

## References

- Aho, I. (1999). Building environmental assessment methods: environmental performance or sustainability?. *Building Research & Information*, 27, 134-137
- Alcamo, J., Florke, M. and Marker, M. (2007). Future long-term changes in global water resources driven by socio-economic and climatic changes. *Hydrological Sciences Journal*, 52(2), 247-275.
- Ali, H.H. and Al Nsairat, S.F. (2008). Developing a green building assessment tool for developing countries: Case of Jordan. *Building and Environment*, 44, 1053-64.
- Alsulami, B. and Mohamed, S. (2012). Hybrid Fuzzy Sustainability Assessment Model: A Case Study of a Regional Infrastructure Transport Project. *ICSDEC 2012*, 400-408.
- Andriantiatsaholainaina, L.A. and Phllis, Y.A. (2001). Sustainability: an ill-defined concept and its assessment using fuzzy logic. *Ecological Economics*, 37, 435-456.
- Australia, (1998). "Environmental Indicators for National State of Environment reporting – human settlements". Department of Environment, Australia.
- Barlow, H. B. (1982). What causes trichromacy? A theoretical analysis using comb-filtered spectra. *Vision Research*, 22, 184-187
- Bell, S. and Morse, S. (1999). *Sustainability Indicators: measuring the immeasurable*. London: Earthscan Publications
- Bell, S. and Morse, S. (2003). *Measuring Sustainability: Learning from doing*. London: Earthscan Publications.
- Berardi, U. (2011). Beyond sustainability assessment systems: upgrading topics by enlarging the scale of assessment. *SUSB International Journal on Sustainable Building Technology*, 2(4), 126-129.
- Berardi, U. (2012). Sustainability assessment in the construction sector: rating systems and rated buildings. *Sustainable Development*, 20, 411-412.
- Berardi, U. (2013). Clarifying the new interpretations of the concept of sustainable. *Sustainable Cities and Society*, 8(1), 223-228.
- Björk, B. C. (1989). Basic structure of a proposed building product model. *Computer-Aided Design*, 21 (2), 71-78.
- Bloom, E, Wheelock, C. (2010). Green Building Certification Programs. *Pike Research Report 2Q*.

- Boslaugh, S. (2012). *Statistics in a Nutshell*, USA: O'Reilly Media, 189.
- Bossel, H. (1999). Indicators for Sustainable Development: Theory, Method, Applications. International Institute for Sustainable Development, Winnipeg.
- Boulanger, P. M. (2012). Integration in Sustainability Impact Assessment: Meanings, Patterns and Tools (draft), Institut pour un Développement Durable. Ottignies: Rue des Fusillés.
- Bourdeau, L. (1999). Sustainable development and the future of construction: A comparison of vision from various countries, *Building research and information*, 27 (6), 112-118.
- Bower, J., Howe, J., Fernholz, K., Lindburg, A. (2006). Designation of Environmentally Preferable Building Materials –Fundamental Change Needed Within LEED, *Dovetail Partner Report*. 98-102. <http://www.dovetailinc.org/documents/DovetailLEED0606.pdf>
- BRE, (2008). *A Discussion Document Comparing International Environmental Assessment Methods for Buildings*, Glasgow: BRE.
- BREEAM. Building Research Establishment, United Kingdom. Retrieved May 18, 2013 from <http://www.breeam.org>.
- Buchanan, B. B. (1991). Regulation of CO<sub>2</sub> assimilation in oxygenic photosynthesis: The ferredoxin /thioredoxin system. *Arch. Biochem Biophysics*, 288, 1-9.
- Butera, F. M. (2010). Climatic change and the built environment. *Advances in Building Energy Research*, 4(1), 45-75.
- CASBEE. Japan Green Building Council. Retrieved April 28, 2013 from <http://www.ibec.or.jp/CASBEE/english/index/htm>.
- CESR, Center for Environmental Systems Research, University of Kassel, Watergap  
Retrieved April 28, 2013 from <http://www.usf.uni-kassel.de/cesr/>
- Chandratilake, S. R. and Dias, W. P. S. (2014). Ratio based indicators and continuous score functions for better assessment of building sustainability. *Energy*, 83, 137-143
- Chandratilake, S. R. and Dias, W.P.S. (2013). Sustainability rating systems for buildings: Comparisons and correlations, *Energy*, 59, 22-28.
- Chen, T.Y., Burnett, J. and Chau, C.K. (2001). Analysis of embodied energy use in the residential building of Hong Kong, *Energy*, 26(4), 323-340.

Cheng, C., Pouffary, S., Svenningsen, N. and Callaway, M. (2008). The Kyoto Protocol, the CDM and the Building and Construction Industry, report for the UNEP Sustainable Buildings and Construction Initiative. UNEP. <http://www.unep.org/sbci/pdfs/BuildingsandCDMreporte-version.pdf>.

Cole, R.J. (1998). Emerging trends in building environmental assessment methods. *Building Research and Information*, 26 (1), 3–16.

Conte, E. and Monno, V. (2012). Beyond the building centric approach: A vision for an integrated evaluation of sustainable buildings. *Environmental Impact Assessment Review*, 34, 31–40.

CPR - Construction Product Regulations, (2011). *Official Journal of the European Union* (OJEU), 8-13.

Dahl, A.L. (1997). The Big Picture: Comprehensive approaches. Part One- Introduction. In: Moldan, B., Billharz, S., and Matravers, R. (Eds) Sustainability Indicators: A report on the project on Indicators of Sustainable Development, Chichester: John Wiley and Sons, 69-83.

Demographia World Urban Atlas (9th ed.). (March 2013). Retrieved April 28, 2013 from <http://www.demographia.com/db-worldua.pdf>

De Blois, M., Herazo-Cueto, B., Latunova, I., Lizarralde, G. (2011). Relationships between construction clients and participants of the building industry: structures and mechanisms of coordination and communication. *Architectural Engineering and Design Management*, 7(1), 3–22.

De Silva, N. and Vithana, S.B.K.H. (2008). Use of PC elements for waste minimization in the Sri Lankan construction industry, *Emerald*, 13(4), 126-131.

Dias, W.P.S. and Pooliyadda, S.P. (2004). Quality based energy contents and carbon coefficients for building materials: a systems approach, *Energy*, 29(4), 561-580.

Dias, W.P.S. (1996). Multi-disciplinary product modelling of buildings. *ASCE Journal of Computing in Civil Engineering*, 10(1), 78-86.

Ding, G.K.C. (2008). Sustainable construction – the role of environmental assessment tools, *Journal of Environmental Management*, 86 (3), 451– 464.

Dixon, T. Colantonio, A., Shiers, D., Reed, R., Wilkinson, S. and Gallimore, P. (2008). A Green Profession? A Global Survey of RICS Members and Their Engagement with the Sustainability Agenda, *Journal of Property Investment and Finance*, 26(6), 460–481.

DSCWG (Douglas Shire Community Working Group), (2001). *Douglas Shire Sustainable Futures Draft Strategy*. In Sherlock, K. (Ed.), Mossman: Douglas Shire Council.

EC, (2003). Sustainability impact assessment of trade agreements: Making trade sustainable?. Background paper, DG, Trade seminar, Brussels, Brussels: European Commission.

EC, (2005: 5). Handbook for sustainability impact assessment, Draft version, Brussels: European Commission.

EC, (2005b: 4). Thematic strategy on the sustainable use of natural resources. Brussels: European Commission.

EC, (2005b: 5). Impact assessment guidelines (SEC 2005). Brussels: European Commission.

EC, (2010). Handbook for trade sustainability impact assessment. Brussels: European Commission.

EISA - Energy Independence and Security Act, (2007). USA: United States House of Representatives.

Environmental Product Declaration, (2008). Cosentino Headquarters. Spain: Ctra. Baza a Huércal, Almería.

Falkenhainer, B. and Forbus, K. (1991). Compositional modelling: Finding the right model for job. *Artificial Intelligence*, 51, 1-3.

Fenner, R.A, Ryce, T. (2008). A Comparative analysis of two building rating systems; Part 2 - Case study, *Engineering Sustainability*, 12, 65-70.

Forsberg, A. and Von Malmborg, F. (2004). Tools for environmental assessment of the built environment, *Building and Environment*, 39, 223-238.

Fowler, K.M. and Rauch, E.M. (2006). Sustainable Building Rating Systems Summary, PNNL-15858. Pacific Northwest National Laboratory, Richland WA: US Department of Energy.

Gibberd, J. (2005). Assessing sustainable buildings in developing countries – the sustainable building assessment tool (SBAT) and the sustainable building lifecycle (SBL). Proceedings of World Sustainable Building Conference (1605–1612). Tokyo.

Goldberg, D. E. (1989). Genetic algorithm in search, optimisation and machine learning. Reading MA: Addison Wesley.

GREEN-SL, Green Building Council of Sri Lanka. Retrieved May 18, 2013, from  
[http://srilankagbc.org/built\\_env.php](http://srilankagbc.org/built_env.php)

Green-star, Green Building Council of Australia. Retrieved April 28, 2014, from  
<http://www.gbca.org.au/green-star>

Green-star, New Zealand Green Building Council. Retrieved April 28, 2013, from  
<http://www.nzgbc.org.nz/main/greenstar>

Hahn, T.J. (2008). Research and solutions: LEED-ing away from sustainability: toward a green building system using nature's design. *Sustainability*. 1(3), 196 –201.

Häkkinen, T, Rauhala, K. and Huovila, P. (2002). Indicators and criteria for sustainable Built environment, VTT research notes 2325, VTT Espoo. 89.

Hastings, R. and Wall, M. (2007). *Sustainable Solar Housing: Strategies and Solutions*. London: Earthscan.

Herger, J.R.E. and Meyer, F.M. (1996). Definition of indicators for environmentally sustainable development. *Chemosphere*, 33(9), 1749-1775.

Hernandez, P. and Kenny, P. (2010). From net energy to zero energy buildings: defining life cycle zero energy buildings (LC-ZEB). *Energy and Buildings*, 42(6), 815 – 821.

Horne, R. and Hayles, C. (2008). Towards global benchmarking for sustainable homes: an international comparison of the energy performance of housing. *Journal of Housing and the Built Environment*. 23, 119–130.

IISD, (1999). "Indicators of Sustainable Development – Theory, Method and Application". International Institute for Sustainable Development.

IISD, (2005). "Sustainable Development Indicators – proposals for a way forward". International Institute for Sustainable Development.

Ilanko, S., and Bharathy, G. K. (2012). Positive and negative penalty parameters in optimisation subjected to continuous constraints. *Computers and Structures*. 108 - 109, 83-92.

ISO Standard 14020, (2000). Environmental Labels and Declarations – General Principles.

ISO Standard 14040, (2006). Environmental Management –Life Cycle Assessment – Principles and Framework.

ISO Standard 15392, (2008). Sustainability in Building Construction – General Principles.

ISO Standard 15643 –1, (2010), Sustainability of Construction Works – Sustainability Assessment of Buildings –Part 1: General Framework.

ISO Standard 21931-1, (2010). Sustainability in Building Construction –Framework for Methods of Assessment for Environmental Performance of Construction Works – Part 1: Buildings.

Iwaro, J. and Mwasha, A. (2010). A review of building energy regulation and policy for energy conservation on developing countries. *Energy Policy*, 38, 7744-7755.

IUCN, (1980). "World Conservation Strategies", International Union for Nature Conservation.

Janikowski, R., Kucharski, R. and Sas-Nowosielska, A. (2000). Multi-criteria and multi-perspective analysis of contaminated land management methods. *Environmental Monitoring and Assessment*. 60 (1), 89 – 102.

Kelly, G. and Baker, B. (2002). An evaluative framework and performance measures for the sustainable regions programme. Final Report to the Department of Transport and Regional Services. Canberra.

Kibert, C. J. (1994). Principles and a model of sustainable construction, Proceedings of First International Conference on Sustainable Construction. November 6-9, Tampa, FL, 1-9.

King, A.A. and Toffel, M.W. (2007). Self-regulatory institutions for solving environmental problems: perspectives and contributions from the management literature. In *Governing the Environment: Interdisciplinary Perspectives*, In Delmas, M. and Young, O. (Eds.), New York: Cambridge University Press.

Krajnc, D. and Glavic, P. (2005). How to compare companies on relevant dimensions of sustainability. *Ecological Economics*, Elsevier. [www.elsevier.com/locate/ecocon](http://www.elsevier.com/locate/ecocon)

Kurtz, J., Jackson, L., Fisher, W. (2001). Strategies for evaluating indicators based on guidelines from the environmental protection agency's office of research and development. *Ecological Indicators*, 1, 49 – 60.

Langston, C.A. and Ding, G.K.C. (2001). *Sustainable Practices in the Built Environment* (2nd ed). Oxford: Butterworth-Heinemann.

Lee, B., Trcka, M. and Hensen, J.L.M. (2011). Embodied energy of building materials and green building rating systems – A case study for industrial halls, *Sustainable Cities and Society*, 1, 67-71.

LEED, US Green Building Council. Retrieved May 21, 2013, from  
<http://www.usgbc.org/DisplayPage.aspx?CategoryID=19>

Lundin, M. (2002). "Indicators for measuring the sustainability of urban water system – A Life Cycle Approach". *Environment Systems Analysis*, Chalmers University of Technology, Goteborg, Sweden.

Malmborg, F.V. (2004). Networking for knowledge transfer: towards an understanding of local authority roles in regional industrial ecosystem management. *Business strategy and the Environment*. 13(5), 334-346.

Malmqvist, T., Glaumann, M., Svenfelt, A., Carlson, P.O., Erlandsson, M., Andersson, J., Wintzell, H., Finnveden, G., Lindholm, T. and Malmstrom, T.G. (2011). A Swedish environmental rating tool for buildings. *Energy*. 36, 1893-1899.

Marszal, A.J., Heiselberg, P., Bourrelle, J.S., Musall, E., Voss, K., Sartori, I. and Napolitano, A. (2011). Zero Energy Building –a review of definitions and calculation methodologies. *Energy and Buildings*. 43 (4), 971 – 979.

McGraw-Hill Construction, (2008). Key Trends in the European and U.S. Construction Marketplace. *Smart Market Report*. New York: McGraw-Hill Construction.

Mlecnik, E., Visscher, H., van Hal, A. (2010). Barriers and opportunities for labels for highly energy-efficient houses. *Energy Policy*. 38(8), 4592 – 4603.

Moore, S.C. (1991). *Measuring Military Readiness and Sustainability*. Santa Monica: RAND Publications.

Morrey, C. (1997). Indicators of sustainable development in the United Kingdom. In Moldan, B., Billharz, S. and Matravers, R. (Eds), *Sustainability Indicators: A report on the project on Indicators of Sustainable Development*, Chichester: John Wiley and Sons, 318-327.

Morse, J. M. (2003). Toward a Definition of Mixed Methods Research. *Journal of Mixed method Research*, 38.

Nathan, H.S.K. and Reddy, S.R. (2008). A conceptual framework for development of sustainable development indicators, Working Paper 2008-03, Mumbai: Indira Gandhi Institute of Development Research.

NationMaster World Statistics, Retrieved April 28, 2013, from  
[http://www.nationmaster.com/graph/env\\_wat\\_sev\\_wat\\_str-environment-water-severe-stress](http://www.nationmaster.com/graph/env_wat_sev_wat_str-environment-water-severe-stress)

Newsham, G.R., Mancini, S. and Birt, B.J. (2009). "Do LEED- certified buildings save energy? Yes, but...". *Energy Build.* 41, 897-905.

Nijkamp, P, Rietveld, P. and Voogd, H. (1990). *Multicriteria Evaluation and Physical Planning*. Amsterdam: North Holland Publications Co.

OECD, (1998). Sustainable Development Indicators, OECD Expert Workshop, 8-9 October, OECD, Paris.

- Papadopoulos, A.M. and Giama, G. (2009). Rating system for counting buildings' environmental performance. *International Journal of Sustainable Energy*. 28, 29-43.
- Pastille Consortium (Ed.), (2002). *Indicators into Action: Local Sustainability Indicator Sets in Their Context*. London: LSE.
- Pullen, S. (2000). Energy used in the Construction and Operation of Houses. *Architectural Science Review*. 43(2), 87-94.
- Pulselli, R. M., Simoncini, E., Pulselli, F.M. and Bastianoni, S. (2007). Emergy Analysis of Building manufacturing, maintenance and use: Em-building indices to evaluate housing sustainability, *Energy and Buildings*, 6(3), 147-152.
- Rappe, P. (1999). Environmentally Sustainable Non-residential Buildings: Sustainability Indicators, National Sustainability Workshop, Part I, October 8-9, Proceedings, *Center for Sustainable Buildings Report No CSS99-08*. University of Michigan, Ann Arbor-Michigan, 12.
- Reed, R., Bilos, A., Wilkinson, S. and Schulte, K.W. (2009). International comparison of sustainable rating tools. *The Journal of Sustainable Real Estate*. 1, 1-22.
- Retzlaff, R.C. (2008). Green building assessment systems. *Journal of the American Planning Association*. 74, 505-519.
- RICS, (2006). RICS Response to UK energy review, Coventry. Royal Institution for Chartered Surveyors.
- Rogers, E. (2003). *Diffusion of innovations*, New York: Free Press, 156-162.
- Rumsey, P. and McLellan, J. F. (2005). Environmental assessment methodologies for commercial buildings: A study of the behavioral foundations influencing the uptake of the LEED scheme in the United States. *Environmental Design and Construction*. 55-56.
- Saaty, T.L. (1994). How to make a decision: The analytic hierarchy process. *Interfaces*, 24, 19-43.
- Šaparauskas, J. (2001). The main aspects of sustainability evaluation in construction. Dept of Construction Technology and Management, Vilnius Gediminas Technical University, Saulėtekio al. 11, 10223 Vilnius, Lithuania
- Schendler, A. and Udall, R. (2005). LEED is Broken; Let's Fix It. *Grist Environmental News & Commentary*. <http://www.grist.org/comments/soapbox/2005/10/26/leed/index1.html>

Scheuer, C.W. and Keoleian, G.A. (2002). "Whole Building Life Cycle Energy and Environmental Impacts: The Dominance of Energy and Water Services Burdens in a New University Building" Sustainable Building 2002. September 23-25, Oslo, Norway.

Seo, S., Tucker, S., Ambrose, M., Mitchell, P. and Wang, C.H. (2006). Technical evaluation of environmental assessment rating tools, Research & Development Corporation. Project No. PN05.1019.

Sev, A. (2009). How can the construction industry contribute to sustainable development? A conceptual framework. *Sustainable Development*. 17(3), 161–173

Smith, A., Stirling, A. and Berkhout, F. (2006). 'The governance of sustainable socio-technical transitions', *Research Policy*. 34, 1491–1510.

South Africa, (2004). "Development of a Core Set of Environmental Performance Indicators: Final Report and Set of Indicators". Washington: Department of environmental affairs and tourism.

Steurer, R. and Hametner, M. (2011). "Objectives and Indicators in Sustainable Development Strategies: Similarities and Variances across Europe".  
<http://onlinelibrary.wiley.com/doi/10.1002/sd.501/pdf>

Sustainable Seattle, (2004). "Indicators of Sustainable Community -A status report on long-term cultural, economic, and environmental health for Seattle/King County". Washington

Suzuki, M. and Oka, T. (1998). Estimation of life cycle energy consumption and CO<sub>2</sub> emission of office buildings in Japan. *Journal of Energy and Buildings*. 28, 33-41.

The Code for Sustainable Homes. Department for Communities and Local Government, (February 2008), United Kingdom.

Trandabat, A. F. (2012). Fuzzy Based Environmental System Approach for Impact Assessment - Case Studies, ILLIT, International University Institute of Technology. 6, 24-29.

Tronchin, L. and Fabbri, K. (2008). Energy performance building evaluation in mediterranean countries: comparison between software simulations and operating rating simulation. *Energy and buildings*. 40, 1176-1187.

Tseng, M.L., Lin, Y.H., and Chiu, A.S.F. (2009). FAHP based study of cleaner production implementation in PCB manufacturing firms, Taiwan. *Journal of Cleaner Production*. 17(14), 1249-1256.

Tseng, M.L. (2013). Modeling the sustainable production indicators in linguistic preferences. *Journal of Cleaner Production*. 40, 46-56.

UNEP, (2006). A Document of the UNEP Finance Initiative Sustainability Management and Reporting Project. *Sustainability Management and Reporting*. UNEP Financial Initiative, 76-79.

Vörösmarty, C. J., Green, P., Salisbury, J. and Lammers, R.B. (2000). Global water resources: Vulnerability from climate change and population growth. *Science*. 289, 284-288.

Wagenhals, S., Garner, W., Duckers, L., and Kuhn, K. (2014). Sustainability index with integrated indicator dependencies. *Business Management and Education*. 12(1), 15-29.

Waldron, D. and Williams, P. (2003). Steps towards sustainability monitoring: the case of the resort municipality of Whistler. In Harris, R., Griffin, T. and Williams, P. (Eds), *Sustainable Tourism: a global perspective*, Oxford: Elsevier Butterworth-Heinemann, 180-194.

Watermeyer, R. B. (1999). Socio-Economic Responsibilities: the challenge facing Structural Engineers. *The Structural Engineer*. 7(3), 145.

WBDG, (2006). Guiding principles for sustainable new construction and major renovations, Whole Building Design Guide. National Institute of Building Sciences, Washington DC. [http://www.wbdg.org/references/fhpsb\\_new.php](http://www.wbdg.org/references/fhpsb_new.php)

WCED, (1987). "Our Common Future: The Brundtland report", World Commission on Environment and Development, UN, Oxford University Press.

Wilkinson, S.J., Reed, R.G. and Cadman, D. (2008). *Property Development*. London: Taylor and Francis. 234-239.

World Bank Indicators, World Bank (2013a). Retrieved April 28, 2013, from <http://data.worldbank.org/indicator/EG.USE.PCAP.KG.OE>.

World Bank Indicators, World Bank (2013b). Retrieved April 28, 2013, from <http://data.worldbank.org/indicator/EG.IMP.CONS.ZS/countries>.

Xiaoping, M., Huimin, L. and Qiming, L. (2009). A comparison study of mainstream sustainable/green building rating tools in the world, International Conference on Management and service Science (46-51). New York.

Yohanis, Y.G. and Norton, B. (2002). Life-cycle operational and embodied energy for a generic single-storey office building in the UK. *Energy*. 27(1), 77-92.