggesting that the sector in the North West is more resilient.
- From 1999-2006 the total number of business data units (essentially workplaces) in the region increased by 13.2%, lower than in England as a whole (14.5%). In 2006 there were just over 247,000 workplaces in the region – the number of businesses supported by the Project must be seen in this context. The 1,200 (gross) businesses supported with resource efficiency therefore represent round 0.5% of the total business stock.
- In line with the Sub-national Review of Economic Development and Regeneration, GVA per head will be one of the key outcome indicators against which future RDA performance will be measured. Underlying all public sector interventions in the regional economy, therefore, should be a concern with raising GVA per head.
- GVA per head in the North West has increased significantly since 2000, from £12,445 to £16,234 by 2006. Despite this, the GVA per head gap with England has actually widened over the period from 15.3% to 17.5%.
- The average annual growth rate in GVA per head since 2000 has been slightly lower in the North West (4.6%) than in England (4.9%). However, this experience is not shared across the sub-regional economies, with Merseyside experiencing a relatively large growth in GVA per head over the period (although it did, admittedly, start from the lowest base in 2000 and is reflective of the sub-region having to 'catch-up').
- GVA per employee can be used as a proxy for productivity. Between 2000 and 2006, GVA per employee in the North West grew by approximately 3.7% per annum, rising from £29,873 per employee in 2000 to £37,086 in 2006. However, this is lower than the comparable growth rate in England (4.7%). This means that the gap in GVA per employee has actually widened since 2000.

Business Competitiveness indicators

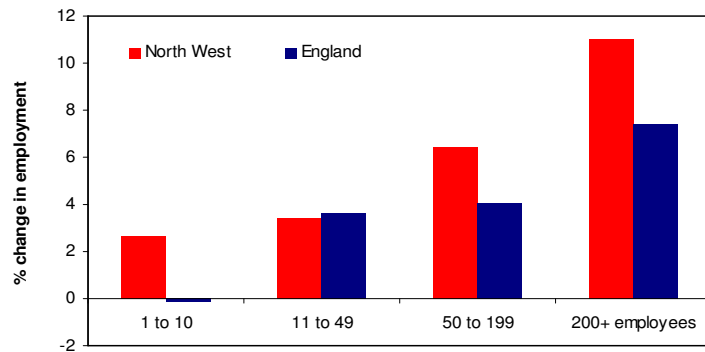
Indicator

Change in VAT deregistrations, 2000-2006



Source: NOMIS VAT registrations/deregistrations/stocks

Growth in employment by workplace sizeband, 2000-2006



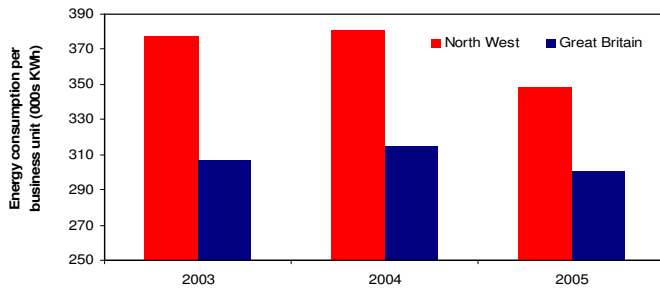
Source: ABI workplace analysis

Commentary

- VAT deregistrations show the number of businesses which have decided no longer to trade above the VAT threshold, suggesting they have been underperforming or uncompetitive. Positively, the number of deregistrations in the North West region has been lower than in 2000 in every year since (with the exception of 2002). Moreover, it is noticeable that there has been a significant dip since 2003 – the year the Project was introduced. It is very likely that the Project, which has assisted over 1,200 businesses to improve their resource efficiency and led to cost savings to date of over £23.4m, has contributed to this reduction.
- Importantly, the fall in the number of VAT deregistrations has been larger in the North West than nationally, suggesting that the region is performing better than the national trend – evidence that regional interventions may have had a significant impact. This experience is evident across many sectors including: wholesale, retail and repairs; hotels and restaurants; and transport, storage and communication. However, this does apply to the manufacturing sector, where regional deregistrations have been in line with the national trend.
- One-year business survival rates in the Northwest in 2004 stood at 92.1%, the same level as in the UK i.e. 92.1% of businesses registered in 2004 were still in operation one year later. This is a significant improvement in closing the gap with the national rate. The cost savings produced by the Project may have contributed to this reduction in the number of businesses failing to survive.
- In 2006, 20% of the working age population received job related training over the previous 13 weeks, some 830,000 people. Rates of job related training reduced over time in the region (22% in 2001).
- One of the Project's objectives is to improve the competitiveness of SMEs across the North West; indeed, much of its work is focused on these businesses. It is therefore important to consider growth in businesses/workplaces of different sizes. Employment in the North West has grown by 6.3% between 2000 and 2006, much larger than the increase nationally (England) of just 4%. As the chart opposite shows, this has primarily been led by the 11% increase in employment within the largest of (200+) workplaces.
- As the chart shows, however, employment growth in the North West has outstripped the national average across all workplace sizebands with the exception of the 11-49 employee sizeband. Importantly for the success of the Project, regional employment growth has been significantly above the England average for micro (1-10) workplaces and medium-size (50-199) workplaces – these experienced a 2.6% increase and a 6.5% increase respectively.
- In 2006, just over two million people in the North West were employed in workplaces with less than 200 employees, accounting for 68.5% of all employees in the region. This can be taken as a proxy for employment in SMEs in the region. In addition, 1,334,100 people were employed in the smallest workplaces (those with less than 50 people on site).
- As a further indicator of the competitiveness of regional business, the turnover per employee in the region has increased significantly in recent years, from around £65,000 in 2000 to £80,000 in 2005. However, this lags significant behind England, with turnover per employee at £94,000 in 2005.

Indicator

Industry and Commercial Energy Consumption, 2003-2005

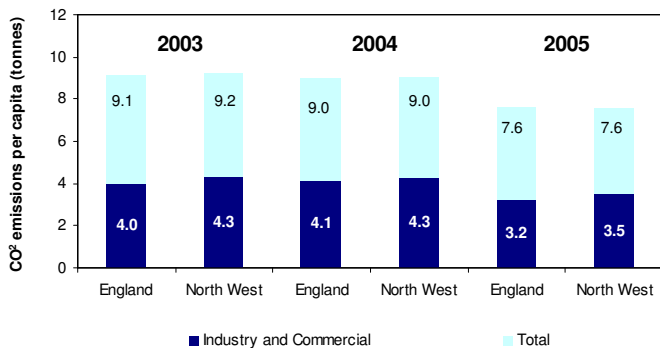


Source: BERR and ABI workplace analysis

Commentary

- At the regional level, total energy consumption by the industrial and commercial sector in 2005 was 84,344 GWh – this is slightly lower than the levels of consumption in 2003 and 2004.
- As the chart opposite shows, when these figures are weighted to the number of business units, it can be observed that energy consumption in the North West dropped off significantly in 2005 whilst in Great Britain it has remained fairly constant over the period. It is also observable that energy consumption per business unit is consistently higher in the North West than in Great Britain, reflective of their differing economic structures with an overrepresentation in manufacturing industries in the North West.
- The Project has led to actual annual savings of approximately 42 GWh of electricity and 52 GWh of natural gas usage. Using 2005 as a baseline, this translates into 0.18% of electricity consumption and 0.14% of natural gas consumption with the potential in the pipeline to become more significant. However, whilst total electricity consumption has increased slightly over the period (although so too has the number of business units), natural gas consumption has decreased by 15% between 2003 and 2005.

Carbon Dioxide emissions, 2003-2005



Source: Defra

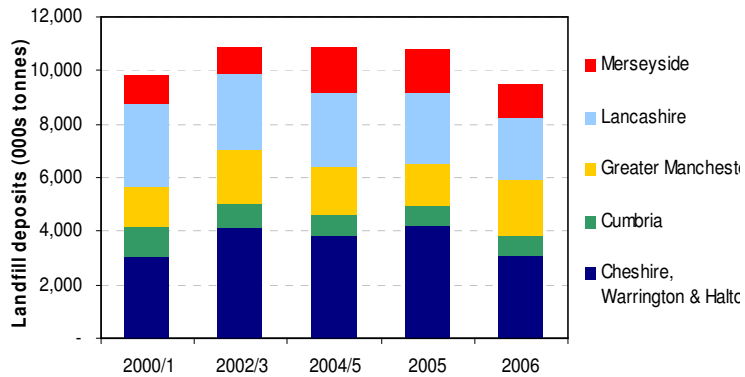
- Total carbon dioxide (CO²) emissions in the North West was approximately 51 million tonnes in 2005 – the proportion of this accounted for by industrial and commercial use was very significant (46%). The chart opposite shows the rate of CO² emissions per capita from industrial and commercial use in 2003, 2004 and 2005 and relates this to total carbon emissions. Industrial and commercial carbon emissions have consistently been slightly higher in the North West than England. Moreover, total carbon emissions are broadly equal between the two areas, meaning industrial and commercial carbon emissions comprise a relatively larger proportion of total emissions in the North West. This is a reflection of the region's large manufacturing and energy sector. Indeed, nationally, manufacturing accounts for approximately 14% of UK GVA and is responsible for 24% of UK carbon emissions²⁶
- It is estimated that, to date, the Project now achieves annual savings of 34,200 tonnes of CO² emissions, with the potential to achieve a further 72,200 tonnes per annum. Using 2005 as a baseline, this translates into 0.15% of total industrial and commercial emissions in the region, with the potential to rise to 0.45%.
- Although data is not available for the years following 2005, it is expected that the Project will lead to falls in the level of CO² emissions. Although the rate of CO² emissions has fallen in the latest year, this is partly due to differences in measurement²⁷ and is in line with the national trend.

²⁶ 'Sustainable development indicators in your pocket 2007', ONS and Defra

²⁷ 2005 data does not include ETS installations or diesel railways

Indicator

Landfill deposits, 2001/02 - 2006

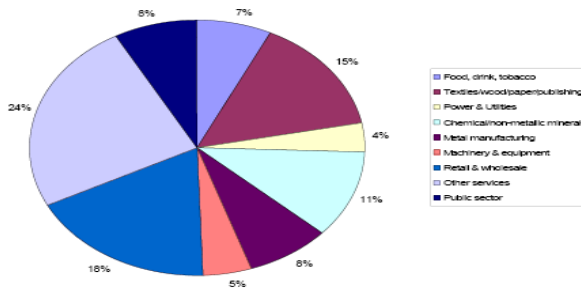


Source: Defra

Commentary

- Environment Agency data shows that just over 9.5 million tonnes of waste was disposed to landfill in 2006 in the North West. Waste disposed to landfill decreased by 12% between 2005 and 2006 in the region, this is in line with a national downward trend. Looking at the data at the sub-regional level, Cheshire, Warrington and Halton account for the single greatest proportion of waste going to landfill. In 2006, this area was responsible for 33% of the regional total.
- Elsewhere, Greater Manchester has accounted for an increasing proportion of the regional waste going to landfill, 22% in 2006 compared to 16% in 2000/1. By contrast, in Lancashire waste going to landfill has reduced significantly, both absolutely and relatively. In 2000/1 Lancashire accounted for 3.1 million tonnes of waste to landfill (31% of the regional total); by 2006 the figure was 2.3 million (24% of the regional total).
- The data in the Toolkit suggests that the Project now contributes an annual saving of 27,200 tonnes of waste diverted from landfill. This equates to around 0.3% of the regional total in 2006. Further, the reduction on waste going to landfill from 2005 to 2006 was some 1.275 million tonnes. Indicatively, the annual savings (as of today) would have represented around 2.1% of this total.
- As set out by the Environment Agency, by the end of 2006 the North West retained adequate landfill capacity for non-hazardous wastes, with over 5 years of landfill life left across the region. It also had nearly 600,000 tonnes of capacity at permitted waste incineration facilities, with just under a quarter available for municipal wastes.

Regional commercial and industrial waste arisings by sector



Source: Urban Mines

- A survey undertaken for the North West Regional Technical Advisory Body (NWR TAB) for Waste and the North West Minerals and Waste Planning Authorities in 2006/07 surveyed around 1,000 companies across the North West to provide regional, sub-regional and local information on the amounts of waste produced and managed by the commercial and industrial sector.
- This survey estimated that the commercial and industrial waste arisings in the North West totalled some 7.5 million tonnes, with retail, wholesale and other services generating the most waste per sector. The manufacturing sector producing the most waste was identified as textiles, paper and pulp.
- The study suggested that a significant proportion of waste is recycled (an estimated 3.6 million tonnes from recycling, land recovery and composting) although landfill is still a popular method of disposal.