

# Reuse and refurbishment of furniture through circular economy procurement

Procura+ award winning tender



Image: Public Health Wales

<b>Procura+ Participant:</b>	Public Health Wales
<b>Contract:</b>	Design of the Office Space and Supply of Office Furniture for New Offices for PHW NHS Trust Awarded: June 2016
<b>Savings:</b>	CO <sub>2</sub> e: 134 tonnes Tonnes of waste diverted from landfill: 41 tonnes Items reused: 2,563

## SUMMARY

- When refurbishing or relocating, it is often considered necessary to buy new furniture.
- Public Health Wales adopted a new mindset when moving office in 2016, and instead sought suppliers who could reuse and remanufacture as much already owned furniture as possible.
- The winning tender provided an attractive, functional office design, in which 94% of furniture was reused or remanufactured.
- The contract was delivered by a consortium of responsible suppliers including sustainable office design company Rype Office Furniture, local furniture manufacturer Orangebox and community interest company Greenstream Flooring.

## Background

[Public Health Wales](#) (PHW) is the national public health agency in Wales. It is part of the UK's National Health Service (NHS), and its mission is to protect and improve health and wellbeing and reduce health inequalities. With 1,700 staff, and a core income of £112 million, the organisation is tasked with providing public health expertise to the Welsh Government, seven health boards, two NHS Trusts, 22 local authorities and the population of Wales (approximately 3 million people).

The organisation was previously split between many buildings across South East Wales, with different amounts of space, and varying provision of facilities and levels of comfort. This fragmentation created unnecessary expense, provided variable levels of comfort for workers and energy-efficiency, and in general many of the premises did not meet the strategic and operational needs of PHW. As such, the decision was taken in 2013 to reconfigure the organisation, and relocate nine smaller satellite offices into one new, large, 4,700m<sup>2</sup> open plan office in central Cardiff.

PHW grouped all the desired outcomes of this office relocation under the *Our Space Programme*, which sought to uphold three principles when designing a new working environment: fitness for purpose, sustainable development and value for money.

## Procurement Approach

The *Our Space Programme* was characterised by high levels of staff engagement. Staff needs were surveyed, problems were identified, and criteria were developed to assess new premises. Events were also held to keep staff informed.

It was decided that the new workplace should be characterised by four dimensions: collaboration (areas where people can meet and plan); focus (space for 'head-down' work); socialisation (informal areas where people can connect); and learning (space to assist in staff development e.g. training resources, quiet spaces). It was also expected that the new workplace design would incorporate best practice in terms of physical accessibility and sensory needs for staff and visitors with special requirements.

PHW released a tender for the design of office space and supply of furniture in April 2016. As part of the tender, an inventory of all furniture which was owned by the organisation and available as part of an optional 'Buy Back' scheme was included. Bidders were encouraged to propose incorporating refurbished items from the existing stock in the submitted design and supply solutions.

## Criteria used in the procurement process

### Subject matter of the contract

Design of the Office Space and Supply of Office Furniture for new Offices for PHW NHS Trust.

### Design specifications

Design specifications were developed to guide bidders in meeting PHW key needs i.e. an office design which meets their workspace requirements, and which is furnished using as much existing

furniture as possible. The design brief set out various ways in which the activities of the successful contractor could promote sustainability. These included:

*Packaging:* Suppliers were required to minimise packaging as far as possible and provide examples of how items would be shipped. All packaging materials should be recyclable and obtained from an ethical source, and indicated whether it can be returned to the supplier for reuse. Where packaging becomes the responsibility of the Trust, it was stated that the supplier should identify any costs associated with its disposal if it cannot be reused. Essential requirements for packaging were as follows:

- packaging volume and weight must be the minimum amount to maintain the necessary levels of safety, hygiene and acceptance for the packed product and for the customer;
- packaging must be manufactured so as to permit reuse or recovery in accordance with specific requirements;
- noxious or hazardous substances in packaging must be minimised in emissions, ash or leachate from incineration or landfill;
- packaging must be sufficiently robust to ensure equipment is securely contained and must consist of readily recyclable materials, and/or materials taken from renewable resources;
- all packaging materials shall be easily separable by hand into recyclable parts consisting of one material (e.g. cardboard, paper, plastic, textile);
- the supplier will remove packaging and dispose of this responsibly and at no cost to Public Health Wales;
- upholstery shall be covered to provide protection from water and dirt. Additional packaging shall be used to protect vulnerable product parts e.g. timber legs;
- packaging shall be of sufficient strength to allow the Customer to place the goods in storage and under reasonable conditions maintain adequate protection over the storage period.

*Timber:* A preference for reused furniture was clearly stated, however, where new timber and wood-derived products for supply or use in the performance of the contract were necessary, it was specified that materials must come from a verifiably legal and sustainable source. PHW accepted evidence including any certification scheme recognised by the UK Government as set out in the [UK Government Timber Procurement Policy: Criteria for Evaluating Certification Schemes](#), or documentary evidence that provides assurance that the timber meets the same criteria (such as independent audits and declarations by the contractor or suppliers, and disclosure of all virgin timber sources - that is, plantation and all subsequent places of delivery throughout the supply chain).

Alternatively, Forest Law Enforcement, Governance and Trade (FLEGT) evidence was accepted as proving that wood-derived products are being exported from a timber-producing country that has signed a bilateral FLEGT Voluntary partnership Agreement (VPA) with the EU and have been licensed for export by the producing country's government. Equivalent evidence includes independent verification that a country has met all the requirements for a FLEGT licence.

*Chemicals:* The supplier was required to specify items which have coatings and whether these utilised hazardous chemicals, environmentally preferable products, or environmentally considerate lubricants.

*End -of-life:* PHW was clear that it was seeking products which can be refurbished and recycled. However, in cases where items cannot be reused, PHW required that the supplier will collect and

dispose of surplus furniture at the end of life. The supplier is required to offer a waste management service to break down the product into separate material for recycling or disposal, and provide a disposal certificate to provide auditable documentation certifying that the product has been disposed of in accordance with the requirements of the Environmental Protection Act 1990.

*Community benefits:* As well as environmental benefits, PHW were keen to achieve social benefits in this tender. As such, the tender specification stated that the successful contractor would be expected to consider opportunities to recruit and train workers who belong to 'disadvantaged' worker groups (for example, has been unemployed for six months or longer, is lacking upper secondary or vocational education, is over 50, is a single adult with one or more dependents, belongs to an underrepresented gender group in a profession with gender imbalance, or is a member of an ethnic minority and requires development opportunities) or 'disabled' worker groups (i.e. is recognised as disabled under national law, or recognised as having a limitation which results from physical, mental or psychological impairment).

The successful contract was also expected to work to open up opportunities for SMEs, including social enterprises, to bid for supply chain opportunities arising from the contract. This was expected to include advertising subcontracting opportunities on the [Buyer Contractor Sub-contract Notice Facility](#).

Finally, the tender stated that the successful contractor will be encouraged to secure other positive outcomes that would benefit the community they operate within, for example, working with local schools and colleges, contributing to community regeneration schemes, and contributing to community environmental initiatives.

## Award criteria

Award criteria were based on a 60% weighting for quality and a 40% weighting for price. The award criteria for quality included:

- Overall design (40%) - comprising functional design (70%) and environmental design (30%).
- Fitness for purpose (15%) - including warranties.
- Sustainability (20%) - including:
  - Logistics (10%) - bidders were required to produce a logistics plan minimising delivery frequencies and, if applicable to the submission, addressing its proposal for economically transporting any furniture to be used from the existing PHW Estate or as part of the buy-back process. Evidence of carbon offsetting, if available, could also be submitted.
  - Recycled packaging (15%) - bidders were asked to describe their approach to using recyclable packaging and provide details of disposal processes.
  - Disposal (50%) - in instances where disposal of furniture or equipment was required, bidders were asked to state how each product would be decommissioned safely and sustainably at the end of its life, and provide details of processes relevant to sustainable disposal. They were also asked to provide details of any non-renewable materials used in their products (i.e. hardwoods and chemicals), confirm their processes and procedures for disposal, and describe their process for managing surplus furniture acquired by them from PHW as part of the 'buy-back' transaction.

- Eco-labeling and ethical standards (35%) - details were asked regarding any ecolabels/ ethical standards associated with the supply of goods offered by the bidder.
- Equality (10%) - bidders were asked to demonstrate the adaptability of their design to ensure future staff and members of the public (visitors and partners) with specific disabilities could be accommodated without restriction.
- Account management (5%)
- Project management and implementation (10%)

An Evaluation Team (consisting of 12 members) was established to score the bids. First, each member of the Evaluation Team individually reviewed submissions and provided a 'suggested score'. Next, a consensus evaluation session was held, to allocate scores to bids (criterion by criterion) and record the scoring rationale.

## Results

The final value of the contract was just under €460,000. A total of eight tenders were received, including two from SMEs. Two of these were ruled out of the initial screening, and six went forward to the full assessment. The contract was awarded in June 2016.

The winning bid came from a consortium consisting of a sustainable office design service Rype Office Furniture, furniture manufacturer Orangebox, and community interest company Greenstream Flooring which supports low-income and long-term unemployed people in areas of high social deprivation. The consortium proposed a design which reused furniture, provided meaningful employment opportunities, and was also commended for its accessibility (for example, it assists visually impaired people through its carpet design etc).

The winning design was functional, coherent, and in keeping with the modern office block.



Image: Public Health Wales

## Sustainability impacts

The procurement process addressed the three main principles of circular procurement: sourcing, maximising utilisation, and closed-loop recovery. Instead of being sent to landfill, many items were given a new lease of life, and have been integrated successfully into a comfortable, modern office setting. By procuring circular solutions, this purchase is also supporting the establishment of a remanufacture and reuse sector which can meet large-scale furnishing needs.

Out of the 2,563 items used in the new office:

- 45% of items were re-used;
- 49% of items were remanufactured; and

- only 6% of items were sourced from new stock

In total, around 41 tonnes of waste were diverted from landfill, and the project saved around 134 tonnes of CO<sub>2e</sub> based on:

- the re-use of 729 office/meeting room desks (saving 50.04 tonnes of CO<sub>2e</sub>)
- the re-use of 979 office/meeting room chairs (saving 57.70 tonnes of CO<sub>2e</sub>)
- the re-use of 522 office pedestals (saving 20.67 tonnes of CO<sub>2e</sub>)
- 670sqm of re-used carpet tiles (saving 5.7 tonnes of CO<sub>2e</sub>)

More generally, the consolidation of 9 offices into a single open plan space also helps improve the utilisation of public sector buildings (typically between 20-40%), which can reduce the carbon footprint of the building. In addition, the chosen building for the office relocation (No 2 Capital Quarter) has an excellent BREEAM rating, is better connected to public transport links and is close to other key partners such as the Welsh Government and Welsh local Government Association, and also has cycling and shower facilities which supports more active transport options.

Due to the success of the *Our Space programme*, PHW now intends to roll it out to all its remaining office accommodation in Wales. In 2017 this included the refurbishment of 990.71 m<sup>2</sup> of office space in Swansea using the same principles. A smaller project of 199.9 m<sup>2</sup> was also undertaken in Newport.



Image: Public Health Wales

## Lessons learned

This project demonstrated that a different approach to furnishing new offices is possible, and that through reuse and refurbishment, it is possible to reduce waste (and associated carbon emissions) while also achieving a modern, functional and attractive workplace.

Dialogue and communication was essential to the success of the process. Although some staff were initially resistant to the change in location and working practices brought by the new office design, by making the social, economic and environmental benefits of this change visible, and also using the re-design to address existing problems identified in staff engagement, it was possible to increase staff buy-in. Feedback from post-occupancy evaluation is now very positive. As a result of the *Our Space Programme*, PHW is working with the Welsh Government to explore how to embed this innovative approach across public sector procurement of office furniture in Wales.

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## About Procura+

Initiated and co-ordinated by ICLEI, Procura+ is a network of European public authorities and regions that connect, exchange and act on sustainable and innovation procurement.

### Connect.



We are a network of European public authorities that connect, exchange and act on sustainable and innovation procurement.

### Exchange.



Our combined knowledge and experience allows us to provide advice, support and publicity to any public authority that wants to implement sustainable and innovation procurement.

### Act.



The Procura+ Network joins forces to champion sustainable and innovation procurement at the European level.

[www.procuraplus.org](http://www.procuraplus.org)



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