

Greening internal finishings, University of Malta

UNIVERSITY OF MALTA, MALTA

Procurement objectives

The [University of Malta](#) has numerous on-campus facilities catering for 11,000 students. The University's Estate and Works Department is responsible for carrying out the internal finishing works for the new extension to the building which houses the lecture halls of the Faculty of Economics, Management and Accountancy (FEMA). The Department, in collaboration with the University's Procurement Directorate, sought to deliver the works using environmentally-friendly construction materials and products.

Background

The Maltese GPP Action Plan requires that at least 20% of all hard floor coverings and window supply tenders be compliant with the national GPP criteria, which are based on the EU GPP criteria. In terms of wall panels, the same requirement is set to 90%.

The University of Malta began including green criteria in its procurement processes in 2012. It is now in the process of adopting a corporate GPP policy, which will go beyond the national GPP guidelines. The University's policy is being developed with the support of the Regional Activity Centre on Cleaner Production (RAC/CP) in collaboration with the Spanish partners from Inèdit Innovació Consultancy Company. More information on this project can be found on https://secure2.gov.mt/tsdu/gpp_uom



Criteria used

Malta's national GPP criteria for "Construction works and other related products and services" were developed on the basis of EU GPP (core) criteria, and were used in the tender for FEMA's internal finishing works. These criteria can be downloaded from https://secure2.gov.mt/tsdu/gpp_resources.

Details of the tender, in terms of the environmental aspects, are as follows:

- **Subject matter:** Tender for internal finishing works, using environmentally friendly construction materials and products, at the FEMA Block B extension building at the University of Malta.
- **Technical specifications:** Bidders were asked to demonstrate that the materials that they used to complete the internal finishes, which included, ceramic tiles for floors, gypsum wall panels, window frames and apertures, as well as paint, were compliant with the environmental specifications prescribed in the national guidance document. These address hazardous substances, energy and water consumption and waste in the production process, amongst other criteria. Regarding verification, bidders were requested to produce various certificates in this regard, for example EMAS, ISO 14001, and type 1 ecolabels, or equivalents, or other alternative means of proof of compliance with the technical specifications.
- **Award criteria:** Lowest price only. The procedure envisaged that those bidders that do not provide the necessary documentation would have been disqualified at the technical evaluation stage.

The tender was awarded in May 2013 and is at the initial stages of implementation.

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Results

All bidders submitted the necessary certificates and documentation, indicating that the market is aware and can respond accordingly to these types of business opportunities.

During the tendering period, no clarifications were required from interested bidders, demonstrating a good understanding of the tender requirements. Bids were received from five companies and the total contract was valued at €122,370.58.

The construction industry in Malta is often criticised for not always being environmentally-friendly. Being aware of the fact that the sector is very energy and resource intensive, both during construction and use phases, the University saw this particular procurement action as an opportunity to play a role in turning criticisms around as far as its construction projects were concerned. Thus the inclusion of several GPP criteria for this particular tender has taken into account several environmental impacts that may be considered for future building projects.

Environmental impacts

The internal finishings of a new building can cover a range of products, aspects and materials.

Hard-floor coverings (HFC): The main environmental impacts relating to HFC vary depending on the types of HFC used, i.e. natural products versus processed products. For processed products, such as ceramic tiles, the main environmental impact is from the energy requirement in the production phase, for example, for firing ceramic and clay tiles.

Wall panels: Internal wall panel materials used in buildings are either gypsum-based board (or plasterboard) or wood-based board (e.g. plywood) – production of both types of panels is energy intensive, particularly wood-based panels. The installation of panels into a building has implications for the internal air quality of the building. Any treatments that have been used on the panels that are volatile will be released into the building over the use period of the panels. One chemical of concern is formaldehyde, commonly used in wood based wall panels. Waste generation during preparation for fitting and at end of life, is also a key concern.

Windows: Important environmental impacts are the energy consumed by their manufacture, natural resource depletion occurring due to their manufacture, energy associated with their use phase, and then disposal impacts when they reach end of use. Materials commonly used in windows and external doors are glass, wood, plastic, aluminium and steel. All manufacturing requires extraction of raw materials at some stage, which will have impacts on land take, energy use and potential loss in biodiversity. The area with the most flexibility over material use is frame construction as there are several different materials that can be used to construct window frames – each of which has its advantages and disadvantages during the various life cycle phases.

Lessons learned

The University of Malta has come to recognise that the inclusion of GPP criteria does not necessarily translate into higher costs – a previous hindrance in making procurement greener. In fact, the GPP criteria have provided the University with an opportunity to procure the works for the FEMA building with reduced impacts on the environment.

Overall, the experience in greening the University's tenders has been very positive. Its tenders have all been GPP compliant, based on the requirements set by the Maltese national government. Since January 2012, GPP has become a national priority. Perhaps the most important development has been the establishment of a close contact between the University and the national GPP Office within the Ministry for Sustainable Development, Environment and Climate Change.