



National Audit Office

# Building for the future: Sustainable construction and refurbishment on the government estate

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# SUMMARY

**1** This report examines the extent to which departments and executive agencies are meeting targets to make their new buildings and major refurbishments more sustainable. Each year departments and agencies spend in the region of £3 billion on these projects. If sustainability is handled well, it can and should provide better value for money in the long term.

## Key findings

**2** The government has set sustainability standards for the construction and refurbishment of buildings on the government estate, but these are not being met. Departments are failing to carry out environmental assessments and achieve the target ratings. In the sample of projects we examined, 80 per cent would not have attained the required standards.

**3** The required standards will in any case not be enough to ensure that departments meet the new targets for Sustainable Operations on the Government Estate, in particular the targets set for carbon emissions, energy and water consumption. Current performance against these targets is poor.

**4** Various barriers are hindering progress towards more sustainable buildings. These include, in particular:

- the fragmentation of policy responsibility among government bodies for improving sustainable construction and refurbishment on the government estate and the absence of a coherent approach to monitoring progress and ensuring compliance;

- the relatively small scale of many projects – especially refurbishments – and the lack of sufficient knowledge and expertise in sustainable procurement among those departmental staff responsible for them;
  - the widespread perception of a conflict between sustainability and value for money – partly because project teams are failing to assess the long-term costs and benefits of more sustainable approaches; and
  - the failure to specify expected benefits and undertake rigorous post-occupancy reviews to evaluate performance against them and the consequent lack of robust data to inform business appraisals for new projects.
- define the level of performance required on the government estate, and revise and promote the sustainability requirements in the Common Minimum Standards;<sup>1</sup>
  - develop outcome-based performance targets for individual buildings (for example in terms of energy and water use) which departments can include in specifications for construction and refurbishment projects;
  - monitor and report on progress, including monitoring compliance at the project level, to help understand and hold departments to account for performance; and
  - advise departments on the factors to consider when assessing whether it is appropriate for a BREEAM assessment (Figure 5) or alternative assessment method to be undertaken, and commission alternatives to a full BREEAM assessment for use on smaller projects or minor refurbishments.

## Recommendations

5 Our recommendations, presented in full in Appendix 1, are summarised below.

**Improving sustainable construction is a government-wide responsibility and central government departments should take far more action to address the serious and widespread failure to achieve the targets set. Whilst precise responsibilities for sustainable procurement are still to emerge, it is clear that some key organisations including Defra, OGC and possibly DTI have a role for providing leadership and direction on the government estate. Between them these organisations should:**

- establish a clear understanding on the division of policy responsibilities for sustainable construction in the public sector, in such a way as to ensure clear accountability for this area of policy;
- work with other departments with a role in promoting sustainable construction to ensure a joined-up approach;
- establish a source of expertise available to all departments to provide advice on sustainable construction for smaller construction and refurbishment projects;
- identify and promote cost neutral or low cost approaches to help make smaller construction and refurbishment projects on the government estate more sustainable;

### Treasury and the Office of Government Commerce should:

- clarify their guidance on the use of whole life costing, and promote this standardised approach to all construction and refurbishment projects by departments and agencies; and
- ensure that the development of sustainability targets for government under the High Performing Property initiative incorporates appropriate environmental benchmarks and measurement mechanisms.

### Departments and agencies should improve the sustainability of new builds and refurbishments on the government estate by:

- specifying their requirements for environmental performance in terms of outcomes – including carbon emissions and energy and water consumption – in line with the targets for Sustainable Operations on the Government Estate;
- conducting post-occupancy evaluations to assess whether completed construction and refurbishment projects have delivered the specified level of performance;
- using integrated teams in all projects, so that all stakeholders are signed up to the need to deliver sustainability;
- incorporating to a greater extent the ‘Quick Wins’ (products which meet environmental standards at minimal cost) and any other features of sustainable buildings which are cost neutral or have the potential to deliver cost savings in the short term; and
- taking full account of the government’s environmental targets – and the wider social and economic impacts which sustainable buildings can bring – when assessing value for money.

## Value for money potential

6 There is much more that departments can do to demonstrate and achieve value for money through sustainable building on their estates. Some aspects of more sustainable building offer tangible financial savings – for example, savings in energy and water consumption of at least £20 million a year.<sup>2</sup> Other aspects of sustainability are more difficult to value or measure, and work is needed to develop a better framework in which these can be assessed and justified, and to provide data to inform future projects. Some of that additional value may offer direct financial savings in the long run – but other value will come from the contribution departments can make to delivery of the UK’s Sustainable Development Strategy and achievement of related national targets.