

surprising that business is increasingly focusing on the importance of maximising staff productivity.

Each of these values specifically reflects the core drivers of this feasibility study and we believe that its outputs will be of direct relevance and interest to BCO and its membership.

## 5.4 Quantifying Quality

An initial conservation study which had been prepared for 73-77 Trongate had examined the viability and costs associated with restoring the building as a wind and watertight shell using funds available from Historic Scotland and Merchant City THI. Thereafter, it had been anticipated that a retailer would complete the fit-out of the building in a manner appropriate to its specific end use. For the purposes of this present study, the costs for this basic scheme were re-visited and updated (for an office scenario), with the costs associated with an improved specification driven by environmental and sustainability considerations extracted and priced separately.

Appendix E comprises a cost comparison between a basic project and one which incorporates the recommendations made as part of this study. For ease of comparison, costs identified by the study team as being of value to the demonstration potential of the building are highlighted in red. These include sorting out waste from the site clearances as part of a recycling strategy, setting aside brickwork for re-use, carrying out treatment works to eradicate dry rot in line with the Danish procedures discussed in the study, using re-cycled hardcore in the concrete for new floors, using reclaimed flooring where possible, upgrading the insulation specification to the roof and external walls, cleaning the paint from the front façade by laser, applying lime harling to new brick external walls, installing secondary glazing, using plywood veneer from a sustainable source, using floor finishes from a source recommended as part of the study, altering the decoration specification, installing sanitary fittings recommended as part of the study, using HDPE pipework, and, finally, installing solar thermal water heating, a displacement ventilation system and photovoltaic panels.

It is estimated that the incorporation of the elements identified above would result in an additional cost to a standard refurbishment strategy of £152,000, this being 15.74% of the standard office option costs. Not all of this increase can be attributed to the promotion of the principles of sustainability; some of it is associated with best practice procedures, such as sorting waste for recycling, heat treatment of rot and laser cleaning of the paint from the front façade. Together, they account for approximately £33,000 of the additional costs, although this has to be seen against a background of innovation and a degree of experimentation which it would be hoped would lead to a reduction in

costs for future exercises of a similar nature. Payback for these operations can only be quantified in these terms.

It is difficult, also, to quantify the cost savings which might be effected through the introduction of the insulation strategy discussed as part of the report. More easily, the following observations can be made:

- The use of Terrafino clay plaster on the inside face of the outer, insulated walls and the roof could remove the requirement for decoration of these surfaces, since the finish is self-coloured and only requires rubbed down if damaged. This would produce a cost saving of £2,567 for every occasion on which re-decoration would normally be implemented.
- Installation of a rainwater recycling system would save approximately £50 per annum.
- Solar thermal heating of water would save approximately £35 per annum (depending on use).
- A “recommended practice” operation of the building including a natural system of ventilation might be expected to save £1,845 per annum as set against the running costs of a traditional “typical practice” operation with a natural ventilation system.
- A “recommended practice” operation of the building including a mixed mode system of ventilation might be expected to save £1,755 per annum as set against the running costs of a traditional “typical practice” operation with a mixed ventilation system.
- The use of condensing boilers will increase the heating system efficiency by approximately 10%.
- Annual savings of approximately £300 could be expected from a photovoltaic cell installation.

As can be seen, payback cannot be demonstrated in financial terms, nor should it be. There are obvious savings in terms of running costs through the implementation of the recommendations of this report, and these may increase as energy costs rise in future. Grants are available for the implementation of some of the elements specified. More importantly, however, what cannot be quantified is the importance of finding a new use for a redundant building, contributing to the regeneration of an area of the city, reducing reliance on non-renewable forms of energy, and creating a healthier and more natural environment in which to work.

## **5.5 Aligning Building Values with Corporate Social Responsibility (CSR)**

How are building qualities relevant to Corporate Social Responsibility (CSR) statements and commitments? Your building is one of the most visible tests of your consistency to practice what you preach, whether it's a new build, a refurbishment or day-to-day operation practices.