

**IFLA Publications 161**

# **THE GREEN LIBRARY**

**The challenge of environmental sustainability**

# **DIE GRÜNE BIBLIOTHEK**

**Ökologische Nachhaltigkeit in der Praxis**

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Edited on behalf of IFLA by  
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## **Sustainable libraries**

A pilot survey of international delegates attending the IFLA World Library and Information Conference 2012 and comparison with the Finnish national survey

**DE GRUYTER  
SAUR**

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## Sustainable libraries

### A pilot survey of international delegates attending the IFLA World Library and Information Conference 2012 and comparison with the Finnish national survey

**Abstract:** This study aims to investigate sustainability awareness in libraries and compare the results between foreign and Finnish libraries. The study employed a descriptive survey method supported by a questionnaire. The survey was conducted at the IFLA World Library and Information Congress in Helsinki in August 2012 and it is a part of a Finnish national project “Sustainable development in libraries”. The Finnish-language questionnaire for public libraries was conducted in February 2012. The questionnaire was divided into five sections: environmental management, environmental economy, reduction of environmental burden, increase in environmental awareness and environmental communication. There were 141 respondents to the Finnish survey but disappointingly only 28 people answered the international survey. This statistically is not significant but the study gives some sense of the potential for investigating international opinion at a major conference such as IFLA. The study showed that there is much room for improvement in sustainability of libraries. Environmental communication seems to be the area that most needs improvement and the reduction of environmental burden is where libraries appear to be performing well. Significant differences were not noticed between Finnish and other libraries although it is not possible to draw definitive conclusions from such a small sample. Further research and more significant comparative studies on sustainability in libraries, in particular on social and economic sustainability, are required.

**Zusammenfassung:** Diese Studie untersucht das Bewusstsein für Nachhaltigkeit in Bibliotheken und vergleicht die Ergebnisse anderer Länder mit denen Finnlands. Die Studie wendet die Methode einer beschreibenden Untersuchung an, gestützt durch eine Umfrage. Die Untersuchung wurde während des IFLA World Library and Information Congress im August 2012 in Helsinki durchgeführt und ist Teil eines finnischen nationalen Projektes “Sustainable development in libraries”. Die Umfrage in finnischer Sprache wurde im Februar 2012 unter öffentlichen Bibliotheken durchgeführt und bestand aus fünf Abschnitten: Umweltmanagement, Umweltökonomie, Reduktion der Umweltbelastung, Zunahme des Umweltbewusstseins und der umweltbezogenen Kommunikation. Es gingen 141 Antworten von finnischen Bibliotheken ein, aber enttäuschenderweise beantwor-

teten nur 28 anwesende Bibliothekare den internationalen Fragebogen. Die Studie zeigt, dass zur Verbesserung der Nachhaltigkeit in Bibliotheken noch viel getan werden kann. Sowohl auf dem Gebiet der Kommunikation als auch bei der Reduzierung der Umweltbelastung scheinen Bibliotheken gut aufgestellt. Signifikante Unterschiede zwischen finnischen und anderen Bibliotheken wurden nicht festgestellt. Weitere Forschungen zur Nachhaltigkeit in Bibliotheken sind erforderlich, besonders hinsichtlich sozialer und ökonomischer Nachhaltigkeit.

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## 1 Introduction

Sustainability is widely considered an important part of contemporary life. It is not a new concept to “go green” but it is becoming more popular as the concept of global warming has become prevalent in the news and popular media. It is becoming more obvious that daily decisions directly affect the environment (Miller 2010, VIII).

In the 21st century also libraries have started to adopt green values and put sustainability into action. As Kathryn Miller says in her book *Public Libraries Going Green* (2010, VIII):

“Libraries are challenged with the new role of connecting the public with environmental awareness and education. Public libraries are challenged to go green.”

It is important to note that going green is not just a case of recycling but also of increasing environmental awareness and educating customers to live in a more environmentally friendly way (Miller 2010, VIII). The book also discusses the library’s green role, the library as a green place, green services at the library and the library staff as a green teacher.

There are not very many publications about sustainability in libraries to date. Philip E. Ephraim has defined sustainability in academic libraries in his article “The greening of libraries”: it consists of all aspects of institutional and statutory information requirements which will benefit students at the moment and generations after this. The main focus is on the sustainable use of academic library resources (Ephraim 2003, 162).

Jennifer Rowley discusses the subject in her article “Libraries and environmental management”. When sustainability in libraries is discussed, it is important to note that libraries have a natural recycling role through the lending of books, journals, audiovisual and other resources meaning that many people can share material. The library can also offer a meeting place for communities and be involved in sustainability projects (Rowley 2006, 273f.). The article also discusses the impact of digitization on environmental issues and the need for library buildings, when people can access the library via internet (p. 276f.).

*How green is my library?* This book also discusses the topic and draws a line between the terms sustainability and being green. “Being green is an element of being sustainable, but sustainability is actually a larger and more holistic concept than being green” (McBane, Mulford & Himmel 2010, 2).

## 2 Main definitions

It is important to define the terms concerning sustainability. It is worth noting that this survey only focuses on ecological sustainability. Social and economic aspects have been left out completely.

- *Sustainability*: Development that provides economic, social, and environmental benefits in the long term, having regard to the needs of living and future generations. (European Environmental Agency: Environmental Terminology and Discovery Service, ETDS<sup>1</sup>)
- *Ecological sustainability*: It refers to ensuring nature’s diversity and the viability of ecosystems as well as adapting people’s actions to it so that nature is not overburdened and the continued loss of natural resources is halted. (Sonkkanen et al. 2012, 4)
- *Environmental management*: The management of resources, property, and all associated programs with an emphasis on environmental conservation and enhancement (Cooper 1996, vol. 1, 234); or, the management and administration of environmental matters in an organization in a way that considers the environmental impact of the operations of an organization in decision-making. (Sonkkanen et al. 2012, 6)
- *Environmental economy*: Usage and usage impact of natural resources in financial decision-making. (Sonkkanen et al. 2012, 6)

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<sup>1</sup> [http://glossary.eea.europa.eu/terminology/concept\\_html?term=sustainable%20development](http://glossary.eea.europa.eu/terminology/concept_html?term=sustainable%20development). Accessed on 18 February 2013.

- *Reduction of environmental burden*: The practical goals of the library in its own operations to reduce environmental impact. (Sonkkanen et al. 2012, 6)
- *Increase of environmental awareness*: Environmental awareness – awareness of environmental aspects and individual choices – is one of the requirements for environmentally friendly solutions. (Sonkkanen et al. 2012, 8)
- *Environmental communication*: Environmental communication refers to communication by offices and agencies relating to environmental aspects and communication disseminating environmental awareness. (Sonkkanen et al. 2012, 8)

### 3 Research questions

In this article the research questions are formulated as follows:

1. What are the differences and similarities between Finnish and libraries in other countries according to the analysis made by the survey?
2. Which of the areas – environmental management, environmental economy, reduction of environmental burden, increase of environmental awareness or environmental communication – are dealt with well or badly by libraries?

### 4 Materials and methods

A descriptive survey method is used to investigate the sustainability in libraries. This method was chosen so that as many librarians as possible could respond to the survey at the international IFLA conference. Only Finnish librarians were excluded because sustainability in Finnish libraries had been investigated earlier that year. The IFLA conference also held many events relating to sustainability such as the ENSULIB SIG (Environmental Sustainability and Libraries Special Interest Group) Workshop, the ENSULIB SIG Business Meeting and a session called “Libraries inspiring and facilitating change towards sustainability”. In the session the project planner Leila Sonkkanen presented the Finnish national project and its results which are included here (IFLA 2012).

## 4.1 International survey

This survey was conducted at the IFLA conference in Helsinki in August 2012 as a part of a Finnish national project “Sustainable development in libraries”. The survey was conducted using a web-based questionnaire that was a shortened and translated version of the Finnish national questionnaire which had been used in the Finnish project. The questionnaire was divided into five sections:

- Environmental management,
- Environmental economy,
- Reduction of environmental burden,
- Increase of environmental awareness and
- Environmental communication.

There were 3–8 questions in each section and one open-ended question at the end of the questionnaire. In addition, there were 6 background questions about the home country, library type, if the person responding had responsibility for environmental issues, job position and number of regular staff at the library.

The survey focused on ecological sustainability, although the term sustainability also includes social and economic aspects. Sustainability in this survey and project means only environmental protection, for example resource and energy efficiency. Social and economic aspects have not been considered at this survey and project.

Conference delegates were able to answer the questionnaire at the exhibition area of Helsinki City Library. Anyone attending the conference could answer the questionnaire but Finnish library staff was excluded. Only 14 questionnaires were completed so the link to the questionnaire was sent by email to the ENSULIB SIG of IFLA. That elicited a further 14 responses. In total, the amount of answers was 28, which was disappointingly low.

## 4.2 National Finnish survey

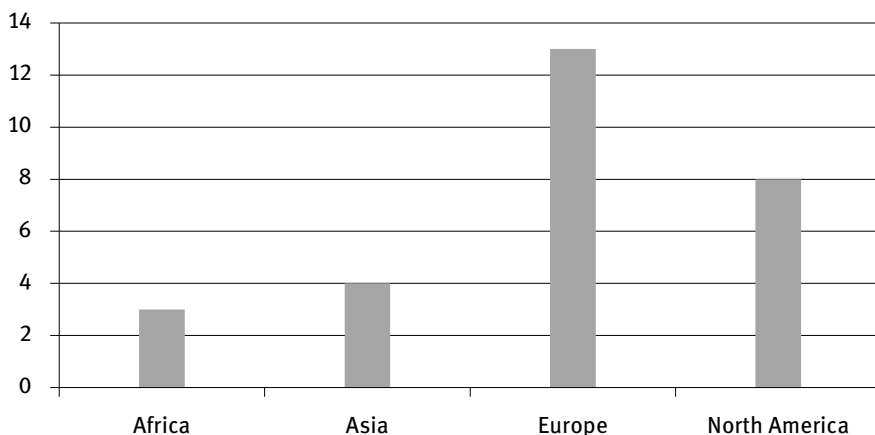
The Finnish national project, “Sustainable Development in Libraries”, included a survey of public libraries carried out in February 2012 on the current state of ecological sustainability in Finnish public libraries. This survey is discussed in detail by Leila Sonkkanen. See her paper in this book, entitled “Sustainability hides in libraries: the state of ecological sustainability in libraries”.

## 5 Results

This chapter discusses the results of the international survey carried out at the IFLA conference and also compares the results with the Finnish national survey.

### 5.1 Background questions

The international questionnaire opened with background questions to clarify the differences between the respondents. The most interesting question was: In which continent is your home library?



**Fig. 7.1:** What is the continent of your home library? N=28.

The largest number of respondents came from Europe: 13. This number included respondents from Italy, Malta, the UK, Lithuania, France, Poland, Spain, Ireland and Belgium. A respondent from Russia is also included in the Europe group. The next biggest was North America with 8 responses. There were 3 and 4 responses from Asia and Africa received respectively. Unfortunately there were no participants from Australia and South America. Because there were so few international responses it seemed reasonable to compare the results from all the continents in total with the Finnish results.

**Table 7:** Regular staff in different libraries in the international survey. N=28.

Regular staff	Public library	Research library	Other library
1–4	0	2	2
5–25	3	1	2
26–75	3	3	2
> 75	3	5	2

Table 7 shows that most respondents in the international survey came from research libraries with more than 75 staff. None of the respondents worked in a public library with less than 5 staff. It is quite surprising that distribution is so uniform when the number of the respondents was only 28.<sup>2</sup>

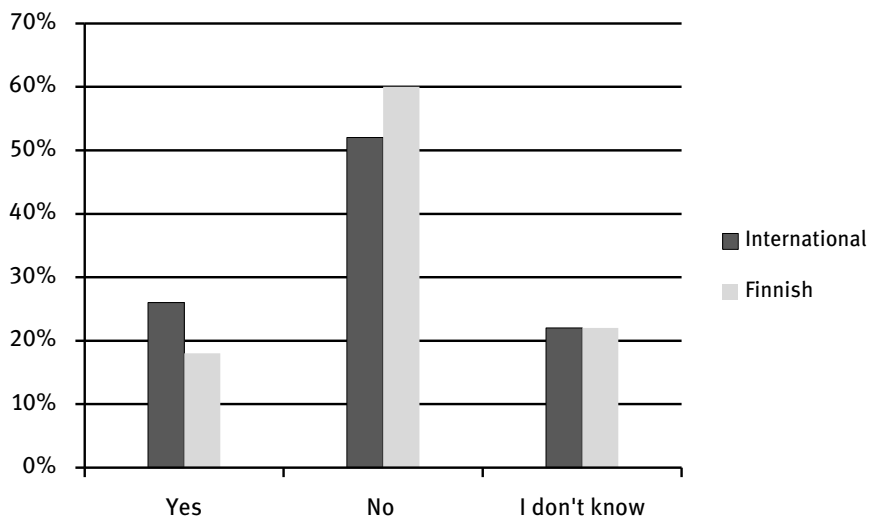
One question asked was if the respondent was responsible for environmental issues in the library. Only 7 of the respondents (25%) answered “yes”. In other background questions the answers were uniformly distributed.

## 5.2 Environmental management

Environmental management is important when considering sustainability in libraries. This involves reporting on environmental issues, environmental strategies, putting staff in charge of environmental issues, training in sustainability and financial support for sustainability solutions. These surveys investigated how Finnish and other libraries have handled environmental management. Figure 2 shows the percentages of both surveys in total.

<sup>2</sup> The Finnish questionnaire used almost the same background questions but the results of the distribution are not available.



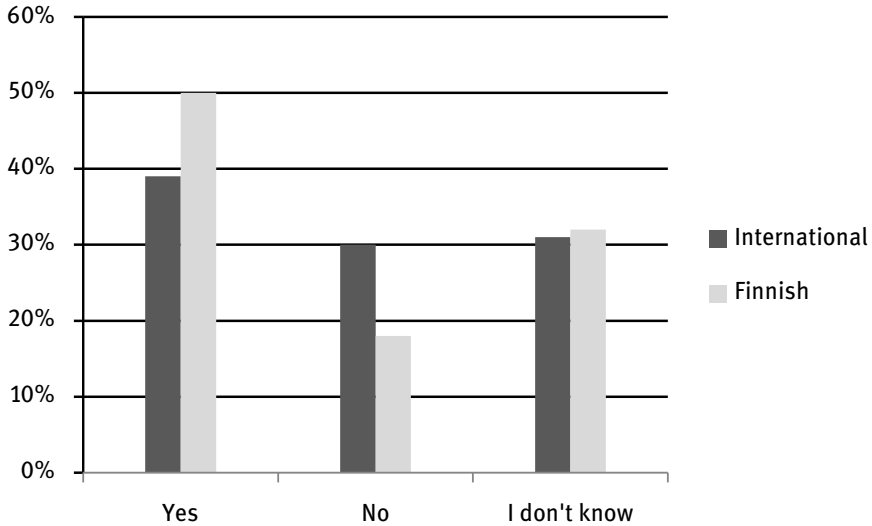


**Fig. 7.2:** Is there environmental management in your library? International N= 28, Finnish N=141. (The figure consists of the sum of all the answers in this section.)

Figure 7.2 shows that there is room for improvement in environmental management both in Finland and abroad because of the high percentage of “no” and “I don’t know” answers. In conclusion it could be stated that environmental management is not very common in libraries.

### 5.3 Environmental economy

Environmental economy in libraries means, for example, taking the environment into account in the budget, formulating tenders with environmental factors in mind and justifying investments on environmental grounds. Figure 7.3 shows the results of questions relating to environmental economy in Finnish and other libraries.

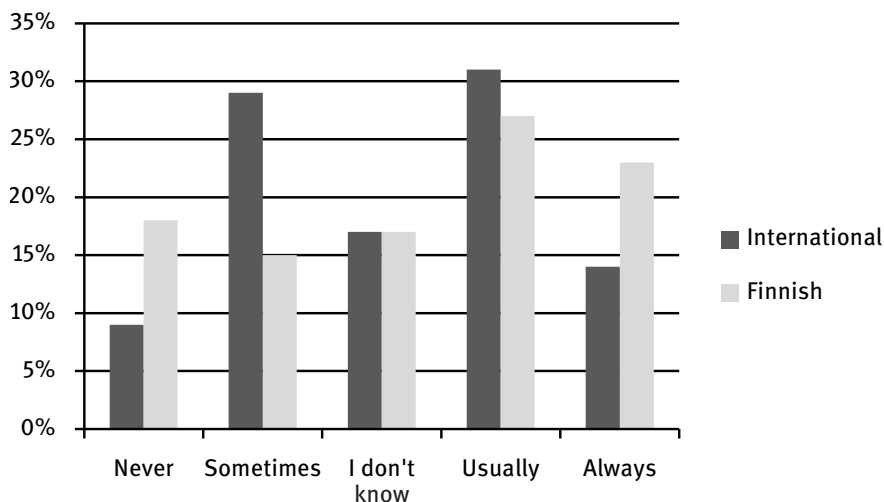


**Fig. 7.3:** Are environmental economy practices carried out at your library? International N=28. Finnish N=141. (The figure combines the sum of all the answers in this section.)

Figure 7.3 indicates that there seems to be a will to take environmental issues into account in libraries' economy but goals and targets have not been formulated yet. In the Finnish survey there were as many as 7 questions of which 50% were "no" answers. It could possibly be concluded that environmental and economic aspects are considered more important in libraries outside Finland.

## 5.4 Reduction of environmental burden

The reduction of environmental burden is for many the most essential part of sustainability or at least recognized by most people as the major outcome. The goal of this survey was to clarify which practices are already being observed by libraries. Figure 7.4 shows the distribution between Finnish and other libraries.

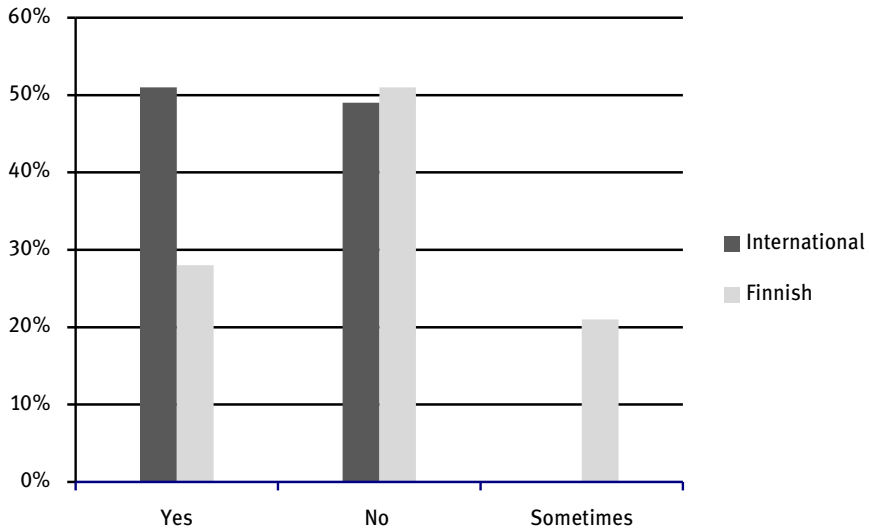


**Fig. 7.4:** Does your library observe practices in order to impact on reduction of environmental burden? International N=28, Finnish N= 141. (The figure consists of the sum of all the answers in this section.)

The most popular answers were “sometimes” and “usually” in the international survey and “always” and “usually” in the Finnish survey. It can perhaps be concluded that practices are more likely to be implemented in Finnish libraries. On the other hand, “usually” and “always” collected in total the same percentage in both surveys so in this respect the situation is as good or as bad in Finland as it is internationally. In the international survey, switching off computers after work and encouraging electronic communication were noted as frequent policies. These questions got the most “always” and “usually” answers. The result is not surprising because we are living in the world of email and internet. Sorting different waste types did not get more than 50% of “always” and “usually” answers as it did in the Finnish survey.

## 5.5 Increase of environmental awareness

Increase of environmental awareness is also important for sustainable libraries. In this section, it was difficult to compare the results of the surveys because the questionnaire included only “yes” or “no” options in the international survey. The original survey also had “sometimes” as an option.

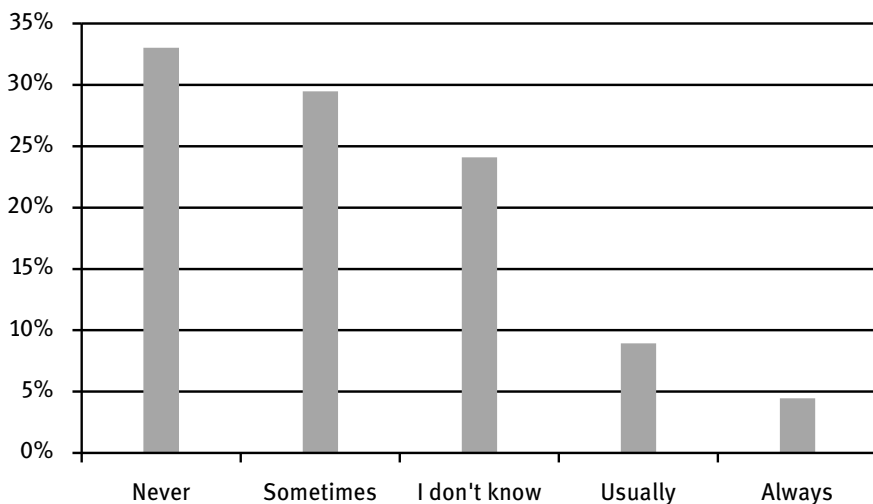


**Fig. 7.5:** Does your library increase environmental awareness? International N=28, Finnish N=141. (The figure consists of the sum of all the answers in this section.)

As Figure 7.5 shows, the responses to the international survey on increasing of environmental awareness were evenly balanced with “yes” (51%) and “no” (49%). In the Finnish survey there were 50% “no”, 30% “yes” and 20% “sometimes” answers. Positive examples were electronic services, such as text messages and emails as in the Finnish survey. Surprisingly, the possibility of sorting waste in public spaces was more common to international respondents than to the Finnish.

## 5.6 Environmental communication

Environmental communication is quite similar to increase of environmental awareness. As Figure 7.6 shows, there are more “never” answers in this section than in the others.



**Fig. 7.6:** Does your library have environmental communication practices? N=28. (The figure consists of the sum of all the answers of the international survey in this section.)

The results shown in Figure 7.6 suggest that environmental communication needs more improvement than the other areas, and environmental communication is the area that has been handled worst in libraries. It is difficult to compare this section with the Finnish survey because the Finnish one concentrated on analysing open-ended questions. Briefly, this area seems to need improvement in Finland as well as internationally.

The respondents had the opportunity to share more information about anything concerning sustainability in libraries in the open-ended question in the end of the international questionnaire. Some answers are shown below:

“Environmental issues have been part of the library’s agenda for just the past three years so we are only starting to implement environmental policies and procedures across our various activities.”

“We have an environmental committee on our university campus. Librarians can be elected to serve on the committee.”

“Formerly I was in charge of the library, but since 2011 I am in charge of the sustainable development initiative at institutional university level.”

The same question was asked in the Finnish national questionnaire and it provided among others the following answers:

“Library is only one part of the municipality’s or town’s operations and services, so sustainability has to be considered as one big unity. I do not think that a library is a problematic unit anywhere when the whole activity is based on borrowing and that is ecological in itself.”

“Economic reasons prevent considering environmental issues – at least when they require much money. Environmental issues are not very high in order of importance among the policy makers.”

These answers demonstrate that taking environmental issues into account in libraries has begun but there is much still to be done. Based on all the results from the different sections, it can be said that there are many issues that need to be considered in relation to sustainability of libraries. It should be noted that the number of respondents in the international survey was too small to draw more than tentative conclusions.

## 6 Conclusion

The authors and editors realize that the statistical basis for this study is too small to draw any definitive conclusions but the results are included here as an addendum to Leila Sonkkanen’s paper on the Finnish national project, “Sustainable Development in Libraries”. The conclusions drawn from the study can only be very tentative because of the low number of respondents. There were only nine public library respondents in the international survey so it was not reasonable to compare them to all the Finnish respondents. A comparison based on the content of a home library was not possible either. However, the survey gives some sense of the potential for investigating international opinion at a major conference such as IFLA and can be seen as a pioneering study or at least a first step and it is an initiative that possibly future students attending IFLA might build upon.

The study looked at sustainability in a small number of international libraries and attempted to compare the results with Finnish public libraries. There would appear to be little difference between Finnish and other libraries as far as one can judge and sustainable development is not yet fully accepted either in practice or strategically in most of the libraries surveyed; there is a need to improve communication about environmental issues in libraries worldwide. Environmental awareness could be increased if libraries took a leading role in society as “green educators” and they already can be considered to have a recycling function in that they are institutions that lend material to customers – an intrinsically ecological activity. Areas which were not included in the 2012 survey but could be investi-

gated in future studies include sustainable library building and the social and economic aspects of sustainability in relation to libraries.

It is clear from the meetings held at the IFLA conference in Helsinki that although there are not large numbers of librarians currently interested in sustainability in libraries, those that are demonstrate great enthusiasm. The challenge is to spread this enthusiasm to others and embed sustainability into daily routines and forward planning. Surveys such as this can provide valuable information on attitudes and practice and play a part in future developments.

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