

HMRC pioneers IBM's holistic approach to identifying carbon management priorities

Overview

■ Business challenge

- To gain a clear route-map highlighting actions to reduce carbon emissions
- To assess each action's likely cost and impact
- To develop a holistic approach to carbon reduction across HMRC's organisation of around 85,000 people and 900 buildings.

■ Solution

IBM worked with HMRC to carry out a diagnostic review. Based on a holistic framework this analysed how carbon is generated across HMRC and recommended a wide variety of carbon management solutions, providing HMRC with a clear, strategic way forward towards its reduction targets.

■ Key benefits

- A clear set of recommendations to help exceed required targets
- A comprehensive picture of HMRC's current carbon emissions
- Identification of those actions which will have most impact
- Total potential carbon reduction of up to 50%
- Reduction in costs over time.



Keen to be at the forefront of sustainable development within government, HM Revenue & Customs (HMRC) was performing well against many of the environmental targets set by the Sustainable Development Commission for 2010. Nevertheless, it was eager to ensure that it did not fall behind on the ambitious targets to reduce carbon emissions from offices by 12.5%.

HMRC consists of around 85,000 people and 900 buildings. The sheer size of the organisation made it difficult for HMRC to get a reliable overview of carbon consumption and the priority areas for action.

Lauren Haycox, Carbon Diagnostics Project Manager at HMRC says: "To push the agenda forward, we needed a clear understanding of both our current carbon production and how to get the greatest return on our investments in time and resources.

We looked for help from an organisation that understood how to achieve this. Our primary requirements were expertise and speed and the study was completed in around eight weeks."

Benchmarking against best practice

IBM used a range of carbon diagnostics tools based on the IBM Component Business Model approach to assess HMRC's current carbon management performance. Through a series of workshops and interviews, the IBM team met with people from across the organisation in operations including Finance, Contact Centres, Strategy, Communications and Marketing, the union, Corporate Responsibility, Estates and IT. This research helped to identify gaps between current practices for carbon management and leading practice, as well as establishing how different functions interact.

Achieving carbon reduction

Business benefits

- A clear set of recommendations to help exceed required targets
- A comprehensive picture of HMRC's current carbon emissions
- Identification of those actions which will have most impact
- Total potential carbon reduction of up to 50%
- Reduction in costs over time
- Knowledge transferred to HMRC staff
- Study completed in eight weeks, allowing HMRC to progress recommendations.

“The work we did with IBM has been very important in getting the carbon issue on the agenda within HMRC. It helps people understand what needs to be done and is a powerful way of highlighting the key areas of activity required across the organisation.”

– Judy Greevy, Head of Corporate Social Responsibility and Diversity at HMRC

HMRC had already identified IT and Estates as significant carbon contributors, so IBM integrated strategic quantitative studies of these two areas into the general, pan-organisation qualitative study. Detailed measurement of energy usage and efficiency was carried out in a typical data centre, office environment and properties identified by HMRC.

Powerful synergy

Led by IBM Global Business Services, which also provided property management expertise, the diagnostic drew on knowledge from across IBM. IBM Global Technology Services provided its unique methodology for measuring the energy use of distributed IT, and IBM Systems Technology Group used its Zodiac study to determine the energy efficiency and performance of the data centre technology.

Following the diagnostic work and gap analysis, IBM was able to recommend a comprehensive set of priority action areas. These provide a shopping list of options from which HMRC can build a programme to reduce its carbon footprint. If HMRC were able to implement every recommendation it could reduce its total carbon output by up to 50%, and most of the initiatives would also provide a cost saving.

IT and Estates

The Zodiac tool used by IBM identifies the most efficient configuration of servers and indicated that significant savings could be made under the terms of the current data centre supply contracts. In the longer term, if HMRC were able to develop a suitable investment case, consolidation in the data centres could potentially provide energy and floor space savings of up to 90% by reducing over 400 servers to 14.

In the area of distributed IT, IBM recommended a range of energy-saving initiatives including automatic power-down, reducing the number of printers, appointing local energy monitors and powering down hard disks more rapidly. Again, if HMRC were able to carry out all the recommendations, energy savings of around 20% could be achieved.

Recommendations for HMRC's estate revolved around creating a strategy that enabled buildings to be managed from both sustainability and cost perspectives. A data management system was suggested to capture energy readings and allow an “at a glance” view of which buildings are performing above or below benchmark so that informed action can be taken.

HMRC has long-term PFI contracts in place to manage its estate and was pleased to discover that much could be achieved to reduce carbon output by working within existing contracts. A potential saving of up to 50% of the Estates carbon footprint was identified if the entire set of recommendations can be put in place.

Getting on the agenda

Every person within HMRC has a role to play in carbon reduction. IBM recommended that someone be appointed at Board level to set carbon reduction targets and cascade these through the organisation using Key Performance Indicators. This would involve capturing carbon data at a functional level – at the moment it is only done at a high level – but it would enable functions to become directly accountable for their own carbon footprint.

Judy Greevy, Head of Corporate Social Responsibility and Diversity at HMRC confirms: “The work we did with IBM has been very important in getting the carbon issue on the agenda within HMRC. It helps people understand what needs to be done and is a powerful way of highlighting the key areas of activity required across the department.”

During the diagnostic study, IBM found a great deal of employee goodwill towards environmental initiatives and this could be harnessed to drive a low carbon culture. Greevy explains: “It was valuable to learn how interested people are in carbon reduction. In the bigger organisational picture it will help us engage and motivate. It’s also essential to be able to give people concrete actions they can take to make a difference. Many of the recommendations that came out of the work IBM did confirmed what we already knew. However, IBM has helped us distil generalities down and move to validated recommendations with measurable impacts and achievable targets.”

Breaking new ground

HMRC is taking the findings of the IBM carbon diagnostics study to its most senior operational committee. Meanwhile it has already been able to move forward on some of the recommendations.

Haycox concludes: “It’s the first time a carbon diagnostics study of this type has been carried out in government and it’s been a very valuable exercise.”

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Transformation at a glance

Eager to be at the forefront of sustainable development within government, HMRC was performing well against many of the targets set by the Sustainable Development Commission. However, it needed to take fast action on carbon management to meet the 2010 deadline of reducing carbon emissions from offices by 12.5%. HMRC engaged IBM to carry out a diagnostic study of carbon production across its large organisation of around 85,000 people and 900 buildings. The study embraced a wide range of processes and business operations including Estates, IT, Finance, HR, Strategy and the unions. HMRC now has a clear “shopping list” of options from which to build a carbon reduction programme. If all the recommendations can be carried out, IBM has identified potential carbon savings of up to 50%. HMRC is taking the findings to its most senior operational committee and is already progressing some of the recommendations.



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