

**IFLA Publications 161**

# **THE GREEN LIBRARY**

**The challenge of environmental sustainability**

# **DIE GRÜNE BIBLIOTHEK**

**Ökologische Nachhaltigkeit in der Praxis**

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**Sustainability hides in libraries**

The state of ecological sustainability in libraries

**DE GRUYTER  
SAUR**

Leila Sonkkanen

# Sustainability hides in libraries

The state of ecological sustainability in libraries<sup>1</sup>

**Abstract:** Services, buildings, logistics, IT-equipment and much more – that is the library of today. These items are normally viewed from an economical point of view in a library’s yearly budget, but have libraries ever considered that they also have an impact on a library’s ecological sustainability? When you want to observe where and how ecological sustainability occurs in a library you should go beyond a purely economic analysis. By creating conditions for sustainable development, adding eco-efficiency as a measuring tool and generally acting in an environmentally friendly manner, library staff can assist in realizing the sustainability of the library.

**Zusammenfassung:** Dienstleistungen, Gebäude, Logistik, IT und vieles mehr – das ist die Bibliothek von heute. Normalerweise werden diese Elemente von einem ökonomischen Standpunkt im Rahmen eines Jahresbudgets betrachtet; doch wurde jemals daran gedacht, dass diese Themen auch einen ökologischen Effekt auf die Nachhaltigkeit einer Bibliothek haben können? Wenn man herausfinden möchte, wo und wie in einer Bibliothek auf ökologische Nachhaltigkeit Wert gelegt wird, muss man über die ökonomische Analyse hinausgehen. Die Einführung von Kriterien für nachhaltige Entwicklung, zusätzliche Eco-Effizienz als Messinstrument und das allgemeine umweltfreundliche Verhalten können helfen, die Nachhaltigkeit von Bibliotheken sichtbar werden zu lassen.

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## 1 Introduction

Ecological sustainability is one aspect of sustainable development. It refers to ensuring nature’s diversity and the viability of ecosystems as well as adapting

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<sup>1</sup> This paper is an updated version of the author’s presentation at the 78th IFLA Conference in Helsinki, Finland, 11–17 Aug 2012. <http://conference.ifla.org/past/ifla78/184-sonkkanen-en.pdf>. Accessed on 8 January 2013.

people's actions to it so that nature is not overburdened and the continued loss of natural resources is halted.

The pressure to transform familiar procedures into more environmentally sustainable ones by reducing environmental impact is increasing hand in hand with environmental awareness. This also applies to libraries; we should create conditions for sustainable development and act in an environmentally friendly manner – although our basic library services are fundamentally sustainable already: we recycle different kind of materials from books to e-readers through lending. The problem is elsewhere. Other functions also matter and must be as eco-friendly as possible. Only then can we talk about libraries as being truly ecologically sustainable players.

## 2 Towards sustainable development

When you want to observe where and how ecological sustainability occurs in a library you should go beyond a purely economic analysis. Adding eco-efficiency as a measuring tool can help to realize the sustainability of one's library.

Sustainability challenges all policy makers to behave in an environmentally responsible way in the community. Decision makers must have the appropriate information and tools to implement environmental management and strategies, in addition to the responsibility for setting ecological targets for the activities and services of a community. By encouraging the first steps towards sustainability, communities lay the groundwork for further ecological decisions.

What should be taken into account when advancing ecological sustainability in libraries? How can greenhouse gas emissions be reduced in different areas? Evaluating different services in order to find the best ways to minimize environmental impact is vital. Innovative communities can find many ways to promote climate friendly attitudes and provide a future where its organizations become more sustainable. Despite the pressure to change standard operating procedures so they are more environmentally friendly, the lack of standard indicators for measuring an organization's environmental impact creates challenges.

Libraries have a magnificent opportunity to be both keyplayers and promoters of environmental awareness. By creating guidelines, together with climate experts, and using best practices we can formulate positive actions for the benefit of our environment. The actions can vary widely. It is also apparent that while the level of knowledge is growing, more efficient actions can be applied to strengthen and maximize the benefits. The unfortunate fact is that taking little steps is too

slow (Harju-Autti et al. 2011, 156) for the environment. Therefore more powerful instruments need to be found.

Management and economy are also factors when we talk about sustainability. Libraries must control their costs with material- and energy-efficiency and thus support the broader environmental work which then leads to real results.

*Education for Sustainable Development (ESD) 2005–2014* (n.d.) is a UNESCO programme which has set goals to integrate the principles, values and practices of sustainable development into education and learning. Libraries can also increasingly play a role as educators in sustainable development because of the organizations' global responsibility.

When libraries are building and improving their sustainability, they should tell people! Customers, decision-makers and staff want to know what the plans for, and the results of, environmental work are. So communication is very important.

### 3 Project team on the track of sustainable development

The purpose of the *Finnish Sustainable Development in Libraries Project* (2011–2012) was to develop and improve the ecological sustainability of public libraries by studying current sustainable development activities, creating integral operating models and policies and presenting development plans as well as developing ways of environmental communication for both the library sector and different customer segments.

The project endeavours to use existing expert and partnership resources as a mutual source of information and resource and involve the different interest groups in the planning and goals of sustainable development.

“Green@Library: Ecological sustainability of libraries” (Sonkkanen et al. 2012) is a publication which was produced by the project team to present as well as promote libraries' environmental work and also included the view of an expert on the project.

Nine libraries throughout Finland took part in the project, making up an active project team:

- the Joroinen-Juva-Rantasalmi (JRR) Library,
- Kemijärvi City Library,
- Kotka City Library,
- Kuusamo City Library,
- Oulu City Library – Regional Library,
- Porvoo City Library – Regional Library of Uusimaa,

- Rääkkylä Library,
- Vallila Library – Helsinki City Library and
- Varkaus City Library.

During the project, the project team worked together in workshops. The aim was to get ideas for improving and developing not only each library's own ecological sustainability but also to increase their knowledge through sharing and discussion in the workshops. The project wanted to highlight knowledge of environmental awareness and communication of environmental issues.

The outcome from this project, besides the general survey and corresponding results, was to disseminate some guidelines about ecological sustainability that libraries could use in their own organizations. These same guidelines could also be used by the community's decision makers, as well as the library's customers. In cooperation with the library's interest groups, the best ways of improving and developing environmental issues can be identified.



Fig. 6.1: Give-away: Promotion of the Green Library through a cleaning cloth. © K.U. Werner.

## 4 Sustainability in public libraries in Finland

The survey (Sonkkanen et al. 2012) was sent to the staff of public libraries and represents their perspective on the state of sustainability today in their library and community. Underlying many of the answers was the general impression that sustainability mainly involves individual actions. These actions are related to the staff's daily basic routines, for example the sorting of waste, but how do libraries communicate their green goals amongst themselves or to their partners? Are all the functions thoroughly reviewed when monitoring and searching for improvements in advancing the level of ecological sustainability?

Results were most relevant when we asked about everyday routines, but many of the other categories resulted in a surprisingly large number of "I don't know" answers. This shows that the respondents did not recognize the varying forms in which sustainability was present in libraries.

The lack of environmental management was striking. Over 60% of the answers stated that it did not take place. This reveals either that environmental management exists but is not recognized, or that environmental management is not present in any way. Also, the impression that strategic decisions are too far removed from the general staff influences their ability to act.

Without proper interaction, lack of time and guidelines lead to the situation where libraries are all facing the same problems. As a result the work is dependent upon the activism and initiative of individuals.

The *Sustainable Development in Libraries Project* compiled a survey for public libraries in February 2012 on the current state of ecological sustainability. The questionnaire ran for ten days. An invitation to the survey was emailed to 768 addresses. There were 141 replies, which is a reasonable response, albeit only a fifth of the total target group. The response percentage was 18%, which can be considered an average result of response activity. Some of the largest cities were well represented, with 14–17 responses per municipality; however, responses were only received from some 20 municipalities.

Approximately 59% of the respondents are responsible for their library's environmental issues.

## 5 The survey and some observations

The survey was divided into five sections:

1. Environmental management: environmental management refers to the management and administration of environmental matters in an organization in

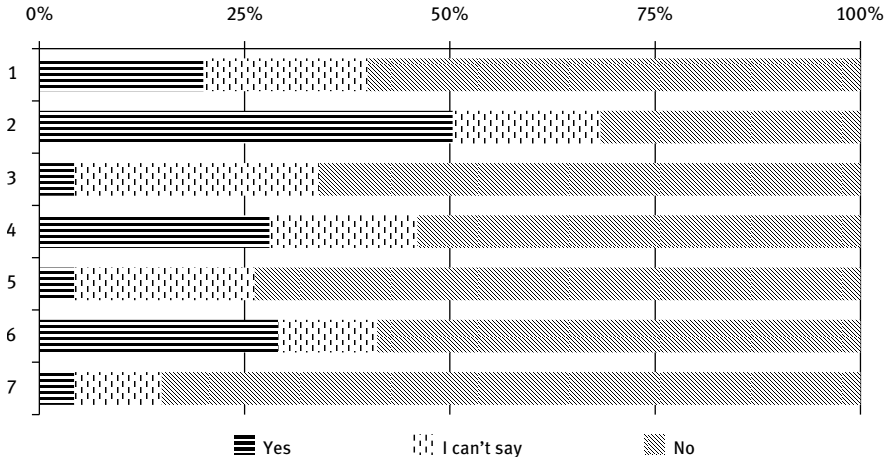
- a way that takes the environmental impact of the operations of an organization into account in decision-making;
2. Environmental economy: usage and usage impact of natural resources in financial decision-making;
  3. Reduction of environmental burden: the practical goals of the library in its own operations to reduce environmental impact;
  4. Increase of environmental awareness: awareness of environmental aspects and individual choices is one of the requirements for environmentally friendly solutions;
  5. Environmental communication: environmental communication refers to communication by offices and agencies in relation to environmental aspects and how information on environmental awareness is disseminated.

Reduction of environmental burden was the largest section with 23 questions; environmental management consisted of 14 questions; environmental economy, 7; increase of environmental awareness, 10; and environmental communication, 8. In addition, the different parts contained 7 open questions in total.

Reduction of environmental burden or everyday environmental actions played an important role in the day-to-day activities of libraries, but the responses of the survey also revealed that the issues covered in the other survey sections have not yet been considered comprehensively when improving the level of ecological sustainability.

## 5.1 Environmental management

In this area we wanted to know how different fields of environmental management are considered in the library. Answers showed that communities with over 20,000 citizens have some guidelines and programmes for environmental management or for energy efficiency. Also these communities often have identified a specialized person responsible for ecological sustainability in the library. When asked about rewarding personnel for developing environmental issues the response was that only 10% had taken some action. The level of environmental management seems to need much improvement.



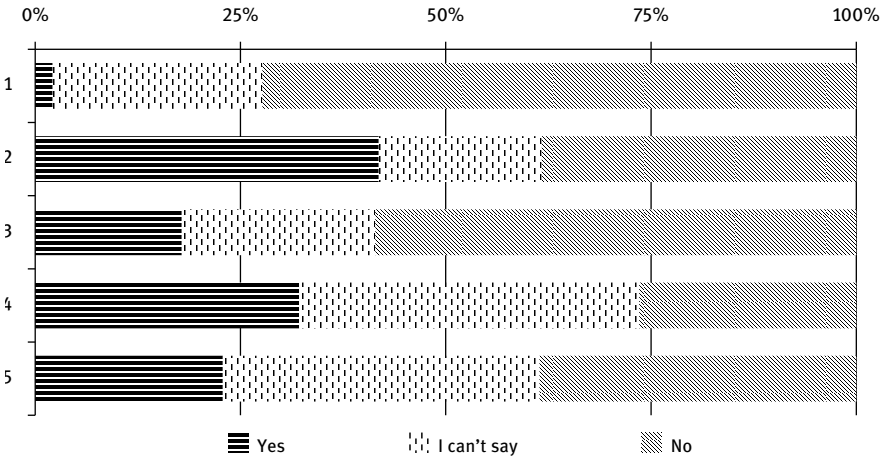
**Fig. 6.2:** Results of the survey for environmental management.

Explanation: 1: The library issues reports about environmental matters to department-/city-/municipality-level. 2: The library has guiding principles for increasing energy-efficiency. 3: An emission reduction plan has been drawn up for the library. 4: The library has its own action plan for furthering environmental matters. 5: The city department or office/work community has received an environmental certificate or some other external environmental label. 6: The library has appointed a person to be responsible for environmental matters. 7: Environmental matters have been linked to employee reward systems.

## 5.2 Environmental economy

Half of the respondents thought that this area is not considered in libraries' decision making processes. Roughly 30% did not know if it is considered and less than 20% said that their library had taken environmental issues into account when making budgetary decisions. In economic decisions environmental finances are not considered on the whole.

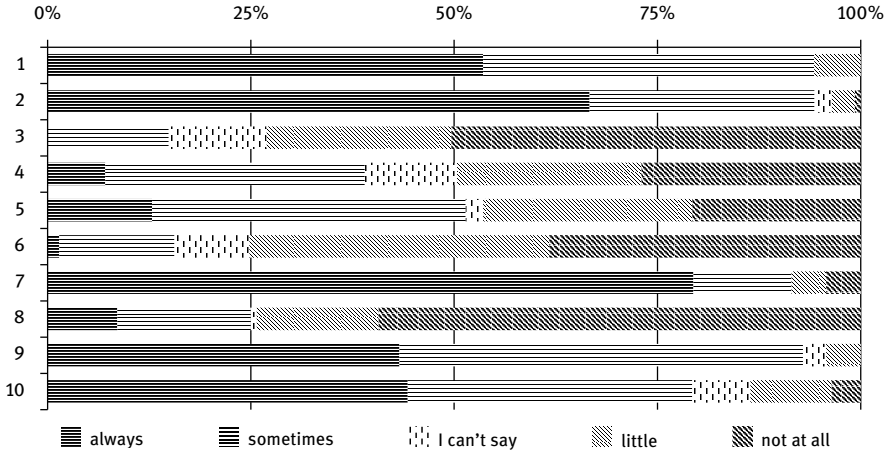




**Fig. 6.3:** Results of the survey for environmental economy.  
 Explanation: 1: The library utilizes environmental budgeting. 2: Costs are monitored per services rendered (for example, for each loan or opening hour). 3: The library’s budget includes binding goals pertaining to the environment. 4: Ecological sustainability is taken into account when preparing requests for quotations. 5: Investments and projects have been justified with environmental perspectives.

### 5.3 Reducing the environmental burden

Questions about everyday routines such as sorting, energy saving and paper consumption were asked in this section. Actions in sorting different wastes, turning off lights after 10 minutes, switching off computers and other machines at the end of the working day and for the weekends and using machines “go to sleep mode” are usually used in more than 50% of the libraries. Improvements can be made for example in preferring laptops rather than desktop PCs or using double-sided printing.



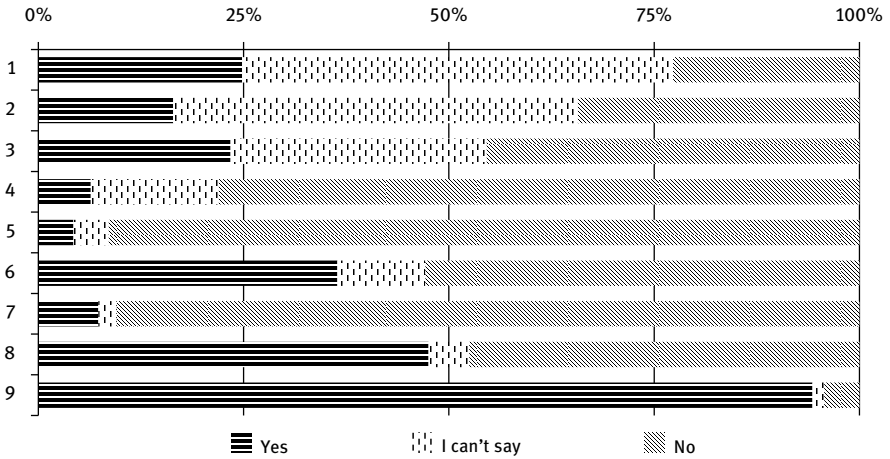
**Fig. 6.4:** Results of the survey for education of environmental burden.

Explanation: 1: Various waste types are sorted (for example, organic waste, paper, cardboard, metal and glass). 2: Discarded material is sorted into the various waste types. 3: The personnel are made aware of the waste amounts and costs. 4: The work unit monitors the consumption of energy, water, waste or paper. 5: The lights are turned off if a room is left for more than 10 minutes. 6: Laptops are preferred in computer acquisitions. 7: Computers and other devices are turned off at the end of each working day and at weekends. 8: The printers print on both sides of the sheet by default. 9: Electronic channels are preferred in communications. 10: The maximum room temperature is 21–22°C.

## 5.4 Increase of environmental awareness

Libraries have many opportunities to promote environmental awareness. The most commonly used methods are setting up an exhibition, organizing an event or setting up a book display. Nearly all the respondents said that electronic services like SMS or e-mail are in use.

Improvements can be achieved by, for example, measuring the loans of environmental material or sorting in customer areas, or enabling customers to recycle used books, magazines or batteries.

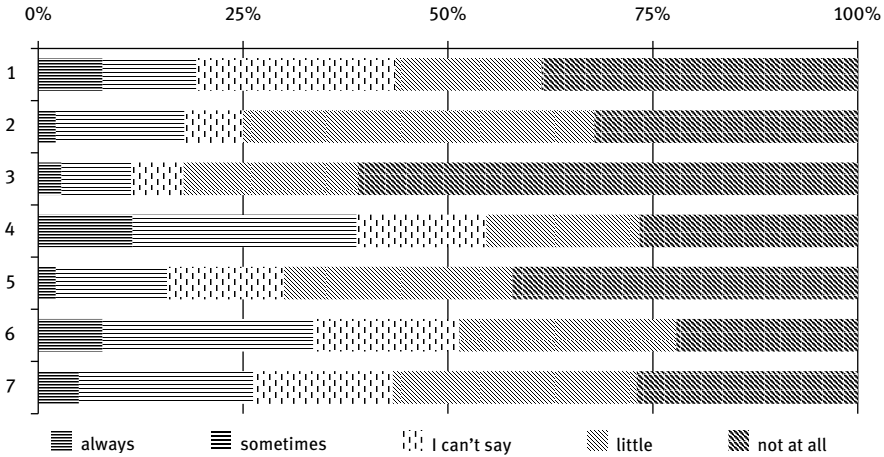


**Fig. 6.5:** Results of the survey for the increase of the environmental awareness.  
 Explanation: 1: The library holds environment-related theme weeks. 2: The library holds environment-related events. 3: Environmentally-themed literature is displayed on a separate shelf. 4: The loaning of environmentally-themed material is monitored. 5: Customer areas provide the opportunity to sort waste. 6: Customer areas feature a recycling point for books/newspapers and magazines/albums. 7: Customer areas feature a recycling point for spent batteries, for example. 8: Items, such as energy consumption meters, can be borrowed from the library. 9: The library offers electronic services to its customers via text messages and e-mails, for example.

## 5.5 Environmental communication

The lack of action was clearly common to many libraries. All the answers were under 50%. Libraries do not report their environmental work in their annual reports, nor do they send press releases, or discuss environmental issues at meetings, or highlight them on their internet pages.

Libraries also rarely cooperate with other organizations or non-governmental organizations on environmental issues. There is also very little feedback from customers; only 10% of the respondents said that they have had feedback from their environmental communications or organized exhibitions or book displays.



**Fig. 6.6:** Results of the survey for the topic environmental communication.

Explanation: 1: Environmental matters are included in the annual report. 2: Environmental matters are covered at weekly meetings. 3: Information on environmental matters is provided on the library's website. 4: Information on environmental matters is provided on the municipality's/library's intranet site. 5: Environmentally matters are brought up in the library's media communications. 6: The library engages in environmental collaboration with other departments and offices of the municipality/city. 7: The library engages in environmental collaboration with organizations.

## 6 Bringing environmental work out into the open

Building ecological sustainability is the sum of several factors, and combining them presents challenges. The survey clearly demonstrates that guidelines are needed to develop an environmentally friendly policy for libraries. The promotion of sustainable development and acquiring information are currently very much dependent on those employees who take an interest in environmental issues. General instructions, guidelines and a framework applicable to the whole library sector would enable their effective implementation in different libraries.

How else to improve and develop?

- Sharing best practice, guidelines, and environmental programmes and strategies for daily routines including management:
  - guidelines are needed because the level of knowledge may be relatively low;
  - through sharing best practice the level of knowledge is raised.

- Measuring and reporting:
  - for environmental finances, e.g. estimating the amount of waste;
  - economic support for development and investments.
- Cooperation:
  - between libraries, customers, other organizations and non-governmental organizations.
- Communication and promoting environmental awareness:
  - libraries are in an excellent position to improve customers' awareness.
- Environmental education for children and the young.
- Backup:
  - the whole organization is committed to sustainability;
  - increase personal involvement;
  - network for eco-specialized librarians;
  - time for planning and putting into action;
  - education;
  - support;
  - share experiences.

When libraries report on how they exercise their ecological responsibility and exchange information with their partners, how do they do this? Together with examples of programmes, actions and measuring results, they will promote their environmental work. This should in turn encourage the public sector to establish communication channels to share this information and to address it in different sectors.

## 7 Sustainability could renew the role of the library

The pressure to transform familiar procedures into more environmentally sustainable ones by reducing the environmental impact is increasing hand in hand with environmental awareness. This does not only apply to libraries; the municipality and city should create conditions for sustainable development and encourage acting in an environmentally friendly manner.

Opportunities are just around the corner, so I challenge libraries not just to pick the ripe fruit but to delve deeper in their actions and services to improve ecological sustainability at every level.

Sustainable development can raise the profile of the entire library system in the future and – once again – provide us with the chance to be pioneers.

## References

- Harju-Autti, P., A. Neuvonen & L. Hakkarainen (eds.). (2011). *Ympäristötietoisuus: suomalaiset 2010-lukua tekemässä*. Helsinki: Rakennustieto.
- “Education for Sustainable Development (ESD) 2005–2014.” (n.d.). [www.unesco.org/new/en/education/themes/leading-the-international-agenda/education-for-sustainable-development/](http://www.unesco.org/new/en/education/themes/leading-the-international-agenda/education-for-sustainable-development/). Accessed on 30 December 2012.
- Sonkkanen, L., M. Asikainen & H. Sahavirta (eds.). (2012). *Green@library: Ecological sustainability of libraries*. <http://sustainability.libraries.fi/G@Len.pdf>. Accessed on 30 December 2012.