

Appendix E

Glossary, bibliography and additional sources

Glossary

Action Energy – the Action Energy programme (formerly the energy efficiency best practice programme EEBPp) is a UK government programme designed to help organisations cut their energy bills by 10-20 per cent. It provides independent, authoritative advice and assistance to UK private and public sector organisations

AUDE – Association of University Directors of Estates

AUE – Association of University Engineers

BEMS – Building energy management systems , computerised control of a buildings energy use, such as heating, lighting and air conditioning etc

BETA – British Energy Trading Arrangements

BMS – Building management systems, computerised control of a building's systems such as energy, lifts, fire alarms, security etc

BRECSU – Building research energy conservation support unit – now part of Action Energy

BREEAM – Building research establishment environmental assessment method, launched in 1990 as a means of reviewing and improving the environmental performance of buildings linked to best practice in environmental design and management

Carbon Trust – The Carbon Trust was established in 2001 by the Government and works with the business community and the public sector on a range of initiatives supporting the implementation and commercial development of low carbon technologies

CCL – Climate change levy, a Government levy on carbon based fuels to encourage energy efficiency

CHP – Combined heat and power, the generation of electricity on site, combined with the use of the waste heat from the generation process

Community Energy – this programme offers funding, information and support to local authorities, Registered Social Landlords, universities, hospitals and other public service organisations for the refurbishment of existing and installation of new community heating schemes. Community Energy is jointly managed by the Energy Saving Trust and the Carbon Trust. It applies to England, Wales, Scotland and Northern Ireland

DHW – Domestic hot water

EMIS – Energy management information systems – see EMS

EMS – Estates Management Statistics

Energy Saving Trust – The Energy Saving Trust was established in 1992 by the Government, to encourage the sustainable and efficient use of energy by households and small organisations

ESCO – Energy services company

ETSU – Energy technology support unit – **now part of Action Energy**

EWG – Expert working group

FHE – Further and higher education

FM – Facilities management

GMP – Good management practice

GIA – Gross internal area

HVAC – Heating, Ventilation and Air-conditioning

HE – Higher education

HEFCE – Higher Education Funding Council for England

HEIs – Higher education institutions

HEEPI – Higher education environmental performance improvement

IT – Information technology

JPPSG – Joint Procurement Policy and Strategy Group

Life Cycle Costing Analysis – (LCCA) is an economic method of project evaluation in which all costs arising from owning, operating, maintaining and ultimately disposing of a project are considered to be potentially important to that decision. LCCA is particularly suitable for the evaluation of building design alternatives that satisfy a required level of building performance (including occupant comfort, safety, adherence to building codes and engineering standards, system reliability, and even aesthetic considerations), but that may have different initial investment costs, different operating, maintenance and repair (OM&R) costs (including energy and water usage), and possibly different lives. When energy conservation projects increase the initial capital cost of a new building or incur retrofit costs in an existing building, LCCA can determine whether or not these projects are economically justified from the investor's viewpoint, based on reduced energy costs and other cost

implications over the project life or the investor's time horizon (see 'Additional sources, international' – Life Cycle Costing Manual – Handbook 135, National Institute of Standards and Technology, USA)

M&T – Monitoring and targeting

NETA – New Energy Trading Arrangements

p/kWh – pence per kilowatt hour

PC – Personal computer

PMC – Project management committee

Renewable energy – is energy that comes from sources that essentially inexhaustible, such as the sun, the wind, moving water and the heat of the earth, or from replaceable fuels such as plants

SLA – Service level agreement

SLS – Service level statement/standards

SMART – Specific, measurable, achievable, relevant, timely

Therm – an Imperial unit of energy (29.31 kWh)

Utilities – includes all forms of energy and water related services

VfM – Value for money

Bibliography

'Appraising investment decisions' (HEFCE 99/21)

'Estates management statistics – annual report 2002' (HEFCE, December 2002/53)

'Facilities management – improving the management of support services in higher education' (National Report, HEFCE 00/14)

'Guidance on the procurement of services' (Joint Procurement Policy and Strategy Group (Volumes 1 and 2, September 2000)

'Investment decision making: a guide to good practice' (HEFCE, April 2003/17)

'Procurement in the English higher education sector: a good practice guide' (National Audit Office, May 1999)

'Procurement benchmarking for higher education' (Joint Procurement Policy and Strategy Group, September 1997)

'Procurement strategy for higher education' (Joint Procurement Policy and Strategy Group, September 1996)

'Rewarding and developing staff in higher education: a guide to good practice in setting HR strategies' (HEFCE March 02/14)

'Risk management – a briefing for governors and senior managers' (HEFCE 01/24) and 'Risk management – a guide to good practice for higher education institutions' (HEFCE 01/28)
'Strategic planning in higher education – a guide for heads of institutions, senior managers and members of governing bodies' (HEFCE 00/24)
'Sustainable Construction Procurement: A Guide to delivering environmentally responsible projects' (Addiss and Talbot, Construction Industry Research and Information Association (CIRIA), December 2001)
'Whole life costing: a good practice guide' (Joint Procurement Policy and Strategy Group, August 1998)

Additional sources

Best practice:

Action Energy

www.actionenergy.org.uk/ActionEnergy/default.htm

Carbon Trust

www.thecarbontrust.co.uk/thecarbontrust/default.htm

Energy Efficiency Best Practice Programme

www.energy-efficiency.gov.uk

FHE Action Energy

www.bham.ac.uk/energy-consortium/fhe/

Making a Corporate Commitment

www.macc2.org.uk/

Construction:

Construction Industry Research and Information Association (CIRIA)

www.ciria.org.uk

Technologies:

Climate Change Programme

www.defra.gov.uk/environment/climatechange/index.htm

Combined Heat and Power Association

www.chpa.org.uk/

Combined Heat and Power Club

www.chpclub.com/

CHP Heat Maps

www.est.org.uk/communityenergy/heatmaps.cfm

Manager's guide to CHP systems

www.chpclub.com/

Market transformation programme
www.mtprog.com/

HE sector organisations:

Association of University Directors of Estates
www.heestates.ac.uk/Partners/AUDE/

Association of University Engineers
www.aue.org.uk

Environmental Association for Universities and Colleges
www.eauc.org.uk

Environmental:

Forum for the Future
www.forumforthefuture.org.uk/

Higher Education Environmental Performance Improvement
www.heepi.org.uk/

Higher Education Partnership for Sustainability
www.forumforthefuture.org.uk/aboutus/default.asp?pageid=361 and www.heps.org.uk/

Funding:

Community Energy Programme
www.est.org.uk/communityenergy/index.cfm

Energy Saving Trust
www.est.org.uk/solar

Integration of new and renewable energy in buildings
www.inreb.org/showpage.jsp?page=funding.jsp

Renewable Energy Grants
www.clear-skies.org/

Legislation:

European Energy related legislation
http://europa.eu.int/comm/dgs/energy_transport/index_en.html

Management information and reporting:

Civil Estate Benchmarking Tool
<http://projects.bre.co.uk/gpg286/>

Corporate Social Responsibility
<http://www2.bitc.org.uk/environment/index.html> and www.csforum.com
and www.csreurope.org

Energy Management Statistics
www.opdems.ac.uk/

Environmental reporting
www.defra.gov.uk/environment/envrp/index.htm

Networking and discussion:

HE Estates web site
www.heestates.ac.uk/

HE Energy Network
www.bham.ac.uk/energy-consortium/fhe/

University energy and water management bulletin board
www.jjiscmail.ac.uk/lists/energy-management.html

Training:

Institute of Energy
www.instenergy.org.uk/title.htm

Purchasing:

Energy Consortium
www.energy-consortium.com

Publications and reports:

Barriers to energy efficiency in the UK higher education sector
www.sussex.ac.uk/spru/environment/research/barriers.html

Taxation and environmental charging:

Climate Change Levy
www.hmce.gov.uk/business/othertaxes/ccl.htm

International:

Copernicus Campus
www.copernicus-campus.org/

Life Cycle Costing Manual (Handbook 135, National Institute of Standards and Technology)
www.nist.gov/public_affairs/pubs.htm

Reducing Office Equipment Energy Use
<http://eetd.lbl.gov/BEA/SF/>

Sustainable Development on Campus
<http://iisd1.iisd.ca/educate/>

User Guide to Power Management in PCs and Monitors
<http://eetd.lbl.gov/EA/Reports/39466/>