

GROUPE DE TRAVAIL METHODES ET TECHNIQUES DE CONSTRUCTION DURABLE

BIBLIOGRAPHIE ET BASE DE DONNEES DES REFERENCES

CONTRACT NUMBER:

B4-3050/2003/352567/SER/B4 – European Commission – Environment Directorate General

Reference: ENV.B3/SER/2003/0007r

1. PUBLICATION LIST

1.1 Books

1. Allard Francis, Editor

Natural Ventilation in Buildings – A Design Handbook.

London, James & James Science Publishers, 1999

Describes the natural ventilation, its appropriate use, the design and dimensioning methodologies, including a CD with software.

2. Anink D, Boonstra C, Mak J

Handbook of Sustainable Building –an Environmental Preference Method for Selection on Materials for use in Construction and Refurbishment.

London, James and James Science Publishers, 1996.

Excellent comparative information on building elements, Dutch source.

3. Asimakopoulos M and D, Santamouris, Editors

Passive Cooling in Buildings.

London, James and James Science Publishers, 1999

Describes the fundamentals of passive cooling together with the principles and formulae necessary for its successful implementation.

4. Baker Nick

Energy and Environment in Non-Domestic Buildings: a Technical Design Guide.

Cambridge, Cambridge Architectural Research for the RIBA, 1995

A short guide to the principles of energy efficient building, by the team which developed the LT Method.

5. Baker Nick and Steemers Koen. The Martin Centre, University of Cambridge, Cambridge.

Daylight Design of Buildings.

London, James and James Science Publishers, 1999

The principles which lie behind successful daylight design.

6. Baldwin R, Yates A, Howard N, Rao S

BREEAM 98 for Offices. Building Research Establishment Environmental Assessment Methodology.

Building Research Establishment, 1998

The Building Research Establishment Environmental Assessment Method (BREEAM) provides a tool for analysing and improving the environmental performance of buildings from design through to management. ISDN 1860812384

7. Baldwin R, Yates A, Howard N, Rao S

Eco-Homes, The environmental rating for homes. Building Research Establishment Environmental Assessment Methodology.

Building Research Establishment, 2000

Ecohomes provides a tool for analysing and improving the environmental performance of residential buildings from design through to management.

8. Boonstra Chiel, Rovers Ronald, Pauwels Suzanne. Editors.
International Conference Sustainable building 2000. Proceedings. 22-25 October 2000, Maastricht, the Netherlands.
2000

9. Bourdeau Luc
CRISP Construction and City Related Sustainability Indicators. State of the Art.
2001
The project deals with the setting up of a Thematic Network whose main objective is to create a group dynamic in the field of Construction and City Related Sustainability Indicators.

10. Michael EDEN (CHALMERS University of Technology), Mauritz GLAUMANN (HiG)
Swedish State of the Art Report.
March 2001
This report compiles and analyses the works on sustainability indicators in Sweden.

11. UK State of the Art Report.
April 2001
This report compiles and analyses the works on sustainability indicators in UK.

12. Pere ALAVEDRA (UPC)
Spanish State of the Report.
2001
This report compiles and analyses the works on sustainability indicators in Spain.

13. Jana SULER (Urbanproject)
Romanian State-of-the-art report.
15th September 2001
This report compiles and analyses the works on sustainability indicators in Romania.

14. Sverre Fossdal (BYGGFORSK/NBI)
Norwegian State-of-the-art Report.
13th March 2001
This report compiles and analyses the works on sustainability indicators in Norway.

15. (W/E Consultants Sustainable Building) & (TNO Building and Construction Research)
Dutch State-of-the-art Report.
17th October 2000
This report compiles and analyses the works on sustainability indicators in the Netherlands.

16. Italian State-of-the-art Report.
This report compiles and analyses the works on sustainability indicators in Italy.

17. György KUNSZT, Gabor TIDERENCZL (EMI)
Hungarian State-of-the-art Report.
17th October 2000
This report compiles and analyses the works on sustainability indicators in Hungary.

18. Dimitrios Bikas - Sotiris Milonas
Greek State-of-the-art Report.

April 2001

This report compiles and analyses the works on sustainability indicators in Greece.

19. Christian WETZEL, Gerhard WÖRLE, Erhard MAYER (Fraunhofer IBP)

German State-of-the-art Report.

6th February 2001

This report compiles and analyses the works on sustainability indicators in Germany.

20. Sylviane Nibel, Catherine Charlot-Valdieu, Jean-Luc Chevalier (CSTB), Philippe Outrequin (La Calade)

French State-of-the-art Report.

13th July 2001

This report compiles and analyses the works on sustainability indicators in France.

21. Tarja HAKKINEN (VTT)

Finnish State-of-the-art Report.

2nd of April, 2001

This report compiles and analyses the works on sustainability indicators in Finland.

22. Klaus Hansen (p. 1-13) and Sven Dammann (p. 13-32), Danish Building and Urban Research

Survey on Danish environmental indicators in the building sector.

February 2002

This report compiles and analyses the works on sustainability indicators in Denmark.

23. J. DESMYTER, K. PUTZEYS (Belgian Building Research Institute), B. SIMONS (Centrum Duurzaam Bouwen)

Belgian State-of-the-Art Report.

15th March, 2001

This report compiles and analyses the works on sustainability indicators in Belgium.

24. Susanne GEISLER (Austrian Institute for Applied Ecology Resource Management and Urban Planning), Thomas MACOUN (TUW-IVV)

Austrian State-of-the-Art Report.

23th November, 2001

This report compiles and analyses the works on sustainability indicators in Austria.

25. BRESCU (Building Research Energy Conservation Support Unit) -DETR (Department of the Environment, Transport and the Regions)

Building a Sustainable Future: Homes for an Autonomous Community.

Garston, UK, BRESCU-DETR, 1998

Useful guidebook outlining design principles for zero CO2 emissions, zero heating and autonomous dwellings within a sustainable planning strategy including issues of site layout, transport and densities.

Includes guidance on construction and product specification.

26. Brophy Vivienne, Goulding John, Lewis J Owen; Energy Research Group, University College Dublin, for the EC

Living in the City: Architectural Ideas Competition for the remodelling of Apartment Buildings.

Kinsale, Gandon Irish Art Books, 1996

Competition documentation (including refurbishment design guidelines), competition entries and jury reports.

27. Burton Simon, Editor
Energy-Efficient Office Refurbishment.
 London, James & James Science Publishers, 2001
Practical design manual, based on EC OFFICE project.
28. Charles KiberT and Abdol Chini (Editors), University of Florida
Overview of Deconstruction in Selected Countries.
 Rotterdam, CIB Publication 252,
Deconstruction and addresses the subject of deconstruction in eight countries: Australia, Germany, Israel, Japan, the Netherlands, Norway, the United Kingdom, and the United States. The Publication addresses a wide range of major issues related to deconstruction including building disassembly, building regulations, government policy, economics, design for deconstruction, whole building reuse, deconstruction tools and techniques, materials recyclability and used materials resale. This Publication is the first product from CIB Task Group TG39.
29. CIB W82 – Luc Bourdeau
Sustainable Development and the Future of Construction.
 Rotterdam, CIB Publication 225,
A comparison of visions from various countries
30. CIB –Editor in Chief: Luc Bourdeau
Agenda 21 on Sustainable Construction.
 Rotterdam, CIB Publication 237, July 1999
The Agenda 21 on Sustainable Construction is intended to be a global intermediary between those general Agendas in existence, i.e. the Brundtland Report and the Habitat Agenda, and the required national/regional Agendas for the built environment and the construction sector current or in the course of development. It should be a conceptual framework that defines the links between the global concept of sustainable development and the construction sector and enables other Agendas on a local or sub-sectorial level to be compared and co-ordinated and to define detailed measures appropriately responsive to the local context.
31. CIRIA - Construction Industry Research and Information Association
Environment Impact of Materials. Volume A: Summary (SP 116).
 London, CIRIA, 1995
Implications and uncertainties of eco-labelling and life-cycle assessment of building materials in general, followed by life-cycle, energy and specification guidance for mineral products; metals; plastics and elastomers; timber and timber products; paints and coatings, adhesives and sealants.
32. CIRIA - Construction Industry Research and Information Association
Environmental issues in construction – A strategic review.
 London, CIRIA, 1999
UK and European legislation, the rising cost of landfill, financial and social drivers to minimize waste, and the increasing sensitivity of society to environmental issues all greatly affect the construction industry. With this in mind, CIRIA undertook a study and conducted a survey into the state of environmental initiatives within the industry.
33. CIRIA - Construction Industry Research and Information Association
A Client's Guide to Greener Construction.
 London, Special Publication 120, CIRIA, 1995
British procurement advice.

34. Confederation of International Contractors' Associations (CICA) at the request of UNEP DTIE
Industry as a partner for sustainable development. Construction.
2002

In a multi-stakeholder consultation facilitated by the United Nations Environment Programme, a number of groups (including representatives from non-governmental organisations, labour unions, research institutes and national governments) provided comments on a preliminary draft of this report prepared by the Confederation of International Contractors' Associations (CICA). The report was then revised, benefiting from stakeholder perspectives and input. The views expressed in the report remain those of the authors, and do not necessarily reflect the views of the United Nations Environment Programme or the individuals and organisations that participated in the consultation.

35. Construction Client's Forum
Whole Life Costing, A client's guide.
London, 1999

36. Coventry S, Woolver & Hillier S
The reclaimed and recycled construction materials handbook.
London, CIRIA C513, 1999
Useful for referencing recycled content.

37. DETR (Department of the Environment, Transport and the Regions, London)
Planning for Sustainable Development: Towards Better Practice.
UK, DETR, 1998
Useful design tool for developing briefs meeting the objectives of sustainable development.

38. DG Enterprise
An agenda for sustainable construction in Europe.
20th May 2001
A report drawn up by the Working Group for Sustainable Construction with participants from the European Commission, Member States and Industry including the results of TG1 (Environmentally friendly construction materials), TG2 (Energy efficiency in buildings) and TG3 (Construction and demolition waste management) with participants from the European Commission, Member States and Industry.

39. DG Enterprise
Sustainable Construction: TG 4. Life Cycle Costs in construction.
The General Report "An agenda for sustainable construction" (37) contains a number of recommendations, one of which proposed to set up the fourth TG to draft a paper on Life Cycle Costs in construction and to make recommendations on how these might be integrated into European policy making. Consequently TG4 was established and this report is the result with recommendations and guidelines on Life Cycle costs in construction aimed at improving the sustainability of the Built environment.

40. DG Enterprise
Report and Recommendations of the EMAT Task Group "A proposed methodology that permits contract award to the Economically Most Advantageous Tender".
July 2001
The primary objective of this task group is to provide a transparent and publicly auditable mechanism and procedure for the evaluation of tenders to determine the economically most advantageous tender on the basis of best quality and value for the client rather than only lowest price.

41. Edwards Brian
Towards Sustainable Architecture: European Directives and Building Design.
Oxford, Butterworth Architecture, 1996

42. Edwards S., Bartlett E., Dickie I.

Whole life costing and life cycle assessment for sustainable building design, BRE Digest 452.

British Research Establishment, Nov 2000

The integration of Whole Life Costing (WLC) and Life Cycle Assessment (LCA) presents a powerful route to improving the sustainability of the construction industry. Combining economic and environmental assessment tools to obtain 'best value' solutions in both financial and environmental terms has the potential to make a significant contribution to achieving sustainable building design. This Digest describes the issues relating to the use of the two tools and goes on to provide examples from a number of recent projects.

43. European Academy of the Urban Environment

Twelve Candidate Countries. Overview Report on Sustainable Urban Management, Sustainable Urban Transport, Sustainable Urban Design and Sustainable Construction.

Berlin, July 2003

This overview report about the twelve candidate countries represents summaries of research findings including interviews with 'key resource persons' an accumulated experience at EA.UE, as well as other relevant publications. The most pressing urban problems have been identified, as have good or best practices, and common barriers to an implementation of best (sustainable) practice in each candidate country.

44. European Academy of the Urban Environment

The city in dialogue: awareness raising and public participation in sustainable urban development in central and eastern Europe.

Berlin, 2000

45. Expert Group on Urban Environment

European Sustainable Cities Report.

Brussels, Office for Official Publications of the European Communities, March 1996

The Expert Group on the Urban Environment was established by the European Commission in 1991. In 1993 the Expert Group, which consists of national representatives and independent experts, launched the Sustainable Cities Project focusing on sustainable urban development and the integration of environmental objectives into planning and management strategies. The main output of the project, the European Sustainable Cities Report, is concerned with identifying the principles of sustainable development and the mechanisms needed to pursue it, not only in cities, but at all levels of the urban settlement hierarchy.

46. Fitzgerald Eileen, McNicholl Ann, Alcock Robert and Owen Lewis J for EC and ACE. Published with support from the EC - THERMIE Programme

A Green Vitruvius –Principles and Practice of Sustainable Architectural Design.

London, James & James Science Publishers, 1999

Architects' Council of Europe publication – professional emphasis.

47. Fontoynt Marc

Daylight performance of buildings, 60 European Case Studies.

London, James & James Science Publishers, 1999

In 'Daylight Performance of Buildings' the daylighting behaviour of sixty buildings throughout Europe, new and old, large and small, with a wide variety of functions has been monitored and objectively assessed. The resulting case studies provide a valuable resource for building designers and incorporate quantitative assessment of a range of daylighting solutions.

48. Ganz, Hack and Lynch Kevin

Site Planning 3rd ed.

Cambridge, MIT Press, 1984

Classic text, still relevant.

Working Group Sustainable Construction Methods & Techniques

ANNEX 3 Final Report 14/01/2004– Contract B4-3050/2003/352567/SER/B4

49. Gauzin-Müller Dominique
L'architecture écologique - 29 exemples européens.
Ed. le Moniteur
Panorama of good European practices of environmental friendly architecture and urbanism.
49. German Ministry of Transport, Building and Housing
Guideline for Sustainable Building.
January 2001
This guideline is a working aid for the design, construction, maintenance, operation and use of federal landholdings and buildings in accordance with the Regulations for the Execution of Federal Building Projects under the Jurisdiction of the Building Financial Administration.
50. Gorgolewski M.
The role of steel in environmentally responsible buildings.
SCI publication, 1999
A good introduction, especially for structural engineers, being short and no-nonsense.
51. Goulding J. and Lewis J. Owen, Editors
European Directory of Sustainable and Energy Efficient Building -Components, Materials and Services.
London, James & James Science Publishers, Published yearly until 1999
A series of articles on new developments accompanies a European-wide classified listing of companies offering products or services.
52. Gray R. H., Bebbington J., Walters D.
Accounting for the Environment.
London, Paul Chapman Publishing Ltd, 2003
53. Hall, Keith and Warm Peter
Greener Building: Products and Services Directory 3rd ed.
The Green Building Press for the Association for Environment Conscious Building, 1995
Listings are for UK products and companies, but this is more than just a directory. Each product category is preceded by a summary of the issues, with suggestions for sustainable actions.
54. Halliday S. P.
Environmental Code of Practice for Buildings and their Services.
Bracknell, Building Services Research and Information Association (BISRIA), 1994
Step-by-step checklist for sustainable practice, following the sequence for a new building from inception to hand-over. It then continues with use, refurbishment, decommissioning, demolition and disposal. Aimed at clients, design teams and building managers.
55. Hawkes Dean
The Environmental Tradition.
London, Spon, 1996
Very good treatment of theory, and case studies.

56. Howard Nigel, Shiers D., Sinclair M.

The Green Guide to Specification.

BRE Report 351, 1998

An environmental profiling system for building materials and components. A comprehensive source of information on the production processes and environmental impact of a vast range of materials used in the building process, presented as a simple rating system.

57. Kur F.

L'habitat écologique - Quel matériaux choisir?

France, Terre vivante, 1998

Alphabetic dictionary of construction materials, giving for each material the technical characteristics, their use, environmental impact and the impact on human health.

58. Lawson W.

Building Materials, Energy and the Environment - Towards ecologically sustainable development.

Canberra, RAIA, 1996

This is a fairly authoritative guide to materials in Australia with lots of nice case studies.

59. Lazarus N. of BioRegional Development Group

Construction Materials Report - Toolkit for Carbon Neutral Developments - Part 1.

This is the BedZED guide to material selection. www.bioregional.com/zero/construction-materials-report.htm

60. Littlefair P.J., Santamouris M., Alvarez S., Dupagne A., Hall D., Teller J., Coronel JF. and Papanikolaou N.

Site layout planning to improve solar access, passive cooling and microclimate.

Garston - Watford, Construction Research Communications Ltd (for BRE), 2001

Guidance for building designers on low energy design solutions in the urban environment, with practical examples from across Europe.

61. McNicholl A. and Lewis J. Owen

Green Design - Sustainable Building for Ireland.

Dublin, The Stationery Office (Dublin) for European Commission, 1996

Well-illustrated introductory text.

62. Mendler S. & Odell W.

The HOK guidebook to sustainable design.

Wiley, 2000

Gives background to addressing relevant issues at appropriate time of interest and gets down to the details.

63. O Cofaigh Eoin and Lewis J. Owen

The Climatic Dwelling: an Introduction to Climate Responsive Residential Architecture.

London, James & James Science Publishers., 1996

Principles, guidelines and case studies.

64. OECD, Working Party on National Environmental Policy

Design of sustainable buildings policies: scope for improvement and barriers.

Paris, OECD Publication Service, 2002

OECD's Sustainable Buildings Project was initiated in the spring of 1998 as a four-year project with the objective to provide guidance regarding the design of government policies to address the environmental impact of the building sector. Among various environmental issues related to this sector, the reduction of CO2 emissions, minimisation of construction and demolition waste and prevention of indoor air pollution were selected as priorities of the project.

65. OECD, Working Party on National Environmental Policy
Case Studies on Policy instruments for Environmentally Sustainable Buildings.
Paris, OECD Publication Service, 2002

66. Office of Government Commerce
Construction Procurement Guidance, N 7 Whole Life Costing.
2001

67. Oikos
Les clés de la maison écologique.
France, Terre vivante, 2002
The keys to the ecological house.

68. Lewis Owen J., Goulding John R., Deschamps Georges
Research networking for energy efficient building.
31st March 2003
The EnerBuild RTD Thematic Network aims to enhance co-operation and the exchange of knowledge between co-ordinators of building sector energy research and development projects supported in the European Commission's Fourth and Fifth Framework RTD programmes. With the overall objective of contributing to the reduction in fossil fuel derived energy use and consequent environmental emissions, EnerBuild RTD will deliver the results of past and current research in this area to potential users in the most important sectors with the greatest dissemination potential.

69. Peuser Felix, Remmers K.-H. and Schnauss M.
Solar Thermal Systems.
London, James & James Science Publishers, 2002
Theoretical and practical guidance.

70. Randall Thomas, Editor
Environmental Design: An Introduction for Architects and Engineers.
London, E & FN Spon, 1996
Written by a team of specialists at Max Fordhams & Partners. Starts with some basic scientific principles, then covers air quality, noise, site planning, energy use, building materials and building form.

71. Rydin Yvonne, Geography & Environment Department at the London School of Economics and Political Science
Pastille, 5th FP. Final Report. Indicators into action: Local sustainability indicator sets in their context.
Sep 2002
The Pastille project focuses on Sustainability Indicator Sets in many different policy and management contexts. The project has developed an approach seeking to conceptualise sustainability Indicators as dynamic sites of conflict and cooperation between policy actors. The Pastille approach sees policy tools including Sustainability Indicators as integral to the processes of urban governance.

72. Santamouris M.
Energy and Climate in the Urban Built Environment.
London, James & James Science Publishers., 2000
Addressing the heat island and canyon effects and concluding with examples of innovative urban bioclimatic buildings.

73. Seppänen O., Säteri J.(eds.)
Healthy Buildings 2000, Proceedings of the Conference.
 Helsinki, SIY Indoor Air Information Oy, 2000
These are the Proceedings of the Conference on Healthy Buildings which was held in Espoo, Finland from 6th to 10th August 2000. This Conference was the Sixth in a series which began with the aim of disseminating research results in the full of indoor air quality and climate among practitioners.
74. Sick Friedrich and Egge Thomas
Photovoltaics in Buildings – A design handbook for architects and engineers.
 London, James & James Science Publishers, 1996
IEA handbook for building professionals
75. Slessor, Catherine and John Linden
Eco-Tech: Sustainable Architecture and High Technology.
 London, Thames & Hudson, 1997
A global survey of forty of the most remarkable buildings of the 1990s
76. Smith, Max; Whitelegg, John and Williams, Nick
Greening the Built Environment.
 Earthscan Publications Ltd, 1998
Greening the Built Environment" takes a fully integrative approach to achieving a sustainable built environment - a subject previously treated in an inadequate and piecemeal manner.
77. Sustainability Action Group of the Government Construction Clients Panel (GCCP). Chaired by Mr John Hobson. UK
Achieving sustainability in construction procurement.
 UK, July 2000
The Government has an important role in driving the sustainability agenda by improving its own performance and translating that into its demands on suppliers.
78. Sustainability Working Group 2001, The Movement for Innovation (M4I)
Environmental Performance Indicators for Sustainable Construction.
 2001
www.m4i.org.uk
79. Trine Dyrstad Pettersen (Ph.D.), Editor
Sustainable Building 2002 Oslo. Proceedings.
 2002
The 3rd International Conference on Sustainable Building, continues the progress established in Maastricht™00, focusing on improving environmental sustainability in the Building, Construction and Property Services sector. The issues involved are wide-ranging, so Sustainable Building 2002 gives a broad perspective, and an insight into the complexity of sustainability in the sector.
80. United Nations Environment Programme. Division of Technology, Industry and Economics.
Sustainable Building and construction. Industry and environment. Volume 26 No. 2-3 April - September 2003
 AENEAS Technical Publishers
81. Urban Task Force, chaired by Lord Rogers of Riverside
Towards an urban renaissance.
 1999
A general introduction to urban sustainability issues, not going into great detail. ISBN 18512165X

82. Vale Brenda and Robert

Green Architecture: Design for an Energy-Conscious Future.

Bulfinch Press, 1991

Provides an overview of resource-conscious building and an exploration of the relationship between the built environment and such critical problems as power supply, waste and recycling, food production, and transportation.

83. Valentina Tarzia, Ambiente Italia Research Institute.

European Common Indicators. Towards a Local Sustainability Profile.

Milano, Ancora Arti Grafiche, Sept 2003

The monitoring initiative is intended to support local authorities in their work towards sustainability and provide objective and comparable information on progress towards sustainability across Europe. It is based on a common set of integrated indicators, each indicator reflecting the interactions between environmental, economic and social aspects. It is designed to measure movement towards or away from sustainability, focusing on the extent of change over time and the identification of trends and directions, rather than absolute measures.

84. Vogtländer Dr. J.G., Hendriks Prof. CH.F.

The Eco-costs/Value Ratio, materials and ecological engineering, analysing the sustainability of products and services by means of a LCA based model.

AENEAS Technical Publishers, 2002

The idea of the eco-costs/value relationship (EVR) is to link the 'value' chain to the 'product' chain. In the value chain, the added costs and value are added throughout the product's entire life. The eco-costs are costs that include pollution prevention costs, energy costs, depreciation costs and labour costs. This book provides the theoretical background and practical applications of this life-cycle analysis of products and services. The practical applications of the model are in the fields of design and engineering as well as governmental strategies for maintaining sustainability.

85. Watson Donald

Environmental design charrette workbook.

American Institute of Architects, 1996

Highlights intensive design workshops dealing with energy efficiency, building technology, environmental approaches to landscaping, waste prevention and resource reclamation, as well as planning and cultural issues. The workbook also contains guidelines for organizers and facilitators, a sample briefing booklet, and a discussion by expert practitioners on the art of community dialogue.

86. Wright, Andrew

Sustainable Urban Communities.

London, Andrew Wright Associates, 2000

A short report highlighting the general principles of sustainable urban design and demonstrating with a practical example of how these can be applied in practice.

1.2 Papers

87. Brochner Jan, Ang George K. I., Fredriksson Gosta
Sustainable Development and the Performance Concept: Encouraging Innovative Environmental Technology in Construction, Building Research and Information, volume 27, nr.6 Nov-Dec 1999.
London, E & FN Spon, Nov-Dec 1999
Performance criteria aiming at sustainability emphasize long term behaviour of built facilities, which complicates the measurement of compliance. Strategies for identifying areas with strong promises of innovative technologies should be developed, so as to concentrate the efforts in developing performance requirements.

88. CEPMC (Council of European Producers of Materials for Construction)
DRAFT The Communication of Environmental Information on Construction Products through Environmental Product Declarations (EPD's).
CEPMC Position Paper.

89. Eamonn Bates Environment
After all that talk, movement this year on waste definitions, Eamonn Bates Environmental Issue Manager,
March 2003.
March 2003
Article about the definition of waste, highlighting the problem of inconsistent or contradictory interpretations.

90. European Commission - Joint Research Centre. Information and Public Relations
Indoor air pollution: new EU research reveals higher risks than previously thought
Brussels, September 2003
The latest studies on human exposure to indoor pollution reveal that indoor environments pose their own threats to health and, in some cases, can be at least twice as polluting as outdoor environments. For more information see EC Joint Research Centre reports on indoor air pollution. See:
http://www.jrc.ec.eu.int/default.asp@sidesz=more_information&sidstsz=press_releases&sanchor=434.htm

91. Pearson, Andy
Global Warming could make 70% of offices unusable, Building, 2003 issue 35 - 05 September 2003.
London, Tony Arnold, 5th September 2003
A shocking prediction.

92. Werner Peter, Henseling Karl Otto, Lützkendorf Thomas, Deilmann Clemens, Uwe R. Fritsche
Criteria and Indicators for Environmentally Sustainable Construction and Housing – Germany. An ongoing research project in Germany. Paper for the International Conference “Sustainable Building 2002”, Oslo 2002.
July 2001
The project selects criteria and indicators on the basis of both the variety of involved protagonists and the variety of guiding principles and aims. The main challenge of this research is to identify the web of protagonists, and to explore how essential decision-making operations in building sector affects the indicators choice.

2. SELECTION OF WEBLINKS

2.1 Demonstration and Research Projects

100. Building and Living Project

www.byggabodialogen.se

The project Building/Living (Bygga-bo-dialogen) for a Sustainable Building Property Sector - is a unique cooperation between companies, municipalities and the Swedish Government and aims towards the development of a sustainable building property sector in Sweden.

101. CIB Task Groups and Working Groups

www.cibworld.nl

Task Group 48 Social and Economic Aspects of Sustainable Construction

Task Group 38 Urban Sustainability

WO67 Energy Conservation in the Built Environments

W108 Climate Change and the Built Environment

102. City of Tomorrow & Cultural Heritage

<http://www.cordis.lu/eesd/ka4/home.html>

The City of Tomorrow and Cultural Heritage Key Action aims to improve urban sustainability through delivering real, noticeable benefits to citizens throughout the EU by 2010. The projects are listed alphabetically by the sub-section of the Key Action in which they fall.

103. ECCREDI

<http://www.tra-efct.com>

ECCREDI: Targeted Research Actions for Environmentally Friendly Construction Technologies.

104. ENTHUSE

An EU ALTENER-project.

105. HQE2R

<http://hqe2r.cstb.fr/>

HQE2R aims at providing decision aid tools for municipalities and their local partners, focussing on the goals of the inhabitants and users of neighbourhoods. With its integrated approach it aims to provide a framework, which can be generally applied in European cities.

106. INDOORTRON

http://ihcp.jrc.cec.eu.int/PCE/facilities/indoortron_facilities_index.html

JRC's indoor air pollution monitoring system.

107. IRMA

Research Project on integrated decontamination and rehabilitation of buildings, structures and materials in urban renewal.

108. LIFE-EQUATION

www.life-equation.nl

Demonstration project on Design Tools for Sustainable Construction.

109. PUB +
www.asm-poland.com.pl
Research project on accessibility to public utility buildings for urban citizens with mobility impairments. Socio-economic comparative studies.

110. RESTATE
<http://www.restate.geog.uu.nl/who/>
Restructuring Large-scale Housing Estates in European Cities: Good Practices and New Visions for Sustainable Neighbourhoods and Cities.

111. RUFUS
<http://www.webforum.com/rufus/home/index.asp?sid=319&mid=1>
Research project on re-use of Foundations for Urban Sites.

112. SHE
<http://www.she.coop>
Demonstration project on sustainable Housing in Europe.

113. SUREURO
<http://www.sureuro.com/>
Fifty six million apartments, built after the Second World War, must be incorporated into new urban development strategies. Which is why energy- and water-saving measures, improved quality of life for residents, the management of household waste, and materials recycling are all being studied now by the building managers and researchers of the Sureuro project.

114. WAMBUCO
<http://www.wambuco.net/>
European Waste Manual for Building construction

2.2 Good practice databases

115. Ecorenewal
www.ecorenewal.com
Ecological Building Renewal Projects in European Cities

116. Experimental Housing in Munchen
http://www.wohnen.bayern.de/exwobau/engl/ms_modell/ms_oekw.html
Database on Good Practice in Munchen

117. Ecological Housing in Munchen
http://www.wohnen.bayern.de/exwobau/engl/e_index.html

118. Ecological Modernization in Munchen
http://www.wohnen.bayern.de/exwobau/engl/ms_modell/ms_oekm.html

119. Environmental Data Services
<http://www.ends.co.uk>

120. European Databank Sustainable Development
<http://www.sd-eudb.net>

121. European Green Building Forum
<http://www.egbf.org/>
Information on European Buildings and Neighbourhoods, focusing on energy-related issues.

122. Local sustainability European Good Practice Information Service.
www.iclei.org/egpis/eseach.htm

123. Online publications catalogue on Urban Environment
<http://europa.eu.int/comm/environment/pubs/urban.htm>
Covers transport, noise, sustainable cities...

124. SURBAN
www.eaue.de
Database on Good Practice in Urban Development

125. Sustainable Building Information System
www.sbis.info
Website created by IISBE to provide users with non-commercial information about sustainable building around the world, and to point or link the user to more detailed sources of information elsewhere.

126. European Housing Ecology Network
<http://www.ehen-europe.net>
Housing associations, housing departments of local authorities and consultants use this website for identifying and developing good ecological practice in the provision, management and servicing of housing

2.3 Thematic networks and forums

127. Brundtland City Energy Network
<http://www.brundtlandnet.com/>
An initiative to link cities and towns in Europe in addressing sustainable energy use.

128. Climate Alliance
<http://www.klimabuendnis.org/kbhome/english/update/frameset.htm>
The Climate Alliance is an association of European cities and municipalities that have entered into a partnership with indigenous rainforest peoples. This worldwide alliance is united by a common concern for the world's climate. Our climate protection contributions build upon commitment and diversity at the local level.

129. CRISP
<http://crisp.cstb.fr>
European Thematic Network on Construction and City Related Sustainability Indicators

130. EnerBuild
<http://www.enerbuild.net/>

The EnerBuild RTD Thematic Network wants to enhance co-operation among energy RTD projects addressing the built environment supported in the EC's Fourth and Fifth Framework programmes.

131. Energie-cités

<http://www.energie-cites.org>

Energie-Cités is an association of European local authorities, mainly municipalities. One of the aims of the association is to provide its members with information on the promotion of sustainable local energy policies.

132. EUROCITIES

<http://www.eurocities.org>

The network from EUROCITIES wants to ensure that urban affairs are placed high on the European Union's policy agenda.

133. European Green Cities Network

<http://www.europeangreencities.com/>

European Green Cities Network is a thematic network under the EU 5th framework programme. The network will disseminate knowledge and experiences regarding sustainable urban housing technologies in order to stimulate market development and help to speed up innovation.

134. PRESCO

<http://www.etn-presco.net>

European Thematic Network on Practical Recommendations on Sustainable Construction

135. Rethinking Construction

<http://www.rethinkingconstruction.org>

Rethinking Construction partners aim to showcase innovations in both products and performance through Demonstration Projects and highlight best practice available within the industry.

136. Sustainable Building and Construction Forum

<http://www.unep.or.jp/ietc/sbc/index.asp>

The Sustainable Building and Construction Forum (United Nations Environment Programme) was set up to facilitate dialogue and exchange of information among key stakeholders, and with their constituencies, on issues related to sustainability in building and construction.

137. Sustainable Cities & Towns Campaign

<http://www.sustainable-cities.org/about.html>

The European Sustainable Cities & Towns Campaign brings together a range of activities carried out by its various partners and contributors. At the same time, the Campaign provides mechanisms to give added value, co-ordinate and support these activities. As defined in the Aalborg Charter, the Campaign aims "to encourage and support cities and towns in working towards sustainability". This is achieved through a number of PROJECTS initiated by the Campaign partner Networks and other interested parties as well as through the organisation of EVENTS, from large scale Conferences to smaller Events and Seminars.

2.4 Organisations and Institutions

138. Energy Research Group, University College Dublin

<http://erg.ucd.ie/>

Energy Research Group, University College Dublin website has a listing of publications in the field of energy efficient design and technologies; and many freely-downloadable EC publications and hosted websites for EC DG Research and TREN supported projects.

139. EUREC

<http://www.eurec.be/>

EUREC Agency has been established as a European Economic Interest Grouping in 1991 to strengthen and rationalize the European RD&D efforts on renewable energy technologies.

140. European Environment Agency

<http://www.eea.eu.int>

Information for improving Europe's environment.

141. ICLEI

<http://www.iclei.org>

ICLEI is an international association of local governments implementing sustainable development.

142. IISBE

<http://www.iisbe.org>

IISBE is an international non-profit organization whose overall aim is to actively facilitate and promote the adoption of policies, methods and tools to accelerate the movement towards a global sustainable built environment.

143. WorldGBC

<http://www.worldgbc.org/>

The WorldGBC was formed in 1999 with the goal of coordinating and advancing the work of national green building organizations, supporting the development of standards, technologies, products and projects.

2.5 Policy Documents

144. Agenda 21

<http://www.un.org/esa/sustdev/documents/agenda21/index.htm>

Agenda 21 is a comprehensive plan of action to be taken globally, nationally and locally by organizations of the United Nations System, Governments, and Major Groups in every area which human impacts on the environment.

145. European Climate Change Programme

<http://www.europa.eu.int/comm/environment/climat/eccp.htm>

146. Habitat Agenda

<http://www.unhabitat.org/unchs/English/hagenda>

The habitat agenda was adopted by 171 governments at Habitat II, Istanbul 1996. The Agenda provides a practical roadmap to an urbanizing world, setting out approaches and strategies towards the achievement of sustainable development of the world's urban areas.

147. Kyoto Protocol
<http://www.untreaty.un.org/english/notpubl/kyoto-en.html>

148. UN Millennium Development Goals
<http://www.un.org/millenniumgoals/>

149. United Nations Environment Programme.
<http://www.unep.or.jp/>

2.6 Tools

150. Breeam
<http://products.bre.co.uk/breeam/index.html>
Environmental performance assessment method of both new and existing non residential buildings.

151. Bristol Sustainable Development Guide for Construction
<http://www.bristol-city.gov.uk/Fuguri/frame.html?P+PSD00108+BG+F+BMM00103+DET00104>
Including a chapter with case studies.

152. CIB-W100 Environmental Assessment of Buildings
www.cibworld.nl
*The W100 focus is on the implementation of building environmental assessment methods, with a strong focus on performance-based systems.
Main tasks are: Maintaining and updating worldwide overview of assessment methods; Follow-up on implementation and management of assessment methods; Literature and reference lists.*

153. Eco-Homes
<http://products.bre.co.uk/breeam/ecohomes.html>
EcoHomes is the homes version of BREEAM.

154. Ecoprofile
<http://www.ecoprofile.com>
Official, voluntary environmental classification method for Buildings in Norway.

155. Eco-Quantum
<http://www.sbr.nl/ecoquantum/>
Calculation method based on LCA to assess the environmental performance of residential buildings.

156. Greencalc
www.greencalc.com
Calculation method based on LCA to assess the environmental performance of non-residential buildings.

157. HQE
www.assohqe.org
National certification system for non-residential buildings. France

158. SPEAR

<http://www.arup.com/environmental/HTML/WhatWeDo/SPeAR.htm>

Sustainable Project Environmental Assessment Routine.

3. REFERENCE LIST

3.1. Chapter 1, 2 and 3

200. Byrne, John

Equity and Sustainability in the Greenhouse. Reclaiming our Atmospheric Commons. 1997
<http://www.udel.edu/ceep/reportlist.htm>

201. DG Environment

Towards a European Strategy for the Sustainable Use of Natural Resources. 10 April 2002
Conclusions of meeting with stakeholders.
<http://europa.eu.int/comm/environment/natres/020410stakeholdersdiscussionpaper.pdf>

202. ECE (Economic Commission for Europe), UN

Annual Bulletin of Housing and Building Statistics for Europe and North America 2000
http://www.unece.org/env/hs/bulletin/cnt2_e98.htm

203. OECD

Environmentally Sustainable Buildings: Challenges and Policies. 2003
Policy Brief. <http://www.oecd.org/dataoecd/23/17/8887401.pdf>

204. World Commission on Environment and Development

Our Common Future, the Brundtland Report. 1987

World Commission on Environment and Development report presented to the UN General Assembly in 1987.

3.2 Chapter 4

205. KPI

Key Performance Indicator. Graphs of performance data are derived from surveys of the construction products industry and environment in the UK. Graphs are from the assessment published in June 2003. Poster of benchmark graphs from "Construction Products Industry 003" is at www.cbpp.org.uk/pdf/cpa_wc_03.pdf. Poster of benchmark graphs from "Environment Key Performance Indicators 2003" is at www.cbpp.org.uk/pdf/env_wc_03.pdf

206. Structural Skills Network

Internal Arup resource

207. Arup RED Guide

Internal Arup resource

208. EN 13779, A Standard for practice".

EN 13779, Ventilation for non-residential buildings - performance requirements for ventilation and room-conditioning systems. Details indoor air quality ratings 1-5. Suggests > 15 l/s/person but this has been developed for application to different countries through internal Arup communication.

Internal Arup resource

209. GEO magazine. Nr2. Feb 2000

210. WWF

Within "One planet living in the Thames Gateway"

http://www.wwf.org.uk/news/n_000000921.asp