THE GREEN LIBRARY

The challenge of environmental sustainability

DIE GRÜNE BIBLIOTHEK

Ökologische Nachhaltigkeit in der Praxis

Edited on behalf of IFLA by
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Libraries, both public and academic libraries, are obviously ecologically sustainable – are they really?

On the one hand we have libraries as mainly deep-plan buildings with high energy consumption for lighting, heating, air-conditioning, and ventilation and with a lot of computer installations, many copiers making many paper copies all day, and – last but not least – printed books which one can define as "dead forests". None of this can be considered sustainable.

On the other hand we have lending, the sharing of books and other media, and also the sharing of computers, the move from printed to electronic resources, common spaces for learning and socializing, retaining cultural heritage, offering information and a variety of materials about a responsible way of life. This is summed up by the statement below:

> "[...] environmental sustainability in libraries is obvious as such, but no one has systematically spelled out why or how it should be implemented. The discussion around green libraries has been largely limited to the buildings, i. e., to subjects like the energy-efficiency of new constructions and basic renovations. [...] However, we cannot rebuild all libraries and make them energy efficient, and we have to find other ways. Libraries have to operate environmentally now and in the future in existing buildings and without new resources. But how do we achieve this?"[1]

The green library movement

Debate and discussion about the role of libraries and librarians as leaders in the ecological sustainability movement was already taking place in the 1970s (Armstrong 1971). It developed slowly, although there have been efforts to promote the idea that the mission of libraries should include the taking on of a leading role in teaching responsibility to the public (Boyden & Weiner 2000).

Going through earlier publications, one will find that from about 2000 on a "green library movement" (Antonelli 2008), apparently inspired by the US American Sustainable Communities Movement (Long 2000), was recognized. But most efforts focused on the eco-building when identifying e.g. "a new century in public library architecture" (Tseng 2007). More initiatives arose to promote environ-

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1 See the article "... proud that my own library is such a responsible operator!" by H. Sahavirta in this publication.

mental awareness and sustainable design and services in libraries published in books, journals and online on special webpages (Coyle 2008).

In addition library associations and organizations like SLA, the Special Libraries Association (Davis 2008) became aware of "green conferences"; they supported their member libraries by setting up specific groups like the Australian Library and Information Society (ALIA Sustainable Libraries Group 2010); they held conferences on green themes like the 16th Seminar of the LIBER Architecture Group held in Prague, Czech Republic 2011 (Sommer & Feldsien-Sudhaus 2012), and the American Library Association – which has been handling this issue since the 1990s (Link 1992) – recently started a petition for a new Sustainability Round Table[2] to aid in the advancement and dissemination of sustainable practices.

IFLA and environmental sustainability

On the occasion of the 75th anniversary of IFLA, the International Federation of Library Associations and Institutions
–   declared that all human beings have the fundamental right to an environment adequate for their health and well-being,
–   acknowledged the importance of a commitment to sustainable development to meet the needs of the present without compromising the ability of the future,
–   asserted that library and information services promote sustainable development by ensuring freedom of access to information.[3]

Although this statement, published in 2002, does not focus directly on ecological environmental sustainability, this issue should be considered included.

The IFLA Library Buildings and Equipment Section[4] picked up IFLA's directive on sustainable development in their *IFLA library building guidelines* (Wagner et al. 2007). During the 75th IFLA World Library and Information Congress 2009 in Milan, Italy, the newly formed IFLA Special Interest Group ENSULIB (Environmental Sustainability and Libraries), sponsored by the IFLA Preservation and Conservation Section,[5] offered their first conference session, entitled "Libraries

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2 http://greeningyourlibrary.wordpress.com/2013/01/11/petition-to-start-a-new-sustainability-round-table-through-ala/. Accessed on 7 March 2013.
3 www.ifla.org/publications/statement-on-libraries-and-sustainable-development. Accessed on 7 March 2013.
4 www.ifla.org/ES/library-buildings-and-equipment. Accessed on 7 March 2013.
5 www.ifla.org/preservation-and-conservation. Accessed on 7 March 2013.

and awareness about sustainability",[6] followed by related conference sessions in 2010–2012. From 2009 on, articles on environmental sustainability and libraries were also published in the *International Preservation News*, published by the IFLA Preservation and Conservation Core Activity PAC.[7]

At the 77th IFLA Congress 2011 in San Juan, Puerto Rico, the IFLA Library Buildings and Equipment Section hosted a conference session on "Sustainability issues in the design of libraries: the importance of creating environmentally responsible library facilities and spaces in the 21st century".[8]

The Green Library – what is it all about?

While in the past most publications on libraries and sustainability issues came from the United States, this book, written by experts in their field from all over the world, covers subjects and best-practice examples not only from the USA but also from Europe, Asia, and Australia. The articles in this book cover a wide range of ideas and best-practice examples on "how to green" libraries and how and where libraries demonstrate both ingenuity and ethical leadership. It answers such questions as what does "sustainable" mean in the context of libraries. What examples are there of building projects across the world that have developed sustainable, green libraries?

> "However, we cannot rebuild all libraries and we have to operate environmentally in existing buildings and without new resources. Libraries can express their commitment to green values and offer an open and easy access to environmental knowledge. Moreover, offering shared space and new kinds of items to be borrowed are examples of new environmentally sustainable activities. To take a clear stand and to create a visible green image for the library is an important part of the environmental work."[9]

Therefore the articles in the book, written in German or English with both English and German abstracts, cover all aspects of designing and managing environmentally sustainable libraries and library services.

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6 www.ifla.org/node/6202. Accessed on 7 March 2013.
7 www.ifla.org/pac. Accessed on 7 March 2013.
8 http://conference.ifla.org/past/ifla77/library-buildings-and-equipment-section.htm. Accessed on 7 March 2013.
9 See the article "... proud that my own library is such a responsible operator!" by H. Sahavirta in this publication.

The book is divided into four main sections: "General"; "Case Studies from Academic Libraries and from Public Libraries"; "Sustainability Specials / More than Libraries ...", and "Appendices".

In the "General" articles the reader will be introduced to "Sustainable thinking: Passageway to better buildings, budgets and beyond" (R. S. Aldrich, S. Benton, L. Schaper and J. A. Scherer) and find that "Sustainability can serve as a tool to build community ...: Sustainable libraries, sustainable services – A global view" (P. Genovese and P. Albanese). There is also an interview with the Canadian-German architect M. Stankovic and the engineer T. Jortzick who put the case for not leaving the responsibility to industry and politicians: "Die Verantwortung nicht der Industrie und der Politik überlassen ...". O. Eigenbrodt provides information on "The impact of standardization on responsible library design: Rereading ISO/TR 11219:2012 from a sustainability perspective" while T. Schelling refers to Swiss standards "Auf dem Weg zur 2000-Watt-Gesellschaft: Schweizer Standards und ihre Umsetzung in nachhaltigen Bibliotheksbauprojekten" to achieve the so-called 2000-Watt society.

L. Sonkkanen presents her Finnish survey on "Sustainability hides in libraries: The state of ecological sustainability in libraries", and this is followed by a description of a student project to pilot an international survey: "Sustainable libraries: A pilot survey of international delegates attending the IFLA World Library and Information Conference 2012 and comparison with the Finnish national survey" by E. Karioja and J. Niemitalo.

Energy-saving concepts from bookshops which can be transferred to libraries are the theme of the German interior designer M. Franz "... dass sich Menschen wohlfühlen: Energiesparende Konzepte aus dem Buchhandel übertragen auf Bibliotheken". Another article from Germany, by S. Witthaus, "Gebäudedokumentation zur Sicherung der Nachhaltigkeit: Bibliotheken nachhaltig planen, bauen, betreiben und dokumentieren" deals with the question of how structured building documentation contributes to ecological sustainability.

"The second-hand library – a way of reducing the ecological footprint" by P. Hauke and K. U. Werner discusses the transformation of existing buildings with a prior non-library function into libraries, and highlights the challenges and the opportunity for sustainable thinking in library planning this brings.

The second section, "Case studies", starts with best-practice examples from academic libraries. The first article refers to a new building opened in 2009 which implements "Sustainability in all phases of the building's life-cycle ...: A case study of The McClay Library, Queen's University Belfast" by K. Latimer, which also discusses trends in 21st-century library design, including the growing importance of energy-efficiency measures.

A rather different example comes from Asia, where "Loads of scraps become precious raw materials: The Kasetsart University Eco-Library in Bangkok, a prototype for the next generation of sustainable buildings in Thailand", written by S. Tinarat.

The environmentally friendly renovation of a listed historic library building in France is the theme of J. Pernoux's article "Nachhaltige Sanierung trotz Denkmalschutz: Das Projekt Neue BNU in Strasbourg".

Active as well as passive construction strategies and innovations were implemented within a dynamic design process to guarantee sustainability in a multiple award-winning Lord Norman Foster building, reported by C. Hallmann, one of the architects involved: "Going Green – Free University Philological Library, Berlin: An evolutionary concept devetopment – from a box to 'The Brain'".

With "Green and growing: The impact of a LEED library on an organization's sustainable practices" the authors R. Olsen and C. McAfee explore the impact a single green facility can have on the sustainable practices of an entire organization.

E. Brahms and J. Schrader outline the modernization measures required because of out-of-date building technology which were based on networked-based control technology and were implemented in the context of a research project, in their article "Die Smart Library UB Hildesheim: Energieverbrauch senken durch intelligente Steuerungssysteme".

The other part of "Case studies" focuses on "Public libraries", starting with examples of sustainability in Danish public libraries: "Environmental awareness is on the rise: Sustainability in Danish public libraries" by H. Niegaard. One in four Danish public libraries has a green operating policy. "My Tree House: World's first green library for kids" is driven by green principles in all facets from design, infrastructure and use of sustainable materials, to collection and programming. The library will be opened in August 2013; the article is written by Lo Wan Ni and Soh Lin Li.

A "Landmark with 'green' credentials: Brighton's 'Jubilee Library'", written by G. U. Gabel, describes a building which is sustainable in many ways, and since its inauguration in 2005 the library has received more than a dozen awards for this.

H. Sahavirta from Finland points out that to take a clear stand and to create a visible green image for the library is an important part of environmental work. Sustainability and new, environmentally friendly services are one way to create a good image and thus to market libraries to decision makers and customers. His customers are "'… proud that my own library is such a responsible operator!' – Vallila Library in Helsinki shows the greener way".

Using the Berlin Central Library project as a case study, V. Heller and J. Fansa discuss some aspects of environmental, economic and social sustainability which should be considered from the very beginning of the planning process: "Nachhaltigkeit in drei Dimensionen: Ressourcenverantwortung im Fokus der Planung für die neue Zentral- und Landesbibliothek Berlin".

While refurbishing an old post building in order to make it meet the requirements of a contemporary public library, the lighting facilities have been upgraded appropriately for the different library zones and this is reported by U. Keite and R. Banduch in their article "Bücherhallen Hamburg im rechten Licht: Neue Beleuchtung in der Zentralbibliothek".

Inaugurated in 2009, the historic building of the Delitzsch City Library "Old Latin School" is in many respects a remarkable educational facility. The concept to install a geothermal heat pump for the first time in the town is described by the city's mayor M. Wilde: "Eine Wärmepumpe für ein Baudenkmal: Die Energiesparbibliothek in Delitzsch als Beispiel für ressourcenschonenden und nachhaltigen Städtebau".

The third section, "Sustainability specials / More than libraries ...", starts by discussing the idea of sustainable library services and opportunities through the virtual world. The two authors, B.F. Williams and A. Koester, also present a case study of their online-only virtual internship experiences to demonstrate first hand the application of these ideas, entitled "No money, no travel, no problem: Sustainability through virtual – not only library – services and collaborations".

Last but not least A. Mittrowann and I. Sprißler give a report on the implementation of an environmental management strategy and the DIN EN ISO 14001 certification achieved in 2011 at ekz.bibliotheksservice GmbH, the largest German library supplier: "Ethisches Handeln vs. ökonomische Anforderungen: Umweltmanagement in einem mittelständischen Unternehmen am Beispiel der ekz.bibliotheksservice GmbH".

The final section, "Appendices", offers a bi-lingual German-English checklist on "Sustainable buildings, equipment and management" by K.U. Werner for those who are interested in "going green" in their library. This is followed by a selected bibliography covering publications from 2000 on (separate from the bibliographies of key publications of each article). For more information please see the extended bibliography on "The Green Library" at the book project's website at www.ibi.hu-berlin.de/studium/studprojekte/buchidee/2012-13 (accessed on 7 March 2013).

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hard during the winter term 2012/2013 recruiting authors, staying constantly in contact with them, editing and formatting the articles, being aware of copyright issues relating to the figures, and generally being responsible for all tasks that occur when producing a professional publication.

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