

Whole life Costing for Healthcare buildings

The case for a whole life approach

Jim Latta, Estates & Facilities Division (E&FD)
Department of Health, 24 June 2009

What is whole life costing (WLC)?



- **Also called Life Cycle Costing (LCC), WLC is a technique to establish the total cost of ownership;**
- **WLC should involve a structured approach that addresses all the elements of this cost;**
- **Can be used to produce a spend profile of the product or service over its anticipated life-span;**
- **The results of an LCC analysis can be used to assist the decision-making process where there is a choice of options.**

Why whole life costing?



- **The visible costs of any purchase represent only a small proportion of the total cost of ownership;**
- **The responsibility for acquisition cost and subsequent support funding can be held by different areas;**
- **This can dilute incentives to apply WLC principles & rigours to purchasing policy;**
- **WLC therefore has management implications because future costs have not been fully anticipated.**

Corporate implications of WLC?



- **The decision maker for major investment is typically the management board;**
- **Which is accountable for any decisions relating to the cost of a project or programme;**
- **The SRO should be responsible for ensuring that estimates are based on whole life costs;**
- **Assisted by appropriate professional expertise.**

Benefits of WLC?



- **Evaluation of competing options in purchasing;**
- **Improved awareness of total costs;**
- **More accurate forecasting of cost profiles; and**
- **Performance trade-off against cost to maximise overall value for money.**

Sustainable development & Carbon reduction commitment



BACKGROUND

- Energy White Paper 2007 – Climate Change Bill ⇒ **Climate Change Act 2008** to incentivise absolute carbon emissions reductions

AIM

- Is a new mandatory emissions trading scheme to cut carbon emissions from large commercial and **organisations providing public services**
- PARTICIPANTS - Organisations whose half-hourly metered electricity use is over 6,000 megawatt hours per annum

TIMESCALE

- March 2009 Consultation on draft CRC regulations
- April 2010 Introductory phase begins
- April 2011 First sale of allowances
- October 2011 First league table + revenue recycling payment
- April 2013 Next phase begins + first auction

www.decc.gov.uk

Social price of carbon



What is the social cost of carbon?

- It is the estimate of the potential cost of global damage resulting from carbon emissions;
- For example, deforestation satisfies customer demand in one country but strips the host country of its natural assets;
- The social cost, that is the potential cost of global damage has been researched at £70 tonne of carbon (within a range of £35-140 t/C)

Sustainable Development (SD) in healthcare



- **Building Research Establishment's Environmental Assessment Method BREEAM for Healthcare aims are to:**
 - **stimulate demand for sustainable buildings**
 - **mitigate the impacts of buildings on the environment;**
 - **enable buildings to be recognised according to their environmental benefits and**
 - **provide a credible, environmental label for buildings.**

www.breeam.org www.sdu.nhs.uk www.carbontrust.co.uk

Sustainable Development (SD) in healthcare



- **All buildings providing public services have an obligation to incorporate principles of sustainable development;**
- **Health Technical Memorandum 07-07 addresses sustainable development within health and social care facilities;**
- **The HTM sets out the main issues that should be addressed throughout a building's life;**
- **It also explores the reuse of existing buildings and provides advice on sustainable refurbishment.**

SD, Resilience & Emergency Planning



- **Sustainable development also includes the need for all health & care organisations to partner work towards their estate being resilient to withstand an incident or emergency;**
- **HBN 00-07 provides best practice guidance on these issues;**
- **The HBN has very good content but the context is acute hospital focused;**
- **E&FD & Emergency Planning Division partner working to have guidance for primary care;**
- **Any examples of good practice are welcomed.**

Future service need resilience



- **Health & Care facilities need to be able to accommodate changes in service delivery;**
- **SD also needs to anticipate population demography profile changes;**
- **In turn, facilities need to be flexible, adaptable and as far as possible allow multi-functional use;**
- **Also sufficient space designed-in to accommodate additional engineering with suitable local connection and access points to minimise future disruption;**
- **For example, blank, plumbed, IPS panel or capped water supply tails & void capped waste systems.**

Sustainable whole life cycle costs more than buildings



- SD also about people both in terms of safe & secure environments for patients to access services and
- Provide good work environments for the health & care workforce providing services
- With the principles of sustainable development embedded into good & effective estate planning & management.

.....and finally



**Health Building Note 11-01:
Primary care and community facilities**