

# Natural History Museum caters for improvement

**The Natural History Museum procurement department oversees spending of £35 million per year, which offers a major opportunity to encourage suppliers to improve environmental performance. WRAP offered support to maximise results through the tender process.**

The Natural History Museum has a strong commitment to develop best environmental practices as part of its procurement process and looks to suppliers to match its standards. Through WRAP's procurement advice, the museum recently explored how it could manage its tender processes to improve performance.

The Natural History Museum welcomes five million visitors a year and is well known for its 75 million-strong specimen collection. Over 800 people are employed by the museum, while another 400 volunteer, the majority at the main museum site in South Kensington, London, which is made up of public galleries, office buildings, scientific collection spaces and research laboratories.

With its mission to maintain and develop its collections and use them to promote the discovery, understanding, responsible use, and enjoyment of the natural world, the museum works to a programme of continuous environmental improvement under ISO: 14001 and also adheres to environmental and energy policies which reflect its environmental objectives. These include the reduction of environmental impacts, emissions and transport,

## Key benefits

- Realise cost savings
- Reduce carbon impacts
- Reduce packaging
- Improved performance



**The Natural History Museum** welcomes five million visitors a year

improvement in purchasing activities and environmental management processes.

Many of these objectives can be achieved via supplier activities around facilities management, so stipulating environmental behaviours in tender documents is an effective means of engaging contractors. When the opportunity arose for WRAP to advise on tender wording, the museum was quick to accept.

## Key actions

- Review tender specification and requirements to engender improved performance
- Work with appointed contractors to improve performance
- Obtain baseline data
- Communicate changes to stakeholders and customers
- Contract management



The museum's catering contract is valued at £70,000 per year

Contracts Manager Bob Oldfield explained: "There are only two purchasing people here, managing a £35 million spend. We can only be a general procurement team and the museum needs to buy all manner of equipment, ranging from scientific equipment to office furniture, to a car fleet, and most points in between. The museum is not a typical organisation because procurement covers such a wide variety of things."

WRAP was able to offer expertise tailored to the museum's specific requirements and noted where the museum could improve or update its contracts for the future.

### Catering

The museum site in South Kensington has two kitchens supplying 235,500 hot meals each year from five permanent public food outlets and one permanent staff facility. During the summer months, two additional outlets serve drinks and cold snacks to the public. Food waste arisings come from food preparation, plate scrapings and unsold stock. With the catering contract valued at around £700,000 per year and food waste costing £20,000, significant opportunities exist to influence outcomes and generate savings.

WRAP explored the potential for improvements in catering, with a focus on waste prevention. The catering review focused on reduction of food and packaging waste and resulted in guidance on the existing contract, which will be used to draft a new contract. Although the contract is not due for renewal, the advice has already proved beneficial to the museum, which works closely with its current contractor to identify better systems on an ongoing basis.

Dry recycling was already in place, but the museum had no service for food segregation, so the first step was to look at better segregation systems. Oldfield said: "Our waste provider is keen to start collecting food waste, which will be sent for anaerobic digestion. We are also setting up a new waste area and hopefully by the end of April everything will be in place."

The museum ran trials to estimate the volume of food waste arisings, taking into account periods with a typically high number of visitors. Results showed that at normal times, food waste is produced at a rate of around 780kg per week. However, during peak times this rises to 1,820kg per week. Over a year, the amount of food waste disposed of is in the region of 51 tonnes which, according to the WRAP report *The True Cost of Waste in Hospitality and Food Service*, equates to £141,525 in lost revenue.



At normal times, food waste amounts to 780kg per week. The museum has introduced a food waste recycling scheme

In addition to restaurants serving food produced on site, the public has access to a picnic area where they are able to eat their own food. This poses a particular challenge for the Museum, which finds it hard to control correct segregation. Ellie Simes, Environmental and Sustainability Manager, said: "We find it difficult to get school parties to segregate waste in the picnic area, so we are thinking of how colleagues looking after school groups can encourage them to sort waste for recycling."

### Resource Management Plan

A key element to WRAP's contract guidance advice was the implementation of a Resource Management Plan, provided by contractors to highlight their environmental responsibilities and commitments, and to

structure a programme of improvements. Ideally, sub-contractors will be equally subject to requirements for targets and data collection.



General waste is segregated for recycling

Suggested contract wording contained within WRAPs Facilities Management Toolkit recommends that: "The Caterer shall work with the museum to meet or exceed operational resource efficiency targets within this contract. The caterer will develop and implement a Resource Management Plan (RMP) to commence at handover, which will include as a minimum:

- An outline of catering practices and protocols on site;
- Identification of the major elements of resource consumption (including food, energy, water consumed, and waste) by quantity, cost and wastage in catering services;
- Identification of existing resource measuring and monitoring equipment and protocols (kitchen sub-metering electricity, gas, and water, and food and various waste measuring systems), and propose improvements;
- Plan of appropriate practices for improving the resource efficiency of the service, reducing energy and water consumption and reducing food and packaging waste through efficient management and maintenance of operations, facilities, and equipment and taking actions to change the behaviour of site users;
- Forecast and baseline (from existing data or extrapolation) of resource consumption and waste;

- Data shall be recorded at least monthly. The caterer will describe the data collection process;
- The caterer will report on this data, and actions listed below on a quarterly basis, and;
- Set targets (Specific, Measurable, Achievable, Relevant and Time-based) for each Key Performance Indicator (KPI) to be monitored.

In addition to data and target references, the Resource Management Plan calls for a clear chain of responsibility, naming individuals who should be instrumental in delivering actions and describing communications and staff training programmes. The aim of the RMP is to outline all chains of responsibility and monitoring systems, to develop a business case for reductions in consumption, and demonstrate methods for interfacing various stakeholders to maximum effect.

### Key Performance Indicators

Key Performance Indicators (KPIs) provide organisations with the tools to set realistic targets and monitor improvement. Suggested catering waste KPIs for the museum would be synchronised with the waste management service, covering parameters such as the total volume of food waste produced and target reduction per customer serving; percentage sent to anaerobic digestion or composting; percentage of packaging waste re-used or recycled, target for packaging waste re-used or recycled, and total packaging waste produced.

*"KPIs have got to be measurable, and it's no good putting them in place if no one ever does anything with them – both the contractor and contract manager need to be looking at that on a regular basis, and talking about it."*

Bob Oldfield,  
Contracts Manager,  
The Natural History Museum

In addition to providing a valuable monitoring tool to assess supplier performance, KPIs can also prove effective in driving change through the organisation:

“For waste management and recycling rates, it is important for us to have that information to use ourselves. There is only so much the waste management companies can do – we provide them with waste, but if they give us accurate information, then we can use that to change the behaviour of our staff.”

### **WRAP recommendations**

In addition to suggested RMP and KPI wording, WRAP also recommended general actions such as staff training in efficient food ordering and menu planning, and stock rotation. Equally, recycled products, energy efficient equipment and sustainable options should be prioritised wherever possible, separate receptacles for recycling should be clearly marked, and staff trained to maximise recycling.

### **Recycling**

For the Natural History Museum, recycling presents its own unique challenges. Although packaging waste is recycled as part of a comingled recycling collection, the variety of items employed in temporary exhibitions do not always fall within the traditional material streams. Bob Oldfield explained: “It is hard for us to implement standard actions that you might find in offices here because of the variation in what we do, and space constraints.



**Procurement at the Natural History Museum** covers such a wide range of purchases that guidance on environmental practice was especially welcome

“Exhibitions are made from all kinds of things. For example, we’ve got a few old TV monitors, scaffolding, used collections cabinets, old racking, odd fibreglass statues, glass tanks...we’re trying to change exhibition designs to be more easily recycled in future as well.”

With such a wide range of procurement – and waste – to consider, informed advice such as the WRAP contract guidance was welcome. The suggestions mean the museum can try and tailor its future tenders so that it can see sustainable improvements.

While we have tried to make sure this information sheet is accurate, we cannot accept responsibility or be held legally responsible for any loss or damage arising out of or in connection with this information being inaccurate, incomplete or misleading. This material is copyrighted. You can copy it free of charge as long as the material is accurate and not used in a misleading context. You must identify the source of the material and acknowledge our copyright. You must not use material to endorse or suggest we have endorsed a commercial product or service. For more details please see our terms and conditions on our website at [www.wrap.org.uk](http://www.wrap.org.uk)

---

**Waste & Resources  
Action Programme**

The Old Academy  
21 Horse Fair  
Banbury, Oxon  
OX16 0AH

Tel: 01295 819 900  
Fax: 01295 819 911  
E-mail: [info@wrap.org.uk](mailto:info@wrap.org.uk)

Helpline freephone  
0808 100 2040

[www.wrap.org.uk/fm](http://www.wrap.org.uk/fm)

