



## Regional Growth into a Low Carbon Economy Herefordshire Briefing

Version 1.0

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### 1 Introduction

In 2009 the West Midlands Regional Observatory and Advantage West Midlands commissioned Atkins to produce a review of the opportunities for growth into the low carbon economy within the West Midlands<sup>1</sup>.

The report was focused on the existing business base of the region and how it might take advantage of the drive towards a low carbon economy. The aim was to produce an understanding of the opportunities for diversification and decarbonisation.

In parallel the Observatory took analysis of potential vulnerability to carbon constraints<sup>2</sup> that was produced at regional level by URS<sup>3</sup> during the development of the West Midlands Economic Strategy and applied it to local authority level data.

The main report also set out to identify the barriers to taking these opportunities and tried to identify regional level policy interventions that could help to reduce these barriers.

While the report was very much a regional level report there are some useful messages at local authority level. This paper sets out the highlights of the report for Herefordshire. The report also produced an evidence base that are we keen to share with local authorities to help them with any more detailed local work.

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<sup>1</sup> Low Carbon Economy in the West Midlands, Atkins, February 2010<sup>1</sup>

<sup>2</sup> Regional Growth into a Low Carbon Economy (Stage One)' WMRO, February 2010

<sup>3</sup> Low Carbon Evidence Base for the West Midlands Regional Economic Strategy, URS (2007)

## 2 Vulnerabilities to carbon constraints

A key challenge in developing a low carbon economy and a low carbon economic strategy is that the economic strategy has to help business. Therefore understanding how the business base is affected by environmental policies is of real importance.

In order to have a greater understanding of the constraints and also the areas of opportunity within the region we undertook a review of URS's work with the aim of replicating the analysis at local authority level. The finer grain of detail should allow those individual authorities to understand better the challenges faced in their particular area.

The vulnerabilities are considered in terms of the sector's operations and its products or services. The data is then analysed in terms of the proportion of businesses or employment within that sector in Herefordshire.

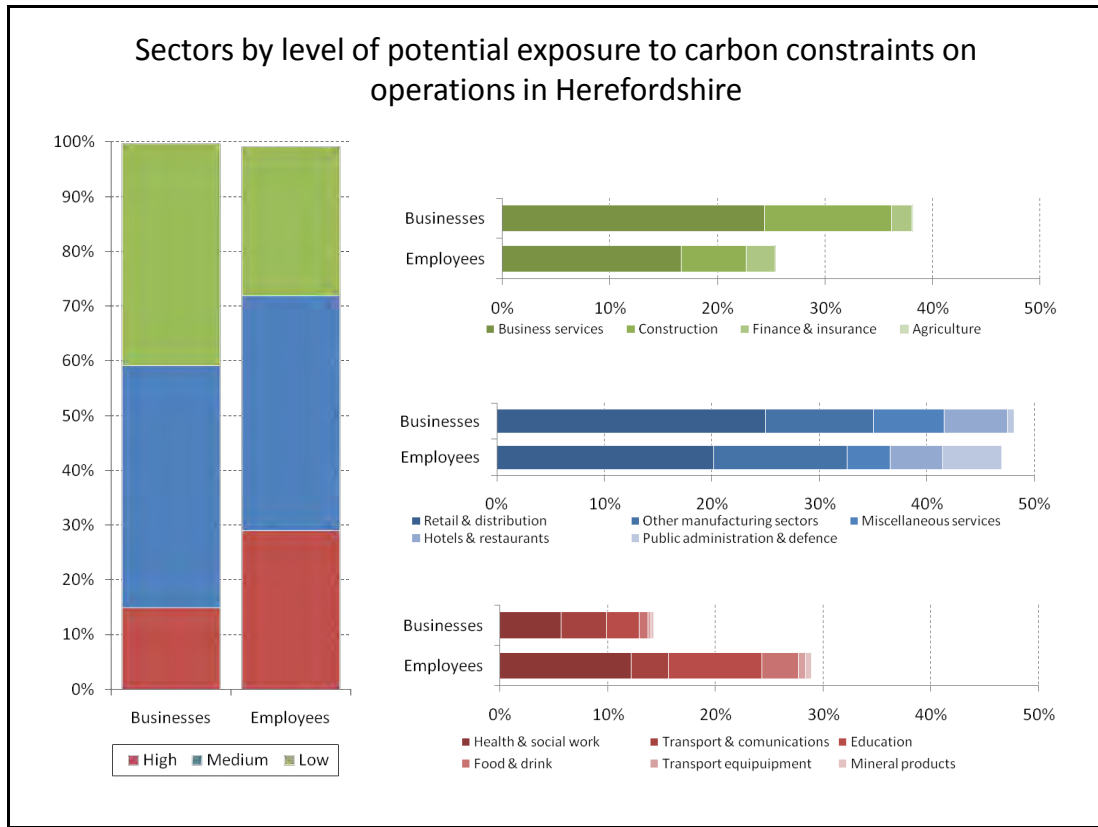
The proportion of sectors with high level of exposure to carbon constraints on operations represents 14.4 per cent of the businesses and involves 28.9 per cent of the employees in Herefordshire (Fig 1). Both of these figures are in line with the regional performance although the employment levels are below the region (32.0 per cent).

The sectors with high vulnerability on operations in Herefordshire are: retail & distribution, health & social work, other manufacturing sectors, education, hotels & restaurants, and miscellaneous services. The sectors with low vulnerability are: business services, construction and agriculture.

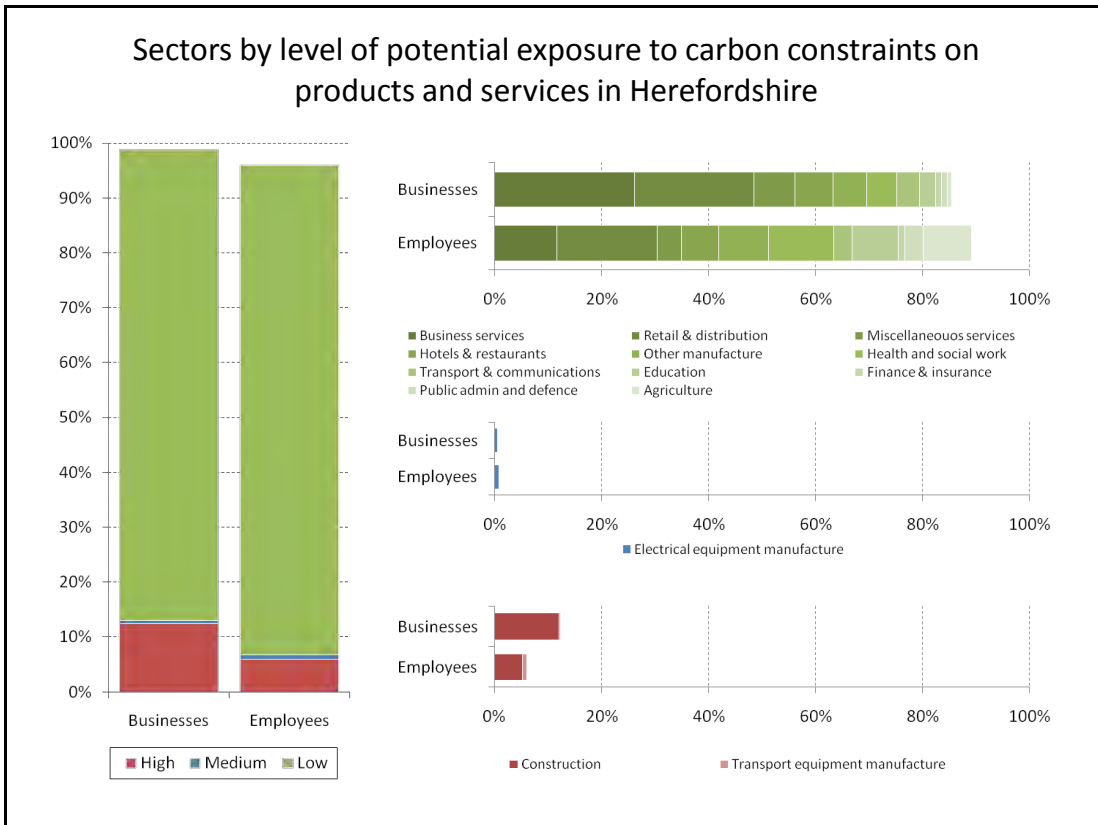
The proportion of sectors with high level of exposure to carbon constraints on products and services represents 12.4 per cent of the businesses and involves 5.9 per cent of the employees in Herefordshire (Fig 2). Again both businesses and employee vulnerability are in line with the regional average.

The sector with high vulnerability on products and services in Herefordshire is construction. The sectors with low vulnerability are: retail & distribution, business services, health & social work, other manufacturing sectors, education, agriculture, hotels & restaurants and miscellaneous services.

**Fig 1: Exposure to carbon constraints on operations in Herefordshire**



**Fig 2: Exposure to carbon constraints on products & services in Herefordshire**



### 3 Sub-regional strengths

Within the main report Atkins identified eight key sectors that presented the largest opportunities for the West Midlands region. This work on identifying strengths was then mapped to the local authorities to identify those opportunity sectors that had a significant presence (Fig 3).

For Herefordshire the analysis showed that none of the opportunity sectors had a ‘*highly significant*’ presence there were three of the opportunity sectors with a ‘*significant*’ presence. Those sectors are:

- Construction;
- Manufacture of food & beverages;
- Environmental goods and services.

**Fig 3: Identification of Sub-regional strengths**

Table 5.8 - Opportunity Analysis By Sub-Region

	Birmingham	Sandwell	Walsall	Dudley	Coventry	Solihull	Wolverhampton	Staffordshire	Worcestershire	Warwickshire	Herefordshire	Shropshire	Stoke on Trent	Telford & Wrekin
Manufacture of non-metallic mineral goods	L	L	L	L	L	L	L	H	L	L	L	L	L	L
Manufacture of automotive and transport equipment	H	L	L	L	H	L	L	H	L	L	L	H	M	H
Manufacture of metals and fabricated metal products and electrical equipment	H	H	H	L	L	L	L	H	H	L	L	L	L	L
Construction	H	L	L	L	L	L	H	H	H	H	M	H	H	H
Manufacture of food and beverages	L	M	L	L	L	L	L	M	L	L	M	M	L	L
Environmental goods and services <sup>14</sup>	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Transport, storage and communications	H	L	L	L	H	L	L	H	L	H	L	H	L	H
Public Services	H	H	H	H	H	H	H	H	L	L	L	H	L	H

**High (H)** – Industry has a *highly significant* presence in the sub-region (>2% employees)

**Medium (M)** – Industry has a *significant* presence in the sub-region (1 – 2% employees or local specialism (LQ analysis))

**Low (L)** – Industry has a *minor* presence in the sub-region (<1% employees)

The Atkins technical report has detailed breakdowns of the opportunities that exist for each of these sectors and can be used to help identify possible interventions to support businesses within the sectors.

## 4 Understanding the type of opportunity

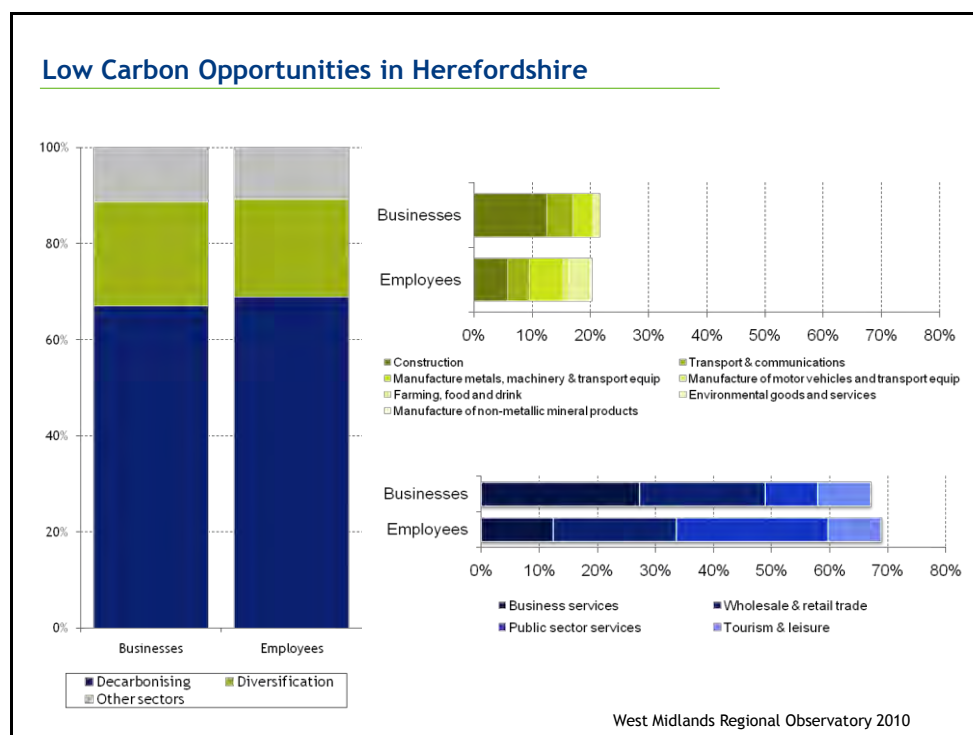
Atkins classified the opportunities that arose into 4 categories:

- **Low carbon techniques**, which refers to improved processes, techniques and materials. This area covers more closely carbon mitigation policies but as these are closely linked to opportunities they need to be broadly understood.
- Opportunities to **diversify into new low carbon products**, which looks at opportunities to begin producing low carbon products. For example, producing low carbon vehicles.
- Opportunities to **decarbonise existing products**. This examines how existing products can be decarbonised. This is very important as these are still key innovations and can help safeguard products and services.
- Areas where there is **minimal opportunity**.

We have taken this and the more detailed analysis in the report and applied it to the sector profile of Herefordshire. For ease of use we have focused on two elements (decarbonising and diversifying). That does not rule out decarbonising opportunities for those classed as diversifying and vice versa just that the clearer opportunities are in the selected category (Fig 4).

The largest proportion of opportunities (67.0 per cent of businesses) are classed as decarbonising with public sector and businesses services having large shares of the business and employment in Herefordshire. The analysis shows that over 20 per cent of Herefordshire's businesses are in sectors with opportunities for diversification into the low carbon economy. The largest proportion of these are in the construction sector (12.4 per cent) with other local strengths being 'farming, food and drink' and 'transport and communications'.

**Fig 4: Understanding the opportunities in Herefordshire**



## 5 The impact of the public sector

In addition to the specific opportunities associated with clusters of industry in specific sub-regions, the report demonstrated that there are specific opportunities associated with the public sector and low carbon opportunities across the region. This is also important, as individual authorities can influence the development of low carbon initiatives directly.

The key opportunity for the public sector is associated with low carbon procurement by local authorities.

The regional solutions and options for the public sector across the region include:

- Provide guidance on sustainable/low carbon procurement for public sector;
- Demonstrate best practice in own procurement and funding methods;
- Develop carbon calculation tools in assessing the carbon footprint of different products and options.

Through low carbon procurement policies local authorities will be in a position to influence other sectors of the economy develop low carbon products; for example, construction materials associated with retro-fitting social housing stock to improve the energy efficiency of housing stock and specifying the increased use of recycled aggregates in buildings and highways.