

BRISTOL CITY COUNCIL

Overview and Scrutiny Management Board

2nd March 2016

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Title: Bristol's Environmental Trends 2004-2014

Ward: Citywide

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RECOMMENDATION

The Overview and Scrutiny Management Board are asked to note the progress of Bristol's environmental trends based on the 12 topics set out by the European Green Capital Award scheme.

Summary

The significant issues in the report are:

- Ten years ago Bristol set its self an ambitious goal to make the city more sustainable and to improve the quality of life of citizens. It encapsulated this goal in a phrase "Green Capital".
- Bristol has made significant progress towards becoming a sustainable city. We are the UK's most sustainable major city and now recognised as one of Europe's leading green cities.
- The European Commission set out 12 environmental topics against which it assesses cities for the European Green Capital Award. This report provides a brief overview of progress against those topics.
- Bristol has improved its performance across all 12 topics over the past decade.
- More detailed consideration of each topic is undertaken by the relevant scrutiny commissions of the city council and this summary is to provide context for the discussion of the European Green Capital year.

1. Context and Background

- 1.** In 2004 Bristol adopted its Community Strategy which set out a goal for Bristol to become a green capital in Europe, creating sustainable communities and tackling climate change. Work initiated in the following years has made Bristol a more sustainable city.
- 2.** In 2008 the European Commission created an award scheme – the European Green Capital Award. This set up an assessment process based on 12 themes, with more detailed indicators for each topic.
- 3.** Bristol won the European Green Capital Award based on a technical submission in October 2012. This 32,000 word bid set out the city's performance against 12 topics. These described the city's performance over the previous 5-10 years, current performance and future plans. Bristol was awarded the title based on its strong track record and ambitious future plans.
- 4.** The bid to be European Green Capital made no new commitments about the city's environmental performance.
- 5.** European Green Capitals are expected to report to the European Commission on progress against these topics, and the more detailed indicators, 5 years after holding the title. Therefore Bristol will produce a report for June 2020, showing data up to 2019.
- 6.** This report was requested by members of OSM shortly before this meeting and seeks to give an overview of the trends in the 12 European Green Capital topics.
- 7.** It is not a comprehensive report on progress and crucially it does not include data for 2015 as many of the dataset are not yet ready.
- 8.** Most of the specific topics which are council led areas, such as transport or land use, within the remit of the Place and Neighbourhoods Scrutiny Commissions and this discussion is not intended to duplicate with those discussions.
- 9.** This paper is only intended to help inform consideration of Bristol's year as European Green Capital and inform the debate about future priorities for Bristol's environment.

2. The 12 Topics

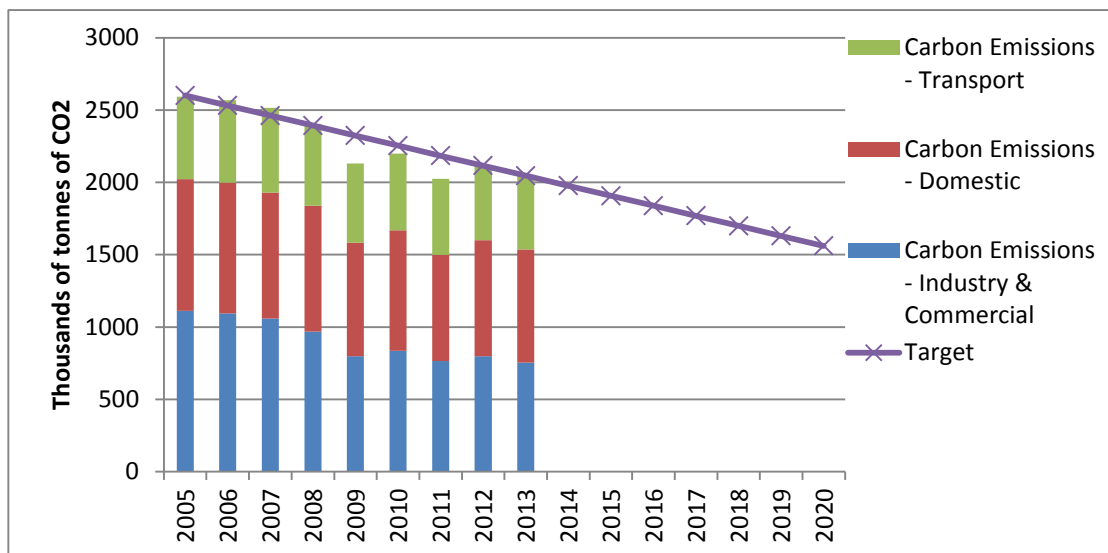
Environmental Management of the local authority

- 10.** Bristol City Council set out an ambition to lead by example by improving its own environmental performance. It has set a whole suite of targets addressing its key impacts and has its performance independently assessed through the Eco Management and Audit Scheme. It reports its performance annually and more details can be found on the council's website.
- 11.** One of these targets was to reduce the city council's own CO2 emissions by 40% by 2020, from 2005, to mirror the target for the city as a whole (see later). The city council has achieved this target in 2015/16 – some 5 years early.
- 12.** Energy use in public buildings and street lights is decreasing, water use is reducing on the councils main sites, and waste recycling rates are improving and have reached 90%. Van and car miles driven for council business are steadily reducing.

Climate Change

13. Bristol has successfully reduced its CO₂ emissions by 21% between 2005 and 2013. This is one of the fastest rates of reduction in the UK and Bristol continues to have the lowest carbon emissions per person of any major UK city.
14. Bristol has invested in measures to reduce carbon emissions and the City Council has focused on reducing energy use in homes, creating new renewable energy generation in the city and sustainable transport investment. These are addressed in more detail later in this report.
15. The City Council is consulting on a new Climate and Energy Security Framework which sets out the strategy and action plan for achieving targets by 2020 and beyond to proposed goal of carbon neutrality by 2050.

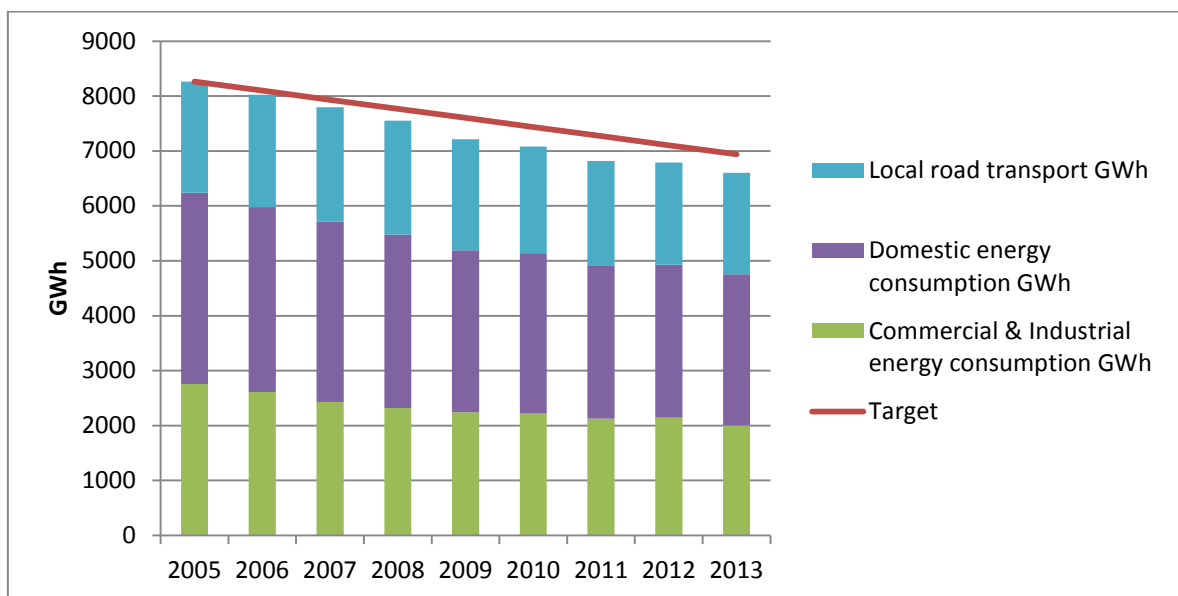
Figure 1: Bristol's carbon emissions from energy and transport



Energy

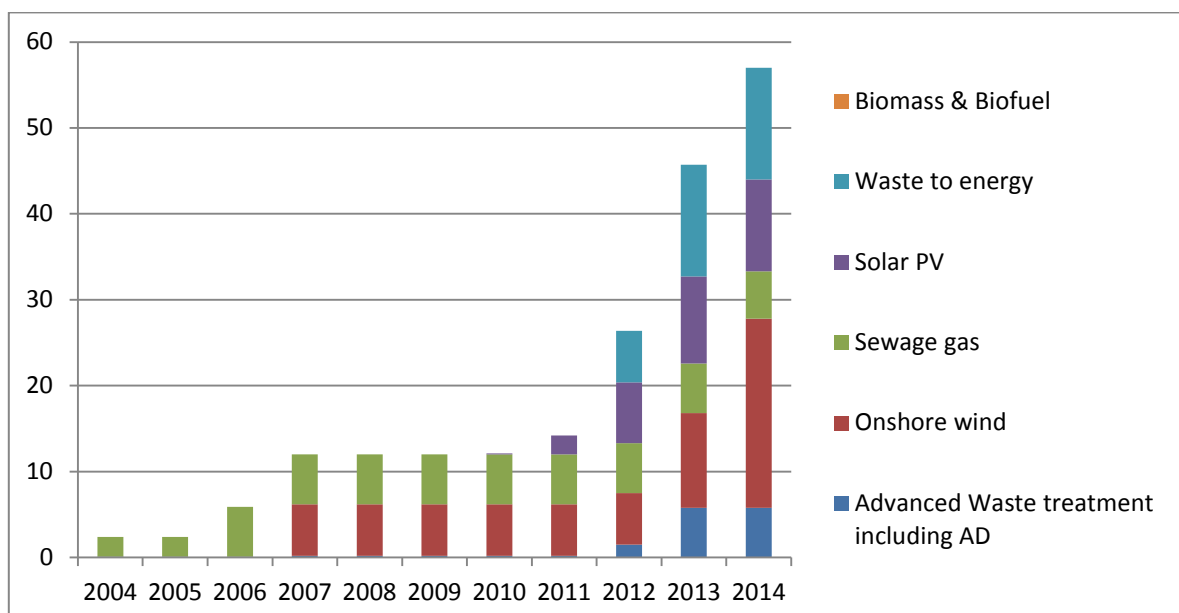
16. Bristol has successfully reduced its energy demand by 16% between 2005 and 2013. This is one of the fastest rates of reduction in the UK and Bristol continues to have the lowest energy demand per person of any major UK city.
17. Bristol City Council is implementing a substantial energy programme, investing to make homes more energy efficient and to create new sources of renewable energy generation in the city. It has also created a new energy company, Bristol Energy.

Figure 2: Bristol's energy consumption



18. In addition, Bristol has seen a rapid growth in renewable energy investment in the city.

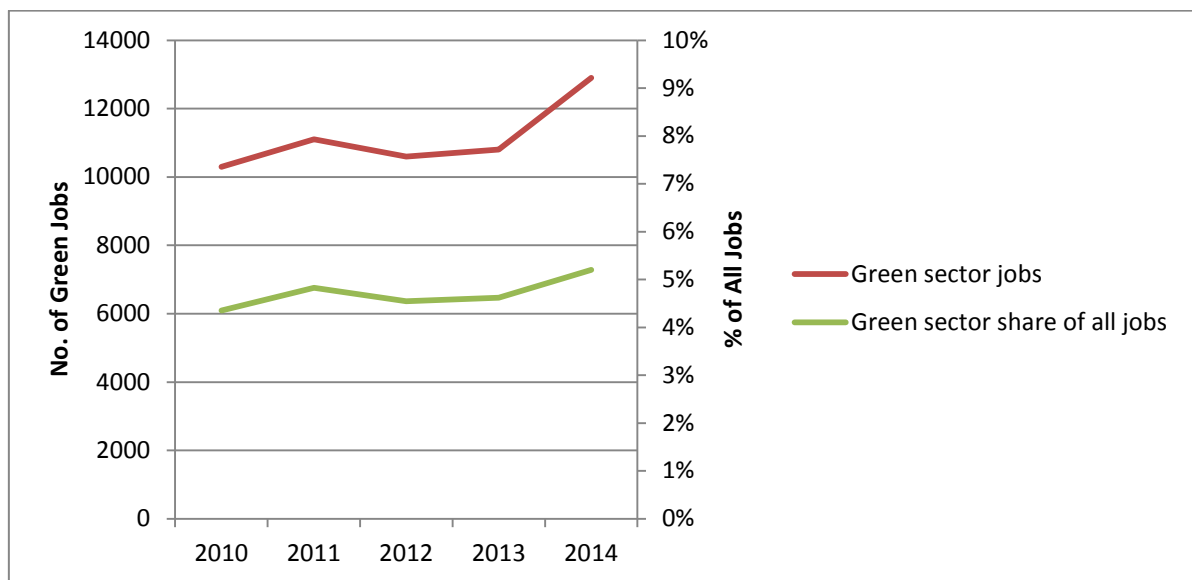
Figure 3: Bristol's renewable energy generation capacity



Green Jobs and Eco Innovation

19. A range of jobs in the environmental technology and services sectors exist in Bristol, with one of the largest clusters of businesses in this sector in the UK, including some global leaders such as DNV GL. There are also many other jobs which are achieving improved environmental outcomes, such as in an organic food business or a business delivering parcels by bike rather than a van, but these are not identifiable in the UK government datasets.

Figure 4: Jobs in the environmental technology and services sector



Transport

20. The transport indicators used by the European Green Capital Award are also showing improvement in Bristol over the past decade and in the last few years in particular. There are decreasing levels in the peak hour morning flow of traffic into the city centre accompanied by (Figure 5) increasing levels of cycling (Figure 6) and bus patronage (Figure 7).
21. The last few years have seen the implementation of a comprehensive programme of transport initiatives including:
- control of commuter parking in residential areas,
 - 20mph speed limits introduced on nearly 1,000km of roads, and
 - construction of the Metrobus rapid transit network.
22. There has also been substantial investment from the bus companies in new vehicles, for example, First Bus have invested in over 50 new buses in 2015 and have seen a 25% increase in passengers since

2013. This increase is not yet fully reflected in the data below.

Figure 5: Central area vehicle traffic

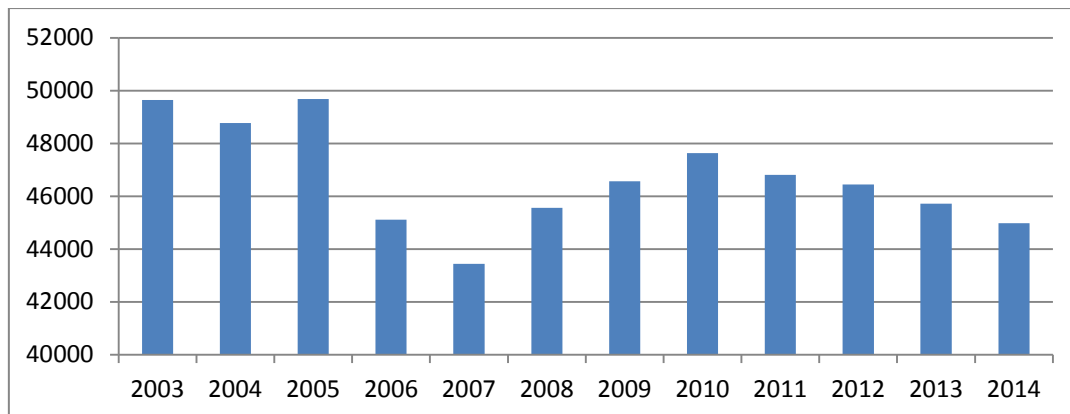


Figure 6: Cycling growth from 2003/4

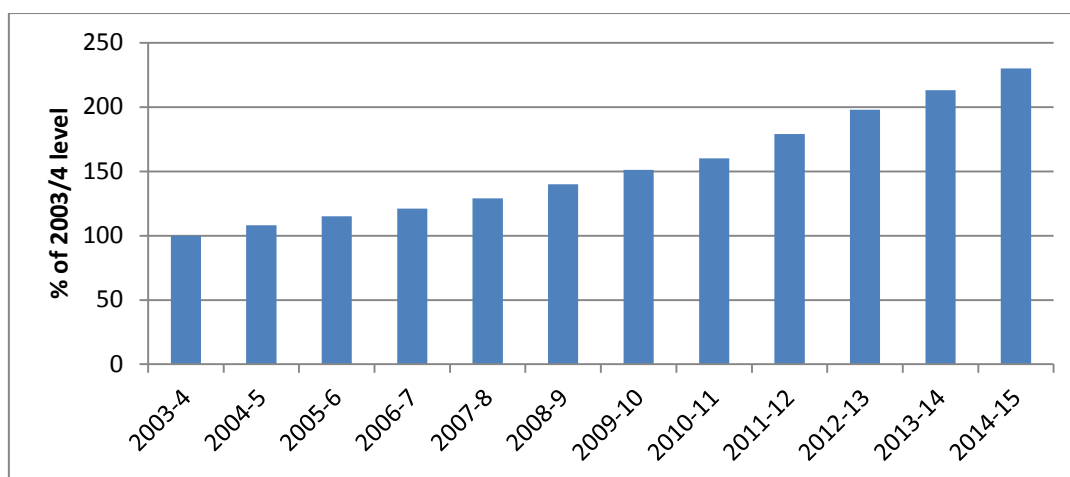
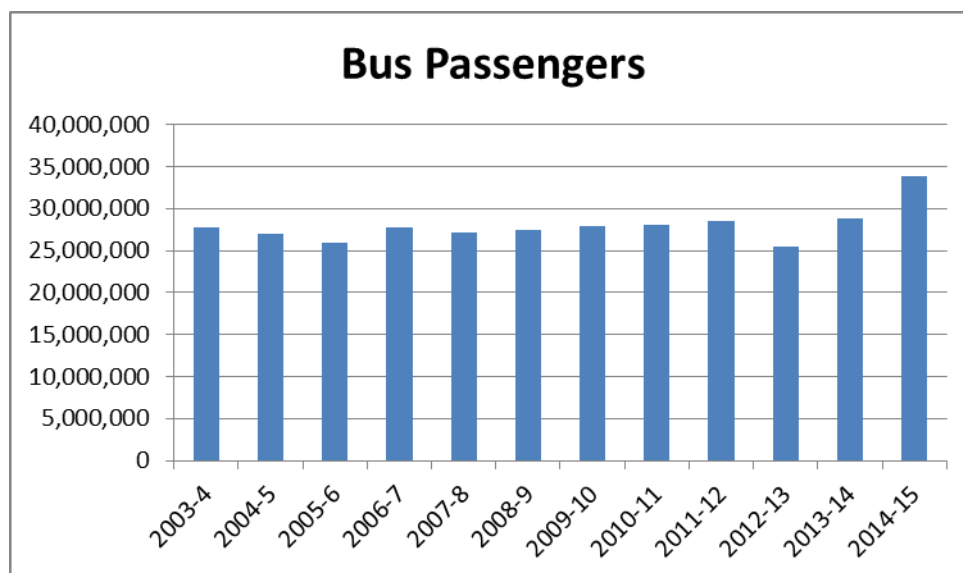


Figure 7: Bus passengers



Air Quality

- 23.** Bristol suffers from air pollution from traffic in the central area and along its main arterial roads. We have defined an Air Quality Management Area for these parts of the city and continuously monitor pollution levels. In some areas Bristol exceeds European and national objectives for Nitrogen Dioxide.
- 24.** The trends in air quality over the past decade are largely static with a slight improvement in central areas but the anticipated benefits of newer cleaner engines not yet showing significant improvements in overall air quality.

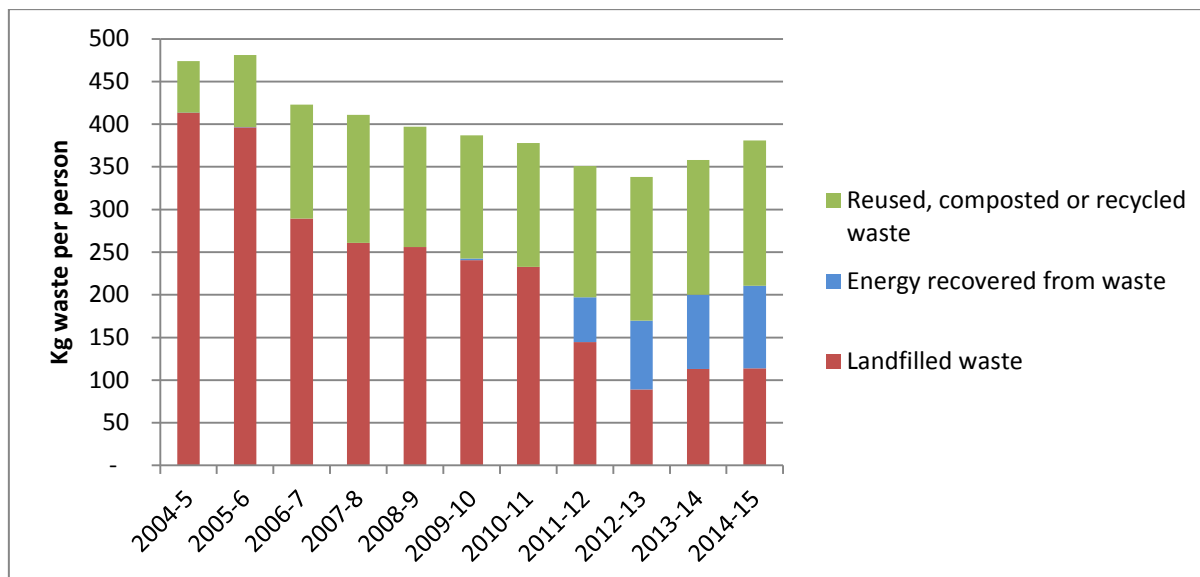
Quality of the Acoustic Environment

- 25.** Overall noise levels in Bristol are not a local authority duty and the national government has developed action plans for each major city.
- 26.** Bristol's work to reduce traffic volumes and traffic speeds will improve the overall noise environment of the city by reducing noise from road traffic. However the noise from aircraft, railways and motorways are the responsibility of national government. They have developed an action plan for Bristol.

Waste

- 27.** Over the past decade Bristol has successfully reduced the amount of waste produced per person and increased the proportion of waste recycled or used for energy, thereby reducing the amount of waste going to landfill.
- 28.** Unfortunately, from 2013/14 to 2014/5 there was a 16% rise in the amount of waste produced by residents, increasing from 145,000t to 171,000t. This has been a UK wide issue and indeed Bristol is one of the later cities to see this increase happen. In relation to the proportion of waste going to landfill, it remains static at 28%.
- 29.** This target has not been achieved primarily due to unforeseen delays in the completion of the general waste contract with Boomeco. This is due to the acquisition of Boomeco (and all its assets / contracts) by one of the major waste service providers in the marketplace and during this process only limited treatment capacity were available to BCC
- 30.** Bristol is developing a new waste strategy for adoption by Cabinet on 1st March 2016 and this sets new targets and plans for the coming decade to achieve.

Figure 8: Waste and recycling



Green urban areas incorporating sustainable land use

31. Bristol is a rapidly growing city and substantial amounts of new housing and commercial development have taken place in the last decade. Over 90% of development has taken place on previously developed, brownfield, sites helping to protect green spaces. A new spatial for the West of England is being developed which will determine the strategic locations for new development.
32. Most Bristol residents live close to a green space with nearly 90% within 300m and approximately 80% of the respondents to the Quality of life survey are satisfied with green spaces in the city.

Nature and Biodiversity

33. Bristol has a long history of wildlife management and in recent years has been making real progress, improving both the quantity and quality of nature reserves in the city. In 2015 Bristol City Council designated a further four local nature reserves as part of its green capital programme.

Water Supply

34. Water in Bristol is supplied by a private company, Bristol Water. Water demand is now at the lowest level in 20 years despite an increase in Bristol's population size. Over £200m of investment has taken place to improve the water network, treatment systems and water efficiency.

Waste Water

35. Bristol sewage is treated by Wessex Water and meets the EU Urban Waste Water Treatment Directive. New facilities to capture biogas from the sewage and from food waste have been installed and this is being

used to power the treatment works and generate additional power for buses. A pilot of the Poo-bus has proved very successful and a bid for additional funding for more bio-gas powered buses has been submitted to government.